



Wowza Streaming Engine™

Server-Side API

Wowza Streaming Engine: Server-Side API



Version 4.8

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Document History

Version	Description	Date
Doc v4.8.0	Document release for Wowza Streaming Engine 4.8.0	02-05-2020

Note

A more recent version of this document may be available online. See the [Wowza Streaming Engine User Guides webpage](#) for the latest updates.

Package

com.wowza.io

com.wowza.io Class HTTPByteReader

java.lang.Object

└─com.wowza.io.HTTPByteReader

Direct Known Subclasses:
[HTTPByteReaderS3](#)

public class **HTTPByteReader**
extends Object

Nested Class Summary

class	HTTPByteReader.SendResult HTTPByteReader.SendResult
-------	--

Field Summary

public static final	BUFFERINCSIZE Value: 1024
protected	connectionTimeout
public static final	CRLF Value:
protected	dateFormat
protected	debugInfo
protected	debugPrefix
public static final	HEADINDEX_CONTENTLENGTH Value: 1
public static final	HEADINDEX_LASTMODIFIED Value: 2
public static final	HEADINDEX_SIZE Value: 3
public static final	HEADINDEX_STATUS Value: 0
protected	host

public static final	<u>MAXHEADERSIZE</u> Value: 4096
protected	<u>maxRetries</u>
protected	<u>maxUsesBeforeReconnect</u>
protected	<u>msgBuf</u>
protected	<u>parseDateFormats</u>
protected	<u>port</u>
protected	<u>proxyHost</u>
protected	<u>proxyPort</u>
protected	<u>readTimeout</u>
protected	<u>receiveBufferSize</u>
public static final	<u>RECEIVEBUFFERSIZE</u> Value: 65000
protected	<u>reqPath</u>
protected	<u>requestFullURL</u>
protected	<u>sendBufferSize</u>
public static final	<u>SENDBUFFERSIZE</u> Value: 65000
protected	<u>socket</u>
public static final	<u>TIMEOUT</u> Value: 6000
protected	<u>userAgent</u>
protected	<u>uses</u>

Constructor Summary

public	<u>HTTPByteReader</u> (String host, int port)
--------	---

Method Summary

void	<u>close()</u>
void	<u>connect()</u>
<u>HTTPByteReaderResult</u>	<u>delete</u> (String path)
<u>HTTPByteReaderResult</u>	<u>deleteDirect</u> (String path)
void	<u>dumpDebug()</u>
String	<u>getConextPath()</u>
int	<u>getConnectionTimeout()</u>
void	<u>getDeleteCommand</u> (String path)
void	<u>getGetCommand</u> (String path, long pos, int flen)
void	<u>getHeadCommand</u> (String path)
int	<u>getMaxRetries()</u>
int	<u>getMaxUsesBeforeReconnect()</u>
void	<u>getPostCommand</u> (String path, <u>PacketFragmentList</u> fragmentList)
int	<u>getReadTimeout()</u>
int	<u>getReceiveBufferSize()</u>
String	<u>getRequestPath</u> (String path, String host, int port)
int	<u>getSendBufferSize()</u>
String	<u>getUserAgent()</u>
long[]	<u>head</u> (String path)
boolean	<u>isOpen()</u>
boolean	<u>isRequestFullURL()</u>
void	<u>parseHeader</u> (<u>HTTPByteReader.SendResult</u> result, byte[] buffer, int offset, int len, boolean isHead)
<u>HTTPByteReaderResult</u>	<u>read</u> (String path, long pos, int flen)
<u>HTTPByteReaderResult</u>	<u>readDirect</u> (String path, long pos, int flen)

void	<u>reconnect()</u>
<u>HTTPByteReader.SendResult</u>	<u>sendRequest</u> (byte[] request, boolean isHead)
<u>HTTPByteReader.SendResult</u>	<u>sendRequest</u> (byte[] request, int len, boolean isHead)
<u>HTTPByteReader.SendResult</u>	<u>sendRequest</u> (byte[] request, <u>PacketFragmentList</u> fragmentList, int len, boolean isHead)
void	<u>setConnectionTimeout</u> (int connectionTimeout)
void	<u>setMaxRetries</u> (int maxRetries)
void	<u>setMaxUsesBeforeReconnect</u> (int maxUsesBeforeReconnect)
void	<u>setProxyAddress</u> (String host, int port)
void	<u>setReadTimeout</u> (int readTimeout)
void	<u>setReceiveBufferSize</u> (int receiveBufferSize)
void	<u>setRequestFullURL</u> (boolean requestFullURL)
void	<u>setSendBufferSize</u> (int sendBufferSize)
void	<u>setUserAgent</u> (String userAgent)
<u>HTTPByteReaderResult</u>	<u>write</u> (String path, byte[] buffer, int offset, int len)
<u>HTTPByteReaderResult</u>	<u>write</u> (String path, <u>PacketFragmentList</u> fragmentList)
<u>HTTPByteReaderResult</u>	<u>write</u> (String path, String str)
<u>HTTPByteReaderResult</u>	<u>writeDirect</u> (String path, <u>PacketFragmentList</u> fragmentList)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MAXHEADERSIZE

public static final int **MAXHEADERSIZE**

Constant value: **4096**

BUFFERINCSIZE

```
public static final int BUFFERINCSIZE
```

Constant value: **1024**

TIMEOUT

```
public static final int TIMEOUT
```

Constant value: **6000**

SENDBUFFERSIZE

```
public static final int SENDBUFFERSIZE
```

Constant value: **65000**

RECEIVEBUFFERSIZE

```
public static final int RECEIVEBUFFERSIZE
```

Constant value: **65000**

CRLF

```
public static final java.lang.String CRLF
```

Constant value:

HEADINDEX_STATUS

```
public static final int HEADINDEX_STATUS
```

Constant value: **0**

HEADINDEX_CONTENTLENGTH

```
public static final int HEADINDEX_CONTENTLENGTH
```

Constant value: **1**

HEADINDEX_LASTMODIFIED

```
public static final int HEADINDEX_LASTMODIFIED
```

Constant value: **2**

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HEADINDEX_SIZE

```
public static final int HEADINDEX_SIZE
```

Constant value: **3**

host

```
protected java.lang.String host
```

port

```
protected int port
```

reqPath

```
protected java.lang.String reqPath
```

proxyHost

```
protected java.lang.String proxyHost
```

proxyPort

```
protected int proxyPort
```

dateFormat

```
protected org.apache.commons.lang.time.FastDateFormat dateFormat
```

socket

```
protected java.net.Socket socket
```

msgBuf

```
protected java.lang.StringBuffer msgBuf
```

maxRetries

```
protected int maxRetries
```

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maxUsesBeforeReconnect

protected int **maxUsesBeforeReconnect**

uses

protected int **uses**

readTimeout

protected int **readTimeout**

connectionTimeout

protected int **connectionTimeout**

debugInfo

protected java.util.List **debugInfo**

debugPrefix

protected java.lang.String **debugPrefix**

requestFullURL

protected boolean **requestFullURL**

parseDateFormats

protected java.lang.String **parseDateFormats**

sendBufferSize

protected int **sendBufferSize**

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receiveBufferSize

```
protected int receiveBufferSize
```

userAgent

```
protected java.lang.String userAgent
```

Constructors

HTTPByteReader

```
public HTTPByteReader(String host,  
                      int port)
```

Methods

setProxyAddress

```
public void setProxyAddress(String host,  
                           int port)
```

close

```
public void close()
```

connect

```
public void connect()
```

reconnect

```
protected void reconnect()
```

isOpen

```
public boolean isOpen()
```

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parseHeader

```
protected void parseHeader(HTTPByteReader.SendResult result,  
    byte[] buffer,  
    int offset,  
    int len,  
    boolean isHead)
```

read

```
public HTTPByteReaderResult read(String path,  
    long pos,  
    int flen)
```

delete

```
public HTTPByteReaderResult delete(String path)
```

getDeleteCommand

```
protected void getDeleteCommand(String path)
```

deleteDirect

```
public HTTPByteReaderResult deleteDirect(String path)
```

write

```
public HTTPByteReaderResult write(String path,  
    String str)
```

write

```
public HTTPByteReaderResult write(String path,  
    byte[] buffer,  
    int offset,  
    int len)
```

write

```
public HTTPByteReaderResult write(String path,  
    PacketFragmentList fragmentList)
```

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getPostCommand

```
protected void getPostCommand(String path,  
    PacketFragmentList fragmentList)
```

writeDirect

```
public HTTPByteReaderResult writeDirect(String path,  
    PacketFragmentList fragmentList)
```

getRequestPath

```
protected String getRequestPath(String path,  
    String host,  
    int port)
```

getConextPath

```
protected String getConextPath()
```

getHeadCommand

```
protected void getHeadCommand(String path)
```

head

```
public long[] head(String path)
```

getGetCommand

```
protected void getGetCommand(String path,  
    long pos,  
    int flen)
```

readDirect

```
public HTTPByteReaderResult readDirect(String path,  
    long pos,  
    int flen)
```

dumpDebug

```
protected void dumpDebug()
```

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sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        boolean isHead)
```

sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        int len,  
        boolean isHead)
```

sendRequest

```
public HTTPByteReader.SendResult sendRequest(byte[] request,  
        PacketFragmentList fragmentList,  
        int len,  
        boolean isHead)
```

getMaxUsesBeforeReconnect

```
public int getMaxUsesBeforeReconnect()
```

setMaxUsesBeforeReconnect

```
public void setMaxUsesBeforeReconnect(int maxUsesBeforeReconnect)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getReadTimeout

```
public int getReadTimeout()
```

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setReadTimeout

```
public void setReadTimeout(int readTimeout)
```

isRequestFullURL

```
public boolean isRequestFullURL()
```

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getSendBufferSize

```
public int getSendBufferSize()
```

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

getReceiveBufferSize

```
public int getReceiveBufferSize()
```

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

getUserAgent

```
public String getUserAgent()
```

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setUserAgent

```
public void setUserAgent(String userAgent)
```

com.wowza.io

Class HTTPByteReader.SendResult

java.lang.Object

└-com.wowza.io.HTTPByteReader.SendResult

protected class **HTTPByteReader.SendResult**

extends Object

Field Summary

public	<u>buffer</u>
public	<u>contentLength</u>
public	<u>contentRangeFound</u>
public	<u>contentRangeStart</u>
public	<u>contentRangeStop</u>
public	<u>contentRead</u>
public	<u>gotHeader</u>
public	<u>gotMessage</u>
public	<u>headerLength</u>
public	<u>keepAlive</u>
public	<u>lastModified</u>
public	<u>status</u>

Constructor Summary

public	<u>SendResult()</u>
--------	-------------------------------------

Method Summary

long	<u>size()</u>
------	-------------------------------

Methods inherited from class java.lang.Object


```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

contentLength

```
public long contentLength
```

headerLength

```
public long headerLength
```

contentRead

```
public long contentRead
```

lastModified

```
public java.util.Date lastModified
```

status

```
public int status
```

gotHeader

```
public boolean gotHeader
```

gotMessage

```
public boolean gotMessage
```

buffer

```
public byte buffer
```

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keepAlive

```
public boolean keepAlive
```

contentRangeFound

```
public boolean contentRangeFound
```

contentRangeStart

```
public long contentRangeStart
```

contentRangeStop

```
public long contentRangeStop
```

Constructors

SendResult

```
public SendResult()
```

Methods

size

```
public long size()
```

com.wowza.io Class HTTPByteReaderResult

java.lang.Object

└─com.wowza.io.HTTPByteReaderResult

```
public class HTTPByteReaderResult
    extends Object
```

Field Summary

public	buffer
public	contentLength
public	headerLength
public	retries
public	status

Constructor Summary

public	HTTPByteReaderResult()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

buffer

```
public byte buffer
```

headerLength

```
public long headerLength
```

contentLength

```
public long contentLength
```

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status

```
public int status
```

retries

```
public int retries
```

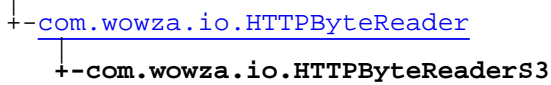
Constructors

HTTPByteReaderResult

```
public HTTPByteReaderResult()
```

com.wowza.io Class HTTPByteReaderS3

java.lang.Object



public class **HTTPByteReaderS3**
extends [HTTPByteReader](#)

Fields inherited from class [com.wowza.io.HTTPByteReader](#)

[BUFFERINCSize](#), [connectionTimeout](#), [CRLF](#), [dateFormat](#), [debugInfo](#), [debugPrefix](#),
[HEADINDEX_CONTENTLENGTH](#), [HEADINDEX_LASTMODIFIED](#), [HEADINDEX_SIZE](#), [HEADINDEX_STATUS](#), [host](#),
[MAXHEADERSIZE](#), [maxRetries](#), [maxUsesBeforeReconnect](#), [msgBuf](#), [parseDateFormats](#), [port](#), [proxyHost](#),
[proxyPort](#), [readTimeout](#), [receiveBufferSize](#), [RECEIVEBUFFERSIZE](#), [reqPath](#), [requestFullURL](#),
[sendBufferSize](#), [SENBUFFERSIZE](#), [socket](#), [TIMEOUT](#), [userAgent](#), [uses](#)

Constructor Summary

public	HTTPByteReaderS3 (String host, int port)
public	HTTPByteReaderS3 (String host, int port, IApplicationInstance appInstance)
public	HTTPByteReaderS3 (String host, int port, IVHost vhost)

Method Summary

IApplicationInstance	getAppInstance ()
String	getAWSAccessKeyId ()
String	getAWSSecretAccessKey ()
void	getGetCommand (String path, long pos, int flen)
void	getHeadCommand (String path)
IVHost	getVHost ()
String	httpDate ()
void	initAuth ()
void	setAppInstance (IApplicationInstance appInstance)

void	setAWSAccessKeyId (String awsAccessKeyId)
void	setAWSSecretAccessKey (String awsSecretAccessKey)
void	setVHost (IVHost vhost)
String	signRequest (String awsSecretAccessKey, String canonicalString)

Methods inherited from class [com.wowza.io.HTTPByteReader](#)

[close](#), [connect](#), [delete](#), [deleteDirect](#), [dumpDebug](#), [getConextPath](#), [getConnectionTimeout](#), [getDeleteCommand](#), [getGetCommand](#), [getHeadCommand](#), [getMaxRetries](#), [getMaxUsesBeforeReconnect](#), [getPostCommand](#), [getReadTimeout](#), [getReceiveBufferSize](#), [getRequestPath](#), [getSendBufferSize](#), [getUserAgent](#), [head](#), [isOpen](#), [isRequestFullURL](#), [parseHeader](#), [read](#), [readDirect](#), [reconnect](#), [sendRequest](#), [sendRequest](#), [sendRequest](#), [setConnectionTimeout](#), [setMaxRetries](#), [setMaxUsesBeforeReconnect](#), [setProxyAddress](#), [setReadTimeout](#), [setReceiveBufferSize](#), [setRequestFullURL](#), [setSendBufferSize](#), [setUserAgent](#), [write](#), [write](#), [write](#), [writeDirect](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port)
```

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port,
                        IApplicationInstance appInstance)
```

HTTPByteReaderS3

```
public HTTPByteReaderS3(String host,
                        int port,
                        IVHost vhost)
```

Methods

initAuth

```
public void initAuth()
```

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getGetCommand

```
protected void getGetCommand(String path,  
    long pos,  
    int flen)
```

getHeadCommand

```
protected void getHeadCommand(String path)
```

httpDate

```
protected String httpDate()
```

signRequest

```
public String signRequest(String awsSecretAccessKey,  
    String canonicalString)
```

getVHost

```
public IVHost getVHost()
```

setVHost

```
public void setVHost(IVHost vhost)
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

getAWSSecretAccessKey

```
public String getAWSSecretAccessKey()
```

setAWSSecretAccessKey

```
public void setAWSSecretAccessKey(String awsSecretAccessKey)
```

getAWSAccessKeyId

```
public String getAWSAccessKeyId()
```

setAWSAccessKeyId

```
public void setAWSAccessKeyId(String awsAccessKeyId)
```

com.wowza.io Class HTTPByteWriter

java.lang.Object

└─com.wowza.io.HTTPByteWriter

public class **HTTPByteWriter**
extends Object

Nested Class Summary

class	HTTPByteWriter.SendResult HTTPByteWriter.SendResult
-------	--

Field Summary

protected	addrIdx
public static final	BUFFERINCSize Value: 1024
protected	CLASS
protected	CLASSNAME
protected	connectionTimeout
public static final	CONNECTIONTIMEOUT Value: 1000
public static final	CRLF Value:
protected	dateFormat
protected	debugInfo
protected	debugPrefix
public static final	HEADINDEX_CONTENTLENGTH Value: 1
public static final	HEADINDEX_LASTMODIFIED Value: 2

public static final	<u>HEADINDEX_SIZE</u> Value: 3
public static final	<u>HEADINDEX_STATUS</u> Value: 0
protected	<u>host</u>
protected	<u>isSSL</u>
public static final	<u>LOG_ALL</u> Value: -1
public static final	<u>LOG_DEBUG</u> Value: 2
public static final	<u>LOG_DEFAULT</u> Value: 1
public static final	<u>LOG_DNS</u> Value: 8
public static final	<u>LOG_FRAGMENTS</u> Value: 4
public static final	<u>LOG_QUIET</u> Value: 0
public static final	<u>LOG_REQHEADERS</u> Value: 16
public static final	<u>LOG_TIMEOUTS</u> Value: 1
protected	<u>logOptions</u>
public static final	<u>MAXHEADERSIZE</u> Value: 4096
protected	<u>maxRetries</u>
public static final	<u>MAXRETRIES</u> Value: 25
protected	<u>maxUsesBeforeReconnect</u>
protected	<u>msgBuf</u>

protected	nonblocked
protected	parseDateFormats
protected	port
protected	proxyHost
protected	proxyPort
protected	readWriteTimeout
public static final	READWRITETIMEOUT Value: 3000
protected	receiveBufferSize
public static final	RECEIVEBUFFERSIZE Value: 65000
protected	reqPath
protected	requestFullURL
protected	retryTimeout
public static final	RETRYWAITTIME Value: 500
protected	sendBufferSize
public static final	SENDBUFFERSIZE Value: 65000
protected	socket
protected	socketChannel
protected	userAgent
protected	uses

Constructor Summary

public	HTTPByteWriter (String host, int port, Boolean nonblocked)
--------	--

Method Summary

void	<u>addLogOptions</u> (int options)
void	<u>close</u> ()
void	<u>connect</u> ()
<u>HTTPByteReaderResult</u>	<u>delete</u> (String path)
<u>HTTPByteReaderResult</u>	<u>deleteDirect</u> (String path)
void	<u>dumpDebug</u> ()
int	<u>getConnectionTimeout</u> ()
String	<u>getContextPath</u> ()
void	<u>getDeleteCommand</u> (String path)
boolean	<u>getIsSSL</u> ()
int	<u>getLogOptions</u> ()
int	<u>getMaxRetries</u> ()
int	<u>getMaxUsesBeforeReconnect</u> ()
void	<u>getPostMessage</u> (String method, String path, <u>PacketFragmentList</u> FragmentList)
int	<u>getReadWriteTimeout</u> ()
int	<u>getReceiveBufferSize</u> ()
String	<u>getRequestPath</u> (String path, String host, int port)
long	<u>getRetryTimeout</u> ()
int	<u>getSendBufferSize</u> ()
String	<u>getUserAgent</u> ()
boolean	<u>init</u> ()
void	<u>initHandShake</u> ()
boolean	<u>innerConnect</u> ()
boolean	<u>isLogOption</u> (int option)

boolean	<u>isOpen()</u>
boolean	<u>isRequestFullURL()</u>
void	<u>parseHeader</u> (<u>HTTPByteWriter.SendResult</u> result, byte[] buffer, int offset, int len, boolean isHead)
static int	<u>parseLogOptions</u> (String options)
void	<u>reconnect()</u>
void	<u>removeLogOptions</u> (int options)
<u>HTTPByteWriter.SendResult</u>	<u>sendRequest</u> (byte[] request, boolean isHead)
<u>HTTPByteWriter.SendResult</u>	<u>sendRequest</u> (byte[] request, <u>PacketFragmentList</u> fragmentList, int len, boolean isHead)
<u>HTTPByteWriter.SendResult</u>	<u>sendRequestBlocked</u> (byte[] request, <u>PacketFragmentList</u> fragmentList, int len, boolean isHead)
<u>HTTPByteWriter.SendResult</u>	<u>sendRequestNonBlocked</u> (byte[] request, <u>PacketFragmentList</u> fragmentList, int len, boolean isHead)
void	<u>setConnectionTimeout</u> (int connectionTimeout)
void	<u>setIsSSL</u> (boolean ssl)
void	<u>setLogOptions</u> (int options)
void	<u>setMaxRetries</u> (int maxRetries)
void	<u>setMaxUsesBeforeReconnect</u> (int maxUsesBeforeReconnect)
void	<u>setProxyAddress</u> (String host, int port)
void	<u>setReadWriteTimeout</u> (int readWriteTimeout)
void	<u>setReceiveBufferSize</u> (int receiveBufferSize)
void	<u>setRequestFullURL</u> (boolean requestFullURL)
void	<u>setRetryTimeout</u> (long timeout)
void	<u>setSendBufferSize</u> (int sendBufferSize)
void	<u>setUserAgent</u> (String userAgent)
int	<u>socketRead</u> (java.nio.ByteBuffer readBuffer)

int	socketWrite (java.nio.ByteBuffer reqBuffer)
HTTPByteReaderResult	write (String method, String path, byte[] buffer, int offset, int len)
HTTPByteReaderResult	write (String method, String path, PacketFragmentList fragmentList)
HTTPByteReaderResult	write (String method, String path, String str)
HTTPByteReaderResult	writeDirect (String method, String path, PacketFragmentList fragmentList)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CLASSNAME

protected java.lang.String **CLASSNAME**

CLASS

protected java.lang.Class **CLASS**

MAXHEADERSIZE

public static final int **MAXHEADERSIZE**

Constant value: **4096**

BUFFERINCSIZE

public static final int **BUFFERINCSIZE**

Constant value: **1024**

READWRITETIMEOUT

public static final int **READWRITETIMEOUT**

Constant value: **3000**

CONNECTIONTIMEOUT

public static final int **CONNECTIONTIMEOUT**

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Constant value: **1000**

SENDBUFSIZE

```
public static final int SENDBUFSIZE
```

Constant value: **65000**

RECEIVEBUFSIZE

```
public static final int RECEIVEBUFSIZE
```

Constant value: **65000**

MAXRETRIES

```
public static final int MAXRETRIES
```

Constant value: **25**

RETRYWAITTIME

```
public static final long RETRYWAITTIME
```

Constant value: **500**

CRLF

```
public static final java.lang.String CRLF
```

Constant value:

HEADINDEX_STATUS

```
public static final int HEADINDEX_STATUS
```

Constant value: **0**

HEADINDEX_CONTENTLENGTH

```
public static final int HEADINDEX_CONTENTLENGTH
```

Constant value: **1**

HEADINDEX_LASTMODIFIED

```
public static final int HEADINDEX_LASTMODIFIED
```

Constant value: **2**

HEADINDEX_SIZE

```
public static final int HEADINDEX_SIZE
```

Constant value: **3**

LOG_QUIET

```
public static final int LOG_QUIET
```

Constant value: **0**

LOG_TIMEOUTS

```
public static final int LOG_TIMEOUTS
```

Constant value: **1**

LOG_DEBUG

```
public static final int LOG_DEBUG
```

Constant value: **2**

LOG_FRAGMENTS

```
public static final int LOG_FRAGMENTS
```

Constant value: **4**

LOG_DNS

```
public static final int LOG_DNS
```

Constant value: **8**

LOG_REQHEADERS

```
public static final int LOG_REQHEADERS
```

Constant value: **16**

LOG_ALL

```
public static final int LOG_ALL
```

Constant value: **-1**

(continued from last page)

LOG_DEFAULT

```
public static final int LOG_DEFAULT
```

Constant value: **1**

host

```
protected java.lang.String host
```

port

```
protected int port
```

reqPath

```
protected java.lang.String reqPath
```

proxyHost

```
protected java.lang.String proxyHost
```

proxyPort

```
protected int proxyPort
```

dateFormat

```
protected org.apache.commons.lang.time.FastDateFormat dateFormat
```

socket

```
protected java.net.Socket socket
```

socketChannel

```
protected java.nio.channels.SocketChannel socketChannel
```

msgBuf

```
protected java.lang.StringBuffer msgBuf
```

(continued from last page)

maxRetries

protected int **maxRetries**

maxUsesBeforeReconnect

protected int **maxUsesBeforeReconnect**

retryTimeout

protected long **retryTimeout**

uses

protected int **uses**

readWriteTimeout

protected int **readWriteTimeout**

connectionTimeout

protected int **connectionTimeout**

debugInfo

protected java.util.List **debugInfo**

debugPrefix

protected java.lang.String **debugPrefix**

requestFullURL

protected boolean **requestFullURL**

(continued from last page)

parseDateFormats

protected java.lang.String **parseDateFormats**

sendBufferSize

protected int **sendBufferSize**

receiveBufferSize

protected int **receiveBufferSize**

userAgent

protected java.lang.String **userAgent**

nonblocked

protected java.lang.Boolean **nonblocked**

logOptions

protected int **logOptions**

addrIdx

protected int **addrIdx**

isSSL

protected boolean **isSSL**

Constructors

HTTPByteWriter

```
public HTTPByteWriter(String host,  
                      int port,  
                      Boolean nonblocked)
```

(continued from last page)

Methods

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getRetryTimeout

```
public long getRetryTimeout()
```

setRetryTimeout

```
public void setRetryTimeout(long timeout)
```

getSendBufferSize

```
public int getSendBufferSize()
```

setSendBufferSize

```
public void setSendBufferSize(int sendBufferSize)
```

getReceiveBufferSize

```
public int getReceiveBufferSize()
```

setReceiveBufferSize

```
public void setReceiveBufferSize(int receiveBufferSize)
```

getUserAgent

```
public String getUserAgent()
```

(continued from last page)

setUserAgent

```
public void setUserAgent(String userAgent)
```

getLogOptions

```
public int getLogOptions()
```

setLogOptions

```
public void setLogOptions(int options)
```

addLogOptions

```
public void addLogOptions(int options)
```

removeLogOptions

```
public void removeLogOptions(int options)
```

isLogOption

```
public boolean isLogOption(int option)
```

setIsSSL

```
public void setIsSSL(boolean ssl)
```

getIsSSL

```
public boolean getIsSSL()
```

setProxyAddress

```
public void setProxyAddress(String host,  
                             int port)
```

close

```
public void close()
```

(continued from last page)

connect

```
public void connect()
```

reconnect

```
protected void reconnect()
```

isOpen

```
public boolean isOpen()
```

parseHeader

```
protected void parseHeader(HTTPByteWriter.SendResult result,  
    byte[] buffer,  
    int offset,  
    int len,  
    boolean isHead)
```

delete

```
public HTTPByteReaderResult delete(String path)
```

getDeleteCommand

```
protected void getDeleteCommand(String path)
```

deleteDirect

```
public HTTPByteReaderResult deleteDirect(String path)
```

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    String str)
```

(continued from last page)

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    byte[] buffer,  
    int offset,  
    int len)
```

write

```
public HTTPByteReaderResult write(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

getPostMessage

```
protected void getPostMessage(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

writeDirect

```
public HTTPByteReaderResult writeDirect(String method,  
    String path,  
    PacketFragmentList fragmentList)
```

getRequestPath

```
protected String getRequestPath(String path,  
    String host,  
    int port)
```

getContextPath

```
protected String getContextPath()
```

dumpDebug

```
protected void dumpDebug()
```

sendRequest

```
public HTTPByteWriter.SendResult sendRequest(byte[] request,  
    boolean isHead)
```

sendRequest

```
public HTTPByteWriter.SendResult sendRequest(byte[] request,  
    PacketFragmentList fragmentList,  
    int len,  
    boolean isHead)
```

sendRequestBlocked

```
public HTTPByteWriter.SendResult sendRequestBlocked(byte[] request,  
    PacketFragmentList fragmentList,  
    int len,  
    boolean isHead)
```

sendRequestNonBlocked

```
public HTTPByteWriter.SendResult sendRequestNonBlocked(byte[] request,  
    PacketFragmentList fragmentList,  
    int len,  
    boolean isHead)
```

getMaxUsesBeforeReconnect

```
public int getMaxUsesBeforeReconnect()
```

setMaxUsesBeforeReconnect

```
public void setMaxUsesBeforeReconnect(int maxUsesBeforeReconnect)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getReadWriteTimeout

```
public int getReadWriteTimeout()
```

(continued from last page)

setReadWriteTimeout

```
public void setReadWriteTimeout(int readWriteTimeout)
```

isRequestFullURL

```
public boolean isRequestFullURL()
```

setRequestFullURL

```
public void setRequestFullURL(boolean requestFullURL)
```

init

```
protected boolean init()
```

innerConnect

```
protected boolean innerConnect()
```

initHandShake

```
protected void initHandShake()  
    throws java.io.IOException
```

socketWrite

```
protected int socketWrite(java.nio.ByteBuffer reqBuffer)  
    throws java.io.IOException
```

socketRead

```
protected int socketRead(java.nio.ByteBuffer readBuffer)  
    throws java.io.IOException,  
           InterruptedException
```

parseLogOptions

```
public static int parseLogOptions(String options)
```

com.wowza.io

Class HTTPByteWriter.SendResult

java.lang.Object

└-com.wowza.io.HTTPByteWriter.SendResult

protected class HTTPByteWriter.SendResult

extends Object

Field Summary

public	buffer
public	contentLength
public	contentRangeFound
public	contentRangeStart
public	contentRangeStop
public	contentRead
public	gotHeader
public	gotMessage
public	headerLength
public	keepAlive
public	lastModified
public	status

Constructor Summary

public	SendResult()
--------	------------------------------

Method Summary

long	size()
String	toString()

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

contentLength

```
public long contentLength
```

headerLength

```
public long headerLength
```

contentRead

```
public long contentRead
```

lastModified

```
public java.util.Date lastModified
```

status

```
public int status
```

gotHeader

```
public boolean gotHeader
```

gotMessage

```
public boolean gotMessage
```

buffer

```
public byte buffer
```

(continued from last page)

keepAlive

```
public boolean keepAlive
```

contentRangeFound

```
public boolean contentRangeFound
```

contentRangeStart

```
public long contentRangeStart
```

contentRangeStop

```
public long contentRangeStop
```

Constructors

SendResult

```
public SendResult()
```

Methods

size

```
public long size()
```

toString

```
public String toString()
```

com.wowza.io Interface IRandomAccessReader

public interface **IRandomAccessReader**
extends

Field Summary

public static final	<u>FORWARD</u> Value: 1
public static final	<u>REVERSE</u> Value: -1

Method Summary

abstract void	<u>close()</u> Close the media asset
abstract boolean	<u>exists()</u> Does the media asset exist
abstract String	<u>getBasePath()</u> Get the basePath for the random access reader
abstract int	<u>getDirecton()</u> Get the current direction hint for the random access reader.
abstract long	<u>getFilePointer()</u> Get the current byte location in the media asset
abstract String	<u>getMediaExtension()</u> Get the media extension
abstract String	<u>getMediaName()</u> Get the media name
abstract String	<u>getPath()</u> Get the unique path to the media asset item
abstract void	<u>init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension)</u> Intialize RandomAccessReader
abstract boolean	<u>isOpen()</u> Is the media asset open
abstract long	<u>lastModified()</u> Return the lastModified date (same format as File.lastModified)
abstract long	<u>length()</u> Get the media asset length in bytes

abstract void	open() Open the media asset
abstract int	read (byte[] buf, int off, int size) Read bytes from the media asset
abstract void	seek (long pos) Seek to a position in the media asset
abstract void	setDirecton (int directon) Set the current direction hint

Fields

FORWARD

```
public static final int FORWARD
```

Constant value: **1**

REVERSE

```
public static final int REVERSE
```

Constant value: **-1**

Methods

init

```
public abstract void init(IApplicationInstance appInstance,
    IMediaStream stream,
    String basePath,
    String mediaName,
    String mediaExtension)
```

Intialize RandomAccessReader

Parameters:

appInstance - application instance
 stream - parent stream if one exists
 basePath - basePath for IApplicationInstance
 mediaName - media name
 mediaExtension - media extension from mediaReaders

open

```
public abstract void open()
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public abstract void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public abstract boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

getFilePointer

```
public abstract long getFilePointer()
```

Get the current byte location in the media asset

Returns:

current byte location in the media asset

seek

```
public abstract void seek(long pos)
```

Seek to a position in the media asset

Parameters:

pos - position to seek to

read

```
public abstract int read(byte[] buf,  
    int off,  
    int size)
```

Read bytes from the media asset

Parameters:

buf - buffer to fill

off - offset in buffer

size - size of block to read

Returns:

number of bytes read, -1 if failure

getDirecton

```
public abstract int getDirecton()
```

(continued from last page)

Get the current direction hint for the random access reader. The underlying system will call `setDirection` to hint at the current direction the media assets is being read.

Returns:

current direction hint for the random access reader

setDirecton

```
public abstract void setDirecton(int directon)
```

Set the current direction hint

Parameters:

`directon` - current direction hint for the random access reader

getBasePath

```
public abstract String getBasePath()
```

Get the `basePath` for the random access reader

Returns:

`basePath` for the random access reader

getMediaName

```
public abstract String getMediaName()
```

Get the media name

Returns:

media name

getMediaExtension

```
public abstract String getMediaExtension()
```

Get the media extension

Returns:

media extension

exists

```
public abstract boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

lastModified

```
public abstract long lastModified()
```

Return the `lastModified` date (same format as `File.lastModified`)

Returns:

`lastModified` date (same format as `File.lastModified`)

length

```
public abstract long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public abstract String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

com.wowza.io**Interface IRandomAccessReadOptimizer**

All Subinterfaces:

[IRandomAccessReadOptimizer2](#)

public interface IRandomAccessReadOptimizer

extends

Method Summary

abstract void	addRequest (long foffset, int fsize, byte[] buffer, int offset)
abstract void	flushReads ()
abstract int	getBufferSize ()
abstract String	getContextStr ()
abstract IRandomAccessReader	getReader ()
abstract void	setBufferSize (int bufferSize)
abstract void	setContextStr (String contextStr)
abstract void	setDebugLog (boolean debugLog)
abstract void	setReader (IRandomAccessReader reader)

Methods**addRequest**

```
public abstract void addRequest(long foffset,
    int fsize,
    byte[] buffer,
    int offset)
```

flushReads

```
public abstract void flushReads()
```

(continued from last page)

getContextStr

```
public abstract String getContextStr()
```

setContextStr

```
public abstract void setContextStr(String contextStr)
```

getBufferSize

```
public abstract int getBufferSize()
```

setBufferSize

```
public abstract void setBufferSize(int bufferSize)
```

setDebugLog

```
public abstract void setDebugLog(boolean debugLog)
```

getReader

```
public abstract IRandomAccessReader getReader()
```

setReader

```
public abstract void setReader(IRandomAccessReader reader)
```

com.wowza.io

Interface IRandomAccessReadOptimizer2

All Superinterfaces:
[IRandomAccessReadOptimizer](#)

public interface **IRandomAccessReadOptimizer2**
extends [IRandomAccessReadOptimizer](#)

Method Summary

abstract boolean	flushReads2()
------------------	-------------------------------

Methods inherited from interface [com.wowza.io.IRandomAccessReadOptimizer](#)

[addRequest](#), [flushReads](#), [getBufferSize](#), [getContextStr](#), [getReader](#), [setBufferSize](#), [setContextStr](#), [setDebugLog](#), [setReader](#)

Methods

flushReads2

public abstract boolean **flushReads2()**

com.wowza.io Interface IRandomAccessWriter

public interface **IRandomAccessWriter**
extends

Method Summary

abstract int	write (IFasterByteArrayOutputStream out, int offset, int size, int amfIndex, int chunksize)
--------------	---

Methods

write

```
public abstract int write(IFasterByteArrayOutputStream out,  
    int offset,  
    int size,  
    int amfIndex,  
    int chunksize)
```

com.wowza.io Interface IRandomAccessWriter2

public interface **IRandomAccessWriter2**
extends

Field Summary

public static final	<u>FORWARD</u> Value: 1
public static final	<u>REVERSE</u> Value: -1

Method Summary

abstract void	<u>close()</u> Close the media asset
abstract boolean	<u>exists()</u> Does the media asset exist
abstract String	<u>getBasePath()</u> Get the basePath for the random access reader
abstract int	<u>getDirecton()</u> Get the current direction hint for the random access reader.
abstract long	<u>getFilePointer()</u> Get the current byte location in the media asset
abstract String	<u>getMediaExtension()</u> Get the media extension
abstract String	<u>getMediaName()</u> Get the media name
abstract String	<u>getPath()</u> Get the unique path to the media asset item
abstract void	<u>init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension)</u> Intialize RandomAccessReader
abstract boolean	<u>isOpen()</u> Is the media asset open
abstract long	<u>lastModified()</u> Return the lastModified date (same format as File.lastModified)
abstract long	<u>length()</u> Get the media asset length in bytes

abstract void	open() Open the media asset
abstract void	seek(long pos) Seek to a position in the media asset
abstract void	setDirecton(int directon) Set the current direction hint
abstract void	write(byte[] buf, int off, int len) Writes len bytes from the specified byte array starting at offset off to this file.

Fields

FORWARD

```
public static final int FORWARD
```

Constant value: **1**

REVERSE

```
public static final int REVERSE
```

Constant value: **-1**

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    String basePath,  
    String mediaName,  
    String mediaExtension)
```

Intialize RandomAccessReader

Parameters:

appInstance - application instance
stream - parent stream if one exists
basePath - basePath for IApplicationInstance
mediaName - media name
mediaExtension - media extension from mediaReaders

open

```
public abstract void open()  
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public abstract void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public abstract boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

getFilePointer

```
public abstract long getFilePointer()
```

Get the current byte location in the media asset

Returns:

current byte location in the media asset

seek

```
public abstract void seek(long pos)
```

Seek to a position in the media asset

Parameters:

pos - position to seek to

write

```
public abstract void write(byte[] buf,  
    int off,  
    int len)
```

Writes len bytes from the specified byte array starting at offset off to this file.

Parameters:

buf - the data.

off - the start offset in the data.

len - the number of bytes to write.

Throws:

IOException - if an I/O error occurs.

getDirecton

```
public abstract int getDirecton()
```

(continued from last page)

Get the current direction hint for the random access reader. The underlying system will call `setDirection` to hint at the current direction the media assets is being read.

Returns:

current direction hint for the random access reader

setDirecton

```
public abstract void setDirecton(int directon)
```

Set the current direction hint

Parameters:

`directon` - current direction hint for the random access reader

getBasePath

```
public abstract String getBasePath()
```

Get the `basePath` for the random access reader

Returns:

`basePath` for the random access reader

getMediaName

```
public abstract String getMediaName()
```

Get the media name

Returns:

media name

getMediaExtension

```
public abstract String getMediaExtension()
```

Get the media extension

Returns:

media extension

exists

```
public abstract boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

lastModified

```
public abstract long lastModified()
```

Return the `lastModified` date (same format as `File.lastModified`)

Returns:

`lastModified` date (same format as `File.lastModified`)

length

```
public abstract long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public abstract String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

com.wowza.io Interface ITextReader

All Subinterfaces:

[IDvrTextReader](#)

public interface **ITextReader**
extends

Method Summary

abstract void	close() Close the media asset
abstract boolean	exists() Does the media asset exist
abstract String	getBasePath() Get the basePath for the random access reader
abstract String	getMediaName() Get the media name
abstract String	getPath() Get the unique path to the media asset item
abstract void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName)
abstract boolean	isOpen() Is the media asset open
abstract long	lastModified() Return the lastModified date (same format as File.lastModified)
abstract long	length() Get the media asset length in bytes
abstract void	open() Open the media asset
abstract int	read(char[] buf, int off, int size)
abstract boolean	ready()

Methods

(continued from last page)

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    String basePath,  
    String mediaName)
```

open

```
public abstract void open()  
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

ready

```
public abstract boolean ready()  
    throws java.io.IOException
```

close

```
public abstract void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public abstract boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

read

```
public abstract int read(char[] buf,  
    int off,  
    int size)  
    throws java.io.IOException
```

getBasePath

```
public abstract String getBasePath()
```

Get the basePath for the random access reader

(continued from last page)

Returns:basePath for the random access reader

getMediaName

```
public abstract String getMediaName()
```

Get the media name

Returns:media name

exists

```
public abstract boolean exists()
```

Does the media asset exist

Returns:true if media assets exists

lastModified

```
public abstract long lastModified()
```

Return the lastModified date (same format as File.lastModified)

Returns:lastModified date (same format as File.lastModified)

length

```
public abstract long length()
```

Get the media asset length in bytes

Returns:media asset length in bytes

getPath

```
public abstract String getPath()
```

Get the unique path to the media asset item

Returns:unique path to the media asset item

com.wowza.io Interface ITextWriter

All Subinterfaces:

[IDvrTextWriter](#)

public interface **ITextWriter**
extends

Method Summary

abstract void	close() Close the media asset
abstract boolean	exists() Does the media asset exist
abstract String	getBasePath() Get the basePath for the random access reader
abstract String	getMediaName() Get the media name
abstract String	getPath() Get the unique path to the media asset item
abstract void	init(IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName)
abstract boolean	isAppend()
abstract boolean	isOpen() Is the media asset open
abstract long	lastModified() Return the lastModified date (same format as File.lastModified)
abstract long	length() Get the media asset length in bytes
abstract void	open() Open the media asset
abstract void	setAppend(boolean append)
abstract void	write(char[] cbuf)
abstract void	write(char[] cbuf, int off, int len)
abstract void	write(String str)

abstract void	write (String str, int off, int len)
---------------	--

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    String basePath,  
    String mediaName)
```

isAppend

```
public abstract boolean isAppend()
```

setAppend

```
public abstract void setAppend(boolean append)
```

open

```
public abstract void open()  
    throws java.io.IOException
```

Open the media asset

Throws:

IOException

close

```
public abstract void close()  
    throws java.io.IOException
```

Close the media asset

Throws:

IOException

isOpen

```
public abstract boolean isOpen()
```

Is the media asset open

Returns:

true if media asset is open

(continued from last page)

write

```
public abstract void write(char[] cbuf,  
    int off,  
    int len)  
    throws java.io.IOException
```

write

```
public abstract void write(char[] cbuf)  
    throws java.io.IOException
```

write

```
public abstract void write(String str,  
    int off,  
    int len)  
    throws java.io.IOException
```

write

```
public abstract void write(String str)  
    throws java.io.IOException
```

getBasePath

```
public abstract String getBasePath()
```

Get the basePath for the random access reader

Returns:

basePath for the random access reader

getMediaName

```
public abstract String getMediaName()
```

Get the media name

Returns:

media name

exists

```
public abstract boolean exists()
```

Does the media asset exist

Returns:

true if media assets exists

(continued from last page)

lastModified

```
public abstract long lastModified()
```

Return the lastModified date (same format as File.lastModified)

Returns:

lastModified date (same format as File.lastModified)

length

```
public abstract long length()
```

Get the media asset length in bytes

Returns:

media asset length in bytes

getPath

```
public abstract String getPath()
```

Get the unique path to the media asset item

Returns:

unique path to the media asset item

Package

com.wowza.util

com.wowza.util Class AMFUtils

java.lang.Object

└─com.wowza.util.AMFUtils

public class **AMFUtils**
extends Object

Utilities for the conversion between Java and AMF

Constructor Summary

public	AMFUtils()
--------	----------------------------

Method Summary

static AMFData[]	convertParams (Object[] params) Converts an array of Java native data values and class to AMF data types.
----------------------------------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFUtils

public **AMFUtils**()

Methods

convertParams

public static [AMFData\[\]](#) **convertParams**(Object[] params)

(continued from last page)

Converts an array of Java native data values and class to AMF data types. It will box primitive data types into wrapper classes. Supported input data types are:

- null
- Double
- Float
- Long
- Integer
- Short
- Byte
- Number
- Date
- Boolean
- String
- StringBuffer
- byte[] - assumed to be raw AMFData
- ByteBuffer - assumed to be raw AMFData
- AMFData
- AMFDataMixedArray
- AMFDataArray
- AMFDataItem
- AMFDataList
- AMFDataObj

Parameters:

params - Array of Java

Returns:

Array of AMFData[] objects

com.wowza.util Class Base64

```
java.lang.Object
|
+-com.wowza.util.Base64
```

public class **Base64**
extends Object

Encodes and decodes to and from Base64 notation.

Homepage: <http://iharder.net/base64>.

Change Log:

- v2.2.1 - Fixed bug using URL_SAFE and ORDERED encodings. Fixed bug when using very small files (~< 40 bytes).
- v2.2 - Added some helper methods for encoding/decoding directly from one file to the next. Also added a main() method to support command line encoding/decoding from one file to the next. Also added these Base64 dialects:
 1. The default is RFC3548 format.
 2. Calling Base64.setFormat(Base64.BASE64_FORMAT.URLSAFE_FORMAT) generates URL and file name friendly format as described in Section 4 of RFC3548. <http://www.faqs.org/rfcs/rfc3548.html>
 3. Calling Base64.setFormat(Base64.BASE64_FORMAT.ORDERED_FORMAT) generates URL and file name friendly format that preserves lexical ordering as described in <http://www.faqs.org/qa/rfc-1940.html>
 Special thanks to Jim Kellerman at <http://www.powerset.com/> for contributing the new Base64 dialects.
- v2.1 - Cleaned up javadoc comments and unused variables and methods. Added some convenience methods for reading and writing to and from files.
- v2.0.2 - Now specifies UTF-8 encoding in places where the code fails on systems with other encodings (like EBCDIC).
- v2.0.1 - Fixed an error when decoding a single byte, that is, when the encoded data was a single byte.
- v2.0 - I got rid of methods that used booleans to set options. Now everything is more consolidated and cleaner. The code now detects when data that's being decoded is gzip-compressed and will decompress it automatically. Generally things are cleaner. You'll probably have to change some method calls that you were making to support the new options format (ints that you "OR" together).
- v1.5.1 - Fixed bug when decompressing and decoding to a byte[] using decode(String s, boolean gzipCompressed). Added the ability to "suspend" encoding in the Output Stream so you can turn on and off the encoding if you need to embed base64 data in an otherwise "normal" stream (like an XML file).
- v1.5 - Output stream pases on flush() command but doesn't do anything itself. This helps when using GZIP streams. Added the ability to GZip-compress objects before encoding them.
- v1.4 - Added helper methods to read/write files.
- v1.3.6 - Fixed OutputStream.flush() so that 'position' is reset.
- v1.3.5 - Added flag to turn on and off line breaks. Fixed bug in input stream where last buffer being read, if not completely full, was not returned.
- v1.3.4 - Fixed when "improperly padded stream" error was thrown at the wrong time.
- v1.3.3 - Fixed I/O streams which were totally messed up.

I am placing this code in the Public Domain. Do with it as you will. This software comes with no guarantees or warranties but with plenty of well-wishing instead! Please visit <http://iharder.net/base64> periodically to check for updates or to contribute improvements.

Nested Class Summary

class	Base64.InputStream Base64.InputStream
class	Base64.OutputStream Base64.OutputStream

Field Summary

<code>public static final</code>	<u>DECODE</u> Specify decoding. Value: 0
<code>public static final</code>	<u>DONT_BREAK_LINES</u> Don't break lines when encoding (violates strict Base64 specification) Value: 8
<code>public static final</code>	<u>ENCODE</u> Specify encoding. Value: 1
<code>public static final</code>	<u>GZIP</u> Specify that data should be gzip-compressed. Value: 2
<code>public static final</code>	<u>NO_OPTIONS</u> No options specified. Value: 0
<code>public static final</code>	<u>ORDERED</u> Encode using the special "ordered" dialect of Base64 described here: http://www.faqs.org/qa/rfcc-1940.html . Value: 32
<code>public static final</code>	<u>URL_SAFE</u> Encode using Base64-like encoding that is URL- and Filename-safe as described in Section 4 of RFC3548: http://www.faqs.org/rfcs/rfc3548.html . Value: 16

Method Summary

<code>static byte[]</code>	<u>decode</u> (byte[] source, int off, int len, int options) Very low-level access to decoding ASCII characters in the form of a byte array.
<code>static byte[]</code>	<u>decode</u> (String s) Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.
<code>static byte[]</code>	<u>decode</u> (String s, int options) Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.
<code>static void</code>	<u>decodeFileToFile</u> (String infile, String outfile) Reads infile and decodes it to outfile.
<code>static byte[]</code>	<u>decodeFromFile</u> (String filename) Convenience method for reading a base64-encoded file and decoding it.
<code>static void</code>	<u>decodeString</u> (String inString) Decodes inString and outputs result to stdout
<code>static boolean</code>	<u>decodeToFile</u> (String dataToDecode, String filename) Convenience method for decoding data to a file.

static Object	<code>decodeToObject</code> (String encodedObject) Attempts to decode Base64 data and deserialize a Java Object within.
static String	<code>encodeAndReplacePlusesAndDashes</code> (String s)
static String	<code>encodeBytes</code> (byte[] source) Encodes a byte array into Base64 notation.
static String	<code>encodeBytes</code> (byte[] source, int options) Encodes a byte array into Base64 notation.
static String	<code>encodeBytes</code> (byte[] source, int off, int len) Encodes a byte array into Base64 notation.
static String	<code>encodeBytes</code> (byte[] source, int off, int len, int options) Encodes a byte array into Base64 notation.
static void	<code>encodeFileToFile</code> (String infile, String outfile) Reads infile and encodes it to outfile.
static String	<code>encodeFromFile</code> (String filename) Convenience method for reading a binary file and base64-encoding it.
static String	<code>encodeObject</code> (java.io.Serializable serializableObject) Serializes an object and returns the Base64-encoded version of that serialized object.
static String	<code>encodeObject</code> (java.io.Serializable serializableObject, int options) Serializes an object and returns the Base64-encoded version of that serialized object.
static void	<code>encodeString</code> (String inString) Encodes inString and outputs result to stdout
static boolean	<code>encodeToFile</code> (byte[] dataToEncode, String filename) Convenience method for encoding data to a file.
static void	<code>main</code> (String[] args) Encodes or decodes two files from the command line; feel free to delete this method (in fact you probably should) if you're embedding this code into a larger program.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

NO_OPTIONS

public static final int **NO_OPTIONS**

No options specified. Value is zero.
Constant value: **0**

ENCODE

public static final int **ENCODE**

(continued from last page)

Specify encoding.
Constant value: **1**

DECODE

```
public static final int DECODE
```

Specify decoding.
Constant value: **0**

GZIP

```
public static final int GZIP
```

Specify that data should be gzip-compressed.
Constant value: **2**

DONT_BREAK_LINES

```
public static final int DONT_BREAK_LINES
```

Don't break lines when encoding (violates strict Base64 specification)
Constant value: **8**

URL_SAFE

```
public static final int URL_SAFE
```

Encode using Base64-like encoding that is URL- and Filename-safe as described in Section 4 of RFC3548: <http://www.faqs.org/rfcs/rfc3548.html>. It is important to note that data encoded this way is *not* officially valid Base64, or at the very least should not be called Base64 without also specifying that it was encoded using the URL- and Filename-safe dialect.
Constant value: **16**

ORDERED

```
public static final int ORDERED
```

Encode using the special "ordered" dialect of Base64 described here: <http://www.faqs.org/qa/rfcc-1940.html>.
Constant value: **32**

Methods

main

```
public final static void main(String[] args)
```

Encodes or decodes two files from the command line; **feel free to delete this method (in fact you probably should) if you're embedding this code into a larger program.**

encodeObject

```
public static String encodeObject(java.io.Serializable serializableObject)
```

Serializes an object and returns the Base64-encoded version of that serialized object. If the object cannot be serialized or there is another error, the method will return null. The object is not GZip-compressed before being encoded.

Parameters:

`serializableObject` - The object to encode

Returns:

(continued from last page)

The Base64-encoded object

encodeObject

```
public static String encodeObject(java.io.Serializable serializableObject,  
    int options)
```

Serializes an object and returns the Base64-encoded version of that serialized object. If the object cannot be serialized or there is another error, the method will return null.

Valid options:

GZIP: gzip-compresses object before encoding it.
DONT_BREAK_LINES: don't break lines at 76 characters
Note: Technically, this makes your encoding non-compliant.

Example: `encodeObject(myObj, Base64.GZIP)` or

Example: `encodeObject(myObj, Base64.GZIP | Base64.DONT_BREAK_LINES)`

Parameters:

`serializableObject` - The object to encode
`options` - Specified options

Returns:

The Base64-encoded object

See Also:

[GZIP](#)
[DONT_BREAK_LINES](#)

encodeBytes

```
public static String encodeBytes(byte[] source)
```

Encodes a byte array into Base64 notation. Does not GZip-compress data.

Parameters:

`source` - The data to convert

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int options)
```

(continued from last page)

Encodes a byte array into Base64 notation.

Valid options:

GZIP: gzip-compresses object before encoding it.
DONT_BREAK_LINES: don't break lines at 76 characters
Note: Technically, this makes your encoding non-compliant.

Example: `encodeBytes(myData, Base64.GZIP)` or

Example: `encodeBytes(myData, Base64.GZIP | Base64.DONT_BREAK_LINES)`

Parameters:

source - The data to convert
options - Specified options

See Also:

[GZIP](#)
[DONT_BREAK_LINES](#)

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int off,  
    int len)
```

Encodes a byte array into Base64 notation. Does not GZip-compress data.

Parameters:

source - The data to convert
off - Offset in array where conversion should begin
len - Length of data to convert

encodeBytes

```
public static String encodeBytes(byte[] source,  
    int off,  
    int len,  
    int options)
```

Encodes a byte array into Base64 notation.

Valid options:

GZIP: gzip-compresses object before encoding it.
DONT_BREAK_LINES: don't break lines at 76 characters
Note: Technically, this makes your encoding non-compliant.

Example: `encodeBytes(myData, Base64.GZIP)` or

Example: `encodeBytes(myData, Base64.GZIP | Base64.DONT_BREAK_LINES)`

(continued from last page)

Parameters:

- source - The data to convert
- off - Offset in array where conversion should begin
- len - Length of data to convert
- options - Specified options, alphabet type is pulled from this (standard, url-safe, ordered)

See Also:

[GZIP](#)
[DONT_BREAK_LINES](#)

decode

```
public static byte[] decode(byte[] source,  
    int off,  
    int len,  
    int options)
```

Very low-level access to decoding ASCII characters in the form of a byte array. Does not support automatically gunzipping or any other "fancy" features.

Parameters:

- source - The Base64 encoded data
- off - The offset of where to begin decoding
- len - The length of characters to decode

Returns:

decoded data

decode

```
public static byte[] decode(String s)
```

Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.

Parameters:

- s - the string to decode

Returns:

the decoded data

decode

```
public static byte[] decode(String s,  
    int options)
```

Decodes data from Base64 notation, automatically detecting gzip-compressed data and decompressing it.

Parameters:

- s - the string to decode
- options - encode options such as URL_SAFE

Returns:

the decoded data

decodeToObject

```
public static Object decodeToObject(String encodedObject)
```

(continued from last page)

Attempts to decode Base64 data and deserialize a Java Object within. Returns null if there was an error.

Parameters:

encodedObject - The Base64 data to decode

Returns:

The decoded and deserialized object

encodeToFile

```
public static boolean encodeToFile(byte[] dataToEncode,  
    String filename)
```

Convenience method for encoding data to a file.

Parameters:

dataToEncode - byte array of data to encode in base64 form
filename - Filename for saving encoded data

Returns:

true if successful, false otherwise

decodeToFile

```
public static boolean decodeToFile(String dataToDecode,  
    String filename)
```

Convenience method for decoding data to a file.

Parameters:

dataToDecode - Base64-encoded data as a string
filename - Filename for saving decoded data

Returns:

true if successful, false otherwise

decodeFromFile

```
public static byte[] decodeFromFile(String filename)
```

Convenience method for reading a base64-encoded file and decoding it.

Parameters:

filename - Filename for reading encoded data

Returns:

decoded byte array or null if unsuccessful

encodeFromFile

```
public static String encodeFromFile(String filename)
```

Convenience method for reading a binary file and base64-encoding it.

Parameters:

filename - Filename for reading binary data

Returns:

base64-encoded string or null if unsuccessful

encodeFileToFile

```
public static void encodeFileToFile(String infile,  
                                     String outfile)
```

Reads infile and encodes it to outfile.

Parameters:

infile - Input file
outfile - Output file

encodeString

```
public static void encodeString(String inString)
```

Encodes inString and outputs result to stdout

Parameters:

inString - Input string

decodeString

```
public static void decodeString(String inString)
```

Decodes inString and outputs result to stdout

Parameters:

inString - Input string

decodeFileToFile

```
public static void decodeFileToFile(String infile,  
                                     String outfile)
```

Reads infile and decodes it to outfile.

Parameters:

infile - Input file
outfile - Output file

encodeAndReplacePlusesAndDashes

```
public static String encodeAndReplacePlusesAndDashes(String s)
```

com.wowza.util Class Base64.InputStream

```

java.lang.Object
  |
  +- java.io.InputStream
        |
        +- java.io.FilterInputStream
              |
              +- com.wowza.util.Base64.InputStream
  
```

All Implemented Interfaces:

java.io.Closeable

public static class **Base64.InputStream**
extends java.io.FilterInputStream

A [Base64.InputStream](#) will read data from another java.io.InputStream, given in the constructor, and encode/decode to/from Base64 notation on the fly.

See Also:

[Base64](#)

Fields inherited from class java.io.FilterInputStream

in

Constructor Summary

public	InputStream (java.io.InputStream in) Constructs a Base64.InputStream in DECODE mode.
public	InputStream (java.io.InputStream in, int options) Constructs a Base64.InputStream in either ENCODE or DECODE mode.

Method Summary

int	read () Reads enough of the input stream to convert to/from Base64 and returns the next byte.
int	read (byte[] dest, int off, int len) Calls read() repeatedly until the end of stream is reached or len bytes are read.

Methods inherited from class java.io.FilterInputStream

available, close, mark, markSupported, read, read, read, reset, skip

Methods inherited from class java.io.InputStream

available, close, mark, markSupported, read, read, read, readAllBytes, readNBytes, reset, skip, transferTo

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `java.io.Closeable``close`**Methods inherited from interface** `java.lang.AutoCloseable``close`

Constructors

InputStream

```
public InputStream(java.io.InputStream in)
```

Constructs a [Base64.InputStream](#) in DECODE mode.

Parameters:

`in` - the `java.io.InputStream` from which to read data.

InputStream

```
public InputStream(java.io.InputStream in,  
                    int options)
```

Constructs a [Base64.InputStream](#) in either ENCODE or DECODE mode.

Valid options:

```
ENCODE or DECODE: Encode or Decode as data is read.  
DONT_BREAK_LINES: don't break lines at 76 characters  
    (only meaningful when encoding)  
Note: Technically, this makes your encoding non-compliant.
```

Example: `new Base64.InputStream(in, Base64.DECODE)`

Parameters:

`in` - the `java.io.InputStream` from which to read data.

`options` - Specified options

See Also:

[Base64.ENCODE](#)

[Base64.DECODE](#)

[Base64.DONT_BREAK_LINES](#)

Methods

read

```
public int read()  
    throws java.io.IOException
```

(continued from last page)

Reads enough of the input stream to convert to/from Base64 and returns the next byte.

Returns:

next byte

read

```
public int read(byte[] dest,  
               int off,  
               int len)  
throws java.io.IOException
```

Calls [read\(\)](#) repeatedly until the end of stream is reached or len bytes are read. Returns number of bytes read into array or -1 if end of stream is encountered.

Parameters:

dest - array to hold values
off - offset for array
len - max number of bytes to read into array

Returns:

bytes read into array or -1 if end of stream is encountered.

com.wowza.util Class Base64.OutputStream

```

java.lang.Object
|
+- java.io.OutputStream
|
|   +- java.io.FilterOutputStream
|   |
|   |   +- com.wowza.util.Base64.OutputStream

```

All Implemented Interfaces:

java.io.Flushable, java.io.Closeable

public static class **Base64.OutputStream**
extends java.io.FilterOutputStream

A [Base64.OutputStream](#) will write data to another java.io.OutputStream, given in the constructor, and encode/decode to/from Base64 notation on the fly.

See Also:

[Base64](#)

Fields inherited from class java.io.FilterOutputStream

out

Constructor Summary

public	OutputStream (java.io.OutputStream out) Constructs a Base64.OutputStream in ENCODE mode.
public	OutputStream (java.io.OutputStream out , int options) Constructs a Base64.OutputStream in either ENCODE or DECODE mode.

Method Summary

void	close () Flushes and closes (I think, in the superclass) the stream.
void	flushBase64 () Method added by PHIL.
void	resumeEncoding () Resumes encoding of the stream.
void	suspendEncoding () Suspends encoding of the stream.
void	write (byte[] theBytes, int off, int len) Calls write(int) repeatedly until len bytes are written.
void	write (int theByte) Writes the byte to the output stream after converting to/from Base64 notation.

Methods inherited from class java.io.FilterOutputStream

```
close, flush, write, write, write
```

Methods inherited from class `java.io.OutputStream`

```
close, flush, write, write, write
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `java.io.Closeable`

```
close
```

Methods inherited from interface `java.lang.AutoCloseable`

```
close
```

Methods inherited from interface `java.io.Flushable`

```
flush
```

Constructors

OutputStream

```
public OutputStream(java.io.OutputStream out)
```

Constructs a [Base64.OutputStream](#) in ENCODE mode.

Parameters:

out - the java.io.OutputStream to which data will be written.

OutputStream

```
public OutputStream(java.io.OutputStream out,  
                    int options)
```

Constructs a [Base64.OutputStream](#) in either ENCODE or DECODE mode.

Valid options:

```
ENCODE or DECODE: Encode or Decode as data is read.  
DONT_BREAK_LINES: don't break lines at 76 characters  
    (only meaningful when encoding)  
Note: Technically, this makes your encoding non-compliant.
```

Example: new Base64.OutputStream(out, Base64.ENCODE)

(continued from last page)

Parameters:

out - the java.io.OutputStream to which data will be written.
options - Specified options.

See Also:[Base64.ENCODER](#)[Base64.DECODER](#)[Base64.DONT_BREAK_LINES](#)

Methods

write

```
public void write(int theByte)
    throws java.io.IOException
```

Writes the byte to the output stream after converting to/from Base64 notation. When encoding, bytes are buffered three at a time before the output stream actually gets a write() call. When decoding, bytes are buffered four at a time.

Parameters:

theByte - the byte to write

write

```
public void write(byte[] theBytes,
    int off,
    int len)
    throws java.io.IOException
```

Calls [write\(int\)](#) repeatedly until len bytes are written.

Parameters:

theBytes - array from which to read bytes
off - offset for array
len - max number of bytes to read into array

flushBase64

```
public void flushBase64()
    throws java.io.IOException
```

Method added by PHIL. [Thanks, PHIL. -Rob] This pads the buffer without closing the stream.

close

```
public void close()
    throws java.io.IOException
```

Flushes and closes (I think, in the superclass) the stream.

suspendEncoding

```
public void suspendEncoding()
    throws java.io.IOException
```

Suspends encoding of the stream. May be helpful if you need to embed a piece of base64-encoded data in a stream.

(continued from last page)

resumeEncoding

```
public void resumeEncoding()
```

Resumes encoding of the stream. May be helpful if you need to embed a piece of base64-encoded data in a stream.

com.wowza.util Class BitReader

java.lang.Object

└─com.wowza.util.BitReader

All Implemented Interfaces:

[IBitReader](#)

public class **BitReader**
 extends Object
 implements [IBitReader](#)

Constructor Summary

public	BitReader (byte[] bytes)
public	BitReader (byte[] bytes, int len)
public	BitReader (byte[] bytes, int offset, int len)

Method Summary

int	count ()
int	getBit ()
int	getBytes (byte[] buffer, int offset, int len)
int	getInt (int numberBits)
int	getIntLE (int numberBits)
int	getIntSigned (int numberBits)
long	getLong (int numberBits)
int	peekInt (int numberBits)
int	peekIntLE (int numberBits)
long	peekLong (int numberBits)
int	readExpGolomb ()
int	readExpGolombSigned ()

int	remaining()
void	skip()
void	skip(int numberBits)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.util.IBitReader](#)

[getBytes](#), [getInt](#), [getIntLE](#), [getLong](#), [peekInt](#), [peekIntLE](#), [peekLong](#), [remaining](#), [skip](#)

Constructors

BitReader

```
public BitReader(byte[] bytes)
```

BitReader

```
public BitReader(byte[] bytes,  
                 int len)
```

BitReader

```
public BitReader(byte[] bytes,  
                 int offset,  
                 int len)
```

Methods

remaining

```
public int remaining()
```

count

```
public int count()
```

(continued from last page)

getBit

```
public int getBit()
```

skip

```
public void skip()
```

skip

```
public void skip(int numberBits)
```

peekInt

```
public int peekInt(int numberBits)
```

peekIntLE

```
public int peekIntLE(int numberBits)
```

getInt

```
public int getInt(int numberBits)
```

getIntLE

```
public int getIntLE(int numberBits)
```

peekLong

```
public long peekLong(int numberBits)
```

getLong

```
public long getLong(int numberBits)
```

getIntSigned

```
public int getIntSigned(int numberBits)
```

(continued from last page)

readExpGolombSigned

```
public int readExpGolombSigned()
```

readExpGolomb

```
public int readExpGolomb()
```

getBytes

```
public int getBytes(byte[] buffer,  
                   int offset,  
                   int len)
```


com.wowza.util Class BitReaderFast

java.lang.Object

└─com.wowza.util.BitReaderFast

All Implemented Interfaces:

[IBitReader](#)

public class **BitReaderFast**
 extends Object
 implements [IBitReader](#)

Field Summary

public	bitCurr
public	bitTotal
public	buffer
public	len
public	offset

Constructor Summary

public	BitReaderFast (byte[] buffer)
public	BitReaderFast (byte[] buffer, int len)
public	BitReaderFast (byte[] buffer, int offset, int len)

Method Summary

int	getBytes (byte[] buffer, int offset, int len)
int	getInt (int numberBits)
int	getInt (int numberBits, boolean peek)
int	getIntLE (int numberBits)
int	getIntLE (int numberBits, boolean peek)
long	getLong (int numberBits)

long	getLong (int numberBits, boolean peek)
int	peekInt (int numberBits)
int	peekIntLE (int numberBits)
long	peekLong (int numberBits)
int	remaining ()
void	skip (int numberBits)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.util.IBitReader](#)

[getBytes](#), [getInt](#), [getIntLE](#), [getLong](#), [peekInt](#), [peekIntLE](#), [peekLong](#), [remaining](#), [skip](#)

Fields

buffer

```
public byte buffer
```

offset

```
public int offset
```

len

```
public int len
```

bitCurr

```
public int bitCurr
```

bitTotal

```
public int bitTotal
```

(continued from last page)

Constructors

BitReaderFast

```
public BitReaderFast(byte[] buffer)
```

BitReaderFast

```
public BitReaderFast(byte[] buffer,  
                    int len)
```

BitReaderFast

```
public BitReaderFast(byte[] buffer,  
                    int offset,  
                    int len)
```

Methods

remaining

```
public int remaining()
```

skip

```
public void skip(int numberBits)
```

getInt

```
public int getInt(int numberBits)
```

peekInt

```
public int peekInt(int numberBits)
```

getInt

```
public int getInt(int numberBits,  
                boolean peek)
```

(continued from last page)

getIntLE

```
public int getIntLE(int numberBits)
```

peekIntLE

```
public int peekIntLE(int numberBits)
```

getIntLE

```
public int getIntLE(int numberBits,  
                    boolean peek)
```

getLong

```
public long getLong(int numberBits)
```

peekLong

```
public long peekLong(int numberBits)
```

getLong

```
public long getLong(int numberBits,  
                    boolean peek)
```

getBytes

```
public int getBytes(byte[] buffer,  
                    int offset,  
                    int len)
```

com.wowza.util Class BitWriter

java.lang.Object

└─com.wowza.util.BitWriter

public class **BitWriter**
extends Object

Constructor Summary

public	BitWriter (byte[] bytes)
public	BitWriter (byte[] bytes, int len)

Method Summary

void	alignToByte ()
int	count ()
void	putBit (int bit)
void	putInt (int numberBits, int val)
void	putLong (int numberBits, long val)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

BitWriter

public **BitWriter**(byte[] bytes)

BitWriter

public **BitWriter**(byte[] bytes,
int len)

(continued from last page)

Methods

count

```
public int count()
```

putBit

```
public void putBit(int bit)
```

putInt

```
public void putInt(int numberBits,  
int val)
```

putLong

```
public void putLong(int numberBits,  
long val)
```

alignToByte

```
public void alignToByte()
```

com.wowza.util Class BufferUtils

java.lang.Object

└─com.wowza.util.BufferUtils

public class **BufferUtils**
extends Object

BufferUtils: utilities for converting between binary data and Java primitive types. Faster than Java runtime equivalents

Field Summary

public static final	alphas
public static final	hexadecimal

Constructor Summary

public	BufferUtils()
--------	-------------------------------

Method Summary

static int	byteArrayToInt (byte[] b) Convert byte array to int
static int	byteArrayToInt (byte[] b, int offset) Convert byte array to int with offset
static int	byteArrayToInt (byte[] b, int offset, int count) Convert byte array to int with offset.
static int	byteArrayToInt (byte[] b, int offset, int count, boolean isReverse) Convert byte array to int with offset.
static long	byteArrayToLong (byte[] b) Convert byte array to long
static long	byteArrayToLong (byte[] b, int offset) Convert byte array to long with offset
static long	byteArrayToLong (byte[] b, int offset, int count) Convert byte array to long with offset.
static long	byteArrayToLong (byte[] b, int offset, int count, boolean isReverse) Convert byte array to long with offset.
static int	byteArrayToShort (byte[] b) Convert byte array to int

static int	<code>byteArrayToShort</code> (byte[] b, int offset) Convert byte array to int with offset
static int	<code>byteArrayToShort</code> (byte[] b, int offset, int count) Convert byte array to int with offset.
static int	<code>byteArrayToShort</code> (byte[] b, int offset, int count, boolean isReverse) Convert byte array to int with offset.
static String	<code>byteArrayToString</code> (byte[] b) Convert a byte array to a String (UTF-8 encoding assumed)
static String	<code>byteArrayToString</code> (byte[] b, int offset, int count) Convert a byte array to a String (UTF-8 encoding assumed)
static String	<code>byteArrayToString</code> (byte[] b, int offset, int count, String charsetName) Convert a byte array to a String
static byte[]	<code>decodeHexString</code> (String hexStr) Decode a string as a byte array
static int	<code>doCRC32</code> (int crc, byte[] buffer, int offset, int len) Calculate an IEEE CRC32 value for MPEG transport stream from a starting crc value
static String	<code>encodeHexString</code> (byte[] bytes) Encode a byte array as a string
static String	<code>encodeHexString</code> (byte[] bytes, int offset, int len) Encode a byte array as a string
static int	<code>getUnsignedShort</code> (java.nio.ByteBuffer buffer)
static int	<code>indexOf</code> (byte[] source, byte[] pattern) Finds the first occurrence of a byte pattern in a byte buffer.
static int	<code>indexOfDifferent</code> (byte[] buffer1, byte[] buffer2) Compare two byte buffers, and return the index of the first byte that is different.
static byte[]	<code>intToByteArray</code> (int value) Convert a int value to a byte array in network order
static void	<code>intToByteArray</code> (int value, byte[] buffer, int offset, int size) Convert a int value to a byte array in network order
static void	<code>intToByteArray</code> (int value, byte[] buffer, int offset, int size, boolean isReverse) Convert a int value to a byte array in network order
static byte[]	<code>intToByteArray</code> (int value, int size) Convert a int value to a byte array in network order
static byte[]	<code>longToByteArray</code> (long value) Convert a long value to a byte array in network order
static void	<code>longToByteArray</code> (long value, byte[] buffer, int offset, int size) Convert a long value to a byte array in network order
static void	<code>longToByteArray</code> (long value, byte[] buffer, int offset, int size, boolean isReverse) Convert a long value to a byte array in network order

static byte[]	<code>longToByteArray</code> (long value, int size) Convert a long value to a byte array in network order
static boolean	<code>startsWith</code> (byte[] source, byte[] pattern)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

hexadecimal

```
public static final java.lang.String hexadecimal
```

alphas

```
public static final java.lang.String alphas
```

Constructors

BufferUtils

```
public BufferUtils()
```

Methods

encodeHexString

```
public static String encodeHexString(byte[] bytes)
```

Encode a byte array as a string

Parameters:

bytes - byte array

Returns:

string

encodeHexString

```
public static String encodeHexString(byte[] bytes,  
    int offset,  
    int len)
```

Encode a byte array as a string

Parameters:

(continued from last page)

bytes - byte array
offset - offset
len - length

Returns:
string

decodeHexString

```
public static byte[] decodeHexString(String hexStr)
```

Decode a string as a byte array

Parameters:
hexStr - string

Returns:
byte array

byteArrayToString

```
public static String byteArrayToString(byte[] b)
```

Convert a byte array to a String (UTF-8 encoding assumed)

Parameters:
b - byte array

Returns:
resultant string

byteArrayToString

```
public static String byteArrayToString(byte[] b,  
    int offset,  
    int count)
```

Convert a byte array to a String (UTF-8 encoding assumed)

Parameters:
b - byte array
offset - offset
count - len

Returns:
resultant string

byteArrayToString

```
public static String byteArrayToString(byte[] b,  
    int offset,  
    int count,  
    String charsetName)
```

Convert a byte array to a String

Parameters:
b - byte array
offset - offset

(continued from last page)

count - len
charsetName - character set name

Returns:
resultant string

byteArrayToLong

```
public static long byteArrayToLong(byte[] b)
```

Convert byte array to long

Parameters:
b - byte array (8 bytes)

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset)
```

Conver byte array to long with offset

Parameters:
b - byte array (8 bytes)
offset - offset

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset,  
int count)
```

Convert byte array to long with offset. Count is the number of bytes. Can be less than 8. If less than 8 just fills lower bits in value.

Parameters:
b - byte array
offset - offset
count - number of bytes

Returns:
long value

byteArrayToLong

```
public static long byteArrayToLong(byte[] b,  
int offset,  
int count,  
boolean isReverse)
```

Convert byte array to long with offset. Count is the number of bytes. Can be less than 8. If less than 8 just fills lower bits in value. The reverse flag allows data to be in reverse order.

Parameters:

(continued from last page)

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

long value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b)
```

Convert byte array to int

Parameters:

b - byte array (4 bytes)

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
    int offset)
```

Convert byte array to int with offset

Parameters:

b - byte array (4 bytes)
offset - offset

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
    int offset,  
    int count)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 4. If less than 4 just fills lower bits in value.

Parameters:

b - byte array
offset - offset
count - number of bytes

Returns:

int value

byteArrayToInt

```
public static int byteArrayToInt(byte[] b,  
    int offset,  
    int count,  
    boolean isReverse)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 4. If less than 4 just fills lower bits in value. The reverse flag allows data to be in reverse order.

(continued from last page)

Parameters:

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b)
```

Convert byte array to int

Parameters:

b - byte array (2 bytes)

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
    int offset)
```

Conver byte array to int with offset

Parameters:

b - byte array (2 bytes)
offset - offset

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
    int offset,  
    int count)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 2. If less than 2 just fills lower bits in value.

Parameters:

b - byte array
offset - offset
count - number of bytes

Returns:

int value

byteArrayToShort

```
public static int byteArrayToShort(byte[] b,  
    int offset,  
    int count,  
    boolean isReverse)
```

Convert byte array to int with offset. Count is the number of bytes. Can be less than 2. If less than 2 just fills lower bits in value. The reverse flag allows data to be in reverse order.

(continued from last page)

Parameters:

b - byte array
offset - offset
count - number of bytes
isReverse - is data in reverse order

Returns:

int value

intToByteArray

```
public static byte[] intToByteArray(int value)
```

Convert a int value to a byte array in network order

Parameters:

value - value

Returns:

4-byte array with value

intToByteArray

```
public static byte[] intToByteArray(int value,  
                                     int size)
```

Convert a int value to a byte array in network order

Parameters:

value - value
size - size of resultant byte array

Returns:

size-byte array with value

intToByteArray

```
public static void intToByteArray(int value,  
                                  byte[] buffer,  
                                  int offset,  
                                  int size)
```

Convert a int value to a byte array in network order

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write

intToByteArray

```
public static void intToByteArray(int value,  
                                  byte[] buffer,  
                                  int offset,  
                                  int size,  
                                  boolean isReverse)
```

Convert a int value to a byte array in network order

(continued from last page)

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write
isReverse - is data in reverse order

longToByteArray

```
public static byte[] longToByteArray(long value)
```

Convert a long value to a byte array in network order

Parameters:

value - value

Returns:

8-byte array with value

longToByteArray

```
public static byte[] longToByteArray(long value,  
int size)
```

Convert a long value to a byte array in network order

Parameters:

value - value
size - size of resultant byte array

Returns:

size-byte array with value

longToByteArray

```
public static void longToByteArray(long value,  
byte[] buffer,  
int offset,  
int size)
```

Convert a long value to a byte array in network order

Parameters:

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write

longToByteArray

```
public static void longToByteArray(long value,  
byte[] buffer,  
int offset,  
int size,  
boolean isReverse)
```

Convert a long value to a byte array in network order

Parameters:

(continued from last page)

value - value
buffer - destination byte array
offset - starting offset in byte array
size - number of bytes to write
isReverse - is data in reverse order

getUnsignedShort

```
public static int getUnsignedShort(java.nio.ByteBuffer buffer)
```

doCRC32

```
public static int doCRC32(int crc,  
    byte[] buffer,  
    int offset,  
    int len)
```

Calculate an IEEE CRC32 value for MPEG transport stream from a starting crc value

Parameters:

crc - starting crc value
buffer - buffer
offset - offset
len - len

Returns:

crc value

indexOf

```
public static int indexOf(byte[] source,  
    byte[] pattern)
```

Finds the first occurrence of a byte pattern in a byte buffer.

Note: If we want to improve the performance, we could implement the Knuth-Morris-Pratt algorithm. But I don't need the speed nor do I have time today!

Parameters:

source - The source byte buffer
pattern - the pattern we're looking for.

Returns:

the index of source where the pattern is found, else -1

indexOfDifferent

```
public static int indexOfDifferent(byte[] buffer1,  
    byte[] buffer2)
```

Compare two byte buffers, and return the index of the first byte that is different.

Parameters:

buffer1 - byte array1
buffer2 - byte array2

Returns:

index where buffers differ, or -1.

startsWith

```
public static boolean startsWith(byte[] source,  
    byte[] pattern)
```

com.wowza.util Class DebugUtils

java.lang.Object

└─com.wowza.util.DebugUtils

public final class **DebugUtils**
extends Object

DebugUtils: Debugging utilities.

Constructor Summary

public	DebugUtils()
--------	------------------------------

Method Summary

static java.io.File	byteArrayToFile (byte[] data, String filePath) Dump a buffer of bytes to a file.
static boolean	doesStackContainMethod (String methodName) Examine current stack trace to determine if the specified method name in the the trace.
static String	formatBytes (byte[] data) Format byte array for printing.
static String	formatBytes (byte[] data, boolean showIndex) Format byte array for printing.
static String	formatBytes (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytes (byte[] data, int offset, int len, boolean showIndex) Format byte array for printing.
static String	formatBytesInSingleRow (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytesShort (byte[] data) Format byte array for printing.
static String	formatBytesShort (byte[] data, int offset, int len) Format byte array for printing.
static String	formatBytesStruct (byte[] data)
static String	formatBytesStruct (byte[] data, int offset, int len) Format byte array for printing.
static String	formatMilliseconds (long ms) Give a time in seconds, return a String representing the time in hh:mm:ss.mmm.

static String	<code>formatSeconds</code> (long t) Give a time in seconds, return a String representing the time in hh:mm:ss.
static String	<code>formatUtcTime</code> (long utcTime)
static String	<code>stackTraceToSingleLineString</code> (Throwable e, int maxLines) Given an exception, return single line String representation.
static String	<code>stackTraceToString</code> (Throwable e) Given an exception, return String representation.
static String	<code>stackTraceToString</code> (Throwable e, int maxLines, String separator) Given an exception, return single line String representation.
static String	<code>toHex</code> (byte value) Format a byte value to a 0xff format
static String	<code>toHex</code> (int value) Format a byte value to a 0xffffffff format
static String	<code>toLong</code> (long value) Format a long value to a 0xffffffffffffffff format

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

DebugUtils

```
public DebugUtils()
```

Methods

formatBytesShort

```
public static String formatBytesShort(byte[] data)
```

Format byte array for printing. Simple format as rows of hex values (16 values per row)

Parameters:

data - byte array

Returns:

formatted string

formatBytesShort

```
public static String formatBytesShort(byte[] data,  
    int offset,  
    int len)
```

(continued from last page)

Format byte array for printing. Simple format as rows of hex values (16 values per row)

Parameters:

data - byte array
offset - offset in array
len - data len

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    boolean showIndex)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    int offset,  
    int len)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytes

```
public static String formatBytes(byte[] data,  
    int offset,  
    int len,  
    boolean showIndex)
```

Format byte array for printing. Format as rows of hex values (16 values per row) along with text representation of data.

(continued from last page)

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytesInSingleRow

```
public static String formatBytesInSingleRow(byte[] data,  
    int offset,  
    int len)
```

Format byte array for printing. Format as rows of hex values all in one row along with text representation of data.

Parameters:

data - byte array
offset - start index in array
len - length to format

Returns:

formatted string

formatBytesStruct

```
public static String formatBytesStruct(byte[] data)
```

formatBytesStruct

```
public static String formatBytesStruct(byte[] data,  
    int offset,  
    int len)
```

Format byte array for printing. Format as Java primitive byte values (8 per row).

Parameters:

data - byte array

Returns:

formatted string

toHex

```
public static String toHex(byte value)
```

Format a byte value to a 0xff format

Parameters:

value - byte value

Returns:

return string

toHex

```
public static String toHex(int value)
```

(continued from last page)

Format a byte value to a 0xffffffff format

Parameters:

value - int value

Returns:

return string

toLong

```
public static String toLong(long value)
```

Format a long value to a 0xffffffffffffffff format

Parameters:

value - long value

Returns:

return string

byteArrayToFile

```
public static java.io.File byteArrayToFile(byte[] data,  
String filePath)
```

Dump a buffer of bytes to a file. Useful for debugging.

Parameters:

data - a buffer of bytes

filePath - The path and filename

formatSeconds

```
public static String formatSeconds(long t)
```

Give a time in seconds, return a String representing the time in hh:mm:ss.

123 s --> 00:02:03

Parameters:

t

Returns:

time representation

formatMilliseconds

```
public static String formatMilliseconds(long ms)
```

Give a time in seconds, return a String representing the time in hh:mm:ss.mmm.

123456 ms --> 00:02:03.456

Parameters:

ms

Returns:

time representation

formatUtcTime

```
public static String formatUtcTime(long utcTime)
```

stackTraceToString

```
public static String stackTraceToString(Throwable e)
```

Given an exception, return String representation. Note: this is the entire raw stack trace including tabs and line endings

Parameters:

e - throwable

Returns:

stack trace representation

stackTraceToSingleLineString

```
public static String stackTraceToSingleLineString(Throwable e,  
int maxLines)
```

Given an exception, return single line String representation. Note: line endings are replaced with "|" character. Tabs are removed.

Parameters:

e - throwable

maxLines - If greater than zero, returns only first maxLines of trace

Returns:

stack trace info

stackTraceToString

```
public static String stackTraceToString(Throwable e,  
int maxLines,  
String seperator)
```

Given an exception, return single line String representation. Note: line endings are replaced with "|" character. Tabs are removed.

Parameters:

e - throwable

maxLines - If greater than zero, returns only first maxLines of trace

seperator - character to replace line endings with

Returns:

stack trace info

doesStackContainMethod

```
public static boolean doesStackContainMethod(String methodName)
```

Examine current stack trace to determine if the specified method name in the the trace.

Could be enhanced quite a bit by also checking for Class and method. But simple for now.

Parameters:

(continued from last page)

methodName

Returns:

true if in trace, else false

com.wowza.util Class ElapsedTimer

java.lang.Object

└─com.wowza.util.ElapsedTimer

public class **ElapsedTimer**
extends Object

ElapsedTimer: Utility class for keep track of the duration an object has been in existence.

Constructor Summary

public	ElapsedTimer() Construct a new ElapsedTimer and start the clock
public	ElapsedTimer(long timestamp)

Method Summary

java.util.Date	getDate() Get the date the object was created
String	getDateString() Get the date object was created as formatted String
long	getTime() Get elapsed time object in existence (milliseconds)
double	getTimeSeconds() Get elapsed time object in seconds
String	getTimeString() Get elapsed time object in existence as formatted String (Ex: 3 days 2 minutes 5 seconds)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ElapsedTimer

public **ElapsedTimer()**

Construct a new ElapsedTimer and start the clock

(continued from last page)

ElapsedTimer

public **ElapsedTimer**(long timestamp)

Methods

getDate

public java.util.Date **getDate**()

Get the date the object was created

Returns:

date object created

getString

public String **getString**()

Get the date object was created as formatted String

Returns:

date object created as formatted String

getTime

public long **getTime**()

Get elapsed time object in existence (milliseconds)

Returns:

elapsed time (milliseconds)

getTimeSeconds

public double **getTimeSeconds**()

Get elapsed time object in seconds

Returns:

elapsed time in seconds

getTimeString

public String **getTimeString**()

Get elapsed time object in existence as formatted String (Ex: 3 days 2 minutes 5 seconds)

Returns:

elapsed time as formatted String

com.wowza.util Class FileUtils

java.lang.Object

└─com.wowza.util.FileUtils

public class **FileUtils**
extends Object

FileUtils: File utilities

Field Summary

protected static	fileEditors
------------------	-----------------------------

Constructor Summary

public	FileUtils()
--------	-----------------------------

Method Summary

static void	closeQuietly (java.io.InputStream stream)
static void	closeQuietly (java.io.OutputStream stream)
static void	closeQuietly (java.io.Reader reader)
static void	copyFile (java.io.File fromFile, java.io.File toFile) Simple file copy routine
static void	copyFile2 (java.io.File fromFile, java.io.File toFile)
static boolean	deleteDirectory (java.io.File path)
static void	deleteFolder (java.io.File folder)
static byte[]	fileToByteArray (java.io.File file)
static Object	getFileEditor (String filePath)
static String	streamNameToValidFilename (String name) Encode a stream name (deal with path elements) to a valid filename.
static String	toValidFilename (String name) Encode a name to a valid filename.
static void	traverseDirectory (java.io.File dir, IFileProcess fileNotify) Traverse a directory recursively calling fileNotify for each file and folder encountered

```
static java.io.File
```

```
versionFile(java.io.File newFile)
```

Rename a file using the file format [original-name]_#[.ext].

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields

fileEditors

```
protected static java.util.Map fileEditors
```

Constructors

FileUtils

```
public FileUtils()
```

Methods

fileToByteArray

```
public static byte[] fileToByteArray(java.io.File file)
```

streamNameToValidFilename

```
public static String streamNameToValidFilename(String name)
```

Encode a stream name (deal with path elements) to a valid filename.

Parameters:

name - stream name

Returns:

encoded filename

toValidFilename

```
public static String toValidFilename(String name)
```

Encode a name to a valid filename.

Parameters:

name

Returns:

encoded filename

copyFile

```
public static void copyFile(java.io.File fromFile,  
                             java.io.File toFile)
```

Simple file copy routine

Parameters:

fromFile - from file
toFile - to file

copyFile2

```
public static void copyFile2(java.io.File fromFile,  
                              java.io.File toFile)  
    throws java.io.IOException
```

closeQuietly

```
public static void closeQuietly(java.io.InputStream stream)
```

closeQuietly

```
public static void closeQuietly(java.io.OutputStream stream)
```

closeQuietly

```
public static void closeQuietly(java.io.Reader reader)
```

deleteDirectory

```
public static boolean deleteDirectory(java.io.File path)
```

versionFile

```
public static java.io.File versionFile(java.io.File newFile)
```

Rename a file using the file format [original-name]_#[.ext].

Parameters:

newFile - input file

Returns:

renamed file

(continued from last page)

traverseDirectory

```
public static void traverseDirectory(java.io.File dir,  
    IFileProcess fileNotify)
```

Traverse a directory recursively calling fileNotify for each file and folder encountered

Parameters:

dir - starting directory
fileNotify - file notify object

deleteFolder

```
public static void deleteFolder(java.io.File folder)
```

getFileEditor

```
public static Object getFileEditor(String filePath)
```

com.wowza.util Class FLVUtils

java.lang.Object

└─com.wowza.util.FLVUtils

public final class **FLVUtils**
extends Object

FLVUtils: utility for reading and writing .flv files.

Field Summary

public static final	<u>CLASS</u>
public static final	<u>CLASSNAME</u> Value: FLVUtils
public static final	<u>FLV_CHUNKHEADER_BUFFERSIZE</u> Size of temporary buffer needed for flv reading (byte[]) Value: 13
public static final	<u>FLV_CHUNKHEADER_FIRSTBYTE</u> Header values: first byte of packet data Value: 3
public static final	<u>FLV_CHUNKHEADER_HEADERSIZE</u> Size of packet header (byte[]) Value: 11
public static final	<u>FLV_CHUNKHEADER_ISIZE</u> Header values: packet size Value: 1
public static final	<u>FLV_CHUNKHEADER_IMECODE</u> Header values: timecode (milliseconds) Value: 2
public static final	<u>FLV_CHUNKHEADER_ITYPE</u> Header values: packet type Value: 0
public static final	<u>FLV_CHUNKHEADER_SECONDBYTE</u> Header values: second byte of packet data Value: 4
public static final	<u>FLV_CHUNKHEADER_VALUESIZE</u> Size of header values array (long[]) Value: 5

public static final	FLV_DFRAME D video frame type (partial frame based on key frame) Value: 3
public static final	FLV_KFRAME Key video frame type Value: 1
public static final	FLV_PFRAME P video frame type (partial frame based on previous frame) Value: 2
public static final	FLV_TCINDEXAUDIO Value: 0
public static final	FLV_TCINDEXDATA Value: 2
public static final	FLV_TCINDEXVIDEO Value: 1
public static final	FLV_UFRAME Unknown video frame type Value: 0
public static final	METADATAFILTER_NONE Value: 0
public static final	METADATAFILTER_REMOVE_OBJS Value: 1

Constructor Summary

public	FLVUtils()
--------	----------------------------

Method Summary

static long	adjustFirstPacketTCs (java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs) Align list of timecode for each data type.
static int	audioCodecStringToId (String codecString) Parse a string to get the codec ID defined by IVHost.CODEC_AUDIO_*
static String	audioCodecToMetaDataString (int codec) Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_* as the string used in the onMetaData event
static String	audioCodecToString (int codec) Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_*
static String	frameTypeToString (int frameType)

static int	<u>getAudioCodec</u> (<u>AMFPacket</u> packet) Get the codec id for this audio packet.
static int	<u>getAudioCodec</u> (int value) Return the codec portion of the first byte of an audio packet.
static int	<u>getAudioMP3Layer</u> (<u>AMFPacket</u> packet) Audio marked as MP3 is really MPEG1 Layer 1-3.
static int	<u>getFrameType</u> (byte value) Given the first byte of a video packet, determine the frame type (FLV_*FRAME)
static int	<u>getFrameType</u> (int value) Given the first byte of a video packet, determine the frame type (FLV_*FRAME)
static int	<u>getFrameType</u> (int[] values) Given the headers values (including first byte of the packet), determine the type of video frame (FLV_*FRAME)
static byte	<u>getHeaderFlags</u> (java.io.File file)
static long	<u>getLastTC</u> (java.io.File file) Get the duration of an .flv file.
static <u>OnMetadataBasic</u>	<u>getOnMetadataData</u> (<u>AMFPacket</u> metaDataPacket)
static int	<u>getVideoCodec</u> (<u>AMFPacket</u> packet) Get the codec id for this video packet.
static int	<u>getVideoCodec</u> (int value) Return the codec portion of the first byte of an video packet.
static int	<u>getVideoFrameType</u> (<u>AMFPacket</u> packet)
static int	<u>getVideoTimecodeOffset</u> (<u>AMFPacket</u> packet) Get the timecode offset in milliseconds between the PTS and DTS for this frame.
static int	<u>getVideoTimecodeOffset</u> (byte[] buffer) Get the timecode offset in milliseconds between the PTS and DTS for this frame.
static java.util.List	<u>interleavePackets</u> (java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs) This is a utility function primarily used for IMediaWriters.
static java.util.List	<u>interleavePackets</u> (java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, long[] currentTCs) This is a utility function primarily used for IMediaWriters.
static boolean	<u>isAudioCodecConfig</u> (<u>AMFPacket</u> packet) Returns true if the packet is a audio codec config packet
static boolean	<u>isAudioCodecConfig</u> (java.nio.ByteBuffer buffer) Returns true if the packet is a audio codec config packet
static boolean	<u>isOnMetadata</u> (byte[] dataDataBytes)

static boolean	<code>isOnMetadataPacket</code> (<code>AMFPacket</code> packet) Returns true if packet is onMetaData or [setDataFrame, onMetaData] data packet.
static boolean	<code>isVideoCodecConfig</code> (<code>AMFPacket</code> packet) Returns true if the packet is a video codec config packet
static boolean	<code>isVideoCodecConfig</code> (java.nio.ByteBuffer buffer) Returns true if the packet is a video codec config packet
static boolean	<code>isVideoCodecConfig</code> (int firstByte, int secondByte) Returns true if the packet is a video codec config packet
static boolean	<code>isVideoKeyFrame</code> (<code>AMFPacket</code> packet) Returns true if the packet is a video key frame
static boolean	<code>isVideoKeyFrame</code> (byte[] buffer) Returns true if the packet is a video key frame
static boolean	<code>isVideoKeyFrame</code> (java.nio.ByteBuffer buffer) Returns true if the packet is a video key frame
static boolean	<code>isVideoKeyFrame</code> (int[] chunkHeaderValues) Returns true if the packet is a video key frame
static byte[]	<code>modifyOnMetadataEvent</code> (byte[] buffer, long flags, java.util.List itemsToRemove, java.util.Map itemsToAdd) Modifies onMetadata event to remove or add items
static <code>AMFPacket</code>	<code>readChunk</code> (java.io.DataInput is) Read a packets worth of .flv data from an InputStream and return as an AMFPacket
static <code>AMFPacket</code>	<code>readChunk</code> (java.io.InputStream is) Read a packets worth of .flv data from an InputStream and return as an AMFPacket
static void	<code>readChunkHeader</code> (java.io.RandomAccessFile is, byte[] buffer, int[] values) Read packet header.
static boolean	<code>readHeader</code> (java.io.DataInput is) Read file header.
static boolean	<code>readHeader</code> (java.io.InputStream is) Read file header.
static void	<code>readPrevChunkHeader</code> (java.io.RandomAccessFile is, byte[] buffer, int[] values) Back up one packet from current position in the file and read the packet header.
static String	<code>streamCodecToString</code> (int codec) Get a printable string representation of the stream codecs defined as IVHost.CODEC_STREAM_*
static <code>AMFPacket</code>	<code>updateOnCuePointTimecode</code> (<code>AMFPacket</code> packet, long timecode)
static java.nio.ByteBuffer	<code>updateOnCuePointTimecode</code> (java.nio.ByteBuffer data, int dataType, long timecode)
static int	<code>videoCodecStringToCodecVersion</code> (String codecString) Parse a string to get the codec version defined by IVHost.CODEC_VIDEO_VERSION_*

static int	<u>videoCodecStringToId</u> (String codecString) Parse a string to get the codec ID defined by IVHost.CODEC_VIDEO_*
static String	<u>videoCodecToMetaDateString</u> (int codec) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event
static String	<u>videoCodecToMetaDateString</u> (int codec, int codecVersion) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event
static String	<u>videoCodecToString</u> (int codec) Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_*
static String	<u>videoCodecToString</u> (int codec, int codecVersion)
static com.wowza.wms.mediawriter.MediaWriterStatus	<u>writeChunk</u> (java.io.DataOutput ds, java.nio.ByteBuffer data, int size, long timecode, byte type)
static com.wowza.wms.mediawriter.MediaWriterStatus	<u>writeChunk</u> (java.io.OutputStream ds, java.nio.ByteBuffer data, int size, long timecode, byte type) Write a packets worth of data.
static void	<u>writeDuration</u> (java.io.File file, double duration) Write the duration to an existing .flv file.
static void	<u>writeHeader</u> (java.io.OutputStream ds, double duration, int audiocodecid, int videocodecid, String createdBy, java.util.Map extraMetadata) Write file header including onMetaData packet.
static void	<u>writeHeader</u> (java.io.OutputStream ds, double duration, java.util.Map extraMetadata) Write file header including onMetaData packet.
static void	<u>writeHeaderFlags</u> (java.io.File file, byte newFlags)
static void	<u>writePackets</u> (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs) Write a bunch of packets to .flv file all at once.
static void	<u>writePackets</u> (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, long[] currentTCs, IFLVWriterAdjustTimecode dataPacketTimecodeAdjuster) Write a bunch of packets to .flv file all at once.
static void	<u>writePackets</u> (java.io.OutputStream ds, java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, long[] currentTCs) Write a bunch of packets to .flv file all at once.
static void	<u>writePackets</u> (java.io.OutputStream ds, java.util.List packetList, long tcOffset) Write audio/video/data packets to an .flv file.

static void	writeShortHeader (java.io.DataOutput ds)
static void	writeShortHeader (java.io.OutputStream ds) Write just the FLV file header (without the metadata packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **FLVUtils**

FLV_CHUNKHEADER_ITYPE

public static final int **FLV_CHUNKHEADER_ITYPE**

Header values: packet type
Constant value: **0**

FLV_CHUNKHEADER_ISIZE

public static final int **FLV_CHUNKHEADER_ISIZE**

Header values: packet size
Constant value: **1**

FLV_CHUNKHEADER_IMECODE

public static final int **FLV_CHUNKHEADER_IMECODE**

Header values: timecode (milliseconds)
Constant value: **2**

FLV_CHUNKHEADER_FIRSTBYTE

public static final int **FLV_CHUNKHEADER_FIRSTBYTE**

Header values: first byte of packet data
Constant value: **3**

(continued from last page)

FLV_CHUNKHEADER_SECONDBYTE

```
public static final int FLV_CHUNKHEADER_SECONDBYTE
```

Header values: second byte of packet data
Constant value: **4**

FLV_CHUNKHEADER_HEADERSIZE

```
public static final int FLV_CHUNKHEADER_HEADERSIZE
```

Size of packet header (byte[])
Constant value: **11**

FLV_CHUNKHEADER_BUFFERSIZE

```
public static final int FLV_CHUNKHEADER_BUFFERSIZE
```

Size of temporary buffer needed for flv reading (byte[])
Constant value: **13**

FLV_CHUNKHEADER_VALUESIZE

```
public static final int FLV_CHUNKHEADER_VALUESIZE
```

Size of header values array (long[])
Constant value: **5**

FLV_UFRAME

```
public static final int FLV_UFRAME
```

Unknown video frame type
Constant value: **0**

FLV_KFRAME

```
public static final int FLV_KFRAME
```

Key video frame type
Constant value: **1**

FLV_DFRAME

```
public static final int FLV_DFRAME
```

D video frame type (partial frame based on key frame)
Constant value: **3**

FLV_PFRAME

```
public static final int FLV_PFRAME
```

P video frame type (partial frame based on previous frame)
Constant value: **2**

FLV_TCINDEXAUDIO

```
public static final int FLV_TCINDEXAUDIO
```

(continued from last page)

Constant value: **0**

FLV_TCINDEXVIDEO

```
public static final int FLV_TCINDEXVIDEO
```

Constant value: **1**

FLV_TCINDEXDATA

```
public static final int FLV_TCINDEXDATA
```

Constant value: **2**

METADATAFILTER_NONE

```
public static final long METADATAFILTER_NONE
```

Constant value: **0**

METADATAFILTER_REMOVE_OBJS

```
public static final long METADATAFILTER_REMOVE_OBJS
```

Constant value: **1**

Constructors

FLVUtils

```
public FLVUtils()
```

Methods

streamCodecToString

```
public static String streamCodecToString(int codec)
```

Get a printable string representation of the stream codecs defined as IVHost.CODEC_STREAM_*

Parameters:

codec - codec id defined IVHost.CODEC_STREAM_*

Returns:

codec name

audioCodecStringToId

```
public static int audioCodecStringToId(String codecString)
```

Parse a string to get the codec ID defined by IVHost.CODEC_AUDIO_*

(continued from last page)

Parameters:

codecString - codec string

Returns:

codec ID

videoCodecToMetaDataString

```
public static String videoCodecToMetaDataString(int codec)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

Returns:

codec name

videoCodecToMetaDataString

```
public static String videoCodecToMetaDataString(int codec,  
int codecVersion)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

codecVersion - codec version

Returns:

metadata string

audioCodecToMetaDataString

```
public static String audioCodecToMetaDataString(int codec)
```

Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_* as the string used in the onMetaData event

Parameters:

codec - codec id defined IVHost.CODEC_AUDIO_*

Returns:

codec name

audioCodecToString

```
public static String audioCodecToString(int codec)
```

Get a printable string representation of the audio codecs defined as IVHost.CODEC_AUDIO_*

Parameters:

codec - codec id defined IVHost.CODEC_AUDIO_*

Returns:

codec name

videoCodecStringToCodecVersion

```
public static int videoCodecStringToCodecVersion(String codecString)
```

Parse a string to get the codec version defined by IVHost.CODEC_VIDEO_VERSION_*

Parameters:

codecString

Returns:

codec version string

videoCodecStringToId

```
public static int videoCodecStringToId(String codecString)
```

Parse a string to get the codec ID defined by IVHost.CODEC_VIDEO_*

Parameters:

codecString - codec string

Returns:

codec ID

videoCodecToString

```
public static String videoCodecToString(int codec)
```

Get a printable string representation of the video codecs defined as IVHost.CODEC_VIDEO_*

Parameters:

codec - codec id defined IVHost.CODEC_VIDEO_*

Returns:

codec name

videoCodecToString

```
public static String videoCodecToString(int codec,  
int codecVersion)
```

frameTypeToString

```
public static String frameTypeToString(int frameType)
```

getFrameType

```
public static int getFrameType(int[] values)
```

Given the headers values (including first byte of the packet), determine the type of video frame (FLV_*FRAME)

Parameters:

values - header values

(continued from last page)

Returns:

type of video frame (FLV_*FRAME)

getFrameType

```
public static int getFrameType(int value)
```

Given the first byte of a video packet, determine the frame type (FLV_*FRAME)

Parameters:

value - first byte of packet

Returns:

type of video frame (FLV_*FRAME)

getAudioCodec

```
public static int getAudioCodec(int value)
```

Return the codec portion of the first byte of an audio packet. Return should be one of IVHost.CODEC_AUDIO_*

Parameters:

value - first byte of audio packet

Returns:

codec id

getVideoCodec

```
public static int getVideoCodec(int value)
```

Return the codec portion of the first byte of an video packet. Return should be one of IVHost.CODEC_VIDEO_*

Parameters:

value - first byte of audio packet

Returns:

codec id

getFrameType

```
public static int getFrameType(byte value)
```

Given the first byte of a video packet, determine the frame type (FLV_*FRAME)

Parameters:

value - first byte of packet

Returns:

type of video frame (FLV_*FRAME)

readChunk

```
public static AMFPacket readChunk(java.io.InputStream is)
```

Read a packets worth of .flv data from an InputStream and return as an AMFPacket

Parameters:

(continued from last page)

is - InputStream

Returns:

AMFPacket of data or null if unsuccessful or end of file

readChunk

```
public static AMFPacket readChunk(java.io.DataInput is)
```

Read a packets worth of .flv data from an InputStream and return as an AMFPacket

Parameters:

is - InputStream

Returns:

AMFPacket of data or null if unsuccessful or end of file

readPrevChunkHeader

```
public static void readPrevChunkHeader(java.io.RandomAccessFile is,  
    byte[] buffer,  
    int[] values)
```

Back up one packet from current position in the file and read the packet header. This includes reading the first byte of the packet data. The file pointer will be positioned at the first byte of the packet data. values[FLV_CHUNKHEADER_ITYPE] will be set to 0x7f if failure or start of file.

Parameters:

is - RandomAccessFile

buffer - temporary buffer byte[FLV_CHUNKHEADER_BUFFERSIZE]

values - header values long[FLV_CHUNKHEADER_VALUESIZE]

readChunkHeader

```
public static void readChunkHeader(java.io.RandomAccessFile is,  
    byte[] buffer,  
    int[] values)
```

Read packet header. This includes reading the first byte of the packet data. The file pointer will be positioned at the first byte of the packet data. values[FLV_CHUNKHEADER_ITYPE] will be set to 0x7f if failure or end of file.

Parameters:

is - RandomAccessFile

buffer - temporary buffer byte[FLV_CHUNKHEADER_BUFFERSIZE]

values - header values long[FLV_CHUNKHEADER_VALUESIZE]

readHeader

```
public static boolean readHeader(java.io.InputStream is)
```

Read file header. Return true if successful. Basically this just skips first 13 bytes in file.

readHeader

```
public static boolean readHeader(java.io.DataInput is)
```

Read file header. Return true if successful. Basically this just skips first 13 bytes in file.

(continued from last page)

writeShortHeader

```
public static void writeShortHeader(java.io.OutputStream ds)
```

Write just the FLV file header (without the metadata packet)

Parameters:

ds - OutputStream

writeShortHeader

```
public static void writeShortHeader(java.io.DataOutput ds)
```

writeHeader

```
public static void writeHeader(java.io.OutputStream ds,
    double duration,
    java.util.Map extraMetadata)
```

Write file header including onMetaData packet.

Parameters:

ds - OutputStream

duration - duration of .flv file in seconds

extraMetadata - Map of name/value pairs of metadata that will be appended to the onMetaData block

writeHeader

```
public static void writeHeader(java.io.OutputStream ds,
    double duration,
    int audiocodecid,
    int videocodecid,
    String createdBy,
    java.util.Map extraMetadata)
```

Write file header including onMetaData packet.

With this method you can provide a Map of metadata to write to the file. This map can include a mixture of simple types like: int, long, String, boolean. These types will be wrapped in AMFData classes before they are written to the file. This map can also contain AMFData items. For example if you wanted to insert an array of **cuePoints** the code would look like:

```
Map extraMetadata = new HashMap();

AMFDataArray amfArray = new AMFDataArray();
for(int i=0;i
```

Parameters:

ds - OutputStream

duration - duration of .flv file in seconds

audiocodecid - audio codec ID see IVHost.CODEC_AUDIO_* (-1 for now audio)

videocodecid - video codec ID see IVHost.CODEC_VIDEO_* (-1 for now video)

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createdBy - created by string (null for empty)

extraMetadata - Map of name/value pairs of metadata that will be appended to the onMetaData block

writeChunk

```
public static com.wowza.wms.mediawriter.MediaWriterStatus
writeChunk( java.io.OutputStream ds,
            java.nio.ByteBuffer data,
            int size,
            long timecode,
            byte type)
```

Write a packets worth of data.

Parameters:

ds - OutputStream

data - packet data

size - size of the packet

timecode - timecode (milliseconds)

type - type of packet IVHost.CONTENTTYPE_*

writeChunk

```
public static com.wowza.wms.mediawriter.MediaWriterStatus
writeChunk( java.io.DataOutput ds,
            java.nio.ByteBuffer data,
            int size,
            long timecode,
            byte type)
```

interleavePackets

```
public static java.util.List interleavePackets( java.util.List audioPackets,
        java.util.List videoPackets,
        java.util.List dataPackets,
        java.util.List audioTCs,
        java.util.List videoTCs,
        java.util.List dataTCs,
        long[] currentTCs)
```

This is a utility function primarily used for IMediaWriters. It is a way of taking the discrete audio/video/data packets and timecodes and interleaving them into a single list of AMFPacket objects. The currentTCs array is an array of longs containing the last timecode for each of the packet types FLV_TCINDEX* (long[3]). This array will be used to calculate the absolute timecode for a given packet. For example if the relative timecode for an audio packet is 26 and the currentTCs value for the audio channel is 1003 then the absolute timecode for that packet will be 1029. The currentTCs array will be updated after this call to reflect the absolute timecode of the last packet processed of each type.

Parameters:

audioPackets - list of audio packets (ByteBuffer)

videoPackets - list of video packets (ByteBuffer)

dataPackets - list of data packets (ByteBuffer)

audioTCs - list of relative audio timecodes (Long)

videoTCs - list of relative video timecodes (Long)

dataTCs - list of relative data timecodes (Long)

currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

Returns:

List of AMFPacket objects sorted by timecodes

interleavePackets

```
public static java.util.List interleavePackets(java.util.List audioPackets,
        java.util.List videoPackets,
        java.util.List dataPackets,
        java.util.List audioTCs,
        java.util.List videoTCs,
        java.util.List dataTCs,
        java.util.List dataTypes,
        long[] currentTCs)
```

This is a utility function primarily used for IMediaWriters. It is a way of taking the discrete audio/video/data packets and timecodes and interleaving them into a single list of AMFPacket objects. The currentTCs array is an array of longs containing the last timecode for each of the packet types FLV_TCINDEX* (long[3]). This array will be used to calculate the absolute timecode for a given packet. For example if the relative timecode for an audio packet is 26 and the currentTCs value for the audio channel is 1003 then the absolute timecode for that packet will be 1029. The currentTCs array will be updated after this call to reflect the absolute timecode of the last packet processed of each type.

Parameters:

audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

Returns:

List of AMFPacket objects sorted by timecodes

writePackets

```
public static void writePackets(java.io.OutputStream ds,
        java.util.List packetList,
        long tcOffset)
```

Write audio/video/data packets to an .flv file. They will be written in the packetList order.

Parameters:

ds - OutputStream
 packetList - List of AMFPacket objects
 tcOffset - timecode offset

writePackets

```
public static void writePackets(java.io.OutputStream ds,
        java.util.List audioPackets,
        java.util.List videoPackets,
        java.util.List dataPackets,
        java.util.List audioTCs,
        java.util.List videoTCs,
        java.util.List dataTCs,
        long[] currentTCs)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)

(continued from last page)

videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

writePackets

```
public static void writePackets(java.io.OutputStream ds,
    java.util.List audioPackets,
    java.util.List videoPackets,
    java.util.List dataPackets,
    java.util.List audioTCs,
    java.util.List videoTCs,
    java.util.List dataTCs,
    java.util.List dataTypes,
    long[] currentTCs)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned in this same array.

writePackets

```
public static void writePackets(java.io.OutputStream ds,
    java.util.List audioPackets,
    java.util.List videoPackets,
    java.util.List dataPackets,
    java.util.List audioTCs,
    java.util.List videoTCs,
    java.util.List dataTCs,
    java.util.List dataTypes,
    long[] currentTCs,
    IFLVWriterAdjustTimecode dataPacketTimecodeAdjuster)
```

Write a bunch of packets to .flv file all at once. The packets will be sorted by timecode as written

Parameters:

ds - OutputStream
 audioPackets - list of audio packets (ByteBuffer)
 videoPackets - list of video packets (ByteBuffer)
 dataPackets - list of data packets (ByteBuffer)
 audioTCs - list of relative audio timecodes (Long)
 videoTCs - list of relative video timecodes (Long)
 dataTCs - list of relative data timecodes (Long)
 dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0
 currentTCs - array of longs containing last TCs written for each packet type FLV_TCINDEX* (long[3]). Last timecode written for each packet type will be returned
 dataPacketTimecodeAdjuster - class that implements the IFLVWriterAdjustTimecode interface for adjusting timecodes in this same array.

adjustFirstPacketTCs

```
public static long adjustFirstPacketTCs(java.util.List audioTCs,  
    java.util.List videoTCs,  
    java.util.List dataTCs)
```

Align list of timecode for each data type. Assume first entry in each list is absolute timecode. When done lowest entry in three lists will be zero and other lists will be offset accordingly.

Parameters:

audioTCs - list of audio timecodes
videoTCs - list of video timecodes
dataTCs - list of data timecodes

Returns:

lowest of three absolute timecodes

writeDuration

```
public static void writeDuration(java.io.File file,  
    double duration)
```

Write the duration to an existing .flv file. This routine will hunt through the .flv file for the onMetaData packet and the duration metadata. It will rewrite the value if found. If not found it will do nothing.

Parameters:

file - .flv file
duration - new duration value (seconds)

getLastTC

```
public static long getLastTC(java.io.File file)
```

Get the duration of an .flv file. This routine will find the onMetaData packet and the duration metadata and return the value. If not found it will read the last packet in the file and return the timecode of that packet.

Parameters:

file

Returns:

duration (milliseconds)

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(AMFPacket packet)
```

Returns true if the packet is a video key frame

Parameters:

packet - packet

Returns:

true if is video key frame

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(int firstByte,  
    int secondByte)
```

(continued from last page)

Returns true if the packet is a video codec config packet

Parameters:

firstByte - first byte of packet
secondByte - second byte of packet

Returns:

true if video codec

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(AMFPacket packet)
```

Returns true if the packet is a video codec config packet

Parameters:

packet

Returns:

true if the packet is a video codec config packet

isVideoCodecConfig

```
public static boolean isVideoCodecConfig(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a video codec config packet

Parameters:

buffer - packet data

Returns:

true if the packet is a video codec config packet

isAudioCodecConfig

```
public static boolean isAudioCodecConfig(AMFPacket packet)
```

Returns true if the packet is a audio codec config packet

Parameters:

packet

Returns:

true if the packet is a audio codec config packet

isAudioCodecConfig

```
public static boolean isAudioCodecConfig(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a audio codec config packet

Parameters:

buffer - packet data

Returns:

true if the packet is a audio codec config packet

(continued from last page)

getAudioMP3Layer

```
public static int getAudioMP3Layer(AMFPacket packet)
```

Audio marked as MP3 is really MPEG1 Layer 1-3. Only MPEG1 Layer 3 is truly MP3. This function will return the layer number for this packet.

Parameters:

packet - amf packet

Returns:

layer number

getAudioCodec

```
public static int getAudioCodec(AMFPacket packet)
```

Get the codec id for this audio packet. Returns IVHost.CODEC_AUDIO_UNKNOWN is unknown or not audio packet

Parameters:

packet - packet

Returns:

codec id IVHost.CODEC_AUDIO_*

getVideoCodec

```
public static int getVideoCodec(AMFPacket packet)
```

Get the codec id for this video packet. Returns IVHost.CODEC_VIDEO_UNKNOWN is unknown or not video packet

Parameters:

packet - packet

Returns:

codec id IVHost.CODEC_VIDEO_*

getVideoFrameType

```
public static int getVideoFrameType(AMFPacket packet)
```

getVideoTimecodeOffset

```
public static int getVideoTimecodeOffset(AMFPacket packet)
```

Get the timecode offset in milliseconds between the PTS and DTS for this frame.

Parameters:

packet - AMFPacket

Returns:

timecode offset in milliseconds (can be negative)

getVideoTimecodeOffset

```
public static int getVideoTimecodeOffset(byte[] buffer)
```

(continued from last page)

Get the timecode offset in milliseconds between the PTS and DTS for this frame.

Parameters:

buffer - video packet buffer

Returns:

timecode offset in milliseconds (can be negative)

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(java.nio.ByteBuffer buffer)
```

Returns true if the packet is a video key frame

Parameters:

buffer - packet data (only need first two bytes of data)

Returns:

true if is video key frame

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(byte[] buffer)
```

Returns true if the packet is a video key frame

Parameters:

buffer - packet data (only need first two bytes of data)

Returns:

true if is video key frame

isVideoKeyFrame

```
public static boolean isVideoKeyFrame(int[] chunkHeaderValues)
```

Returns true if the packet is a video key frame

Parameters:

chunkHeaderValues - chunk header values returned by FLVUtils.readChunkHeader

Returns:

true if is video key frame

updateOnCuePointTimecode

```
public static AMFPacket updateOnCuePointTimecode(AMFPacket packet,  
long timecode)
```

updateOnCuePointTimecode

```
public static java.nio.ByteBuffer updateOnCuePointTimecode(java.nio.ByteBuffer data,  
int dataType,  
long timecode)
```

isOnMetadata

```
public static boolean isOnMetadata(byte[] dataDataBytes)
```

isOnMetadataPacket

```
public static boolean isOnMetadataPacket(AMFPacket packet)
```

Returns true if packet is onMetaData or [@setDataFrame, onMetaData] data packet.

Parameters:

packet - packet

Returns:

true if onMetaData packet

getOnMetadataData

```
public static OnMetadataBasic getOnMetadataData(AMFPacket metaDataPacket)
```

getHeaderFlags

```
public static byte getHeaderFlags(java.io.File file)
```

writeHeaderFlags

```
public static void writeHeaderFlags(java.io.File file,  
    byte newFlags)
```

modifyOnMetadataEvent

```
public static byte[] modifyOnMetadataEvent(byte[] buffer,  
    long flags,  
    java.util.List itemsToRemove,  
    java.util.Map itemsToAdd)
```

Modifies onMetadata event to remove or add items

Parameters:

buffer - byte buffer with onMetadata event serialized

flags - flags to control what gets removed (see METADATAFILTER_*)

itemsToRemove - list of names of fields to remove

itemsToAdd - map of items to add

Returns:

serialized onMetadata event

com.wowza.util Class HTTPUtils

java.lang.Object

└─com.wowza.util.HTTPUtils

public class **HTTPUtils**
extends Object

HTTPUtils: utility class for making http requests.

Field Summary

public static final	COOKIEFORMAT
---------------------	------------------------------

Constructor Summary

public	HTTPUtils()
--------	-----------------------------

Method Summary

static String	assembleQueryStr (java.util.Map queryMap, boolean enableEncoding) Assemble a map of name value pairs into a single query string.
---------------	---

static java.util.Map	expandHTTPHeadersStr (String httpUserHTTPHeadersStr)
----------------------	--

static String	formatDeleteCookie (String name, String path, String domain) Formats a cookie header value that is in the past to delete a cookie
---------------	--

static String	formatSetCookie (String name, String value, int timeoffset, String path, String domain, boolean isSecure) Format a HTTP header Set-Cookie value
---------------	--

static byte[]	HTTPRequestToByteArray (String inUrl, String method, String data, java.util.Map headers) Make a HTTP request and return the result as a byte array
---------------	---

static byte[]	HTTPRequestToByteArray (String inUrl, String method, String data, java.util.Map inHeaders, java.util.Map outHeaders, long dataLimit) Make a HTTP request and return the result as a byte array
---------------	---

static boolean	HTTPRequestToFile (java.io.File file, String inUrl, String method, String data, java.util.List headers) Make a HTTP request and have the result saved to a file.
----------------	---

static java.util.List	splitCookie (String str) Breaks Cookies header value into a list of name/value pairs.
-----------------------	--

static String[]	splitPragmas (String str) Split HTTP Pragma values at commas that separate values.
-----------------	---

static java.util.Map	<code>splitQueryStr</code> (String queryStr) Split a query string into a map and URL decode the values
static String	<code>statusCodeToStr</code> (int statusCode) Convert an HTTP status code to a string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

COOKIEDATEFORMAT

public static final org.apache.commons.lang.time.FastDateFormat **COOKIEDATEFORMAT**

Constructors

HTTPUtils

public **HTTPUtils**()

Methods

HTTPRequestToFile

```
public static boolean HTTPRequestToFile(java.io.File file,
    String inUrl,
    String method,
    String data,
    java.util.List headers)
```

Make a HTTP request and have the result saved to a file.

Parameters:

file - destination
inUrl - url (will work with http and https)
method - method (POST, GET)
data - post data
headers - map of headers (Content-type...)

Returns:

true if successful

HTTPRequestToByteArray

```
public static byte[] HTTPRequestToByteArray(String inUrl,
    String method,
    String data,
    java.util.Map headers)
```

Make a HTTP request and return the result as a byte array

(continued from last page)

Parameters:

inUrl - url (will work with http and https)
method - method (POST, GET)
data - post data
headers - map of headers (Content-type...)

Returns:

byte array of result or null if not successful

HTTPRequestToByteArray

```
public static byte[] HTTPRequestToByteArray(String inUrl,  
    String method,  
    String data,  
    java.util.Map inHeaders,  
    java.util.Map outHeaders,  
    long dataLimit)
```

Make a HTTP request and return the result as a byte array

Parameters:

inUrl - url (will work with http and https)
method - method (POST, GET)
data - data
inHeaders - map of headers (Content-type...)
outHeaders - response headers
dataLimit - maximum number of bytes to read, zero for no limit

Returns:

byte array of result or null if not successful

assembleQueryStr

```
public static String assembleQueryStr(java.util.Map queryMap,  
    boolean enableEncoding)
```

Assemble a map of name value pairs into a single query string. URL encode query string values.

Parameters:

queryMap - name value pairs

Returns:

query string

splitQueryStr

```
public static java.util.Map splitQueryStr(String queryStr)
```

Split a query string into a map and URL decode the values

Parameters:

queryStr - query string

Returns:

map of name value pairs

(continued from last page)

splitPragmas

```
public static String[] splitPragmas(String str)
```

Split HTTP Pragma values at commas that separate values. It deals with internal commas in strings. Example:

```
no-cache, client-id=1485578017, features="seekable, stridable", timeout=6
```

Result:

```
no-cache  
client-id=1485578017  
features="seekable, stridable"  
timeout=6
```

Parameters:

str - Pragma value

Returns:

array of strings broken at commas

splitCookie

```
public static java.util.List splitCookie(String str)
```

Breaks Cookies header value into a list of name/value pairs. The Cookie string: "name1=value1;name2;name1=value3" is returned as: List(item({"name1", "value1"}), item("name2", null), item("name1", "value3"))

Parameters:

str - input string

Returns:

List of name value pairs

formatDeleteCookie

```
public static String formatDeleteCookie(String name,  
    String path,  
    String domain)
```

Formats a cookie header value that is in the past to delete a cookie

Parameters:

name - variable name

path - path

(continued from last page)

domain - domain

Returns:formatted cookie string

formatSetCookie

```
public static String formatSetCookie(String name,  
    String value,  
    int timeoffset,  
    String path,  
    String domain,  
    boolean isSecure)
```

Format a HTTP header Set-Cookie value

Parameters:

name - variable name
value - variable value - null if no value
timeoffset - expiration time in seconds
path - cookie path
domain - cookie domain
isSecure - is cookie secure

Returns:formatted cookie string

statusCodeToStr

```
public static String statusCodeToStr(int statusCode)
```

Convert an HTTP status code to a string

Parameters:

statusCode - HTTP status code

Returns:string

expandHTTPHeadersStr

```
public static java.util.Map expandHTTPHeadersStr(String httpUserHTTPHeadersStr)
```


com.wowza.util Interface IBandwidthThrottler

public interface **IBandwidthThrottler**
extends

Method Summary

abstract long	<code>getBytesAllocation</code> (long request) Requests bytes from the bandwidth throttler interface.
---------------	--

Methods

getBytesAllocation

public abstract long **getBytesAllocation**(long request)

Requests bytes from the bandwidth throttler interface. Return value is the number of bytes allocated

Parameters:

request - request number of bytes

Returns:

allocated number of bytes

com.wowza.util Interface IBitReader

All Known Implementing Classes:
[BitReaderFast](#), [BitReader](#)

public interface **IBitReader**
extends

Method Summary

abstract int	getBytes (byte[] buffer, int offset, int len)
abstract int	getInt (int numberBits)
abstract int	getIntLE (int numberBits)
abstract long	getLong (int numberBits)
abstract int	peekInt (int numberBits)
abstract int	peekIntLE (int numberBits)
abstract long	peekLong (int numberBits)
abstract int	remaining ()
abstract void	skip (int numberBits)

Methods

remaining

public abstract int **remaining**()

skip

public abstract void **skip**(int numberBits)

getInt

public abstract int **getInt**(int numberBits)

peekInt

```
public abstract int peekInt(int numberBits)
```

getIntLE

```
public abstract int getIntLE(int numberBits)
```

peekIntLE

```
public abstract int peekIntLE(int numberBits)
```

getLong

```
public abstract long getLong(int numberBits)
```

peekLong

```
public abstract long peekLong(int numberBits)
```

getBytes

```
public abstract int getBytes(byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.util Interface IFileProcess

public interface **IFileProcess**
extends

Used by FileUtils.traverseDirectory

Method Summary

abstract void	onFile (java.io.File file) Triggered for each file encountered in FileUtils.traverseDirectory
---------------	--

Methods

onFile

public abstract void **onFile**(java.io.File file)

Triggered for each file encountered in FileUtils.traverseDirectory

Parameters:

file - file descriptor

com.wowza.util Class IOPerformanceCounter

java.lang.Object

└─com.wowza.util.IOPerformanceCounter

public class **IOPerformanceCounter**
extends Object

IOPerformanceCounter: data object that tracks the server performance of a particular component (client, vHost, server, stream). It tracks bytes and messages sent to and from the object being measured.

Constructor Summary

public	<u>IOPerformanceCounter</u> () Create an empty performance counter.
--------	---

Method Summary

void	<u>add</u> (<u>IOPerformanceCounter</u> value) Add (value) to this counter.
void	<u>addDifference</u> (<u>IOPerformanceCounter</u> current, <u>IOPerformanceCounter</u> last) Add the result of (current-last) to this counter.
void	<u>clear</u> () Clear or reset this counter back to zero.
<u>IOPerformanceCounter</u>	<u>clone</u> () Create a deep clone (copy) if this object.
void	<u>doSet</u> (<u>IOPerformanceCounter</u> value) Set this object to value.
void	<u>dummy</u> ()
long	<u>getFileInBytes</u> () Get file in bytes
double	<u>getFileInBytesRate</u> () Get estimate of file byte-in byte rate.
long	<u>getFileOutBytes</u> () Get file byte-out bytes (not implemented)
double	<u>getFileOutBytesRate</u> () Get estimate of file byte-out message byte rate (not implemented).
long	<u>getMessagesInBytes</u> () Get byte-in bytes
double	<u>getMessagesInBytesRate</u> () Get estimate of byte-in message byte rate.

long	<u>getMessagesInCount</u> () Get byte-in message count
long	<u>getMessagesInCountRate</u> () Get estimate of byte-in message count rate.
long	<u>getMessagesLossBytes</u> () Get byte-loss bytes
double	<u>getMessagesLossBytesRate</u> () Get estimate of byte-loss message byte rate.
long	<u>getMessagesLossCount</u> () Get byte-loss message count
long	<u>getMessagesLossCountRate</u> () Get estimate of byte-loss message count rate.
long	<u>getMessagesOutBytes</u> () Get byte-out bytes
double	<u>getMessagesOutBytesRate</u> () Get estimate of byte-out message byte rate.
long	<u>getMessagesOutCount</u> () Get byte-out message count
long	<u>getMessagesOutCountRate</u> () Get estimate of byte-out message count rate.
long	<u>incrementBytesIn</u> (long bytes) Increment bytes-in by bytes and increment message count by 0.
long	<u>incrementBytesLoss</u> (long bytes) Increment bytes-loss by bytes and increment message count by 0.
long	<u>incrementBytesOut</u> (long bytes) Increment bytes-out by bytes and increment message count by 0.
long	<u>incrementFileIn</u> (long bytes) Increment file-bytes-in by bytes.
long	<u>incrementFileOut</u> (long bytes) Increment file bytes-out by bytes.
long	<u>incrementMessagesIn</u> () Increment byte-in message count by 1.
long	<u>incrementMessagesIn</u> (long bytes) Increment bytes-in by bytes and increment message count by 1.
long	<u>incrementMessagesIn</u> (long bytes, long count) Increment bytes-in by bytes and message count by count.
long	<u>incrementMessagesLoss</u> () Increment byte-loss message count by 1.
long	<u>incrementMessagesLoss</u> (long bytes) Increment bytes-loss by bytes and increment message count by 1.

long	<code>incrementMessagesLoss</code> (long bytes, long count) Increment bytes-loss by bytes and message count by count.
long	<code>incrementMessagesOut</code> () Increment byte-out message count by 1.
long	<code>incrementMessagesOut</code> (long bytes) Increment bytes-out by bytes and increment message count by 1.
long	<code>incrementMessagesOut</code> (long bytes, long count) Increment bytes-out by bytes and message count by count.
boolean	<code>isDebugEnabled</code> ()
void	<code>setDebugEnabled</code> (boolean debugLog)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

IOPerformanceCounter

```
public IOPerformanceCounter()
```

Create an empty performance counter.

Methods

clone

```
public IOPerformanceCounter clone()
```

Create a deep clone (copy) if this object.

addDifference

```
public void addDifference(IOPerformanceCounter current,  
                          IOPerformanceCounter last)
```

Add the result of (current-last) to this counter. Used internally to efficiently track object performance on a timer.

Parameters:

current - current counter

last - last counter

clear

```
public void clear()
```

Clear or reset this counter back to zero.

(continued from last page)

add

```
public void add(IOPerformanceCounter value)
```

Add (value) to this counter.

Parameters:

value - value to add

doSet

```
public void doSet(IOPerformanceCounter value)
```

Set this object to value.

Parameters:

value - value to set

incrementMessagesIn

```
public long incrementMessagesIn(long bytes)
```

Increment bytes-in by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-in bytes

incrementFileIn

```
public long incrementFileIn(long bytes)
```

Increment file-bytes-in by bytes.

Parameters:

bytes - number of bytes

Returns:

bytes-in bytes

incrementMessagesIn

```
public long incrementMessagesIn(long bytes,  
                                long count)
```

Increment bytes-in by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-in bytes

(continued from last page)

incrementBytesIn

```
public long incrementBytesIn(long bytes)
```

Increment bytes-in by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-in bytes

incrementMessagesIn

```
public long incrementMessagesIn()
```

Increment byte-in message count by 1.

Returns:

bytes-in message count

incrementMessagesOut

```
public long incrementMessagesOut(long bytes)
```

Increment bytes-out by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-out bytes

incrementFileOut

```
public long incrementFileOut(long bytes)
```

Increment file bytes-out by bytes.

Parameters:

bytes - number of bytes

Returns:

bytes-out bytes

incrementMessagesLoss

```
public long incrementMessagesLoss(long bytes)
```

Increment bytes-loss by bytes and increment message count by 1.

Parameters:

bytes - number of bytes

Returns:

bytes-loss bytes

(continued from last page)

incrementMessagesOut

```
public long incrementMessagesOut(long bytes,  
    long count)
```

Increment bytes-out by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-out bytes

incrementMessagesLoss

```
public long incrementMessagesLoss(long bytes,  
    long count)
```

Increment bytes-loss by bytes and message count by count.

Parameters:

bytes - number of bytes
count - number of messages

Returns:

bytes-loss bytes

incrementBytesOut

```
public long incrementBytesOut(long bytes)
```

Increment bytes-out by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-out bytes

incrementBytesLoss

```
public long incrementBytesLoss(long bytes)
```

Increment bytes-loss by bytes and increment message count by 0.

Parameters:

bytes

Returns:

bytes-loss bytes

incrementMessagesOut

```
public long incrementMessagesOut( )
```

Increment byte-out message count by 1.

Returns:

(continued from last page)

bytes-out message count

incrementMessagesLoss

```
public long incrementMessagesLoss()
```

Increment byte-loss message count by 1.

Returns:

bytes-loss message count

getMessagesInCount

```
public long getMessagesInCount()
```

Get byte-in message count

Returns:

byte-in message count

getMessagesOutCount

```
public long getMessagesOutCount()
```

Get byte-out message count

Returns:

byte-out message count

getMessagesLossCount

```
public long getMessagesLossCount()
```

Get byte-loss message count

Returns:

byte-loss message count

getMessagesInBytes

```
public long getMessagesInBytes()
```

Get byte-in bytes

Returns:

byte-in bytes

getFileInBytes

```
public long getFileInBytes()
```

Get file in bytes

Returns:

file in bytes

(continued from last page)

getMessagesOutBytes

```
public long getMessagesOutBytes()
```

Get byte-out bytes

Returns:

byte-out bytes

getFileOutBytes

```
public long getFileOutBytes()
```

Get file byte-out bytes (not implemented)

Returns:

byte-out bytes

getMessagesLossBytes

```
public long getMessagesLossBytes()
```

Get byte-loss bytes

Returns:

byte-loss bytes

getMessagesInCountRate

```
public long getMessagesInCountRate()
```

Get estimate of byte-in message count rate.

Returns:

estimate of byte-in message count rate (messages per second)

getMessagesOutCountRate

```
public long getMessagesOutCountRate()
```

Get estimate of byte-out message count rate.

Returns:

estimate of byte-out message count rate (messages per second)

getMessagesLossCountRate

```
public long getMessagesLossCountRate()
```

Get estimate of byte-loss message count rate.

Returns:

estimate of byte-loss message count rate (messages per second)

getMessagesInBytesRate

```
public double getMessagesInBytesRate()
```

(continued from last page)

Get estimate of byte-in message byte rate.

Returns:

estimate of byte-in message byte rate (bytes per second)

getFileInBytesRate

```
public double getFileInBytesRate()
```

Get estimate of file byte-in byte rate.

Returns:

estimate of file byte-in byte rate (bytes per second)

getMessagesOutBytesRate

```
public double getMessagesOutBytesRate()
```

Get estimate of byte-out message byte rate.

Returns:

estimate of byte-out message byte rate (bytes per second)

getFileOutBytesRate

```
public double getFileOutBytesRate()
```

Get estimate of file byte-out message byte rate (not implemented).

Returns:

estimate of file byte-out message byte rate (bytes per second)

getMessagesLossBytesRate

```
public double getMessagesLossBytesRate()
```

Get estimate of byte-loss message byte rate.

Returns:

estimate of byte-loss message byte rate (bytes per second)

dummy

```
public void dummy()
```

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

com.wowza.util Interface IPacketFragment

All Known Implementing Classes:
[PacketFragment](#)

public interface **IPacketFragment**
extends

Method Summary

abstract IPacketFragment	clone()
abstract byte[]	getBuffer()
abstract int	getLen()
abstract int	getOffset()
abstract void	setBuffer (byte[] buffer)
abstract void	setLen (int len)
abstract void	setOffset (int offset)

Methods

getBuffer

public abstract byte[] **getBuffer**()

setBuffer

public abstract void **setBuffer**(byte[] buffer)

getOffset

public abstract int **getOffset**()

setOffset

public abstract void **setOffset**(int offset)

(continued from last page)

getLen

```
public abstract int getLen()
```

setLen

```
public abstract void setLen(int len)
```

clone

```
public abstract IPacketFragment clone()
```

com.wowza.util Class MD5DigestUtils

java.lang.Object

└─com.wowza.util.MD5DigestUtils

public class **MD5DigestUtils**
extends Object

MD5DigestUtils: MD5 hash utilities.

Field Summary

protected static	md5Digest
protected static	md5Lock

Constructor Summary

public	MD5DigestUtils()
--------	----------------------------------

Method Summary

static String	generateAuth (String method, String uri, String username, String password, String realm, String nonce) Generate an HTTP authorization response
static String	generateAuth (String a2Hash, String alHash, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuth (String method, String uri, String alHash, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuth (String method, String uri, String username, String password, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuthHTTP (String method, String uri, String alHash, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateAuthHTTP (String method, String uri, String username, String password, String realm, String nonce, String qop, String nonceCount, String cnonce) Generate an HTTP authorization response
static String	generateHash (String value) Generate MD5 hash

static byte[]	generateHashBytes (byte[] value) Generate MD5 hash
static byte[]	generateHashBytes (String value) Generate MD5 hash

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

md5Digest

protected static java.security.MessageDigest **md5Digest**

md5Lock

protected static java.lang.Object **md5Lock**

Constructors

MD5DigestUtils

public **MD5DigestUtils**()

Methods

generateAuth

```
public static String generateAuth(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce

Returns:

auth response

generateAuth

```
public static String generateAuth(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth response

generateAuthHTTP

```
public static String generateAuthHTTP(String method,
    String uri,
    String username,
    String password,
    String realm,
    String nonce,
    String qop,
    String nonceCount,
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

response

(continued from last page)

generateAuthHTTP

```
public static String generateAuthHTTP(String method,  
    String uri,  
    String alHash,  
    String nonce,  
    String qop,  
    String nonceCount,  
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
username - username
password - password
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

response

generateAuth

```
public static String generateAuth(String method,  
    String uri,  
    String alHash,  
    String realm,  
    String nonce,  
    String qop,  
    String nonceCount,  
    String cnonce)
```

Generate an HTTP authorization response

Parameters:

method - method
uri - URI
alHash - alHash
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth

generateAuth

```
public static String generateAuth(String a2Hash,  
    String alHash,  
    String realm,  
    String nonce,  
    String qop,  
    String nonceCount,  
    String cnonce)
```

(continued from last page)

Generate an HTTP authorization response

Parameters:

a2Hash - a2Hash
a1Hash - a1Hash
realm - realm
nonce - nonce
qop - qop
nonceCount - nonceCount
cnonce - cnonce

Returns:

auth

generateHashBytes

```
public static byte[] generateHashBytes(byte[] value)
```

Generate MD5 hash

Parameters:

value - byte array to hash

Returns:

byte array result

generateHashBytes

```
public static byte[] generateHashBytes(String value)
```

Generate MD5 hash

Parameters:

value - in string converted to byte array (UTF-8)

Returns:

byte array result

generateHash

```
public static String generateHash(String value)
```

Generate MD5 hash

Parameters:

value - in string converted to byte array (UTF-8)

Returns:

hash as binhex string

com.wowza.util Class MediaUtils

java.lang.Object

└─com.wowza.util.MediaUtils

public class **MediaUtils**
extends Object

MediaUtils: Media utilities.

Field Summary

public static final	CODECSTR_FORMAT_VIDEO_POSTIOS4 Value: 2
public static final	CODECSTR_FORMAT_VIDEO_PREIOS4 Value: 1

Constructor Summary

public	MediaUtils()
--------	------------------------------

Method Summary

static String	audioCodecTypeToString (int codecType) Audio codec ID to string.
static String	videoCodecTypeToString (int codecType) Video codec ID to string.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CODECSTR_FORMAT_VIDEO_PREIOS4

public static final int **CODECSTR_FORMAT_VIDEO_PREIOS4**

Constant value: **1**

CODECSTR_FORMAT_VIDEO_POSTIOS4

public static final int **CODECSTR_FORMAT_VIDEO_POSTIOS4**

(continued from last page)

Constant value: **2**

Constructors

MediaUtils

```
public MediaUtils()
```

Methods

audioCodecTypeToString

```
public static String audioCodecTypeToString(int codecType)
```

Audio codec ID to string. See IVHost.CODEC_AUDIO_*

Parameters:

codecType - codec id. See IVHost.CODEC_AUDIO_*

Returns:

codec string

videoCodecTypeToString

```
public static String videoCodecTypeToString(int codecType)
```

Video codec ID to string. See IVHost.CODEC_VIDEO_*

Parameters:

codecType - codec id. See IVHost.CODEC_VIDEO_*

Returns:

codec string

com.wowza.util Class NetworkUtils

java.lang.Object

└─com.wowza.util.NetworkUtils

public class **NetworkUtils**
extends Object

NetworkUtils: Networking utilities.

Constructor Summary

public	NetworkUtils()
--------	--------------------------------

Method Summary

static boolean	isAddressMulticast (String IpAddress) Returns true if IP address is multicast address
static String	socketAddressToUniqueStr (java.net.InetSocketAddress socketAddress)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

NetworkUtils

public **NetworkUtils**()

Methods

isAddressMulticast

public static boolean **isAddressMulticast**(String IpAddress)

Returns true if IP address is multicast address

Parameters:

IpAddress - IP address

Returns:

true if IP address is multicast address

socketAddressToUniqueStr

```
public static String socketAddressToUniqueStr( java.net.InetSocketAddress  
socketAddress)
```


com.wowza.util Interface NoMBean

public interface **NoMBean**
extends `Annotation`

Annotation for excluding a method from the JMX interface. Below is an example of how it would be used

```
import com.wowza.util.NoMBean;
import com.wowza.wms.module.*;

class MyClass extends ModuleBase
{
    @NoMBean public void myMethod()
    {
    }
}
```

Methods inherited from interface <code>java.lang.annotation.Annotation</code>

<code>annotationType</code> , <code>equals</code> , <code>hashCode</code> , <code>toString</code>

com.wowza.util Class OnMetadataBasic

java.lang.Object

└─com.wowza.util.OnMetadataBasic

public class **OnMetadataBasic**
extends Object

Field Summary

public	audiochannels
public	audiocodecid
public	audiodatarate
public	audiodevice
public	audioinputvolume
public	audiosamplerate
public	author
public	avclevel
public	avcprofile
public	copyright
public	creationdate
public	description
public	displayHeight
public	displayWidth
public	frameHeight
public	framerate
public	frameWidth

public	height
public	keywords
public	presetname
public	rating
public	title
public	videocodecid
public	videodatarate
public	videodevice
public	videokeyframe_frequency
public	width

Constructor Summary

public	OnMetadataBasic()
--------	-----------------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

author

```
public java.lang.String author
```

copyright

```
public java.lang.String copyright
```

description

```
public java.lang.String description
```

(continued from last page)

keywords

```
public java.lang.String keywords
```

rating

```
public java.lang.String rating
```

title

```
public java.lang.String title
```

presetname

```
public java.lang.String presetname
```

creationdate

```
public java.lang.String creationdate
```

videodevice

```
public java.lang.String videodevice
```

framerate

```
public double framerate
```

width

```
public double width
```

height

```
public double height
```

displayWidth

```
public double displayWidth
```

(continued from last page)

displayHeight

```
public double displayHeight
```

frameWidth

```
public double frameWidth
```

frameHeight

```
public double frameHeight
```

videocodecid

```
public java.lang.String videocodecid
```

videodatarate

```
public double videodatarate
```

avclevel

```
public double avclevel
```

avcprofile

```
public double avcprofile
```

videokeyframe_frequency

```
public double videokeyframe_frequency
```

audiodevice

```
public java.lang.String audiodevice
```

(continued from last page)

audiosamplerate

```
public double audiosamplerate
```

audiochannels

```
public double audiochannels
```

audioinputvolume

```
public double audioinputvolume
```

audiocodecid

```
public java.lang.String audiocodecid
```

audiodatarate

```
public double audiodatarate
```

Constructors

OnMetadataBasic

```
public OnMetadataBasic()
```

com.wowza.util Class PacketFragment

java.lang.Object

└─com.wowza.util.PacketFragment

All Implemented Interfaces:

[IPacketFragment](#)

public class **PacketFragment**

extends Object

implements [IPacketFragment](#)

Field Summary

protected	buffer
protected	len
protected	offset

Constructor Summary

public	PacketFragment (byte[] buffer, int offset, int len)
public	PacketFragment (byte[] buffer)
public	PacketFragment ()

Method Summary

PacketFragment	clone ()
byte[]	getBuffer ()
int	getLen ()
int	getOffset ()
void	setBuffer (byte[] buffer)
void	setLen (int len)
void	setOffset (int offset)
int	size ()

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.util.IPacketFragment](#)

[clone](#), [getBuffer](#), [getLen](#), [getOffset](#), [setBuffer](#), [setLen](#), [setOffset](#)

Fields

buffer

protected byte **buffer**

offset

protected int **offset**

len

protected int **len**

Constructors

PacketFragment

```
public PacketFragment(byte[] buffer,  
                      int offset,  
                      int len)
```

PacketFragment

```
public PacketFragment(byte[] buffer)
```

PacketFragment

```
public PacketFragment()
```

Methods

(continued from last page)

clone

```
public PacketFragment clone()
```

size

```
public int size()
```

getBuffer

```
public byte[] getBuffer()
```

setBuffer

```
public void setBuffer(byte[] buffer)
```

getOffset

```
public int getOffset()
```

setOffset

```
public void setOffset(int offset)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.util Class PacketFragmentList

java.lang.Object

└-com.wowza.util.PacketFragmentList

public class **PacketFragmentList**
extends Object

Field Summary

protected	duration
protected	fragments
protected	size
protected	startTime

Constructor Summary

public	PacketFragmentList()
--------	--------------------------------------

Method Summary

void	addPacketFragment (int insertLoc, IPacketFragment fragment)
void	addPacketFragment (IPacketFragment fragment)
void	addPacketFragments (PacketFragmentList frags)
void	clearFragment ()
PacketFragmentList	clone ()
long	getDuration ()
java.util.List	getFragments ()
java.util.List	getFragmentsInternal ()
long	getStartTime ()
void	removeBytes (int offset, int len)

IPacketFragment	removeFragment (int index)
void	setDuration (long duration)
void	setStartTime (long startTime)
int	size ()
byte[]	toByteArray ()
byte[]	toByteArray (boolean copy)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

fragments

protected java.util.List **fragments**

size

protected int **size**

startTime

protected long **startTime**

duration

protected long **duration**

Constructors

PacketFragmentList

public **PacketFragmentList**()

Methods

(continued from last page)

clone

```
public PacketFragmentList clone()
```

addPacketFragments

```
public void addPacketFragments(PacketFragmentList frags)
```

addPacketFragment

```
public void addPacketFragment(IPacketFragment fragment)
```

addPacketFragment

```
public void addPacketFragment(int insertLoc,  
    IPacketFragment fragment)
```

removeFragment

```
public IPacketFragment removeFragment(int index)
```

removeBytes

```
public void removeBytes(int offset,  
    int len)
```

clearFragment

```
public void clearFragment()
```

size

```
public int size()
```

getFragmentsInternal

```
public java.util.List getFragmentsInternal()
```

(continued from last page)

getFragments

```
public java.util.List getFragments()
```

getStartTime

```
public long getStartTime()
```

setStartTime

```
public void setStartTime(long startTime)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

toByteArray

```
public byte[] toByteArray()
```

toByteArray

```
public byte[] toByteArray(boolean copy)
```

com.wowza.util Class PacketFragmentManager

java.lang.Object

└-com.wowza.util.PacketFragmentManager

public class **PacketFragmentManager**
extends Object

Constructor Summary

public	PacketFragmentManager (java.util.List fragments, int size)
--------	--

Method Summary

int	count ()
void	get (byte[] buffer)
void	get (byte[] buffer, int offset, int len)
int	getBytes ()
int	remaining ()
void	skip ()
void	skip (int numberBytes)
static void	trim (java.util.List fragments, int size)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PacketFragmentManager

```
public PacketFragmentManager(java.util.List fragments,  
                               int size)
```

Methods

(continued from last page)

trim

```
public static void trim(java.util.List fragments,
                        int size)
```

remaining

```
public int remaining()
```

count

```
public int count()
```

getBytes

```
public int getBytes()
```

skip

```
public void skip()
```

skip

```
public void skip(int numberBytes)
```

get

```
public void get(byte[] buffer)
```

get

```
public void get(byte[] buffer,
                int offset,
                int len)
```

com.wowza.util Class RolloverLong

java.lang.Object

└─com.wowza.util.RolloverLong

public class **RolloverLong**
extends Object

Constructor Summary

public	RolloverLong (int bits)
--------	---

Method Summary

RolloverLong	clone ()
long	get ()
long	set (long val)
long	setAbs (long val)
void	setHighBits (long val)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RolloverLong

public **RolloverLong**(int bits)

Methods

clone

public [RolloverLong](#) **clone**()

get

```
public long get()
```

setHighBits

```
public void setHighBits(long val)
```

setAbs

```
public long setAbs(long val)
```

set

```
public long set(long val)
```

toString

```
public String toString()
```

com.wowza.util Class SetUtils

java.lang.Object

└─com.wowza.util.SetUtils

public class **SetUtils**
extends Object

Static utilities for standard set operations: union, intersection, difference, subset and superset.

Constructor Summary

public	SetUtils()
--------	----------------------------

Method Summary

static java.util.Set	diff (java.util.Set set1, java.util.Set set2) Create difference of the 2 sets.
static java.util.Set	intersection (java.util.Set set1, java.util.Set set2) Create intersection of 2 sets.
static boolean	isSubset (java.util.Set set1, java.util.Set set2) Determines if set1 is a subset of set2.
static boolean	isSuperset (java.util.Set set1, java.util.Set set2) Determines if set1 is a superset of set2.
static java.util.Set	union (java.util.Set set1, java.util.Set set2) Create union of 2 sets.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SetUtils

public **SetUtils**()

Methods

intersection

public static java.util.Set **intersection**(java.util.Set set1,
java.util.Set set2)

(continued from last page)

Create intersection of 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the intersection of the 2 sets.

union

```
public static java.util.Set union(java.util.Set set1,  
    java.util.Set set2)
```

Create union of 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the union of the 2 sets.

diff

```
public static java.util.Set diff(java.util.Set set1,  
    java.util.Set set2)
```

Create difference of the 2 sets.

Parameters:

set1 - First set
set2 - Second set

Returns:

a new Set, containing the set1 - set2.

isSubset

```
public static boolean isSubset(java.util.Set set1,  
    java.util.Set set2)
```

Determines if set1 is a subset of set2.

Parameters:

set1 - First set
set2 - Second set

Returns:

true if set1 is subset of set2, otherwise false.

isSuperset

```
public static boolean isSuperset(java.util.Set set1,  
    java.util.Set set2)
```

Determines if set1 is a superset of set2.

Parameters:

(continued from last page)

set1 - First set
set2 - Second set

Returns:

true if set1 is superset of set2, otherwise false.

com.wowza.util Class StringUtils

java.lang.Object

└─com.wowza.util.StringUtils

public class **StringUtils**
extends Object

StringUtils: utility class of String utilities.

Constructor Summary

public	StringUtils()
--------	-------------------------------

Method Summary

static boolean	equals (String s1, String s2) Checks if 2 strings are equals, accounting for null cases.
static int	fastStringHash (String contextStr)
static String	getOrDefault (String s, String defaultString) Returns string s, or defaultString if s is null.
static String	intToHexStr (int value, int strLen)
static String	intToStr (int value, int strLen)
static boolean	isEmpty (String s) Checks if string is empty, handling null String case.
static int	length (String s) Returns string length, handling null String case as length of 0.
static String	longToHexStr (long value, int strLen)
static String	longToStr (long value, int strLen)
static String	stampToString (long stamp) Convert a duration (milliseconds) to a formatted string.
static String	stampToStringNoUnits (long stamp) Convert a duration (milliseconds) to a formatted string.
static long	stringToMilliseconds (String stamp) Convert a hh:mm:ss.SSS string to milliseconds No validation that hh:mm:ss are valid ranges
static String	toStringList (java.util.List strings) Convert list of Strings to comma-separated string

static String	toStringList (String[] strings) Convert array of Strings to comma-separated string
static String	toStringList (WMSProperties properties) Convert properties to comma-separated string
static String	valueOf (String s) Returns string, handling null String case as "".

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

StringUtils

```
public StringUtils()
```

Methods

intToStr

```
public static String intToStr(int value,  
                               int strLen)
```

intToHexStr

```
public static String intToHexStr(int value,  
                                  int strLen)
```

longToStr

```
public static String longToStr(long value,  
                                int strLen)
```

longToHexStr

```
public static String longToHexStr(long value,  
                                   int strLen)
```

isEmpty

```
public static boolean isEmpty(String s)
```

(continued from last page)

Checks if string is empty, handling null String case.

Parameters:

s

Returns:

false if string is null or "", true otherwise

length

```
public static int length(String s)
```

Returns string length, handling null String case as length of 0.

Parameters:

s

Returns:

0 if string is null, or length of string.

valueOf

```
public static String valueOf(String s)
```

Returns string, handling null String case as "".

Parameters:

s

Returns:

"" if string is null, or string value.

getOrDefault

```
public static String getOrDefault(String s,  
    String defaultString)
```

Returns string s, or defaultString if s is null.

Parameters:

s

defaultString

Returns:

"" if string is null, or string value.

stampToString

```
public static String stampToString(long stamp)
```

Convert a duration (milliseconds) to a formatted string.

Parameters:

stamp - duration (milliseconds)

Returns:

formatted string (example: 3 days 4 minutes 1 seconds)

(continued from last page)

stampToStringNoUnits

```
public static String stampToStringNoUnits(long stamp)
```

Convert a duration (milliseconds) to a formatted string.

Parameters:

stamp - duration (milliseconds)

Returns:

formatted string (example: 03:04:01.123 hours:minutes:seconds.milliseconds)

stringToMilliseconds

```
public static long stringToMilliseconds(String stamp)
```

Convert a hh:mm:ss.SSS string to milliseconds No validation that hh:mm:ss are valid ranges

Parameters:

stamp - string (hours:minutes:seconds.milliseconds)

Returns:

milliseconds, -1 is parse failed

equals

```
public static boolean equals(String s1,  
    String s2)
```

Checks if 2 strings are equals, accounting for null cases. If both are null, they are considered equal.

Parameters:

s1 - string one

s2 - string 2

Returns:

true is the strings are equal

toStringList

```
public static String toStringList(WMSProperties properties)
```

Convert properties to comma-separated string

Parameters:

properties

Returns:

comma-separated string

toStringList

```
public static String toStringList(java.util.List strings)
```

Convert list of Strings to comma-separated string

Parameters:

strings

(continued from last page)

Returns:comma-separated string

toStringList

```
public static String toStringList(String[] strings)
```

Convert array of Strings to comma-separated string

Parameters:

strings

Returns:comma-separated string

fastStringHash

```
public static int fastStringHash(String contextStr)
```

com.wowza.util Class SystemUtils

java.lang.Object

└─com.wowza.util.SystemUtils

public class **SystemUtils**
extends Object

Nested Class Summary

class	SystemUtils.ReplaceItem SystemUtils.ReplaceItem
-------	--

Field Summary

public static final	defaultLocale
public static final	defaultTimeZone
public static final	gmtTimeZone
protected static final	msb0baseTime Value: 2085978496000
protected static final	msblbaseTime Value: -2208988800000

Constructor Summary

public	SystemUtils()
--------	-------------------------------

Method Summary

static void	addBouncyCastleSecurityProvider() Load bouncy castle providers, Internal use.
static String[]	execCommandGetResult (String cmdStr)
static String[]	execCommandGetResult (String[] cmdStr)
static String	expandEnvironmentVariables (String inValue) Expand system level Java properties in a String in the form \${property-name}
static String	expandEnvironmentVariables (String inValue, java.util.Map valueMap) Expand system level Java properties in a String in the form \${property-name}.

static long	<code>getCpuTime()</code> Get CPU time in nanoseconds.
static String	<code>getLinuxSocketParam(String cmdStr)</code>
static byte[]	<code>getMACAddress()</code> Get MAC address of localhost interface (only works on Java 6 or greater)
static long	<code>getSystemTime()</code> Get system time in nanoseconds.
static long	<code>getUserTime()</code> Get user time in nanoseconds.
static long	<code>toNTPTime(long t)</code> Convert a timecode value in milliseconds to NTP time

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

`defaultTimeZone`

public static final `java.util.TimeZone` **`defaultTimeZone`**

`gmtTimeZone`

public static final `java.util.TimeZone` **`gmtTimeZone`**

`defaultLocale`

public static final `java.util.Locale` **`defaultLocale`**

`msb0baseTime`

protected static final long **`msb0baseTime`**

Constant value: **`2085978496000`**

`msb1baseTime`

protected static final long **`msb1baseTime`**

Constant value: **`-2208988800000`**

(continued from last page)

Constructors

SystemUtils

```
public SystemUtils()
```

Methods

expandEnvironmentVariables

```
public static String expandEnvironmentVariables(String inValue)
```

Expand system level Java properties in a String in the form \${property-name}

Parameters:

inValue - string with properties

Returns:

expanded string

expandEnvironmentVariables

```
public static String expandEnvironmentVariables(String inValue,  
        java.util.Map valueMap)
```

Expand system level Java properties in a String in the form \${property-name}. You can also pass in a map of name/value pairs that will expand the list of available properties

Parameters:

inValue - string with properties

valueMap - name/value pair map

Returns:

expanded string

getMACAddress

```
public static byte[] getMACAddress()
```

Get MAC address of localhost interface (only works on Java 6 or greater)

Returns:

MAC address of localhost interface

addBouncyCastleSecurityProvider

```
public static void addBouncyCastleSecurityProvider()
```

Load bouncy castle providers, Internal use.

toNTPTime

```
public static long toNTPTime(long t)
```

Convert a timecode value in milliseconds to NTP time

(continued from last page)

Parameters:

t - timecode value in milliseconds

Returns:

NTP time

getCpuTime

```
public static long getCpuTime()
```

Get CPU time in nanoseconds.

getUserTime

```
public static long getUserTime()
```

Get user time in nanoseconds.

getSystemTime

```
public static long getSystemTime()
```

Get system time in nanoseconds.

getLinuxSocketParam

```
public static String getLinuxSocketParam(String cmdStr)
```

execCommandGetResult

```
public static String[] execCommandGetResult(String[] cmdStr)
```

execCommandGetResult

```
public static String[] execCommandGetResult(String cmdStr)
```

com.wowza.util Class SystemUtils.ReplaceItem

java.lang.Object

└─com.wowza.util.SystemUtils.ReplaceItem

public static class **SystemUtils.ReplaceItem**
extends Object

Field Summary

public	end
public	newValue
public	start

Constructor Summary

public	ReplaceItem (int start, int stop, String newValue)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

start

public int **start**

end

public int **end**

newValue

public java.lang.String **newValue**

Constructors

(continued from last page)

ReplaceItem

```
public ReplaceItem(int start,  
                   int stop,  
                   String newValue)
```

com.wowza.util Class URLUtils

java.lang.Object

└─com.wowza.util.URLUtils

public final class **URLUtils**
extends Object

Class to deal with URLs

Constructor Summary

public	URLUtils()
--------	----------------------------

Method Summary

static String	appendParamsToUrl (String url, String params) Convenience call to add parameters to a url.
static String	decodeValue (String val) Wrapper for URLDecoder.decode(val, "UTF-8");
static String	encodeValue (String val) Wrapper for URLEncoder.encode(val, "UTF-8");
static String	getParamValue (java.util.Map params, String key) Helper funtion to get single value from multiple value parameter Map
static java.util.Map	parseQueryStr (String queryString, boolean doDecode) Parse query string part of url into Map of Lists (to support multiple values) of query parameters
static String	pathToFileURL (String basePath) Convert a path to a url (file://[path])
static String	urlToId (java.net.URL url) Create a MD5 message digest hash of a url

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

URLUtils

public **URLUtils**()

(continued from last page)

Methods

pathToFileURL

```
public static String pathToFileURL(String basePath)
```

Convert a path to a url (file://[path])

Parameters:

basePath - path

Returns:

file url

urlToId

```
public static String urlToId(java.net.URL url)
```

Create a MD5 message digest hash of a url

Parameters:

url - url to hash

Returns:

hashed url

appendParamsToUrl

```
public static String appendParamsToUrl(String url,  
String params)
```

Convenience call to add parameters to a url. If already has ? add &.

Parameters:

url - input url

params - parameters in the form param1=val1¶m2=val2

Returns:

appended url

encodeValue

```
public static String encodeValue(String val)
```

Wrapper for URLEncoder.encode(val, "UTF-8");

Parameters:

val - value to encode

Returns:

encoded value

decodeValue

```
public static String decodeValue(String val)
```

Wrapper for URLDecoder.decode(val, "UTF-8");

(continued from last page)

Parameters:

val - value to decode

Returns:decoded value

parseQueryStr

```
public static java.util.Map parseQueryStr(String queryString,  
boolean doDecode)
```

Parse query string part of url into Map of Lists (to support multiple values) of query parameters

Parameters:

queryString - query string

doDecode - true to use URLDecoder.decode() to decode parameters

Returns:Map of Lists

getParamValue

```
public static String getParamValue(java.util.Map params,  
String key)
```

Helper funtion to get single value from multiple value parameter Map

Parameters:

params - params Map

key - key string

Returns:first value

com.wowza.util Class XMLUtils

java.lang.Object

└─com.wowza.util.XMLUtils

public class **XMLUtils**
extends Object

XMLUtils: utility class for parsing XML files.

Constructor Summary

public	XMLUtils()
--------	----------------------------

Method Summary

static org.w3c.dom.Node	getNodeByTagName (org.w3c.dom.Element node, String name) Return a child Node by tag name.
static String	getNodeValue (org.w3c.dom.Node node) Return the text value of a node.
static String	getNodeValueByTagName (org.w3c.dom.Element node, String name) Get a child Node value by tag name.
static String	getVersion (org.w3c.dom.Element root) Given a Wowza XML file's root element, parse the version attribute
static boolean	getXMLPropertyBool (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, boolean defaultVal) Get a boolean int value pointed to by xpath or defaultVal if not found.
static double	getXMLPropertyDouble (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, double defaultVal) Get a single double value pointed to by xpath or defaultVal if not found.
static boolean	getXMLPropertyExists (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root)
static int	getXMLPropertyInt (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, int defaultVal) Get a single int value pointed to by xpath or defaultVal if not found.
static int	getXMLPropertyIntSize (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, int defaultVal)
static long	getXMLPropertyLong (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, long defaultVal) Get a single long value pointed to by xpath or defaultVal if not found.
static long	getXMLPropertyLongSize (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, long defaultVal)

static String	getXMLPropertyStr (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root) Get a single string value pointed to by xpath or null if not found.
static String	getXMLPropertyStr (javax.xml.xpath.XPath xpath, String xpathStr, org.w3c.dom.Element root, String defaultVal) Get a single string value pointed to by xpath or defaultVal if not found.
static void	loadConfigProperties (org.w3c.dom.Element root, String propertiesXPath, WMSProperties properties) Loads <Properties> elemnt by xpath into properties object.
static void	loadConfigProperties (org.w3c.dom.NodeList resultList, WMSProperties properties) Given a nodeList load children as properties.
static javax.xml.xpath.XPath Factory	newXPathFactory () Get a new XPath factory object.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

XMLUtils

public **XMLUtils**()

Methods

getNodeValueByTagName

public static String **getNodeValueByTagName**(org.w3c.dom.Element node, String name)

Get a child Node value by tag name. Return null if does not exist.

Parameters:

node - parent node
name - tag name

Returns:

node value or null if does not exist

getNodeByTagName

public static org.w3c.dom.Node **getNodeByTagName**(org.w3c.dom.Element node, String name)

Return a child Node by tag name. Return null if does not exist.

Parameters:

node - parent node

(continued from last page)

name - tag name

Returns:

Node or null if does not exist

getNodeValue

```
public static String getNodeValue(org.w3c.dom.Node node)
```

Return the text value of a node. Return concatenated value of all children nodes that are text nodes.

Parameters:

node - parent node

Returns:

concatenated text nodes or empty string if not found or no children

loadConfigProperties

```
public static void loadConfigProperties(org.w3c.dom.Element root,  
    String propertiesXPath,  
    WMSPProperties properties)
```

Loads <Properties> elemnt by xpath into properties object.

Parameters:

root - root node

propertiesXPath - xpath to search for <Properties> element

properties - properties to add values to

loadConfigProperties

```
public static void loadConfigProperties(org.w3c.dom.NodeList resultList,  
    WMSPProperties properties)
```

Given a nodeList load children as properties.

Parameters:

resultList - node list

properties - properties to add values to

getXMLPropertyStr

```
public static String getXMLPropertyStr(javax.xml.xpath.XPath xpath,  
    String xpathStr,  
    org.w3c.dom.Element root)
```

Get a single string value pointed to by xpath or null if not found.

Parameters:

xpath - XPath interface

xpathStr - xpath string

root - root node to start search

Returns:

single string value pointed to by xpath or null if not found

(continued from last page)

getXMLPropertyStr

```
public static String getXMLPropertyStr( javax.xml.xpath.XPath xpath,
    String xpathStr,
    org.w3c.dom.Element root,
    String defaultVal)
```

Get a single string value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

single string value pointed to by xpath or defaultVal if not found

getXMLPropertyExists

```
public static boolean getXMLPropertyExists( javax.xml.xpath.XPath xpath,
    String xpathStr,
    org.w3c.dom.Element root)
```

getXMLPropertyInt

```
public static int getXMLPropertyInt( javax.xml.xpath.XPath xpath,
    String xpathStr,
    org.w3c.dom.Element root,
    int defaultVal)
```

Get a single int value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

int value or defaultVal if not found

getXMLPropertyIntSize

```
public static int getXMLPropertyIntSize( javax.xml.xpath.XPath xpath,
    String xpathStr,
    org.w3c.dom.Element root,
    int defaultVal)
```

getXMLPropertyLong

```
public static long getXMLPropertyLong( javax.xml.xpath.XPath xpath,
    String xpathStr,
    org.w3c.dom.Element root,
    long defaultVal)
```

Get a single long value pointed to by xpath or defaultVal if not found.

(continued from last page)

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

long value or defaultVal if not found

getXMLPropertyLongSize

```
public static long getXMLPropertyLongSize( javax.xml.xpath.XPath xpath,
      String xpathStr,
      org.w3c.dom.Element root,
      long defaultVal)
```

getXMLPropertyDouble

```
public static double getXMLPropertyDouble( javax.xml.xpath.XPath xpath,
      String xpathStr,
      org.w3c.dom.Element root,
      double defaultVal)
```

Get a single double value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

double value or defaultVal if not found

getXMLPropertyBool

```
public static boolean getXMLPropertyBool( javax.xml.xpath.XPath xpath,
      String xpathStr,
      org.w3c.dom.Element root,
      boolean defaultVal)
```

Get a boolean int value pointed to by xpath or defaultVal if not found.

Parameters:

xpath - XPath interface
xpathStr - xpath string
root - node to start search
defaultVal - default value

Returns:

boolean value or defaultVal if not found

newXPathFactory

```
public static javax.xml.xpath.XPathFactory newXPathFactory()
```

(continued from last page)

Get a new XPath factory object. There is a bug in certain implementations of the Sun VM that forces an explicit creation of the "com.sun.org.apache.xpath.internal.jaxp.XPathFactoryImpl". This method will try the correct method for creation and if fails will directly create "com.sun.org.apache.xpath.internal.jaxp.XPathFactoryImpl" object.

Returns:

XPathFactory or null if not found

getVersion

```
public static String getVersion(org.w3c.dom.Element root)
```

Given a Wowza XML file's root element, parse the version attribute

Parameters:

root

Returns:

version or "0" if not specified

com.wowza.util Class ZipUtils

java.lang.Object

└-com.wowza.util.ZipUtils

public class **ZipUtils**
extends Object

Constructor Summary

public	ZipUtils()
--------	----------------------------

Method Summary

static byte[]	toGzip (byte[] bytes)
static boolean	zipDirectory (String srcDir, String destDir, String zipFileName)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ZipUtils

public **zipUtils**()

Methods

toGzip

public static byte[] **toGzip**(byte[] bytes)

zipDirectory

public static boolean **zipDirectory**(String srcDir,
String destDir,
String zipFileName)

Package

com.wowza.wms.amf

com.wowza.wms.amf

Class AMF3Utils

java.lang.Object

└─com.wowza.wms.amf.AMF3Utils

public class **AMF3Utils**
extends Object

AMF3 utilities

Constructor Summary

public	AMF3Utils()
--------	-----------------------------

Method Summary

static java.util.Date	deserializeDate (java.nio.ByteBuffer data) Deserialize date type
static int	deserializeInt (java.nio.ByteBuffer data) Deserialize int
static String	deserializeString (java.nio.ByteBuffer data) Deserialize string
static String	deserializeString (java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize string
static String	deserializeString (java.nio.ByteBuffer data, int utflen) Deserialize string
static int	serializeDate (java.io.DataOutputStream out, java.util.Date date) Serialize a date object
static int	serializeInt (java.io.DataOutputStream out, int val) Serialize int value
static int	serializeString (java.io.DataOutputStream out, String str) Serialize a string value
static int	serializeStringNoLength (java.io.DataOutputStream out, String str) Serialize string but do not write the length
static void	serializeZeroLengthString (java.io.DataOutputStream out) Serialize empty string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMF3Utils

```
public AMF3Utils()
```

Methods

deserializeDate

```
public static java.util.Date deserializeDate(java.nio.ByteBuffer data)
```

Deserialize date type

Parameters:

data - buffer

Returns:

date

serializeDate

```
public static int serializeDate(java.io.DataOutputStream out,  
    java.util.Date date)
```

Serialize a date object

Parameters:

out - output stream

date - date

Returns:

number of bytes written

deserializeInt

```
public static int deserializeInt(java.nio.ByteBuffer data)
```

Deserialize int

Parameters:

data - buffer

Returns:

int value

serializeInt

```
public static int serializeInt(java.io.DataOutputStream out,  
    int val)
```

Serialize int value

Parameters:

(continued from last page)

out - output stream
val - int value

Returns:

number of bytes written

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)  
    throws java.io.IOException
```

Deserialize string

Parameters:

data - data
context - AMF context

Returns:

string value

Throws:

IOException

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data)  
    throws java.io.IOException
```

Deserialize string

Parameters:

data - data

Returns:

string value

Throws:

IOException

deserializeString

```
public static String deserializeString(java.nio.ByteBuffer data,  
    int utflen)  
    throws java.io.IOException
```

Deserialize string

Parameters:

data - data
utflen - len of the string

Returns:

string value

Throws:

IOException

(continued from last page)

serializeZeroLengthString

```
public static void serializeZeroLengthString(java.io.DataOutputStream out)
```

Serialize empty string

Parameters:

out - output stream

serializeStringNoLength

```
public static int serializeStringNoLength(java.io.DataOutputStream out,  
    String str)  
throws java.io.IOException
```

Serialize string but do not write the length

Parameters:

out - output stream

str - string value

Returns:

number of bytes written

Throws:

IOException

serializeString

```
public static int serializeString(java.io.DataOutputStream out,  
    String str)  
throws java.io.IOException
```

Serialize a string value

Parameters:

out - output stream

str - string value

Returns:

number of bytes written

Throws:

IOException

com.wowza.wms.amf

Class AMFData

```
java.lang.Object
```

```
└--com.wowza.wms.amf.AMFData
```

Direct Known Subclasses:

[AMFDataObj](#), [AMFDataList](#), [AMFDataItem](#), [AMFDataByteArray](#), [AMFDataArray](#)

```
public abstract class AMFData
extends Object
```

Base abstract class for data in Action Message Format (AMF). Data is sent between the Flash client and the Wowza Streaming Engine using the AMF format. This class cannot be instantiated. It serves as the base class for all AMFData objects.

Field Summary

public static	AMF_DEFAULT_DESERIALIZE_CHARSETNAME
public static final	AMF_LEVEL0 Value: 0
public static final	AMF_LEVEL3 Value: 3
public static final	DATA_TYPE_AMF3 Value: 17
public static final	DATA_TYPE_AMF3_ARRAY Value: 9
public static final	DATA_TYPE_AMF3_BOOLEAN_FALSE Value: 2
public static final	DATA_TYPE_AMF3_BOOLEAN_TRUE Value: 3
public static final	DATA_TYPE_AMF3_BYTEARRAY Value: 12
public static final	DATA_TYPE_AMF3_DATE Value: 8
public static final	DATA_TYPE_AMF3_INTEGER Value: 4

public static final	<u>DATA_TYPE_AMF3_NULL</u> Value: 1
public static final	<u>DATA_TYPE_AMF3_NUMBER</u> Value: 5
public static final	<u>DATA_TYPE_AMF3_OBJECT</u> Value: 10
public static final	<u>DATA_TYPE_AMF3_STRING</u> Value: 6
public static final	<u>DATA_TYPE_AMF3_UNDEFINED</u> Value: 0
public static final	<u>DATA_TYPE_AMF3_XML_LEGACY</u> Value: 7
public static final	<u>DATA_TYPE_AMF3_XML_TOP</u> Value: 11
public static final	<u>DATA_TYPE_ARRAY</u> Value: 10
public static final	<u>DATA_TYPE_AS_OBJECT</u> Value: 13
public static final	<u>DATA_TYPE_BOOLEAN</u> Value: 1
public static final	<u>DATA_TYPE_BYTEARRAY</u> Value: 33
public static final	<u>DATA_TYPE_CUSTOM_CLASS</u> Value: 16
public static final	<u>DATA_TYPE_DATE</u> Value: 11
public static final	<u>DATA_TYPE_INTEGER</u> Value: 32
public static final	<u>DATA_TYPE_LONG_STRING</u> Value: 12
public static final	<u>DATA_TYPE_MIXED_ARRAY</u> Value: 8

public static final	DATA_TYPE_MOVIE_CLIP Value: 4
public static final	DATA_TYPE_NULL Value: 5
public static final	DATA_TYPE_NUMBER Value: 0
public static final	DATA_TYPE_OBJECT Value: 3
public static final	DATA_TYPE_OBJECT_END Value: 9
public static final	DATA_TYPE_RECORDSET Value: 14
public static final	DATA_TYPE_REFERENCE_OBJECT Value: 7
public static final	DATA_TYPE_STRING Value: 2
public static final	DATA_TYPE_UNDEFINED Value: 6
public static final	DATA_TYPE_UNKNOWN Value: -1
public static final	DATA_TYPE_XML Value: 15
public static final	DATA_TYPE_XML_TOP Value: 34
public static final	MILLS_PER_HOUR Number of milliseconds in an hour Value: 60000
protected	type

Constructor Summary

public	AMFData()
--------	---------------------------

Method Summary

static AMFDataContextDeserialize	createContextDeserialize() Create an AMF3 deserialization context
static AMFDataContextDeserialize	createContextDeserialize(int objectEncoding) Create an AMF3 deserialization context
static AMFDataContextSerialize	createContextSerialize() Create an AMF3 serialization context
static AMFDataContextSerialize	createContextSerialize(int objectEncoding) Create an AMF3 serialization context
abstract void	deserialize(java.nio.ByteBuffer data) Deserialize data in byte buffer
abstract void	deserialize(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize data in byte buffer
static AMFData	deserializeInnerObject(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize next item
static AMFData	getReference(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Get AMF3 object reference
int	getType() Returns the data type for this object
abstract Object	getValue() Convert object to Java native class
static boolean	isAMF3Start(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is AMF3 start
static boolean	isArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is an array start
static boolean	isByteArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte is ByteArray start
static boolean	isMixedArrayStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is mixed array start
static boolean	isObjEnd(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte is object end
static boolean	isObjStart(java.nio.ByteBuffer data, AMFDataContextDeserialize context) Returns true if next byte in data is object start
static int	peekByte(java.nio.ByteBuffer data) Return the next byte in the buffer without incrementing the data position

abstract byte[]	serialize() Serial object to byte array
abstract byte[]	serialize(AMFDataContextSerialize context) Serial object to byte array
abstract void	serialize(java.io.DataOutputStream out) Serialize object to output stream
abstract void	serialize(java.io.DataOutputStream out, AMFDataContextSerialize context) Serialize object to output stream
abstract void	serialize(java.io.DataOutputStream out, int objectEncoding) Serialize object to output stream
abstract byte[]	serialize(int objectEncoding) Serial object to byte array
void	setType(int type) Sets the the data type for this object
static int	skipByte(java.nio.ByteBuffer data) Skip forward one byte in the byte buffer
static boolean	testNextByte(java.nio.ByteBuffer data, int test) Peek at the next value in data to see if its the test value
static boolean	triggerAMF3Switch(AMFData data) Return true if the object is serialized differently in AMF3

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DATA_TYPE_UNKNOWN

public static final byte **DATA_TYPE_UNKNOWN**

Constant value: **-1**

DATA_TYPE_NUMBER

public static final byte **DATA_TYPE_NUMBER**

Constant value: **0**

DATA_TYPE_BOOLEAN

public static final byte **DATA_TYPE_BOOLEAN**

(continued from last page)

Constant value: **1**

DATA_TYPE_STRING

```
public static final byte DATA_TYPE_STRING
```

Constant value: **2**

DATA_TYPE_OBJECT

```
public static final byte DATA_TYPE_OBJECT
```

Constant value: **3**

DATA_TYPE_MOVIE_CLIP

```
public static final byte DATA_TYPE_MOVIE_CLIP
```

Constant value: **4**

DATA_TYPE_NULL

```
public static final byte DATA_TYPE_NULL
```

Constant value: **5**

DATA_TYPE_UNDEFINED

```
public static final byte DATA_TYPE_UNDEFINED
```

Constant value: **6**

DATA_TYPE_REFERENCE_OBJECT

```
public static final byte DATA_TYPE_REFERENCE_OBJECT
```

Constant value: **7**

DATA_TYPE_MIXED_ARRAY

```
public static final byte DATA_TYPE_MIXED_ARRAY
```

Constant value: **8**

DATA_TYPE_OBJECT_END

```
public static final byte DATA_TYPE_OBJECT_END
```

Constant value: **9**

(continued from last page)

DATA_TYPE_ARRAY

```
public static final byte DATA_TYPE_ARRAY
```

Constant value: **10**

DATA_TYPE_DATE

```
public static final byte DATA_TYPE_DATE
```

Constant value: **11**

DATA_TYPE_LONG_STRING

```
public static final byte DATA_TYPE_LONG_STRING
```

Constant value: **12**

DATA_TYPE_AS_OBJECT

```
public static final byte DATA_TYPE_AS_OBJECT
```

Constant value: **13**

DATA_TYPE_RECORDSET

```
public static final byte DATA_TYPE_RECORDSET
```

Constant value: **14**

DATA_TYPE_XML

```
public static final byte DATA_TYPE_XML
```

Constant value: **15**

DATA_TYPE_CUSTOM_CLASS

```
public static final byte DATA_TYPE_CUSTOM_CLASS
```

Constant value: **16**

DATA_TYPE_AMF3

```
public static final byte DATA_TYPE_AMF3
```

Constant value: **17**

DATA_TYPE_INTEGER

```
public static final byte DATA_TYPE_INTEGER
```

(continued from last page)

Constant value: **32**

DATA_TYPE_BYTEARRAY

```
public static final byte DATA_TYPE_BYTEARRAY
```

Constant value: **33**

DATA_TYPE_XML_TOP

```
public static final byte DATA_TYPE_XML_TOP
```

Constant value: **34**

DATA_TYPE_AMF3_UNDEFINED

```
public static final byte DATA_TYPE_AMF3_UNDEFINED
```

Constant value: **0**

DATA_TYPE_AMF3_NULL

```
public static final byte DATA_TYPE_AMF3_NULL
```

Constant value: **1**

DATA_TYPE_AMF3_BOOLEAN_FALSE

```
public static final byte DATA_TYPE_AMF3_BOOLEAN_FALSE
```

Constant value: **2**

DATA_TYPE_AMF3_BOOLEAN_TRUE

```
public static final byte DATA_TYPE_AMF3_BOOLEAN_TRUE
```

Constant value: **3**

DATA_TYPE_AMF3_INTEGER

```
public static final byte DATA_TYPE_AMF3_INTEGER
```

Constant value: **4**

DATA_TYPE_AMF3_NUMBER

```
public static final byte DATA_TYPE_AMF3_NUMBER
```

Constant value: **5**

DATA_TYPE_AMF3_STRING

```
public static final byte DATA_TYPE_AMF3_STRING
```

Constant value: **6**

DATA_TYPE_AMF3_XML_LEGACY

```
public static final byte DATA_TYPE_AMF3_XML_LEGACY
```

Constant value: **7**

DATA_TYPE_AMF3_DATE

```
public static final byte DATA_TYPE_AMF3_DATE
```

Constant value: **8**

DATA_TYPE_AMF3_ARRAY

```
public static final byte DATA_TYPE_AMF3_ARRAY
```

Constant value: **9**

DATA_TYPE_AMF3_OBJECT

```
public static final byte DATA_TYPE_AMF3_OBJECT
```

Constant value: **10**

DATA_TYPE_AMF3_XML_TOP

```
public static final byte DATA_TYPE_AMF3_XML_TOP
```

Constant value: **11**

DATA_TYPE_AMF3_BYTEARRAY

```
public static final byte DATA_TYPE_AMF3_BYTEARRAY
```

Constant value: **12**

AMF_LEVEL0

```
public static final byte AMF_LEVEL0
```

Constant value: **0**

(continued from last page)

AMF_LEVEL3

```
public static final byte AMF_LEVEL3
```

Constant value: **3**

AMF_DEFAULT_DESERIALIZE_CHARSETNAME

```
public static java.lang.String AMF_DEFAULT_DESERIALIZE_CHARSETNAME
```

MILLS_PER_HOUR

```
public static final int MILLS_PER_HOUR
```

Number of milliseconds in an hour
Constant value: **60000**

type

```
protected int type
```

Constructors

AMFData

```
public AMFData()
```

Methods

getType

```
public int getType()
```

Returns the data type for this object

Returns:

object type DATA_TYPE_*

setType

```
public void setType(int type)
```

Sets the the data type for this object

Parameters:

type - type DATA_TYPE_*

testNextByte

```
public static boolean testNextByte(java.nio.ByteBuffer data,  
    int test)
```


(continued from last page)

Peek at the next value in data to see if its the test value

Parameters:

data - binary data being deserialized
test - value being tested

Returns:

return true if the next byte in the buffer equals the test value

peekByte

```
public static int peekByte(java.nio.ByteBuffer data)
```

Return the next byte in the buffer without incrementing the data position

Parameters:

data - binary data being deserialized

Returns:

next byte in buffer

skipByte

```
public static int skipByte(java.nio.ByteBuffer data)
```

Skip forward one byte in the byte buffer

Parameters:

data - binary data being deserialized

Returns:

next byte in buffer

isObjStart

```
public static boolean isObjStart(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte in data is object start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is object start

isAMF3Start

```
public static boolean isAMF3Start(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte in data is AMF3 start

Parameters:

data - binary data being deserialized
context - deserialization context

(continued from last page)

Returns:

Returns true if next byte in data is object start

isArrayStart

```
public static boolean isArrayStart(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte in data is an array start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is and array start

isMixedArrayStart

```
public static boolean isMixedArrayStart(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte in data is mixed array start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in data is mixed array start

isObjEnd

```
public static boolean isObjEnd(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte is object end

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

Returns true if next byte in object end

isByteArrayStart

```
public static boolean isByteArrayStart(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Returns true if next byte is ByteArray start

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

true if next byte in object end

getReference

```
public static AMFData getReference(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Get AMF3 object reference

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

null if not a reference else referenced object

deserializeInnerObject

```
public static AMFData deserializeInnerObject(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)  
throws java.io.IOException
```

Deserialize next item

Parameters:

data - binary data being deserialized
context - deserialization context

Returns:

deserialized object

Throws:

IOException

createContextSerialize

```
public static AMFDataContextSerialize createContextSerialize()
```

Create an AMF3 serialization context

Returns:

AMF3 serialization context

createContextSerialize

```
public static AMFDataContextSerialize createContextSerialize(int objectEncoding)
```

Create an AMF3 serialization context

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

AMF3 serialization context

createContextDeserialize

```
public static AMFDataContextDeserialize createContextDeserialize()
```

Create an AMF3 deserialization context

(continued from last page)

Returns:

AMF3 deserialization context

createContextDeserialize

```
public static AMFDataContextDeserialize createContextDeserialize(int objectEncoding)
```

Create an AMF3 deserialization context

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

AMF3 deserialization context

serialize

```
public abstract void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

Parameters:

out - Output stream

serialize

```
public abstract void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

Parameters:

out - Output stream

objectEncoding - object encoding level (see AMF_LEVEL*)

serialize

```
public abstract void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

Parameters:

out - Output stream

context - serialization context used by AMF3

serialize

```
public abstract byte[] serialize()
```

Serial object to byte array

Returns:

serialized byte array

(continued from last page)

serialize

```
public abstract byte[] serialize(int objectEncoding)
```

Serial object to byte array

Parameters:

objectEncoding - object encoding level (see AMF_LEVEL*)

Returns:

serialized byte array

serialize

```
public abstract byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

Parameters:

context - serialization context used by AMF3

Returns:

serialized byte array

deserialize

```
public abstract void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

Parameters:

data - binary data

deserialize

```
public abstract void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

Parameters:

data - binary data

context - deserialization context used by AMF3

getValue

```
public abstract Object getValue()
```

Convert object to Java native class

Returns:

java native class

triggerAMF3Switch

```
public static boolean triggerAMF3Switch(AMFData data)
```

Return true if the object is serialized differently in AMF3

(continued from last page)

Parameters:

data - AMF object

Returns:

true if the object is serialized differently in AMF3

com.wowza.wms.amf Class AMFDataArray

```
java.lang.Object
|
+-com.wowza.wms.amf.AMFData
|   |
|   +-com.wowza.wms.amf.AMFDataArray
```

```
public class AMFDataArray
extends AMFData
```

AMFDataArray: class for marshalling data between Wowza Pro server and Flash client. This class is a simple ordered array of items.

Create Array of Strings

```
AMFDataArray amfDataArray = new AMFDataArray();

amfDataArray.add("item1");
amfDataArray.add("item2");
amfDataArray.add("item3");
```

Iterate Items In Array

```
AMFDataArray amfDataArray;

for(int i=0;i<amfDataArray.size();i++)
{
    AMFData amfData = amfDataArray.get(i);
    WMSLoggerFactory.getLogger(null).debug("amfData.getType(): "+amfData.getType());
}
```

NOTE: There is a slight difference between this class and AMFDataList. This class when serialized/deserialized does include the DATA_TYPE_ARRAY header (byte) and array size (int).

NOTE: Simple arrays created in the Flash player client and sent to the Wowza Pro server are of type [AMFDataMixedArray](#).

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#),
[DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#),
[DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#),
[DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#),
[DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#),
[DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#),
[DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#),
[DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#),
[DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#),
[DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#),
[MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataArray () Create empty AMFDataArray object
public	AMFDataArray (byte[] data) Deserialize entire data array and create AMFDataArray object
public	AMFDataArray (byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataArray object
public	AMFDataArray (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataArray object
public	AMFDataArray (java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	add (AMFData data) Append a new item onto the array
void	add (boolean data) Append a boolean (will be wrapped in an AMFDataItem object)
void	add (java.util.Date data) Append a date (will be wrapped in an AMFDataItem object)
void	add (double data) Append a double (will be wrapped in an AMFDataItem object)
void	add (int data) Append a int (will be wrapped in an AMFDataItem object)
void	add (int index, AMFData data) Insert an item into the array
void	add (int index, boolean data) Insert a boolean value (will be wrapped in an AMFDataItem object)
void	add (int index, java.util.Date data) Insert a date value (will be wrapped in an AMFDataItem object)
void	add (int index, double data) Insert a double value (will be wrapped in an AMFDataItem object)

void	add (int index, int data) Insert a int value (will be wrapped in an AMFDataItem object)
void	add (int index, long data) Insert a long value (will be wrapped in an AMFDataItem object)
void	add (int index, String data) Insert a string value (will be wrapped in an AMFDataItem object)
void	add (long data) Append a long (will be wrapped in an AMFDataItem object)
void	add (String data) Append a string (will be wrapped in an AMFDataItem object)
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
AMFData	get (int index) Get item at index
boolean	getBoolean (int index) Get item at index return as boolean
byte	getBytes (int index) Get item at index return as byte
java.util.Date	getDate (int index) Get item at index return as Date
double	getDouble (int index) Get item at index return as double
float	getFloat (int index) Get item at index return as float
int	getInt (int index) Get item at index return as int
long	getLong (int index) Get item at index return as long
AMFDataObj	getObject (int index) Get item at index return as AMFDataObj
short	getShort (int index) Get item at index return as short
String	getString (int index) Get item at index return as String
Object	getValue ()
AMFData	remove (int index) Remove an item from the array

byte[]	serialize()
byte[]	serialize() (AMFDataContextSerialize context)
void	serialize() (java.io.DataOutputStream out)
void	serialize() (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize() (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize() (int objectEncoding)
void	set() (int index, AMFData data) Set an array item
void	set() (int index, boolean data) Set an boolean value (will be wrapped in an AMFDataItem object)
void	set() (int index, java.util.Date data) Set an date value (will be wrapped in an AMFDataItem object)
void	set() (int index, double data) Set an double value (will be wrapped in an AMFDataItem object)
void	set() (int index, int data) Set an int value (will be wrapped in an AMFDataItem object)
void	set() (int index, long data) Set an long value (will be wrapped in an AMFDataItem object)
void	set() (int index, String data) Set an string value (will be wrapped in an AMFDataItem object)
int	size() Returns the number of items in array
String	toString() Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

(continued from last page)

AMFDataArray

```
public AMFDataArray()
```

Create empty AMFDataArray object

AMFDataArray

```
public AMFDataArray(byte[] data)
```

Deserialize entire data array and create AMFDataArray object

Parameters:

data - binary data

AMFDataArray

```
public AMFDataArray(byte[] data,  
                    int offset,  
                    int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataArray object

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataArray

```
public AMFDataArray(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataArray object

Parameters:

data - binary data

AMFDataArray

```
public AMFDataArray(java.nio.ByteBuffer data,  
                   AMFDataContextDeserialize context)
```

Methods

remove

```
public AMFData remove(int index)
```

Remove an item from the array

Parameters:

index - index

Returns:

delete item or null if not found

size

```
public int size()
```

Returns the number of items in array

Returns:

number of items in array

add

```
public void add(AMFData data)
```

Append a new item onto the array

Parameters:

data - AMFData object

add

```
public void add(String data)
```

Append a string (will be wrapped in an AMFDataItem object)

Parameters:

data - string value

add

```
public void add(double data)
```

Append a double (will be wrapped in an AMFDataItem object)

Parameters:

data - double value

add

```
public void add(int data)
```

Append a int (will be wrapped in an AMFDataItem object)

Parameters:

data - int value

add

```
public void add(long data)
```

Append a long (will be wrapped in an AMFDataItem object)

Parameters:

data - long value

add

```
public void add(java.util.Date data)
```

(continued from last page)

Append a date (will be wrapped in an AMFDataItem object)

Parameters:

data - date value

add

```
public void add(boolean data)
```

Append a boolean (will be wrapped in an AMFDataItem object)

Parameters:

data - boolean value

add

```
public void add(int index,  
    AMFData data)
```

Insert an item into the array

Parameters:

index - index

data - AMFData object

add

```
public void add(int index,  
    String data)
```

Insert a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - string value

add

```
public void add(int index,  
    double data)
```

Insert a double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - double value

add

```
public void add(int index,  
    int data)
```

Insert a int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index

data - int value

add

```
public void add(int index,  
                long data)
```

Insert a long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

add

```
public void add(int index,  
                java.util.Date data)
```

Insert a date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

add

```
public void add(int index,  
                boolean data)
```

Insert a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

set

```
public void set(int index,  
                AMFData data)
```

Set an array item

Parameters:

index - index
data - AMFData object

set

```
public void set(int index,  
                String data)
```

Set a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

set

```
public void set(int index,  
                double data)
```

(continued from last page)

Set an double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

set

```
public void set(int index,  
                int data)
```

Set an int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

set

```
public void set(int index,  
                long data)
```

Set an long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

set

```
public void set(int index,  
                java.util.Date data)
```

Set an date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

set

```
public void set(int index,  
                boolean data)
```

Set an boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

get

```
public AMFData get(int index)
```

Get item at index

Parameters:

index

(continued from last page)

Returns:

Returns AMFData object or null if out of bounds

getString

```
public String getString(int index)
```

Get item at index return as String

Parameters:

index

Returns:

Return item as String or null if out of bounds

getInt

```
public int getInt(int index)
```

Get item at index return as int

Parameters:

index

Returns:

Return item as int or 0 if out of bounds

getLong

```
public long getLong(int index)
```

Get item at index return as long

Parameters:

index

Returns:

Return item as long or 0 if out of bounds

getShort

```
public short getShort(int index)
```

Get item at index return as short

Parameters:

index

Returns:

Return item as short or 0 if out of bounds

getByte

```
public byte getByte(int index)
```

Get item at index return as byte

Parameters:

(continued from last page)

index

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index

Returns:

Return item as AMFDataObj or null if out of bounds

getDouble

```
public double getDouble(int index)
```

Get item at index return as double

Parameters:

index

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(int index)
```

Get item at index return as float

(continued from last page)

Parameters:

index

Returns:

Return item as float or 0 if out of bounds

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

(continued from last page)

getValue

```
public Object getValue()
```

Convert object to Java native class

toString

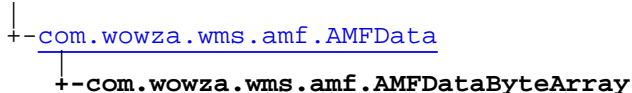
```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataByteArray

java.lang.Object



```
public class AMFDataByteArray
extends AMFData
```

AMFDataByteArray: class for marshalling data between Wowza Pro server and Flash client. This class is a simple byte array.

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataByteArray () Create empty AMFDataByteArray object
public	AMFDataByteArray (byte[] data) Deserialize entire byte array and create AMFDataByteArray object.
public	AMFDataByteArray (byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataByteArray object.
public	AMFDataByteArray (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataByteArray object.
public	AMFDataByteArray (java.nio.ByteBuffer data, AMFDataContextDeserialize context) Deserialize entire data array and create AMFDataByteArray object.

Method Summary

int	compress () Compress the internal buffer using the ZLIB compression library
int	decompress () Decompress the internal buffer using the ZLIB compression library

void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
Object	getValue () Returns the underlying byte[] data buffer
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
int	size () Returns the number of bytes in the byte array
byte[]	toArray () Returns the underlying data buffer (not a copy)
java.nio.ByteBuffer	toByteBuffer () Wraps the underlying data buffer with a ByteBuffer object.
String	toString () Return object as formatted string
static AMFDataByteArray	wrap (byte[] data) Wraps a byte[] into a AMFDataByteArray.
static AMFDataByteArray	wrap (java.nio.ByteBuffer data) Wraps a ByteBuffer into a AMFDataByteArray.

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

AMFDataByteArray

```
public AMFDataByteArray()
```

Create empty AMFDataByteArray object

AMFDataByteArray

```
public AMFDataByteArray(byte[] data)
```

Deserialize entire byte array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

AMFDataByteArray

```
public AMFDataByteArray(byte[] data,  
                        int offset,  
                        int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataByteArray

```
public AMFDataByteArray(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

AMFDataByteArray

```
public AMFDataByteArray(java.nio.ByteBuffer data,  
                        AMFDataContextDeserialize context)
```

Deserialize entire data array and create AMFDataByteArray object. Note: This is for AMF3 deserialization and cannot be used to create an AMFDataByteArray with the passed in data. To create a new AMDDDataByteArray from either a byte[] or ByteBuffer, use the static wrap method.

Parameters:

data - binary data

context - deserialization context (used for AMF3 decoding)

Methods

(continued from last page)

size

```
public int size()
```

Returns the number of bytes in the byte array

Returns:

number of bytes in the array

toArray

```
public byte[] toArray()
```

Returns the underlying data buffer (not a copy)

Returns:

data buffer (not a copy)

toByteBuffer

```
public java.nio.ByteBuffer toByteBuffer()
```

Wraps the underlying data buffer with a ByteBuffer object.

Returns:

byte[] wrapped as ByteBuffer

wrap

```
public static AMFDataByteArray wrap(byte[] data)
```

Wraps a byte[] into a AMFDataByteArray. Note: This method does not copy the array.

Parameters:

data - byte[] data

Returns:

wrapped byte[]

wrap

```
public static AMFDataByteArray wrap(java.nio.ByteBuffer data)
```

Wraps a ByteBuffer into a AMFDataByteArray. Note: This method only copies the ByteBuffer data if the ByteBuffer.array() method fails.

Parameters:

data - ByteBuffer data

Returns:

wrapped ByteBuffer

getValue

```
public Object getValue()
```

Returns the underlying byte[] data buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

compress

```
public int compress()
```

Compress the internal buffer using the ZLIB compression library

Returns:

(continued from last page)

size of compressed buffer

decompress

```
public int decompress()
```

Decompress the internal buffer using the ZLIB compression library

Returns:

size of decompressed buffer

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataContextDeserialize

java.lang.Object

└─com.wowza.wms.amf.AMFDataContextDeserialize

public class **AMFDataContextDeserialize**
extends Object

AMF context used for deserialization

Constructor Summary

public	<u>AMFDataContextDeserialize()</u> Constructor
public	<u>AMFDataContextDeserialize(int objectEncoding)</u> Constructor with encoding

Method Summary

void	<u>addObject(Object obj)</u> Add an object to the object cache
void	<u>addString(String str)</u> Add a string to the string cache
void	<u>addTrait(AMFDataTrait obj)</u> Add a trait to the trait cache
int	<u>clearIntData()</u> Internal use, get and clear int data
String	<u>getCharsetName()</u> Get charset name used to deserialize strings (default is AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8)
int	<u>getIntData()</u> Internal use, get int data
Object	<u>getObject(int index)</u> Get an object from the object cache
int	<u>getObjectEncoding()</u> Get object encoding, see AMFData.AMF_LEVEL*
String	<u>getString(int index)</u> Get a string from the string cache
<u>AMFDataTrait</u>	<u>getTrait(int index)</u> Get a trait from the trait cache
boolean	<u>isAMF0()</u> Is context AMF0

boolean	<code>isAMF3()</code> Is context AMF3
boolean	<code>isIntData()</code> Internal use, get int data
void	<code>setCharsetName(String charsetName)</code> Set charset name used to deserialize strings (default is AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8)
void	<code>setIntData(int intData)</code> Internal use, set int data
void	<code>setObjectEncoding(int objectEncoding)</code> Set object encoding, see AMFData.AMF_LEVEL*

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

AMFDataContextDeserialize

```
public AMFDataContextDeserialize()
```

Constructor

AMFDataContextDeserialize

```
public AMFDataContextDeserialize(int objectEncoding)
```

Constructor with encoding

Parameters:

`objectEncoding` - object encoding, see AMFData.AMF_LEVEL*

Methods

isIntData

```
public boolean isIntData()
```

Internal use, get int data

Returns:

returns true if pending int data

setIntData

```
public void setIntData(int intData)
```

Internal use, set int data

Parameters:

(continued from last page)

intData - int data

getIntData

```
public int getIntData()
```

Internal use, get int data

Returns:

int data

clearIntData

```
public int clearIntData()
```

Internal use, get and clear int data

Returns:

int data

getObjectEncoding

```
public int getObjectEncoding()
```

Get object encoding, see AMFData.AMF_LEVEL*

Returns:

object encoding, see AMFData.AMF_LEVEL*

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

Set object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

isAMF3

```
public boolean isAMF3()
```

Is context AMF3

Returns:

true, if AMF3

isAMF0

```
public boolean isAMF0()
```

Is context AMF0

Returns:

true, if AMF0

(continued from last page)

addString

```
public void addString(String str)
```

Add a string to the string cache

Parameters:

str - string value

getString

```
public String getString(int index)  
throws IndexOutOfBoundsException
```

Get a string from the string cache

Parameters:

index - index

Returns:

string value

Throws:

IndexOutOfBoundsException

addObject

```
public void addObject(Object obj)
```

Add an object to the object cache

Parameters:

obj - object value

getObject

```
public Object getObject(int index)  
throws IndexOutOfBoundsException
```

Get an object from the object cache

Parameters:

index - index

Returns:

object value

Throws:

IndexOutOfBoundsException

addTrait

```
public void addTrait(AMFDataTrait obj)
```

Add a trait to the trait cache

Parameters:

obj - trait object

getTrait

```
public AMFDataTrait getTrait(int index)  
    throws IndexOutOfBoundsException
```

Get a trait from the trait cache

Parameters:

index - index

Returns:

trait object

Throws:

[IndexOutOfBoundsException](#)

getCharsetName

```
public String getCharsetName()
```

Get charset name used to deserialize strings (default is `AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8`)

Returns:

charset name used to decode/encode strings

setCharsetName

```
public void setCharsetName(String charsetName)
```

Set charset name used to deserialize strings (default is `AMFData.AMF_DEFAULT_DESERIALIZE_CHARSETNAME = UTF-8`)

Parameters:

charsetName - charset name used to decode/encode strings

com.wowza.wms.amf

Class AMFDataContextSerialize

java.lang.Object

└─com.wowza.wms.amf.AMFDataContextSerialize

public class **AMFDataContextSerialize**
extends Object

AMF context used for serialization

Constructor Summary

public	AMFDataContextSerialize() Constructor
public	AMFDataContextSerialize(int objectEncoding) Constructor with object encoding, see AMFData.AMF_LEVEL*

Method Summary

int	getObjectEncoding() Get object encoding, see AMFData.AMF_LEVEL*
int	getObjectReference(Object obj) Get index of object in object cache
int	getStringReference(String str) Get index of string item in string cache
int	getTargetEncoding() Get target encoding, see AMFData.AMF_LEVEL*
int	getTraitReference(AMFDataTrait obj) Get index of trait object in trait cache
boolean	isAMF0() Is context AMF0
boolean	isAMF3() Is context AMF3
void	setObjectEncoding(int objectEncoding) Set object encoding, see AMFData.AMF_LEVEL*
void	setTargetEncoding(int targetEncoding) Set target encoding, , see AMFData.AMF_LEVEL*
void	writeString(java.io.DataOutputStream out, String str) Write a stream to the output buffer

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFDataContextSerialize

```
public AMFDataContextSerialize()
```

Constructor

AMFDataContextSerialize

```
public AMFDataContextSerialize(int objectEncoding)
```

Constructor with object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

Methods

getObjectEncoding

```
public int getObjectEncoding()
```

Get object encoding, see AMFData.AMF_LEVEL*

Returns:

object encoding, see AMFData.AMF_LEVEL*

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

Set object encoding, see AMFData.AMF_LEVEL*

Parameters:

objectEncoding - object encoding, see AMFData.AMF_LEVEL*

getTargetEncoding

```
public int getTargetEncoding()
```

Get target encoding, see AMFData.AMF_LEVEL*

Returns:

target encoding, see AMFData.AMF_LEVEL*

setTargetEncoding

```
public void setTargetEncoding(int targetEncoding)
```

Set target encoding, , see AMFData.AMF_LEVEL*

(continued from last page)

Parameters:

targetEncoding - target encoding, , see AMFData.AMF_LEVEL*

isAMF3

```
public boolean isAMF3()
```

Is context AMF3

Returns:

true, if AMF3

isAMF0

```
public boolean isAMF0()
```

Is context AMF0

Returns:

true, if AMF0

getStringReference

```
public int getStringReference(String str)
```

Get index of string item in string cache

Parameters:

str - string value

Returns:

index

getObjectReference

```
public int getObjectReference(Object obj)
```

Get index of object in object cache

Parameters:

obj - object value

Returns:

index

getTraitReference

```
public int getTraitReference(AMFDataTrait obj)
```

Get index of trait object in trait cache

Parameters:

obj - trait object

Returns:

index

(continued from last page)

writeString

```
public void writeString(java.io.DataOutputStream out,  
    String str)
```

Write a stream to the output buffer

Parameters:

out - output buffer

str - string value

com.wowza.wms.amf Class AMFDataItem

```
java.lang.Object
  |
  +--com.wowza.wms.amf.AMFData
        |
        +--com.wowza.wms.amf.AMFDataItem
```

```
public class AMFDataItem
extends AMFData
```

AMFDataItem: class for marshalling data between Wowza Pro server and Flash client. The type wraps native Java data types.

- DATA_TYPE_NUMBER = int, long, short, double, float
- DATA_TYPE_STRING = String
- DATA_TYPE_BOOLEAN = boolean
- DATA_TYPE_DATE = Date
- DATA_TYPE_NULL = 'null'

Create Native Java Types

```
AMFDataItem amfDataString = new AMFDataItem("here is my string"); // String
AMFDataItem amfDataLong = new AMFDataItem(1234L); // long
AMFDataItem amfDataDouble = new AMFDataItem(1.234); // double
AMFDataItem amfDataBoolean = new AMFDataItem(true); // boolean
AMFDataItem amfDataNull = new AMFDataItem(); // null
```

Get Native Java Types

```
String dataString = amfDataString.getType()==AMFData.DATA_TYPE_LONG_STRING?
    amfDataString.toString():"";

long dataLong = amfDataLong.getType()==AMFData.DATA_TYPE_NUMBER?
    amfDataLong.longValue():0;

double dataDouble = amfDataDouble.getType()==AMFData.DATA_TYPE_NUMBER?
    amfDataLong.doubleValue():0.0;

boolean dataBoolean = amfDataBoolean.getType()==AMFData.DATA_TYPE_BOOLEAN?
    amfDataLong.booleanValue():false;

Object dataNull = amfDataNull.getType()==AMFData.DATA_TYPE_NULL?
    null:null;
```

Field Summary

public static final	DATEFORMAT Value: EEE, dd MMM yyyy HH:mm:ss
protected	fastDateFormat

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#),
[DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#),
[DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#),
[DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#),
[DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#),
[DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#),
[DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#),
[DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#),
[DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#),
[DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#),
[MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataItem () Construct AMF type DATA_TYPE_NULL object
public	AMFDataItem (String value) Construct AMF type DATA_TYPE_STRING object
public	AMFDataItem (int value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem (long value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem (double value) Construct AMF type DATA_TYPE_NUMBER object
public	AMFDataItem (boolean value) Construct AMF type DATA_TYPE_BOOLEAN
public	AMFDataItem (java.util.Date value) Construct AMF type DATA_TYPE_DATE
public	AMFDataItem (byte[] data) Deserialize entire data array and create AMFDataItem object
public	AMFDataItem (byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataItem object
public	AMFDataItem (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataItem object

public	AMFDataItem (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
--------	---

Method Summary

boolean	booleanValue () Return object as boolean.
byte	byteValue () Return object as byte.
java.util.Date	dateValue () Return object as Date.
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
double	doubleValue () Return object as double.
float	floatValue () Return object as float.
Object	getValue () Return value as Java class
int	intValue () Return object as int.
long	longValue () Return object as long.
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
short	shortValue () Return object as short.
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

DATEFORMAT

`public static final java.lang.String DATEFORMAT`

Constant value: **EEE, dd MMM yyyy HH:mm:ss**

fastDateFormat

`protected org.apache.commons.lang.time.FastDateFormat fastDateFormat`

Constructors

AMFDataItem

`public AMFDataItem()`

Construct AMF type DATA_TYPE_NULL object

AMFDataItem

`public AMFDataItem(String value)`

Construct AMF type DATA_TYPE_STRING object

Parameters:

value - String value

AMFDataItem

`public AMFDataItem(int value)`

Construct AMF type DATA_TYPE_NUMBER object

Parameters:

value - int value

AMFDataItem

`public AMFDataItem(long value)`

(continued from last page)

Construct AMF type DATA_TYPE_NUMBER object

Parameters:

value - long value

AMFDataItem

```
public AMFDataItem(double value)
```

Construct AMF type DATA_TYPE_NUMBER object

Parameters:

value - double value

AMFDataItem

```
public AMFDataItem(boolean value)
```

Construct AMF type DATA_TYPE_BOOLEAN

Parameters:

value - boolean value

AMFDataItem

```
public AMFDataItem(java.util.Date value)
```

Construct AMF type DATA_TYPE_DATE

Parameters:

value - Date value

AMFDataItem

```
public AMFDataItem(byte[] data)
```

Deserialize entire data array and create AMFDataItem object

Parameters:

data - binary data

AMFDataItem

```
public AMFDataItem(byte[] data,  
                   int offset,  
                   int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataItem object

Parameters:

data - binary data

offset - starting offset into data

size - size of data to deserialize

AMFDataItem

```
public AMFDataItem(java.nio.ByteBuffer data)
```

(continued from last page)

Deserialize entire data array and create AMFDataItem object

Parameters:

data - binary data

AMFDataItem

```
public AMFDataItem(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Methods

longValue

```
public long longValue()
```

Return object as long. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

long value or 0 if failure

intValue

```
public int intValue()
```

Return object as int. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

int value or 0 if failure

doubleValue

```
public double doubleValue()
```

Return object as double. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

double value or 0 if failure

floatValue

```
public float floatValue()
```

Return object as float. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

float value or 0 if failure

shortValue

```
public short shortValue()
```

Return object as short. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

short value or 0 if failure

byteValue

```
public byte byteValue()
```

Return object as byte. Valid object types are DATA_TYPE_NUMBER and DATA_TYPE_STRING.

Returns:

byte value or 0 if failure

dateValue

```
public java.util.Date dateValue()
```

Return object as Date. Valid object types are DATA_TYPE_DATE.

Returns:

Date value or null if failure

booleanValue

```
public boolean booleanValue()
```

Return object as boolean. Valid object types are DATA_TYPE_BOOLEAN and DATA_TYPE_STRING.

Returns:

boolean value or false if failure

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

getValue

```
public Object getValue()
```

Return value as Java class

toString

```
public String toString()
```

Return object as formatted string

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

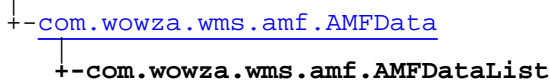
```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

com.wowza.wms.amf

Class AMFDataList

java.lang.Object



public class **AMFDataList**
 extends [AMFData](#)

AMFDataList: class for marshalling data between Wowza Pro server and Flash client. This class is for internal server marshalling of AMF event messages between the Flash client and Wowza Pro server.

NOTE: There is a slight difference between this class and AMFDataArray. This class when serialized/deserialized does NOT include the DATA_TYPE_ARRAY header (byte) and array size (int). AMF formatted functions use this class since they do not include these elements.

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataList() Create empty AMFDataList object
public	AMFDataList (byte[] data) Deserialize entire data array and create AMFDataList object
public	AMFDataList (byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataList object
public	AMFDataList (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataList object
public	AMFDataList (java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	add (AMFData data) Append a new item onto the array
------	---

void	add (boolean data) Append a boolean (will be wrapped in an AMFDataItem object)
void	add (java.util.Date data) Append a date (will be wrapped in an AMFDataItem object)
void	add (double data) Append a double (will be wrapped in an AMFDataItem object)
void	add (int data) Append a int (will be wrapped in an AMFDataItem object)
void	add (int index, AMFData data) Insert an item into the array
void	add (int index, boolean data) Insert a boolean value (will be wrapped in an AMFDataItem object)
void	add (int index, java.util.Date data) Insert a date value (will be wrapped in an AMFDataItem object)
void	add (int index, double data) Insert a double value (will be wrapped in an AMFDataItem object)
void	add (int index, int data) Insert a int value (will be wrapped in an AMFDataItem object)
void	add (int index, long data) Insert a long value (will be wrapped in an AMFDataItem object)
void	add (int index, String data) Insert a string value (will be wrapped in an AMFDataItem object)
void	add (long data) Append a long (will be wrapped in an AMFDataItem object)
void	add (String data) Append a string (will be wrapped in an AMFDataItem object)
void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
AMFData	get (int index) Get item at index
boolean	getBoolean (int index) Get item at index return as boolean
byte	getBytes (int index) Get item at index return as byte
java.util.Date	getDate (int index) Get item at index return as Date
double	getDouble (int index) Get item at index return as double

float	<code>getFloat(int index)</code> Get item at index return as float
int	<code>getInt(int index)</code> Get item at index return as int
long	<code>getLong(int index)</code> Get item at index return as long
<code>AMFDataObj</code>	<code>getObject(int index)</code> Get item at index return as AMFDataObj
short	<code>getShort(int index)</code> Get item at index return as short
String	<code>getString(int index)</code> Get item at index return as String
int	<code>getType(int index)</code> Get type of item at index.
Object	<code>getValue()</code>
<code>AMFData</code>	<code>remove(int index)</code> Remove an element from the AMFDataList object
byte[]	<code>serialize()</code>
byte[]	<code>serialize(AMFDataContextSerialize context)</code>
byte[]	<code>serialize(AMFDataContextSerialize context, byte[] prepend)</code>
void	<code>serialize(java.io.DataOutputStream out)</code>
void	<code>serialize(java.io.DataOutputStream out, AMFDataContextSerialize context)</code>
void	<code>serialize(java.io.DataOutputStream out, AMFDataContextSerialize context, byte[] prepend)</code>
void	<code>serialize(java.io.DataOutputStream out, int objectEncoding)</code>
byte[]	<code>serialize(int objectEncoding)</code>
void	<code>set(int index, AMFData data)</code> Set an array item
void	<code>set(int index, boolean data)</code> Set an boolean value (will be wrapped in an AMFDataItem object)
void	<code>set(int index, java.util.Date data)</code> Set an date value (will be wrapped in an AMFDataItem object)
void	<code>set(int index, double data)</code> Set an double value (will be wrapped in an AMFDataItem object)

void	<u>set</u> (int index, int data) Set an int value (will be wrapped in an AMFDataItem object)
void	<u>set</u> (int index, long data) Set an long value (will be wrapped in an AMFDataItem object)
void	<u>set</u> (int index, String data) Set an string value (will be wrapped in an AMFDataItem object)
int	<u>size</u> () Returns the number of items in array
String	<u>toString</u> () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

AMFDataList

```
public AMFDataList()
```

Create empty AMFDataList object

AMFDataList

```
public AMFDataList(byte[] data)
```

Deserialize entire data array and create AMFDataList object

Parameters:

data - binary data

AMFDataList

```
public AMFDataList(byte[] data,  
                   int offset,  
                   int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataList object

Parameters:

data - binary data

offset - starting offset into data

(continued from last page)

size - size of data to deserialize

AMFDataList

```
public AMFDataList(java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataList object

Parameters:

data - binary data

AMFDataList

```
public AMFDataList(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Methods

remove

```
public AMFData remove(int index)
```

Remove an element from the AMFDataList object

Parameters:

index - index

Returns:

removed element

size

```
public int size()
```

Returns the number of items in array

Returns:

number of items in array

add

```
public void add(AMFData data)
```

Append a new item onto the array

Parameters:

data - AMFData object

add

```
public void add(String data)
```

Append a string (will be wrapped in an AMFDataItem object)

Parameters:

data - string value

add

```
public void add(double data)
```

Append a double (will be wrapped in an AMFDataItem object)

Parameters:

data - double value

add

```
public void add(int data)
```

Append a int (will be wrapped in an AMFDataItem object)

Parameters:

data - int value

add

```
public void add(long data)
```

Append a long (will be wrapped in an AMFDataItem object)

Parameters:

data - long value

add

```
public void add(java.util.Date data)
```

Append a date (will be wrapped in an AMFDataItem object)

Parameters:

data - date value

add

```
public void add(boolean data)
```

Append a boolean (will be wrapped in an AMFDataItem object)

Parameters:

data - boolean value

add

```
public void add(int index,  
    AMFData data)
```

Insert an item into the array

Parameters:

index - index

data - AMFData object

(continued from last page)

add

```
public void add(int index,  
                String data)
```

Insert a string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

add

```
public void add(int index,  
                double data)
```

Insert a double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

add

```
public void add(int index,  
                int data)
```

Insert a int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

add

```
public void add(int index,  
                long data)
```

Insert a long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

add

```
public void add(int index,  
                java.util.Date data)
```

Insert a date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

add

```
public void add(int index,  
                boolean data)
```

(continued from last page)

Insert a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - boolean value

set

```
public void set(int index,  
    AMFData data)
```

Set an array item

Parameters:

data - AMFData object

set

```
public void set(int index,  
    String data)
```

Set an string value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - string value

set

```
public void set(int index,  
    double data)
```

Set an double value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - double value

set

```
public void set(int index,  
    int data)
```

Set an int value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - int value

set

```
public void set(int index,  
    long data)
```

Set an long value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - long value

set

```
public void set(int index,  
               java.util.Date data)
```

Set an date value (will be wrapped in an AMFDataItem object)

Parameters:

index - index
data - date value

set

```
public void set(int index,  
               boolean data)
```

Set an boolean value (will be wrapped in an AMFDataItem object)

Parameters:

index - element to return
data - boolean value

getType

```
public int getType(int index)
```

Get type of item at index. Return AMFData.DATA_TYPE_UNKNOWN if item does not exist

Parameters:

index - element to return

Returns:

type of item at index

get

```
public AMFData get(int index)
```

Get item at index

Parameters:

index - element to return

Returns:

Returns AMFData object or null if out of bounds

getString

```
public String getString(int index)
```

Get item at index return as String

Parameters:

index - element to return

Returns:

Return item as String or null if out of bounds

getInt

```
public int getInt(int index)
```

Get item at index return as int

Parameters:

index - element to return

Returns:

Return item as int or 0 if out of bounds

getLong

```
public long getLong(int index)
```

Get item at index return as long

Parameters:

index - element to return

Returns:

Return item as long or 0 if out of bounds

getDouble

```
public double getDouble(int index)
```

Get item at index return as double

Parameters:

index - element to return

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public float getFloat(int index)
```

Get item at index return as float

Parameters:

index - element to return

Returns:

Return item as float or 0 if out of bounds

getShort

```
public short getShort(int index)
```

Get item at index return as short

Parameters:

index - element to return

(continued from last page)

Returns:

Return item as short or 0 if out of bounds

getBytes

```
public byte getBytes(int index)
```

Get item at index return as byte

Parameters:

index - element to return

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index - element to return

Returns:

Return item as boolean or false if out of bounds

getDate

```
public java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index - element to return

Returns:

Return item as Date or null if out of bounds

getObject

```
public AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index - element to return

Returns:

Return item as AMFDataObj or null if out of bounds

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

(continued from last page)

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context,  
    byte[] prepend)
```

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

serialize

```
public byte[] serialize(AMFDataContextSerialize context,  
    byte[] prepend)
```

getValue

```
public Object getValue()
```

Convert object to Java native class

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataMixedArray

```

java.lang.Object
  |
  +- com.wowza.wms.amf.AMFData
      |
      +- com.wowza.wms.amf.AMFDataObj
          |
          +- com.wowza.wms.amf.AMFDataMixedArray
  
```

All Implemented Interfaces:

[IAMFDataObj](#)

```

public class AMFDataMixedArray
extends AMFDataObj
  
```

AMFDataMixedArray: class for marshalling data between Wowza Pro server and Flash client. Array of mixed data types. An Array object created in the Flash client is wrapped in this data type when sent to the Wowza Pro server.

Create Array of Strings

```

AMFDataMixedArray amfDataMixedArray = new AMFDataMixedArray();

amfDataMixedArray.put("0", "item1");
amfDataMixedArray.put("1", "item2");
amfDataMixedArray.put("2", "item3");
  
```

Iterate Mixed Array

```

AMFDataMixedArray amfDataMixedArray;

int len = amfDataMixedArray.size();
for(int i=0;i<len;i++)
{
    String value = amfDataMixedArray.getString(i);
    int itemType = amfDataMixedArray.getType(i);
    WMSLoggerFactory.getLogger(null).debug("item:
["+i+": "+amfDataMixedArray.getKey(i)+"]="+value+" type:"+itemType);
}
  
```

NOTE: A AMFDataMixedArray is exactly the same as a AMFDataObj except its type is DATA_TYPE_MIXED_ARRAY.

This objects acts like a Map and a List at the same time. As items are added by key the order and position of each object is recorded. Objects can be retrieved either by key or by index.

Fields inherited from class [com.wowza.wms.amf.AMFDataObj](#)

[DECODE_OBJ_REF](#), [DECODE_TRAITS](#), [DECODE_TRAITS_EXT](#), [DECODE_TRAITS_REF](#), [DECODE_UNDEFINED](#), [members](#), [order](#), [serializer](#), [trait](#)

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataMixedArray() Create empty AMFDataMixedArray object
public	AMFDataMixedArray (byte[] data) Deserialize entire data array and create AMFDataMixedArray object
public	AMFDataMixedArray (byte[] data, int offset, int size) Deserialize data array starting at offest for size bytes and create AMFDataMixedArray object
public	AMFDataMixedArray (java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataMixedArray object
public	AMFDataMixedArray (java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

void	deserialize (java.nio.ByteBuffer data)
void	deserialize (java.nio.ByteBuffer data, AMFDataContextDeserialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
String	toString () Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFDataObj](#)

[containsKey](#), [deserialize](#), [deserialize](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getClassName](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getSerializer](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [getTrait](#), [getValue](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setClassName](#), [setSerializer](#), [size](#), [toString](#)

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.amf.IAMFDataObj](#)

[containsKey](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#)

Constructors

AMFDataMixedArray

```
public AMFDataMixedArray()
```

Create empty AMFDataMixedArray object

AMFDataMixedArray

```
public AMFDataMixedArray(byte[] data)
```

Deserialize entire data array and create AMFDataMixedArray object

Parameters:

data - binary data

AMFDataMixedArray

```
public AMFDataMixedArray(byte[] data,  
                           int offset,  
                           int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataMixedArray object

Parameters:

data - binary data

(continued from last page)

offset - starting offset into data
size - size of data to deserialize

AMFDataMixedArray

```
public AMFDataMixedArray( java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataMixedArray object

Parameters:

data - binary data

AMFDataMixedArray

```
public AMFDataMixedArray( java.nio.ByteBuffer data,  
                           AMFDataContextDeserialize context)
```

Methods

deserialize

```
public void deserialize( java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize( java.nio.ByteBuffer data,  
                           AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize( java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize( java.io.DataOutputStream out,  
                       int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize( java.io.DataOutputStream out,  
                           AMFDataContextSerialize context)
```

Serialize object to output stream

toString

```
public String toString()
```

Return object as formatted string

com.wowza.wms.amf

Class AMFDataObj

```
java.lang.Object
|
+-com.wowza.wms.amf.AMFData
|   |
|   +-com.wowza.wms.amf.AMFDataObj
```

All Implemented Interfaces:

[IAMFDataObj](#)

Direct Known Subclasses:

[AMFDataMixedArray](#)

```
public class AMFDataObj
extends AMFData
implements IAMFDataObj
```

AMFDataObj: class for marshalling data between Wowza Pro server and Flash client. Object with attributes. Implementation is very similar to a java.util.Map. Each parameter is an item in the map.

Create AMFDataObj

```
AMFDataObj amfDataObj = new AMFDataObj();

amfDataObj.put("key1", "item1");
amfDataObj.put("key2", "item2");
amfDataObj.put("key3", "item3");
```

Iterate AMFDataObj

```
AMFDataObj amfDataObj;

List keys = amfDataObj.getKeys();
Iterator iter = keys.iterator();
while(iter.hasNext())
{
    String key = (String)iter.next();
    AMFData value = amfDataObj.get(key);
    int itemType = value.getType();
    WMSLoggerFactory.getLogger(null).debug(key+"="+value.toString()+"
(type:"+itemType+")");
}
```

Direct Access To Attributes

```
AMFDataObj amfDataObj;

// If you know the type you can access it directly
String dataString = amfDataObj.getString("stringData");
long dataLong = amfDataObj.getLong("longData");
double dataDouble = amfDataObj.getDouble("doubleData");
boolean dataBoolean = amfDataObj.getBoolean("booleanData");

// This illustrate how to decode the value if
// you don't know the type
AMFData myItemKey1 = amfDataObj.get("theData");
switch (myItemKey1.getType())
{
default:
case AMFDataItem.DATA_TYPE_UNDEFINED:
case AMFDataItem.DATA_TYPE_UNKNOWN:
case AMFDataItem.DATA_TYPE_NULL:
    // the value is null or undefined
    break;
case AMFDataItem.DATA_TYPE_NUMBER:
    double amfDataDouble = ((AMFDataItem)myItemKey1).doubleValue();
    break;
case AMFDataItem.DATA_TYPE_BOOLEAN:
    boolean amfDataBoolean = ((AMFDataItem)myItemKey1).booleanValue();
    break;
case AMFDataItem.DATA_TYPE_STRING:
    String amfDataString = ((AMFDataItem)myItemKey1).toString();
    break;
case AMFDataItem.DATA_TYPE_DATE:
    Date amfDataDate = ((AMFDataItem)myItemKey1).dateValue();
    break;
case AMFDataItem.DATA_TYPE_OBJECT:
    AMFDataObj amfDataValObj = (AMFDataObj)myItemKey1;
    break;
case AMFDataItem.DATA_TYPE_MIXED_ARRAY:
    AMFDataMixedArray amfDataMixedArray = (AMFDataMixedArray)myItemKey1;
    break;
case AMFDataItem.DATA_TYPE_ARRAY:
    AMFDataArray amfDataArray = (AMFDataArray)myItemKey1;
    break;
}
```

Field Summary

public static final	DECODE_OBJ_REF Value: 1
public static final	DECODE_TRAITS Value: 4
public static final	DECODE_TRAITS_EXT Value: 3
public static final	DECODE_TRAITS_REF Value: 2
public static final	DECODE_UNDEFINED Value: 0
protected	members
protected	order
protected	serializer
protected	trait

Fields inherited from class [com.wowza.wms.amf.AMFData](#)

[AMF_DEFAULT_DESERIALIZE_CHARSETNAME](#), [AMF_LEVEL0](#), [AMF_LEVEL3](#), [DATA_TYPE_AMF3](#), [DATA_TYPE_AMF3_ARRAY](#), [DATA_TYPE_AMF3_BOOLEAN_FALSE](#), [DATA_TYPE_AMF3_BOOLEAN_TRUE](#), [DATA_TYPE_AMF3_BYTEARRAY](#), [DATA_TYPE_AMF3_DATE](#), [DATA_TYPE_AMF3_INTEGER](#), [DATA_TYPE_AMF3_NULL](#), [DATA_TYPE_AMF3_NUMBER](#), [DATA_TYPE_AMF3_OBJECT](#), [DATA_TYPE_AMF3_STRING](#), [DATA_TYPE_AMF3_UNDEFINED](#), [DATA_TYPE_AMF3_XML_LEGACY](#), [DATA_TYPE_AMF3_XML_TOP](#), [DATA_TYPE_ARRAY](#), [DATA_TYPE_AS_OBJECT](#), [DATA_TYPE_BOOLEAN](#), [DATA_TYPE_BYTEARRAY](#), [DATA_TYPE_CUSTOM_CLASS](#), [DATA_TYPE_DATE](#), [DATA_TYPE_INTEGER](#), [DATA_TYPE_LONG_STRING](#), [DATA_TYPE_MIXED_ARRAY](#), [DATA_TYPE_MOVIE_CLIP](#), [DATA_TYPE_NULL](#), [DATA_TYPE_NUMBER](#), [DATA_TYPE_OBJECT](#), [DATA_TYPE_OBJECT_END](#), [DATA_TYPE_RECORDSET](#), [DATA_TYPE_REFERENCE_OBJECT](#), [DATA_TYPE_STRING](#), [DATA_TYPE_UNDEFINED](#), [DATA_TYPE_UNKNOWN](#), [DATA_TYPE_XML](#), [DATA_TYPE_XML_TOP](#), [MILLS_PER_HOUR](#), [type](#)

Constructor Summary

public	AMFDataObj() Create empty AMFDataObj object
public	AMFDataObj(byte[] data) Deserialize entire data array and create AMFDataObj object
public	AMFDataObj(byte[] data, int offset, int size) Deserialize data array starting at offset for size bytes and create AMFDataObj object
public	AMFDataObj(java.nio.ByteBuffer data) Deserialize entire data array and create AMFDataObj object
public	AMFDataObj(java.nio.ByteBuffer data, AMFDataContextDeserialize context)

Method Summary

boolean	<u>containsKey</u> (String name)
void	<u>deserialize</u> (java.nio.ByteBuffer data)
void	<u>deserialize</u> (java.nio.ByteBuffer data, <u>AMFDataContextDeserialize</u> context)
<u>AMFData</u>	<u>get</u> (int index)
<u>AMFData</u>	<u>get</u> (String name)
boolean	<u>getBoolean</u> (int index)
boolean	<u>getBoolean</u> (String name)
byte	<u>getByte</u> (int index)
byte	<u>getByte</u> (String name)
String	<u>getClassName</u> ()
java.util.Date	<u>getDate</u> (int index)
java.util.Date	<u>getDate</u> (String name)
double	<u>getDouble</u> (int index)
double	<u>getDouble</u> (String name)
float	<u>getFloat</u> (int index)
float	<u>getFloat</u> (String name)
int	<u>getInt</u> (int index)
int	<u>getInt</u> (String name)
String	<u>getKey</u> (int index)
java.util.List	<u>getKeys</u> ()
long	<u>getLong</u> (int index)
long	<u>getLong</u> (String name)
<u>AMFDataObj</u>	<u>getObject</u> (int index)

AMFDataObj	getObject (String name)
IAMFExternalizable	getSerializer ()
short	getShort (int index)
short	getShort (String name)
String	getString (int index)
String	getString (String name)
AMFDataTrait	getTrait ()
Object	getValue ()
void	put (String name, AMFData data)
void	put (String name, boolean data)
void	put (String name, java.util.Date data)
void	put (String name, double data)
void	put (String name, int data)
void	put (String name, long data)
void	put (String name, String data)
AMFData	remove (int index)
AMFData	remove (String name)
byte[]	serialize ()
byte[]	serialize (AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out)
void	serialize (java.io.DataOutputStream out, AMFDataContextSerialize context)
void	serialize (java.io.DataOutputStream out, int objectEncoding)
byte[]	serialize (int objectEncoding)
void	setClassName (String className)

void	setSerializer(IAMFExternalizable serializer)
int	size() Return the number of members of this object/array
String	toString() Return object as formatted string

Methods inherited from class [com.wowza.wms.amf.AMFData](#)

[createContextDeserialize](#), [createContextDeserialize](#), [createContextSerialize](#), [createContextSerialize](#), [deserialize](#), [deserialize](#), [deserializeInnerObject](#), [getReference](#), [getType](#), [getValue](#), [isAMF3Start](#), [isArrayStart](#), [isByteArrayStart](#), [isMixedArrayStart](#), [isObjEnd](#), [isObjStart](#), [peekByte](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [serialize](#), [setType](#), [skipByte](#), [testNextByte](#), [triggerAMF3Switch](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.amf.IAMFDataObj](#)

[containsKey](#), [get](#), [get](#), [getBoolean](#), [getBoolean](#), [getBytes](#), [getBytes](#), [getDate](#), [getDate](#), [getDouble](#), [getDouble](#), [getFloat](#), [getFloat](#), [getInt](#), [getInt](#), [getKey](#), [getKeys](#), [getLong](#), [getLong](#), [getObject](#), [getObject](#), [getShort](#), [getShort](#), [getString](#), [getString](#), [put](#), [put](#), [put](#), [put](#), [put](#), [put](#), [remove](#), [remove](#)

Fields

DECODE_UNDEFINED

```
public static final int DECODE_UNDEFINED
```

Constant value: **0**

DECODE_OBJ_REF

```
public static final int DECODE_OBJ_REF
```

Constant value: **1**

DECODE_TRAITS_REF

```
public static final int DECODE_TRAITS_REF
```

Constant value: **2**

DECODE_TRAITS_EXT

```
public static final int DECODE_TRAITS_EXT
```

(continued from last page)

Constant value: **3**

DECODE_TRAITS

```
public static final int DECODE_TRAITS
```

Constant value: **4**

members

```
protected java.util.Map members
```

order

```
protected java.util.List order
```

trait

```
protected com.wowza.wms.amf.AMFDataTrait trait
```

serializer

```
protected com.wowza.wms.amf.IAMFExternalizable serializer
```

Constructors

AMFDataObj

```
public AMFDataObj()
```

Create empty AMFDataObj object

AMFDataObj

```
public AMFDataObj(byte[] data)
```

Deserialize entire data array and create AMFDataObj object

Parameters:

data - binary data

AMFDataObj

```
public AMFDataObj(byte[] data,  
                  int offset,  
                  int size)
```

Deserialize data array starting at offset for size bytes and create AMFDataObj object

Parameters:

(continued from last page)

data - binary data
offset - starting offset into data
size - size of data to deserialize

AMFDataObj

```
public AMFDataObj( java.nio.ByteBuffer data)
```

Deserialize entire data array and create AMFDataObj object

Parameters:

data - binary data

AMFDataObj

```
public AMFDataObj( java.nio.ByteBuffer data,  
                  AMFDataContextDeserialize context)
```

Methods

size

```
public int size()
```

Return the number of members of this object/array

Returns:

number of members

containsKey

```
public boolean containsKey(String name)
```

put

```
public void put(String name,  
               AMFData data)
```

put

```
public void put(String name,  
               String data)
```

put

```
public void put(String name,  
               double data)
```

(continued from last page)

put

```
public void put(String name,  
               int data)
```

put

```
public void put(String name,  
               long data)
```

put

```
public void put(String name,  
               java.util.Date data)
```

put

```
public void put(String name,  
               boolean data)
```

getKeys

```
public java.util.List getKeys()
```

getKey

```
public String getKey(int index)
```

get

```
public AMFData get(String name)
```

get

```
public AMFData get(int index)
```

remove

```
public AMFData remove(String name)
```

(continued from last page)

remove

```
public AMFData remove(int index)
```

getString

```
public String getString(String name)
```

getInt

```
public int getInt(String name)
```

getLong

```
public long getLong(String name)
```

getShort

```
public short getShort(String name)
```

getDouble

```
public double getDouble(String name)
```

getFloat

```
public float getFloat(String name)
```

getByte

```
public byte getByte(String name)
```

getBoolean

```
public boolean getBoolean(String name)
```

getDate

```
public java.util.Date getDate(String name)
```

(continued from last page)

getObject

```
public AMFDataObj getObject(String name)
```

getString

```
public String getString(int index)
```

getInt

```
public int getInt(int index)
```

getLong

```
public long getLong(int index)
```

getShort

```
public short getShort(int index)
```

getByte

```
public byte getByte(int index)
```

getDouble

```
public double getDouble(int index)
```

getFloat

```
public float getFloat(int index)
```

getBoolean

```
public boolean getBoolean(int index)
```

(continued from last page)

getDate

```
public java.util.Date getDate(int index)
```

getObject

```
public AMFDataObj getObject(int index)
```

deserialize

```
public void deserialize(java.nio.ByteBuffer data)
```

Deserialize data in byte buffer

deserialize

```
public void deserialize(java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

Deserialize data in byte buffer

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    int objectEncoding)
```

Serialize object to output stream

serialize

```
public void serialize(java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

Serialize object to output stream

serialize

```
public byte[] serialize()
```

Serial object to byte array

serialize

```
public byte[] serialize(int objectEncoding)
```

Serial object to byte array

(continued from last page)

serialize

```
public byte[] serialize(AMFDataContextSerialize context)
```

Serial object to byte array

getValue

```
public Object getValue()
```

Convert object to Java native class

toString

```
public String toString()
```

Return object as formatted string

getClassName

```
public String getClassName()
```

setClassName

```
public void setClassName(String className)
```

getTrait

```
public AMFDataTrait getTrait()
```

getSerializer

```
public IAMFExternalizable getSerializer()
```

setSerializer

```
public void setSerializer(IAMFExternalizable serializer)
```

com.wowza.wms.amf

Class AMFDataTrait

java.lang.Object

└-com.wowza.wms.amf.AMFDataTrait

public class **AMFDataTrait**
extends Object

AMF trait used to describe an AMF class in AMF3

Constructor Summary

public	AMFDataTrait () Constructor
--------	---

Method Summary

void	addMember (String member) Add a member
AMFDataTrait	clone () clone the trait
String	getClassName () Get class name
AMFData	getInnerObj () Get inner object
String	getMember (int i) Get member by index
int	getMemberCount () Get the number of members
java.util.List	getMembers () Get a list of trait members
boolean	isDynamic () Is class dynamic
boolean	isMember (String member) Return true if member of this trait
void	setClassName (String className) Set class name
void	setDynamic (boolean isDynamic) Set isDynamic
void	setInnerObj (AMFData innerObj) Set inner object

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

AMFDataTrait

```
public AMFDataTrait()
```

Constructor

Methods

clone

```
public AMFDataTrait clone()
```

clone the trait

addMember

```
public void addMember(String member)
```

Add a member

Parameters:

member - member name

isMember

```
public boolean isMember(String member)
```

Return true if member of this trait

Parameters:

member - member name

Returns:

true, if member

getMembers

```
public java.util.List getMembers()
```

Get a list of trait members

Returns:

list of trait members

getMemberCount

```
public int getMemberCount()
```

(continued from last page)

Get the number of members

Returns:

number of members

getMember

```
public String getMember(int i)
```

Get member by index

Parameters:

i - index

Returns:

member name

getClassName

```
public String getClassName()
```

Get class name

Returns:

class name

setClassName

```
public void setClassName(String className)
```

Set class name

Parameters:

className - class name

isDynamic

```
public boolean isDynamic()
```

Is class dynamic

Returns:

true, if dynamic

setDynamic

```
public void setDynamic(boolean isDynamic)
```

Set isDynamic

Parameters:

isDynamic - true, if dynamic

getInnerObj

```
public AMFData getInnerObj()
```

Get inner object

(continued from last page)

Returns:

inner object

setInnerObj

```
public void setInnerObj(AMFData innerObj)
```

Set inner object

Parameters:

innerObj - inner object

com.wowza.wms.amf

Class AMFObj

java.lang.Object

└─com.wowza.wms.amf.AMFObj

public class **AMFObj**
extends Object

AMFObj: class that stores the state of channel between the client and the server.

Field Summary

public static final	AMFDEBUGHEADERSIZE Value: false
public static final	WOWZDEBUGHEADERSIZE Value: false

Constructor Summary

public	AMFObj (int id) Create new AMFObj for a given channel (id)
public	AMFObj (int id, int objectEncoding) Create new AMFObj for a given channel (id)

Method Summary

void	addChunk (byte[] buffer, int offset, int len) Add a chunk to the chunk list
void	clearByteContainer () Clear the byte container
long	getAbsTimecode () Get the absolute time code
int	getByteContainerLevel () Fake container for processing
long	getChunkCounter ()
java.util.List	getChunks () Get the chunks that make up this packet
int	getId () Get channel id
int	getObjectEncoding ()

long	<u>getSentAbsTimecode()</u>
int	<u>getSize()</u> Get packet size
int	<u>getSrc()</u> Get stream id (0 if not stream data)
long	<u>getTimecode()</u> Get timecode (milliseconds) sometimes relative
int	<u>getType()</u> Get content type IVHost.CONTENTTYPE_*
long	<u>incAbsTimecode()</u> (long absTimecode) Increment the absolute timecode
void	<u>incByteContainerLevel()</u> (int byteContainerLevel) Fake container for processing
boolean	<u>isByteContainerEmpty()</u> Fake container for processing
boolean	<u>isByteContainerFull()</u> Fake container for processing
boolean	<u>isLastSentAbsTimecode()</u>
boolean	<u>isLongTimecode()</u> Get is a 32 bit timecode
boolean	<u>isNew()</u> Is this a new packet.
boolean	<u>isObjectEncodingAMF0()</u>
boolean	<u>isObjectEncodingAMF3()</u>
long	<u>setAbsTimecodeLong()</u> (long absTimecode) Set the absolute timecode
long	<u>setAbsTimecodeShort()</u> (long absTimecode) Set the absolute timecode
void	<u>setByteContainerLevel()</u> (int byteContainerLevel) Fake container for processing
void	<u>setChunkCounter()</u> (long chunkCounter)
void	<u>setId()</u> (int id) Set channel id
void	<u>setLastSentAbsTimecode()</u> (boolean isLastSentAbsTimecode)
void	<u>setLongTimecode()</u> (boolean isLongTimecode) Set is a 32 bit timecode

void	setNew (boolean isNew) Set is new packet
void	setObjectEncoding (int objectEncoding)
void	setSentAbsTimecode (long sentAbsTimecode)
void	setSize (int size) Set packet size
void	setSrc (int src) Set stream id (0 if not stream data)
void	setTimecode (long timecode) Set timecode (milliseconds) sometimes relative
void	setType (int type) Set content type IVHost.CONTENTTYPE_*
String	toString () Return object as formatted string

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AMFDEBUGHEADERSIZE

public static final boolean **AMFDEBUGHEADERSIZE**

Constant value: **false**

WOWZDEBUGHEADERSIZE

public static final boolean **WOWZDEBUGHEADERSIZE**

Constant value: **false**

Constructors

AMFObj

public **AMFObj**(int id)

Create new AMFObj for a given channel (id)

Parameters:

id - channel id

(continued from last page)

AMFObj

```
public AMFObj(int id,  
              int objectEncoding)
```

Create new AMFObj for a given channel (id)

Parameters:

id - channel id
objectEncoding - object encoding level (AMF0 or AMF3)

Methods

getChunks

```
public java.util.List getChunks()
```

Get the chunks that make up this packet

Returns:

chunks that make up this packet

addChunk

```
public void addChunk(byte[] buffer,  
                     int offset,  
                     int len)
```

Add a chunk to the chunk list

Parameters:

buffer - buffer
offset - offset
len - length

getId

```
public int getId()
```

Get channel id

Returns:

channel id

setId

```
public void setId(int id)
```

Set channel id

Parameters:

id - channel id

getSize

```
public int getSize()
```

Get packet size

(continued from last page)

Returns:

packet size

setSize

```
public void setSize(int size)
```

Set packet size

Parameters:

size - packet size

getType

```
public int getType()
```

Get content type IVHost.CONTENTTYPE_*

Returns:

content type

setType

```
public void setType(int type)
```

Set content type IVHost.CONTENTTYPE_*

Parameters:

type - content type

getSrc

```
public int getSrc()
```

Get stream id (0 if not stream data)

Returns:

stream id

setSrc

```
public void setSrc(int src)
```

Set stream id (0 if not stream data)

Parameters:

src - stream id

toString

```
public String toString()
```

Return object as formatted string

getTimecode

```
public long getTimecode()
```

(continued from last page)

Get timecode (milliseconds) sometimes relative

Returns:

timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) sometimes relative

Parameters:

timecode - timecode (milliseconds)

isNew

```
public boolean isNew()
```

Is this a new packet. If new entire packet header needs to be sent

Returns:

is new packet

setNew

```
public void setNew(boolean isNew)
```

Set is new packet

Parameters:

isNew - is new packet

getAbsTimecode

```
public long getAbsTimecode()
```

Get the absolute time code

Returns:

absolute timecode

setAbsTimecodeLong

```
public long setAbsTimecodeLong(long absTimecode)
```

Set the absolute timecode

Parameters:

absTimecode - absolute timecode

Returns:

absolute timecode

setAbsTimecodeShort

```
public long setAbsTimecodeShort(long absTimecode)
```

Set the absolute timecode

(continued from last page)

Parameters:

absTimecode

Returns:

absolute timecode

incAbsTimecode

```
public long incAbsTimecode(long absTimecode)
```

Increment the absolution timecode

Parameters:

absTimecode - absolute timecode

Returns:

absolute timecode

getByteContainerLevel

```
public int getByteContainerLevel()
```

Fake container for processing

Returns:

current container level

clearByteContainer

```
public void clearByteContainer()
```

Clear the byte container

setByteContainerLevel

```
public void setByteContainerLevel(int byteContainerLevel)
```

Fake container for processing

Parameters:

byteContainerLevel - current container level

incByteContainerLevel

```
public void incByteContainerLevel(int byteContainerLevel)
```

Fake container for processing

Parameters:

byteContainerLevel - current container level

isByteContainerEmpty

```
public boolean isByteContainerEmpty()
```

Fake container for processing

Returns:

(continued from last page)

is container full

isByteContainerFull

```
public boolean isByteContainerFull()
```

Fake container for processing

Returns:

is container full

isLongTimecode

```
public boolean isLongTimecode()
```

Get is a 32 bit timecode

Returns:

true if 32 bit timecode

setLongTimecode

```
public void setLongTimecode(boolean isLongTimecode)
```

Set is a 32 bit timecode

Parameters:

isLongTimecode - is a 32 bit timecode

isLastSentAbsTimecode

```
public boolean isLastSentAbsTimecode()
```

setLastSentAbsTimecode

```
public void setLastSentAbsTimecode(boolean isLastSentAbsTimecode)
```

isObjectEncodingAMF3

```
public boolean isObjectEncodingAMF3()
```

isObjectEncodingAMF0

```
public boolean isObjectEncodingAMF0()
```

setObjectEncoding

```
public void setObjectEncoding(int objectEncoding)
```

getObjectEncoding

```
public int getObjectEncoding()
```

getChunkCounter

```
public long getChunkCounter()
```

setChunkCounter

```
public void setChunkCounter(long chunkCounter)
```

getSentAbsTimecode

```
public long getSentAbsTimecode()
```

setSentAbsTimecode

```
public void setSentAbsTimecode(long sentAbsTimecode)
```

com.wowza.wms.amf Class AMFObjChunk

java.lang.Object

└─com.wowza.wms.amf.AMFObjChunk

```
public class AMFObjChunk
extends Object
```

Field Summary

public	buffer
public	len
public	offset

Constructor Summary

public	AMFObjChunk (byte[] buffer, int offset, int len)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

buffer

```
public byte buffer
```

offset

```
public int offset
```

len

```
public int len
```

Constructors

(continued from last page)

AMFObjChunk

```
public AMFObjChunk(byte[] buffer,  
                   int offset,  
                   int len)
```

com.wowza.wms.amf

Class AMPacket

java.lang.Object

└─com.wowza.wms.amf.AMPacket

```
public class AMPacket
extends Object
```

AMFPacket: data container for data being transferred to and from the server from the Flash client. AMPacket is also used to store data read/written to/from an flv file.

Constructor Summary

public	AMPacket() Create new empty packet
public	AMPacket(int type, int src, int size) Create new packet with given values
public	AMPacket(int type, int src, byte[] data) Create new packet with given values

Method Summary

int	addData(byte[] data, int offset, int size) Add data to the packet
int	addDataEx(byte[] srcData, int srcOffset, int destOffset, int srcBytes) Add data to the packet
static int	calcTotalPacketSize(int packetSize, int headerSize, int chunkSize, int amfNumber, boolean isLongTimecode) Calculate the total packet size for given packet parameters
AMPacket	clone()
AMPacket	clone(boolean doCopy)
boolean	containsExtraDataKey(String key) Return true if extra data contains the key
static AMPacket	deserializePacket(byte[] buffer)
java.util.Map	extraDataClone() Deep copy the extra data and return as a Map
static java.util.Map	extraDataClone(java.util.Map extraData)
long	getAbsTimecode() Get absolute timecode (milliseconds)

byte[]	<u>getData()</u> Get data as byte[]
java.nio.ByteBuffer	<u>getDataBuffer()</u> Get data as ByteBuffer
<u>IAMFPacketExtraData</u>	<u>getExtraData(String key)</u> Get extra data value
java.util.Set	<u>getExtraDataKeys()</u> Get a set of the extra data keys
int	<u>getFirstByte()</u> Get first byte of data (used to peek into packet)
Object	<u>getLock()</u> Get lock (mostly used for extra data access)
int	<u>getMissing()</u> Get the number of bytes remaining unfilled in the packet
int	<u>getSecondByte()</u> Get second byte of data (used to peek into packet)
long	<u>getSeq()</u> Get packet sequence number.
int	<u>getSize()</u> Get packet size
int	<u>getSrc()</u> Get stream id (0 if not stream data)
long	<u>getTimecode()</u> Get timecode (milliseconds) relative to the <i>previous</i> packet.
int	<u>getType()</u> Get content type IVHost.CONTENTTYPE_*
boolean	<u>isAudio()</u> Is this an audio packet IVHost.CONTENTTYPE_AUDIO
boolean	<u>isExtraData()</u> Returns true if this packet contains any extra data
boolean	<u>isVideo()</u> Is this an audio packet IVHost.CONTENTTYPE_VIDEO
void	<u>putAllExtraData(java.util.Map entries)</u> Add extra data key value pairs
<u>IAMFPacketExtraData</u>	<u>putExtraData(String key, <u>IAMFPacketExtraData</u> value)</u> Add extra data value
byte[]	<u>serializePacket()</u>
void	<u>setAbsTimecode(long absTimecode)</u> Set absolute timecode (milliseconds)

void	<code>setDataBuffer</code> (byte[] data) Set the data buffer to a byte array
void	<code>setDataBuffer</code> (java.nio.ByteBuffer data) Set the data for this packet
void	<code>setSeq</code> (long seq) Set packet sequence.
void	<code>setSize</code> (int size) Set packet size
void	<code>setSrc</code> (int src) Set stream id (0 if not stream data)
void	<code>setTimecode</code> (long timecode) Set timecode (milliseconds) relative,
void	<code>setTimecodes</code> (long timecode, long absTimecode) Set both relative and absolute timecode in one call (milliseconds)
void	<code>setType</code> (int type) Set content type IVHost.CONTENTTYPE_*
String	<code>toString</code> () Return object as formatted string
void	<code>truncatePacket</code> (int newSize)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

AMFPacket

```
public AMFPacket()
```

Create new empty packet

AMFPacket

```
public AMFPacket(int type,  
                 int src,  
                 int size)
```

Create new packet with given values

Parameters:

type - packet content type: IVHost.CONTENTTYPE_*
src - stream id
size - packet size (bytes)

(continued from last page)

AMFPacket

```
public AMFPacket(int type,  
                 int src,  
                 byte[] data)
```

Create new packet with given values

Parameters:

`type` - packet content type: IVHost.CONTENTTYPE_*
`src` - stream id
`data` - data buffer

Methods

clone

```
public AMFPacket clone()
```

clone

```
public AMFPacket clone(boolean doCopy)
```

getSize

```
public int getSize()
```

Get packet size

Returns:

packet size

setSize

```
public void setSize(int size)
```

Set packet size

Parameters:

`size` - packet size

truncatePacket

```
public void truncatePacket(int newSize)
```

getMissing

```
public int getMissing()
```

Get the number of bytes remaining unfilled in the packet

Returns:

number of bytes unfilled in packet

setDataBuffer

```
public void setDataBuffer(java.nio.ByteBuffer data)
```

Set the data for this packet

Parameters:

data - byte buffer that holds packet data

setDataBuffer

```
public void setDataBuffer(byte[] data)
```

Set the data buffer to a byte array

Parameters:

data - data buffer byte array

addData

```
public int addData(byte[] data,  
                  int offset,  
                  int size)
```

Add data to the packet

Parameters:

data - byte buffer with data
offset - offset in byte buffer
size - size of data

Returns:

number of bytes unfilled in packet

getType

```
public int getType()
```

Get content type IVHost.CONTENTTYPE_*

Returns:

content type

setType

```
public void setType(int type)
```

Set content type IVHost.CONTENTTYPE_*

Parameters:

type - content type

getSrc

```
public int getSrc()
```

Get stream id (0 if not stream data)

(continued from last page)

Returns:

stream id

setSrc

```
public void setSrc(int src)
```

Set stream id (0 if not stream data)

Parameters:

src - stream id

toString

```
public String toString()
```

Return object as formatted string

getTimecode

```
public long getTimecode()
```

Get timecode (milliseconds) relative to the *previous* packet.

Returns:

timecode (milliseconds)

setTimecodes

```
public void setTimecodes(long timecode,  
    long absTimecode)
```

Set both relative and absolute timecode in one call (milliseconds)

Note this time is relative to the *previous* packet.

Parameters:

timecode - relative timecode (milliseconds)

absTimecode - absolute timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) relative,

Note this time is relative to the *previous* packet.

Parameters:

timecode - timecode (milliseconds)

getAbsTimecode

```
public long getAbsTimecode()
```

Get absolute timecode (milliseconds)

Returns:

absolute timecode

setAbsTimecode

```
public void setAbsTimecode(long absTimecode)
```

Set absolute timecode (milliseconds)

Parameters:

absTimecode - absolute timecode

getSeq

```
public long getSeq()
```

Get packet sequence number. Used for live streams to keep track of packet ordering.

Returns:

packet sequence

setSeq

```
public void setSeq(long seq)
```

Set packet sequence. Used for live streams to keep track of packet ordering.

Parameters:

seq - packet sequence

isAudio

```
public boolean isAudio()
```

Is this an audio packet IVHost.CONTENTTYPE_AUDIO

Returns:

true if audio packet

isVideo

```
public boolean isVideo()
```

Is this an audio packet IVHost.CONTENTTYPE_VIDEO

Returns:

true if video packet

getDataBuffer

```
public java.nio.ByteBuffer getDataBuffer()
```

Get data as ByteBuffer

Returns:

data as ByteBuffer

getData

```
public byte[] getData()
```

(continued from last page)

Get data as byte[]

Returns:

data as byte[] null if no data

getFirstByte

```
public int getFirstByte()
```

Get first byte of data (used to peek into packet)

Returns:

first byte of data in packet

getSecondByte

```
public int getSecondByte()
```

Get second byte of data (used to peek into packet)

Returns:

second byte of data in packet

calcTotalPacketSize

```
public static int calcTotalPacketSize(int packetSize,  
    int headerSize,  
    int chunkSize,  
    int amfNumber,  
    boolean isLongTimecode)
```

Calculate the total packet size for given packet parameters

Parameters:

packetSize - data size
headerSize - header size
chunkSize - chunk size
amfNumber - amf number
isLongTimecode - is long timecode

Returns:

total bytes

addDataEx

```
public int addDataEx(byte[] srcData,  
    int srcOffset,  
    int destOffset,  
    int srcBytes)
```

Add data to the packet

Parameters:

srcData -- source byte buffer with data
srcOffset -- start copying from source buffer at this offset
destOffset -- copy into destination buffer from this offset
srcBytes -- size of data to copy

Returns:

(continued from last page)

number of bytes unfilled in packet

serializePacket

```
public byte[] serializePacket()
```

deserializePacket

```
public static AMFPacket deserializePacket(byte[] buffer)
```

getLock

```
public Object getLock()
```

Get lock (mostly used for extra data access)

Returns:

lock

putExtraData

```
public IAMFPacketExtraData putExtraData(String key,  
    IAMFPacketExtraData value)
```

Add extra data value

Parameters:

key - key

value - extra data

Returns:

extra data currently at that key

putAllExtraData

```
public void putAllExtraData(java.util.Map entries)
```

Add extra data key value pairs

Parameters:

entries - extra data key value pairs

getExtraData

```
public IAMFPacketExtraData getExtraData(String key)
```

Get extra data value

Parameters:

key - key

Returns:

extra data value

getExtraDataKeys

```
public java.util.Set getExtraDataKeys()
```

Get a set of the extra data keys

Returns:

extra data keys

containsExtraDataKey

```
public boolean containsExtraDataKey(String key)
```

Return true if extra data contains the key

Parameters:

key - key

Returns:

true if extra data contains the key

isExtraData

```
public boolean isExtraData()
```

Returns true if this packet contains any extra data

Returns:

true if this packet contains any extra data

extraDataClone

```
public static java.util.Map extraDataClone(java.util.Map extraData)
```

extraDataClone

```
public java.util.Map extraDataClone()
```

Deep copy the extra data and return as a Map

Returns:

deep copy of extra data

com.wowza.wms.amf

Class AMFParsingException

```

java.lang.Object
  |-- java.lang.Throwable
    |-- java.lang.Exception
      |-- java.lang.RuntimeException
        +- com.wowza.wms.amf.AMFParsingException
  
```

All Implemented Interfaces:

java.io.Serializable

```

public class AMFParsingException
extends RuntimeException
  
```

Constructor Summary

public	AMFParsingException() Constructs a new exception with null as its detail message.
public	AMFParsingException(String message) Constructs a new exception with the specified detail message.
public	AMFParsingException(String message, Throwable cause) Constructs a new exception with the specified detail message and cause.
public	AMFParsingException(Throwable cause) Constructs a new exception with the specified cause and a detail message of (cause==null ? null : cause.toString()) (which typically contains the class and detail message of cause).
protected	AMFParsingException(String message, Throwable cause, boolean enableSuppression, boolean writableStackTrace) Constructs a new exception with the specified detail message, cause, suppression enabled or disabled, and writable stack trace enabled or disabled.

Methods inherited from class java.lang.Throwable

addSuppressed, fillInStackTrace, getCause, getLocalizedMessage, getMessage, getStackTrace, getSuppressed, initCause, printStackTrace, printStackTrace, printStackTrace, setStackTrace, toString

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

AMFParsingException

```
public AMFParsingException()
```

Constructs a new exception with null as its detail message. The cause is not initialized, and may subsequently be initialized by a call to `Throwable.initCause(java.lang.Throwable)`.

AMFParsingException

```
public AMFParsingException(String message)
```

Constructs a new exception with the specified detail message. The cause is not initialized, and may subsequently be initialized by a call to `Throwable.initCause(java.lang.Throwable)`.

Parameters:

message - the detail message. The detail message is saved for later retrieval by the `Throwable.getMessage()` method.

AMFParsingException

```
public AMFParsingException(String message,
                             Throwable cause)
```

Constructs a new exception with the specified detail message and cause.

Note that the detail message associated with cause is *not* automatically incorporated in this exception's detail message.

Parameters:

message - the detail message (which is saved for later retrieval by the `Throwable.getMessage()` method).

cause - the cause (which is saved for later retrieval by the `Throwable.getCause()` method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

AMFParsingException

```
public AMFParsingException(Throwable cause)
```

Constructs a new exception with the specified cause and a detail message of `(cause==null ? null : cause.toString())` (which typically contains the class and detail message of cause). This constructor is useful for exceptions that are little more than wrappers for other throwables.

Parameters:

cause - the cause (which is saved for later retrieval by the `Throwable.getCause()` method). (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

AMFParsingException

```
protected AMFParsingException(String message,
                                Throwable cause,
                                boolean enableSuppression,
                                boolean writableStackTrace)
```

Constructs a new exception with the specified detail message, cause, suppression enabled or disabled, and writable stack trace enabled or disabled.

Parameters:

message - the detail message.

cause - the cause. (A null value is permitted, and indicates that the cause is nonexistent or unknown.)

enableSuppression - whether or not suppression is enabled or disabled

writableStackTrace - whether or not the stack trace should be writable

com.wowza.wms.amf Interface IAMFDataObj

All Known Implementing Classes:
[AMFDataObj](#)

public interface **IAMFDataObj**
extends

Method Summary

abstract boolean	<code>containsKey</code> (String name) Return true if the object/array contains key
abstract AMFData	<code>get</code> (int index) Return the object at a particular index.
abstract AMFData	<code>get</code> (String name) Return the object at a particular key.
abstract boolean	<code>getBoolean</code> (int index) Get item at index return as boolean
abstract boolean	<code>getBoolean</code> (String name) Get item at key return as boolean
abstract byte	<code>getByte</code> (int index) Get item at index return as byte
abstract byte	<code>getByte</code> (String name) Get item at key return as byte
abstract java.util.Date	<code>getDate</code> (int index) Get item at index return as Date
abstract java.util.Date	<code>getDate</code> (String name) Get item at key return as Date
abstract double	<code>getDouble</code> (int index) Get item at index return as double
abstract double	<code>getDouble</code> (String name) Get item at key return as double
abstract float	<code>getFloat</code> (int index) Get item at index return as float
abstract float	<code>getFloat</code> (String name) Get item at key return as float
abstract int	<code>getInt</code> (int index) Get item at index return as int
abstract int	<code>getInt</code> (String name) Get item at key return as int

abstract String	<u>getKey</u> (int index) Return the key at a particular index.
abstract java.util.List	<u>getKeys</u> () Return a list of all the keys (the list is a copy)
abstract long	<u>getLong</u> (int index) Get item at index return as long
abstract long	<u>getLong</u> (String name) Get item at key return as long
abstract <u>AMFDataObj</u>	<u>getObject</u> (int index) Get item at index return as AMFDataObj
abstract <u>AMFDataObj</u>	<u>getObject</u> (String name) Get item at key return as AMFDataObj
abstract short	<u>getShort</u> (int index) Get item at index return as short
abstract short	<u>getShort</u> (String name) Get item at key return as short
abstract String	<u>getString</u> (int index) Get item at index return as String
abstract String	<u>getString</u> (String name) Get item at key return as String
abstract void	<u>put</u> (String name, <u>AMFData</u> data) Put or replace object at key
abstract void	<u>put</u> (String name, boolean data) Put or replace boolean value at key (data will be wrapped in an AMFDataItem object)
abstract void	<u>put</u> (String name, java.util.Date data) Put or replace date value at key (data will be wrapped in an AMFDataItem object)
abstract void	<u>put</u> (String name, double data) Put or replace double value at key (data will be wrapped in an AMFDataItem object)
abstract void	<u>put</u> (String name, int data) Put or replace int value at key (data will be wrapped in an AMFDataItem object)
abstract void	<u>put</u> (String name, long data) Put or replace long value at key (data will be wrapped in an AMFDataItem object)
abstract void	<u>put</u> (String name, String data) Put or replace string value at key (data will be wrapped in an AMFDataItem object)
abstract <u>AMFData</u>	<u>remove</u> (int index) Remove element by index
abstract <u>AMFData</u>	<u>remove</u> (String name) Remove element by key

(continued from last page)

Methods

containsKey

```
public abstract boolean containsKey(String name)
```

Return true if the object/array contains key

Parameters:

name - key

Returns:

Return true the object/array contains key

put

```
public abstract void put(String name,  
    AMFData data)
```

Put or replace object at key

Parameters:

name - key

data - object

put

```
public abstract void put(String name,  
    String data)
```

Put or replace string value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - string value

put

```
public abstract void put(String name,  
    double data)
```

Put or replace double value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - double value

put

```
public abstract void put(String name,  
    int data)
```

Put or replace int value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key

data - int value

put

```
public abstract void put(String name,  
                        long data)
```

Put or replace long value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - long value

put

```
public abstract void put(String name,  
                        java.util.Date data)
```

Put or replace date value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - date value

put

```
public abstract void put(String name,  
                        boolean data)
```

Put or replace boolean value at key (data will be wrapped in an AMFDataItem object)

Parameters:

name - key
data - boolean value

getKeys

```
public abstract java.util.List getKeys()
```

Return a list of all the keys (the list is a copy)

Returns:

new list that contains one entry for each key

getKey

```
public abstract String getKey(int index)
```

Return the key at a particular index.

Parameters:

index

Returns:

Return key at index or null if out of bounds

get

```
public abstract AMFData get(String name)
```

(continued from last page)

Return the object at a particular key.

Parameters:

name - key

Returns:

Return object or null if out of bounds

get

```
public abstract AMFData get(int index)
```

Return the object at a particular index.

Parameters:

index - index

Returns:

Return object or null if out of bounds

remove

```
public abstract AMFData remove(String name)
```

Remove element by key

Parameters:

name - key

Returns:

removed object or null if not found

remove

```
public abstract AMFData remove(int index)
```

Remove element by index

Parameters:

index - index

Returns:

removed object or null if not found

getString

```
public abstract String getString(String name)
```

Get item at key return as String

Parameters:

name - key

Returns:

Return item as String or null if out of bounds

(continued from last page)

getInt

```
public abstract int getInt(String name)
```

Get item at key return as int

Parameters:

name - key

Returns:

Return item as int or 0 if out of bounds

getLong

```
public abstract long getLong(String name)
```

Get item at key return as long

Parameters:

name - key

Returns:

Return item as long or 0 if out of bounds

getShort

```
public abstract short getShort(String name)
```

Get item at key return as short

Parameters:

name - key

Returns:

Return item as short or 0 if out of bounds

getDouble

```
public abstract double getDouble(String name)
```

Get item at key return as double

Parameters:

name - key

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public abstract float getFloat(String name)
```

Get item at key return as float

Parameters:

name - key

Returns:

Return item as float or 0 if out of bounds

getBytes

```
public abstract byte getBytes(String name)
```

Get item at key return as byte

Parameters:

name - key

Returns:

Return item as byte or 0 if out of bounds

getBoolean

```
public abstract boolean getBoolean(String name)
```

Get item at key return as boolean

Parameters:

name - key

Returns:

Return item as boolean or false if out of bounds

getDate

```
public abstract java.util.Date getDate(String name)
```

Get item at key return as Date

Parameters:

name - key

Returns:

Return item as Date or null if out of bounds

getObject

```
public abstract AMFDataObj getObject(String name)
```

Get item at key return as AMFDataObj

Parameters:

name - key

Returns:

Return item as AMFDataObj or null if out of bounds

getString

```
public abstract String getString(int index)
```

Get item at index return as String

Parameters:

index - index

(continued from last page)

Returns:

Return item as String or null if out of bounds

getInt

```
public abstract int getInt(int index)
```

Get item at index return as int

Parameters:

index - index

Returns:

Return item as int or 0 if out of bounds

getLong

```
public abstract long getLong(int index)
```

Get item at index return as long

Parameters:

index - index

Returns:

Return item as long or 0 if out of bounds

getShort

```
public abstract short getShort(int index)
```

Get item at index return as short

Parameters:

index - index

Returns:

Return item as short or 0 if out of bounds

getByte

```
public abstract byte getByte(int index)
```

Get item at index return as byte

Parameters:

index - index

Returns:

Return item as byte or 0 if out of bounds

getDouble

```
public abstract double getDouble(int index)
```

Get item at index return as double

Parameters:

(continued from last page)

index - index

Returns:

Return item as double or 0 if out of bounds

getFloat

```
public abstract float getFloat(int index)
```

Get item at index return as float

Parameters:

index - index

Returns:

Return item as float or 0 if out of bounds

getBoolean

```
public abstract boolean getBoolean(int index)
```

Get item at index return as boolean

Parameters:

index - index

Returns:

Return item as boolean or false if out of bounds

getDate

```
public abstract java.util.Date getDate(int index)
```

Get item at index return as Date

Parameters:

index - index

Returns:

Return item as Date or null if out of bounds

getObject

```
public abstract AMFDataObj getObject(int index)
```

Get item at index return as AMFDataObj

Parameters:

index - index

Returns:

Return item as AMFDataObj or null if out of bounds

com.wowza.wms.amf Interface IAMFExternalizable

public interface **IAMFExternalizable**
extends

Method Summary

abstract void	deserialize (AMFDataObj amfObj, java.nio.ByteBuffer data, AMFDataContextDeserialize context)
abstract String	getClassName ()
abstract void	serialize (AMFDataObj amfObj, java.io.DataOutputStream out, AMFDataContextSerialize context)
abstract void	setClassName (String className)

Methods

deserialize

```
public abstract void deserialize(AMFDataObj amfObj,  
    java.nio.ByteBuffer data,  
    AMFDataContextDeserialize context)
```

serialize

```
public abstract void serialize(AMFDataObj amfObj,  
    java.io.DataOutputStream out,  
    AMFDataContextSerialize context)
```

getClassName

```
public abstract String getClassName()
```

setClassName

```
public abstract void setClassName(String className)
```

com.wowza.wms.amf Interface IAMFPacketExtraData

public interface **IAMFPacketExtraData**
extends

Method Summary

abstract IAMFPacketExtraData	clone() Return a deep copy of the extra data item
---	--

Methods

clone

public abstract [IAMFPacketExtraData](#) **clone()**

Return a deep copy of the extra data item

Returns:

deep copy of the extra data item

Package

com.wowza.wms.application

com.wowza.wms.application Interface IApplication

public interface **IApplication**
extends

IApplication: public interface to Application object

Field Summary

public static final	<u>DEFAULT_APPLICATION_NAME</u> Value: _defapp_
---------------------	---

Method Summary

abstract void	<u>addApplicationInstanceListener</u> (<u>IApplicationInstanceNotify</u> applicationInstanceListener) Add applicationInstance listener.
abstract <u>IApplicationInstance</u>	<u>getAppInstance</u> (String name) Get applicationInstance object by name
abstract java.util.List	<u>getAppInstanceNames</u> () Get a list of application instance names
abstract String	<u>getApplicationPath</u> () Get the root path for application
abstract String	<u>getConfigPath</u> () Get full path to Application.xml file
abstract <u>ConnectionCounter</u>	<u>getConnectionCounter</u> () Get the connectionCounter for application
abstract ConnectionCounterSimple	<u>getConnectionCounter</u> (int counterIndex) Get the connectionCounter for application for application for a specific technology (see IVHost.COUNTER_*)
abstract String	<u>getDateStarted</u> () Get date application started
abstract <u>IOPerformanceCounter</u>	<u>getIoPerformanceCounter</u> () Get the performance counter for application
abstract <u>IOPerformanceCounter</u>	<u>getIoPerformanceCounter</u> (int counterIndex) Get the performance counter for application for a specific technology (see IVHost.COUNTER_*)
abstract String	<u>getName</u> () Get the name of application
abstract <u>WMSProperties</u>	<u>getProperties</u> () Get application properties

abstract void	<u>getProtocolUsage</u> (boolean[] protocolsInUse) Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
abstract String	<u>getTimeRunning</u> () Get time application running
abstract double	<u>getTimeRunningSeconds</u> () Get time running in seconds
abstract <u>IVHost</u>	<u>getVHost</u> () Get the parent vHost object
abstract boolean	<u>isAppInstanceLoaded</u> (String name) Return true if application instance is loaded
abstract boolean	<u>isRunning</u> () Returns true if the application is in running state
abstract String	<u>readAppConfig</u> (String sName) Method to read xml config file..
abstract void	<u>removeAppInstance</u> (<u>IApplicationInstance</u> appInstance) Disconnect all clients connected to an application instance and remove it from the IApplication application list.
abstract void	<u>removeApplicationInstanceListener</u> (<u>IApplicationInstanceNotify</u> applicationInstanceListener) Remove applicationInstance listener.
abstract void	<u>setName</u> (String name) Set name of application
abstract void	<u>shutdown</u> (boolean isServerShutdown) shutdown application
abstract void	<u>shutdownAppInstance</u> (String appInstanceName) Shutdown an application instance by name.
abstract boolean	<u>writeAppConfig</u> (String sName, String data) Method to write xml config file..

Fields

DEFAULT_APPLICATION_NAME

public static final java.lang.String **DEFAULT_APPLICATION_NAME**

Constant value: **_defapp_**

Methods

shutdown

public abstract void **shutdown**(boolean isServerShutdown)

shutdown application

(continued from last page)

Parameters:

isServerShutdown - true if due to shutdown of server

getApplicationPath

```
public abstract String getApplicationPath()
```

Get the root path for application

Returns:

root path for application

getConfigPath

```
public abstract String getConfigPath()
```

Get full path to Application.xml file

Returns:

full path to Application.xml file

getAppInstance

```
public abstract IApplicationInstance getAppInstance(String name)
```

Get applicationInstance object by name

Parameters:

name - applicationInstance name

Returns:

appliationInstance object

isAppInstanceLoaded

```
public abstract boolean isAppInstanceLoaded(String name)
```

Return true if application instance is loaded

Parameters:

name - applicationInstance name

Returns:

true if application instance is loaded

getName

```
public abstract String getName()
```

Get the name of application

Returns:

name of application

setName

```
public abstract void setName(String name)
```

(continued from last page)

Set name of application

Parameters:

name - name of application

getVHost

```
public abstract IVHost getVHost()
```

Get the parent vHost object

Returns:

parent vHost

getProperties

```
public abstract WMSProperties getProperties()
```

Get application properties

Returns:

application properties

addApplicationInstanceListener

```
public abstract void addApplicationInstanceListener(IApplicationInstanceNotify  
applicationInstanceListener)
```

Add applicationInstance listener. Will be invoked each time applicationInstance created/deleted

Parameters:

applicationInstanceListener - applicationInstance listener

removeApplicationInstanceListener

```
public abstract void removeApplicationInstanceListener(IApplicationInstanceNotify  
applicationInstanceListener)
```

Remove applicationInstance listener. Will be invoked each time applicationInstance created/deleted

Parameters:

applicationInstanceListener - applicationInstance listener

getConnectionCounter

```
public abstract ConnectionCounter getConnectionCounter()
```

Get the connectionCounter for application

Returns:

connectionCounter for application

getConnectionCounter

```
public abstract ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get the connectionCounter for application for application for a specific technology (see IVHost.COUNTER_*)

(continued from last page)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:connection ocunter

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter()
```

Get the performance counter for application

Returns:performance counter for application

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get the performance counter for application for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:performance counter

getDateStarted

```
public abstract String getDateStarted()
```

Get date application started

Returns:date application started

getTimeRunning

```
public abstract String getTimeRunning()
```

Get time application running

Returns:time application running

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get time running in seconds

Returns:time running in seconds

getAppInstanceNames

```
public abstract java.util.List getAppInstanceNames()
```

(continued from last page)

Get a list of application instance names

Returns:

list of application instance names

removeAppInstance

public abstract void **removeAppInstance**([IApplicationInstance](#) appInstance)

Disconnect all clients connected to an application instance and remove it from the IApplication application list. The proper way to call this is:

```
public void shutdownAppInstance(IApplicationInstance appInstance)
{
    IVHost vhost = appInstance.getVHost();
    IApplication app = appInstance.getApplication();

    WMSReadWriteLock appLock = vhost.getApplicationLock();
    appLock.writeLock().lock();
    try
    {
        app.removeAppInstance(appInstance);
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(Application.class).error("Application.shutdownAppInstance ",
        e);
    }
    finally
    {
        appLock.writeLock().unlock();
    }
}
```

Parameters:

appInstance - application instance to remove

shutdownAppInstance

public abstract void **shutdownAppInstance**(String appInstanceName)

Shutdown an application instance by name. This will disconnect all clients connected to this application instance.

Parameters:

appInstanceName - application instance name

(continued from last page)

readAppConfig

```
public abstract String readAppConfig(String sName)
```

Method to read xml config file..

writeAppConfig

```
public abstract boolean writeAppConfig(String sName,  
                                         String data)
```

Method to write xml config file..

getProtocolUsage

```
public abstract void getProtocolUsage(boolean[] protocolsInUse)
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

isRunning

```
public abstract boolean isRunning()
```

Returns true if the application is in running state

Returns:

true if the application is in running state

com.wowza.wms.application Interface IApplicationInstance

public interface **IApplicationInstance**
extends

IApplicationInstance: public interface to ApplicationInstance object

Field Summary

public static final	<u>DEFAULT_APPINSTANCE_NAME</u> Value: _definst_
public static final	<u>PROTOCOLUSAGE_CMAF_CUPERTINO</u> Value: 53
public static final	<u>PROTOCOLUSAGE_CMAF_LL_CUPERTINO</u> Value: 55
public static final	<u>PROTOCOLUSAGE_CMAF_LL_MPEGDASH</u> Value: 56
public static final	<u>PROTOCOLUSAGE_CMAF_MPEGDASH</u> Value: 54
public static final	<u>PROTOCOLUSAGE_CUPERTINO</u> Value: 7
public static final	<u>PROTOCOLUSAGE_MC_CUPERTINO</u> Value: 50
public static final	<u>PROTOCOLUSAGE_MC_LIVEREPEATER</u> Value: 44
public static final	<u>PROTOCOLUSAGE_MC_MPEGTSTCP</u> Value: 51
public static final	<u>PROTOCOLUSAGE_MC_RTP</u> Value: 45
public static final	<u>PROTOCOLUSAGE_MC_SHOUTCAST</u> Value: 43
public static final	<u>PROTOCOLUSAGE_MC_SRTRECEIVER</u> Value: 52

public static final	<u>PROTOCOLUSAGE_MEDIACACHE</u> Value: 20
public static final	<u>PROTOCOLUSAGE_MPEGDASH</u> Value: 10
public static final	<u>PROTOCOLUSAGE_ORIGINCUPERTINO</u> Value: 15
public static final	<u>PROTOCOLUSAGE_ORIGINMPEGDASH</u> Value: 18
public static final	<u>PROTOCOLUSAGE_ORIGINSANJOSE</u> Value: 17
public static final	<u>PROTOCOLUSAGE_ORIGINSMOOTH</u> Value: 16
public static final	<u>PROTOCOLUSAGE_PUSHUBLISHING</u> Value: 19
public static final	<u>PROTOCOLUSAGE_RTMP</u> Value: 0
public static final	<u>PROTOCOLUSAGE_RTMP_IN</u> Value: 21
public static final	<u>PROTOCOLUSAGE_RTMP_OUT</u> Value: 22
public static final	<u>PROTOCOLUSAGE_RTMP_E</u> Value: 4
public static final	<u>PROTOCOLUSAGE_RTMP_E_IN</u> Value: 29
public static final	<u>PROTOCOLUSAGE_RTMP_E_OUT</u> Value: 30
public static final	<u>PROTOCOLUSAGE_RTMP_S</u> Value: 2
public static final	<u>PROTOCOLUSAGE_RTMP_S_IN</u> Value: 25
public static final	<u>PROTOCOLUSAGE_RTMP_S_OUT</u> Value: 26

public static final	<u>PROTOCOLUSAGE_RTMTPT</u> Value: 1
public static final	<u>PROTOCOLUSAGE_RTMTPT_IN</u> Value: 23
public static final	<u>PROTOCOLUSAGE_RTMTPT_OUT</u> Value: 24
public static final	<u>PROTOCOLUSAGE_RTMPTE</u> Value: 5
public static final	<u>PROTOCOLUSAGE_RTMPTE_IN</u> Value: 31
public static final	<u>PROTOCOLUSAGE_RTMPTE_OUT</u> Value: 32
public static final	<u>PROTOCOLUSAGE_RTMPPTS</u> Value: 3
public static final	<u>PROTOCOLUSAGE_RTMPPTS_IN</u> Value: 27
public static final	<u>PROTOCOLUSAGE_RTMPPTS_OUT</u> Value: 28
public static final	<u>PROTOCOLUSAGE_RTP</u> Value: 6
public static final	<u>PROTOCOLUSAGE_RTP_IN</u> Value: 33
public static final	<u>PROTOCOLUSAGE_RTP_OUT</u> Value: 34
public static final	<u>PROTOCOLUSAGE_RTSP_IN</u> Value: 35
public static final	<u>PROTOCOLUSAGE_RTSP_OUT</u> Value: 36
public static final	<u>PROTOCOLUSAGE_RTSPPULL_IN</u> Value: 46
public static final	<u>PROTOCOLUSAGE_RTSPPULL_OUT</u> Value: 47

public static final	PROTOCOLUSAGE_SANJOSE Value: 9
public static final	PROTOCOLUSAGE_SMOOTH Value: 8
public static final	PROTOCOLUSAGE_TOTAL Value: 57
public static final	PROTOCOLUSAGE_WEBM Value: 11
public static final	PROTOCOLUSAGE_WEBRTC_IN Value: 48
public static final	PROTOCOLUSAGE_WEBRTC_OUT Value: 49
public static final	PROTOCOLUSAGE_WOWZ Value: 12
public static final	PROTOCOLUSAGE_WOWZ_IN Value: 37
public static final	PROTOCOLUSAGE_WOWZ_OUT Value: 38
public static final	PROTOCOLUSAGE_WOWZE Value: 13
public static final	PROTOCOLUSAGE_WOWZE_IN Value: 39
public static final	PROTOCOLUSAGE_WOWZE_OUT Value: 40
public static final	PROTOCOLUSAGE_WOWZS Value: 14
public static final	PROTOCOLUSAGE_WOWZS_IN Value: 41
public static final	PROTOCOLUSAGE_WOWZS_OUT Value: 42

Method Summary

abstract void	addClientListener (IClientNotify clientListener) Add client listener.
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abstract void	addDvrRecorderListener (ILiveStreamDvrRecorderActionNotify listener) Add a Dvr Recorder listener (see: ILiveStreamDvrRecorderActionNotify)
abstract void	addDvrStreamManagerListener (IDvrStreamManagerActionNotify listener) Add a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)
abstract void	addHTTPListener (IHTTPSessionNotify httpListener) Add listner to be notified of HTTPSession create and destroy.
abstract void	addHTTPStreamerSession (IHTTPStreamerSession httpStreamerSession) Add a HTTPStreamerSession to this application instance
abstract void	addLiveStreamPacketizerListener (ILiveStreamPacketizerActionNotify liveStreamPacketizerListener) Add a Live Stream Packetizer listener (see: ILiveStreamPacketizerActionNotify)
abstract void	addLiveStreamTranscoderListener (ILiveStreamTranscoderNotify liveStreamTranscoderListener) Add a live stream transcoder listener
abstract void	addMediaCasterListener (IMediaCasterNotify mediaCasterListener) Add mediaCaster listener.
abstract void	addMediaCasterListener (IMediaCasterNotify2 mediaCasterListener) Add mediaCaster listener.
abstract void	addMediaReaderListener (IMediaReaderActionNotify mediaReaderListener) Add media reader listener.
abstract void	addMediaStreamListener (IMediaStreamNotify mediaStreamListener) Add mediaStream listener.
abstract void	addMediaWriterListener (IMediaWriterActionNotify listener) Add a MediaWriter listener class.
abstract void	addModuleListener (IModuleNotify moduleListener) Add module listener.
abstract void	addPlayStreamByName (IMediaStream stream, String name) Add a media stream to the list of streams that are listening for a published stream
abstract void	addPublisher (Publisher publisher) Add a server side publisher to this application instance
abstract void	addPushPublishSession (IMediaStream stream, IPushPublishSession pushPublishSession) Add a push publish session to the list of active push publish sessions
abstract void	addPushPublishSessionListener (IPushPublishSessionNotify pushPublishSessionListener) Add a push publish session listener (see IPushPublishSessionNotify)
abstract void	addRTPIncomingDatagramPortAll () Allow all incoming RTP UDP ports for this application instance
abstract void	addRTPIncomingDatagramPortRange (int startPort, int endPort) Add a port range to the list of valid incoming RTP UDP ports
abstract void	addRTPListener (IRTPSessionNotify rtpListener) Add listner to be notified of RTPSession create and destroy.

abstract void	addRTPSession (RTPSession rtpSession) Add an RTP session to this application instance
abstract void	addSharedObjectListener (ISharedObjectNotify sharedObjectListener, boolean isPersistent) Add sharedObject listener.
abstract void	addSourceControlSession (String streamName, ISourceControlSession sourceControlSession) Add a source control session to the list of active source control sessions associated with the given stream name
abstract void	addSourceControlSessionListener (ISourceControlSessionNotify sourceControlSessionListener) Add a source control session listener (see ISourceControlSessionNotify)
abstract void	broadcastMsg (java.util.List clientList, String handlerName) Broadcast a message to a specific list of clients connected to this application instance
abstract void	broadcastMsg (java.util.List clientList, String handlerName, Object[] params) Broadcast a message to a specific list of clients connected to this application instance
abstract void	broadcastMsg (String handlerName, Object[] params) Broadcast a message to all clients connected to this applicationInstance
abstract boolean	containsDvrRecorder (String dvrRecorder) Does this application instance contain a references to this DVR recorder.
abstract boolean	containsHTTPStreamer (String httpStreamer) Does this application instance allow streaming of a given HTTPStreamer
abstract boolean	containsLiveStreamPacketizer (String liveStreamPacketizer) Does this application instance contain a references to this live stream packetizer.
abstract boolean	containsLiveStreamTranscoder (String liveStreamTranscoder) Return true if this application instance contains the transcoder name
abstract String	decodeStorageDir (String storageDir) This function will take a storage path that uses variables and expand the variables based on the context.
abstract String[]	getAllowDomains () Get the list of domain names used to control access to this application.
abstract IApplication	getApplication () Get parent application
abstract int	getApplicationInstanceTouchTimeout () Get the application instance touch timeout (milliseconds).
abstract int	getApplicationTimeout () Get application timeout (milliseconds)
abstract IClient	getClient (int index) Deprecated. Get the client connection at index. This method is deprecated. It is best to use getClient() to return a List objects.
abstract IClient	getClientById (int index) Get a client connection by the client Id

abstract int	<u>getClientCount()</u> Get number of client connections currently connected to applicationInstance
abstract int	<u>getClientCountTotal()</u> Get number of client connections in total that have connected to this applicationInstance
abstract int	<u>getClientIdleFrequency()</u> Get default client idle frequency (milliseconds)
abstract java.util.List	<u>getClients()</u> Get the set of clients currently connected to this application instance (replaces getClient(index))
abstract edu.emory.mathcs.back port.java.util.concur rent.locks.WMSReadWri teLock	<u>getClientsLockObj()</u> Get the read/write lock for this application instance
abstract <u>ConnectionCounter</u>	<u>getConnectionCounter()</u> Get the connectionCounter for applicationInstance
abstract ConnectionCounterSimp le	<u>getConnectionCounter(int counterIndex)</u> Get the connectionCounter for applicationInstance for a specific technology (see IVHost.COUNTER_*)
abstract String	<u>getContextStr()</u> Returns the application context string in the form [application]/[appInstance].
abstract String	<u>getDateStarted()</u> Get date applicationInstance started
abstract DvrApplicationContext	<u>getDvrApplicationContext()</u> Get live stream dvr application context
abstract DvrApplicationConvert erContext	<u>getDvrConverter()</u> Get dvr application converter context
abstract <u>WMSProperties</u>	<u>getDvrProperties()</u> Get the property collection of DVR settings that are specific to this application instance.
abstract String	<u>getDvrRecorderList()</u> Get the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)
abstract <u>IHTTPStreamerApplicat ionContext</u>	<u>getHTTPStreamerApplicationContext(String httpStreamName, boolean doCreate)</u> Get the HTTPStreamer application context for a given HTTPStreamer adapter
abstract String	<u>getHTTPStreamerList()</u> Get the comma separated list of HTTPStreamers names being used by this application (see conf/HTTPStreamers.xml)
abstract <u>WMSProperties</u>	<u>getHTTPStreamerProperties()</u> Get the property collection of HTTPStreamer settings that are specific to this application instance
abstract int	<u>getHTTPStreamerSessionCount()</u> Get the current number of HTTPStreamerSessions associated with this application instance

abstract int	<u>getHTTPStreamerSessionCount</u> (int protocol) Get the current number of HTTPStreamerSessions associated with this application instance by protocol.
abstract int	<u>getHTTPStreamerSessionCount</u> (int protocol, String streamName) Get the current number of HTTPStreamerSessions associated with this application instance and stream name by protocol .
abstract int	<u>getHTTPStreamerSessionCount</u> (String streamName) Get the current number of HTTPStreamerSessions associated with this application instance and stream name
abstract java.util.Map	<u>getHTTPStreamerSessionCountsByName</u> (int protocol) Get a map of session counts by name for a given protocol
abstract java.util.List	<u>getHTTPStreamerSessions</u> () Get the HTTPStreamerSessions associated with this application instance
abstract java.util.List	<u>getHTTPStreamerSessions</u> (int protocol) Get the HTTPStreamerSessions associated with this application instance by protocol.
abstract java.util.List	<u>getHTTPStreamerSessions</u> (int protocol, String streamName) Get the HTTPStreamerSessions associated with this application instance for a stream name by protocol.
abstract java.util.List	<u>getHTTPStreamerSessions</u> (String streamName) Get the HTTPStreamerSessions associated with this application instance for a stream name
abstract <u>IOPerformanceCounter</u>	<u>getIOPerformanceCounter</u> () Get the performance counter for applicationInstance
abstract <u>IOPerformanceCounter</u>	<u>getIOPerformanceCounter</u> (int counterIndex) Get the performance counter for applicationInstance for a specific technology (see IVHost.COUNTER_*)
abstract long	<u>getLastTouchTime</u> () Get the last time the instance was touched (milliseconds)
abstract <u>ILiveStreamDvrRecorderControl</u>	<u>getLiveStreamDvrRecorderControl</u> () Get the Live Stream DVR Recorder Controller.
abstract <u>ILiveStreamPacketizerControl</u>	<u>getLiveStreamPacketizerControl</u> () Get the Live Stream Packetizer Controller.
abstract String	<u>getLiveStreamPacketizerList</u> () Get the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)
abstract <u>WMSPProperties</u>	<u>getLiveStreamPacketizerProperties</u> () Get the property collection of LiveStreamPacketizer settings that are specific to this application instance
abstract <u>ILiveStreamTranscoderControl</u>	<u>getLiveStreamTranscoderControl</u> () Get the Live Stream Transcoder Contoller.
abstract String	<u>getLiveStreamTranscoderList</u> () Get comma separated list of transcoders to use for this application instance

abstract WMSProperties	getManagerProperties() Get Application's manager's properties collection
abstract int	getMaximumPendingReadBytes() Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
abstract int	getMaximumPendingWriteBytes() Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
abstract int	getMaximumSetBufferTime() Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
abstract int	getMaxStorageDirDepth() Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths
abstract java.util.List	getMediaCacheFilters() Get the list of allowed MediaCache sources.
abstract WMSProperties	getMediaCasterProperties() Get the property collection of media caster settings that are specific to this application instance
abstract int	getMediacasterRTPRTSPRTPTTransportMode() RTP MediaCaster RTSP/RTP transport mode.
abstract MediaCasterStreamMap	getMediaCasterStreams() Get the media caster streams attached to this application instance
abstract IMediaCasterValidateMediaCaster	getMediaCasterValidator() Get the MediaCaster validator interface for this application instance
abstract IMediaListProvider	getMediaListProvider() Get the current media list provider.
abstract int	getMediaReaderContentType(String mediaType) Get the content type of a media stream name prefix (see IMediaReader.CONTENT'TYPE_*)
abstract WMSProperties	getMediaReaderProperties() Get the property collection of media reader settings that are specific to this application instance
abstract WMSProperties	getMediaWriterProperties() Get the property collection of media reader settings that are specific to this application instance
abstract ModuleFunctions	getModFunctions() Get list of application modules
abstract Object	getModuleInstance(String name) Get the instance of the module class for this application instance.
abstract ModuleList	getModuleList() Get the list of loaded modules.
abstract String	getName() Get applicationInstance name
abstract int	getPingTimeout() Get ping timeout (milliseconds)

abstract int	<u>getPlayStreamCount</u> (String streamName) Get the number of Flash players playing a given stream name
abstract java.util.Map	<u>getPlayStreamCountsByName</u> () Get a map of stream names to number of Flash players playing the stream name
abstract java.util.List	<u>getPlayStreamsByName</u> (String name) Get a list of media streams that are listening for published stream.
abstract <u>WMSPProperties</u>	<u>getProperties</u> () Get applicationInstance properties
abstract boolean[]	<u>getProtocolUsage</u> () Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
abstract void	<u>getProtocolUsage</u> (boolean[] protocolsInUse) Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
abstract int	<u>getPublisherCount</u> () Get the current number of server side publishers
abstract java.util.List	<u>getPublishers</u> () Get the set of server side publishers
abstract java.util.List	<u>getPublishStreamNames</u> () Get the list of live stream names currently being published.
abstract int	<u>getPushPublishSessionCount</u> () Get the number of push publishing sessions.
abstract java.util.List	<u>getPushPublishSessions</u> () Get all active push publish sessions
abstract java.util.List	<u>getPushPublishSessions</u> (<u>IMediaStream</u> stream) Get the current push publish sessions for a given IMediaStream
abstract String	<u>getRepeaterOriginUrl</u> () Get the Repeater Origin URL used by the Live Stream Repeater
abstract String	<u>getRepeaterQueryString</u> () Get the Repeater query string that is used to connect to the origin.
abstract String	<u>getRsoStorageDir</u> () Get remote shared object storage path
abstract String	<u>getRsoStoragePath</u> () Get the resolved storage path to the shared objects
abstract int	<u>getRTPAVSyncMethod</u> () Get RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)
abstract int	<u>getRTPIdleFrequency</u> () Set the default RTP idle frequency (milliseconds)
abstract int	<u>getRTPMaxRTCPWaitTime</u> () Get the maximum time to wait for RTCP packets (milliseconds)

abstract String	<u>getRTPPlayAuthenticationMethod()</u> Get the RTP play authentication method (as defined in conf/Authentication.xml)
abstract <u>WMSProperties</u>	<u>getRTPProperties()</u> Get the property collection of RTP settings that are specific to this application instance
abstract String	<u>getRTPPublishAuthenticationMethod()</u> Get the RTP publish authentication method (as defined in conf/Authentication.xml)
abstract int	<u>getRTPSessionCount()</u> Get the number of RTP sessions running under this application instance
abstract int	<u>getRTPSessionCount(String streamName)</u> Get the number of RTP player streams playing a given stream name
abstract java.util.Map	<u>getRTPSessionCountsByName()</u> Get a map of stream names and session counts of RTP sessions
abstract java.util.List	<u>getRTPSessions()</u> Get a list of RTP sessions running under this application instance
abstract java.util.List	<u>getRTPSessions(String streamName)</u> Get a list of RTP sessions running under this application instance playing a given stream name
abstract String	<u>getRTSPBindIpAddress()</u> Set the IP address to which UDP ports will be bound for RTSP/RTP sessions
abstract String	<u>getRTSPConnectionAddressType()</u> Get the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract String	<u>getRTSPConnectionIpAddress()</u> Get the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract int	<u>getRTSPMaximumPendingWriteBytes()</u> Get the maximum number of pending write bytes for an RTSP session
abstract String	<u>getRTSPOriginAddressType()</u> Get the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract String	<u>getRTSPOriginIpAddress()</u> Get the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract int	<u>getRTSPSessionTimeout()</u> Get the RTSP session timeout (milliseconds)
abstract String	<u>getSharedObjectReadAccess()</u> Get the default shared object read access
abstract <u>ISharedObjects</u>	<u>getSharedObjects()</u> Get non-persistent shared object collection
abstract <u>ISharedObjects</u>	<u>getSharedObjects(boolean isPersistent)</u> Get either persistent or non-persistent shared object collection
abstract String	<u>getSharedObjectWriteAccess()</u> Get the default shared object write access

abstract ISourceControlSession	getSourceControlSession (String streamName) Get the source control session for the given stream name
abstract int	getSourceControlSessionCount () Get the number of source control sessions.
abstract java.util.List	getSourceControlSessions () Get all active source control sessions
abstract String	getStreamAudioSampleAccess () Get the default stream audio sample access
abstract int	getStreamCount () Get the total number of open streams attached to this application instance
abstract IMediaStreamFileMapper	getStreamFileMapper () Get the stream file mapper.
abstract String	getStreamKeyDir () Get the stream key path
abstract String	getStreamKeyPath () Get the resolved key path to the MediaStreams encryption keys
abstract IMediaStreamNameAliasProvider	getStreamNameAliasProvider () Get the stream name alias provider
abstract WMSProperties	getStreamProperties () Get the property collection of stream settings that are specific to this application instance
abstract String	getStreamReadAccess () Get the default stream read access
abstract WMSProperties	getStreamRecorderProperties () Get the property collection of StreamRecorder settings that are specific to this application instance
abstract MediaStreamMap	getStreams () Get all the mediaStream objects attached to this applicationInstance
abstract String	getStreamStorageDir () Get stream storage path
abstract String	getStreamStoragePath () Get the resolved storage path to the MediaStreams
abstract String	getStreamType () Get default streamType for application.
abstract String	getStreamVideoSampleAccess () Get the default stream video sample access
abstract String	getStreamWriteAccess () Get the default stream write access
abstract WMSProperties	getTimedTextProperties () Get the property collection of timed text settings that are specific to this application instance.

abstract String	<u>getTimeRunning()</u> Get time applicationInstance running
abstract double	<u>getTimeRunningSeconds()</u> Get time running in seconds
abstract LiveStreamTranscoderA pplicationContext	<u>getTranscoderApplicationContext()</u> Get live stream transcoder application context
abstract <u>WMSProperties</u>	<u>getTranscoderProperties()</u> Get the property collection of Transcoder settings that are specific to this application instance
abstract int	<u>getValidationFrequency()</u> Get time between validation pings (milliseconds)
abstract <u>IVHost</u>	<u>getVHost()</u> Get parent vHost
abstract String	<u>getVODTimedTextProviderList()</u> Get the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)
abstract java.util.List	<u>getVODTimedTextProviderSet()</u>
abstract com.wowza.wms.webrtc. model.WebRTCApplicati onContext	<u>getWebRTCApplicationContext()</u> Get the WebRTC application level context
abstract <u>WMSProperties</u>	<u>getWebRTCProperties()</u> Get the property collection of WebRTC settings that are specific to this application instance
abstract int	<u>getWebRTCSessionCount()</u> Get count of WebRTC sessions
abstract int	<u>getWebRTCSessionCount(String streamName)</u> Get count of WebRTC sessions by stream name
abstract java.util.Map	<u>getWebRTCSessionCountsByName()</u> Get a map of WebRTC sessions by stream name
abstract java.util.List	<u>getWebRTCSessions()</u> Get list of WebRTC sessions
abstract java.util.List	<u>getWebRTCSessions(String streamName)</u> Get list of WebRTC sessions by stream name
abstract void	<u>incClientCountTotal()</u> Increment the total number of connected client counter by one
abstract boolean	<u>isAcceptConnection()</u> Is auto accept connection on/off
abstract boolean	<u>isDebugAppTimeout()</u> If true appTimeout processing will be logged.
abstract boolean	<u>isLive()</u> Returns true if the application stream type of the application instance is live

abstract boolean	<u>isMediaCacheSourceAllowed</u> (String sourceName) Test to see if a MediaCache source name is allowed
abstract boolean	<u>isRepeaterAppType</u> () Is this a repeater application type
abstract boolean	<u>isRTPIncomingDatagramPortValid</u> (int port) Check a port number to be sure it is a valid RTP UDP port for this application instance
abstract boolean	<u>isValidateFMLEConnections</u> () Returns true if validating FMLE connection (default is false)
abstract void	<u>notifyDvrStreamManagerCreate</u> (<u>IDvrStreamManager</u> dvrStoreManager, String streamName) Notify listeners that Dvr Application Store Manager has been created.
abstract void	<u>notifyDvrStreamManagerDestroy</u> (<u>IDvrStreamManager</u> dvrManager) Notify listeners that Dvr Application Store Manager has been destroyed.
abstract void	<u>notifyDvrStreamManagerInit</u> (<u>IDvrStreamManager</u> dvrStoreManager) Notify listeners that Dvr Application Store Manager has been initialized.
abstract void	<u>notifyHTTPSessionCreate</u> (<u>IHTTPStreamerSession</u> httpSession) Notify HTTP session create
abstract void	<u>notifyHTTPSessionDestroy</u> (<u>IHTTPStreamerSession</u> httpSession) Notify HTTP session destroy
abstract void	<u>notifyLiveStreamDvrRecorderCreate</u> (<u>ILiveStreamDvrRecorder</u> dvr, String streamName) Notify Dvr Recorder Create
abstract void	<u>notifyLiveStreamDvrRecorderDestroy</u> (<u>ILiveStreamDvrRecorder</u> dvr) Notify DVR Recorder has been destroyed.
abstract void	<u>notifyLiveStreamDvrRecorderInit</u> (<u>ILiveStreamDvrRecorder</u> dvr, String streamName) Notify DVR Recorder has been initialized.
abstract void	<u>notifyLiveStreamPacketizerCreate</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer, String streamName) Notify Live Stream Packetizer Create
abstract void	<u>notifyLiveStreamPacketizerDestroy</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer) Notify Live Stream Packetizer Destory
abstract void	<u>notifyLiveStreamPacketizerInit</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer, String streamName) Notify Live Stream Packetizer Init
abstract void	<u>notifyLiveStreamTranscoderCreate</u> (<u>ILiveStreamTranscoder</u> liveStreamTranscoder, <u>IMediaStream</u> stream) Notify live stream transcoder create
abstract void	<u>notifyLiveStreamTranscoderDestroy</u> (<u>ILiveStreamTranscoder</u> liveStreamTranscoder, <u>IMediaStream</u> stream) Notify live stream transcoder destroy
abstract void	<u>notifyLiveStreamTranscoderInit</u> (<u>ILiveStreamTranscoder</u> liveStreamTranscoder, <u>IMediaStream</u> stream) Notify live stream transcoder init

abstract void	<u>notifyMediaReaderClose</u> (<u>IMediaReader</u> mediaReader, <u>IMediaStream</u> stream) Notify media reader notifyMediaReaderClose
abstract void	<u>notifyMediaReaderCreate</u> (<u>IMediaReader</u> mediaReader) Notify media reader notifyMediaReaderCreate
abstract void	<u>notifyMediaReaderExtractMetaData</u> (<u>IMediaReader</u> mediaReader, <u>IMediaStream</u> stream) Notify media reader notifyMediaReaderExtractMetaData
abstract void	<u>notifyMediaReaderInit</u> (<u>IMediaReader</u> mediaReader, <u>IMediaStream</u> stream) Notify media reader notifyMediaReaderInit
abstract void	<u>notifyMediaReaderOpen</u> (<u>IMediaReader</u> mediaReader, <u>IMediaStream</u> stream) Notify media reader notifyMediaReaderOpen
abstract void	<u>notifyMediaWriterOnFLVAddMetadata</u> (<u>IMediaStream</u> stream, java.util.Map extraMetadata) Notify all MediaWriter listeners of onFLVAddMetadata
abstract void	<u>notifyMediaWriterOnWriteComplete</u> (<u>IMediaStream</u> stream, java.io.File file) Notify all MediaWriter listeners of onWriteComplete
abstract void	<u>notifyPushPublishSessionCreate</u> (String streamName, <u>IMediaStream</u> stream, <u>IPushPublishSession</u> pushPublishSession) Notify push publish session create
abstract void	<u>notifyPushPublishSessionDestroy</u> (String streamName, <u>IMediaStream</u> stream, <u>IPushPublishSession</u> pushPublishSession) Notify push publish session destroy
abstract void	<u>notifyRTPSessionCreate</u> (<u>RTPSession</u> rtpSession) Notify RTP session create
abstract void	<u>notifyRTPSessionDestroy</u> (<u>RTPSession</u> rtpSession) Notify RTP session destroy
abstract void	<u>notifySourceControlSessionCreate</u> (String streamName, <u>ISourceControlSession</u> sourceControlSession) Notify source control session create
abstract void	<u>notifySourceControlSessionDestroy</u> (String streamName, <u>ISourceControlSession</u> sourceControlSession) Notify source control session destroy
abstract void	<u>parseAllowDomains</u> (String domainFilterStr) Parse a comma delimited list of domain names used to control access to this application.
abstract String	<u>readAppInstConfig</u> (String sName) Method to read xml config file..
abstract void	<u>registerPlayRTPSession</u> (<u>RTPSession</u> rtpSession) Register an RTP session as a play session
abstract void	<u>removeClientListener</u> (<u>IClientNotify</u> clientListener) Remove client listener.
abstract void	<u>removeDvrRecorderListener</u> (<u>ILiveStreamDvrRecorderActionNotify</u> listener) Remove a Dvr Recorder listener (see: <u>ILiveStreamDvrRecorderActionNotify</u>)

abstract void	<u>removeDvrStreamManagerListener</u> (<u>IDvrStreamManagerActionNotify</u> listener) Remove a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)
abstract void	<u>removeHTTPListener</u> (<u>IHTTPSessionNotify</u> httpListener) Remove listner to be notified of HTTPSession create and destroy.
abstract void	<u>removeHTTPStreamerSession</u> (<u>IHTTPStreamerSession</u> httpStreamerSession) Remove a HTTPStreamerSession from this application instance
abstract void	<u>removeLiveStreamPacketizerListener</u> (<u>ILiveStreamPacketizerActionNotify</u> liveStreamPacketizerListener) Remove a Live Stream Packetizer listener (see: ILiveStreamPacketizerActionNotify)
abstract void	<u>removeLiveStreamTranscoderListener</u> (<u>ILiveStreamTranscoderNotify</u> liveStreamTranscoderListener) Remove a live stream transcoder listener
abstract void	<u>removeMediaCasterListener</u> (<u>IMediaCasterNotify</u> mediaCasterListener) Remove mediaCaster listener.
abstract void	<u>removeMediaReaderListener</u> (<u>IMediaReaderActionNotify</u> mediaReaderListener) Remove media reader listener.
abstract void	<u>removeMediaStreamListener</u> (<u>IMediaStreamNotify</u> mediaStreamListener) Remove mediaStream listener.
abstract void	<u>removeMediaWriterListener</u> (<u>IMediaWriterActionNotify</u> listener) remove MediaWriter listener class.
abstract void	<u>removeModuleListener</u> (<u>IModuleNotify</u> moduleListener) Remove module listener
abstract void	<u>removePlayStreamByName</u> (<u>IMediaStream</u> stream) Remove media stream from the list of streams that are listening for a published stream
abstract void	<u>removePublisher</u> (<u>Publisher</u> publisher) Remove a server side publisher from this application instance
abstract void	<u>removePushPublishSession</u> (<u>IMediaStream</u> stream, <u>IPushPublishSession</u> pushPublishSession) Remove a push publish session
abstract void	<u>removePushPublishSessionListener</u> (<u>IPushPublishSessionNotify</u> pushPublishSessionListener) Remove a push publish session listener (see IPushPublishSessionNotify)
abstract void	<u>removePushPublishSessions</u> (<u>IMediaStream</u> stream) Remove all push publish sessions for a give stream
abstract void	<u>removeRTPListener</u> (<u>IRTPSessionNotify</u> rtpListener) Remove listner to be notified of RTPSession create and destroy.
abstract void	<u>removeRTPSession</u> (<u>RTPSession</u> rtpSession) Remove an RTP session from this application instance
abstract void	<u>removeSharedObjectListener</u> (<u>ISharedObjectNotify</u> sharedObjectListener, boolean isPersistent) Remove sharedObject listener.
abstract void	<u>removeSourceControlSession</u> (String streamName) Remove the source control session for the given stream name from the application instance

abstract void	<u>removeSourceControlSessionListener</u> (<u>ISourceControlSessionNotify</u> sourceControlSessionListener) Remove the provided source control session listener from the list of source control session listeners (see <u>ISourceControlSessionNotify</u>)
abstract boolean	<u>resetMediaCasterStream</u> (String streamName) Reset a media caster stream
abstract boolean	<u>resetMediaCasterStream</u> (String streamName, String streamExt) Reset a media caster stream
abstract String	<u>resolvePlayAlias</u> (String name) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, <u>IClient</u> client) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, <u>IHTTPStreamerSession</u> httpSession) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, <u>ILiveStreamPacketizer</u> liveStreamPacketizer) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, <u>IWebSocketSession</u> websocket) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, <u>RTPSession</u> rtpSession) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolvePlayAlias</u> (String name, com.wowza.wms.webrtc.model.WebRTCSession webrtcSession) Resolve the play alias with this application's stream name alias provider
abstract String	<u>resolveStreamAlias</u> (String name) Resolve the stream name alias with this application's stream name alias provider
abstract String	<u>resolveStreamAlias</u> (String name, <u>IMediaCaster</u> mediaCaster) Resolve the stream name alias with this application's stream name alias provider
abstract String	<u>resolveStreamAlias</u> (String name, <u>IWebSocketSession</u> websocket) Resolve the stream name alias with this application's stream name alias provider
abstract String	<u>resolveStreamAlias</u> (String name, com.wowza.wms.webrtc.model.WebRTCSession webrtcSession) Resolve the stream name alias with this application's stream name alias provider
abstract void	<u>setAcceptConnection</u> (boolean acceptConnection) Set is auto accept connection
abstract void	<u>setAllowDomains</u> (String[] domainFilter) Set the list of domain names used to control access to this application.
abstract void	<u>setApplicationInstanceTouchTimeout</u> (int applicationInstanceTouchTimeout) Set the application instance touch timeout (milliseconds).
abstract void	<u>setApplicationTimeout</u> (int applicationTimeout) Set application timeout (milliseconds)
abstract void	<u>setClientIdleFrequency</u> (int clientIdleFrequency) Set default client idle frequency (milliseconds)

abstract void	<u>setDebugAppTimeout</u> (boolean debugAppTimeout) If true appTimeout processing will be logged.
abstract void	<u>setDvrRecorderList</u> (String recorderList) Set the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)
abstract void	<u>setHTTPStreamerList</u> (String httpStreamerList) Set the comma separated list of HTTPStreamer names being used by this application (see conf/HTTPStreamers.xml)
abstract void	<u>setLiveStreamDvrRecorderControl</u> (<u>ILiveStreamDvrRecorderControl</u> controller) Set the Live Stream DVR Controller.
abstract void	<u>setLiveStreamPacketizerControl</u> (<u>ILiveStreamPacketizerControl</u> liveStreamPacketizerControl) Set the Live Stream Packetizer Contoller.
abstract void	<u>setLiveStreamPacketizerList</u> (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this application (see conf/LiveStreamPacketizers.xml)
abstract void	<u>setLiveStreamTranscoderControl</u> (<u>ILiveStreamTranscoderControl</u> liveStreamTranscoderControl) Set the Live Stream Transcoder Contoller.
abstract void	<u>setLiveStreamTranscoderList</u> (String liveStreamTranscoderList) Set comma separated list of transcoders to use for this application instance
abstract void	<u>setMaximumPendingReadBytes</u> (int maximumPendingReaderBytes) Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
abstract void	<u>setMaximumPendingWriteBytes</u> (int maximumPendingWriteBytes) Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
abstract void	<u>setMaximumSetBufferTime</u> (int maximumSetBufferTime) Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
abstract void	<u>setMaxStorageDirDepth</u> (int maxStorageDirDepth) Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths
abstract void	<u>setMediacasterRTPRTSPRTPTransportMode</u> (int mediacasterRTPRTSPRTPTransportMode) RTP MediaCaster RTSP/RTP transport mode.
abstract void	<u>setMediaCasterValidator</u> (<u>IMediaCasterValidateMediaCaster</u> mediaCasterValidator) Set the MediaCaster validator interface for this application instance
abstract void	<u>setMediaListProvider</u> (<u>IMediaListProvider</u> mediaListProvider) Set the current media list provider.
abstract void	<u>setName</u> (String name) Set applicationInstance name
abstract void	<u>setPingTimeout</u> (int pingTimeout) Set ping timeout (milliseconds)

abstract void	<u>setRepeaterAppType</u> (boolean isRepeaterAppType) Set is repeater application type
abstract void	<u>setRepeaterOriginUrl</u> (String repeaterOriginUrl) Set the Repeater Origin URL used by the Live Stream Repeater
abstract void	<u>setRepeaterQueryString</u> (String repeaterQueryString) Set the Repeater query string that is used to connect to the origin.
abstract void	<u>setRsoStorageDir</u> (String rsoStorageDir) Set remote shared object storage path
abstract void	<u>setRTPAVSyncMethod</u> (int rtpAVSyncMethod) Set RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)
abstract void	<u>setRTPIIdleFrequency</u> (int rtspIdleFrequency) Get the default RTP idle frequency (milliseconds)
abstract void	<u>setRTPMMaxRTCPWaitTime</u> (int rtpMaxRTCPWaitTime) Set the maximum time to wait for RTCP packets (milliseconds)
abstract void	<u>setRTPPlayAuthenticationMethod</u> (String rtpPlayAuthenticationMethod) Set the RTP play authentication method (as defined in conf/Authentication.xml)
abstract void	<u>setRTPPublishAuthenticationMethod</u> (String rtpPublishAuthenticationMethod) Set the RTP publish authentication method (as defined in conf/Authentication.xml)
abstract void	<u>setRTSPBindIpAddress</u> (String rtspBindIpAddress) Get the IP address to which UDP ports will be bound for RTSP/RTP sessions
abstract void	<u>setRTSPConnectionAddressType</u> (String rtspConnectionAddressType) Set the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract void	<u>setRTSPConnectionIpAddress</u> (String rtspConnectionIpAddress) Set the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract void	<u>setRTSPMaximumPendingWriteBytes</u> (int rtspMaximumPendingWriteBytes) Set the maximum number of pending write bytes for an RTSP session
abstract void	<u>setRTSPOriginAddressType</u> (String rtspOriginAddressType) Set the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract void	<u>setRTSPOriginIpAddress</u> (String rtspOriginIpAddress) Set the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session
abstract void	<u>setRTSPSessionTimeout</u> (int rtspSessionTimeout) Set the RTSP session timeout (milliseconds)
abstract void	<u>setSharedObjectReadAccess</u> (String sharedObjectReadAccess) Set the default shared object read access
abstract void	<u>setSharedObjectWriteAccess</u> (String sharedObjectWriteAccess) Set the default shared object write access

abstract void	<u>setStreamAudioSampleAccess</u> (String streamAudioSampleAccess) Set the default stream audio sample access
abstract void	<u>setStreamFileMapper</u> (<u>IMediaStreamFileMapper</u> streamFileMapper) Set the stream file mapper.
abstract void	<u>setStreamKeyDir</u> (String keyStorageDir) Set the stream key path
abstract void	<u>setStreamNameAliasProvider</u> (<u>IMediaStreamNameAliasProvider</u> streamNameAliasProvider) Set the stream name alias provider
abstract void	<u>setStreamReadAccess</u> (String streamReadAccess) Set the default stream read access
abstract void	<u>setStreamStorageDir</u> (String streamStorageDir) Set stream storage path
abstract void	<u>setStreamType</u> (String streamType) Set default stream type for application.
abstract void	<u>setStreamVideoSampleAccess</u> (String streamVideoSampleAccess) Set the default stream video sample access
abstract void	<u>setStreamWriteAccess</u> (String streamWriteAccess) Set the default stream write access
abstract void	<u>setValidateFMLEConnections</u> (boolean validateFMLEConnections) Returns true if validating FMLE connection (default is false)
abstract void	<u>setValidationFrequency</u> (int validationFrequency) Set time between validation pings (milliseconds)
abstract void	<u>setVODTimedTextProviderList</u> (String timedTextProviderList) Set the comma separated list of VODTimedTextProvider names being used by this application (see conf/TimedTextProviders.xml)
abstract void	<u>shutdown</u> (boolean isServerShutdown, boolean isAppShutdown) shutdown applicationInstance
abstract void	<u>shutdownClient</u> (<u>IClient</u> client) shutdown a client connection immediately
abstract boolean	<u>startMediaCasterStream</u> (String streamName, String mediaCasterType) Start a media caster stream
abstract boolean	<u>startMediaCasterStream</u> (String streamName, String streamExt, String mediaCasterType) Start a media caster stream
abstract void	<u>stopMediaCasterStream</u> (String streamName) Stop a media caster stream
abstract void	<u>touch</u> () Touch the application instance so that it stays loaded for at least applicationInstanceTouchTimeout
abstract boolean	<u>writeAppInstConfig</u> (String sName, String data) Method to write xml config file..

Fields

PROTOCOLUSAGE_RTMP

```
public static final int PROTOCOLUSAGE_RTMP
```

Constant value: **0**

PROTOCOLUSAGE_RTMPT

```
public static final int PROTOCOLUSAGE_RTMPT
```

Constant value: **1**

PROTOCOLUSAGE_RTMPS

```
public static final int PROTOCOLUSAGE_RTMPS
```

Constant value: **2**

PROTOCOLUSAGE_RTMPTS

```
public static final int PROTOCOLUSAGE_RTMPTS
```

Constant value: **3**

PROTOCOLUSAGE_RTMPE

```
public static final int PROTOCOLUSAGE_RTMPE
```

Constant value: **4**

PROTOCOLUSAGE_RTMPTE

```
public static final int PROTOCOLUSAGE_RTMPTE
```

Constant value: **5**

PROTOCOLUSAGE_RTP

```
public static final int PROTOCOLUSAGE_RTP
```

Constant value: **6**

PROTOCOLUSAGE_CUPERTINO

```
public static final int PROTOCOLUSAGE_CUPERTINO
```

Constant value: **7**

PROTOCOLUSAGE_SMOOTH

```
public static final int PROTOCOLUSAGE_SMOOTH
```

Constant value: **8**

PROTOCOLUSAGE_SANJOSE

```
public static final int PROTOCOLUSAGE_SANJOSE
```

Constant value: **9**

PROTOCOLUSAGE_MPEGDASH

```
public static final int PROTOCOLUSAGE_MPEGDASH
```

Constant value: **10**

PROTOCOLUSAGE_WEBM

```
public static final int PROTOCOLUSAGE_WEBM
```

Constant value: **11**

PROTOCOLUSAGE_WOWZ

```
public static final int PROTOCOLUSAGE_WOWZ
```

Constant value: **12**

PROTOCOLUSAGE_WOWZE

```
public static final int PROTOCOLUSAGE_WOWZE
```

Constant value: **13**

PROTOCOLUSAGE_WOWZS

```
public static final int PROTOCOLUSAGE_WOWZS
```

Constant value: **14**

PROTOCOLUSAGE_ORIGINCUPERTINO

```
public static final int PROTOCOLUSAGE_ORIGINCUPERTINO
```

Constant value: **15**

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PROTOCOLUSAGE_ORIGINSMOOTH

```
public static final int PROTOCOLUSAGE_ORIGINSMOOTH
```

Constant value: **16**

PROTOCOLUSAGE_ORIGINSANJOSE

```
public static final int PROTOCOLUSAGE_ORIGINSANJOSE
```

Constant value: **17**

PROTOCOLUSAGE_ORIGINMPEGDASH

```
public static final int PROTOCOLUSAGE_ORIGINMPEGDASH
```

Constant value: **18**

PROTOCOLUSAGE_PUSHUBLISHING

```
public static final int PROTOCOLUSAGE_PUSHUBLISHING
```

Constant value: **19**

PROTOCOLUSAGE_MEDIACACHE

```
public static final int PROTOCOLUSAGE_MEDIACACHE
```

Constant value: **20**

PROTOCOLUSAGE_RTMP_IN

```
public static final int PROTOCOLUSAGE_RTMP_IN
```

Constant value: **21**

PROTOCOLUSAGE_RTMP_OUT

```
public static final int PROTOCOLUSAGE_RTMP_OUT
```

Constant value: **22**

PROTOCOLUSAGE_RTMPT_IN

```
public static final int PROTOCOLUSAGE_RTMPT_IN
```

Constant value: **23**

PROTOCOLUSAGE_RTMPT_OUT

```
public static final int PROTOCOLUSAGE_RTMPT_OUT
```

(continued from last page)

Constant value: **24**

PROTOCOLUSAGE_RTMPS_IN

```
public static final int PROTOCOLUSAGE_RTMPS_IN
```

Constant value: **25**

PROTOCOLUSAGE_RTMPS_OUT

```
public static final int PROTOCOLUSAGE_RTMPS_OUT
```

Constant value: **26**

PROTOCOLUSAGE_RTMPTS_IN

```
public static final int PROTOCOLUSAGE_RTMPTS_IN
```

Constant value: **27**

PROTOCOLUSAGE_RTMPTS_OUT

```
public static final int PROTOCOLUSAGE_RTMPTS_OUT
```

Constant value: **28**

PROTOCOLUSAGE_RTMPE_IN

```
public static final int PROTOCOLUSAGE_RTMPE_IN
```

Constant value: **29**

PROTOCOLUSAGE_RTMPE_OUT

```
public static final int PROTOCOLUSAGE_RTMPE_OUT
```

Constant value: **30**

PROTOCOLUSAGE_RTMPTE_IN

```
public static final int PROTOCOLUSAGE_RTMPTE_IN
```

Constant value: **31**

PROTOCOLUSAGE_RTMPTE_OUT

```
public static final int PROTOCOLUSAGE_RTMPTE_OUT
```

Constant value: **32**

PROTOCOLUSAGE_RTP_IN

```
public static final int PROTOCOLUSAGE_RTP_IN
```

Constant value: **33**

PROTOCOLUSAGE_RTP_OUT

```
public static final int PROTOCOLUSAGE_RTP_OUT
```

Constant value: **34**

PROTOCOLUSAGE_RTSP_IN

```
public static final int PROTOCOLUSAGE_RTSP_IN
```

Constant value: **35**

PROTOCOLUSAGE_RTSP_OUT

```
public static final int PROTOCOLUSAGE_RTSP_OUT
```

Constant value: **36**

PROTOCOLUSAGE_WOWZ_IN

```
public static final int PROTOCOLUSAGE_WOWZ_IN
```

Constant value: **37**

PROTOCOLUSAGE_WOWZ_OUT

```
public static final int PROTOCOLUSAGE_WOWZ_OUT
```

Constant value: **38**

PROTOCOLUSAGE_WOWZE_IN

```
public static final int PROTOCOLUSAGE_WOWZE_IN
```

Constant value: **39**

PROTOCOLUSAGE_WOWZE_OUT

```
public static final int PROTOCOLUSAGE_WOWZE_OUT
```

Constant value: **40**

(continued from last page)

PROTOCOLUSAGE_WOWZS_IN

```
public static final int PROTOCOLUSAGE_WOWZS_IN
```

Constant value: **41**

PROTOCOLUSAGE_WOWZS_OUT

```
public static final int PROTOCOLUSAGE_WOWZS_OUT
```

Constant value: **42**

PROTOCOLUSAGE_MC_SHOUTCAST

```
public static final int PROTOCOLUSAGE_MC_SHOUTCAST
```

Constant value: **43**

PROTOCOLUSAGE_MC_LIVEREPEATER

```
public static final int PROTOCOLUSAGE_MC_LIVEREPEATER
```

Constant value: **44**

PROTOCOLUSAGE_MC_RTP

```
public static final int PROTOCOLUSAGE_MC_RTP
```

Constant value: **45**

PROTOCOLUSAGE_RTSP_PULL_IN

```
public static final int PROTOCOLUSAGE_RTSP_PULL_IN
```

Constant value: **46**

PROTOCOLUSAGE_RTSP_PULL_OUT

```
public static final int PROTOCOLUSAGE_RTSP_PULL_OUT
```

Constant value: **47**

PROTOCOLUSAGE_WEBRTC_IN

```
public static final int PROTOCOLUSAGE_WEBRTC_IN
```

Constant value: **48**

PROTOCOLUSAGE_WEBRTC_OUT

```
public static final int PROTOCOLUSAGE_WEBRTC_OUT
```

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Constant value: **49**

PROTOCOLUSAGE_MC_CUPERTINO

```
public static final int PROTOCOLUSAGE_MC_CUPERTINO
```

Constant value: **50**

PROTOCOLUSAGE_MC_MPEGTSTCP

```
public static final int PROTOCOLUSAGE_MC_MPEGTSTCP
```

Constant value: **51**

PROTOCOLUSAGE_MC_SRTRECEIVER

```
public static final int PROTOCOLUSAGE_MC_SRTRECEIVER
```

Constant value: **52**

PROTOCOLUSAGE_CMAF_CUPERTINO

```
public static final int PROTOCOLUSAGE_CMAF_CUPERTINO
```

Constant value: **53**

PROTOCOLUSAGE_CMAF_MPEGDASH

```
public static final int PROTOCOLUSAGE_CMAF_MPEGDASH
```

Constant value: **54**

PROTOCOLUSAGE_CMAF_LL_CUPERTINO

```
public static final int PROTOCOLUSAGE_CMAF_LL_CUPERTINO
```

Constant value: **55**

PROTOCOLUSAGE_CMAF_LL_MPEGDASH

```
public static final int PROTOCOLUSAGE_CMAF_LL_MPEGDASH
```

Constant value: **56**

PROTOCOLUSAGE_TOTAL

```
public static final int PROTOCOLUSAGE_TOTAL
```

Constant value: **57**

DEFAULT_APPINSTANCE_NAME

```
public static final java.lang.String DEFAULT_APPINSTANCE_NAME
```

Constant value: **_definst_**

Methods

shutdownClient

```
public abstract void shutdownClient(IClient client)
```

shutdown a client connection immediately

Parameters:

client - client connection

shutdown

```
public abstract void shutdown(boolean isServerShutdown,  
    boolean isAppShutdown)
```

shutdown applicationInstance

Parameters:

isServerShutdown - true if due to shutdown of server

isAppShutdown - true if due to shutdown of application

getApplication

```
public abstract IApplication getApplication()
```

Get parent application

Returns:

parent application

getName

```
public abstract String getName()
```

Get applicationInstance name

Returns:

applicationInstance name

setName

```
public abstract void setName(String name)
```

Set applicationInstance name

Parameters:

name - applicationInstance name

(continued from last page)

getStreams

public abstract [MediaStreamMap](#) **getStreams()**

Get all the mediaStream objects attached to this applicationInstance

Get Stream By StreamId

```
IClient client;
int streamId;

MediaStreamMap streams = client.getAppInstance().getStreams();
IMediaStream stream = streams.getStream((IClient)null, streamId);
```

Returns:

collection of mediaStream objects

getVHost

public abstract [IVHost](#) **getVHost()**

Get parent vHost

Returns:

parent vHost

getProperties

public abstract [WMSProperties](#) **getProperties()**

Get applicationInstance properties

Returns:

applicationInstance properties

getManagerProperties

public abstract [WMSProperties](#) **getManagerProperties()**

Get Application's manager's properties collection

Returns:

manager's property collection

getStreamType

public abstract String **getStreamType()**

Get default streamType for application.

(continued from last page)

Returns:

streamType name

setStreamType

```
public abstract void setStreamType(String streamType)
```

Set default stream type for application.

Parameters:

streamType - streamType name

isRepeaterAppType

```
public abstract boolean isRepeaterAppType()
```

Is this a repeater application type

Returns:

setRepeaterAppType

```
public abstract void setRepeaterAppType(boolean isRepeaterAppType)
```

Set is repeater application type

Parameters:

isRepeaterAppType

isAcceptConnection

```
public abstract boolean isAcceptConnection()
```

Is auto accept connection on/off

Returns:

auto accept connection

setAcceptConnection

```
public abstract void setAcceptConnection(boolean acceptConnection)
```

Set is auto accept connection

Parameters:

acceptConnection - auto accept connection

getClientCountTotal

```
public abstract int getClientCountTotal()
```

Get number of client connections in total that have connected to this applicationInstance

Returns:

number of client connections

incClientCountTotal

```
public abstract void incClientCountTotal()
```

Increment the total number of connected client counter by one

getClientCount

```
public abstract int getClientCount()
```

Get number of client connections currently connected to applicationInstance

Returns:

number of client connections

getClientById

```
public abstract IClient getClientById(int index)
```

Get a client connection by the client Id

Parameters:

index - client Id

Returns:

client connection

getClients

```
public abstract java.util.List getClients()
```

Get the set of clients currently connected to this application instance (replaces getClient(index))

Returns:

set of clients

getClient

```
public abstract IClient getClient(int index)
```

Deprecated. *Get the client connection at index. This method is deprecated. It is best to use getClient() to return a List objects.*

Parameters:

index - index

Returns:

client connection

getSharedObjects

```
public abstract ISharedObjects getSharedObjects()
```

Get non-persistent shared object collection

Returns:

collection of non-persistent shared objects

getSharedObjects

public abstract [ISharedObjects](#) **getSharedObjects**(boolean isPersistent)

Get either persistent or non-persistent shared object collection

Parameters:

isPersistent

Returns:

collection of shared objects

addClientListener

public abstract void **addClientListener**([IClientNotify](#) clientListener)

(continued from last page)

Add client listener. Listens for connects, disconnect, accepts and reject

Add a Client Listener

```
IApplicationInstance appInstance;

class ClientListener implements IClientNotify
{
    public void onClientConnect(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientConnect: "+
            client.getClientId());
    }

    public void onClientDisconnect(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientDisconnect: "+
            client.getClientId());
    }

    public void onClientAccept(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientAccept: "+
            client.getClientId());
    }

    public void onClientReject(IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onClientReject: "+
            client.getClientId());
    }
}

appInstance.addClientListener(new ClientListener());
```

Parameters:

clientListener - client listener

removeClientListener

```
public abstract void removeClientListener(IClientNotify clientListener)
```

Remove client listener. Listens for connects, disconnect, accepts and reject

Parameters:

clientListener - client listener

addMediaStreamListener

public abstract void **addMediaStreamListener**([IMediaStreamNotify](#) mediaStreamListener)

Add mediaStream listener. Listens for create and destroy

Add a MediaStream Listener

```
IApplicationInstance appInstance;

class MediaStreamListener implements IMediaStreamNotify
{
    public void onMediaStreamCreate(IMediaStream stream)
    {
        WMSLoggerFactory.getLogger(null).debug("onMediaStreamCreate: "+
            stream.getSrc());
    }

    public void onMediaStreamDestroy(IMediaStream stream)
    {
        WMSLoggerFactory.getLogger(null).debug("onMediaStreamDestroy: "+
            stream.getSrc());
    }
}

appInstance.addMediaStreamListener(new MediaStreamListener());
```

Parameters:

mediaStreamListener - mediaStream listener

removeMediaStreamListener

public abstract void **removeMediaStreamListener**([IMediaStreamNotify](#) mediaStreamListener)

Remove mediaStream listener. Listens for create and destroy

Parameters:

mediaStreamListener - mediaStream listener

addSharedObjectListener

public abstract void **addSharedObjectListener**([ISharedObjectNotify](#) sharedObjectListener, boolean isPersistent)

(continued from last page)

Add sharedObject listener. Listens for create, destroy, clientConnect, clientDisconnect

Add SharedObject Listener

```
IApplicationInstance appInstance;

class SharedObjectListener implements ISharedObjectNotify
{
    public void onSharedObjectCreate(ISharedObject sharedObject)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectCreate: "+
            sharedObject.getName());
    }

    public void onSharedObjectDestroy(ISharedObject sharedObject)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectDestroy: "+
            sharedObject.getName());
    }

    public void onSharedObjectConnect(ISharedObject sharedObject, IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectConnect: "+
            sharedObject.getName());
    }

    public void onSharedObjectDisconnect(ISharedObject sharedObject, IClient client)
    {
        WMSLoggerFactory.getLogger(null).debug("onSharedObjectDisconnect: "+
            sharedObject.getName());
    }
}

appInstance.addSharedObjectListener(new SharedObjectListener(), false);
```

Parameters:

sharedObjectListener - sharedObject listener
isPersistent

removeSharedObjectListener

```
public abstract void removeSharedObjectListener(ISharedObjectNotify
sharedObjectListener,
    boolean isPersistent)
```

Remove sharedObject listener. Listens for create, destroy, clientConnect, clientDisconnect

Parameters:

(continued from last page)

sharedObjectListener - sharedObject listener
isPersistent

addMediaCasterListener

public abstract void **addMediaCasterListener**([IMediaCasterNotify](#) mediaCasterListener)

Add mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

addMediaCasterListener

public abstract void **addMediaCasterListener**([IMediaCasterNotify2](#) mediaCasterListener)

Add mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

removeMediaCasterListener

public abstract void **removeMediaCasterListener**([IMediaCasterNotify](#) mediaCasterListener)

Remove mediaCaster listener. Listens for create, destroy, registerPlayer, unregisterPlayer, setSourceStream

Parameters:

mediaCasterListener

getConnectionCounter

public abstract [ConnectionCounter](#) **getConnectionCounter**()

Get the connectionCounter for applicationInstance

Returns:

connection counter

getConnectionCounter

public abstract ConnectionCounterSimple **getConnectionCounter**(int counterIndex)

Get the connectionCounter for applicationInstance for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index

Returns:

connection counter

getDateStarted

public abstract String **getDateStarted**()

Get date applicationInstance started

Returns:

(continued from last page)

date applicationInstance started

getTimeRunning

```
public abstract String getTimeRunning()
```

Get time applicationInstance running

Returns:

time applicationInstance running

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

broadcastMsg

```
public abstract void broadcastMsg(java.util.List clientList,  
    String handlerName)
```

Broadcast a message to a specific list of clients connected to this application instance

Parameters:

clientList - list of client

handlerName - handler name

broadcastMsg

```
public abstract void broadcastMsg(java.util.List clientList,  
    String handlerName,  
    Object[] params)
```

Broadcast a message to a specific list of clients connected to this application instance

Parameters:

clientList - list of client

handlerName - handler name

params - parameters

broadcastMsg

```
public abstract void broadcastMsg(String handlerName,  
    Object[] params)
```

(continued from last page)

Broadcast a message to all clients connected to this applicationInstance

Broadcast Message to All Clients

```
IApplicationInstance appInstance;  
appInstance.broadcastMsg("onNotify", "Hello World", 1.2345, false, new Date());
```

Parameters:

handlerName - handler name

params - variable list of arguments (Java primitive and Strings will be wrapped in AMFData objects)

getIOPerformanceCounter

```
public abstract IOPerformanceCounter getIOPerformanceCounter()
```

Get the performance counter for applicationInstance

Returns:

io performance counter

getIOPerformanceCounter

```
public abstract IOPerformanceCounter getIOPerformanceCounter(int counterIndex)
```

Get the performance counter for applicationInstance for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

addPlayStreamByName

```
public abstract void addPlayStreamByName(IMediaStream stream,  
String name)
```

Add a media stream to the list of streams that are listening for a published stream

Parameters:

stream - media stream

name - stream name

removePlayStreamByName

```
public abstract void removePlayStreamByName(IMediaStream stream)
```

Remove media stream from the list of streams that are listening for a published stream

Parameters:

(continued from last page)

stream - media stream

getPlayStreamCountsByName

```
public abstract java.util.Map getPlayStreamCountsByName()
```

Get a map of stream names to number of Flash players playing the stream name

Returns:

map of stream names to number of Flash players playing the stream name

getPlayStreamCount

```
public abstract int getPlayStreamCount(String streamName)
```

Get the number of Flash players playing a given stream name

Parameters:

streamName - stream name

Returns:

number of players

getPlayStreamsByName

```
public abstract java.util.List getPlayStreamsByName(String name)
```

Get a list of media streams that are listening for published stream.

Parameters:

name - stream name

Returns:

list of streams or null if no listeners

getMediaCasterStreams

```
public abstract MediaCasterStreamMap getMediaCasterStreams()
```

Get the media caster streams attached to this application instance

Returns:

media caster streams attached to this application instance

getStreamCount

```
public abstract int getStreamCount()
```

Get the total number of open streams attached to this application instance

Returns:

the total number of open streams attached to this application instance

getModFunctions

```
public abstract ModuleFunctions getModFunctions()
```

Get list of application modules

(continued from last page)

Returns:

list of application modules

addListener

```
public abstract void addListener(IModuleNotify moduleListener)
```

Add module listener. Listens for onModuleLoad and onModuleUnload events. See IModuleNotify.

Parameters:

moduleListener - module listener

removeListener

```
public abstract void removeListener(IModuleNotify moduleListener)
```

Remove module listener

Parameters:

moduleListener - module listener

getModuleList

```
public abstract ModuleList getModuleList()
```

Get the list of loaded modules.

Returns:

list of loaded modules

getModuleInstance

```
public abstract Object getModuleInstance(String name)
```

Get the instance of the module class for this application instance.

Parameters:

name - module name as defined in Application.xml

Returns:

instance of class for this application instance

getApplicationTimeout

```
public abstract int getApplicationTimeout()
```

Get application timeout (milliseconds)

Returns:

application timeout (milliseconds)

setApplicationTimeout

```
public abstract void setApplicationTimeout(int applicationTimeout)
```

Set application timeout (milliseconds)

(continued from last page)

Parameters:

applicationTimeout - application timeout (milliseconds)

getPingTimeout

```
public abstract int getPingTimeout()
```

Get ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

setPingTimeout

```
public abstract void setPingTimeout(int pingTimeout)
```

Set ping timeout (milliseconds)

Parameters:

pingTimeout - ping timeout (milliseconds)

getValidationFrequency

```
public abstract int getValidationFrequency()
```

Get time between validation pings (milliseconds)

Returns:

time between validation pings (milliseconds)

setValidationFrequency

```
public abstract void setValidationFrequency(int validationFrequency)
```

Set time between validation pings (milliseconds)

Parameters:

validationFrequency - time between validation pings (milliseconds)

getMaximumPendingWriteBytes

```
public abstract int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

setMaximumPendingWriteBytes

```
public abstract void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Parameters:

maximumPendingWriteBytes - maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

getMaximumPendingReadBytes

```
public abstract int getMaximumPendingReadBytes()
```

Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Returns:

maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumPendingReadBytes

```
public abstract void setMaximumPendingReadBytes(int maximumPendingReaderBytes)
```

Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Parameters:

maximumPendingReaderBytes - maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumSetBufferTime

```
public abstract void setMaximumSetBufferTime(int maximumSetBufferTime)
```

Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Parameters:

maximumSetBufferTime - maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getMaximumSetBufferTime

```
public abstract int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getRepeaterOriginUrl

```
public abstract String getRepeaterOriginUrl()
```

Get the Repeater Origin URL used by the Live Stream Repeater

Returns:

URL used by the Live Stream Repeater

setRepeaterOriginUrl

```
public abstract void setRepeaterOriginUrl(String repeaterOriginUrl)
```

Set the Repeater Origin URL used by the Live Stream Repeater

Parameters:

repeaterOriginUrl - URL used by the Live Stream Repeater

getRepeaterQueryString

```
public abstract String getRepeaterQueryString()
```

Get the Repeater query string that is used to connect to the origin. This value can be used to pass secure URL parameters to the origin for security validation.

Returns:

Repeater query string

setRepeaterQueryString

```
public abstract void setRepeaterQueryString(String repeaterQueryString)
```

Set the Repeater query string that is used to connect to the origin. This value can be used to pass secure URL parameters to the origin for security validation.

Parameters:

repeaterQueryString - Repeater query string

getAllowDomains

```
public abstract String[] getAllowDomains()
```

Get the list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Returns:

list of domain names used to control access to this application

setAllowDomains

```
public abstract void setAllowDomains(String[] domainFilter)
```

Set the list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Parameters:

domainFilter - list of domain names used to control access to this application

parseAllowDomains

```
public abstract void parseAllowDomains(String domainFilterStr)
```

Parse a comma delimited list of domain names used to control access to this application. Upon connection, if this list is non-null the client.referrer value is checked to make sure the referrer is from a domain in this list.

Parameters:

domainFilterStr - comma delimited list of domain names

getClientIdleFrequency

```
public abstract int getClientIdleFrequency()
```

Get default client idle frequency (milliseconds)

Returns:

default client idle frequency (milliseconds)

setClientIdleFrequency

```
public abstract void setClientIdleFrequency(int clientIdleFrequency)
```

Set default client idle frequency (milliseconds)

Parameters:

clientIdleFrequency - default client idle frequency (milliseconds)

getRTPIdeFrequency

```
public abstract int getRTPIdeFrequency()
```

Set the default RTP idle frequency (milliseconds)

Returns:

default RTP idle frequency (milliseconds)

setRTPIdeFrequency

```
public abstract void setRTPIdeFrequency(int rtspIdleFrequency)
```

Get the default RTP idle frequency (milliseconds)

Parameters:

rtspIdleFrequency - default RTP idle frequency (milliseconds)

getStreamStorageDir

```
public abstract String getStreamStorageDir()
```

Get stream storage path

Returns:

stream storage path

setStreamStorageDir

```
public abstract void setStreamStorageDir(String streamStorageDir)
```

Set stream storage path

Parameters:

streamStorageDir - stream storage path

getStreamKeyDir

```
public abstract String getStreamKeyDir()
```

Get the stream key path

Returns:

stream key path

setStreamKeyDir

```
public abstract void setStreamKeyDir(String keyStorageDir)
```

(continued from last page)

Set the stream key path

Parameters:

keyStorageDir - stream key path

getRsoStorageDir

```
public abstract String getRsoStorageDir()
```

Get remote shared object storage path

Returns:

remote shared object storage path

setRsoStorageDir

```
public abstract void setRsoStorageDir(String rsoStorageDir)
```

Set remote shared object storage path

Parameters:

rsoStorageDir - remote shared object storage path

getStreamKeyPath

```
public abstract String getStreamKeyPath()
```

Get the resolved key path to the MediaStreams encryption keys

Returns:

resolved key path to the MediaStreams encryption keys

getStreamStoragePath

```
public abstract String getStreamStoragePath()
```

Get the resolved storage path to the MediaStreams

Returns:

resolved storage path to the MediaStreams

getRsoStoragePath

```
public abstract String getRsoStoragePath()
```

Get the resolved storage path to the shared objects

Returns:

resolved storage path to the shared objects

getStreamVideoSampleAccess

```
public abstract String getStreamVideoSampleAccess()
```

Get the default stream video sample access

Returns:

default stream video sample access

(continued from last page)

See Also:[IClient.getStreamVideoSampleAccess\(\)](#)

setStreamVideoSampleAccess

```
public abstract void setStreamVideoSampleAccess(String streamVideoSampleAccess)
```

Set the default stream video sample access

Parameters:

streamVideoSampleAccess - default stream video sample access

See Also:[IClient.setStreamVideoSampleAccess\(String\)](#)

getStreamAudioSampleAccess

```
public abstract String getStreamAudioSampleAccess()
```

Get the default stream audio sample access

Returns:

default stream audio sample access

See Also:[IClient.getStreamAudioSampleAccess\(\)](#)

setStreamAudioSampleAccess

```
public abstract void setStreamAudioSampleAccess(String streamAudioSampleAccess)
```

Set the default stream audio sample access

Parameters:

streamAudioSampleAccess

See Also:[IClient.setStreamAudioSampleAccess\(String\)](#)

getStreamReadAccess

```
public abstract String getStreamReadAccess()
```

Get the default stream read access

Returns:

default stream read access

See Also:[IClient.getStreamReadAccess\(\)](#)

setStreamReadAccess

```
public abstract void setStreamReadAccess(String streamReadAccess)
```

Set the default stream read access

(continued from last page)

Parameters:

streamReadAccess - default stream read access

See Also:[IClient.setStreamReadAccess\(String\)](#)

getStreamWriteAccess

```
public abstract String getStreamWriteAccess()
```

Get the default stream write access

Returns:

default stream write access

See Also:[IClient.getStreamWriteAccess\(\)](#)

setStreamWriteAccess

```
public abstract void setStreamWriteAccess(String streamWriteAccess)
```

Set the default stream write access

Parameters:

streamWriteAccess - default stream write access

See Also:[IClient.setStreamWriteAccess\(String\)](#)

getSharedObjectReadAccess

```
public abstract String getSharedObjectReadAccess()
```

Get the default shared object read access

Returns:

default shared object read access

See Also:[IClient.getSharedObjectReadAccess\(\)](#)

setSharedObjectReadAccess

```
public abstract void setSharedObjectReadAccess(String sharedObjectReadAccess)
```

Set the default shared object read access

Parameters:

sharedObjectReadAccess - default shared object read access

See Also:[IClient.setSharedObjectReadAccess\(String\)](#)

getSharedObjectWriteAccess

```
public abstract String getSharedObjectWriteAccess()
```

(continued from last page)

Get the default shared object write access

Returns:

default shared object write access

See Also:

[IClient.getSharedObjectWriteAccess\(\)](#)

setSharedObjectWriteAccess

```
public abstract void setSharedObjectWriteAccess(String sharedObjectWriteAccess)
```

Set the default shared object write access

Parameters:

sharedObjectWriteAccess - default shared object write access

See Also:

[IClient.setSharedObjectWriteAccess\(String\)](#)

getRTPPublishAuthenticationMethod

```
public abstract String getRTPPublishAuthenticationMethod()
```

Get the RTP publish authentication method (as defined in conf/Authentication.xml)

Returns:

RTP publish authentication method

setRTPPublishAuthenticationMethod

```
public abstract void setRTPPublishAuthenticationMethod(String  
rtpPublishAuthenticationMethod)
```

Set the RTP publish authentication method (as defined in conf/Authentication.xml)

Parameters:

rtpPublishAuthenticationMethod - RTP publish authentication method

getRTPPlayAuthenticationMethod

```
public abstract String getRTPPlayAuthenticationMethod()
```

Get the RTP play authentication method (as defined in conf/Authentication.xml)

Returns:

RTP play authentication method

setRTPPlayAuthenticationMethod

```
public abstract void setRTPPlayAuthenticationMethod(String  
rtpPlayAuthenticationMethod)
```

Set the RTP play authentication method (as defined in conf/Authentication.xml)

Parameters:

rtpPlayAuthenticationMethod - RTP play authentication method

(continued from last page)

getRTPAVSyncMethod

```
public abstract int getRTPAVSyncMethod()
```

Get RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)

Returns:

RTP audio/video sync method

setRTPAVSyncMethod

```
public abstract void setRTPAVSyncMethod(int rtpAVSyncMethod)
```

Set RTP audio/video sync method (RTPStream.AVSYNCMETHODS_SENDERREPORT, RTPStream.AVSYNCMETHODS_SYSTEMCLOCK, RTPStream.AVSYNCMETHODS_RTPTIMECODE)

Parameters:

rtpAVSyncMethod - RTP audio/video sync method

getRTPMaxRTCPWaitTime

```
public abstract int getRTPMaxRTCPWaitTime()
```

Get the maximum time to wait for RTCP packets (milliseconds)

Returns:

maximum time to wait for RTCP packets (milliseconds)

setRTPMaxRTCPWaitTime

```
public abstract void setRTPMaxRTCPWaitTime(int rtpMaxRTCPWaitTime)
```

Set the maximum time to wait for RTCP packets (milliseconds)

Parameters:

rtpMaxRTCPWaitTime - maximum time to wait for RTCP packets (milliseconds)

getRTPSessions

```
public abstract java.util.List getRTPSessions(String streamName)
```

Get a list of RTP sessions running under this application instance playing a given stream name

Parameters:

streamName - stream name

Returns:

list of RTP sessions running under this application instance playing a given stream name

getRTPSessions

```
public abstract java.util.List getRTPSessions()
```

Get a list of RTP sessions running under this application instance

Returns:

list of RTP sessions running under this application instance

getRTPSessionCountsByName

```
public abstract java.util.Map getRTPSessionCountsByName()
```

Get a map of stream names and session counts of RTP sessions

Returns:

map of stream names and session counts

getRTPSessionCount

```
public abstract int getRTPSessionCount(String streamName)
```

Get the number of RTP player streams playing a given stream name

Parameters:

streamName - stream name

Returns:

the number of RTP sessions

getRTPSessionCount

```
public abstract int getRTPSessionCount()
```

Get the number of RTP sessions running under this application instance

Returns:

the number of RTP sessions running under this application instance

addRTPSession

```
public abstract void addRTPSession(RTPSession rtpSession)
```

Add an RTP session to this application instance

Parameters:

rtpSession - RTP session to add

registerPlayRTPSession

```
public abstract void registerPlayRTPSession(RTPSession rtpSession)
```

Register an RTP session as a play session

Parameters:

rtpSession - RTP session to register

removeRTPSession

```
public abstract void removeRTPSession(RTPSession rtpSession)
```

Remove an RTP session from this application instance

Parameters:

rtpSession - RTP session to remove

getClientsLockObj

```
public abstract edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getClientsLockObj()
```

Get the read/write lock for this application instance

Returns:

read/write lock for this application instance

getStreamProperties

```
public abstract WMSProperties getStreamProperties()
```

Get the property collection of stream settings that are specific to this application instance

Returns:

property collection of stream settings

getMediaCasterProperties

```
public abstract WMSProperties getMediaCasterProperties()
```

Get the property collection of media caster settings that are specific to this application instance

Returns:

property collection of media caster settings

getMediaReaderProperties

```
public abstract WMSProperties getMediaReaderProperties()
```

Get the property collection of media reader settings that are specific to this application instance

Returns:

property collection of media reader settings

getMediaWriterProperties

```
public abstract WMSProperties getMediaWriterProperties()
```

Get the property collection of media reader settings that are specific to this application instance

Returns:

property collection of media reader settings

getRTPProperties

```
public abstract WMSProperties getRTPProperties()
```

Get the property collection of RTP settings that are specific to this application instance

Returns:

property collection of RTP settings

(continued from last page)

getLiveStreamPacketizerProperties

```
public abstract WMSProperties getLiveStreamPacketizerProperties()
```

Get the property collection of LiveStreamPacketizer settings that are specific to this application instance

Returns:

property collection of LiveStreamPacketizer settings

getTranscoderProperties

```
public abstract WMSProperties getTranscoderProperties()
```

Get the property collection of Transcoder settings that are specific to this application instance

Returns:

property collection of Transcoder settings

getHTTPStreamerProperties

```
public abstract WMSProperties getHTTPStreamerProperties()
```

Get the property collection of HTTPStreamer settings that are specific to this application instance

Returns:

property collection of HTTPStreamer settings

getWebRTCProperties

```
public abstract WMSProperties getWebRTCProperties()
```

Get the property collection of WebRTC settings that are specific to this application instance

Returns:

property collection of WebRTC settings

getMaxStorageDirDepth

```
public abstract int getMaxStorageDirDepth()
```

Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths

Returns:

folder depth

setMaxStorageDirDepth

```
public abstract void setMaxStorageDirDepth(int maxStorageDirDepth)
```

Maximum folder depth allowed for the StreamStorageDir and SharedObjectStorageDir paths

Parameters:

maxStorageDirDepth - folder depth

getStreamFileMapper

```
public abstract IMediaStreamFileMapper getStreamFileMapper()
```

(continued from last page)

Get the stream file mapper. See [IMediaStreamFileMapper](#)

Returns:

streamFileMapper stream file mapper

setStreamFileMapper

```
public abstract void setStreamFileMapper(IMediaStreamFileMapper streamFileMapper)
```

Set the stream file mapper. See [IMediaStreamFileMapper](#)

Parameters:

streamFileMapper - stream file mapper

decodeStorageDir

```
public abstract String decodeStorageDir(String storageDir)
```

This function will take a storage path that uses variables and expand the variables based on the context. It supports the following variables (as well as any system variables): `${com.wowza.wms.AppHome}`: Application home directory `${com.wowza.wms.ConfigHome}`: Configuration home directory `${com.wowza.wms.context.VHostConfigHome}`: Virtual configuration path `${com.wowza.wms.context.VHost}`: Virtual host name `${com.wowza.wms.context.Application}`: Application name `${com.wowza.wms.context.ApplicationInstance}`: Application instance name

getLiveStreamPacketizerList

```
public abstract String getLiveStreamPacketizerList()
```

Get the comma separated list of LiveStreamPacketizers names being used by this application (see [conf/LiveStreamPacketizers.xml](#))

Returns:

comma separated list of LiveStreamPacketizers names

getHTTPStreamerList

```
public abstract String getHTTPStreamerList()
```

Get the comma separated list of HTTPStreamers names being used by this application (see [conf/HTTPStreamers.xml](#))

Returns:

comma separated list of HTTPStreamers names

setLiveStreamPacketizerList

```
public abstract void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this application (see [conf/LiveStreamPacketizers.xml](#))

Parameters:

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

setHTTPStreamerList

```
public abstract void setHTTPStreamerList(String httpStreamerList)
```

Set the comma separated list of HTTPStreamer names being used by this application (see [conf/HTTPStreamers.xml](#))

Parameters:

(continued from last page)

`httpStreamerList` - comma separated list of HTTPStreamer names

containsHTTPStreamer

```
public abstract boolean containsHTTPStreamer(String httpStreamer)
```

Does this application instance allow streaming of a given HTTPStreamer

Parameters:

`httpStreamer` - HTTP Streamer name

Returns:

true is this type of streaming is allowed

containsLiveStreamPacketizer

```
public abstract boolean containsLiveStreamPacketizer(String liveStreamPacketizer)
```

Does this application instance contain a references to this live stream packetizer. If it is true we consider this a live stream source for the HTTP streamer. If false then we consider this a video on demand source.

Parameters:

`liveStreamPacketizer` - live stream packetizer name

Returns:

true if contains reference to it

containsDvrRecorder

```
public abstract boolean containsDvrRecorder(String dvrRecorder)
```

Does this application instance contain a references to this DVR recorder. If it is true we consider this a DVR source for the HTTP streamer.

Parameters:

`dvrRecorder` - DVR recorder name

Returns:

true if contains reference to it

getVODTimedTextProviderList

```
public abstract String getVODTimedTextProviderList()
```

Get the comma separated list of VODTimedTextProvider names being used by this application (see `conf/TimedTextProviders.xml`)

Returns:

comma separated list of VODTimedTextProvider names

setVODTimedTextProviderList

```
public abstract void setVODTimedTextProviderList(String timedTextProviderList)
```

Set the comma separated list of VODTimedTextProvider names being used by this application (see `conf/TimedTextProviders.xml`)

Parameters:

`timedTextProviderList` - comma separated list of VODTimedTextProvider names

getVODTimedTextProviderSet

```
public abstract java.util.List getVODTimedTextProviderSet()
```

getTimedTextProperties

```
public abstract WMSProperties getTimedTextProperties()
```

Get the property collection of timed text settings that are specific to this application instance. These are defined in Application/TimedText/Properties tag in Application.xml

Returns:

property collection of Timed Text settings

getStreamNameAliasProvider

```
public abstract IMediaStreamNameAliasProvider getStreamNameAliasProvider()
```

Get the stream name alias provider

Returns:

stream name alias provider

setStreamNameAliasProvider

```
public abstract void setStreamNameAliasProvider(IMediaStreamNameAliasProvider streamNameAliasProvider)
```

Set the stream name alias provider

Parameters:

streamNameAliasProvider - stream name alias provider

getPublishers

```
public abstract java.util.List getPublishers()
```

Get the set of server side publishers

Returns:

set of server side publishers

getPublisherCount

```
public abstract int getPublisherCount()
```

Get the current number of server side publishers

Returns:

number of server side publishers

addPublisher

```
public abstract void addPublisher(Publisher publisher)
```

Add a server side publisher to this application instance

(continued from last page)

Parameters:

publisher - server side publisher

removePublisher

```
public abstract void removePublisher(Publisher publisher)
```

Remove a server side publisher from this application instance

Parameters:

publisher - server side publisher

getHTTPStreamerSessions

```
public abstract java.util.List getHTTPStreamerSessions(int protocol,  
String streamName)
```

Get the HTTPStreamerSessions associated with this application instance for a stream name by protocol. See (IHTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)

streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public abstract java.util.List getHTTPStreamerSessions(String streamName)
```

Get the HTTPStreamerSessions associated with this application instance for a stream name

Parameters:

streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCountsByName

```
public abstract java.util.Map getHTTPStreamerSessionCountsByName(int protocol)
```

Get a map of session counts by name for a given protocol

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

map of session counts by name

getHTTPStreamerSessionCount

```
public abstract int getHTTPStreamerSessionCount(String streamName)
```

Get the current number of HTTPStreamerSessions associated with this application instance and stream name

Parameters:

(continued from last page)

streamName - stream name

Returns:

number of HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public abstract int getHTTPStreamerSessionCount(int protocol,  
String streamName)
```

Get the current number of HTTPStreamerSessions associated with this application instance and stream name by protocol . See (IHTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)
streamName - stream name

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public abstract java.util.List getHTTPStreamerSessions()
```

Get the HTTPStreamerSessions associated with this application instance

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessions

```
public abstract java.util.List getHTTPStreamerSessions(int protocol)
```

Get the HTTPStreamerSessions associated with this application instance by protocol. See (IHTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public abstract int getHTTPStreamerSessionCount()
```

Get the current number of HTTPStreamerSessions associated with this application instance

Returns:

current number of HTTPStreamerSessions associated with this application instance

getHTTPStreamerSessionCount

```
public abstract int getHTTPStreamerSessionCount(int protocol)
```

Get the current number of HTTPStreamerSessions associated with this application instance by protocol. See (IHTTPStreamerSession.SESSIONPROTOCOL_*) for protocols

Parameters:

(continued from last page)

protocol - streaming protocol (IHTTPStreamerSession.SESSIONPROTOCOL_*)

Returns:

current number of HTTPStreamerSessions associated with this application instance

addHTTPStreamerSession

```
public abstract void addHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Add a HTTPStreamerSession to this application instance

Parameters:

httpStreamerSession - HTTPStreamerSession

removeHTTPStreamerSession

```
public abstract void removeHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Remove a HTTPStreamerSession from this application instance

Parameters:

httpStreamerSession - HTTPStreamerSession

getHTTPStreamerApplicationContext

```
public abstract IHTTPStreamerApplicationContext  
getHTTPStreamerApplicationContext(String httpStreamName,  
    boolean doCreate)
```

Get the HTTPStreamer application context for a given HTTPStreamer adapter

Parameters:

httpStreamName - HTTPStreamer adapter name
doCreate - create if it does not exist

Returns:

HTTPStreamer application context

addRTPIncomingDatagramPortRange

```
public abstract void addRTPIncomingDatagramPortRange(int startPort,  
    int endPort)
```

Add a port range to the list of valid incoming RTP UDP ports

Parameters:

startPort - starting port number
endPort - end port number

addRTPIncomingDatagramPortAll

```
public abstract void addRTPIncomingDatagramPortAll()
```

Allow all incoming RTP UDP ports for this application instance

isRTPIncomingDatagramPortValid

```
public abstract boolean isRTPIncomingDatagramPortValid(int port)
```


(continued from last page)

Check a port number to be sure it is a valid RTP UDP port for this application instance

Parameters:

port - port number

Returns:

true if the port is valid

readAppInstConfig

```
public abstract String readAppInstConfig(String sName)
```

Method to read xml config file..

writeAppInstConfig

```
public abstract boolean writeAppInstConfig(String sName,  
String data)
```

Method to write xml config file..

getLiveStreamPacketizerControl

```
public abstract ILiveStreamPacketizerControl getLiveStreamPacketizerControl()
```

Get the Live Stream Packetizer Controller. This class will get called each time a stream is to be packetized using the LiveStreamPacketizer mechanism.

Returns:

Live Stream Packetizer Controller

setLiveStreamPacketizerControl

```
public abstract void setLiveStreamPacketizerControl(ILiveStreamPacketizerControl  
liveStreamPacketizerControl)
```

Set the Live Stream Packetizer Controller. This class will get called each time a stream is to be packetized using the LiveStreamPacketizer mechanism.

Parameters:

liveStreamPacketizerControl - Live Stream Packetizer Controller

resetMediaCasterStream

```
public abstract boolean resetMediaCasterStream(String streamName)
```

Reset a media caster stream

Parameters:

streamName - stream name

Returns:

true if successful

resetMediaCasterStream

```
public abstract boolean resetMediaCasterStream(String streamName,  
String streamExt)
```

(continued from last page)

Reset a media caster stream

Parameters:

streamName - stream name
streamExt - stream extension

Returns:

true if successful

startMediaCasterStream

```
public abstract boolean startMediaCasterStream(String streamName,  
        String streamExt,  
        String mediaCasterType)
```

Start a media caster stream

Parameters:

streamName - stream name
streamExt - stream extension
mediaCasterType - media caster stream type

Returns:

true if successful

startMediaCasterStream

```
public abstract boolean startMediaCasterStream(String streamName,  
        String mediaCasterType)
```

Start a media caster stream

Parameters:

streamName - stream name
mediaCasterType - media caster stream type

Returns:

true if successful

stopMediaCasterStream

```
public abstract void stopMediaCasterStream(String streamName)
```

Stop a media caster stream

Parameters:

streamName - stream name

getContextStr

```
public abstract String getContextStr()
```

Returns the application context string in the form [application]/[appInstance].

Returns:

application context string

(continued from last page)

getPublishStreamNames

```
public abstract java.util.List getPublishStreamNames()
```

Get the list of live stream names currently being published.

Returns:

list of live stream names currently being published

addMediaWriterListener

```
public abstract void addMediaWriterListener(IMediaWriterActionNotify listener)
```

Add a MediaWriter listener class. See IMediaWriterActionNotify

Parameters:

listener - MediaWriter listener class

removeMediaWriterListener

```
public abstract void removeMediaWriterListener(IMediaWriterActionNotify listener)
```

remove MediaWriter listener class. See IMediaWriterActionNotify

Parameters:

listener - MediaWriter listener class

notifyMediaWriterOnWriteComplete

```
public abstract void notifyMediaWriterOnWriteComplete(IMediaStream stream,  
java.io.File file)
```

Notify all MediaWriter listeners of onWriteComplete

Parameters:

stream - media stream

file - file that was written

notifyMediaWriterOnFLVAddMetadata

```
public abstract void notifyMediaWriterOnFLVAddMetadata(IMediaStream stream,  
java.util.Map extraMetadata)
```

Notify all MediaWriter listeners of onFLVAddMetadata

Parameters:

stream - media stream

extraMetadata - meta to add to the file

getMediaCasterValidator

```
public abstract IMediaCasterValidateMediaCaster getMediaCasterValidator()
```

Get the MediaCaster validator interface for this application instance

Returns:

MediaCaster validator interface

(continued from last page)

setMediaCasterValidator

```
public abstract void setMediaCasterValidator( IMediaCasterValidateMediaCaster  
mediaCasterValidator)
```

Set the MediaCaster validator interface for this application instance

Parameters:

mediaCasterValidator - MediaCaster validator interface

touch

```
public abstract void touch()
```

Touch the application instance so that it stays loaded for at least applicationInstanceTouchTimeout

getLastTouchTime

```
public abstract long getLastTouchTime()
```

Get the last time the instance was touched (milliseconds)

Returns:

last time the instance was touched (milliseconds)

getApplicationInstanceTouchTimeout

```
public abstract int getApplicationInstanceTouchTimeout()
```

Get the application instance touch timeout (milliseconds). Default is 5000.

Returns:

application instance touch timeout (milliseconds)

setApplicationInstanceTouchTimeout

```
public abstract void setApplicationInstanceTouchTimeout(int  
applicationInstanceTouchTimeout)
```

Set the application instance touch timeout (milliseconds). Default is 5000.

Parameters:

applicationInstanceTouchTimeout - application instance touch timeout (milliseconds)

getRTSPSessionTimeout

```
public abstract int getRTSPSessionTimeout()
```

Get the RTSP session timeout (milliseconds)

Returns:

RTSP session timeout (milliseconds)

setRTSPSessionTimeout

```
public abstract void setRTSPSessionTimeout(int rtspSessionTimeout)
```

Set the RTSP session timeout (milliseconds)

(continued from last page)

Parameters:`rtspSessionTimeout` - RTSP session timeout (milliseconds)

getRTSPMaximumPendingWriteBytes

```
public abstract int getRTSPMaximumPendingWriteBytes()
```

Get the maximum number of pending write bytes for an RTSP session

Returns:

maximum number of pending write bytes for an RTSP session

setRTSPMaximumPendingWriteBytes

```
public abstract void setRTSPMaximumPendingWriteBytes(int rtspMaximumPendingWriteBytes)
```

Set the maximum number of pending write bytes for an RTSP session

Parameters:

`rtspMaximumPendingWriteBytes` - maximum number of pending write bytes for an RTSP session

addMediaReaderListener

```
public abstract void addMediaReaderListener(IMediaReaderActionNotify  
mediaReaderListener)
```

Add media reader listener. see [IMediaReaderActionNotify](#)

Parameters:

`mediaReaderListener` - media reader listener

removeMediaReaderListener

```
public abstract void removeMediaReaderListener(IMediaReaderActionNotify  
mediaReaderListener)
```

Remove media reader listener. see [IMediaReaderActionNotify](#)

Parameters:

`mediaReaderListener` - media reader listener

notifyMediaReaderCreate

```
public abstract void notifyMediaReaderCreate(IMediaReader mediaReader)
```

Notify media reader `notifyMediaReaderCreate`

Parameters:

`mediaReader` - media reader

notifyMediaReaderInit

```
public abstract void notifyMediaReaderInit(IMediaReader mediaReader,  
IMediaStream stream)
```

Notify media reader `notifyMediaReaderInit`

Parameters:

`mediaReader` - media reader

(continued from last page)

stream - media stream

notifyMediaReaderOpen

```
public abstract void notifyMediaReaderOpen(IMediaReader mediaReader,  
      IMediaStream stream)
```

Notify media reader notifyMediaReaderOpen

Parameters:

mediaReader - media reader
stream - media stream

notifyMediaReaderExtractMetaData

```
public abstract void notifyMediaReaderExtractMetaData(IMediaReader mediaReader,  
      IMediaStream stream)
```

Notify media reader notifyMediaReaderExtractMetaData

Parameters:

mediaReader - media reader
stream - media stream

notifyMediaReaderClose

```
public abstract void notifyMediaReaderClose(IMediaReader mediaReader,  
      IMediaStream stream)
```

Notify media reader notifyMediaReaderClose

Parameters:

mediaReader - media reader
stream - media stream

getRTSPBindIpAddress

```
public abstract String getRTSPBindIpAddress()
```

Set the IP address to which UDP ports will be bound for RTSP/RTP sessions

Returns:

IP address to which UDP ports will be bound for RTSP/RTP sessions

setRTSPBindIpAddress

```
public abstract void setRTSPBindIpAddress(String rtspBindIpAddress)
```

Get the IP address to which UDP ports will be bound for RTSP/RTP sessions

Parameters:

rtspBindIpAddress - IP address to which UDP ports will be bound for RTSP/RTP sessions

getRTSPConnectionIpAddress

```
public abstract String getRTSPConnectionIpAddress()
```

Get the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

(continued from last page)

Returns:

connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPConnectionIpAddress

```
public abstract void setRTSPConnectionIpAddress(String rtspConnectionIpAddress)
```

Set the connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

`rtspConnectionIpAddress` - connection IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

getRTSPConnectionAddressType

```
public abstract String getRTSPConnectionAddressType()
```

Get the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPConnectionAddressType

```
public abstract void setRTSPConnectionAddressType(String rtspConnectionAddressType)
```

Set the connection IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

`rtspConnectionAddressType`

getRTSPOriginIpAddress

```
public abstract String getRTSPOriginIpAddress()
```

Get the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPOriginIpAddress

```
public abstract void setRTSPOriginIpAddress(String rtspOriginIpAddress)
```

Set the origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

`rtspOriginIpAddress` - origin IP address to used in the Session Description Protocol data exchanged for an RTSP/RTP session

getRTSPOriginAddressType

```
public abstract String getRTSPOriginAddressType()
```

Get the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Returns:

origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

setRTSPOriginAddressType

```
public abstract void setRTSPOriginAddressType(String rtspOriginAddressType)
```

Set the origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

Parameters:

rtspOriginAddressType - origin IP address type (IP4) to used in the Session Description Protocol data exchanged for an RTSP/RTP session

addLiveStreamPacketizerListener

```
public abstract void addLiveStreamPacketizerListener(ILiveStreamPacketizerActionNotify  
liveStreamPacketizerListener)
```

Add a Live Stream Packetizer listener (see: [ILiveStreamPacketizerActionNotify](#))

Parameters:

liveStreamPacketizerListener - Live Stream Packetizer listener

removeLiveStreamPacketizerListener

```
public abstract void  
removeLiveStreamPacketizerListener(ILiveStreamPacketizerActionNotify  
liveStreamPacketizerListener)
```

Remove a Live Stream Packetizer listener (see: [ILiveStreamPacketizerActionNotify](#))

Parameters:

liveStreamPacketizerListener - Live Stream Packetizer listener

notifyLiveStreamPacketizerCreate

```
public abstract void notifyLiveStreamPacketizerCreate(ILiveStreamPacketizer  
liveStreamPacketizer,  
String streamName)
```

Notify Live Stream Packetizer Create

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

notifyLiveStreamPacketizerDestroy

```
public abstract void notifyLiveStreamPacketizerDestroy(ILiveStreamPacketizer  
liveStreamPacketizer)
```

Notify Live Stream Packetizer Destory

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

notifyLiveStreamPacketizerInit

```
public abstract void notifyLiveStreamPacketizerInit(ILiveStreamPacketizer  
liveStreamPacketizer,  
String streamName)
```

Notify Live Stream Packetizer Init

(continued from last page)

Parameters:

liveStreamPacketizer - Live Stream Packetizer listener

isValidateFMLEConnections

```
public abstract boolean isValidateFMLEConnections()
```

Returns true if validating FMLE connection (default is false)

Returns:

true if validating FMLE connection

setValidateFMLEConnections

```
public abstract void setValidateFMLEConnections(boolean validateFMLEConnections)
```

Returns true if validating FMLE connection (default is false)

Parameters:

validateFMLEConnections - true if validating FMLE connection

addLiveStreamTranscoderListener

```
public abstract void addLiveStreamTranscoderListener(ILiveStreamTranscoderNotify  
liveStreamTranscoderListener)
```

Add a live stream transcoder listener

Parameters:

liveStreamTranscoderListener - live stream transcoder listener

removeLiveStreamTranscoderListener

```
public abstract void removeLiveStreamTranscoderListener(ILiveStreamTranscoderNotify  
liveStreamTranscoderListener)
```

Remove a live stream transcoder listener

Parameters:

liveStreamTranscoderListener - live stream transcoder listener

notifyLiveStreamTranscoderCreate

```
public abstract void notifyLiveStreamTranscoderCreate(ILiveStreamTranscoder  
liveStreamTranscoder,  
                  IMediaStream stream)
```

Notify live stream transcoder create

Parameters:liveStreamTranscoder - live stream transcoder
stream - stream

notifyLiveStreamTranscoderDestroy

```
public abstract void notifyLiveStreamTranscoderDestroy(ILiveStreamTranscoder  
liveStreamTranscoder,  
                  IMediaStream stream)
```

(continued from last page)

Notify live stream transcoder destroy

Parameters:

liveStreamTranscoder - live stream transcoder
stream - stream

notifyLiveStreamTranscoderInit

```
public abstract void notifyLiveStreamTranscoderInit(ILiveStreamTranscoder  
liveStreamTranscoder,  
    IMediaStream stream)
```

Notify live stream transcoder init

Parameters:

liveStreamTranscoder - live stream transcoder
stream - stream

containsLiveStreamTranscoder

```
public abstract boolean containsLiveStreamTranscoder(String liveStreamTranscoder)
```

Return true if this application instance contains the transcoder name

Parameters:

liveStreamTranscoder - transcoder name

Returns:

true if this application instance contains the transcoder name

getLiveStreamTranscoderList

```
public abstract String getLiveStreamTranscoderList()
```

Get comma separated list of transcoders to use for this application instance

Returns:

comma separated list of transcoders

setLiveStreamTranscoderList

```
public abstract void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set comma separated list of transcoders to use for this application instance

Parameters:

liveStreamTranscoderList - comma separated list of transcoders

getLiveStreamTranscoderControl

```
public abstract ILiveStreamTranscoderControl getLiveStreamTranscoderControl()
```

Get the Live Stream Transcoder Contoller. This class will get called each time a stream is to be transcoded using the LiveStreamTranscoder mechanism.

Returns:

Live Stream Transcoder Contoller

setLiveStreamTranscoderControl

```
public abstract void setLiveStreamTranscoderControl(ILiveStreamTranscoderControl liveStreamTranscoderControl)
```

Set the Live Stream Transcoder Contoller. This class will get called each time a stream is to be transcoded using the LiveStreamTranscoder mechanism.

Parameters:

liveStreamTranscoderControl - Live Stream Transcoder Contoller

getTranscoderApplicationContext

```
public abstract LiveStreamTranscoderApplicationContext getTranscoderApplicationContext()
```

Get live stream transcoder application context

Returns:

live stream transcoder application context

getDvrProperties

```
public abstract WMSProperties getDvrProperties()
```

Get the property collection of DVR settings that are specific to this application instance. These are defined in Application/DVR/Properties tag in Application.xml

Returns:

property collection of DVR settings

getDvrApplicationContext

```
public abstract DvrApplicationContext getDvrApplicationContext()
```

Get live stream dvr application context

Returns:

live stream dvr application context

getDvrConverter

```
public abstract DvrApplicationContext getDvrConverter()
```

Get dvr application converter context

Returns:

dvr application converter context

getLiveStreamDvrRecorderControl

```
public abstract ILiveStreamDvrRecorderControl getLiveStreamDvrRecorderControl()
```

Get the Live Stream DVR Recorder Controller. This class will get called each time a stream is to be DVR-ed.

Returns:

Live Stream DVR Controller

setLiveStreamDvrRecorderControl

```
public abstract void setLiveStreamDvrRecorderControl(ILiveStreamDvrRecorderControl controller)
```

Set the Live Stream DVR Controller.

Parameters:

controller - Live Stream DVR Controller

getDvrRecorderList

```
public abstract String getDvrRecorderList()
```

Get the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)

Returns:

comma separated list of Dvr Recorder names

setDvrRecorderList

```
public abstract void setDvrRecorderList(String recorderList)
```

Set the comma separated list of Dvr Recorder names being used by this application (see conf/Dvr.xml)

Parameters:

recorderList - comma separated list of Dvr Recorder names

addDvrRecorderListener

```
public abstract void addDvrRecorderListener(ILiveStreamDvrRecorderActionNotify listener)
```

Add a Dvr Recorder listener (see: [ILiveStreamDvrRecorderActionNotify](#))

Parameters:

listener - Dvr Recorder listener

removeDvrRecorderListener

```
public abstract void removeDvrRecorderListener(ILiveStreamDvrRecorderActionNotify listener)
```

Remove a Dvr Recorder listener (see: [ILiveStreamDvrRecorderActionNotify](#))

Parameters:

listener - Dvr Recorder listener

notifyLiveStreamDvrRecorderCreate

```
public abstract void notifyLiveStreamDvrRecorderCreate(ILiveStreamDvrRecorder dvr, String streamName)
```

Notify Dvr Recorder Create

Parameters:

dvr - DVR Recorder listener
streamName - stream Name

notifyLiveStreamDvrRecorderInit

```
public abstract void notifyLiveStreamDvrRecorderInit(ILiveStreamDvrRecorder dvr,  
String streamName)
```

Notify DVR Recorder has been initialized.

Parameters:

dvr - DVR Recorder listener * @param streamName stream Name

notifyLiveStreamDvrRecorderDestroy

```
public abstract void notifyLiveStreamDvrRecorderDestroy(ILiveStreamDvrRecorder dvr)
```

Notify DVR Recorder has been destroyed.

Parameters:

dvr - DVR Recorder listener

addDvrStreamManagerListener

```
public abstract void addDvrStreamManagerListener(IDvrStreamManagerActionNotify  
listener)
```

Add a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)

Parameters:

listener - Dvr Application Store Manager listener

removeDvrStreamManagerListener

```
public abstract void removeDvrStreamManagerListener(IDvrStreamManagerActionNotify  
listener)
```

Remove a Dvr Application Store Manager listener (see: IDvrStoreActionNotify)

Parameters:

listener - Dvr Application Store Manager listener

notifyDvrStreamManagerCreate

```
public abstract void notifyDvrStreamManagerCreate(IDvrStreamManager dvrStoreManager,  
String streamName)
```

Notify listeners that Dvr Application Store Manager has been created.

Parameters:

dvrStoreManager - Dvr Application Store Manager
streamName

notifyDvrStreamManagerInit

```
public abstract void notifyDvrStreamManagerInit(IDvrStreamManager dvrStoreManager)
```

Notify listeners that Dvr Application Store Manager has been initialized.

Parameters:

dvrStoreManager - Dvr Application Store Manager

notifyDvrStreamManagerDestroy

```
public abstract void notifyDvrStreamManagerDestroy(IDvrStreamManager dvrManager)
```

Notify listeners that Dvr Application Store Manager has been destroyed.

Parameters:

dvrManager - Dvr Application Store Manager

getMediaReaderContentType

```
public abstract int getMediaReaderContentType(String mediaType)
```

Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)

Parameters:

mediaType - mediaType (such as flv or smil)

Returns:

content type (see IMediaReader.CONTENTTYPE_*)

getMediaListProvider

```
public abstract IMediaListProvider getMediaListProvider()
```

Get the current media list provider. The media list provider is used to resolve amlst:streamname requests to a media list (equivalent to a SMIL file).

Returns:

media list provider

setMediaListProvider

```
public abstract void setMediaListProvider(IMediaListProvider mediaListProvider)
```

Set the current media list provider. The media list provider is used to resolve amlst:streamname requests to a media list (equivalent to a SMIL file).

Parameters:

mediaListProvider - media list provider

getMediacasterRTPRTSPRTPTransportMode

```
public abstract int getMediacasterRTPRTSPRTPTransportMode()
```

RTP MediaCaster RTSP/RTP transport mode. See RTPMediaCaster.RTSPTRANSPORTMODE_*

Returns:

RTP MediaCaster RTSP/RTP transport mode

setMediacasterRTPRTSPRTPTransportMode

```
public abstract void setMediacasterRTPRTSPRTPTransportMode(int  
mediacasterRTPRTSPRTPTransportMode)
```

RTP MediaCaster RTSP/RTP transport mode. See RTPMediaCaster.RTSPTRANSPORTMODE_*

Parameters:

(continued from last page)

mediacasterRTPRTSPRTPTransportMode - RTP MediaCaster RTSP/RTP transport mode

getProtocolUsage

```
public abstract boolean[] getProtocolUsage()
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

Returns:

protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

getProtocolUsage

```
public abstract void getProtocolUsage(boolean[] protocolsInUse)
```

Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)

isDebugAppTimeout

```
public abstract boolean isDebugAppTimeout()
```

If true appTimeout processing will be logged.

Returns:

true appTimeout processing will be logged

setDebugAppTimeout

```
public abstract void setDebugAppTimeout(boolean debugAppTimeout)
```

If true appTimeout processing will be logged.

Parameters:

debugAppTimeout - true appTimeout processing will be logged

addRTPLListener

```
public abstract void addRTPLListener(IRTPSessionNotify rtpListener)
```

Add listner to be notified of RTPSession create and destroy.

Parameters:

rtpListener - RTP listener

removeRTPLListener

```
public abstract void removeRTPLListener(IRTPSessionNotify rtpListener)
```

Remove listner to be notified of RTPSession create and destroy.

Parameters:

rtpListener - RTP listener

notifyRTPSessionCreate

```
public abstract void notifyRTPSessionCreate(RTPSession rtpSession)
```

Notify RTP session create

(continued from last page)

Parameters:

rtpSession - rtp session

notifyRTPSessionDestroy

```
public abstract void notifyRTPSessionDestroy(RTPSession rtpSession)
```

Notify RTP session destroy

Parameters:

rtpSession - rtp session

addHTTPListener

```
public abstract void addHTTPListener(IHTTPSessionNotify httpListener)
```

Add listener to be notified of HTTPSession create and destroy.

Parameters:

httpListener - http listener

removeHTTPListener

```
public abstract void removeHTTPListener(IHTTPSessionNotify httpListener)
```

Remove listener to be notified of HTTPSession create and destroy.

Parameters:

httpListener - http listener

notifyHTTPSessionCreate

```
public abstract void notifyHTTPSessionCreate(IHTTPStreamerSession httpSession)
```

Notify HTTP session create

Parameters:

httpSession - HTTP session

notifyHTTPSessionDestroy

```
public abstract void notifyHTTPSessionDestroy(IHTTPStreamerSession httpSession)
```

Notify HTTP session destroy

Parameters:

httpSession - HTTP session

getMediaCacheFilters

```
public abstract java.util.List getMediaCacheFilters()
```

Get the list of allowed MediaCache sources.

Returns:

list of allowed MediaCache sources

isMediaCacheSourceAllowed

```
public abstract boolean isMediaCacheSourceAllowed(String sourceName)
```

Test to see if a MediaCache source name is allowed

Parameters:

sourceName - MediaCache source name

Returns:

true if allowed

getPushPublishSessions

```
public abstract java.util.List getPushPublishSessions(IMediaStream stream)
```

Get the current push publish sessions for a given IMediaStream

Parameters:

stream - stream

Returns:

push publish sessions

getPushPublishSessions

```
public abstract java.util.List getPushPublishSessions()
```

Get all active push publish sessions

Returns:

all active push publish sessions

addPushPublishSession

```
public abstract void addPushPublishSession(IMediaStream stream,  
IPushPublishSession pushPublishSession)
```

Add a push publish session to the list of active push publish sessions

Parameters:

stream - stream

pushPublishSession - push publish session

removePushPublishSession

```
public abstract void removePushPublishSession(IMediaStream stream,  
IPushPublishSession pushPublishSession)
```

Remove a push publish session

Parameters:

stream - stream

pushPublishSession - push publish session

(continued from last page)

removePushPublishSessions

```
public abstract void removePushPublishSessions(IMediaStream stream)
```

Remove all push publish sessions for a give stream

Parameters:

stream - stream

addPushPublishSessionListener

```
public abstract void addPushPublishSessionListener(IPushPublishSessionNotify  
pushPublishSessionListener)
```

Add a push publish session listener (see IPushPublishSessionNotify)

Parameters:

pushPublishSessionListener - push publish session

removePushPublishSessionListener

```
public abstract void removePushPublishSessionListener(IPushPublishSessionNotify  
pushPublishSessionListener)
```

Remove a push publish session listener (see IPushPublishSessionNotify)

Parameters:

pushPublishSessionListener - push publish session

notifyPushPublishSessionCreate

```
public abstract void notifyPushPublishSessionCreate(String streamName,  
IMediaStream stream,  
IPushPublishSession pushPublishSession)
```

Notify push publish session create

Parameters:

streamName - stream name

stream - stream

pushPublishSession - push publish session

notifyPushPublishSessionDestroy

```
public abstract void notifyPushPublishSessionDestroy(String streamName,  
IMediaStream stream,  
IPushPublishSession pushPublishSession)
```

Notify push publish session destroy

Parameters:

streamName - stream name

stream - stream

pushPublishSession - push publish session

getPushPublishSessionCount

```
public abstract int getPushPublishSessionCount()
```

(continued from last page)

Get the number of push publishing sessions.

Returns:

number of push publishing sessions

getStreamRecorderProperties

```
public abstract WMSProperties getStreamRecorderProperties()
```

Get the property collection of StreamRecorder settings that are specific to this application instance

Returns:

property collection of StreamRecorder settings

isLive

```
public abstract boolean isLive()
```

Returns true if the application stream type of the application instance is live

Returns:

true if the application stream type is live

getSourceControlSession

```
public abstract ISourceControlSession getSourceControlSession(String streamName)
```

Get the source control session for the given stream name

Parameters:

streamName - the stream name

Returns:

an ISourceControlSession for the stream provided or null if it doesn't exist

getSourceControlSessions

```
public abstract java.util.List getSourceControlSessions()
```

Get all active source control sessions

Returns:

List all active source control sessions

addSourceControlSession

```
public abstract void addSourceControlSession(String streamName,  
    ISourceControlSession sourceControlSession)
```

Add a source control session to the list of active source control sessions associated with the given stream name

Parameters:

streamName - the stream name

sourceControlSession - the source control session

removeSourceControlSession

```
public abstract void removeSourceControlSession(String streamName)
```

(continued from last page)

Remove the source control session for the given stream name from the application instance

Parameters:

streamName - the stream name

addSourceControlSessionListener

```
public abstract void addSourceControlSessionListener(ISourceControlSessionNotify  
sourceControlSessionListener)
```

Add a source control session listener (see [ISourceControlSessionNotify](#))

Parameters:

sourceControlSessionListener - source control session listener

removeSourceControlSessionListener

```
public abstract void removeSourceControlSessionListener(ISourceControlSessionNotify  
sourceControlSessionListener)
```

Remove the provided source control session listener from the list of source control session listeners (see [ISourceControlSessionNotify](#))

Parameters:

sourceControlSessionListener - source control session listener

notifySourceControlSessionCreate

```
public abstract void notifySourceControlSessionCreate(String streamName,  
ISourceControlSession sourceControlSession)
```

Notify source control session create

Parameters:

streamName - stream name

sourceControlSession - the source control session that was just created

notifySourceControlSessionDestroy

```
public abstract void notifySourceControlSessionDestroy(String streamName,  
ISourceControlSession sourceControlSession)
```

Notify source control session destroy

Parameters:

streamName - stream name

sourceControlSession - the source control session that is being destroyed

getSourceControlSessionCount

```
public abstract int getSourceControlSessionCount()
```

Get the number of source control sessions.

Returns:

number of source control sessions

(continued from last page)

getWebRTCApplicationContext

```
public abstract com.wowza.wms.webrtc.model.WebRTCApplicationContext  
getWebRTCApplicationContext()
```

Get the WebRTC application level context

Returns:

WebRTC application level context

getWebRTCSessions

```
public abstract java.util.List getWebRTCSessions()
```

Get list of WebRTC sessions

Returns:

list of WebRTC sessions

getWebRTCSessions

```
public abstract java.util.List getWebRTCSessions(String streamName)
```

Get list of WebRTC sessions by stream name

Parameters:

streamName - stream name

Returns:

list of WebRTC sessions by stream name

getWebRTCSessionCount

```
public abstract int getWebRTCSessionCount()
```

Get count of WebRTC sessions

Returns:

count of WebRTC sessions

getWebRTCSessionCount

```
public abstract int getWebRTCSessionCount(String streamName)
```

Get count of WebRTC sessions by stream name

Parameters:

streamName - stream name

Returns:

count of WebRTC sessions by stream name

getWebRTCSessionCountsByName

```
public abstract java.util.Map getWebRTCSessionCountsByName()
```

Get a map of WebRTC sessions by stream name

Returns:

(continued from last page)

map of WebRTC sessions by stream name

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    IClient client)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    RTPSession rtpSession)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    IHTTPStreamerSession httpSession)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webrtcSession)
```

Resolve the play alias with this application's stream name alias provider

Returns:

(continued from last page)

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolvePlayAlias

```
public abstract String resolvePlayAlias(String name,  
    IWebSocketSession websocket)
```

Resolve the play alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolveStreamAlias

```
public abstract String resolveStreamAlias(String name)
```

Resolve the stream name alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolveStreamAlias

```
public abstract String resolveStreamAlias(String name,  
    IMediaCaster mediaCaster)
```

Resolve the stream name alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolveStreamAlias

```
public abstract String resolveStreamAlias(String name,  
    IWebSocketSession websocket)
```

Resolve the stream name alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

resolveStreamAlias

```
public abstract String resolveStreamAlias(String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webrtcSession)
```

Resolve the stream name alias with this application's stream name alias provider

Returns:

a resolved stream name, or the name passed in if a stream name alias provider is not defined

com.wowza.wms.application Interface IApplicationInstanceNotify

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

public interface **IApplicationInstanceNotify**
extends

IApplicationInstanceNotify: listener interface used by IApplication addApplicationInstanceListener

Method Summary

abstract void	onApplicationInstanceCreate (IApplicationInstance applicationInstance) Triggered when applicationInstance created
abstract void	onApplicationInstanceDestroy (IApplicationInstance applicationInstance) Triggered when applicationInstance destroyed

Methods

onApplicationInstanceCreate

public abstract void **onApplicationInstanceCreate**([IApplicationInstance](#) applicationInstance)

Triggered when applicationInstance created

Parameters:

applicationInstance - applicationInstance

onApplicationInstanceDestroy

public abstract void **onApplicationInstanceDestroy**([IApplicationInstance](#) applicationInstance)

Triggered when applicationInstance destroyed

Parameters:

applicationInstance - applicationInstance

com.wowza.wms.application Interface IApplicationNotify

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

public interface **IApplicationNotify**
extends

IApplicationNotify: listener interface used by IVHost addApplicationListener

Method Summary

abstract void	onApplicationCreate (IApplication application) Triggered when application created
abstract void	onApplicationDestroy (IApplication application) Triggered when application destroyed

Methods

onApplicationCreate

public abstract void **onApplicationCreate**([IApplication](#) application)

Triggered when application created

Parameters:

application - application

onApplicationDestroy

public abstract void **onApplicationDestroy**([IApplication](#) application)

Triggered when application destroyed

Parameters:

application - application

com.wowza.wms.application Class WMSProperties

```

java.lang.Object
  |-- java.util.AbstractMap
        |-- java.util.HashMap
              |-- com.wowza.wms.application.WMSProperties

```

All Implemented Interfaces:

java.util.Map, java.io.Serializable, Cloneable, java.util.Map

```

public class WMSProperties
extends java.util.HashMap

```

WMSProperties: generic properties container used by many class to store extended property information. Acts like a simple Map with some simple utilities for performing type conversion.

Constructor Summary

public	<u>WMSProperties()</u>
--------	--

Method Summary

static void	<u>cloneProperties</u> (<u>WMSProperties</u> from, <u>WMSProperties</u> to) Copy all properties from "from" properties object to "to" properties object.
String[]	<u>getAllAsStrings</u> () Return all properties as String[].
java.util.Map	<u>getMatchingEntries</u> (String prefix, java.util.ArrayList types)
Object	<u>getProperty</u> (String name) Get property value as generic object.
boolean	<u>getPropertyBoolean</u> (String name, boolean defaultVal) Get property as boolean, return default value if does not exist.
double	<u>getPropertyDouble</u> (String name, double defaultVal) Get property as double, return default value if does not exist.
int	<u>getPropertyInt</u> (String name, int defaultVal) Get property as int, return default value if does not exist.
long	<u>getPropertyLong</u> (String name, long defaultVal) Get property as long, return default value if does not exist.
String	<u>getPropertyStr</u> (String name) Get property as String
String	<u>getPropertyStr</u> (String name, String defaultVal) Get property as String, return default value if does not exist.

void	<code>loadFromProperties</code> (java.util.Properties props)
void	<code>putAll</code> (java.util.Map m)
void	<code>setProperty</code> (String name, Object value) Set property to generic object.
String	<code>toJSON</code> ()
String	<code>toString</code> ()

Methods inherited from class `java.util.HashMap`

```
clear, clone, compute, computeIfAbsent, computeIfPresent, containsKey, containsValue,
entrySet, forEach, get, getOrDefault, isEmpty, keySet, merge, put, putAll,
putIfAbsent, remove, remove, replace, replace, replaceAll, size, values
```

Methods inherited from class `java.util.AbstractMap`

```
clear, clone, containsKey, containsValue, entrySet, equals, get, hashCode, isEmpty,
keySet, put, putAll, remove, size, toString, values
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `java.util.Map`

```
clear, compute, computeIfAbsent, computeIfPresent, containsKey, containsValue, entry,  
entrySet, equals, forEach, get, getDefault, hashCode, isEmpty, keySet, merge, of,  
of, of, of, of, of, of, of, of, of, of, ofEntries, put, putAll, putIfAbsent, remove,  
remove, replace, replace, replaceAll, size, values
```

Methods inherited from interface `java.util.Map`

```
clear, compute, computeIfAbsent, computeIfPresent, containsKey, containsValue, entry,  
entrySet, equals, forEach, get, getDefault, hashCode, isEmpty, keySet, merge, of,  
of, of, of, of, of, of, of, of, of, of, ofEntries, put, putAll, putIfAbsent, remove,  
remove, replace, replace, replaceAll, size, values
```

Constructors

WMSPProperties

```
public WMSProperties()
```

Methods

(continued from last page)

cloneProperties

```
public static void cloneProperties(WMSProperties from,  
    WMSProperties to)
```

Copy all properties from "from" properties object to "to" properties object.

Parameters:

from - source properties
to - destination properties

loadFromProperties

```
public void loadFromProperties(java.util.Properties props)
```

setProperty

```
public void setProperty(String name,  
    Object value)
```

Set property to generic object.

Parameters:

name - property name
value - value

getProperty

```
public Object getProperty(String name)
```

Get property value as generic object.

Parameters:

name - property name

Returns:

value, null if does not exist

getPropertyStr

```
public String getPropertyStr(String name)
```

Get property as String

Parameters:

name - property name

Returns:

value as String, null if does not exist

getPropertyStr

```
public String getPropertyStr(String name,  
    String defaultVal)
```

Get property as String, return default value if does not exist.

(continued from last page)

Parameters:

name - property name
defaultVal - default value

Returns:

value as String, defaultVal if does not exist

getPropertyBoolean

```
public boolean getPropertyBoolean(String name,  
    boolean defaultVal)
```

Get property as boolean, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as boolean, defaultVal if does not exist

getPropertyInt

```
public int getPropertyInt(String name,  
    int defaultVal)
```

Get property as int, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as boolean, defaultVal if does not exist

getPropertyLong

```
public long getPropertyLong(String name,  
    long defaultVal)
```

Get property as long, return default value if does not exist.

Parameters:

name - property name
defaultVal - default value

Returns:

value as long, defaultVal if does not exist

getPropertyDouble

```
public double getPropertyDouble(String name,  
    double defaultVal)
```

Get property as double, return default value if does not exist.

Parameters:

name - property name

(continued from last page)

defaultVal - default value

Returns:

value as double, defaultVal if does not exist

getMatchingEntries

```
public java.util.Map getMatchingEntries(String prefix,  
    java.util.ArrayList types)
```

getAllAsStrings

```
public String[] getAllAsStrings()
```

Return all properties as String[]. Format is "key=value".

Returns:

all properties as String[]

toJSON

```
public String toJSON()
```

toString

```
public String toString()
```

putAll

```
public void putAll(java.util.Map m)
```

Package

com.wowza.wms.authentication

com.wowza.wms.authentication

Class AuthenticateUsernamePasswordProviderBase

java.lang.Object

└--com.wowza.wms.authentication.AuthenticateUsernamePasswordProviderBase

All Implemented Interfaces:

[IAuthenticateUsernamePasswordProvider](#)

public abstract class **AuthenticateUsernamePasswordProviderBase**

extends Object

implements [IAuthenticateUsernamePasswordProvider](#)

Base class for implementing HTTP and RTSP based custom authentication class.

Field Summary

protected	client
protected	rtpSession
protected	vhost

Constructor Summary

public	AuthenticateUsernamePasswordProviderBase()
--------	--

Method Summary

IClient	getClient() Get client
RTPSession	getRTPSession() Get RTP Session
IVHost	getVHost() Get vhost
void	setClient(IClient client) Set client
void	setRTPSession(RTPSession rtpSession) Set RTP Session
void	setVHost(IVHost vhost) Set vhost

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.authentication.IAuthenticateUsernamePasswordProvider](#)[getClient](#), [getPassword](#), [getRTPSession](#), [getVHost](#), [setClient](#), [setRTPSession](#), [setVHost](#), [userExists](#)

Fields

vhostprotected com.wowza.wms.vhost.IVHost **vhost****client**protected com.wowza.wms.client.IClient **client****rtpSession**protected com.wowza.wms.rtp.model.RTPSession **rtpSession**

Constructors

AuthenticateUsernamePasswordProviderBasepublic **AuthenticateUsernamePasswordProviderBase**()

Methods

getVHostpublic [IVHost](#) **getVHost**()

Get vhost

Returns:

vhost

setVHostpublic void **setVHost**([IVHost](#) vhost)

Set vhost

Parameters:

vhost - vhost

(continued from last page)

getRTPSession

```
public RTPSession getRTPSession()
```

Get RTP Session

Returns:

RTP Session

setRTPSession

```
public void setRTPSession(RTPSession rtpSession)
```

Set RTP Session

Parameters:

rtpSession - RTP Session

getClient

```
public IClient getClient()
```

Get client

Returns:

client

setClient

```
public void setClient(IClient client)
```

Set client

Parameters:

client - client

com.wowza.wms.authentication Interface IAuthenticate

public interface **IAuthenticate**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	PASSWORDFILEFORMAT_CLEAR Value: 1
public static final	PASSWORDFILEFORMAT_UNKNOWN Value: 0

Method Summary

abstract void	init (IApplicationInstance appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
abstract void	init (IVHost vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

Methods

init

public abstract void **init**([IApplicationInstance](#) appInstance, AuthenticationItem authenticationItem)

Initialize authentication class when instantiated as part of an application instance

(continued from last page)

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public abstract void init(IVHost vhost,  
    AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

com.wowza.wms.authentication Interface IAuthenticate2

public interface **IAuthenticate2**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	PASSWORDFILEFORMAT_CLEAR Value: 1
public static final	PASSWORDFILEFORMAT_UNKNOWN Value: 0

Method Summary

abstract AuthenticationItem	getAuthenticationItem() Return the authentication item object
abstract void	init(IApplicationInstance appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
abstract void	init(IVHost vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

Methods

init

public abstract void **init**([IApplicationInstance](#) appInstance, AuthenticationItem authenticationItem)

(continued from last page)

Initialize authentication class when instantiated as part of an application instance

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public abstract void init(IVHost vhost,  
    AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

getAuthenticationItem

```
public abstract AuthenticationItem getAuthenticationItem()
```

Return the authentication item object

Returns:

authentication item

com.wowza.wms.authentication Interface IAuthenticate3

public interface **IAuthenticate3**
extends

IAuthenticate: HTTP and RTSP authentication interface

Field Summary

public static final	<u>PASSWORDFILEFORMAT_CLEAR</u> Value: 1
public static final	<u>PASSWORDFILEFORMAT_UNKNOWN</u> Value: 0

Method Summary

abstract AuthenticationItem	<u>getAuthenticationItem()</u> Return the authentication item object
abstract String	<u>getAuthenticationMethod()</u> Return the authentication method invoked - play or publish
abstract void	<u>init(IApplicationInstance</u> appInstance, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of an application instance
abstract void	<u>init(IVHost</u> vhost, AuthenticationItem authenticationItem) Initialize authentication class when instantiated as part of a vhost
abstract void	<u>setAuthenticationMethod</u>(String method) Set the authentication method invoked - play or publish

Fields

PASSWORDFILEFORMAT_UNKNOWN

public static final int **PASSWORDFILEFORMAT_UNKNOWN**

Constant value: **0**

PASSWORDFILEFORMAT_CLEAR

public static final int **PASSWORDFILEFORMAT_CLEAR**

Constant value: **1**

(continued from last page)

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of an application instance

Parameters:

appInstance - application instance
authenticationItem - authentication item

init

```
public abstract void init(IVHost vhost,  
    AuthenticationItem authenticationItem)
```

Initialize authentication class when instantiated as part of a vhost

Parameters:

vhost - vhost
authenticationItem - authentication item

getAuthenticationItem

```
public abstract AuthenticationItem getAuthenticationItem()
```

Return the authentication item object

Returns:

authentication item

setAuthenticationMethod

```
public abstract void setAuthenticationMethod(String method)
```

Set the authentication method invoked - play or publish

getAuthenticationMethod

```
public abstract String getAuthenticationMethod()
```

Return the authentication method invoked - play or publish

Returns:

authentication item

com.wowza.wms.authentication Interface IAuthenticateHTTPProvider

public interface **IAuthenticateHTTPProvider**
extends

IAuthenticateHTTPProvider: HTTP authentication provider

Method Summary

abstract boolean	authenticateHTTPProvider (IVHost vhost, IHTTPRequest req, IHTTPResponse resp) Called for each HTTP authentication
------------------	---

Methods

authenticateHTTPProvider

```
public abstract boolean authenticateHTTPProvider(IVHost vhost,  
    IHTTPRequest req,  
    IHTTPResponse resp)
```

Called for each HTTP authentication

Parameters:

vhost - virtual host
req - HTTP request
resp - HTTP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateIPAccessList

public interface **IAuthenticateIPAccessList**
extends

Method Summary

abstract boolean	<u>isBlackListSet()</u>
abstract boolean	<u>isInPublishBlackList</u> (String clientIP)
abstract boolean	<u>isInPublishWhiteList</u> (String clientIP)
abstract boolean	<u>isWhiteListSet()</u>
abstract void	<u>setIPBlackList</u> (String ipBlackList)
abstract void	<u>setIPWhiteList</u> (String ipWhiteList) IAuthenticateIPAccessList: Access list provider

Methods

setIPWhiteList

public abstract void **setIPWhiteList**(String ipWhiteList)

IAuthenticateIPAccessList: Access list provider

setIPBlackList

public abstract void **setIPBlackList**(String ipBlackList)

isWhiteListSet

public abstract boolean **isWhiteListSet**()

isBlackListSet

public abstract boolean **isBlackListSet**()

isInPublishWhiteList

public abstract boolean **isInPublishWhiteList**(String clientIP)

isInPublishBlackList

public abstract boolean **isInPublishBlackList**(String clientIP)

com.wowza.wms.authentication Interface IAuthenticateRTSP

public interface **IAuthenticateRTSP**
extends

IAuthenticateRTSP: RTSP authentication provider

Method Summary

abstract boolean	<code>authenticateRTSP(RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)</code> Called for each RTSP authentication
------------------	---

Methods

authenticateRTSP

```
public abstract boolean authenticateRTSP(RTPSession rtspSession,  
com.wowza.wms.rtsp.RTSPRequestMessage req,  
com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Called for each RTSP authentication

Parameters:

rtspSession - RTP session
req - RTSP request
resp - RTSP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateSIP

public interface **IAuthenticateSIP**
extends

IAuthenticateRTSP: RTSP authentication provider

Method Summary

abstract boolean	<code>authenticateSIP(RTPSession rtspSession, com.wowza.wms.sip.SIPRequestMessage req, com.wowza.wms.sip.SIPResponseMessages resp)</code> Called for each RTSP authentication
------------------	--

Methods

authenticateSIP

```
public abstract boolean authenticateSIP(RTPSession rtspSession,  
    com.wowza.wms.sip.SIPRequestMessage req,  
    com.wowza.wms.sip.SIPResponseMessages resp)
```

Called for each RTSP authentication

Parameters:

`rtspSession` - RTP session
`req` - RTSP request
`resp` - RTSP response

Returns:

true if authentication was successful

com.wowza.wms.authentication Interface IAuthenticateUsernamePasswordProvider

All Known Implementing Classes:

[AuthenticateUsernamePasswordProviderBase](#)

public interface **IAuthenticateUsernamePasswordProvider**
extends

IAuthenticateUsernamePasswordProvider: HTTP and RTSP username/password validator interface

Method Summary

abstract IClient	getClient() Get client
abstract String	getPassword(String username) Get password for a given user
abstract RTPSession	getRTPSession() Get RTP session
abstract IVHost	getVHost() Get vhost
abstract void	setClient(IClient client) Set client
abstract void	setRTPSession(RTPSession rtpSession) Set RTP session
abstract void	setVHost(IVHost vhost) Set vhost
abstract boolean	userExists(String username) Return true if user exists

Methods

userExists

public abstract boolean **userExists**(String username)

Return true if user exists

Parameters:

username - username

Returns:

true if user exists

(continued from last page)

getPassword

```
public abstract String getPassword(String username)
```

Get password for a given user

Parameters:

username - username

Returns:

password

getVHost

```
public abstract IVHost getVHost()
```

Get vhost

Returns:

vhost

setVHost

```
public abstract void setVHost(IVHost vhost)
```

Set vhost

Parameters:

vhost - vhost

getClient

```
public abstract IClient getClient()
```

Get client

Returns:

client

setClient

```
public abstract void setClient(IClient client)
```

Set client

Parameters:

client - client

getRTPSession

```
public abstract RTPSession getRTPSession()
```

Get RTP session

Returns:

RTP session

(continued from last page)

setRTPSession

```
public abstract void setRTPSession(RTPSession rtpSession)
```

Set RTP session

Parameters:

`rtpSession` - RTP session

Package

com.wowza.wms.client

com.wowza.wms.client Class ConnectionCounter

java.lang.Object

```

  |
+-com.wowza.wms.client.ConnectionCounterBase
  |
+-com.wowza.wms.client.ConnectionCounter

```

```

public class ConnectionCounter
extends ConnectionCounterBase

```

Fields inherited from class com.wowza.wms.client.ConnectionCounterBase

DATEFORMATSTR, NEVERSTR, REJECTREASON_APPLICATION, REJECTREASON_COUNT, REJECTREASON_LICENSE

Constructor Summary

public	ConnectionCounter() Create empty ConnectionCounter
--------	---

Method Summary

void	acceptConnection (ConnectionHolder connectionHolder, byte[] license) Accept a new connection.
void	addConnectionListener (IConnectionNotify connectionNotify) Add a connection listener.
void	decrement (ConnectionHolder connectionHolder, boolean isValid, java.util.Date date, long stamp, byte[] license) Decrement connection counters.
void	disconnect (ConnectionHolder connectionHolder, byte[] license) Disconnect connection.
long	getCurrent () Get total number of client currently conencted to this object.
long	getLastConnectAcceptedStamp () Get time (milliseconds) of the last conenction to this object.
String	getLastConnectAcceptedStampString () Get time (milliseconds) of the last conenction to this object as formatted string.
java.util.Date	getLastConnectAcceptedTime () Get time (milliseconds) of the last accepted conenction to this object.
String	getLastConnectAcceptedTimeString () Get time (milliseconds) of the last accepted conenction to this object as formatted string.
long	getLastConnectRejectedByReasonStamp (int reason) Get time (milliseconds) of the last rejected conenction by reason to this object.

String	<code>getLastConnectRejectedByReasonStampString(int reason)</code> Get time (milliseconds) of the last rejected connection by reason to this object as formatted string.
java.util.Date	<code>getLastConnectRejectedByReasonTime(int reason)</code> Get date and time of last rejected connection by reason to this object as Date object.
String	<code>getLastConnectRejectedByReasonTimeString(int reason)</code> Get date and time of last rejected connection by reason to this object as formatted string.
long	<code>getLastConnectRejectedStamp()</code> Get time (milliseconds) of the last rejected connection to this object.
String	<code>getLastConnectRejectedStampString()</code> Get time (milliseconds) of the last rejected connection to this object as formatted string.
java.util.Date	<code>getLastConnectRejectedTime()</code> Get date and time of last rejected connection to this object as Date object.
String	<code>getLastConnectRejectedTimeString()</code> Get date and time of last rejected connection to this object as formatted string.
long	<code>getLastDisconnectStamp()</code> Get time (milliseconds) of the last disconnected connection to this object.
String	<code>getLastDisconnectStampString()</code> Get time (milliseconds) of the last disconnected connection to this object as formatted string.
java.util.Date	<code>getLastDisconnectTime()</code> Get date and time of last disconnected connection to this object as Date object.
String	<code>getLastDisconnectTimeString()</code> Get date and time of last disconnected connection to this object as Date object as formatted string.
long	<code>getTotal()</code> Get total number of connection attempts to this object.
long	<code>getTotalAccepted()</code> Get total number of accepted connections to this object.
long	<code>getTotalRejected()</code> Get total number of rejected connections to this object.
void	<code>incrementAccept(ConnectionHolder connectionHolder, java.util.Date date, long stamp, byte[] license)</code> Increment accepted connections.
void	<code>incrementReject(ConnectionHolder connectionHolder, int reason, java.util.Date date, long stamp, byte[] license)</code> Increment reject connection.
void	<code>rejectConnection(ConnectionHolder connectionHolder, int reason, byte[] license)</code> Reject connection.
void	<code>removeConnectionListener(IConnectionNotify connectionNotify)</code> Remove connection listener
void	<code>setConnectionValidator(IConnectionValidator connectionValidator)</code> Set the connection validator.

boolean	validateNewConnection (ConnectionHolder connectionHolder, byte[] license) Validate a new connection.
---------	---

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

ConnectionCounter

```
public ConnectionCounter()
```

Create empty ConnectionCounter

Methods

addConnectionListener

```
public void addConnectionListener(IConnectionNotify connectionNotify)
```

Add a connection listener. Receives following events: `onClientConnect`, `onClientDisconnect`, `onClientAccept` and `onClientReject`.

Parameters:

`connectionNotify` - connection listener

removeConnectionListener

```
public void removeConnectionListener(IConnectionNotify connectionNotify)
```

Remove connection listener

Parameters:

`connectionNotify` - connection listener

setConnectionValidator

```
public void setConnectionValidator(IConnectionValidator connectionValidator)
```

Set the connection validator.

Parameters:

`connectionValidator` - connection validator

validateNewConnection

```
public boolean validateNewConnection(ConnectionHolder connectionHolder,  
byte[] license)
```

Validate a new connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

(continued from last page)

Parameters:

connectionHolder - connection holder
license - security data

Returns:

true if connection is accepted

acceptConnection

```
public void acceptConnection(ConnectionHolder connectionHolder,  
    byte[] license)
```

Accept a new connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
license - security data

incrementAccept

```
public void incrementAccept(ConnectionHolder connectionHolder,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Increment accepted connections.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

rejectConnection

```
public void rejectConnection(ConnectionHolder connectionHolder,  
    int reason,  
    byte[] license)
```

Reject connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
reason - reason the connection was refused. See REJECTREASON_*
license - security data

(continued from last page)

incrementReject

```
public void incrementReject(ConnectionHolder connectionHolder,  
    int reason,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Increment reject connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
reason - reason the connection was refused. See REJECTREASON_*
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

disconnect

```
public void disconnect(ConnectionHolder connectionHolder,  
    byte[] license)
```

Disconnect connection.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
license - security data

decrement

```
public void decrement(ConnectionHolder connectionHolder,  
    boolean isValid,  
    java.util.Date date,  
    long stamp,  
    byte[] license)
```

Decrement connection counters.

NOTE: This is a private internal call. Server will not work properly if this method is not called properly using internal security mechanism.

Parameters:

connectionHolder - connection holder
isValid - is a valid connection
date - date the connection occurred
stamp - time stamp connection occurred (milliseconds)
license - security data

getCurrent

```
public long getCurrent()
```

Get total number of client currently connected to this object.

Returns:

total number of client currently connected to this object

getLastConnectAcceptedStamp

```
public long getLastConnectAcceptedStamp()
```

Get time (milliseconds) of the last conenction to this object.

Returns:

time (milliseconds) of the last conenction to this object

getLastConnectAcceptedStampString

```
public String getLastConnectAcceptedStampString()
```

Get time (milliseconds) of the last conenction to this object as formatted string.

Returns:

time (milliseconds) of the last conenction to this object as formatted string

getLastConnectAcceptedTime

```
public java.util.Date getLastConnectAcceptedTime()
```

Get time (milliseconds) of the last accepeted conenction to this object.

Returns:

time (milliseconds) of the last accepeted conenction to this object

getLastConnectAcceptedTimeString

```
public String getLastConnectAcceptedTimeString()
```

Get time (milliseconds) of the last accepeted conenction to this object as formatted string.

Returns:

time (milliseconds) of the last accepeted conenction to this object as formatted string

getLastConnectRejectedStamp

```
public long getLastConnectRejectedStamp()
```

Get time (milliseconds) of the last rejected conenction to this object.

Returns:

time (milliseconds) of the last rejected conenction to this object

getLastConnectRejectedStampString

```
public String getLastConnectRejectedStampString()
```

Get time (milliseconds) of the last rejected conenction to this object as formatted string.

Returns:

time (milliseconds) of the last rejected conenction to this object as formatted string

getLastConnectRejectedTime

```
public java.util.Date getLastConnectRejectedTime()
```

(continued from last page)

Get date and time of last rejected connection to this object as Date object.

Returns:

date and time of last reject connection to this object as Date object

getLastConnectRejectedTimeString

```
public String getLastConnectRejectedTimeString()
```

Get date and time of last rejected connection to this object as formatted string.

Returns:

date and time of last reject connection to this object as formatted string

getLastConnectRejectedByReasonStampString

```
public String getLastConnectRejectedByReasonStampString(int reason)
```

Get time (milliseconds) of the last rejected connection by reason to this object as formatted string.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

time (milliseconds) of the last rejected connection by reason to this object as formatted string

getLastConnectRejectedByReasonStamp

```
public long getLastConnectRejectedByReasonStamp(int reason)
```

Get time (milliseconds) of the last rejected connection by reason to this object.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

time (milliseconds) of the last rejected connection by reason to this object

getLastConnectRejectedByReasonTime

```
public java.util.Date getLastConnectRejectedByReasonTime(int reason)
```

Get date and time of last rejected connection by reason to this object as Date object.

Parameters:

reason - reason, see REJECTREASON_*

Returns:

date and time of last reject connection by reason to this object as Date object

getLastConnectRejectedByReasonTimeString

```
public String getLastConnectRejectedByReasonTimeString(int reason)
```

Get date and time of last rejected connection by reason to this object as formatted string.

Parameters:

reason - reason, see REJECTREASON_*

(continued from last page)

Returns:

date and time of last rejected connection by reason to this object as formatted string

getLastDisconnectStampString

```
public String getLastDisconnectStampString()
```

Get time (milliseconds) of the last disconnected connection to this object as formatted string.

Returns:

time (milliseconds) of the last disconnected connection to this object as formatted string

getLastDisconnectStamp

```
public long getLastDisconnectStamp()
```

Get time (milliseconds) of the last disconnected connection to this object.

Returns:

time (milliseconds) of the last disconnected connection to this object

getLastDisconnectTime

```
public java.util.Date getLastDisconnectTime()
```

Get date and time of last disconnected connection to this object as Date object.

Returns:

date and time of last disconnected connection to this object as Date object

getLastDisconnectTimeString

```
public String getLastDisconnectTimeString()
```

Get date and time of last disconnected connection to this object as Date object as formatted string.

Returns:

date and time of last disconnected connection to this object as Date object as formatted string

getTotal

```
public long getTotal()
```

Get total number of connection attempts to this object.

Returns:

total number of connection attempts to this object

getTotalAccepted

```
public long getTotalAccepted()
```

Get total number of accepted connections to this object.

Returns:

total number of accepted connections to this object

getTotalRejected

```
public long getTotalRejected()
```

Get total number of rejected connections to this object.

Returns:

total number of rejected connections to this object

com.wowza.wms.client Interface IClient

public interface **IClient**
extends

IClient: public interface to Client object.

Field Summary

public static final	AUDIOSAMPLE_ACCESS_ALL Value: *
public static final	AUDIOSAMPLE_ACCESS_NONE Value:
public static final	READ_ACCESS_ALL Value: *
public static final	READ_ACCESS_NONE Value:
public static final	VIDEOSAMPLE_ACCESS_ALL Value: *
public static final	VIDEOSAMPLE_ACCESS_NONE Value:
public static final	WRITE_ACCESS_ALL Value: *
public static final	WRITE_ACCESS_NONE Value:

Method Summary

abstract void	acceptConnection () Accept connection
abstract void	acceptConnection (AMFData successObj) Accept connection
abstract void	acceptConnection (String successStr) Accept connection
abstract void	addAcceptConnectionAttribute (String key, AMFDataObj item) Add and attribute to the resultObj that gets passed back to the client on successful connection

abstract void	<u>addAcceptConnectionAttribute</u> (String key, String item) Add and attribute to the resultObj that gets passed back to the client on successful connection
abstract void	<u>call</u> (String handlerName) Simplified call client method/handler call.
abstract void	<u>call</u> (String handlerName, <u>IModuleCallResult</u> resultObj, Object[] params) Call client method/handler.
abstract void	<u>clearFastPlaySettings</u> () Force clear the fastPlay settings
abstract void	<u>fcSubscribe</u> (String streamName) Subscribe to a live stream (for live stream repeater to start start from edge to origin)
abstract void	<u>fcSubscribe</u> (String streamName, String mediaCasterType) Subscribe to a live stream (use a particular mediaCasterType)
abstract void	<u>fcUnSubscribe</u> (String streamName) UnSubscribe from a stream
abstract void	<u>fcUnSubscribeAll</u> () UnSubscribe to all streams that this client is current subscribed to
abstract <u>IApplicationInstance</u>	<u>getAppInstance</u> () Get parent applicationInstance.
abstract <u>IApplication</u>	<u>getApplication</u> () Get parent application.
abstract int	<u>getBufferTime</u> () Get default buffer time for newly created mediaStream objects
abstract int	<u>getClientId</u> () Get client id.
abstract long	<u>getConnectTime</u> () Get time in milliseconds the client connected to the server.
abstract String	<u>getDateStarted</u> () Get date and time of client connection
abstract <u>ElapsedTimer</u>	<u>getElapsedTime</u> () Get elapsed time client has been connected.
abstract FastPlaySettings	<u>getFastPlaySettings</u> () Get the current fastPlay settings.
abstract String	<u>getFlashVer</u> () Get client flash version
abstract String	<u>getForwardedIP</u> () Get the forwarded IP of the connected client, if available.
abstract int	<u>getIdleFrequency</u> () Get client idle frequency (milliseconds)
abstract String	<u>getIp</u> () Client ip address

abstract long	<u>getLastValidateTime()</u> Get last time (millisecond) the connection was validated with a ping
abstract int	<u>getLiveRepeaterCapabilities()</u> Get the live repeater capabilities of this connection
abstract String	<u>getLiveStreamPacketizerList()</u> Get the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)
abstract String	<u>getLiveStreamTranscoderList()</u> Get the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)
abstract int	<u>getMaximumPendingWriteBytes()</u> Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
abstract int	<u>getMaximumSetBufferTime()</u> Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
abstract <u>IOPerformanceCounter</u>	<u>getMediaIOPerformanceCounter()</u> Get performance counter for media bytes transferred to this client.
abstract int	<u>getObjectEncoding()</u> Get the object encoding level
abstract String	<u>getPageUrl()</u> Get the pageUrl for this connection.
abstract long	<u>getPingRoundTripTime()</u> Get turn around time (milliseconds) of last ping request
abstract int	<u>getPingTimeout()</u> Get the ping timeout (milliseconds)
abstract int	<u>getPlayStreamCount()</u> Get the number of play streams
abstract java.util.List	<u>getPlayStreams()</u> Get a collection of all play streams.
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get client properties
abstract int	<u>getProtocol()</u> Get connection protocol (1 = RTMP, 3 = RTMPT)
abstract int	<u>getPublishStreamCount()</u> Get the number of publish streams
abstract java.util.List	<u>getPublishStreams()</u> Get a collection of publish streams.
abstract String	<u>getQueryStr()</u> Get the query string part of the connection string.
abstract String	<u>getReferrer()</u> Get the referrer data for this connection.

abstract String	<u>getRepeaterOriginUrl()</u> Get the origin URL used by the Live Stream Repeater
abstract <u>AMFObj</u>	<u>getRespAMFAudioObj()</u> (<u>IMediaStream</u> stream) Get the audio response AMFObj for a given mediaStream
abstract <u>AMFObj</u>	<u>getRespAMFDataObj()</u> (<u>IMediaStream</u> stream) Get the data response AMFObj for a given mediaStream
abstract <u>AMFObj</u>	<u>getRespAMFVideoObj()</u> (<u>IMediaStream</u> stream) Get the video response AMFObj for a given mediaStream
abstract <u>ResponseFunctions</u>	<u>getRespFunctions()</u> Get client responseFunctions object.
abstract <u>AMFObj</u>	<u>getResponseAMFObj()</u> (int index) Get the response channel AMFObj for channel index.
abstract <u>RTPStream</u>	<u>getRTPStream()</u> If this client was created due to an RTP connection to the server return the underlying RTPStream object
abstract <u>HostPort</u>	<u>getServerHostPort()</u> Get the hostPort object for the connection that is servicing this client
abstract String	<u>getSharedObjectReadAccess()</u> Get the shared object read access value.
abstract String	<u>getSharedObjectWriteAccess()</u> Get the shared object write access value.
abstract String	<u>getStreamAudioSampleAccess()</u> Get the audio sample access value.
abstract java.io.File	<u>getStreamFile()</u> (String streamName) Get File object for stream with given name.
abstract java.io.File	<u>getStreamFile()</u> (String streamName, String streamExt) Get File object for stream with given name and extension.
abstract java.io.File	<u>getStreamFile()</u> (String streamName, String streamExt, boolean doCreateFolder) Get File object for stream with given name and extension.
abstract String	<u>getStreamReadAccess()</u> Get the stream read access value.
abstract String	<u>getStreamType()</u> Get default streamType
abstract String	<u>getStreamVideoSampleAccess()</u> Get the video sample access value.
abstract String	<u>getStreamWriteAccess()</u> Get the stream write access value.
abstract String	<u>getTimeRunning()</u> Get elapsed time of connection

abstract double	<u>getTimeRunningSeconds()</u> Get time running in seconds
abstract <u>IOPerformanceCounter</u>	<u>getTotalIOPerformanceCounter()</u> Get performance counter for all bytes transferred to this client.
abstract String	<u>getUri()</u> Get the full URI of the connection string
abstract <u>IVHost</u>	<u>getVHost()</u> Get parent vHost
abstract com.wowza.wms.protocol.wowz.WOWZSession	<u>getWowzSession()</u>
abstract ClientWriteListener	<u>getWriteListener()</u> Object that tracks write operations
abstract boolean	<u>isAcceptConnection()</u> Is auto accept connection
abstract boolean	<u>isAcceptConnectionSendClientId()</u> Include the client id in the accept connection response
abstract boolean	<u>isConnected()</u> Is this client connected
abstract boolean	<u>isEncrypted()</u> Is this connection encrypted (RTMPE or RTMPTE)
abstract boolean	<u>isFlashMediaLiveEncoder()</u> Returns true if this connection is the Flash Media Live Encoder
abstract boolean	<u>isFlashVersion10()</u> Returns true if the Flash version is equal or greater than 10.x.x.x
abstract boolean	<u>isFlashVersion90115()</u> Returns true if the Flash version is equal or greater than 9.0.115.x
abstract boolean	<u>isFlashVersionH264Capable()</u> Returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)
abstract boolean	<u>isLiveRepeater()</u> Returns true if this connection is from the live stream repeater
abstract boolean	<u>isObjectEncodingAMF0()</u> Is the object encoding for this client AMF0
abstract boolean	<u>isObjectEncodingAMF3()</u> Is the object encoding for this client AMF3
abstract boolean	<u>isSecure()</u> Is this connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)
abstract boolean	<u>isSendCloseOnRejectConnection()</u>
abstract boolean	<u>isSSL()</u> Is this connection SSL (RTMPS)

abstract boolean	<u>isValidFMLEConnections()</u> Returns true if validating FMLE connection (default is false)
abstract int	<u>ping(IModulePingResult pingResult)</u> Ping client.
abstract void	<u>redirectConnection(String url)</u> Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
abstract void	<u>redirectConnection(String url, String description)</u> Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
abstract void	<u>redirectConnection(String url, String description, AMFData errorObj)</u> Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302).
abstract void	<u>redirectConnection(String url, String description, String errorStr)</u> Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)
abstract void	<u>rejectConnection()</u> Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
abstract void	<u>rejectConnection(AMFData errorObj)</u> Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
abstract void	<u>rejectConnection(String errorStr)</u> Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
abstract void	<u>rejectConnection(String description, AMFData errorObj)</u> Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
abstract void	<u>rejectConnection(String description, String errorStr)</u> Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)
abstract void	<u>reparentClient(IVHost vhost)</u> Move a client object to a new vhost.
abstract void	<u>setAcceptConnection(boolean acceptConnection)</u> Set the default for accept connection
abstract void	<u>setAcceptConnectionDescription(String description)</u> Call this method from onConnect to set the info.description property returned in NetConnection onStatus handler
abstract void	<u>setAcceptConnectionExObj(AMFDataObj acceptConnectionExObj)</u> Call this method from onConnect to set the info.ex property returned in NetConnection onStatus handler
abstract void	<u>setAcceptConnectionObj(AMFData acceptConnectionObj)</u> Call this method from onConnect to add an "application" property to the info object that is passed back to the Flash client in the onStatus handler.

abstract void	<u>setAcceptConnectionSendClientId</u> (boolean acceptConnectionSendClientId) Include the client id in the connection response
abstract void	<u>setBufferTime</u> (int bufferTime) Set default buffer time for newly created mediaStream objects
abstract void	<u>setFastPlaySettings</u> (FastPlaySettings fastPlaySettings) Set fastPlay settings
abstract void	<u>setFlashVer</u> (String flashVer) Set client flash version
abstract void	<u>setForwardedIP</u> (String IP) Set the forwarded IP of the connected client.
abstract void	<u>setIdleFrequency</u> (int idleFrequency) Set client idle frequency (milliseconds)
abstract void	<u>setLastValidateTime</u> (long lastValidateTime) Set the last time (milliseconds) the connection was validated with ping
abstract void	<u>setLiveRepeaterCapabilities</u> (int liveRepeaterCapabilities) Set the live repeater capabilities of this connection
abstract void	<u>setLiveStreamPacketizerList</u> (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)
abstract void	<u>setLiveStreamTranscoderList</u> (String liveStreamTranscoderList) Set the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)
abstract void	<u>setObjectEncoding</u> (int objectEncoding) Set the object encoding level
abstract void	<u>setRepeaterOriginUrl</u> (String repeaterOriginUrl) Set the origin URL used by the Live Stream Repeater
abstract void	<u>setSendCloseOnRejectConnection</u> (boolean sendCloseOnRejectConnection)
abstract void	<u>setSharedObjectReadAccess</u> (String sharedObjectReadAccess) Set the shared object read access value.
abstract void	<u>setSharedObjectWriteAccess</u> (String sharedObjectWriteAccess) Set the shared object write access value.
abstract void	<u>setShutdownClient</u> (boolean shutdownClient) Gracefully and forcefully shutdown a client.
abstract void	<u>setStreamAudioSampleAccess</u> (String audioSampleAccess) Set the stream audio sample access value.
abstract void	<u>setStreamReadAccess</u> (String streamReadAccess) Set the stream object read access value.
abstract void	<u>setStreamType</u> (String streamType) Set default streamType

abstract void	<code>setStreamVideoSampleAccess</code> (String videoSampleAccess) Set the stream video sample access value.
abstract void	<code>setStreamWriteAccess</code> (String streamWriteAccess) Set the stream object write access value.
abstract void	<code>setThreadContext</code> () Set the thread logging context to this client
abstract void	<code>setValidateFMLEConnections</code> (boolean validateFMLEConnections) Returns true if validating FMLE connection (default is false)
abstract void	<code>setWowzSession</code> (com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
abstract void	<code>shutdownClient</code> () Gracefully shutdown a client.
abstract int	<code>testFlashVersion</code> (int[] version) Test to see if the connected client flash version is equal to or greater than a given value.
abstract void	<code>touch</code> () Update the last touch time for client

Fields

VIDEOSAMPLE_ACCESS_ALL

```
public static final java.lang.String VIDEOSAMPLE_ACCESS_ALL
```

Constant value: *

VIDEOSAMPLE_ACCESS_NONE

```
public static final java.lang.String VIDEOSAMPLE_ACCESS_NONE
```

Constant value:

AUDIOSAMPLE_ACCESS_ALL

```
public static final java.lang.String AUDIOSAMPLE_ACCESS_ALL
```

Constant value: *

AUDIOSAMPLE_ACCESS_NONE

```
public static final java.lang.String AUDIOSAMPLE_ACCESS_NONE
```

Constant value:

READ_ACCESS_ALL

```
public static final java.lang.String READ_ACCESS_ALL
```

(continued from last page)

Constant value: *

READ_ACCESS_NONE

```
public static final java.lang.String READ_ACCESS_NONE
```

Constant value:

WRITE_ACCESS_ALL

```
public static final java.lang.String WRITE_ACCESS_ALL
```

Constant value: *

WRITE_ACCESS_NONE

```
public static final java.lang.String WRITE_ACCESS_NONE
```

Constant value:

Methods

getClientId

```
public abstract int getClientId()
```

Get client id. Assigned by server and connection time.

Returns:

client id

getFlashVer

```
public abstract String getFlashVer()
```

Get client flash version

Returns:

client flash version string

setFlashVer

```
public abstract void setFlashVer(String flashVer)
```

Set client flash version

Parameters:

flashVer - client flash version string

getTotalIOPerformanceCounter

```
public abstract IOPerformanceCounter getTotalIOPerformanceCounter()
```

Get performance counter for all bytes transferred to this client. This includes function calls.

(continued from last page)

Returns:

performance counter

getMediaIOPerformanceCounter

```
public abstract IOPerformanceCounter getMediaIOPerformanceCounter()
```

Get performance counter for media bytes transferred to this client. Only includes bytes to mediaStream objects

Returns:

performance counter

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get parent applicationInstance. Is null if connection reject or before accepted.

Returns:

parent applicationInstance

getApplication

```
public abstract IApplication getApplication()
```

Get parent application. Is null if connection reject or before accepted.

Returns:

application

getPlayStreams

```
public abstract java.util.List getPlayStreams()
```

Get a collection of all play streams. Play streams are streams that are created due to a call to play.

Iterate Play Streams

```
IClient client;

List playStreams = client.getPlayStreams();
Iterator iter = playStreams.iterator();
while(iter.hasNext())
{
    IMediaStream stream = (IMediaStream)iter.next();
    WMSLoggerFactory.getLogger(null).debug("stream: "+stream.getName());
}
```

(continued from last page)

Returns:collection of play streams

getPublishStreams

```
public abstract java.util.List getPublishStreams()
```

Get a collection of publish streams. Publish streams are streams that are created due to a call to publish.

Iterate Public Streams

```
IClient client;

List publishStreams = client.getPublishStreams();
Iterator iter = publishStreams.iterator();
while(iter.hasNext())
{
    IMediaStream stream = (IMediaStream)iter.next();
    WMSLoggerFactory.getLogger(null).debug("stream: "+stream.getName());
}
```

Returns:collection of publish stream

getPlayStreamCount

```
public abstract int getPlayStreamCount()
```

Get the number of play streams

Returns:number of play streams

getPublishStreamCount

```
public abstract int getPublishStreamCount()
```

Get the number of publish streams

Returns:number of publish streams

shutdownClient

```
public abstract void shutdownClient()
```

(continued from last page)

Gracefully shutdown a client. Only use this method to shutdown a client if you know the client is connected to Wowza Pro. If the client may be disconnected from Wowza Pro, use `IClient.setShutdownClient(true)`

touch

```
public abstract void touch()
```

Update the last touch time for client

isConnected

```
public abstract boolean isConnected()
```

Is this client connected

Returns:

is connected

getProperties

```
public abstract WMSProperties getProperties()
```

Get client properties

Returns:

collection of client properties

getStreamType

```
public abstract String getStreamType()
```

Get default streamType

Returns:

streamType

setStreamType

```
public abstract void setStreamType(String streamType)
```

Set default streamType

Parameters:

streamType - streamType

isAcceptConnection

```
public abstract boolean isAcceptConnection()
```

Is auto accept connection

Returns:

auto accept connection

acceptConnection

```
public abstract void acceptConnection()
```

Accept connection

acceptConnection

```
public abstract void acceptConnection(String successStr)
```

Accept connection

Parameters:

successStr - application property value added to NetConnection.Connect.Success event object

acceptConnection

```
public abstract void acceptConnection(AMFData successObj)
```

Accept connection

Parameters:

successObj - application property value added to NetConnection.Connect.Success event object

rejectConnection

```
public abstract void rejectConnection()
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

rejectConnection

```
public abstract void rejectConnection(String errorStr)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

errorStr - error (returned in onStatus handler in info.application parameter)

rejectConnection

```
public abstract void rejectConnection(AMFData errorObj)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

errorObj - error AMFData (returned in onStatus handler in info.application parameter)

rejectConnection

```
public abstract void rejectConnection(String description,  
    String errorStr)
```

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

description - description (returned in onStatus handler in info.description parameter)

errorStr - error (returned in onStatus handler in info.application parameter)

rejectConnection

```
public abstract void rejectConnection(String description,  
    AMFData errorObj)
```

(continued from last page)

Reject connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected)

Parameters:

description - description (returned in onStatus handler in info.description parameter)
errorObj - error AMFData (returned in onStatus handler in info.application parameter)

redirectConnection

```
public abstract void redirectConnection(String url)
```

Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)

Parameters:

url - url (returned in onStatus handler in info.ex.redirect parameter)

redirectConnection

```
public abstract void redirectConnection(String url,  
    String description)
```

Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)

Parameters:

url - url (returned in onStatus handler in info.ex.redirect parameter)
description - description (returned in onStatus handler in info.description parameter)

redirectConnection

```
public abstract void redirectConnection(String url,  
    String description,  
    String errorStr)
```

Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302)

Parameters:

url - url (returned in onStatus handler in info.ex.redirect parameter)
description - description (returned in onStatus handler in info.description parameter)
errorStr - error (returned in onStatus handler in info.application parameter)

redirectConnection

```
public abstract void redirectConnection(String url,  
    String description,  
    AMFData errorObj)
```


(continued from last page)

Redirection connection (NetConnection.onStatus handler returns info.code of NetConnection.Connect.Rejected and info.ex.code of 302). Code must be added client side to capture the NetConnection.Connect.Rejected message, look for the info.ex.code value of 302 and attempt a reconnect to the info.ex.redirect url. Client side example:

```
public function ncOnStatus(infoObject:NetStatusEvent)
{
    if (infoObject.info.code == "NetConnection.Connect.Rejected")
    {
        if (infoObject.info.ex.code == 302)
        {
            trace("Connection redirected: "+infoObject.info.ex.redirect);
            nc.connect(infoObject.info.ex.redirect);
        }
        else
            trace("Connection rejected");
    }
}
nc.addEventListener(NetStatusEvent.NET_STATUS, ncOnStatus);
```

Parameters:

url - url (returned in onStatus handler in info.ex.redirect parameter)
description - description (returned in onStatus handler in info.description parameter)
errorObj - error AMFData (returned in onStatus handler in info.application parameter)

isAcceptConnectionSendClientId

public abstract boolean **isAcceptConnectionSendClientId()**

Include the client id in the accept connection response

Returns:

true if client id is included

setAcceptConnectionSendClientId

public abstract void **setAcceptConnectionSendClientId**(boolean acceptConnectionSendClientId)

Include the client id in the connection response

Parameters:

acceptConnectionSendClientId - true if client id is included

getVHost

public abstract [IVHost](#) **getVHost()**

Get parent vHost

Returns:

vHost object

call

```
public abstract void call(String handlerName,  
    IModuleCallResult resultObj,  
    Object[] params)
```

Call client method/handler. You can call any method/handler attached to NetConnection object. Such as netConnection.myFunc

Call Client Handler Method With Result Object

```
IClient client;  
  
class ReturnObj implements IModuleCallResult  
{  
    public void onResult(IClient client, RequestFunction function,  
        AMFDataList params)  
    {  
        WMSLoggerFactory.getLogger(null).debug("onResult");  
    }  
}  
  
client.call("onCustomMethod", new ReturnObj(), "param1", 1.2345, false, new Date());
```

Parameters:

handlerName - handler name

resultObj - if client method returns data this object will receive callback, null if don't care or no return on client method/handler.

params - variable list of argument. Will be automatically wrapped in AMFData objects

call

```
public abstract void call(String handlerName)
```

Simplified call client method/handler call. No resultObj. No parameters

Parameters:

handlerName - handler name

ping

```
public abstract int ping(IModulePingResult pingResult)
```

(continued from last page)

Ping client. Unlike FMS this ping is asynchronous. pingResult object will be notified of successful response by client or timeout.

Ping Client and Kill Connection If Client Has Died

```
class PingResult implements IModulePingResult
{
    public void onResult(IClient client, long pingTime, int pingId, boolean result)
    {
        WMSLogger log = WMSLoggerFactory.getLogger(null);
        log.debug("onResult: result:"+result);
        if (!result)
        {
            // client has died lets kill it
            client.getAppInstance().shutdownClient(client);
        }
        else
            log.debug("lastPingTime: "+client.getPingRoundTripTime());
    }
}
client.ping(new PingResult());
```

Parameters:

pingResult - ping result object. Will receive callback on result of ping or timeout. Can be null.

Returns:

ping id

getIp

```
public abstract String getIp()
```

Client ip address

Returns:

client ip address

getForwardedIP

```
public abstract String getForwardedIP()
```

Get the forwarded IP of the connected client, if available. Default returns null

Returns:

(continued from last page)

setForwardedIP

```
public abstract void setForwardedIP(String IP)
```

Set the forwarded IP of the connected client.

Parameters:

IP

getFastPlaySettings

```
public abstract FastPlaySettings getFastPlaySettings()
```

Get the current fastPlay settings. FastPlay settings when set from the client are immediatly cleared on the next call to seek/unpause/play.

Returns:

fastPlay settings

setFastPlaySettings

```
public abstract void setFastPlaySettings(FastPlaySettings fastPlaySettings)
```

Set fastPlay settings

Parameters:

fastPlaySettings - fastPlay settings

clearFastPlaySettings

```
public abstract void clearFastPlaySettings()
```

Force clear the fastPlay settings

getRespFunctions

```
public abstract ResponseFunctions getRespFunctions()
```

(continued from last page)

Get client responseFunctions object. The responseFunctions object is the method by which events are sent to the client. This code snippet shows how to send an onStatus event for a mediaStream (stream) to the client.

Send Status Message to Client

```
ResponseFunctions respFunctions = client.getRespFunctions();

ResponseFunction resp = new ResponseFunction();
resp.createDefaultMessage("onStatus", 0.0);
resp.setRetAMFObj(stream.getRespAMFDataObj());
resp.setSrc(stream.getSrc());

AMFDataObj data = new AMFDataObj();
data.put("level", new AMFDataItem("status"));
data.put("code", new AMFDataItem("NetStream.Publish.Success"));
data.put("description", new AMFDataItem(stream.getName()+" is now unpublished.));
data.put("clientId", new AMFDataItem(clientID));
resp.addBody(data);

respFunctions.add(resp);
```

Returns:

responseFunctions object

getConnectTime

```
public abstract long getConnectTime()
```

Get time in milliseconds the client connected to the server. To get the duration of time in milliseconds that the client has been connected to the server us the following formula: (System.currentTimeMillis() - client.getConnectTime())

Returns:

duration connected (milliseconds)

getPingRoundTripTime

```
public abstract long getPingRoundTripTime()
```

Get turn around time (milliseconds) of last ping request

Returns:

time (milliseconds)

getDateStarted

```
public abstract String getDateStarted()
```

Get date and time of client connection

(continued from last page)

Returns:date and time of connection

getTimeRunning

```
public abstract String getTimeRunning()
```

Get elapsed time of connection

Returns:elapsed time of connection

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get time running in seconds

Returns:time running in seconds

getStreamFile

```
public abstract java.io.File getStreamFile(String streamName)
```

Get File object for stream with given name. Assumes file extension is .flv.

Parameters:

streamName - stream name

Returns:file

getStreamFile

```
public abstract java.io.File getStreamFile(String streamName,  
                                             String streamExt)
```

(continued from last page)

Get File object for stream with given name and extension. For example test.flv would be `getStreamFile("test", "flv");`

Get File Descriptor

```
IClient client;
File file = client.getStreamFile("test", "flv");
WMSLogger log = WMSLoggerFactory.getLogger(null);
if (file != null)
{
    if (file.exists())
        log.debug("getStreamFile: " + file.getPath());
}
```

Parameters:

streamName - stream name
streamExt - stream extension

Returns:

file

getStreamFile

```
public abstract java.io.File getStreamFile(String streamName,
String streamExt,
boolean doCreateFolder)
```

Get File object for stream with given name and extension. If doCreateFolder is true, create folder necessary to make path exist. For example test.flv would be `getStreamFile("test", "flv");`

Parameters:

streamName - stream name
streamExt - stream extension
doCreateFolder - create folders if needed

Returns:

file

getBufferTime

```
public abstract int getBufferTime()
```

Get default buffer time for newly created mediaStream objects

Returns:

default buffer time (milliseconds)

setBufferTime

```
public abstract void setBufferTime(int bufferTime)
```

(continued from last page)

Set default buffer time for newly created mediaStream objects

Parameters:

bufferTime - bufer time (milliseconds)

getResponseAMFObj

```
public abstract AMFObj getResponseAMFObj(int index)
```

Get the response channel AMFObj for channel index.

Parameters:

index - channel index

Returns:

AMFObj

getRespAMFAudioObj

```
public abstract AMFObj getRespAMFAudioObj(IMediaStream stream)
```

Get the audio response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getRespAMFVideoObj

```
public abstract AMFObj getRespAMFVideoObj(IMediaStream stream)
```

Get the video response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getRespAMFDataObj

```
public abstract AMFObj getRespAMFDataObj(IMediaStream stream)
```

Get the data response AMFObj for a given mediaStream

Parameters:

stream - mediaStream

Returns:

response channel AMFObj

getQueryStr

```
public abstract String getQueryStr()
```


(continued from last page)

Get the query string part of the connection string. If the connection string where:
rtmp://localhost/app/appInst?data1=myData1&data2=myData2, then query string would be
data1=myData1&data2=myData2

Returns:query string

getReferrer

```
public abstract String getReferrer()
```

Get the referrer data for this connection. The referrer in Wowza Streaming Engine terms is the full url to the Flash movie that connected to the server. Checking referre upon connection is a great way to secure server connections and only allow your Flash movies to connect to the server.

Only Allow Your .swf Files to Connect to Wowza Pro server

```
public class MyModule extends ModuleBase
{
    static public void onConnect(IClient client, RequestFunction function,
        AMFDataList params)
    {
        String referrer = client.getReferrer();

        if (referrer.indexOf("www.mycompany.com") >= 0 &&
            referrer.indexOf("mycoolflash.swf") >= 0)
            client.acceptConnection("valid referrer");
        else
            client.rejectConnection("invalid referrer: "+referrer);
    }
}
```

Returns:referrer

getPageUrl

```
public abstract String getPageUrl()
```

Get the pageUrl for this connection.

Returns:pageUrl for this connection

getUri

```
public abstract String getUri()
```

Get the full URI of the connection string

(continued from last page)

Returns:

URI of connection string

getProtocol

```
public abstract int getProtocol()
```

Get connection protocol (1 = RTMP, 3 = RTMPT)

Returns:

connection protocol (1 = RTMP, 3 = RTMPT)

getServerHostPort

```
public abstract HostPort getServerHostPort()
```

Get the hostPort object for the connection that is servicing this client

Returns:

vHost hostPort servicing request

isSecure

```
public abstract boolean isSecure()
```

Is this connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)

Returns:

is connection protected by either SSL or encryption (RTMPE, RTMPTE, RTMPS)

isSSL

```
public abstract boolean isSSL()
```

Is this connection SSL (RTMPS)

Returns:

is connection (RTMPS)

isEncrypted

```
public abstract boolean isEncrypted()
```

Is this connection encrypted (RTMPE or RTMPTE)

Returns:

is connection encrypted (RTMPE or RTMPTE)

getIdleFrequency

```
public abstract int getIdleFrequency()
```

Get client idle frequency (milliseconds)

Returns:

client idle frequency (milliseconds)

setIdleFrequency

```
public abstract void setIdleFrequency(int idleFrequency)
```

Set client idle frequency (milliseconds)

Parameters:

idleFrequency - client idle frequency (milliseconds)

getSharedObjectReadAccess

```
public abstract String getSharedObjectReadAccess()
```

Get the shared object read access value. see setSharedObjectReadAccess for more information.

Returns:

shared object read access value

setSharedObjectReadAccess

```
public abstract void setSharedObjectReadAccess(String sharedObjectReadAccess)
```

Set the shared object read access value. This list is a semi-colon delimited list of shared objects that this client has access to. By default the value is set to IClient.READ_ACCESS_ALL which indicates this client can read all shared objects. If you want to disable read access to all shared objects set this value to IClient.READ_ACCESS_NONE. If this value is set to anything other than IClient.READ_ACCESS_ALL or IClient.READ_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming shared object read requests. If any item in the list completely matches the shared object name or the start of the shared object name, then access is allowed. For example, if the sharedObjectReadAccess list is set to "testa/testb;testc" then the following requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

sharedObjectReadAccess - shared object read access value

getSharedObjectWriteAccess

```
public abstract String getSharedObjectWriteAccess()
```

Get the shared object write access value. see setSharedObjectWriteAccess for more information.

Returns:

shared object write access value

setSharedObjectWriteAccess

```
public abstract void setSharedObjectWriteAccess(String sharedObjectWriteAccess)
```

(continued from last page)

Set the shared object write access value. This list is a semi-colon delimited list of shared objects that this client has access to. By default the value is set to IClient.WRITE_ACCESS_ALL which indicates this client can write all shared objects. If you want to disable write access to all shared objects set this value to IClient.WRITE_ACCESS_NONE. If this value is set to anything other than IClient.WRITE_ACCESS_ALL or IClient.WRITE_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming shared object write requests. If any item in the list completely matches the shared object name or the start of the shared object name, then access is allowed. For example, if the sharedObjectWriteAccess list is set to "testa/testb;testc" then the following requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

sharedObjectWriteAccess

getStreamVideoSampleAccess

```
public abstract String getStreamVideoSampleAccess()
```

Get the video sample access value. see setVideoStreamAccess for more information.

Returns:

video sample access

setStreamVideoSampleAccess

```
public abstract void setStreamVideoSampleAccess(String videoSampleAccess)
```

Set the stream video sample access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.VIDEOSTREAM_ACCESS_NONE which indicates this client can access no stream data client side. If you want to enable access to all stream names set this value to IClient.VIDEOSTREAM_ACCESS_ALL. If this value is set to anything other than IClient.VIDEOSTREAM_ACCESS_ALL or IClient.VIDEOSTREAM_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamVideoSampleAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

videoSampleAccess

getStreamAudioSampleAccess

```
public abstract String getStreamAudioSampleAccess()
```

Get the audio sample access value. see setVideoStreamAccess for more information.

Returns:

(continued from last page)

audio sample access

setStreamAudioSampleAccess

```
public abstract void setStreamAudioSampleAccess(String audioSampleAccess)
```

Set the stream audio sample access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.AUDIOSTREAM_ACCESS_NONE which indicates this client can access no stream data client side. If you want to enable access to all stream names set this value to IClient.AUDIOSTREAM_ACCESS_ALL. If this value is set to anything other than IClient.AUDIOSTREAM_ACCESS_ALL or IClient.AUDIOSTREAM_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamAudioSampleAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

audioSampleAccess

getStreamReadAccess

```
public abstract String getStreamReadAccess()
```

Get the stream read access value. see setStreamReadAccess for more information.

Returns:

stream read access value

setStreamReadAccess

```
public abstract void setStreamReadAccess(String streamReadAccess)
```

Set the stream object read access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.READ_ACCESS_ALL which indicates this client can play all streams. If you want to disable read access to all stream names set this value to IClient.READ_ACCESS_NONE. If this value is set to anything other than IClient.READ_ACCESS_ALL or IClient.READ_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamReadAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

streamReadAccess - shared object read access value

getStreamWriteAccess

```
public abstract String getStreamWriteAccess()
```

Get the stream write access value. see setStreamWriteAccess for more information.

Returns:

stream write access value

setStreamWriteAccess

```
public abstract void setStreamWriteAccess(String streamWriteAccess)
```

Set the stream object write access value. This list is a semi-colon delimited list of stream names that this client has access to. By default the value is set to IClient.WRITE_ACCESS_ALL which indicates this client can play all streams. If you want to disable write access to all stream names set this value to IClient.WRITE_ACCESS_NONE. If this value is set to anything other than IClient.WRITE_ACCESS_ALL or IClient.WRITE_ACCESS_NONE then each item in the semi-color delimited list is compared against incoming stream play requests. If any item in the list completely matches the stream name or the start of the stream name, then access is allowed. For example, if the streamWriteAccess list is set to "testa/testb;testc" then the following play requests would be granted the following access:

- testc: Granted Access
- testc/test: Granted Access
- testC/test: Denied Access (incorrect case)
- testa/testb: Granted Access
- testa/testb123: Granted Access
- testa/testb/file123: Granted Access
- testa/test: Denied Access (incomplete match)

Values in this list are always case sensitive.

Parameters:

streamWriteAccess - shared object read access value

getWriteListener

```
public abstract ClientWriteListener getWriteListener()
```

Object that tracks write operations

Returns:

Object that tracks write operations

addAcceptConnectionAttribute

```
public abstract void addAcceptConnectionAttribute(String key,  
AMFDataObj item)
```

Add and attribute to the resultObj that gets passed back to the client on successful connection

Parameters:

key - key
item - item to add

addAcceptConnectionAttribute

```
public abstract void addAcceptConnectionAttribute(String key,  
String item)
```

Add and attribute to the resultObj that gets passed back to the client on successful connection

(continued from last page)

Parameters:

key - key
item - item to add

getRepeaterOriginUrl

```
public abstract String getRepeaterOriginUrl()
```

Get the origin URL used by the Live Stream Repeater

Returns:

URL used by the Live Stream Repeater

setRepeaterOriginUrl

```
public abstract void setRepeaterOriginUrl(String repeaterOriginUrl)
```

Set the origin URL used by the Live Stream Repeater

Parameters:

repeaterOriginUrl - URL used by the Live Stream Repeater

getLastValidateTime

```
public abstract long getLastValidateTime()
```

Get last time (millisecond) the connection was validated with a ping

Returns:

last time (millisecond) the connection was validated with a ping

setLastValidateTime

```
public abstract void setLastValidateTime(long lastValidateTime)
```

Set the last time (milliseconds) the connection was validated with ping

Parameters:

lastValidateTime - last time (milliseconds) the connection was validated with ping

getPingTimeout

```
public abstract int getPingTimeout()
```

Get the ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

isLiveRepeater

```
public abstract boolean isLiveRepeater()
```

Returns true if this connection is from the live stream repeater

Returns:

true if this connection is from the live stream repeater

isFlashVersionH264Capable

```
public abstract boolean isFlashVersionH264Capable()
```

Returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)

Returns:

returns true if the connected client is capable of playing H.264 video (Flash player 9.0.45.x or greater)

isFlashVersion90115

```
public abstract boolean isFlashVersion90115()
```

Returns true if the Flash version is equal or greater than 9.0.115.x

Returns:

returns true if the Flash version is equal or greater than 9.0.115.x

isFlashVersion10

```
public abstract boolean isFlashVersion10()
```

Returns true if the Flash version is equal or greater than 10.x.x.x

Returns:

returns true if the Flash version is equal or greater than 10.x.x.x

isFlashMediaLiveEncoder

```
public abstract boolean isFlashMediaLiveEncoder()
```

Returns true if this connection is the Flash Media Live Encoder

Returns:

true if this connection is the Flash Media Live Encoder

testFlashVersion

```
public abstract int testFlashVersion(int[] version)
```

Test to see if the connected client flash version is equal to or greater than a given value. Example: int isGood = testFlashVersion({ 9, 0, 5, 12});

Parameters:

version - array of version values

Returns:

1 if greater, 0 if equal, -1 if less than

isObjectEncodingAMF3

```
public abstract boolean isObjectEncodingAMF3()
```

Is the object encoding for this client AMF3

Returns:

true of the object encoding for this client is AMF3

isObjectEncodingAMF0

```
public abstract boolean isObjectEncodingAMF0()
```

Is the object encoding for this client AMF0

Returns:

true of the object encoding for this client is AMF0

setObjectEncoding

```
public abstract void setObjectEncoding(int objectEncoding)
```

Set the object encoding level

Parameters:

objectEncoding - object encoding level

getObjectEncoding

```
public abstract int getObjectEncoding()
```

Get the object encoding level

Returns:

object encoding level

setAcceptConnectionObj

```
public abstract void setAcceptConnectionObj(AMFData acceptConnectionObj)
```

Call this method from onConnect to add an "application" property to the info object that is passed back to the Flash client in the onStatus handler.

Parameters:

acceptConnectionObj - connection object

setAcceptConnectionDescription

```
public abstract void setAcceptConnectionDescription(String description)
```

Call this method from onConnect to set the info.description property returned in NetConnection onStatus handler

Parameters:

description - description

setAcceptConnectionExObj

```
public abstract void setAcceptConnectionExObj(AMFDataObj acceptConnectionExObj)
```

Call this method from onConnect to set the info.ex property returned in NetConnection onStatus handler

Parameters:

acceptConnectionExObj - exObj AMFData item return in info.ex property of NetConnection onStatus handler

(continued from last page)

getRTPStream

```
public abstract RTPStream getRTPStream()
```

If this client was created due to an RTP connection to the server return the underlying RTPStream object

Returns:

underlying RTPStream object

setAcceptConnection

```
public abstract void setAcceptConnection(boolean acceptConnection)
```

Set the default for accept connection

Parameters:

acceptConnection - default for accept connection

setShutdownClient

```
public abstract void setShutdownClient(boolean shutdownClient)
```

Gracefully and forcefully shutdown a client.

Parameters:

shutdownClient - set to true to gracefully and forcefully shutdown a client

reparentClient

```
public abstract void reparentClient(IVHost vhost)
```

Move a client object to a new vhost. This can only be done right after the handshake process has completed. See IVHostNotify.onVHostClientConnect.

Parameters:

vhost - new vhost

getMaximumSetBufferTime

```
public abstract int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call

getMaximumPendingWriteBytes

```
public abstract int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

(continued from last page)

getLiveStreamPacketizerList

```
public abstract String getLiveStreamPacketizerList()
```

Get the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)

Returns:

comma separated list of LiveStreamPacketizers names

setLiveStreamPacketizerList

```
public abstract void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this client (see conf/LiveStreamPacketizers.xml)

Parameters:

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

getLiveStreamTranscoderList

```
public abstract String getLiveStreamTranscoderList()
```

Get the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)

Returns:

comma separated list of LiveStreamTranscoders names

setLiveStreamTranscoderList

```
public abstract void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set the comma separated list of LiveStreamTranscoders names being used by this client (see conf/LiveStreamTranscoders.xml)

Parameters:

liveStreamTranscoderList - comma separated list of LiveStreamTranscoders names

getElapsedTime

```
public abstract ElapsedTimer getElapsedTime()
```

Get elapsed time client has been connected.

Returns:

elapsed time client has been connected.

getLiveRepeaterCapabilities

```
public abstract int getLiveRepeaterCapabilities()
```

Get the live repeater capabilities of this connection

Returns:

live repeater capabilities of this connection

setLiveRepeaterCapabilities

```
public abstract void setLiveRepeaterCapabilities(int liveRepeaterCapabilities)
```

(continued from last page)

Set the live repeater capabilities of this connection

Parameters:

liveRepeaterCapabilities - live repeater capabilities of this connection

fcSubscribe

```
public abstract void fcSubscribe(String streamName)
```

Subscribe to a live stream (for live stream repeater to start start from edge to origin)

Parameters:

streamName - stream name

fcSubscribe

```
public abstract void fcSubscribe(String streamName,  
    String mediaCasterType)
```

Subscribe to a live stream (use a particular mediaCasterType)

Parameters:

streamName - stream name

mediaCasterType - media caster type name

fcUnSubscribeAll

```
public abstract void fcUnSubscribeAll()
```

UnSubscribe to all streams that this client is current subscribed to

fcUnSubscribe

```
public abstract void fcUnSubscribe(String streamName)
```

UnSubscribe from a stream

Parameters:

streamName - stream name

isValidateFMLEConnections

```
public abstract boolean isValidateFMLEConnections()
```

Returns true if validating FMLE connection (default is false)

Returns:

true if validating FMLE connection

setValidateFMLEConnections

```
public abstract void setValidateFMLEConnections(boolean validateFMLEConnections)
```

Returns true if validating FMLE connection (default is false)

Parameters:

validateFMLEConnections - true if validating FMLE connection

(continued from last page)

setThreadContext

```
public abstract void setThreadContext()
```

Set the thread logging context to this client

getWowzSession

```
public abstract com.wowza.wms.protocol.wowz.WOWZSession getWowzSession()
```

setWowzSession

```
public abstract void setWowzSession(com.wowza.wms.protocol.wowz.WOWZSession  
wowzSession)
```

isSendCloseOnRejectConnection

```
public abstract boolean isSendCloseOnRejectConnection()
```

setSendCloseOnRejectConnection

```
public abstract void setSendCloseOnRejectConnection(boolean  
sendCloseOnRejectConnection)
```

com.wowza.wms.client Interface IClientNotify

public interface **IClientNotify**
extends

IClientNotify: listener interface used by [IApplicationInstance.addClientListener\(IClientNotify\)](#)

See Also:

[IApplicationInstance.addClientListener\(IClientNotify\)](#)

Method Summary

abstract void	onClientAccept (IClient client) Triggered when client connection accepted
abstract void	onClientConnect (IClient client) Triggered when client attempt connection
abstract void	onClientDisconnect (IClient client) Triggered when client disconnected
abstract void	onClientReject (IClient client) Triggered when client connection rejected

Methods

onClientConnect

public abstract void **onClientConnect**([IClient](#) client)

Triggered when client attempt connection

Parameters:

client - client

onClientDisconnect

public abstract void **onClientDisconnect**([IClient](#) client)

Triggered when client disconnected

Parameters:

client - client

onClientAccept

public abstract void **onClientAccept**([IClient](#) client)

Triggered when client connection accepted

Parameters:

client - client

onClientReject

```
public abstract void onClientReject(IClient client)
```

Triggered when client connection rejected

Parameters:

client - client

com.wowza.wms.client Interface IConnectionNotify

public interface **IConnectionNotify**
extends

IConnectionNotify: internal class to manage connection counting

Method Summary

abstract void	onAcceptConnection (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, java.util.Date date, long stamp) Triggered when client connection accepted
abstract void	onDisconnect (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, boolean isValid, java.util.Date date, long stamp) Triggered when client disconnected
abstract void	onRejectConnection (ConnectionCounter connectionCounter, ConnectionHolder connectionHolder, int reason, java.util.Date date, long stamp) Triggered when client connection rejected

Methods

onAcceptConnection

```
public abstract void onAcceptConnection(ConnectionCounter connectionCounter,  
    ConnectionHolder connectionHolder,  
    java.util.Date date,  
    long stamp)
```

Triggered when client connection accepted

Parameters:

connectionCounter
connectionHolder
date
stamp

onRejectConnection

```
public abstract void onRejectConnection(ConnectionCounter connectionCounter,  
    ConnectionHolder connectionHolder,  
    int reason,  
    java.util.Date date,  
    long stamp)
```

Triggered when client connection rejected

Parameters:

connectionCounter
connectionHolder
reason

(continued from last page)

date
stamp

onDisconnect

```
public abstract void onDisconnect(ConnectionCounter connectionCounter,  
    ConnectionHolder connectionHolder,  
    boolean isValid,  
    java.util.Date date,  
    long stamp)
```

Triggered when client disconnected

Parameters:

connectionCounter
connectionHolder
isValid
date
stamp

Package

com.wowza.wms.closedcaption.cea608

com.wowza.wms.closedcaption.cea608

Class ClosedCaptionCEA608Utils

java.lang.Object

└-com.wowza.wms.timedtext.cea608.CEA608Constants

└-[com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils](#)

└-com.wowza.wms.closedcaption.cea608.ClosedCaptionCEA608Utils

public class **ClosedCaptionCEA608Utils**

extends [ClosedCaptionCEA608Utils](#)

Fields inherited from class com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils

[CEA608_EXTENDED_FR_SP_MAP](#), [CEA608_EXTENDED_NA_MAP](#),
[CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP](#), [CEA608_MUSICAL_NOTE](#), [CEA608_SOLID_BLOCK](#), [CHANNEL1](#),
[CHANNEL2](#), [COL_0](#), [COL_12](#), [COL_16](#), [COL_20](#), [COL_24](#), [COL_28](#), [COL_4](#), [COL_5](#), [COL0_BLUE](#), [COL0_CYAN](#),
[COL0_GREEN](#), [COL0_HIBYTE](#), [COL0_LOWBYTE](#), [COL0_MAGENTA](#), [COL0_RED](#), [COL0_WHITE](#), [COL0_YELLOW](#),
[COLN_LOWBYTE](#), [CONTROLCODES_AOF](#), [CONTROLCODES_AON](#), [CONTROLCODES_BAO](#), [CONTROLCODES_BAS](#),
[CONTROLCODES_BBO](#), [CONTROLCODES_BBS](#), [CONTROLCODES_BCO](#), [CONTROLCODES_BCS](#), [CONTROLCODES_BGO](#),
[CONTROLCODES_BGS](#), [CONTROLCODES_BMO](#), [CONTROLCODES_BMS](#), [CONTROLCODES BRO](#), [CONTROLCODES_BRS](#),
[CONTROLCODES_BS](#), [CONTROLCODES_BT](#), [CONTROLCODES_BWO](#), [CONTROLCODES_BWS](#), [CONTROLCODES_BYO](#),
[CONTROLCODES_BYS](#), [CONTROLCODES_CR](#), [CONTROLCODES_DER](#), [CONTROLCODES_EDM](#), [CONTROLCODES_ENM](#),
[CONTROLCODES_EOC](#), [CONTROLCODES_FA](#), [CONTROLCODES_FAU](#), [CONTROLCODES_FON](#), [CONTROLCODES_RCL](#),
[CONTROLCODES_RDC](#), [CONTROLCODES_RTD](#), [CONTROLCODES_RU2](#), [CONTROLCODES_RU3](#), [CONTROLCODES_RU4](#),
[CONTROLCODES_TO1](#), [CONTROLCODES_TO2](#), [CONTROLCODES_TO3](#), [CONTROLCODES_TR](#), [COUNT_COLS](#),
[COUNT_ROWS](#), [DONOTHING_BYTE](#), [DONOTHING_SHORT](#), [FORMAT_COLOR](#), [FORMAT_FLASH](#), [FORMAT_ITALICS](#),
[FORMAT_ITALICS_UNDERLINE](#), [LANG_ASCII](#), [LANG_ASCII_DBL](#), [LANG_GB231280](#), [LANG_KSC56011987](#),
[LANG_PRIV1](#), [LANG_PRIV2](#), [LANG_REG1](#), [MAX_CC_COUNT](#), [ODDPARITY](#), [SEI_PAYLOADTYPE](#), [SEI_STARTCODE](#),
[SEI_USERDATATYPECODE](#), [UTF8_BRITISH_POUND](#), [UTF8_BULLET](#), [UTF8_CENTS](#),
[UTF8_CLOSING_DOUBLE_QUOTE](#), [UTF8_CLOSING_GUILLEMETS](#), [UTF8_CONNECTING_VERTICAL_BAR](#),
[UTF8_COPYRIGHT](#), [UTF8_CURRENCY](#), [UTF8_DASH](#), [UTF8_DEGREE](#), [UTF8_DOUBLEQUOTE](#), [UTF8_EM_DASH](#),
[UTF8_EXCLAMATION](#), [UTF8_GREATERTHAN](#), [UTF8_INVERTED_EXCLAMATION](#), [UTF8_LEFT_SINGLE_QUOTATION](#),
[UTF8_LEFTPAREN](#), [UTF8_LESSTHAN](#), [UTF8_LOWER_A](#), [UTF8_LOWER_A_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_A_WITH_DIAERESIS](#), [UTF8_LOWER_A_WITH_GRAVE](#), [UTF8_LOWER_A_WITH_RING](#),
[UTF8_LOWER_A_WITH_TILDE](#), [UTF8_LOWER_B](#), [UTF8_LOWER_C](#), [UTF8_LOWER_D](#), [UTF8_LOWER_E](#),
[UTF8_LOWER_E_WITH_CIRCUMFLEX](#), [UTF8_LOWER_E_WITH_DIAERESIS](#), [UTF8_LOWER_E_WITH_GRAVE](#),
[UTF8_LOWER_F](#), [UTF8_LOWER_G](#), [UTF8_LOWER_H](#), [UTF8_LOWER_I](#), [UTF8_LOWER_I_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_I_WITH_DIAERESIS](#), [UTF8_LOWER_I_WITH_GRAVE](#), [UTF8_LOWER_J](#), [UTF8_LOWER_K](#),
[UTF8_LOWER_L](#), [UTF8_LOWER_M](#), [UTF8_LOWER_N](#), [UTF8_LOWER_O](#), [UTF8_LOWER_O_WITH_CIRCUMFLEX](#),
[UTF8_LOWER_O_WITH_DIAERESIS](#), [UTF8_LOWER_O_WITH_GRAVE](#), [UTF8_LOWER_O_WITH_STROKE](#),
[UTF8_LOWER_O_WITH_TILDE](#), [UTF8_LOWER_P](#), [UTF8_LOWER_Q](#), [UTF8_LOWER_R](#), [UTF8_LOWER_S](#),
[UTF8_LOWER_T](#), [UTF8_LOWER_U](#), [UTF8_LOWER_U_WITH_CIRCUMFLEX](#), [UTF8_LOWER_U_WITH_DIAERESIS](#),
[UTF8_LOWER_U_WITH_GRAVE](#), [UTF8_LOWER_V](#), [UTF8_LOWER_W](#), [UTF8_LOWER_X](#), [UTF8_LOWER_Y](#),
[UTF8_LOWER_Z](#), [UTF8_MINUSHYPHEN](#), [UTF8_MUSICAL_NOTE](#), [UTF8_NBSP](#), [UTF8_NOTMATCH](#), [UTF8_ONE_HALF](#),
[UTF8_OPENING_DOUBLE_QUOTE](#), [UTF8_OPENING_GUILLEMETS](#), [UTF8_PERIOD](#), [UTF8_PIPE](#), [UTF8_QUESTION](#),
[UTF8_REGISTERED_MARK](#), [UTF8_REVERSE_QUERY](#), [UTF8_RIGHTPAREN](#), [UTF8_SERVICE_MARK](#),
[UTF8_SINGLEQUOTE](#), [UTF8_SPACE](#), [UTF8_TRADEMARK](#), [UTF8_UNDERSCORE](#), [UTF8_UPPER_A](#),
[UTF8_UPPER_A_WITH_ACUTE](#), [UTF8_UPPER_A_WITH_CIRCUMFLEX](#), [UTF8_UPPER_A_WITH_DIAERESIS](#),
[UTF8_UPPER_A_WITH_GRAVE](#), [UTF8_UPPER_A_WITH_RING](#), [UTF8_UPPER_A_WITH_TILDE](#), [UTF8_UPPER_B](#),
[UTF8_UPPER_C](#), [UTF8_UPPER_C_WITH_CEDILLA](#), [UTF8_UPPER_D](#), [UTF8_UPPER_E](#),
[UTF8_UPPER_E_WITH_ACUTE](#), [UTF8_UPPER_E_WITH_CIRCUMFLEX](#), [UTF8_UPPER_E_WITH_DIAERESIS](#),
[UTF8_UPPER_E_WITH_GRAVE](#), [UTF8_UPPER_F](#), [UTF8_UPPER_G](#), [UTF8_UPPER_H](#), [UTF8_UPPER_I](#),
[UTF8_UPPER_I_WITH_CIRCUMFLEX](#), [UTF8_UPPER_I_WITH_DIAERESIS](#), [UTF8_UPPER_I_WITH_GRAVE](#),
[UTF8_UPPER_I_WITH_TILDE](#), [UTF8_UPPER_J](#), [UTF8_UPPER_K](#), [UTF8_UPPER_L](#), [UTF8_UPPER_M](#),
[UTF8_UPPER_N](#), [UTF8_UPPER_O](#), [UTF8_UPPER_O_WITH_ACUTE](#), [UTF8_UPPER_O_WITH_CIRCUMFLEX](#),
[UTF8_UPPER_O_WITH_DIAERESIS](#), [UTF8_UPPER_O_WITH_GRAVE](#), [UTF8_UPPER_O_WITH_STROKE](#),
[UTF8_UPPER_O_WITH_TILDE](#), [UTF8_UPPER_P](#), [UTF8_UPPER_Q](#), [UTF8_UPPER_R](#), [UTF8_UPPER_S](#),
[UTF8_UPPER_T](#), [UTF8_UPPER_U](#), [UTF8_UPPER_U_WITH_ACUTE](#), [UTF8_UPPER_U_WITH_CIRCUMFLEX](#),
[UTF8_UPPER_U_WITH_DIAERESIS](#), [UTF8_UPPER_U_WITH_GRAVE](#), [UTF8_UPPER_V](#), [UTF8_UPPER_W](#),
[UTF8_UPPER_X](#), [UTF8_UPPER_Y](#), [UTF8_UPPER_Z](#), [UTF8_YEN](#), [UTF8MAP](#), [UTF8MAP_INDEX_OFFSET](#)

Fields inherited from class `com.wowza.wms.timedtext.cea608.CEA608Constants`

[CC_CHANNEL_CC1](#), [CC_CHANNEL_CC2](#), [CC_CHANNEL_CC3](#), [CC_CHANNEL_CC4](#), [CC_TYPE_DTVCC_PACKET_DATA](#),
[CC_TYPE_DTVCC_PACKET_START](#), [CC_TYPE_NTSC_FIELD_1](#), [CC_TYPE_NTSC_FIELD_2](#)

Constructor Summary

public [ClosedCaptionCEA608Utils\(\)](#)

Methods inherited from class [com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils](#)

[calcParity](#), [calcParity](#), [cea608CharToCharUTF8](#), [cea608ExtendedCharacterToUTF8](#),
[charUTF8ToCAE608](#), [charUTF8ToCAE608](#), [checkParity](#), [checkParity](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Constructors

ClosedCaptionCEA608Utils

```
public ClosedCaptionCEA608Utils()
```

Package

com.wowza.wms.drm.cenc

com.wowza.wms.drm.cenc Class CencInfo

java.lang.Object

└─com.wowza.wms.drm.cenc.CencInfo

All Implemented Interfaces:

IEncryptionInfo, [IDvrEncryptionInfo](#)

public class **CencInfo**
 extends Object
 implements [IDvrEncryptionInfo](#), IEncryptionInfo

Field Summary

public static final	ALGORITHMID_CBC Value: 2
public static final	ALGORITHMID_CTR Value: 1
public static final	ALGORITHMID_NONE Value: 0
public static final	KEY_ROTATION_TYPE_EXTERNAL Value: 3
public static final	KEY_ROTATION_TYPE_INTERNAL_RANDOM Value: 2
public static final	KEY_ROTATION_TYPE_INTERNAL_STATIC Value: 1
public static final	KEY_ROTATION_TYPE_NONE Value: 0
public static final	PSSH_VERSION_0 Value: 0
public static final	PSSH_VERSION_1 Value: 1

Fields inherited from interface [com.wowza.wms.dvr.IDvrEncryptionInfo](#)

[ENCRYPTION_TYPE_CENC](#), [ENCRYPTION_TYPE_CUPERTINO](#), [ENCRYPTION_TYPE_PLAYREADY](#)

Constructor Summary

public	CencInfo()
--------	----------------------------

Method Summary

void	addDRM (String hashKey, ICencDRMInfo drm) Adds a DRM system info instance to the list of DRM systems associated with the stream encryption.
Object	clone()
static CencInfo	deserialize (byte[] data)
static CencInfo	deserialize (java.nio.ByteBuffer buffer)
static String	formatKID (String KID)
String	generateRandomKID()
int	getAlgorithm()
String	getAlgorithmString()
String	getCencMp4ProtSchemeString()
String	getCencMpegTsProtSchemeString()
java.util.Map	getDRMs()
byte[]	getEncIVBytes()
byte[]	getEncKeyBytes()
java.util.List	getEncKeyBytesList()
String	getEncKeyString()
byte[]	getEncRepeaterBytes()
int	getEncryptionType()
boolean	getIsRotatingKeys()
java.util.Map	getKeyPairs()
int	getKeyRotationType()
String	getKID()

byte[]	getKIDBytes()
byte[]	getKIDBytesSwapped()
java.util.List	getKIDsBytesList()
java.util.List	getKIDsBytesListSwapped()
java.util.List	getKIDsList()
String	getNameSpaceString()
int	getPSSHFlags()
int	getPSSHVersion()
int	getSerializeSize()
boolean	isValid()
static boolean	loadFromKeyFile(IApplicationInstance appInstance, String streamName, CencInfo cencInfo, long chunkId, int contentType, int chunkDurationTarget, String keyFileParamPrefix)
byte[]	serialize()
int	serialize(byte[] buffer, int pos)
void	setAlgorithm(int algorithm) Sets the encryption algorithm to be used.
void	setAppInstance(IApplicationInstance appInstance)
void	setEncKeyBytes(byte[] keyBytes) Sets the encryption content key as a byte buffer.
void	setEncKeyBytesList(java.util.List keyBytesList)
void	setEncRepeaterBytes(byte[] encRepeaterBytes)
void	setIVBytes(byte[] encIVBytes)
void	setKeyPairs(java.util.Map keyPairs)
void	setKeyRotationInterval(int interval)
void	setKeyRotationType(int keyRotationType)
void	setKID(byte[] KIDbytes) Sets the encryption key id.

void	setKID (String KID) Sets the encryption key id.
void	setKIDsList (java.util.List KIDList) Sets the list of encryption key id strings.
void	setPSSHFlags (int psshFlags)
void	setPSSHVersion (int psshVersion)
static byte[]	swapKIDBytes (byte[] KID)
String	toString ()
void	updateKey (long chunkId, int chunkDurationTarget)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.dvr.IDvrEncryptionInfo](#)

[clone](#), [getEncryptionType](#), [getSerializeSize](#), [serialize](#), [serialize](#)

Methods inherited from interface `com.wowza.wms.httpstreamer.util.IEncryptionInfo`

`getEncIVBytes`, `getEncKeyBytes`

Fields

PSSH_VERSION_0

```
public static final int PSSH_VERSION_0
```

Constant value: **0**

PSSH_VERSION_1

```
public static final int PSSH_VERSION_1
```

Constant value: **1**

ALGORITHMID_NONE

```
public static final int ALGORITHMID_NONE
```

Constant value: **0**

(continued from last page)

ALGORITHMID_CTR

```
public static final int ALGORITHMID_CTR
```

Constant value: **1**

ALGORITHMID_CBC

```
public static final int ALGORITHMID_CBC
```

Constant value: **2**

KEY_ROTATION_TYPE_NONE

```
public static final int KEY_ROTATION_TYPE_NONE
```

Constant value: **0**

KEY_ROTATION_TYPE_INTERNAL_STATIC

```
public static final int KEY_ROTATION_TYPE_INTERNAL_STATIC
```

Constant value: **1**

KEY_ROTATION_TYPE_INTERNAL_RANDOM

```
public static final int KEY_ROTATION_TYPE_INTERNAL_RANDOM
```

Constant value: **2**

KEY_ROTATION_TYPE_EXTERNAL

```
public static final int KEY_ROTATION_TYPE_EXTERNAL
```

Constant value: **3**

Constructors

CencInfo

```
public CencInfo()
```

Methods

setEncKeyBytes

```
public void setEncKeyBytes(byte[] keyBytes)
```

Sets the encryption content key as a byte buffer.

Parameters:

(continued from last page)

keyBytes - the encryption content key as a byte buffer

setEncKeyBytesList

```
public void setEncKeyBytesList(java.util.List keyBytesList)
```

setKeyRotationType

```
public void setKeyRotationType(int keyRotationType)
```

getKeyRotationType

```
public int getKeyRotationType()
```

getIsRotatingKeys

```
public boolean getIsRotatingKeys()
```

generateRandomKID

```
public String generateRandomKID()
```

updateKey

```
public void updateKey(long chunkId,  
    int chunkDurationTarget)
```

getKeyPairs

```
public java.util.Map getKeyPairs()
```

setKeyPairs

```
public void setKeyPairs(java.util.Map keyPairs)
```

setKeyRotationInterval

```
public void setKeyRotationInterval(int interval)
```

(continued from last page)

getEncKeyBytes

```
public byte[] getEncKeyBytes()
```

getEncKeyBytesList

```
public java.util.List getEncKeyBytesList()
```

getEncKeyString

```
public String getEncKeyString()
```

setIVBytes

```
public void setIVBytes(byte[] encIVBytes)
```

getEncIVBytes

```
public byte[] getEncIVBytes()
```

swapKIDBytes

```
public static byte[] swapKIDBytes(byte[] KID)
```

setKID

```
public void setKID(String KID)
```

Sets the encryption key id. String must be in uuid form "F6005DCF-7F93-4B8E-85C7-F977740DA059" (big endian)

Parameters:

KID - key id

setKID

```
public void setKID(byte[] KIDbytes)
```

Sets the encryption key id.

Parameters:

KIDbytes - key id byte array

setKIDsList

```
public void setKIDsList(java.util.List KIDList)
```

(continued from last page)

Sets the list of encryption key id strings. Ids must be in uuid form "F6005DCF-7F93-4B8E-85C7-F977740DA059" (big endian)

Parameters:

KIDList - list of key id strings

getKID

```
public String getKID()
```

getKIDBytes

```
public byte[] getKIDBytes()
```

getKIDBytesSwapped

```
public byte[] getKIDBytesSwapped()
```

getKIDsList

```
public java.util.List getKIDsList()
```

getKIDsBytesList

```
public java.util.List getKIDsBytesList()
```

getKIDsBytesListSwapped

```
public java.util.List getKIDsBytesListSwapped()
```

getAlgorithm

```
public int getAlgorithm()
```

getAlgorithmString

```
public String getAlgorithmString()
```

setAlgorithm

```
public void setAlgorithm(int algorithm)
```

Sets the encryption algorithm to be used. Currently only CencInfo.ALGORITHMID_CTR is supported.

(continued from last page)

Parameters:

algorithm - encryption algorithm

isValid

```
public boolean isValid()
```

getNameSpaceString

```
public String getNameSpaceString()
```

getCencMp4ProtSchemeString

```
public String getCencMp4ProtSchemeString()
```

getCencMpegTsProtSchemeString

```
public String getCencMpegTsProtSchemeString()
```

addDRM

```
public void addDRM(String hashKey,  
    ICencDRMInfo drm)
```

Adds a DRM system info instance to the list of DRM systems associated with the stream encryption. The hashKey should be some unique string to identify the DRM System, such as a concatenation of the DRM system's system name and systemId

Example hashKey: "myDRM:12345678-1234-1234-1234-123456789123"

Parameters:

hashKey - hash key

drm - the drm info instance

getDRMs

```
public java.util.Map getDRMs()
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

(continued from last page)

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

formatKID

```
public static String formatKID(String KID)
```

loadFromKeyFile

```
public static boolean loadFromKeyFile(IApplicationInstance appInstance,  
    String streamName,  
    CencInfo cencInfo,  
    long chunkId,  
    int contentType,  
    int chunkDurationTarget,  
    String keyFileParamPrefix)
```

getSerializeSize

```
public int getSerializeSize()
```

serialize

```
public byte[] serialize()
```

serialize

```
public int serialize(byte[] buffer,  
    int pos)
```

deserialize

```
public static CencInfo deserialize(byte[] data)
```

deserialize

```
public static CencInfo deserialize(java.nio.ByteBuffer buffer)
```

(continued from last page)

toString

```
public String toString()
```

getPSSHVersion

```
public int getPSSHVersion()
```

setPSSHVersion

```
public void setPSSHVersion(int psshVersion)
```

getPSSHFlags

```
public int getPSSHFlags()
```

setPSSHFlags

```
public void setPSSHFlags(int psshFlags)
```

getEncryptionType

```
public int getEncryptionType()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.drm.cenc Interface ICencConstants

public interface **ICencConstants**
extends

Field Summary

public static final	CENC_DRM_INFO_TYPE_PLAYREADY Value: 1
public static final	CENC_DRM_INFO_TYPE_VCAS Value: 2
public static final	CENC_DRM_INFO_TYPE_WIDEVINE Value: 3

Fields

CENC_DRM_INFO_TYPE_PLAYREADY

public static final int **CENC_DRM_INFO_TYPE_PLAYREADY**

Constant value: **1**

CENC_DRM_INFO_TYPE_VCAS

public static final int **CENC_DRM_INFO_TYPE_VCAS**

Constant value: **2**

CENC_DRM_INFO_TYPE_WIDEVINE

public static final int **CENC_DRM_INFO_TYPE_WIDEVINE**

Constant value: **3**

com.wowza.wms.drm.cenc Interface ICencDRMInfo

All Subinterfaces:

[ICencDRMInfo2](#)

public interface **ICencDRMInfo**
extends

Interface for Common Encryption (CENC) DRM information classes. DRM system-specific metadata can be attached to a stream's CENC data to indicate that a stream or a media segment within that stream is protected by the particular DRM system, and may be authorized and decrypted by a player client using the provided DRM system metadata. The metadata provided by classes implementing ICencDRMInfo is inserted into a stream's manifest and/or fragment files. CENC DRM support is in accordance with the Common Encryption standard (ISO/IEC 23001-7).

Method Summary

abstract void	<code>deserialize</code> (byte[] data) Sets all internal class data by deserializing the data from the provided byte buffer representation of the class.
abstract byte[]	<code>generateKey</code> (byte[] KID) Generates a 128-bit content key for use in AES encryption.
abstract String	<code>getMPEGDashCPSubElements</code> (boolean keyRotation) Returns a string defining zero or more custom xml elements to be inserted as sub-elements to the ContentProtection element that defines the DRM system in an MPEG-DASH MPD.
abstract String	<code>getNameSpaces</code> () Returns a string defining zero or more custom xml name space strings to be inserted into an xml-formatted manifest, such as an MPEG-DASH MPD.
abstract byte[]	<code>getPsshData</code> (boolean keyRotation) Returns the DRM system-specific binary data associated with the encryption of the media.
abstract String	<code>getSystemId</code> () Returns the DRM system id.
abstract String	<code>getSystemName</code> () Returns a string defining the DRM system name.
abstract String	<code>getURL</code> () Returns the license acquisition URL.
abstract boolean	<code>isComplete</code> () Verifies whether all required class parameters have been set, such as systemId.
abstract byte[]	<code>serialize</code> () Returns a byte buffer with a serialized representation of the class, which could later be reconstituted back into the class via the deserialize method.
abstract void	<code>setPsshData</code> (byte[] psshData) Sets the DRM system-specific binary data associated with the encryption of the media.

abstract void	<code>setSystemId</code> (String systemId) Sets the DRM system id.
abstract void	<code>setURL</code> (String url) Sets the license acquisition URL.
abstract boolean	<code>supportsKeyGeneration</code> () Verifies whether dynamic key generation is supported.
abstract void	<code>updateKeyInfo</code> (byte[] KID, byte[] contentKey) Sets the new key id and a 128-bit content key values for use in AES encryption.

Methods

`setSystemId`

```
public abstract void setSystemId(String systemId)
```

Sets the DRM system id.

Example: "12345678-1234-1234-1234-123456789012"

Parameters:

systemId - DRM system id

`getSystemId`

```
public abstract String getSystemId()
```

Returns the DRM system id.

Returns:

DRM system id string

`getURL`

```
public abstract String getURL()
```

Returns the license acquisition URL.

Returns:

license acquisition URL string

`setURL`

```
public abstract void setURL(String url)
```

Sets the license acquisition URL.

Example: "http://www.mycompany.com/sdrm/rightsmanager.asmx"

Parameters:

url - license acquisition URL string

getNamespaces

```
public abstract String getNamespaces()
```

Returns a string defining zero or more custom xml name space strings to be inserted into an xml-formatted manifest, such as an MPEG-DASH MPD.

Example: `xmlns:sdrma="urn:mycompany:superdrm:a" xmlns:sdrmb="urn:mycompany:superdrm:b"`

Returns:

zero or more xml name space strings separate by spaces, with a "" or 'null' return indicating no custom namespaces

getMPEGDashCPSubElements

```
public abstract String getMPEGDashCPSubElements(boolean keyRotation)
```

Returns a string defining zero or more custom xml elements to be inserted as sub-elements to the ContentProtection element that defines the DRM system in an MPEG-DASH MPD. The element would typically contain Base64-encoded system-specific metadata.

Example: `<sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>`

The resulting ContentProtection element would look something like:

```
<ContentProtection schemeIdUri="urn:uuid:12345678-1234-1234-1234-123456789012"
value="SuperDRM">
  <sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>
</ContentProtection>
```

Parameters:

`keyRotation` - indicates whether key rotation is enabled

Returns:

string defining the MPEG-DASH ContentProtection sub-elements

getSystemName

```
public abstract String getSystemName()
```

Returns a string defining the DRM system name. This string would be used as the value of the **value** attribute in the ContentProtection element that defines the DRM system in an MPEG-DASH MPD.

Example: `"SuperDRM"`

The resulting ContentProtection element in an MPEG-DASH MPD would look something like:

```
<ContentProtection schemeIdUri="urn:uuid:12345678-1234-1234-1234-123456789012"
value="SuperDRM">
  <sdrma:hdr><!-- base64-encoded data --></sdrma:hdr>
</ContentProtection>
```

Returns:

string defining the DRM system name

supportsKeyGeneration

```
public abstract boolean supportsKeyGeneration()
```

Verifies whether dynamic key generation is supported. This capability is only required for dynamic random key rotation support.

(continued from last page)

Returns:

true if dynamic key generation is supported, else false

See Also:

[generateKey\(byte\[\]\)](#)

generateKey

```
public abstract byte[] generateKey(byte[] KID)
```

Generates a 128-bit content key for use in AES encryption. Support for this method is only required when dynamic random key generation & rotation is supported.

Parameters:

KID - key id for which a content key should be generated

Returns:

byte buffer containing the generated content key, or null if not supported

See Also:

[supportsKeyGeneration\(\)](#)

updateKeyInfo

```
public abstract void updateKeyInfo(byte[] KID,  
    byte[] contentKey)
```

Sets the new key id and a 128-bit content key values for use in AES encryption. Support for this method is only required in a Common Encryption scenario where dynamic random key generation & rotation is supported.

Parameters:

KID - new key id in effect

contentKey - new content key in effect

See Also:

[supportsKeyGeneration\(\)](#)

serialize

```
public abstract byte[] serialize()
```

Returns a byte buffer with a serialized representation of the class, which could later be reconstituted back into the class via the deserialize method.

Returns:

byte buffer containing a serialized representation of the class

See Also:

[deserialize\(byte\[\]\)](#)

deserialize

```
public abstract void deserialize(byte[] data)
```

Sets all internal class data by deserializing the data from the provided byte buffer representation of the class.

Parameters:

data - byte buffer containing the serialized representation of the class

(continued from last page)

See Also:[serialize\(\)](#)

getPsshData

```
public abstract byte[] getPsshData(boolean keyRotation)
```

Returns the DRM system-specific binary data associated with the encryption of the media. This data will be inserted into an ISOBMFF pssh box and identified by the associated systemId.

Parameters:

keyRotation - indicates whether key rotation is enabled

Returns:

byte buffer containing the DRM system-specific binary data for the pssh box

setPsshData

```
public abstract void setPsshData(byte[] psshData)
```

Sets the DRM system-specific binary data associated with the encryption of the media. This data will be inserted into an ISOBMFF pssh box and identified by the associated systemId.

Parameters:

psshData - DRM system-specific binary data for the pssh box

isComplete

```
public abstract boolean isComplete()
```

Verifies whether all required class parameters have been set, such as systemId.

Returns:

true if all required class parameters have been set, else false

com.wowza.wms.drm.cenc Interface ICencDRMInfo2

All Superinterfaces:

[ICencDRMInfo](#)

public interface **ICencDRMInfo2**
extends [ICencDRMInfo](#)

Extended interface for Common Encryption (CENC) DRM information classes. Adds extra field not present in ICencDRMInfo.

Method Summary

abstract Object

[clone\(\)](#)

Gets a clone of the DRM Information class.

Methods inherited from interface [com.wowza.wms.drm.cenc.ICencDRMInfo](#)

[deserialize](#), [generateKey](#), [getMPEGDashCPSubElements](#), [getNameSpaces](#), [getPsshData](#),
[getSystemId](#), [getSystemName](#), [getURL](#), [isComplete](#), [serialize](#), [setPsshData](#), [setSystemId](#),
[setURL](#), [supportsKeyGeneration](#), [updateKeyInfo](#)

Methods

clone

public abstract Object **clone()**
throws CloneNotSupportedException

Gets a clone of the DRM Information class. The implementing class should add `@Override` to the method implementation since the default Object clone() method is protected.

com.wowza.wms.drm.cenc Interface ICencEncryptor

public interface **ICencEncryptor**
extends

Method Summary

abstract byte[]	encryptData (byte[] data, int offset, int len)
abstract int	getBlockSize ()
abstract void	init (IEncryptionInfo encInfo)
abstract byte[]	startEncryption ()

Methods

init

public abstract void **init**(IEncryptionInfo encInfo)

startEncryption

public abstract byte[] **startEncryption**()

encryptData

public abstract byte[] **encryptData**(byte[] data,
int offset,
int len)

getBlockSize

public abstract int **getBlockSize**()

Package

com.wowza.wms.dvr

com.wowza.wms.dvr

Class DefaultDvrStreamVersionHandler

java.lang.Object

└─com.wowza.wms.dvr.DefaultDvrStreamVersionHandler

All Implemented Interfaces:

[IDvrStreamVersionHandler](#)

public class **DefaultDvrStreamVersionHandler**
 extends Object
 implements [IDvrStreamVersionHandler](#)

Default stream Version Handler. May be sub-classed

Constructor Summary

public	DefaultDvrStreamVersionHandler()
--------	--

Method Summary

IDvrStreamStore	determineExistingStoreForPlaying (IDvrStreamManager dvrMgr, String baseStreamName)
IDvrStreamStore	determineExistingStoreForRecording (IDvrStreamManager dvrMgr, String baseStreamName)
String	getArchiveStrategy (IDvrStreamManager dvrMgr, String baseStreamName)
boolean	handleArchivedStream (IDvrStreamManager dvrMgr, String baseStreamName, String vStreamName, java.util.SortedSet versions, DvrManifestHolder manifestHolder)
boolean	shouldDeleteArchivedStream (IDvrStreamManager dvrMgr, IDvrStreamStore store)
boolean	shouldLoadArchivedStream (IDvrStreamManager dvrMgr, String baseStreamName, String vStreamName, java.util.SortedSet versions, DvrManifestHolder manifest)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.dvr.IDvrStreamVersionHandler](#)

[determineExistingStoreForPlaying](#), [determineExistingStoreForRecording](#), [getArchiveStrategy](#), [handleArchivedStream](#), [shouldDeleteArchivedStream](#), [shouldLoadArchivedStream](#)

Constructors

DefaultDvrStreamVersionHandler

```
public DefaultDvrStreamVersionHandler()
```

Methods

getArchiveStrategy

```
public String getArchiveStrategy(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

determineExistingStoreForRecording

```
public IDvrStreamStore determineExistingStoreForRecording(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

determineExistingStoreForPlaying

```
public IDvrStreamStore determineExistingStoreForPlaying(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

handleArchivedStream

```
public boolean handleArchivedStream(IDvrStreamManager dvrMgr,  
    String baseStreamName,  
    String vStreamName,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifestHolder)
```

shouldLoadArchivedStream

```
public boolean shouldLoadArchivedStream(IDvrStreamManager dvrMgr,  
    String baseStreamName,  
    String vStreamName,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifest)
```

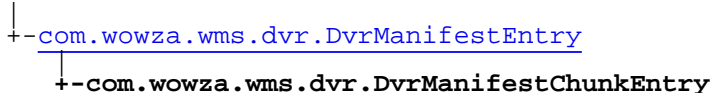
shouldDeleteArchivedStream

```
public boolean shouldDeleteArchivedStream(IDvrStreamManager dvrMgr,  
    IDvrStreamStore store)
```

com.wowza.wms.dvr

Class DvrManifestChunkEntry

java.lang.Object



public class **DvrManifestChunkEntry**
 extends [DvrManifestEntry](#)

Entry in DVR manifest that contains an associated chunk.

Field Summary

protected	artifact
protected	encryptions

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestChunkEntry (int type, long index, long dvrStart, long dvrStop, long packetTime, long utcTime, DvrChunkArtifact artifact) Constructor
public	DvrManifestChunkEntry (int type, long index, long dvrStart, long dvrStop, long packetTime, long utcTime, DvrChunkArtifact artifact, DvrEncryptionInfoHolder encryptions) Constructor

Method Summary

String	getArtifactsTextRepresentation ()
DvrChunkArtifact	getDvrArtifact () Get DVR artifact reference.
DvrEncryptionInfoHolder	getEncryptions () Get associated encryptions.
String	getEncryptionsTextRepresentation ()
String	getManifestRepresentation ()

void	serialize (java.io.DataOutputStream out)
void	setEncryptions (DvrEncryptionInfoHolder encryptions) Set associated encryptions.
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#),
[getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#),
[getType](#), [getUtcStartTime](#), [getUTCStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

artifact

protected com.wowza.wms.dvr.DvrChunkArtifact **artifact**

encryptions

protected com.wowza.wms.dvr.DvrEncryptionInfoHolder **encryptions**

Constructors

DvrManifestChunkEntry

```
public DvrManifestChunkEntry(int type,
                             long index,
                             long dvrStart,
                             long dvrStop,
                             long packetTime,
                             long utcTime,
                             DvrChunkArtifact artifact)
```

Constructor

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
utcTime
packetTime
artifact - reference to the chunk artifact

(continued from last page)

DvrManifestChunkEntry

```
public DvrManifestChunkEntry(int type,
                             long index,
                             long dvrStart,
                             long dvrStop,
                             long packetTime,
                             long utcTime,
                             DvrChunkArtifact artifact,
                             DvrEncryptionInfoHolder encryptions)
```

Constructor

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
utcTime
packetTime
artifact - reference to the chunk artifact
encryptions - associated encryptions

Methods

getDvrArtifact

```
public DvrChunkArtifact getDvrArtifact()
```

Get DVR artifact reference.

Returns:

DVR artifact reference.

setEncryptions

```
public void setEncryptions(DvrEncryptionInfoHolder encryptions)
```

Set associated encryptions.

Parameters:

encryptions - encryptions

getEncryptions

```
public DvrEncryptionInfoHolder getEncryptions()
```

Get associated encryptions.

Returns:

encryptions

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

(continued from last page)

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

getEncryptionsTextRepresentation

```
protected String getEncryptionsTextRepresentation()
```

getArtifactsTextRepresentation

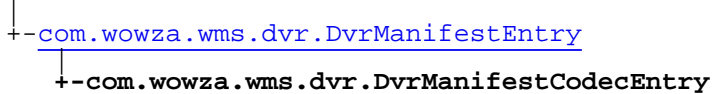
```
protected String getArtifactsTextRepresentation()
```

toString

```
public String toString()
```


com.wowza.wms.dvr Class DvrManifestCodecEntry

java.lang.Object



public class **DvrManifestCodecEntry**
extends [DvrManifestEntry](#)

Entry in DVR manifest that contains codec information

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestCodecEntry (long index, long dvrStart, long packetTime, long utcTime, com.wowza.wms.media.model.MediaCodecInfoAudio audioCodec, com.wowza.wms.media.model.MediaCodecInfoVideo videoCodec) Constructor
--------	---

Method Summary

com.wowza.wms.media.model.MediaCodecInfoAudio	getAudioCodec () Get audio codec information
String	getManifestRepresentation ()
com.wowza.wms.media.model.MediaCodecInfoVideo	getVideoCodec () Get video codec information
void	serialize (java.io.DataOutputStream out)
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#), [getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#), [getType](#), [getUtcStartTime](#), [getUTCStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

DvrManifestCodecEntry

```
public DvrManifestCodecEntry(long index,
                             long dvrStart,
                             long packetTime,
                             long utcTime,
                             com.wowza.wms.media.model.MediaCodecInfoAudio audioCodec,
                             com.wowza.wms.media.model.MediaCodecInfoVideo videoCodec)
```

Constructor

Parameters:

index - manifest index
dvrStart - start time (ms in DVR time scale)
audioCodec - audio codec info
videoCodec - video codec info

Methods

getVideoCodec

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getVideoCodec()
```

Get video codec information

Returns:

video codec information

getAudioCodec

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getAudioCodec()
```

Get audio codec information

Returns:

audio codec information

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

(continued from last page)

toString

```
public String toString()
```

com.wowza.wms.dvr

Class DvrManifestEntry

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntry

Direct Known Subclasses:

[DvrManifestTimeMapEntry](#), [DvrManifestOnMetadataEntry](#), [DvrManifestCodecEntry](#), [DvrManifestChunkEntry](#)

public abstract class **DvrManifestEntry**
extends Object

Abstract class representing entry in DVR manifest.

Field Summary

protected	dvrStart
protected	dvrStop
protected	index
public static final	MANIFESTFILE_KEY_ARTIFACT Value: artifact
public static final	MANIFESTFILE_KEY_AUDIO_CODEC Value: aCodec
public static final	MANIFESTFILE_KEY_CHUNKINDEX Value: chunkIndex
public static final	MANIFESTFILE_KEY_DVRTIME Value: dvrTime
public static final	MANIFESTFILE_KEY_ENCRYPTIONS Value: enc
public static final	MANIFESTFILE_KEY_INDEX Value: index
public static final	MANIFESTFILE_KEY_METADATA Value: metadata
public static final	MANIFESTFILE_KEY_NAME Value: name

public static final	MANIFESTFILE_KEY_PACKETTIME Value: packetTime
public static final	MANIFESTFILE_KEY_SIZE Value: size
public static final	MANIFESTFILE_KEY_START Value: start
public static final	MANIFESTFILE_KEY_STOP Value: stop
public static final	MANIFESTFILE_KEY_TYPE Value: type
public static final	MANIFESTFILE_KEY_UTCTIME Value: utcTime
public static final	MANIFESTFILE_KEY_VIDEO_CODEC Value: vCodec
protected	packetTime
protected static final	SERIALIZE_CURRENT_VERSION Value: 3
protected	type
protected	utcTime

Constructor Summary

public	DvrManifestEntry (int type, long index, long dvrStart, long dvrStop, long packetTime, long utcTime) Constructor Valid types include: IVHost.CONTENTTYPE_AUDIO , IVHost.CONTENTTYPE_VIDEO , IVHost.CONTENTTYPE_DATA , IDvrManifest.ON_METADATA_TYPE , IDvrManifest.CODEC_TYPE , or IDvrManifest.TIME_MAP_TYPE
--------	---

Method Summary

String	encodeBytes (byte[] bytes) Encode string of bytes as Base64.
String	getCommonInitialTextRepString ()
long	getDuration () Get duration
long	getIndex () Get manifest index.

abstract String	<code>getManifestRepresentation()</code> Get textual representation of record for textual manifest usage.
long	<code>getPacketStartTime()</code> Get chunk start timecode in packetTime units.
long	<code>getStartTimecode()</code> Get start timecode.
long	<code>getStopTimecode()</code> Get stop timecode.
int	<code>getType()</code> Get type of manifest record.
long	<code>getUtcStartTime()</code> Get chunk start timecode in UTC units.
long	<code>getUTCStartTime()</code>
byte[]	<code>serialize()</code> Serialize manifest record.
abstract void	<code>serialize(java.io.DataOutputStream out)</code> Serialize manifest record.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MANIFESTFILE_KEY_INDEX

```
public static final java.lang.String MANIFESTFILE_KEY_INDEX
```

Constant value: **index**

MANIFESTFILE_KEY_TYPE

```
public static final java.lang.String MANIFESTFILE_KEY_TYPE
```

Constant value: **type**

MANIFESTFILE_KEY_START

```
public static final java.lang.String MANIFESTFILE_KEY_START
```

Constant value: **start**

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MANIFESTFILE_KEY_STOP

```
public static final java.lang.String MANIFESTFILE_KEY_STOP
```

Constant value: **stop**

MANIFESTFILE_KEY_SIZE

```
public static final java.lang.String MANIFESTFILE_KEY_SIZE
```

Constant value: **size**

MANIFESTFILE_KEY_ARTIFACT

```
public static final java.lang.String MANIFESTFILE_KEY_ARTIFACT
```

Constant value: **artifact**

MANIFESTFILE_KEY_DVRTIME

```
public static final java.lang.String MANIFESTFILE_KEY_DVRTIME
```

Constant value: **dvrTime**

MANIFESTFILE_KEY_CHUNKINDEX

```
public static final java.lang.String MANIFESTFILE_KEY_CHUNKINDEX
```

Constant value: **chunkIndex**

MANIFESTFILE_KEY_PACKETTIME

```
public static final java.lang.String MANIFESTFILE_KEY_PACKETTIME
```

Constant value: **packetTime**

MANIFESTFILE_KEY_UTCTIME

```
public static final java.lang.String MANIFESTFILE_KEY_UTCTIME
```

Constant value: **utcTime**

MANIFESTFILE_KEY_NAME

```
public static final java.lang.String MANIFESTFILE_KEY_NAME
```

Constant value: **name**

MANIFESTFILE_KEY_AUDIO_CODEC

```
public static final java.lang.String MANIFESTFILE_KEY_AUDIO_CODEC
```

(continued from last page)

Constant value: **aCodec**

MANIFESTFILE_KEY_VIDEO_CODEC

```
public static final java.lang.String MANIFESTFILE_KEY_VIDEO_CODEC
```

Constant value: **vCodec**

MANIFESTFILE_KEY_ENCRYPTIONS

```
public static final java.lang.String MANIFESTFILE_KEY_ENCRYPTIONS
```

Constant value: **enc**

MANIFESTFILE_KEY_METADATA

```
public static final java.lang.String MANIFESTFILE_KEY_METADATA
```

Constant value: **metadata**

SERIALIZE_CURRENT_VERSION

```
protected static final byte SERIALIZE_CURRENT_VERSION
```

Constant value: **3**

dvrStart

```
protected long dvrStart
```

dvrStop

```
protected long dvrStop
```

packetTime

```
protected long packetTime
```

utcTime

```
protected long utcTime
```

index

```
protected long index
```

(continued from last page)

type

protected int **type**

Constructors

DvrManifestEntry

```
public DvrManifestEntry(int type,  
                        long index,  
                        long dvrStart,  
                        long dvrStop,  
                        long packetTime,  
                        long utcTime)
```

Constructor Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [IDvrManifest.ON_METADATA_TYPE](#), [IDvrManifest.CODEC_TYPE](#), or [IDvrManifest.TIME_MAP_TYPE](#)

Parameters:

type - type
index - manifest index
dvrStart - start time (ms in DVR time scale)
dvrStop - stop time (ms in DVR time scale)
packetTime
utcTime

Methods

getStartTimecode

```
public long getStartTimecode()
```

Get start timecode. In milliseconds, DVR time base.

Returns:

start time

getStopTimecode

```
public long getStopTimecode()
```

Get stop timecode. In milliseconds, DVR time base.

Returns:

stop time

getPacketStartTime

```
public long getPacketStartTime()
```

Get chunk start timecode in packetTime units. In milliseconds.

Returns:

packet start time

getUtcStartTime

```
public long getUtcStartTime()
```

Get chunk start timecode in UTC units. In milliseconds.

Returns:

UTC start time

getDuration

```
public long getDuration()
```

Get duration

Returns:

duration in ms

getType

```
public int getType()
```

Get type of manifest record. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [IDvrManifest.ON_METADATA_TYPE](#), [IDvrManifest.CODEC_TYPE](#), or [IDvrManifest.TIME_MAP_TYPE](#)

Returns:

type

getIndex

```
public long getIndex()
```

Get manifest index.

Returns:

index

getUTCStartTime

```
public long getUTCStartTime()
```

serialize

```
public abstract void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

Parameters:

out - output stream

serialize

```
public byte[] serialize()
```

Serialize manifest record.

(continued from last page)

Returns:

serialized data

getManifestRepresentation

```
public abstract String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

Returns:

textual representation of entry

getCommonInitialTextRepString

```
protected String getCommonInitialTextRepString()
```

encodeBytes

```
protected String encodeBytes(byte[] bytes)
```

Encode string of bytes as Base64. Provides check for null buffer or empty buffer.

Parameters:

bytes - buffer to encode.

Returns:

Base64 encoding or "".

com.wowza.wms.dvr

Class DvrManifestEntryFactory



```
public class DvrManifestEntryFactory
extends Object
```

Deserialize manifest entry blobs.

Constructor Summary

public	DvrManifestEntryFactory()
--------	---

Method Summary

static DvrManifestEntry	deserialize (byte[] data)
static DvrManifestEntry	deserialize (java.nio.ByteBuffer buffer)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

DvrManifestEntryFactory

```
public DvrManifestEntryFactory()
```

Methods

deserialize

```
public static DvrManifestEntry deserialize(byte[] data)
```

deserialize

```
public static DvrManifestEntry deserialize(java.nio.ByteBuffer buffer)
```

com.wowza.wms.dvr Class DvrManifestEntryRange

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntryRange

public class **DvrManifestEntryRange**
extends Object

Class that compactly represents a range of indices of a certain manifest type.

Constructor Summary

public	DvrManifestEntryRange (int type, long startIndex, long endIndex) Construct a range of a given type.
--------	--

Method Summary

void	deserialize (byte[] data) Deserialize.
long	getEndIndex () Get end index.
IndexRange	getRange () Get index range.
long	getStartIndex () Get start index.
int	getType () Get range type
boolean	isEmpty ()
boolean	isInRange (int index) Is index in range.
byte[]	serialize () Serialize range.
void	setRange (IndexRange range) Set index range.
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Constructors

DvrManifestEntryRange

```
public DvrManifestEntryRange(int type,  
                             long startIndex,  
                             long endIndex)
```

Construct a range of a given type.

Parameters:

type - manifest type

startIndex - initial member of range

endIndex - final member of range

Methods

getType

```
public int getType()
```

Get range type

Returns:

type.

getRange

```
public IndexRange getRange()
```

Get index range.

Returns:

index range

setRange

```
public void setRange(IndexRange range)
```

Set index range.

Parameters:

range - index range.

getStartIndex

```
public long getStartIndex()
```

Get start index.

Returns:

start index (or -1 if undefined)

getEndIndex

```
public long getEndIndex()
```

Get end index.

(continued from last page)

Returns:

end index (or -1 if undefined)

isInRange

```
public boolean isInRange(int index)
```

Is index in range.

Parameters:

index - index in question.

Returns:

true if part of range.

serialize

```
public byte[] serialize()
```

Serialize range.

Returns:

out buffer containing serialized range.

deserialize

```
public void deserialize(byte[] data)
```

Deserialize. Called after no-op constructor.

Parameters:

data - buffer to deserialize.

isEmpty

```
public boolean isEmpty()
```

toString

```
public String toString()
```

com.wowza.wms.dvr Class DvrManifestEntryRangeGroup

java.lang.Object

└─com.wowza.wms.dvr.DvrManifestEntryRangeGroup

```
public class DvrManifestEntryRangeGroup
    extends Object
```

A group of Manifest Ranges. The group may contain ranges of different types.

Field Summary

public	ranges
--------	------------------------

Constructor Summary

public	DvrManifestEntryRangeGroup()
--------	--

Method Summary

void	addRange(DvrManifestEntryRange range) Add an index range to the group.
void	deserialize(byte[] data) Deserialize.
boolean	isEmpty() Determine if group of ranges is empty
boolean	isInRange(int type, int index) Determine if index of given type is contained in the group of ranges.
byte[]	serialize() Serialize range group
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

ranges

```
public java.util.List ranges
```


Constructors

DvrManifestEntryRangeGroup

```
public DvrManifestEntryRangeGroup()
```

Methods

addRange

```
public void addRange(DvrManifestEntryRange range)
```

Add an index range to the group.

Parameters:

range

isInRange

```
public boolean isInRange(int type,  
    int index)
```

Determine if index of given type is contained in the group of ranges.

Parameters:

type - range type

index - index in question

Returns:

true iof in range.

isEmpty

```
public boolean isEmpty()
```

Determine if group of ranges is empty

Returns:

true if empty

serialize

```
public byte[] serialize()
```

Serialize range group

Returns:

bytes representing range group

deserialize

```
public void deserialize(byte[] data)
```

Deserialize. Called after no-op constructor.

(continued from last page)

Parameters:

data - buffer to deserialize.

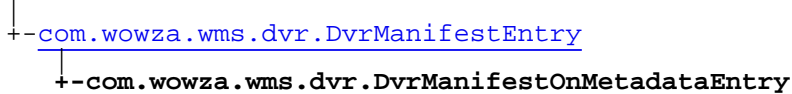
toString

```
public String toString()
```

com.wowza.wms.dvr

Class DvrManifestOnMetadataEntry

java.lang.Object



public class **DvrManifestOnMetadataEntry**
 extends [DvrManifestEntry](#)

Entry in DVR manifest that contains onMetadata information and associated onMetadata chunk.

Field Summary

protected	artifact
protected	data

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestOnMetadataEntry (long index, long start, long packetTime, long utcTime, DvrChunkArtifact artifact, byte[] data) Constructor
--------	---

Method Summary

String	getArtifactsTextRepresentation()
byte[]	getData() Get onMetadata information.
DvrChunkArtifact	getDvrArtifact()
String	getManifestRepresentation()
void	serialize (java.io.DataOutputStream out)
String	toString()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[getBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#), [getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#), [getType](#), [getUtcStartTime](#), [getUTCStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

artifact

protected `com.wowza.wms.dvr.DvrChunkArtifact` **artifact**

data

protected `byte` **data**

Constructors

DvrManifestOnMetadataEntry

```
public DvrManifestOnMetadataEntry(long index,
                                   long start,
                                   long packetTime,
                                   long utcTime,
                                   DvrChunkArtifact artifact,
                                   byte[] data)
```

Constructor

Parameters:

`index` - manifest index
`start` - start time (ms in DVR time scale)
`utcTime`
`packetTime`
`artifact` - reference to the chunk artifact
`data` - buffer of onMetadata information

Methods

getDvrArtifact

```
public DvrChunkArtifact getDvrArtifact()
```

getData

```
public byte[] getData()
```

(continued from last page)

Get onMetadata information.

Returns:

onMetadata information.

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

getArtifactsTextRepresentation

```
protected String getArtifactsTextRepresentation()
```

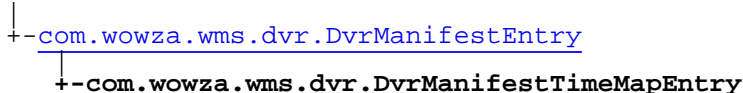
toString

```
public String toString()
```

com.wowza.wms.dvr

Class DvrManifestTimeMapEntry

java.lang.Object



public class **DvrManifestTimeMapEntry**
 extends [DvrManifestEntry](#)

Entry in DVR manifest that contains time map information.

Fields inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[dvrStart](#), [dvrStop](#), [index](#), [MANIFESTFILE_KEY_ARTIFACT](#), [MANIFESTFILE_KEY_AUDIO_CODEC](#), [MANIFESTFILE_KEY_CHUNKINDEX](#), [MANIFESTFILE_KEY_DVRTIME](#), [MANIFESTFILE_KEY_ENCRYPTIONS](#), [MANIFESTFILE_KEY_INDEX](#), [MANIFESTFILE_KEY_METADATA](#), [MANIFESTFILE_KEY_NAME](#), [MANIFESTFILE_KEY_PACKETTIME](#), [MANIFESTFILE_KEY_SIZE](#), [MANIFESTFILE_KEY_START](#), [MANIFESTFILE_KEY_STOP](#), [MANIFESTFILE_KEY_TYPE](#), [MANIFESTFILE_KEY_UTCTIME](#), [MANIFESTFILE_KEY_VIDEO_CODEC](#), [packetTime](#), [SERIALIZE_CURRENT_VERSION](#), [type](#), [utcTime](#)

Constructor Summary

public	DvrManifestTimeMapEntry (long index, long chunkIndex, long start, long packetTime, long utcTime, TimeMapRecord timeMap) Constructor
--------	--

Method Summary

long	getChunkIndex () Get chunk index that correlates to this time mapping
String	getManifestRepresentation ()
TimeMapRecord	getTimeMapping () Get time map record.
void	serialize (java.io.DataOutputStream out)
String	toString ()

Methods inherited from class [com.wowza.wms.dvr.DvrManifestEntry](#)

[encodeBytes](#), [getCommonInitialTextRepString](#), [getDuration](#), [getIndex](#), [getManifestRepresentation](#), [getPacketStartTime](#), [getStartTimecode](#), [getStopTimecode](#), [getType](#), [getUtcStartTime](#), [getUTCStartTime](#), [serialize](#), [serialize](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

DvrManifestTimeMapEntry

```
public DvrManifestTimeMapEntry(long index,
                               long chunkIndex,
                               long start,
                               long packetTime,
                               long utcTime,
                               TimeMapRecord timeMap)
```

Constructor

Parameters:

index - manifest index
start - start time (ms in DVR time scale)
timeMap - time map record

Methods

getTimeMapping

```
public TimeMapRecord getTimeMapping()
```

Get time map record.

Returns:

time map record

getChunkIndex

```
public long getChunkIndex()
```

Get chunk index that correlates to this time mapping

Returns:

chunk index

getManifestRepresentation

```
public String getManifestRepresentation()
```

Get textual representation of record for textual manifest usage.

serialize

```
public void serialize(java.io.DataOutputStream out)
```

Serialize manifest record.

toString

```
public String toString()
```

com.wowza.wms.dvr Interface IDvrApplicationConverterContext

public interface **IDvrApplicationConverterContext**
extends

Method Summary

abstract java.util.Map	<u>getDvrConversions</u> (boolean force) Get a list of all the single conversions that have not expired
abstract IDvrConverterStore	<u>getDvrConverterStore</u> (String dvrStoreName) Gets a nDVR store for conversion If the store name provided is not available the converter has no information about the store.
abstract java.util.Map	<u>getDvrGroups</u> (boolean force) Get a list of all the group conversions that have not expired
abstract java.util.SortedMap	<u>getDvrStoresAvailable</u> () Get a list of all the nDVR stores available for this application instance
abstract void	<u>shutDownAllConverstions</u> () Stops all conversions currently running
abstract IDvrConverter	<u>startConversion</u> (IDvrConverterStore store, DvrConverterControlBase dvrControlObject) Start a single conversion
abstract IDvrConverter	<u>startConversion</u> (String dvrStoreName, long start, long end) Start a single conversion
abstract IDvrConverterGroupStatus	<u>startGroupConversion</u> (DvrConverterControlBase dvrControlObject) Start a group conversion
abstract IDvrConverterGroupStatus	<u>startGroupConversion</u> (java.util.List storeNames, long start, long end) Start a group conversion
abstract IDvrConverter	<u>stopConversion</u> (IDvrConverterStore store) Stop a single conversion
abstract IDvrConverter	<u>stopConversion</u> (String dvrStoreName) Stop a single conversion
abstract IDvrConverterGroupStatus	<u>stopGroupConversion</u> (DvrConverterControlBase dvrControlObject) Stop a group conversion
abstract java.util.List	<u>stopGroupConversion</u> (java.util.List storeNames) Stop a group conversion

Methods

(continued from last page)

shutdownAllConverstions

```
public abstract void shutdownAllConverstions()
```

Stops all conversions currently running

getDvrConverterStore

```
public abstract IDvrConverterStore getDvrConverterStore(String dvrStoreName)
```

Gets a nDVR store for conversion If the store name provided is not available the converter has no information about the store. You can present 'myStream' and if there are multiple stores, such as myStream.0, myStream1 then the highest number store will be used.

Parameters:

dvrStoreName

getDvrGroups

```
public abstract java.util.Map getDvrGroups(boolean force)
```

Get a list of all the group conversions that have not expired

Returns:

Map>Integer,IDvrConverterGroup<

getDvrConversions

```
public abstract java.util.Map getDvrConversions(boolean force)
```

Get a list of all the single conversions that have not expired

Returns:

Map<String,IDvrConverter>

getDvrStoresAvailable

```
public abstract java.util.SortedMap getDvrStoresAvailable()
```

Get a list of all the nDVR stores available for this application instance

Returns:

SortedMap<String, SortedSet<Integer>>

startGroupConversion

```
public abstract IDvrConverterGroupStatus startGroupConversion(DvrConverterControlBase  
dvrControlObject)
```

Start a group conversion

Parameters:

dvrControlObject

Returns:

IDvrConverterGroupStatus

(continued from last page)

startGroupConversion

```
public abstract IDvrConverterGroupStatus startGroupConversion( java.util.List  
storeNames,  
                    long start,  
                    long end)
```

Start a group conversion

Parameters:

storeNames
start
end

Returns:

IDvrConverterGroupStatus

startConversion

```
public abstract IDvrConverter startConversion(String dvrStoreName,  
                    long start,  
                    long end)
```

Start a single conversion

Parameters:

dvrStoreName
start
end

Returns:

IDvrConverter

startConversion

```
public abstract IDvrConverter startConversion(IDvrConverterStore store,  
                    DvrConverterControlBase dvrControlObject)
```

Start a single conversion

Parameters:

store
dvrControlObject

Returns:

IDvrConverter

stopConversion

```
public abstract IDvrConverter stopConversion(String dvrStoreName)
```

Stop a single conversion

Parameters:

dvrStoreName

Returns:

IDvrConverter

stopConversion

```
public abstract IDvrConverter stopConversion(IDvrConverterStore store)
```

Stop a single conversion

Parameters:

store

Returns:

IDvrConverter

stopGroupConversion

```
public abstract IDvrConverterGroupStatus stopGroupConversion(DvrConverterControlBase  
dvrControlObject)
```

Stop a group conversion

Parameters:

dvrControlObject

Returns:

IDvrConverterGroupStatus

stopGroupConversion

```
public abstract java.util.List stopGroupConversion(java.util.List storeNames)
```

Stop a group conversion

Parameters:

storeNames

Returns:

List<DvrConverterStatus>

com.wowza.wms.dvr Interface IDvrChannelManifest

All Subinterfaces:

[IDvrTimeMap](#)

public interface **IDvrChannelManifest**
extends

Method Summary

abstract long	expandEndTime (long dvrEndTime)
abstract long	expandStartTime (long dvrStartTime)
abstract long	getClosestStartTime (long t)
abstract DvrManifestEntry	getFirstEntry ()
abstract long	getFirstIndex ()
abstract java.util.Map	getIndexMap ()
abstract DvrManifestEntry	getLastLiveEntry ()
abstract DvrManifestEntry	getLastRecordedEntry ()
abstract long	getLastRecordedIndex ()
abstract long	getLiveDuration ()
abstract java.util.List	getLiveEntries ()
abstract java.util.List	getLiveEntries (long startTime)
abstract java.util.List	getLiveEntriesWithLimit (long t, int limit)
abstract DvrManifestEntryRange	getLiveRangeEndingBeforeTime (long time)
abstract DvrManifestEntryRange	getLiveRangeEndingBeforeTime (long time, boolean skipFirst)
abstract java.util.List	getLiveTailEntries (long index)
abstract int	getNumberLiveEntries (long dvrStart)

abstract int	<u>getNumberLiveEntries</u> (long dvrStart, long dvrEnd)
abstract int	<u>getNumberRecordedEntries</u> (long dvrStart)
abstract int	<u>getNumberRecordedEntries</u> (long dvrStart, long dvrEnd)
abstract long	<u>getRecordedDuration</u> ()
abstract java.util.List	<u>getRecordedEntries</u> ()
abstract java.util.List	<u>getRecordedEntries</u> (long dvrStartTime)
abstract java.util.List	<u>getRecordedEntries</u> (long dvrStartTime, long dvrEndTime)
abstract java.util.List	<u>getRecordedEntriesInRange</u> (long startIndex, long endIndex)
abstract java.util.List	<u>getRecordedEntriesWithLimit</u> (long t, int limit)
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByIndex</u> (long index)
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByTimeKey</u> (long t)
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryStartingBeforeTime</u> (long t, boolean inclusive)
abstract int	<u>getType</u> ()
abstract boolean	<u>isEmpty</u> ()
abstract void	<u>setManifestDebug</u> (boolean flag)

Methods

isEmpty

public abstract boolean **isEmpty**()

getType

public abstract int **getType**()

getLastRecordedIndex

public abstract long **getLastRecordedIndex**()

(continued from last page)

setManifestDebug

```
public abstract void setManifestDebug(boolean flag)
```

getRecordedEntries

```
public abstract java.util.List getRecordedEntries()
```

getRecordedEntriesInRange

```
public abstract java.util.List getRecordedEntriesInRange(long startIndex,  
long endIndex)
```

getIndexMap

```
public abstract java.util.Map getIndexMap()
```

getRecordedEntryByTimeKey

```
public abstract DvrManifestEntry getRecordedEntryByTimeKey(long t)
```

getRecordedEntryByIndex

```
public abstract DvrManifestEntry getRecordedEntryByIndex(long index)
```

getRecordedEntryStartingBeforeTime

```
public abstract DvrManifestEntry getRecordedEntryStartingBeforeTime(long t,  
boolean inclusive)
```

getRecordedEntries

```
public abstract java.util.List getRecordedEntries(long dvrStartTime)
```

getRecordedEntries

```
public abstract java.util.List getRecordedEntries(long dvrStartTime,  
long dvrEndTime)
```

getRecordedEntriesWithLimit

```
public abstract java.util.List getRecordedEntriesWithLimit(long t,  
    int limit)
```

getRecordedDuration

```
public abstract long getRecordedDuration()
```

getLiveDuration

```
public abstract long getLiveDuration()
```

getClosestStartTime

```
public abstract long getClosestStartTime(long t)
```

getLiveEntries

```
public abstract java.util.List getLiveEntries()
```

getLiveTailEntries

```
public abstract java.util.List getLiveTailEntries(long index)
```

getNumberLiveEntries

```
public abstract int getNumberLiveEntries(long dvrStart)
```

getNumberLiveEntries

```
public abstract int getNumberLiveEntries(long dvrStart,  
    long dvrEnd)
```

getNumberRecordedEntries

```
public abstract int getNumberRecordedEntries(long dvrStart)
```

(continued from last page)

getNumberRecordedEntries

```
public abstract int getNumberRecordedEntries(long dvrStart,  
                                              long dvrEnd)
```

getLiveEntries

```
public abstract java.util.List getLiveEntries(long startTime)
```

getLiveEntriesWithLimit

```
public abstract java.util.List getLiveEntriesWithLimit(long t,  
                                                        int limit)
```

getFirstIndex

```
public abstract long getFirstIndex()
```

getFirstEntry

```
public abstract DvrManifestEntry getFirstEntry()
```

getLastLiveEntry

```
public abstract DvrManifestEntry getLastLiveEntry()
```

getLastRecordedEntry

```
public abstract DvrManifestEntry getLastRecordedEntry()
```

getLiveRangeEndingBeforeTime

```
public abstract DvrManifestEntryRange getLiveRangeEndingBeforeTime(long time)
```

getLiveRangeEndingBeforeTime

```
public abstract DvrManifestEntryRange getLiveRangeEndingBeforeTime(long time,  
                             boolean skipFirst)
```

(continued from last page)

expandStartTime

```
public abstract long expandStartTime(long dvrStartTime)
```

expandEndTime

```
public abstract long expandEndTime(long dvrEndTime)
```

com.wowza.wms.dvr Interface IDvrChunker

public interface **IDvrChunker**
extends

Method Summary

abstract long	calculateChunkGroupTime (long dvrTime)
abstract String	determineChunkGroupIdentifier (long dvrTime)
abstract int	getChunkGroupDuration ()
abstract void	setChunkGroupDuration (int chunkGrouping)

Methods

getChunkGroupDuration

public abstract int **getChunkGroupDuration**()

determineChunkGroupIdentifier

public abstract String **determineChunkGroupIdentifier**(long dvrTime)

calculateChunkGroupTime

public abstract long **calculateChunkGroupTime**(long dvrTime)

setChunkGroupDuration

public abstract void **setChunkGroupDuration**(int chunkGrouping)

com.wowza.wms.dvr Interface IDvrChunkIDHandler

All Subinterfaces:

[IDvrChunkIDHandler2](#)

public interface **IDvrChunkIDHandler**
extends

This interface should no longer be used directly. Please use IDvrChunkIDHandler2

Method Summary

abstract void	<code>init</code> (<code>IDvrManifest</code> dvrManifest) Initialize the chunk ID handler
abstract int	<code>onAssignChunkId</code> (String streamName, DvrPacketHolder vPackets, DvrPacketHolder aPackets) This returns the chunkID to use for the nDVR chunk to be stored.
abstract void	<code>setAudioManifest</code> (DvrChannelManifest audioManifest) Set the audio manifest for this handler
abstract void	<code>setCodecManifest</code> (DvrChannelManifest codecManifest) Set the codec manifest for this handler
abstract void	<code>setDataManifest</code> (DvrChannelManifest dataManifest) Set the data manifest for this handler
abstract void	<code>setMetadataManifest</code> (DvrChannelManifest onMetaManifest) Set the meta data manifest for this handler
abstract void	<code>setVideoManifest</code> (DvrChannelManifest videoManifest) Set the video manifest for this handler

Methods

init

public abstract void **init**([`IDvrManifest`](#) dvrManifest)

Initialize the chunk ID handler

Parameters:

dvrManifest

setVideoManifest

public abstract void **setVideoManifest**(DvrChannelManifest videoManifest)

Set the video manifest for this handler

Parameters:

(continued from last page)

videoManifest

setAudioManifest

```
public abstract void setAudioManifest(DvrChannelManifest audioManifest)
```

Set the audio manifest for this handler

Parameters:

audioManifest

setDataManifest

```
public abstract void setDataManifest(DvrChannelManifest dataManifest)
```

Set the data manifest for this handler

Parameters:

dataManifest

setMetadataManifest

```
public abstract void setMetadataManifest(DvrChannelManifest onMetaManifest)
```

Set the meta data manifest for this handler

Parameters:

onMetaManifest

setCodecManifest

```
public abstract void setCodecManifest(DvrChannelManifest codecManifest)
```

Set the codec manifest for this handler

Parameters:

codecManifest

onAssignChunkId

```
public abstract int onAssignChunkId(String streamName,  
    DvrPacketHolder vPackets,  
    DvrPacketHolder aPackets)
```

This returns the chunkID to use for the nDVR chunk to be stored. It MUST return a consist number based on the state of the manifests/packets provided, i.e. return the same answer if no changes are made between calls.

Parameters:

streamName
vPackets
aPackets

Returns:

com.wowza.wms.dvr Interface IDvrChunkIDHandler2

All Superinterfaces:

[IDvrChunkIDHandler](#)

public interface **IDvrChunkIDHandler2**

extends [IDvrChunkIDHandler](#)

Method Summary

abstract int	getLastAssignedChunkId()
abstract int	onAssignChunkId (String streamName, AMFPacket dataPacket)
abstract void	setDVRStore (IDvrStreamStore dvrStore) Set the DVR Store for this ID Handler

Methods inherited from interface [com.wowza.wms.dvr.IDvrChunkIDHandler](#)

[init](#), [onAssignChunkId](#), [setAudioManifest](#), [setCodecManifest](#), [setDataManifest](#),
[setMetadataManifest](#), [setVideoManifest](#)

Methods

setDVRStore

public abstract void **setDVRStore**([IDvrStreamStore](#) dvrStore)

Set the DVR Store for this ID Handler

Parameters:

dvrStore

onAssignChunkId

public abstract int **onAssignChunkId**(String streamName,
[AMFPacket](#) dataPacket)

getLastAssignedChunkId

public abstract int **getLastAssignedChunkId**()

com.wowza.wms.dvr Interface IDvrChunkIDHandler3

public interface **IDvrChunkIDHandler3**
extends

Method Summary

abstract long	getLastAssignedChunkId()
abstract void	init(IDvrManifest dvrManifest) Initialize the chunk ID handler
abstract long	onAssignChunkId (String streamName, AMFPacket dataPacket)
abstract long	onAssignChunkId (String streamName, DvrPacketHolder vPackets, DvrPacketHolder aPackets) This returns the chunkID to use for the nDVR chunk to be stored.
abstract void	setAudioManifest (DvrChannelManifest audioManifest) Set the audio manifest for this handler
abstract void	setCodecManifest (DvrChannelManifest codecManifest) Set the codec manifest for this handler
abstract void	setDataManifest (DvrChannelManifest dataManifest) Set the data manifest for this handler
abstract void	setDVRStore (IDvrStreamStore dvrStore)
abstract void	setLastSkippedChunkId (long chunkId)
abstract void	setMetadataManifest (DvrChannelManifest onMetaManifest) Set the meta data manifest for this handler
abstract void	setVideoManifest (DvrChannelManifest videoManifest) Set the video manifest for this handler

Methods

init

public abstract void **init**([IDvrManifest](#) dvrManifest)

Initialize the chunk ID handler

Parameters:

dvrManifest

(continued from last page)

setVideoManifest

```
public abstract void setVideoManifest(DvrChannelManifest videoManifest)
```

Set the video manifest for this handler

Parameters:

videoManifest

setAudioManifest

```
public abstract void setAudioManifest(DvrChannelManifest audioManifest)
```

Set the audio manifest for this handler

Parameters:

audioManifest

setDataManifest

```
public abstract void setDataManifest(DvrChannelManifest dataManifest)
```

Set the data manifest for this handler

Parameters:

dataManifest

setMetadataManifest

```
public abstract void setMetadataManifest(DvrChannelManifest onMetaManifest)
```

Set the meta data manifest for this handler

Parameters:

onMetaManifest

setCodecManifest

```
public abstract void setCodecManifest(DvrChannelManifest codecManifest)
```

Set the codec manifest for this handler

Parameters:

codecManifest

onAssignChunkId

```
public abstract long onAssignChunkId(String streamName,  
    DvrPacketHolder vPackets,  
    DvrPacketHolder aPackets)
```

This returns the chunkID to use for the nDVR chunk to be stored. It MUST return a consist number based on the state of the manifests/packets provided, i.e. return the same answer if no changes are made between calls.

Parameters:

streamName

vPackets

aPackets

(continued from last page)

Returns:

setDVRStore

```
public abstract void setDVRStore(IDvrStreamStore dvrStore)
```

onAssignChunkId

```
public abstract long onAssignChunkId(String streamName,  
    AMFPacket dataPacket)
```

getLastAssignedChunkId

```
public abstract long getLastAssignedChunkId()
```

setLastSkippedChunkId

```
public abstract void setLastSkippedChunkId(long chunkId)
```


com.wowza.wms.dvr Interface IDvrChunkMemoryCache

All Superinterfaces:

[IDvrRawChunkProvider](#)

public interface **IDvrChunkMemoryCache**

extends [IDvrRawChunkProvider](#)

Interface for managing in-memory cache of chunks. The implementor is responsible for implementing the desired algorithm for keeping DVR chunks in memory.

Method Summary

abstract void	addToCache (DvrManifestChunkEntry entry, DvrChunk chunk) Provide in-memory cache the opportunity to add the DVR chunk to its cache.
abstract void	addToCache (int type, long index, DvrChunk chunk) Provide in-memory cache the opportunity to add the DVR chunk to its cache.
abstract void	closeCache ()
abstract void	init (IDvrStreamStore store) Called to initialize the in-memory cache.
abstract DvrChunk	retrieveRawChunk (DvrManifestChunkEntry entry)
abstract DvrChunk	retrieveRawChunk (int type, long index)
abstract void	setContext (String context) Set the full context for this cache

Methods inherited from interface [com.wowza.wms.dvr.IDvrRawChunkProvider](#)

[retrieveRawChunk](#)

Methods

init

public abstract void **init**([IDvrStreamStore](#) store)

Called to initialize the in-memory cache.

Parameters:

store - The DVR stream store associated with this cache.

setContext

public abstract void **setContext**(String context)

(continued from last page)

Set the full context for this cache

Parameters:

context

retrieveRawChunk

```
public abstract DvrChunk retrieveRawChunk(DvrManifestChunkEntry entry)
```

retrieveRawChunk

```
public abstract DvrChunk retrieveRawChunk(int type,  
long index)
```

closeCache

```
public abstract void closeCache()
```

addToCache

```
public abstract void addToCache(DvrManifestChunkEntry entry,  
DvrChunk chunk)
```

Provide in-memory cache the opportunity to add the DVR chunk to its cache. The implementation may choose to cache the chunk or ignore it.

Parameters:

entry - DVR manifest entry
chunk - the chunk.

addToCache

```
public abstract void addToCache(int type,  
long index,  
DvrChunk chunk)
```

Provide in-memory cache the opportunity to add the DVR chunk to its cache. The implementation may choose to cache the chunk or ignore it.

Parameters:

int - type
int - index
chunk - the chunk.

com.wowza.wms.dvr Interface IDvrChunkUtcDelegate

public interface **IDvrChunkUtcDelegate**
extends

Delegate class for determining utc time of DVR chunk.

Method Summary

abstract long	determineUtcTime (long currentUtc, long aChunkStartUtc, long aFirstPacketUtc, AMFPacket aFirstPacket, long vChunkStartUtc, long vFirstPacketUtc, AMFPacket vFirstPacket)
abstract void	init (IDvrStreamStore store)

Methods

init

public abstract void **init**([IDvrStreamStore](#) store)

determineUtcTime

```
public abstract long determineUtcTime(long currentUtc,  
    long aChunkStartUtc,  
    long aFirstPacketUtc,  
    AMFPacket aFirstPacket,  
    long vChunkStartUtc,  
    long vFirstPacketUtc,  
    AMFPacket vFirstPacket)
```

com.wowza.wms.dvr Interface IDvrConstants

All Superinterfaces:

[IDvrPrivateConstants](#)

public interface **IDvrConstants**

extends [IDvrPrivateConstants](#)

Nested Class Summary

class	IDvrConstants.DvrTimeScale IDvrConstants.DvrTimeScale
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Field Summary

public static final	ARCHIVE_STRATEGY_APPEND Value: append
public static final	ARCHIVE_STRATEGY_DELETE Value: delete
public static final	ARCHIVE_STRATEGY_VERSION Value: version
public static final	DEFAULT_CHUNK_MEMORY_CACHESIZE Default value for DVR Property "chunkMemoryCacheSize". Value: 10
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG Default value for DVR Property "chunkReadMemoryCacheDebug". Value: false
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE Default value for DVR Property "chunkReadMemoryCacheEnable". Value: false
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE Default value for DVR Property "chunkReadMemoryCacheExpireAge". Value: 600000
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY Default value for DVR Property "chunkReadMemoryCacheGCExpireFrequency". Value: 10000
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT Default value for DVR Property "chunkReadMemoryCacheMaxExpireCount". Value: 20

public static final	DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE Default value for DVR Property "chunkReadMemoryCacheStore". Value: *
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_AUDIO Default value for DVR Property "chunkReadMemoryCacheAudioSize". Value: 5242880
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_DATA Default value for DVR Property "chunkReadMemoryCacheDataSize". Value: 1048576
public static final	DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_VIDEO Default value for DVR Property "chunkReadMemoryCacheVideoSize". Value: 41943040
public static final	DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD Default value for property "dvrCupertinoPlaylistGzipThreshold" #see PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD Value: 4000
public static final	DEFAULT_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED Default value for property "dvrCupertinoPlaylistGzipThreshold" #see PROPERTY_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED Value: false
public static final	DEFAULT_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD Default value for property "dvrMPEGDashPlaylistGzipThreshold" #see PROPERTY_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD Value: 4000
public static final	DEFAULT_PLAYLIST_REQUEST_DELEGATE Value: com.wowza.wms.dvr.impl.DvrStartDurationPlaylistRequestDelegate
public static final	DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA Default value for DVR Property "dvrAllowableAVPacketDelta". Value: 2000
public static final	DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA Default value for DVR Property "dvrAppendDiscontinuityDelta". Value: 0
public static final	DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION Default value for DVR Property "dvrAudioOnlyChunkTargetDuration". Value: 2000
public static final	DEFAULT_PROPERTY_BREAK_ON_PTS Default value for DVR Property "dvrChunkBreakOnPTS". Value: true
public static final	DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST Default value for DVR Property "dvrChunkBreakOnPTSManifest". Value: false

public static final	DEFAULT_PROPERTY_CHUNK_CACHE_CLASS Default value for DVR Property "dvrChunkMemoryCacheClass". Value: com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache
public static final	DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM Default value for DVR Property "dvrChunkDurationMinimum". Value: 1500
public static final	DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS Default value for DVR Property "dvrChunkGroupingSeconds". Value: 600
public static final	DEFAULT_PROPERTY_CHUNK_ID_CLASS Internal DO NOT USE Value: com.wowza.wms.dvr.DvrChunkIDHandler3
public static final	DEFAULT_PROPERTY_CHUNK_READ_CACHE_CLASS Default value for DVR Property "dvrChunkMemoryReadCacheClass". Value: com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryReadCache
public static final	DEFAULT_PROPERTY_CHUNK_READER_CLASS Default value for DVR Property "dvrChunkReaderClass". Value: com.wowza.wms.dvr.impl.io.DvrFileChunkReader
public static final	DEFAULT_PROPERTY_CHUNK_WRITER_CLASS Default value for DVR Property "dvrChunkWriterClass". Value: com.wowza.wms.dvr.impl.io.DvrFileChunkWriter
public static final	DEFAULT_PROPERTY_DEBUG_CHANNEL_MANIFEST Value: false
public static final	DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED Default value for DVR Property "dvrMaxInvalidChunksLogged". Value: 10
public static final	DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS Default value for DVR Property "dvrDebugMaximumRawPackets". Value: 200
public static final	DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED Default value for DVR Property "dvrMaxValidChunksLogged". Value: 10
public static final	DEFAULT_PROPERTY_DEBUG_RAW_PACKETS Default value for DVR Property "dvrDebugRawPackets". Value: false
public static final	DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG Default value for DVR Property "dvrMaxChunkLogCount". Value: 10
public static final	DEFAULT_PROPERTY_FILE_SYSTEM_CLASS Default value for DVR Property "dvrFileSystemClass". Value: com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem

public static final	DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS Default value for DVR Property "dvrManifestPersisterClass". Value: com.wowza.wms.dvr.impl.DvrManifestPersister
public static final	DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG Default value for DVR Property "dvrMaxRecountDurationLogCount". Value: 30
public static final	DEFAULT_PROPERTY_MAX_RECORDING_LENGTH Default value for DVR Property "dvrMaximumRecordingLength". Value: 108000
public static final	DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA Default value for DVR Property "dvrMbrAlternateMatchDelta". Value: 1000
public static final	DEFAULT_PROPERTY_MBR_CLASS_ALIGNER Internal DO NOT USE Value:
public static final	DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize". Value: 100
public static final	DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize". Value: 750
public static final	DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS Default value for DVR Property "dvrMediaCacheReaderClass". Value: com.wowza.wms.mediacache.impl.MediaCacheRandomAccessReader
public static final	DEFAULT_PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP Value: true
public static final	DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY Value: 200
public static final	DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME Default value for DVR Property "dvrResetTimePacketDelta". Value: 200
public static final	DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM Default value for DVR Property "dvrChunkDurationMinimum". Value: 5000
public static final	DEFAULT_PROPERTY_PACKET_SORT_TIME Default value for DVR Property "dvrPacketSortTime". Value: 0
public static final	DEFAULT_PROPERTY_PACKET_SORTER_CLASS Default value for DVR Property "dvrPacketSorterClass". Value: com.wowza.wms.stream.live.LiveReceiverPacketSorter2

public static final	DEFAULT_PROPERTY_PURGE_DEFAULT Internal DO NOT USE Value: dvrChunkPurgeDefault
public static final	DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS Default value for DVR Property "dvrRecordingsLoaderClass". Value: com.wowza.wms.dvr.DvrRecordingsLoader
public static final	DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION Value: 4000
public static final	DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE Default value for property "dvrSanJosePlaylistAbstDurationTolerance" #see PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE Value: 4
public static final	DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE Default value for property "dvrSanJosePlaylistAbstTimescale" #see PROPERTY_SANJOSE_ABST_TIMESCALE Value: 1000
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION Value: 2
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION Value: 1
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK Value: true
public static final	DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION Value: true
public static final	DEFAULT_PROPERTY_STORAGE_DIRECTORY Default value for DVR Property "dvrStorageDirectory". Value: \${com.wowza.wms.context.VHostConfigHome}/dvr
public static final	DEFAULT_PROPERTY_TEXT_READER_CLASS Default value for DVR Property "dvrTextReaderClass". Value: com.wowza.wms.dvr.impl.io.DvrTextFileReader
public static final	DEFAULT_PROPERTY_TEXT_WRITER_CLASS Default value for DVR Property "dvrTextWriterClass". Value: com.wowza.wms.dvr.impl.io.DvrTextFileWriter

public static final	<u>DVR_DEFAULT_FILESTORE</u> The default DVR store ID: "dvrfilestorage". Value: dvrfilestorage
public static final	<u>DVR_DEFAULT_RECORDER_ID</u> The default DVR recorder ID: "dvrrecorder". Value: dvrrecorder
public static final	<u>DVR_REPEATER_PACKETIZER_ID</u> The default DVR streaming repeater ID: "dvrstreamingrepeater". Value: dvrstreamingrepeater
public static final	<u>DVR_STREAMING_PACKETIZER_ID</u> The default DVR streaming packetizer ID: "dvrstreamingpacketizer". Value: dvrstreamingpacketizer
public static final	<u>DVR_WINDOW_DURATION_UNLIMITED</u> Value: 0
public static final	<u>MEDIACACHE_PREFIX</u> The MediaCache prefix for dvr repeater Value: dvrorigin
public static final	<u>MIMETYPE_VIDEO_MP4</u> Constant for mime type "video/mp4" Value: video/mp4
public static final	<u>PROPERTY_ALLOWABLE_AV_PACKET_DELTA</u> DVR Property "dvrAllowableAVPacketDelta": for specifying how much audio and video packets may diverge before triggering an error. Value: dvrAllowableAVPacketDelta
public static final	<u>PROPERTY_APPEND_DISCONTINUITY_DELTA</u> DVR Property "dvrAppendDiscontinuityDelta": for specifying how many milliseconds of empty space are put between individual recordings that when in append mode. Value: dvrAppendDiscontinuityDelta
public static final	<u>PROPERTY_ARCHIVE_STRATEGY</u> DVR Property "dvrArchiveStrategy": for specifying the DVR archive strategy. Value: dvrArchiveStrategy
public static final	<u>PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION</u> DVR Property "dvrAudioOnlyChunkTargetDuration": for target duration when recording audio-only. Value: dvrAudioOnlyChunkTargetDuration
public static final	<u>PROPERTY_BREAK_ON_PTS</u> DVR Property "dvrChunkBreakOnPTS": for specifying that DVR should be broken on PTS. Value: dvrChunkBreakOnPTS
public static final	<u>PROPERTY_BREAK_ON_PTS_MANIFEST</u> DVR Property "dvrChunkBreakOnPTSManifest": for specifying that DVR manifest should use the PTS when dvrChunkBreakOnPTS is enabled. Value: dvrChunkBreakOnPTSManifest

public static final	PROPERTY_CHUNK_CACHE_CLASS DVR Property "dvrChunkMemoryCacheClass": for controlling the class responsible for caching DVR chunks in memory. Value: dvrChunkMemoryCacheClass
public static final	PROPERTY_CHUNK_DURATION_MINIMUM DVR Property "dvrChunkDurationMinimum": for minimum chunk duration, in milliseconds. Value: dvrChunkDurationMinimum
public static final	PROPERTY_CHUNK_GROUPING_SECONDS DVR Property "dvrChunkGroupingSeconds": for determining how many seconds of DVR are stored in each stores sub-folder. Value: dvrChunkGroupingSeconds
public static final	PROPERTY_CHUNK_ID_CLASS Value: dvrChunkIDHandlerClass
public static final	PROPERTY_CHUNK_MBR_ALIGNER Internal DO NOT USE Value: dvrChunkMbrCustomAligner
public static final	PROPERTY_CHUNK_MEMORY_CACHESIZE DVR Property "chunkMemoryCacheSize": used by DvrDefaultChunkMemoryCache to set number of chunks stored in DVR in-memory cache. Value: chunkMemoryCacheSize
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_DEBUG DVR Property "chunkReadMemoryCacheDebug": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache. Value: chunkReadMemoryCacheDebug
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_ENABLE DVR Property "chunkReadMemoryCacheEnable": used by DvrDefaultChunkMemoryReadCache to enable read caching. Value: chunkReadMemoryCacheEnable
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE DVR Property "chunkReadMemoryCacheExpireAge": used by DvrDefaultChunkMemoryReadCache to set when a chunk should automatically be purged from the cache. Value: chunkReadMemoryCacheExpireAge
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY DVR Property "chunkReadMemoryCacheGCExpireFrequency": used by DvrDefaultChunkMemoryReadCache to set the how often an expire cycle runs. Value: chunkReadMemoryCacheGCExpireFrequency
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT DVR Property "chunkReadMemoryCacheMaxExpireCount": used by DvrDefaultChunkMemoryReadCache to set the amount of chunks to expire in each cycle. Value: chunkReadMemoryCacheMaxExpireCount
public static final	PROPERTY_CHUNK_MEMORY_READ_CACHE_STORE DVR Property "chunkReadMemoryCacheStore": used by DvrDefaultChunkMemoryReadCache to enable caching for stores. Value: chunkReadMemoryCacheStore

public static final	<u>PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_AUDIO</u> DVR Property "chunkReadMemoryCacheAudioSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache. Value: chunkReadMemoryCacheAudioSize
public static final	<u>PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_DATA</u> DVR Property "chunkReadMemoryCacheDataSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache. Value: chunkReadMemoryCacheDataSize
public static final	<u>PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_VIDEO</u> DVR Property "chunkReadMemoryCacheVideoSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache. Value: chunkReadMemoryCacheVideoSize
public static final	<u>PROPERTY_CHUNK_READ_CACHE_CLASS</u> DVR Property "dvrChunkMemoryReadCacheClass": for controlling the class responsible for caching DVR chunks in memory. Value: dvrChunkMemoryReadCacheClass
public static final	<u>PROPERTY_CHUNK_READER_CLASS</u> DVR Property "dvrChunkReaderClass": for controlling the class responsible for reading DVR Chunks. Value: dvrChunkReaderClass
public static final	<u>PROPERTY_CHUNK_WRITER_CLASS</u> DVR Property "dvrChunkWriterClass": for controlling the class responsible for writing DVR Chunks. Value: dvrChunkWriterClass
public static final	<u>PROPERTY_CUPERTINO_ENABLE_DATE_EVENTS</u> HTTP Streamer Property "dvrCupertinoEnableDataEvents": used to stream ID3 data for HLS DVR streams Value: dvrCupertinoEnableDataEvents
public static final	<u>PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER</u> DVR Property "dvrCupertinoOnChunkStartResetCounter": when a new chunk starts, reset internal tsPacketizer counters Value: dvrCupertinoOnChunkStartResetCounter
public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING</u> DVR Property "dvrCupertinoPlaylistAllowCaching": used to force Cupertino playlist to set #EXT-X-ALLOW-CACHE: value Value: dvrCupertinoPlaylistAllowCaching
public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES</u> HTTP Streamer Property "dvrCupertinoPlaylistDiscontinuityAtAlternates": used to insert discontinuity tags into HLS stream if DVR store switches mid-playlist. Value: dvrCupertinoPlaylistDiscontinuityAtAlternates
public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE</u> DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live. Value: dvrCupertinoPlaylistForceLive

public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE</u> DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live versus non-live. Value: dvrCupertinoPlaylistForceNonLive
public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD</u> DVR Property "dvrCupertinoPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted, the playlist will be compressed Value: dvrCupertinoPlaylistGzipThreshold
public static final	<u>PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP</u> DVR Property "dvrCupertinoPlaylistUseGzip": used to force Cupertino playlist to use gzip if it is accepted Value: dvrCupertinoPlaylistUseGzip
public static final	<u>PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS</u> DVR Property "dvrCupertinoPutEndTagBeforeChunks": if set to true, puts the EXT-X-ENDLIST before the DVR chunks. Value: dvrCupertinoPutEndTagBeforeChunks
public static final	<u>PROPERTY_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED</u> DVR Property "dvrCupertinoPutEndTagIfPlaylistDurationReached": if set to true, puts the EXT-X-ENDLIST tag after DVR chunks only when a DVR playlist's duration has been specified in a request, and it's calculated end time has been reached for streams that are still recording. Value: dvrCupertinoPutEndTagIfPlaylistDurationReached
public static final	<u>PROPERTY_DEBUG_CHANNEL_MANIFEST</u> DVR Property "dvrDebugChannelManifest": for turning on logging of DVR channel manifests. Value: dvrDebugChannelManifest
public static final	<u>PROPERTY_DEBUG_CHUNK_RETRIEVALS</u> DVR Property "dvrDebugChunkRetrievals": for logging each chunk retrieval Value: dvrDebugChunkRetrievals
public static final	<u>PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER</u> HTTP Streamer Property "dvrDebugCupertinoPlayerAdapter": for turning on DVR Player Cupertino Adapter debug logging. Value: dvrDebugCupertinoPlayerAdapter
public static final	<u>PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS</u> DVR Property "dvrDebugFailedChunkRetrievals": for logging info about each failed chunk retrieval Value: dvrDebugFailedChunkRetrievals
public static final	<u>PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS</u> DVR Property "dvrLogInvalidChunkDetails": to control detailed logging information of DVR invalid chunks Value: dvrLogInvalidChunkDetails
public static final	<u>PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER</u> DVR Property "dvrLogInvalidChunkMatcher": for matching stream names that will log chunk packets Value: dvrLogInvalidChunkMatcher

public static final	<u>PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS</u> DVR Property "dvrLogValidChunkDetails": to control detailed logging information of DVR valid chunks Value: dvrLogValidChunkDetails
public static final	<u>PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER</u> DVR Property "dvrLogValidChunkMatcher": for matching stream names that will log chunk packets Value: dvrLogValidChunkMatcher
public static final	<u>PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED</u> DVR Property "dvrMaxInvalidChunksLogged": for controlling maximum number of invalid DVR chunks logged. Value: dvrMaxInvalidChunksLogged
public static final	<u>PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED</u> DVR Property "dvrMaxValidChunksLogged": for controlling maximum number of valid DVR chunks logged. Value: dvrMaxValidChunksLogged
public static final	<u>PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS</u> DVR Property "dvrDebugMaximumRawPackets": for setting maximum number of logged raw packets. Value: dvrDebugMaximumRawPackets
public static final	<u>PROPERTY_DEBUG_MBR_ALIGNMENT</u> HTTP Streamer or DVR Property "dvrDebugMbrAlignment": for turning on logging of mbr alignment Value: dvrDebugMbrAlignment
public static final	<u>PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION</u> DVR Property "dvrDebugMbrAlignmentResolution": for turning on logging of mbr alignment resolution (requested to actual) Value: dvrDebugMbrAlignmentResolution
public static final	<u>PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE</u> HTTP Streamer or DVR Property "dvrDebugMbrDetailsWhenRecordDNE": for turning on DVR MBR Player Adapter debug logging. Value: dvrDebugMbrDetailsWhenRecordDNE
public static final	<u>PROPERTY_DEBUG_MBR_PLAYER_ADAPTER</u> HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging. Value: dvrDebugMbrPlayerAdapter
public static final	<u>PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY</u> HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging when null shifted entries is returned. Value: dvrDebugMbrPlayerAdapterWhenShiftedEmpty
public static final	<u>PROPERTY_DEBUG_METHODS</u> DVR Property "dvrDebugManagerLogMethods": for turning on DVR Manager debug logging. Value: dvrDebugManagerLogMethods
public static final	<u>PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER</u> HTTP Streamer Property "dvrDebugMPEGDashPlayerAdapter": for turning on DVR Player MPEG-DASH Adapter debug logging. Value: dvrDebugMPEGDashPlayerAdapter

public static final	<u>PROPERTY_DEBUG_PLAYER_ADAPTER</u> HTTP Streamer Property "dvrDebugPlayerAdapter": for turning on DVR Player Adapter debug logging for all streamer types. Value: dvrDebugPlayerAdapter
public static final	<u>PROPERTY_DEBUG_PLAYLIST_REQUEST</u> DVR Property "dvrDebugPlaylistRequest": for turning on logging of DVR playlist requests. Value: dvrDebugPlaylistRequest
public static final	<u>PROPERTY_DEBUG_RAW_PACKETS</u> DVR Property "dvrDebugRawPackets": for turning on logging of incoming raw packets. Value: dvrDebugRawPackets
public static final	<u>PROPERTY_DEBUG_RAW_PACKETS_MATCHER</u> DVR Property "dvrDebugRawPacketsMatcher": for matching stream names that will dump raw packet. Value: dvrDebugRawPacketsMatcher
public static final	<u>PROPERTY_DEBUG_REPEATER</u> DVR Property "dvrDebugRepeater": for turning on logging of DVR repeater Value: dvrDebugRepeater
public static final	<u>PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER</u> HTTP Streamer Property "dvrDebugSanJosePlayerAdapter": for turning on DVR Player San Jose Adapter debug logging. Value: dvrDebugSanJosePlayerAdapter
public static final	<u>PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER</u> HTTP Streamer Property "dvrDebugSmoothPlayerAdapter": for turning on DVR Player Smooth Adapter debug logging. Value: dvrDebugSmoothPlayerAdapter
public static final	<u>PROPERTY_DEBUG_STATE_CHANGE</u> DVR Property "dvrDebugStateChange": for logging state changes of DVR store. Value: dvrDebugStateChange
public static final	<u>PROPERTY_DEBUG_TOSSED_HOLDERS</u> DVR Property "dvrDebugTossedHolders": for turning on logging of packets that are being tossed. Value: dvrDebugTossedHolders
public static final	<u>PROPERTY_ENCRYPTION_INFO_DELEGATE</u> DVR Property "dvrPlaylistEncryptionInfoDelegate": used to over-ride the encryption info on the playback side. Value: dvrPlaylistEncryptionInfoDelegate
public static final	<u>PROPERTY_FILE_SYSTEM_CLASS</u> DVR Property "dvrFileSystemClass": for controlling the class responsible for managing the DVR File System. Value: dvrFileSystemClass
public static final	<u>PROPERTY_MANIFEST_PERSISTER_CLASS</u> DVR Property "dvrManifestPersisterClass": for controlling the class responsible for persisting the manifest files. Value: dvrManifestPersisterClass

public static final	PROPERTY_MAX_CHUNK_LOG DVR Property "dvrMaxChunkLogCount": for maximum number of DVR chunks to log. Value: dvrMaxChunkLogCount
public static final	PROPERTY_MAX_RECALC_DURATION_LOG DVR Property "dvrMaxRecountDurationLogCount": for maximum number of messages to log regarding recalculating DVR chunk duration Value: dvrMaxRecountDurationLogCount
public static final	PROPERTY_MAX_RECORDING_LENGTH DVR Property "dvrMaximumRecordingLength": The maximum recording length in seconds. Value: dvrMaximumRecordingLength
public static final	PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO DVR Property "abrIndexesAlwaysStartWithZero": when doing mbr alignment, always start the alignment at index 0. Value: abrIndexesAlwaysStartWithZero
public static final	PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE DVR Property "dvrAbrAlignmentChunksInReserve": when doing mbr alignment, implement code that ignores n chunks in each chunklist and determines a trim time based on the maximum time of all of the non-reserve chunks. Value: dvrAbrAlignmentChunksInReserve
public static final	PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA DVR Property "dvrMbrAlternateMatchDelta": when finding alternative for a MBR gap, an alternate is considered a match is within this many ms of the gap in question. Value: dvrMbrAlternateMatchDelta
public static final	PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE DVR Property "dvrMbrMinimumPacketTimeGapSize": when doing mbr alignment gaps smaller than this are ignored. Value: dvrMbrMinimumPacketTimeGapSize
public static final	PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE DVR Property "dvrMbrMinimumUtcTimeGapSize": when doing mbr alignment gaps smaller than this are ignored. Value: dvrMbrMinimumUtcTimeGapSize
public static final	PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT DVR Property "dvrMbrUseUtcForAlignment": when doing mbr alignment use utc time for alignment Value: dvrMbrUseUtcForAlignment
public static final	PROPERTY_MEDIACACHE_ENABLED DVR Property "dvrMediaCacheEnabled" Value: dvrMediaCacheEnabled
public static final	PROPERTY_MEDIACACHE_READER_CLASS DVR Property "dvrMediaCacheReaderClass" Value: dvrMediaCacheReaderClass
public static final	PROPERTY_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD DVR Property "dvrMPGEDashPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted by the requesting client, the playlist will be compressed Value: dvrMPGEDashPlaylistGzipThreshold

public static final	PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP DVR Property "dvrMPEGDashPlaylistUseGzip": used to enable creation MPEG-DASH playlists with GZIP encoding Value: dvrMPEGDashPlaylistUseGzip
public static final	PROPERTY_PACKET_DELTA_TO_NOTIFY Value: dvrPacketDeltaToNotify
public static final	PROPERTY_PACKET_DELTA_TO_RESET_TIME DVR Property "dvrResetTimePacketDelta": for controlling how much Chunk start times must diverge from last chunk's end time before the DVR time gets reset. Value: dvrResetTimePacketDelta
public static final	PROPERTY_PACKET_DURATION_MAXIMUM DVR Property "dvrPacketDurationMaximum": for maximum packet duration, in milliseconds. Value: dvrPacketDurationMaximum
public static final	PROPERTY_PACKET_SORT_TIME DVR Property "dvrPacketSortTime": for sorting incoming packets. Value: dvrPacketSortTime
public static final	PROPERTY_PACKET_SORTER_CLASS DVR Property "dvrPacketSorterClass": for controlling the class responsible for sorting packets received for recording. Value: dvrPacketSorterClass
public static final	PROPERTY_PLAYLIST_REQUEST_DELEGATE DVR Property "dvrPlaylistRequestDelegate": used to over-ride the class that generates a playlist request. Value: dvrPlaylistRequestDelegate
public static final	PROPERTY_RECORD_AUDIO DVR Property "recordAudio": for determining if audio should be recorded. Value: recordAudio
public static final	PROPERTY_RECORD_DATA DVR Property "recordData": for determining if data should be recorded. Value: recordData
public static final	PROPERTY_RECORD_VIDEO DVR Property "recordVideo": for determining if video should be recorded. Value: recordVideo
public static final	PROPERTY_RECORDINGS_LOADER_CLASS DVR Property "dvrRecordingsLoaderClass": for controlling the class responsible for loading DVR recordings. Value: dvrRecordingsLoaderClass
public static final	PROPERTY_REPEATER_HEARTBEAT_DURATION DVR Property "dvrRepeaterHeartbeatDuration": for time in ms that origin pings edges Value: dvrRepeaterHeartbeatDuration
public static final	PROPERTY_REPEATER_SHARED_SECRET DVR Property "dvrEncryptionSharedSecret ": for encryption shared secret between origins and edges. Value: dvrEncryptionSharedSecret

public static final	<u>PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE</u> DVR Property "dvrSanJosePlaylistAbstDurationEqualityTolerance": used to over-ride the tolerance when determining equal chunks lengths. Value: dvrSanJosePlaylistAbstDurationTolerance
public static final	<u>PROPERTY_SANJOSE_ABST_TIMESCALE</u> DVR Property "dvrSanJosePlaylistAbstTimescale": used to over-ride the time-scale for abst files. Value: dvrSanJosePlaylistAbstTimescale
public static final	<u>PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE</u> DVR Property "dvrSanJosePlaylistDeliveryType": used to over-ride the mime type for DVR San Jose F4m playlists. Value: dvrSanJosePlaylistDeliveryType
public static final	<u>PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE</u> DVR Property "dvrSanJosePlaylistLiveStreamType": used to over-ride the stream type for live DVR in San Jose f4m playlists. Value: dvrSanJosePlaylistLiveStreamType
public static final	<u>PROPERTY_SANJOSE_PLAYLIST_MIMETYPE</u> DVR Property "dvrSanJosePlaylistMimeType": used to over-ride the mime type for DVR San Jose F4m playlists. Value: dvrSanJosePlaylistMimeType
public static final	<u>PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE</u> DVR Property "dvrSanJosePlaylistRecordedStreamType": used to over-ride the stream type for non-live (recorded) DVR in San Jose f4m playlists. Value: dvrSanJosePlaylistRecordedStreamType
public static final	<u>PROPERTY_SANJOSE_PLAYLIST_VERSION</u> DVR Property "dvrSanJosePlaylistVersion": used to over-ride the version of the San Jose f4m playlist. Value: dvrSanJosePlaylistVersion
public static final	<u>PROPERTY_SMOOTH_MANIFEST_H264_CODEC</u> DVR Property "dvrSmoothManifestH264Codec": used to force Smooth Manifest to use this as its FourCC H264 codec info. Value: dvrSmoothManifestH264Codec
public static final	<u>PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE</u> DVR Property "dvrSmoothManifestLiveCanPause": used to determine is CanPause is enabled in smooth Manifest. Value: dvrSmoothManifestLiveCanPause
public static final	<u>PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK</u> DVR Property "dvrSmoothManifestLiveCanSeek": used to determine is CanSeek is enabled in smooth Manifest. Value: dvrSmoothManifestLiveCanSeek
public static final	<u>PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION</u> DVR Property "dvrSmoothManifestMajorVersion": used to determine Smooth manifest major version Value: dvrSmoothManifestMajorVersion
public static final	<u>PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION</u> DVR Property "dvrSmoothManifestMinorVersion": used to determine Smooth manifest major version Value: dvrSmoothManifestMinorVersion

public static final	<u>PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE</u> DVR Property "dvrSmoothManifestRecordedCanPause": used to determine is CanPause is enabled in smooth Manifest. Value: dvrSmoothManifestRecordedCanPause
public static final	<u>PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK</u> DVR Property "dvrSmoothManifestRecordedCanSeek": used to determine is CanSeek is enabled in smooth Manifest. Value: dvrSmoothManifestRecordedCanSeek
public static final	<u>PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION</u> DVR Property "dvrSmoothManifestRecordedSpecifyDuration": used to determine if duration is specified. Value: dvrSmoothManifestRecordedSpecifyDuration
public static final	<u>PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION</u> DVR Property "dvrSmoothManifestVerboseDuration": used to force Smooth Manifest to include durations for each record Value: dvrSmoothManifestVerboseDuration
public static final	<u>PROPERTY_START_RECORDING_ON_STARTUP</u> DVR Property "startRecordingOnStartup": for determining if DVR recorder should start recording immediately. Value: startRecordingOnStartup
public static final	<u>PROPERTY_STORAGE_DIRECTORY</u> DVR Property "dvrStorageDirectory": for overriding the DVR storage directory location Typically this is defined application-wide in Application.xml under Application/DVR/StorageDirectory. Value: dvrStorageDirectory
public static final	<u>PROPERTY_STREAM_DATA</u> Value: dvrStreamRecordedData
public static final	<u>PROPERTY_STREAM_ONLY_LIVE_STREAMS</u> DVR Property "dvrStreamOnlyLiveStreams": used to allow only streaming of 'live' DVR streams. Value: dvrStreamOnlyLiveStreams
public static final	<u>PROPERTY_TEXT_READER_CLASS</u> DVR Property "dvrTextReaderClass": for controlling the class responsible for reading DVR text files. Value: dvrTextReaderClass
public static final	<u>PROPERTY_TEXT_WRITER_CLASS</u> DVR Property "dvrTextWriterClass": for controlling the class responsible for writing DVR text files. Value: dvrTextWriterClass
public static final	<u>PROPERTY_USE_SAX_PARSER</u> DVR Property "dvrUseSAXParser": for controlling the XML parser for DVR container manifests Value: dvrUseSAXParser
public static final	<u>PROPERTY_WINDOW_DURATION</u> DVR Property "dvrWindowDuration": for specifying the DVR window duration, in seconds. Value: dvrWindowDuration

public static final	SANJOSE_F4M_STREAMINGTYPE_STREAMING Constant for San Jose streaming type "streaming". Value: streaming
public static final	SANJOSE_F4M_STREAMTYPE_DVR Constant for San Jose stream type "dvr". Value: dvr
public static final	SANJOSE_F4M_STREAMTYPE_LIVE Constant for San Jose stream type "live". Value: live
public static final	SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED Constant for San Jose stream type "liveOrRecorded". Value: liveOrRecorded
public static final	SANJOSE_F4M_STREAMTYPE_RECORDED Constant for San Jose stream type "recorded". Value: recorded
public static final	SANJOSE_F4M_VERSION_1_0 Constant for San Jose f4m version "1.0". Value: 1.0
public static final	SANJOSE_F4M_VERSION_2_0 Constant for San Jose f4m version "2.0". Value: 2.0

Fields inherited from interface [com.wowza.wms.dvr.IDvrPrivateConstants](#)

[CHUNK_FILENAME_FORMAT_AUDIO](#), [CHUNK_FILENAME_FORMAT_DATA](#), [CHUNK_FILENAME_FORMAT_METADATA](#),
[CHUNK_FILENAME_FORMAT_VIDEO](#), [CHUNK_FOLDER_FORMAT](#), [DEFAULT_PROPERTY_AUDIO_GROUP_COUNT](#),
[DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE](#), [DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#),
[DEFAULT_PROPERTY_MAX_SAVE_HOLDER_SIZE](#), [DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#),
[DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#), [DEFAULT_PROPERTY_PURGE_CONTROL_CLASS](#),
[DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#),
[DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#), [DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT](#),
[DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT](#), [DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO](#),
[DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#), [DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME](#),
[PROPERTY_AUDIO_GROUP_COUNT](#), [PROPERTY_DEBUG_DISCONTINUITY](#), [PROPERTY_DEBUG_MBR_RESOLVER](#),
[PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS](#),
[PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS](#), [PROPERTY_INTERCEPTOR_CHUNK_DELEGATE](#),
[PROPERTY_MANIFEST_PURGE_CACHE_SIZE](#), [PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#),
[PROPERTY_MAX_SAVE_HOLDER_SIZE](#), [PROPERTY_MBR_USE_SIMPLEALIGNMENT](#),
[PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#), [PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#),
[PROPERTY_PURGE_CONTROL_CLASS](#), [PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#),
[PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#), [PROPERTY_UTC_ALIGN_TO_AUDIO](#),
[PROPERTY_UTC_DELEGATE_CLASS](#), [PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#),
[PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD](#), [PROPERTY_WAIT_FOR_CODEC_TIME](#)

Fields

DVR_STREAMING_PACKETIZER_ID

```
public static final java.lang.String DVR_STREAMING_PACKETIZER_ID
```

(continued from last page)

The default DVR streaming packetizer ID: "dvrstreamingpacketizer".

See DVR.xml and Application.xml.

Constant value: **dvrstreamingpacketizer**

DVR_REPEATER_PACKETIZER_ID

```
public static final java.lang.String DVR_REPEATER_PACKETIZER_ID
```

The default DVR streaming repeater ID: "dvrstreamingrepeater".

See DVR.xml and Application.xml.

Constant value: **dvrstreamingrepeater**

DVR_DEFAULT_RECORDER_ID

```
public static final java.lang.String DVR_DEFAULT_RECORDER_ID
```

The default DVR recorder ID: "dvrrecorder".

See DVR.xml and Application.xml.

Constant value: **dvrrecorder**

DVR_DEFAULT_FILESTORE

```
public static final java.lang.String DVR_DEFAULT_FILESTORE
```

The default DVR store ID: "dvrfilestorage".

See DVR.xml and Application.xml.

Constant value: **dvrfilestorage**

MEDIACACHE_PREFIX

```
public static final java.lang.String MEDIACACHE_PREFIX
```

The MediaCache prefix for dvr repeater

See MediaCache.xml

Constant value: **dvrorigin**

PROPERTY_CHUNK_GROUPING_SECONDS

```
public static final java.lang.String PROPERTY_CHUNK_GROUPING_SECONDS
```

DVR Property "dvrChunkGroupingSeconds": for determining how many seconds of DVR are stored in each stores sub-folder.

The directory naming convention is HHHH_MM_SS with H = hours, M = minutes, S = seconds. Using the defaults, first directory would be named 0000_00_00 and the second directory would be named 0000_10_00, etc.

Valid values are integers greater than 60. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkGroupingSeconds**

See Also:

[DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS](#)

DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS

```
public static final int DEFAULT_PROPERTY_CHUNK_GROUPING_SECONDS
```

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Default value for DVR Property "dvrChunkGroupingSeconds".

Default value is 600 seconds (10 minutes).

Constant value: **600**

See Also:

[PROPERTY_CHUNK_GROUPING_SECONDS](#)

PROPERTY_APPEND_DISCONTINUITY_DELTA

```
public static final java.lang.String PROPERTY_APPEND_DISCONTINUITY_DELTA
```

DVR Property "dvrAppendDiscontinuityDelta": for specifying how many milliseconds of empty space are put between individual recordings that when in append mode.

Valid values are integers greater than or equal to 0. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrAppendDiscontinuityDelta**

See Also:

[DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA](#)

DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA

```
public static final int DEFAULT_PROPERTY_APPEND_DISCONTINUITY_DELTA
```

Default value for DVR Property "dvrAppendDiscontinuityDelta".

Default value is 0.

Constant value: **0**

See Also:

[PROPERTY_APPEND_DISCONTINUITY_DELTA](#)

PROPERTY_WINDOW_DURATION

```
public static final java.lang.String PROPERTY_WINDOW_DURATION
```

DVR Property "dvrWindowDuration": for specifying the DVR window duration, in seconds.

Typically this is defined application-wide in Application.xml under Application/DVR/WindowDuration. However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization. Valid values are integers greater than or equal to 0. Add the property to Application/DVR/Properties section of Application.xml. The default is 0, meaning the window size is unlimited.

Constant value: **dvrWindowDuration**

See Also:

[DVR_WINDOW_DURATION_UNLIMITED](#)

DVR_WINDOW_DURATION_UNLIMITED

```
public static final int DVR_WINDOW_DURATION_UNLIMITED
```

Constant value: **0**

PROPERTY_STORAGE_DIRECTORY

```
public static final java.lang.String PROPERTY_STORAGE_DIRECTORY
```

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DVR Property "dvrStorageDirectory": for overriding the DVR storage directory location Typically this is defined application-wide in Application.xml under Application/DVR/StorageDirectory. However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization.
Constant value: **dvrStorageDirectory**

See Also:

[DEFAULT_PROPERTY_STORAGE_DIRECTORY](#)

DEFAULT_PROPERTY_STORAGE_DIRECTORY

```
public static final java.lang.String DEFAULT_PROPERTY_STORAGE_DIRECTORY
```

Default value for DVR Property "dvrStorageDirectory".

Default value is "\${com.wowza.wms.context.VHostConfigHome}/dvr".

Constant value: **\${com.wowza.wms.context.VHostConfigHome}/dvr**

See Also:

[PROPERTY_STORAGE_DIRECTORY](#)

PROPERTY_ARCHIVE_STRATEGY

```
public static final java.lang.String PROPERTY_ARCHIVE_STRATEGY
```

DVR Property "dvrArchiveStrategy": for specifying the DVR archive strategy.

Typically this is defined application-wide in Application.xml under Application/DVR/ArchiveStrategy However, to override this on a per stream basis, the property may be set on the IDvrStreamManager after creation and before initialization. Valid values are:

Constant value: **dvrArchiveStrategy**

See Also:

[ARCHIVE_STRATEGY_APPEND](#)

[ARCHIVE_STRATEGY_VERSION](#)

[ARCHIVE_STRATEGY_APPEND](#)

ARCHIVE_STRATEGY_DELETE

```
public static final java.lang.String ARCHIVE_STRATEGY_DELETE
```

Constant value: **delete**

ARCHIVE_STRATEGY_VERSION

```
public static final java.lang.String ARCHIVE_STRATEGY_VERSION
```

Constant value: **version**

ARCHIVE_STRATEGY_APPEND

```
public static final java.lang.String ARCHIVE_STRATEGY_APPEND
```

Constant value: **append**

PROPERTY_CHUNK_READER_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_READER_CLASS
```

(continued from last page)

DVR Property "dvrChunkReaderClass": for controlling the class responsible for reading DVR Chunks.

The class must implement IDvrChunkReader

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkReaderClass**

See Also:

`com.wowza.wms.dvr.io.IDvrChunkReader`

[DEFAULT_PROPERTY_CHUNK_READER_CLASS](#)

DEFAULT_PROPERTY_CHUNK_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_READER_CLASS
```

Default value for DVR Property "dvrChunkReaderClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrFileChunkReader".

Constant value: **com.wowza.wms.dvr.impl.io.DvrFileChunkReader**

See Also:

[PROPERTY_CHUNK_READER_CLASS](#)

PROPERTY_CHUNK_WRITER_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_WRITER_CLASS
```

DVR Property "dvrChunkWriterClass": for controlling the class responsible for writing DVR Chunks.

The class must implement IDvrChunkWriter

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkWriterClass**

See Also:

`com.wowza.wms.dvr.io.IDvrChunkWriter`

[DEFAULT_PROPERTY_CHUNK_WRITER_CLASS](#)

DEFAULT_PROPERTY_CHUNK_WRITER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_WRITER_CLASS
```

Default value for DVR Property "dvrChunkWriterClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrFileChunkWriter".

Constant value: **com.wowza.wms.dvr.impl.io.DvrFileChunkWriter**

See Also:

[PROPERTY_CHUNK_WRITER_CLASS](#)

PROPERTY_FILE_SYSTEM_CLASS

```
public static final java.lang.String PROPERTY_FILE_SYSTEM_CLASS
```

DVR Property "dvrFileSystemClass": for controlling the class responsible for managing the DVR File System.

The class must implement `com.wowza.wms.dvr.io.IDvrFileSystem` and may sub-class `com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem`

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrFileSystemClass**

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See Also:

`com.wowza.wms.dvr.io.IDvrFileSystem`
[DEFAULT_PROPERTY_FILE_SYSTEM_CLASS](#)

DEFAULT_PROPERTY_FILE_SYSTEM_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_FILE_SYSTEM_CLASS
```

Default value for DVR Property "dvrFileSystemClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem".

Constant value: **com.wowza.wms.dvr.impl.io.DvrDefaultFileSystem**

See Also:

[PROPERTY_FILE_SYSTEM_CLASS](#)

PROPERTY_MANIFEST_PERSISTER_CLASS

```
public static final java.lang.String PROPERTY_MANIFEST_PERSISTER_CLASS
```

DVR Property "dvrManifestPersisterClass": for controlling the class responsible for persisting the manifest files.

The class must implement `com.wowza.wms.dvr.io.IDvrManifestPersister`

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrManifestPersisterClass**

See Also:

`com.wowza.wms.dvr.io.IDvrManifestPersister`
[DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS](#)

DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_MANIFEST_PERSISTER_CLASS
```

Default value for DVR Property "dvrManifestPersisterClass".

Default value is "com.wowza.wms.dvr.impl.DvrManifestPersister".

Constant value: **com.wowza.wms.dvr.impl.DvrManifestPersister**

See Also:

[PROPERTY_MANIFEST_PERSISTER_CLASS](#)

PROPERTY_CHUNK_CACHE_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_CACHE_CLASS
```

DVR Property "dvrChunkMemoryCacheClass": for controlling the class responsible for caching DVR chunks in memory.

The class must implement [IDvrChunkMemoryCache](#) and may sub-class `com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache`

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkMemoryCacheClass**

See Also:

[IDvrChunkMemoryCache](#)
[DEFAULT_PROPERTY_CHUNK_CACHE_CLASS](#)

(continued from last page)

DEFAULT_PROPERTY_CHUNK_CACHE_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_CACHE_CLASS
```

Default value for DVR Property "dvrChunkMemoryCacheClass".

Default value is "com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache".

Constant value: **com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache**

See Also:

[PROPERTY_CHUNK_CACHE_CLASS](#)

PROPERTY_CHUNK_READ_CACHE_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_READ_CACHE_CLASS
```

DVR Property "dvrChunkMemoryReadCacheClass": for controlling the class responsible for caching DVR chunks in memory.

The class must implement [IDvrChunkMemoryCache](#) and may sub-class com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrChunkMemoryReadCacheClass**

See Also:

[IDvrChunkMemoryCache](#)

[DEFAULT_PROPERTY_CHUNK_READ_CACHE_CLASS](#)

DEFAULT_PROPERTY_CHUNK_READ_CACHE_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_READ_CACHE_CLASS
```

Default value for DVR Property "dvrChunkMemoryReadCacheClass".

Default value is "com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryCache".

Constant value: **com.wowza.wms.dvr.impl.DvrDefaultChunkMemoryReadCache**

See Also:

[PROPERTY_CHUNK_CACHE_CLASS](#)

PROPERTY_RECORDINGS_LOADER_CLASS

```
public static final java.lang.String PROPERTY_RECORDINGS_LOADER_CLASS
```

DVR Property "dvrRecordingsLoaderClass": for controlling the class responsible for loading DVR recordings.

The class must implement [IDvrRecordingsLoader](#)

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrRecordingsLoaderClass**

See Also:

[IDvrRecordingsLoader](#)

[DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS](#)

DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_RECORDINGS_LOADER_CLASS
```

(continued from last page)

Default value for DVR Property "dvrRecordingsLoaderClass".

Default value is "com.wowza.wms.dvr.DvrRecordingsLoader".

Constant value: **com.wowza.wms.dvr.DvrRecordingsLoader**

See Also:

[PROPERTY_RECORDINGS_LOADER_CLASS](#)

PROPERTY_TEXT_WRITER_CLASS

```
public static final java.lang.String PROPERTY_TEXT_WRITER_CLASS
```

DVR Property "dvrTextWriterClass": for controlling the class responsible for writing DVR text files.

The class must implement [IDvrTextWriter](#)

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrTextWriterClass**

See Also:

[IDvrTextWriter](#)

[DEFAULT_PROPERTY_TEXT_WRITER_CLASS](#)

DEFAULT_PROPERTY_TEXT_WRITER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_TEXT_WRITER_CLASS
```

Default value for DVR Property "dvrTextWriterClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrTextFileWriter".

Constant value: **com.wowza.wms.dvr.impl.io.DvrTextFileWriter**

See Also:

[PROPERTY_TEXT_WRITER_CLASS](#)

PROPERTY_TEXT_READER_CLASS

```
public static final java.lang.String PROPERTY_TEXT_READER_CLASS
```

DVR Property "dvrTextReaderClass": for controlling the class responsible for reading DVR text files.

The class must implement [IDvrTextReader](#)

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrTextReaderClass**

See Also:

[IDvrTextReader](#)

[DEFAULT_PROPERTY_TEXT_READER_CLASS](#)

DEFAULT_PROPERTY_TEXT_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_TEXT_READER_CLASS
```

Default value for DVR Property "dvrTextReaderClass".

Default value is "com.wowza.wms.dvr.impl.io.DvrTextFileReader".

Constant value: **com.wowza.wms.dvr.impl.io.DvrTextFileReader**

See Also:

[PROPERTY_TEXT_READER_CLASS](#)

PROPERTY_PACKET_SORTER_CLASS

```
public static final java.lang.String PROPERTY_PACKET_SORTER_CLASS
```

DVR Property "dvrPacketSorterClass": for controlling the class responsible for sorting packets received for recording.

The class must implement `ILivePacketSorter`

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrPacketSorterClass**

See Also:

`ILivePacketSorter`

[DEFAULT_PROPERTY_PACKET_SORTER_CLASS](#)

DEFAULT_PROPERTY_PACKET_SORTER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_PACKET_SORTER_CLASS
```

Default value for DVR Property "dvrPacketSorterClass".

Default value is "com.wowza.wms.stream.live.LiveReceiverPacketSorter2".

Constant value: **com.wowza.wms.stream.live.LiveReceiverPacketSorter2**

See Also:

[PROPERTY_PACKET_SORTER_CLASS](#)

PROPERTY_CHUNK_ID_CLASS

```
public static final java.lang.String PROPERTY_CHUNK_ID_CLASS
```

Constant value: **dvrChunkIDHandlerClass**

DEFAULT_PROPERTY_CHUNK_ID_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_CHUNK_ID_CLASS
```

Internal DO NOT USE

Constant value: **com.wowza.wms.dvr.DvrChunkIDHandler3**

PROPERTY_CHUNK_MBR_ALIGNER

```
public static final java.lang.String PROPERTY_CHUNK_MBR_ALIGNER
```

Internal DO NOT USE

Constant value: **dvrChunkMbrCustomAligner**

DEFAULT_PROPERTY_MBR_CLASS_ALIGNER

```
public static final java.lang.String DEFAULT_PROPERTY_MBR_CLASS_ALIGNER
```

Internal DO NOT USE

Constant value:

DEFAULT_PROPERTY_PURGE_DEFAULT

```
public static final java.lang.String DEFAULT_PROPERTY_PURGE_DEFAULT
```

(continued from last page)

Internal DO NOT USE

Constant value: **dvrChunkPurgeDefault**

PROPERTY_USE_SAX_PARSER

```
public static final java.lang.String PROPERTY_USE_SAX_PARSER
```

DVR Property "dvrUseSAXParser": for controlling the XML parser for DVR container manifests

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrUseSAXParser**

PROPERTY_ALLOWABLE_AV_PACKET_DELTA

```
public static final java.lang.String PROPERTY_ALLOWABLE_AV_PACKET_DELTA
```

DVR Property "dvrAllowableAVPacketDelta": for specifying how much audio and video packets may diverge before triggering an error.

Wowza nDVR expects the incoming audio and video to be aligned. Through this parameter, Wowza nDVR will try to compensate for out of alignment issues, but it cannot resolve them. This setting safeguards against audio and data video packets that are not closely aligned. The units are in ms. The default value is 2000 ms. If audio and video are out of alignment by more than this value, the audio and video chunks will be ignored in an attempt to get the streams back into alignment. If you already have an out of alignment issue, increasing the default value is likely to cause more problems. Increasing this value will increase the number of chunks not recorded which may cause the overall quality to be unacceptable.

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrAllowableAVPacketDelta**

See Also:

[DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA](#)

DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA

```
public static final int DEFAULT_PROPERTY_ALLOWABLE_AV_PACKET_DELTA
```

Default value for DVR Property "dvrAllowableAVPacketDelta".

Default value is 2000 ms.

Constant value: **2000**

See Also:

[PROPERTY_ALLOWABLE_AV_PACKET_DELTA](#)

PROPERTY_PACKET_DELTA_TO_RESET_TIME

```
public static final java.lang.String PROPERTY_PACKET_DELTA_TO_RESET_TIME
```

DVR Property "dvrResetTimePacketDelta": for controlling how much Chunk start times must diverge from last chunk's end time before the DVR time gets reset.

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrResetTimePacketDelta**

See Also:

[DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME](#)

DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME

```
public static final int DEFAULT_PROPERTY_PACKET_DELTA_TO_RESET_TIME
```

(continued from last page)

Default value for DVR Property "dvrResetTimePacketDelta".

Default value is 200 ms.

Constant value: **200**

See Also:

[PROPERTY_PACKET_DELTA_TO_RESET_TIME](#)

PROPERTY_PACKET_DELTA_TO_NOTIFY

```
public static final java.lang.String PROPERTY_PACKET_DELTA_TO_NOTIFY
```

Constant value: **dvrPacketDeltaToNotify**

DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY

```
public static final int DEFAULT_PROPERTY_PACKET_DELTA_TO_NOTIFY
```

Constant value: **200**

PROPERTY_RECORD_DATA

```
public static final java.lang.String PROPERTY_RECORD_DATA
```

DVR Property "recordData": for determining if data should be recorded.

Set property to: true to record data of incoming stream. Default is true. Set property to: false to ignore data packets during recording.

Constant value: **recordData**

PROPERTY_RECORD_VIDEO

```
public static final java.lang.String PROPERTY_RECORD_VIDEO
```

DVR Property "recordVideo": for determining if video should be recorded.

Set property to: true to record video of incoming stream. Default is true. Set property to: false to ignore video packets during recording. Either recordVideo or recordAudio property must be set to: true

Constant value: **recordVideo**

PROPERTY_RECORD_AUDIO

```
public static final java.lang.String PROPERTY_RECORD_AUDIO
```

DVR Property "recordAudio": for determining if audio should be recorded.

Set property to: true to record audio of incoming stream. Default is true. Set property to: false to ignore audio packets during recording. Either recordVideo or recordAudio property must be set to: true

Constant value: **recordAudio**

PROPERTY_START_RECORDING_ON_STARTUP

```
public static final java.lang.String PROPERTY_START_RECORDING_ON_STARTUP
```

DVR Property "startRecordingOnStartup": for determining if DVR recorder should start recording immediately.

Set property to: true (default) to start recording immediately when stream is detected. Set property to: false to init the DVR recorder but to not start recording immediately when stream starts.

Constant value: **startRecordingOnStartup**

PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION

```
public static final java.lang.String PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION
```

DVR Property "dvrAudioOnlyChunkTargetDuration": for target duration when recording audio-only.

Applies to recording an audio-only stream and is the target chunk duration. The unit is in ms. The default value is 2000 ms. This setting is ignored if the stream contains video and audio, in which case the keyframe determines the chunk size.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrAudioOnlyChunkTargetDuration**

See Also:

[DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION](#)

DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION

```
public static final int DEFAULT_PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION
```

Default value for DVR Property "dvrAudioOnlyChunkTargetDuration".

Default value is 2000 ms.
Constant value: **2000**

See Also:

[PROPERTY_AUDIO_ONLY_CHUNK_TARGET_DURATION](#)

PROPERTY_PACKET_SORT_TIME

```
public static final java.lang.String PROPERTY_PACKET_SORT_TIME
```

DVR Property "dvrPacketSortTime": for sorting incoming packets. Specified in milliseconds.

Valid values are a integer greater than equal to 0. Zero means no sorting occurs. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrPacketSortTime**

See Also:

[DEFAULT_PROPERTY_PACKET_SORT_TIME](#)

DEFAULT_PROPERTY_PACKET_SORT_TIME

```
public static final int DEFAULT_PROPERTY_PACKET_SORT_TIME
```

Default value for DVR Property "dvrPacketSortTime".

Default value is 0 ms (i.e. no sorting).
Constant value: **0**

See Also:

[PROPERTY_PACKET_SORT_TIME](#)

PROPERTY_BREAK_ON_PTS_MANIFEST

```
public static final java.lang.String PROPERTY_BREAK_ON_PTS_MANIFEST
```

DVR Property "dvrChunkBreakOnPTSManifest": for specifying that DVR manifest should use the PTS when dvrChunkBreakOnPTS is enabled.

Valid values are "true" or "false" Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrChunkBreakOnPTSManifest**

(continued from last page)

See Also:

[DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST](#)

DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST

public static final boolean **DEFAULT_PROPERTY_BREAK_ON_PTS_MANIFEST**

Default value for DVR Property "dvrChunkBreakOnPTSManifest".

Default value is true.

Constant value: **false**

See Also:

[PROPERTY_BREAK_ON_PTS_MANIFEST](#)

PROPERTY_BREAK_ON_PTS

public static final java.lang.String **PROPERTY_BREAK_ON_PTS**

DVR Property "dvrChunkBreakOnPTS": for specifying that DVR should be broken on PTS.

Valid values are "true" or "false" Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrChunkBreakOnPTS**

See Also:

[DEFAULT_PROPERTY_BREAK_ON_PTS](#)

DEFAULT_PROPERTY_BREAK_ON_PTS

public static final boolean **DEFAULT_PROPERTY_BREAK_ON_PTS**

Default value for DVR Property "dvrChunkBreakOnPTS".

Default value is true.

Constant value: **true**

See Also:

[PROPERTY_BREAK_ON_PTS](#)

PROPERTY_REPEATER_SHARED_SECRET

public static final java.lang.String **PROPERTY_REPEATER_SHARED_SECRET**

DVR Property "dvrEncryptionSharedSecret": for encryption shared secret between origins and edges. In Origin-Edge scenarios when Wowza is using encryption, a shared secret must be defined for both origin and edges to encrypt the information sent between origin and edge so that encryption information is not revealed.

A String values.

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrEncryptionSharedSecret**

PROPERTY_REPEATER_HEARTBEAT_DURATION

public static final java.lang.String **PROPERTY_REPEATER_HEARTBEAT_DURATION**

DVR Property "dvrRepeaterHeartbeatDuration": for time in ms that origin pings edges

A Integer Value.

Add the property to Application/DVR/Properties section of Application.xml

(continued from last page)

Constant value: **dvrRepeaterHeartbeatDuration**

DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION

```
public static final int DEFAULT_PROPERTY_REPEATER_HEARTBEAT_DURATION
```

Constant value: **4000**

PROPERTY_CHUNK_DURATION_MINIMUM

```
public static final java.lang.String PROPERTY_CHUNK_DURATION_MINIMUM
```

DVR Property "dvrChunkDurationMinimum": for minimum chunk duration, in milliseconds.

Add the property to Application/DVR/Properties section of Application.xml

Constant value: **dvrChunkDurationMinimum**

See Also:

[DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM](#)

DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM

```
public static final int DEFAULT_PROPERTY_CHUNK_DURATION_MINIMUM
```

Default value for DVR Property "dvrChunkDurationMinimum".

Default value is 1500 ms.

Constant value: **1500**

See Also:

[PROPERTY_CHUNK_DURATION_MINIMUM](#)

PROPERTY_CHUNK_MEMORY_CACHESIZE

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_CACHESIZE
```

DVR Property "chunkMemoryCacheSize": used by DvrDefaultChunkMemoryCache to set number of chunks stored in DVR in-memory cache.

Default value is [DEFAULT_CHUNK_MEMORY_CACHESIZE](#)

Add this to Application/DVR/Properties section of Application.xml

Constant value: **chunkMemoryCacheSize**

DEFAULT_CHUNK_MEMORY_CACHESIZE

```
public static final int DEFAULT_CHUNK_MEMORY_CACHESIZE
```

Default value for DVR Property "chunkMemoryCacheSize".

Default value is 10 chunks.

Constant value: **10**

See Also:

[PROPERTY_CHUNK_MEMORY_CACHESIZE](#)

DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE

```
public static final java.lang.String DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE
```

(continued from last page)

Default value for DVR Property "chunkReadMemoryCacheStore".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE](#)
Constant value: *

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_STORE

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHE_STORE
```

DVR Property "chunkReadMemoryCacheStore": used by DvrDefaultChunkMemoryReadCache to enable caching for stores. It is a comma separated list of store names.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_STORE](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheStore**

DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE

```
public static final long DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE
```

Default value for DVR Property "chunkReadMemoryCacheExpireAge".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE](#) Do not put this too high.
Constant value: **600000**

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE
```

DVR Property "chunkReadMemoryCacheExpireAge": used by DvrDefaultChunkMemoryReadCache to set when a chunk should automatically be purged from the cache.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_AGE](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheExpireAge**

DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE

```
public static final boolean DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE
```

Default value for DVR Property "chunkReadMemoryCacheEnable".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE](#).
Constant value: **false**

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_ENABLE

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHE_ENABLE
```

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DVR Property "chunkReadMemoryCacheEnable": used by DvrDefaultChunkMemoryReadCache to enable read caching.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_ENABLE](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheEnable**

DEFAULT_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY

```
public static final long DEFAULT_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY
```

Default value for DVR Property "chunkReadMemoryCacheGCExpireFrequency".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY](#) Do not put this too high.
Constant value: **10000**

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY

```
public static final java.lang.String  
PROPERTY_CHUNK_MEMORY_READ_CACHE_GC_EXPIRE_FREQUENCY
```

DVR Property "chunkReadMemoryCacheGCExpireFrequency": used by DvrDefaultChunkMemoryReadCache to set the how often an expire cycle runs.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_EXPIRE_FREQUENCY](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheGCExpireFrequency**

DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT

```
public static final int DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT
```

Default value for DVR Property "chunkReadMemoryCacheMaxExpireCount".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT](#)
Constant value: **20**

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT
```

DVR Property "chunkReadMemoryCacheMaxExpireCount ": used by DvrDefaultChunkMemoryReadCache to set the amount of chunks to expire in each cycle.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_MAX_EXPIRE_COUNT](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheMaxExpireCount**

DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG

```
public static final boolean DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG
```

Default value for DVR Property "chunkReadMemoryCacheDebug".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG](#)

(continued from last page)

Constant value: **false**

See Also:

[DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG](#)

PROPERTY_CHUNK_MEMORY_READ_CACHE_DEBUG

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHE_DEBUG
```

DVR Property "chunkReadMemoryCacheDebug": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHE_DEBUG](#)

Add this to Application/DVR/Properties section of Application.xml

Constant value: **chunkReadMemoryCacheDebug**

DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_VIDEO

```
public static final int DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_VIDEO
```

Default value for DVR Property "chunkReadMemoryCacheVideoSize".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_VIDEO](#) This is a buffer size for approximately 10 minutes of video at 500kbps

Constant value: **41943040**

See Also:

[PROPERTY_CHUNK_MEMORY_READ_CACHESIZE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_VIDEO

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_VIDEO
```

DVR Property "chunkReadMemoryCacheVideoSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_VIDEO](#)

Add this to Application/DVR/Properties section of Application.xml

Constant value: **chunkReadMemoryCacheVideoSize**

DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_AUDIO

```
public static final int DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_AUDIO
```

Default value for DVR Property "chunkReadMemoryCacheAudioSize".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_AUDIO](#) This is a buffer size for approximately 10 minutes of audio at 128kbps

Constant value: **5242880**

See Also:

[PROPERTY_CHUNK_MEMORY_READ_CACHESIZE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_AUDIO

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_AUDIO
```

(continued from last page)

DVR Property "chunkReadMemoryCacheAudioSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_AUDIO](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheAudioSize**

DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_DATA

```
public static final int DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_DATA
```

Default value for DVR Property "chunkReadMemoryCacheDataSize".

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_DATA](#) This is a buffer size for approximately a random of amount of time based on different encoders sending different amounts of data
Constant value: **1048576**

See Also:

[PROPERTY_CHUNK_MEMORY_READ_CACHESIZE](#)

PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_DATA

```
public static final java.lang.String PROPERTY_CHUNK_MEMORY_READ_CACHESIZE_DATA
```

DVR Property "chunkReadMemoryCacheDataSize": used by DvrDefaultChunkMemoryReadCache to set the amount of memory for DVR in-memory read cache.

Default value is [DEFAULT_CHUNK_MEMORY_READ_CACHESIZE_DATA](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **chunkReadMemoryCacheDataSize**

PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT

```
public static final java.lang.String PROPERTY_MBR_USE_UTC_FOR_ALIGNMENT
```

DVR Property "dvrMbrUseUtcForAlignment": when doing mbr alignment use utc time for alignment

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrUseUtcForAlignment**

PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO

```
public static final java.lang.String PROPERTY_MBR_ALIGNMENT_ALWAYS_START_AT_ZERO
```

DVR Property "abrIndexesAlwaysStartWithZero": when doing mbr alignment, always start the alignment at index 0.

Previous to 4.1.1.03, when DVR aligns single renditions into an ABR stream, it always starts the ABR rendition at index zero, not matter the indexes of the individual streams. The behavior was changed to better accommodate HTTP Origin, where indexes were innappropriately getting re-used after the session was restarted.

The default is false. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **abrIndexesAlwaysStartWithZero**

PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE

```
public static final java.lang.String PROPERTY_MBR_ALIGNMENT_CHUNKS_IN_RESERVE
```

(continued from last page)

DVR Property "dvrAbrAlignmentChunksInReserve": when doing mbr alignment, implement code that ignores n chunks in each chunklist and determines a trim time based on the maximum time of all of the non-reserve chunks. This prevents some alignment issues when one stream is falling behind others

Introduced in 4.6.0.02

The default is 0. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrAbrAlignmentChunksInReserve**

PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE

```
public static final java.lang.String PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE
```

DVR Property "dvrMbrMinimumPacketTimeGapSize": when doing mbr alignment gaps smaller than this are ignored.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrMinimumPacketTimeGapSize**

See Also:

[DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE](#)

PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA

```
public static final java.lang.String PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA
```

DVR Property "dvrMbrAlternateMatchDelta": when finding alternative for a MBR gap, an alternate is considered a match is within this many ms of the gap in question.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrAlternateMatchDelta**

See Also:

[DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA](#)

DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA

```
public static final int DEFAULT_PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA
```

Default value for DVR Property "dvrMbrAlternateMatchDelta".

Default value is 1000 ms.
Constant value: **1000**

See Also:

[PROPERTY_MBR_ALTERNATIVE_MATCH_DELTA](#)

PROPERTY_PACKET_DURATION_MAXIMUM

```
public static final java.lang.String PROPERTY_PACKET_DURATION_MAXIMUM
```

DVR Property "dvrPacketDurationMaximum": for maximum packet duration, in milliseconds.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrPacketDurationMaximum**

See Also:

[DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM](#)

DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM

```
public static final int DEFAULT_PROPERTY_PACKET_DURATION_MAXIMUM
```

(continued from last page)

Default value for DVR Property "dvrChunkDurationMinimum".

Default value is 5000 ms.
Constant value: **5000**

See Also:

[PROPERTY_PACKET_DURATION_MAXIMUM](#)

DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE

```
public static final int DEFAULT_PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE
```

Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize".

Default value is 100 ms.
Constant value: **100**

See Also:

[PROPERTY_MBR_MINIMUM_PACKETTIME_GAP_SIZE](#)

PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE

```
public static final java.lang.String PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE
```

DVR Property "dvrMbrMinimumUtcTimeGapSize": when doing mbr alignment gaps smaller than this are ignored.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMbrMinimumUtcTimeGapSize**

See Also:

[DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE](#)

DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE

```
public static final int DEFAULT_PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE
```

Default value for DVR Property "dvrMbrMinimumPacketTimeGapSize".

Default value is 750 ms.
Constant value: **750**

See Also:

[PROPERTY_MBR_MINIMUM_UTCTIME_GAP_SIZE](#)

PROPERTY_MAX_RECORDING_LENGTH

```
public static final java.lang.String PROPERTY_MAX_RECORDING_LENGTH
```

DVR Property "dvrMaximumRecordingLength": The maximum recording length in seconds. Recording stops when it reaches this value.

Add the property to Application/DVR/Properties section of Application.xml A value of zero means no maximum recording length is enforced. If used in conjunction with DVRWindow, should be slightly larger (1-2%) than DVRWindow.
Constant value: **dvrMaximumRecordingLength**

See Also:

[DEFAULT_PROPERTY_MAX_RECORDING_LENGTH](#)

DEFAULT_PROPERTY_MAX_RECORDING_LENGTH

```
public static final long DEFAULT_PROPERTY_MAX_RECORDING_LENGTH
```

(continued from last page)

Default value for DVR Property "dvrMaximumRecordingLength".

Default value is 108000 (30 hours)
Constant value: **108000**

See Also:

[PROPERTY_MAX_RECORDING_LENGTH](#)

PROPERTY_MEDIACACHE_ENABLED

```
public static final java.lang.String PROPERTY_MEDIACACHE_ENABLED
```

DVR Property "dvrMediaCacheEnabled"

Add the property to Application/DVR/Properties section of Application.xml Default is false.
Constant value: **dvrMediaCacheEnabled**

PROPERTY_MEDIACACHE_READER_CLASS

```
public static final java.lang.String PROPERTY_MEDIACACHE_READER_CLASS
```

DVR Property "dvrMediaCacheReaderClass"

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMediaCacheReaderClass**

See Also:

[DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS](#)

DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_MEDIACACHE_READER_CLASS
```

Default value for DVR Property "dvrMediaCacheReaderClass".
Constant value: **com.wowza.wms.mediacache.impl.MediaCacheRandomAccessReader**

See Also:

[PROPERTY_MEDIACACHE_READER_CLASS](#)

PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS
```

DVR Property "dvrLogInvalidChunkDetails": to control detailed logging information of DVR invalid chunks

The default is false, meaning do not log invalid chunks. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrLogInvalidChunkDetails**

See Also:

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_LOG_INVALID_CHUNK_MATCHER
```

DVR Property "dvrLogInvalidChunkMatcher": for matching stream names that will log chunk packets

Only affects logging if [PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#) is true.
Constant value: **dvrLogInvalidChunkMatcher**

(continued from last page)

See Also:

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED

```
public static final java.lang.String PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED
```

DVR Property "dvrMaxInvalidChunksLogged": for controlling maximum number of invalid DVR chunks logged.

The default is 10. Logging only occurs if property [PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#) is true. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMaxInvalidChunksLogged**

See Also:

[DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

[PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#)

DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED
```

Default value for DVR Property "dvrMaxInvalidChunksLogged".

Default value is 10.
Constant value: **10**

See Also:

[PROPERTY_DEBUG_LOG_INVALID_CHUNK_DETAILS](#)

[PROPERTY_DEBUG_MAX_INVALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS
```

DVR Property "dvrLogValidChunkDetails": to control detailed logging information of DVR valid chunks

The default is false, meaning do not log valid chunks. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrLogValidChunkDetails**

See Also:

[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED

```
public static final java.lang.String PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED
```

DVR Property "dvrMaxValidChunksLogged": for controlling maximum number of valid DVR chunks logged.

The default is 10. Logging only occurs if property [PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#) is true. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMaxValidChunksLogged**

See Also:

[DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

[PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#)

DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED
```


(continued from last page)

Default value for DVR Property "dvrMaxValidChunksLogged".

Default value is 10.
Constant value: **10**

See Also:

[PROPERTY_DEBUG_LOG_VALID_CHUNK_DETAILS](#)
[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_LOG_VALID_CHUNK_MATCHER
```

DVR Property "dvrLogValidChunkMatcher": for matching stream names that will log chunk packets

Only affects logging if [PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#) is true.
Constant value: **dvrLogValidChunkMatcher**

See Also:

[PROPERTY_DEBUG_MAX_VALID_CHUNKS_LOGGED](#)

PROPERTY_DEBUG_TOSSED_HOLDERS

```
public static final java.lang.String PROPERTY_DEBUG_TOSSED_HOLDERS
```

DVR Property "dvrDebugTossedHolders": for turning on logging of packets that are being tossed.

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugTossedHolders**

PROPERTY_DEBUG_RAW_PACKETS

```
public static final java.lang.String PROPERTY_DEBUG_RAW_PACKETS
```

DVR Property "dvrDebugRawPackets": for turning on logging of incoming raw packets.

Valid values are "true" or "false".
Constant value: **dvrDebugRawPackets**

See Also:

[PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS](#)

DEFAULT_PROPERTY_DEBUG_RAW_PACKETS

```
public static final boolean DEFAULT_PROPERTY_DEBUG_RAW_PACKETS
```

Default value for DVR Property "dvrDebugRawPackets".

Default value is false.
Constant value: **false**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)
[PROPERTY_DEBUG_RAW_PACKETS_MATCHER](#)

PROPERTY_DEBUG_RAW_PACKETS_MATCHER

```
public static final java.lang.String PROPERTY_DEBUG_RAW_PACKETS_MATCHER
```

(continued from last page)

DVR Property "dvrDebugRawPacketsMatcher": for matching stream names that will dump raw packet.

Only affects logging if [PROPERTY_DEBUG_RAW_PACKETS](#) is true.

Constant value: **dvrDebugRawPacketsMatcher**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)

PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS

```
public static final java.lang.String PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS
```

DVR Property "dvrDebugMaximumRawPackets": for setting maximum number of logged raw packets.

Valid values is an integer. 0 means there is no limit.

Only affects logging if [PROPERTY_DEBUG_RAW_PACKETS](#) is true.

Constant value: **dvrDebugMaximumRawPackets**

See Also:

[PROPERTY_DEBUG_RAW_PACKETS](#)

DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS

```
public static final int DEFAULT_PROPERTY_DEBUG_MAX_RAW_PACKETS
```

Default value for DVR Property "dvrDebugMaximumRawPackets".

Default value is 200 log statements.

Constant value: **200**

See Also:

[PROPERTY_DEBUG_MAXIMUM_RAW_PACKETS](#)

PROPERTY_DEBUG_STATE_CHANGE

```
public static final java.lang.String PROPERTY_DEBUG_STATE_CHANGE
```

DVR Property "dvrDebugStateChange": for logging state changes of DVR store.

Constant value: **dvrDebugStateChange**

PROPERTY_DEBUG_CHUNK_RETRIEVALS

```
public static final java.lang.String PROPERTY_DEBUG_CHUNK_RETRIEVALS
```

DVR Property "dvrDebugChunkRetrievals": for logging each chunk retrieval

Constant value: **dvrDebugChunkRetrievals**

PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS

```
public static final java.lang.String PROPERTY_DEBUG_FAILED_CHUNK_RETRIEVALS
```

DVR Property "dvrDebugFailedChunkRetrievals": for logging info about each failed chunk retrieval

Constant value: **dvrDebugFailedChunkRetrievals**

PROPERTY_MAX_CHUNK_LOG

```
public static final java.lang.String PROPERTY_MAX_CHUNK_LOG
```

(continued from last page)

DVR Property "dvrMaxChunkLogCount ": for maximum number of DVR chunks to log.

Maximum number of chunks to log recording information about in the wowzamedia_access.log file. As recording is continued past this value, there is no feedback for normal operation in the log. View directories and files created in [install-dir]/dvr for on-going feedback that recording is occurring. Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMaxChunkLogCount**

See Also:

[DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG](#)

DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG

```
public static final int DEFAULT_PROPERTY_DVR_MAX_CHUNK_LOG
```

Default value for DVR Property "dvrMaxChunkLogCount ".

Default value is 10 logging statements.
Constant value: **10**

See Also:

[PROPERTY_MAX_CHUNK_LOG](#)

PROPERTY_MAX_RECALC_DURATION_LOG

```
public static final java.lang.String PROPERTY_MAX_RECALC_DURATION_LOG
```

DVR Property "dvrMaxRecountDurationLogCount ": for maximum number of messages to log regarding recalculating DVR chunk duration

Maximum number of log statements recorded regarding chunk duration being recalculated. A value less than 0 means all statements will be logged with no limit.
Constant value: **dvrMaxRecountDurationLogCount**

See Also:

[DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG](#)

DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG

```
public static final int DEFAULT_PROPERTY_MAX_RECALC_DURATION_LOG
```

Default value for DVR Property "dvrMaxRecountDurationLogCount ".

Default value is 30 logging statements.
Constant value: **30**

See Also:

[PROPERTY_MAX_RECALC_DURATION_LOG](#)

PROPERTY_DEBUG_METHODS

```
public static final java.lang.String PROPERTY_DEBUG_METHODS
```

DVR Property "dvrDebugManagerLogMethods ": for turning on DVR Manager debug logging.

Valid values are "true" or "false".

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrDebugManagerLogMethods**

PROPERTY_DEBUG_REPEATER

```
public static final java.lang.String PROPERTY_DEBUG_REPEATER
```

(continued from last page)

DVR Property "dvrDebugRepeater": for turning on logging of DVR repeater

Valid values are "true" or "false".

Constant value: **dvrDebugRepeater**

PROPERTY_DEBUG_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugPlayerAdapter": for turning on DVR Player Adapter debug logging for all streamer types.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.

Constant value: **dvrDebugPlayerAdapter**

PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_SMOOTH_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugSmoothPlayerAdapter": for turning on DVR Player Smooth Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.

Constant value: **dvrDebugSmoothPlayerAdapter**

PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_SANJOSE_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugSanJosePlayerAdapter": for turning on DVR Player San Jose Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.

Constant value: **dvrDebugSanJosePlayerAdapter**

PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_CUPERTINO_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugCupertinoPlayerAdapter": for turning on DVR Player Cupertino Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.

Constant value: **dvrDebugCupertinoPlayerAdapter**

PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_MPEGDASH_PLAYER_ADAPTER
```

HTTP Streamer Property "dvrDebugMPegDashPlayerAdapter": for turning on DVR Player MPEG-DASH Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.

Constant value: **dvrDebugMPegDashPlayerAdapter**

PROPERTY_DEBUG_MBR_PLAYER_ADAPTER

```
public static final java.lang.String PROPERTY_DEBUG_MBR_PLAYER_ADAPTER
```

HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrPlayerAdapter**

PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY

```
public static final java.lang.String  
PROPERTY_DEBUG_MBR_PLAYER_ADAPTER_IF_SHIFTED_EMPTY
```

HTTP Streamer or DVR Property "dvrDebugMbrPlayerAdapter": for turning on DVR MBR Player Adapter debug logging when null shifted entries is returned.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrPlayerAdapterWhenShiftedEmpty**

PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE

```
public static final java.lang.String PROPERTY_DEBUG_MBR_DETAILS_WHEN_RECORD_DNE
```

HTTP Streamer or DVR Property "dvrDebugMbrDetailsWhenRecordDNE": for turning on DVR MBR Player Adapter debug logging.

Valid values are "true" or "false". (Default is false)

Add this property to Application/HTTPStreamer/Properties.
Constant value: **dvrDebugMbrDetailsWhenRecordDNE**

PROPERTY_DEBUG_MBR_ALIGNMENT

```
public static final java.lang.String PROPERTY_DEBUG_MBR_ALIGNMENT
```

HTTP Streamer or DVR Property "dvrDebugMbrAlignment": for turning on logging of mbr alignment

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugMbrAlignment**

PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION

```
public static final java.lang.String PROPERTY_DEBUG_MBR_ALIGNMENT_RESOLUTION
```

DVR Property "dvrDebugMbrAlignmentResolution": for turning on logging of mbr alignment resolution (requested to actual)

Valid values are "true" or "false". Default is false.
Constant value: **dvrDebugMbrAlignmentResolution**

PROPERTY_DEBUG_PLAYLIST_REQUEST

```
public static final java.lang.String PROPERTY_DEBUG_PLAYLIST_REQUEST
```

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DVR Property "dvrDebugPlaylistRequest": for turning on logging of DVR playlist requests.

Valid values are "true" or "false". Default is false.

Constant value: **dvrDebugPlaylistRequest**

PROPERTY_DEBUG_CHANNEL_MANIFEST

```
public static final java.lang.String PROPERTY_DEBUG_CHANNEL_MANIFEST
```

DVR Property "dvrDebugChannelManifest": for turning on logging of DVR channel manifests.

Valid values are "true" or "false". Default is false.

Constant value: **dvrDebugChannelManifest**

DEFAULT_PROPERTY_DEBUG_CHANNEL_MANIFEST

```
public static final boolean DEFAULT_PROPERTY_DEBUG_CHANNEL_MANIFEST
```

Constant value: **false**

PROPERTY_PLAYLIST_REQUEST_DELEGATE

```
public static final java.lang.String PROPERTY_PLAYLIST_REQUEST_DELEGATE
```

DVR Property "dvrPlaylistRequestDelegate": used to over-ride the class that generates a playlist request.

The delegate should extend DvrBasePlaylistRequestFactory

If unspecified, the standard DVR-time based delegate [DEFAULT_PLAYLIST_REQUEST_DELEGATE](#) is used

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrPlaylistRequestDelegate**

DEFAULT_PLAYLIST_REQUEST_DELEGATE

```
public static final java.lang.String DEFAULT_PLAYLIST_REQUEST_DELEGATE
```

Constant value: **com.wowza.wms.dvr.impl.DvrStartDurationPlaylistRequestDelegate**

PROPERTY_ENCRYPTION_INFO_DELEGATE

```
public static final java.lang.String PROPERTY_ENCRYPTION_INFO_DELEGATE
```

DVR Property "dvrPlaylistEncryptionInfoDelegate": used to over-ride the encryption info on the playback side.

The specified delegate should extend com.wowza.wms.dvr.DvrBaseEncryptionInfoDelegate

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrPlaylistEncryptionInfoDelegate**

PROPERTY_STREAM_ONLY_LIVE_STREAMS

```
public static final java.lang.String PROPERTY_STREAM_ONLY_LIVE_STREAMS
```

DVR Property "dvrStreamOnlyLiveStreams": used to allow only streaming of 'live' DVR streams. This means the DVR stream must actively be recording to be streamed. If not live, the streaming session will timeout when connecting.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrStreamOnlyLiveStreams**

PROPERTY_SANJOSE_PLAYLIST_MIMETYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_MIMETYPE
```

DVR Property "dvrSanJosePlaylistMimeType": used to over-ride the mime type for DVR San Jose F4m playlists.

Default value is "video/mp4"

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSanJosePlaylistMimeType**

PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_DELIVERYTYPE
```

DVR Property "dvrSanJosePlaylistDeliveryType": used to over-ride the mime type for DVR San Jose F4m playlists.

Default value is "streaming"

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSanJosePlaylistDeliveryType**

PROPERTY_SANJOSE_PLAYLIST_VERSION

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_VERSION
```

DVR Property "dvrSanJosePlaylistVersion": used to over-ride the version of the San Jose f4m playlist.

Default value is "2.0". Valid values are "1.0" and "2.0".

Constant value: **dvrSanJosePlaylistVersion**

See Also:

[SANJOSE_F4M_VERSION_1_0](#)

[Add this to Application/DVR/Properties section of Application.xml](#)

PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_RECORDED_STREAMTYPE
```

DVR Property "dvrSanJosePlaylistRecordedStreamType": used to over-ride the stream type for non-live (recorded) DVR in San Jose f4m playlists.

Default value is #SANJOSE_F4M_STREAMTYPE_RECORDED.*

Constant value: **dvrSanJosePlaylistRecordedStreamType**

See Also:

[SANJOSE_F4M_STREAMTYPE_DVR](#)

[SANJOSE_F4M_STREAMTYPE_LIVE](#)

[SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED](#)

Add this to Application/DVR/Properties section of Application.xml

PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE

```
public static final java.lang.String PROPERTY_SANJOSE_PLAYLIST_LIVE_STREAMTYPE
```

(continued from last page)

DVR Property "dvrSanJosePlaylistLiveStreamType": used to over-ride the stream type for live DVR in San Jose f4m playlists.

Default value is #SANJOSE_F4M_STREAMTYPE_DVR.

Constant value: **dvrSanJosePlaylistLiveStreamType**

See Also:

[SANJOSE_F4M_STREAMTYPE_DVR](#)

[SANJOSE_F4M_STREAMTYPE_LIVE](#)

[SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED](#)

Add this to Application/DVR/Properties section of Application.xml

SANJOSE_F4M_STREAMTYPE_DVR

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_DVR
```

Constant for San Jose stream type "dvr".

Constant value: **dvr**

SANJOSE_F4M_STREAMTYPE_RECORDED

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_RECORDED
```

Constant for San Jose stream type "recorded".

Constant value: **recorded**

SANJOSE_F4M_STREAMTYPE_LIVE

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_LIVE
```

Constant for San Jose stream type "live".

Constant value: **live**

SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED

```
public static final java.lang.String SANJOSE_F4M_STREAMTYPE_LIVEORRECORDED
```

Constant for San Jose stream type "liveOrRecorded".

Constant value: **liveOrRecorded**

SANJOSE_F4M_VERSION_1_0

```
public static final java.lang.String SANJOSE_F4M_VERSION_1_0
```

Constant for San Jose f4m version "1.0".

Constant value: **1.0**

SANJOSE_F4M_VERSION_2_0

```
public static final java.lang.String SANJOSE_F4M_VERSION_2_0
```

Constant for San Jose f4m version "2.0".

Constant value: **2.0**

SANJOSE_F4M_STREAMINGTYPE_STREAMING

```
public static final java.lang.String SANJOSE_F4M_STREAMINGTYPE_STREAMING
```

Constant for San Jose streaming type "streaming"

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Constant value: **streaming**

MIMETYPE_VIDEO_MP4

```
public static final java.lang.String MIMETYPE_VIDEO_MP4
```

Constant for mime type "video/mp4"
Constant value: **video/mp4**

PROPERTY_SANJOSE_ABST_TIMESCALE

```
public static final java.lang.String PROPERTY_SANJOSE_ABST_TIMESCALE
```

DVR Property "dvrSanJosePlaylistAbstTimescale": used to over-ride the time-scale for abst files.

Default value is #SANJOSE_ABST_DEFAULT_TIMESCALE (1000), which means milliseconds.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSanJosePlaylistAbstTimescale**

PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE

```
public static final java.lang.String PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE
```

DVR Property "dvrSanJosePlaylistAbstDurationEqualityTolerance": used to over-ride the tolerance when determining equal chunks lengths.

Default value is #SANJOSE_ABST_DEFAULT_DURATION_EQUALITY_TOLERANCE (50), which means 50 milliseconds.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSanJosePlaylistAbstDurationTolerance**

DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE

```
public static final int DEFAULT_PROPERTY_SANJOSE_ABST_TIMESCALE
```

Default value for property "dvrSanJosePlaylistAbstTimescale" #see [PROPERTY_SANJOSE_ABST_TIMESCALE](#)
Constant value: **1000**

DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE

```
public static final int DEFAULT_PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE
```

Default value for property "dvrSanJosePlaylistAbstDurationTolerance" #see [PROPERTY_SANJOSE_ABST_DURATION_TOLERANCE](#)
Constant value: **4**

PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_FORCE_LIVE
```

DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistForceLive**

(continued from last page)

PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_FORCE_NONLIVE
```

DVR Property "dvrCupertinoPlaylistForceLive": used to override playlist request delegate logic that determines if playlist is live versus non-live.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistForceNonLive**

PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_USE_GZIP
```

DVR Property "dvrCupertinoPlaylistUseGzip": used to force Cupertino playlist to use gzip if it is accepted

Default value is true

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistUseGzip**

PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD
```

DVR Property "dvrCupertinoPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted, the playlist will be compressed

Default value is [DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD](#)

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistGzipThreshold**

DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD

```
public static final int DEFAULT_CUPERTINO_PLAYLIST_GZIP_THRESHOLD
```

Default value for property "dvrCupertinoPlaylistGzipThreshold" #see
[PROPERTY_CUPERTINO_PLAYLIST_GZIP_THRESHOLD](#)
Constant value: **4000**

PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER

```
public static final java.lang.String PROPERTY_CUPERTINO_ON_CHUNK_START_RESET_COUNTER
```

DVR Property "dvrCupertinoOnChunkStartResetCounter": when a new chunk starts, reset internal tsPacketizer counters

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoOnChunkStartResetCounter**

PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_ALLOW_CACHING
```

(continued from last page)

DVR Property "dvrCupertinoPlaylistAllowCaching": used to force Cupertino playlist to set #EXT-X-ALLOW-CACHE: value

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistAllowCaching**

PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS

```
public static final java.lang.String PROPERTY_CUPERTINO_PUT_END_TAG_BEFORE_CHUNKS
```

DVR Property "dvrCupertinoPutEndTagBeforeChunks": if set to true, puts the EXT-X-ENDLIST before the DVR chunks.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPutEndTagBeforeChunks**

PROPERTY_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED

```
public static final java.lang.String  
PROPERTY_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED
```

DVR Property "dvrCupertinoPutEndTagIfPlaylistDurationReached": if set to true, puts the EXT-X-ENDLIST tag after DVR chunks only when a DVR playlist's duration has been specified in a request, and it's calculated end time has been reached for streams that are still recording.

Default value is false

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrCupertinoPutEndTagIfPlaylistDurationReached**

DEFAULT_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED

```
public static final boolean DEFAULT_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED
```

Default value for property "dvrCupertinoPlaylistGzipThreshold" #see
[PROPERTY_CUPERTINO_PUT_END_TAG_IF_PLAYLIST_DURATION_REACHED](#)
Constant value: **false**

PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK
```

DVR Property "dvrSmoothManifestLiveCanSeek": used to determine is CanSeek is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_LIVE_CAN_SEEK, which is set to true.

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestLiveCanSeek**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_SEEK
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE
```

(continued from last page)

DVR Property "dvrSmoothManifestLiveCanPause": used to determine is CanPause is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE, which is set to true.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestLiveCanPause**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_LIVE_CAN_PAUSE
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK
```

DVR Property "dvrSmoothManifestRecordedCanSeek": used to determine is CanSeek is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK, which is set to true.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestRecordedCanSeek**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_SEEK
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE
```

DVR Property "dvrSmoothManifestRecordedCanPause": used to determine is CanPause is enabled in smooth Manifest.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE, which is set to true.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestRecordedCanPause**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_CAN_PAUSE
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION

```
public static final java.lang.String  
PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION
```

DVR Property "dvrSmoothManifestRecordedSpecifyDuration": used to determine if duration is specified. If not duration of zero is shown.

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION, which is set to true.

Add this to Application/DVR/Properties section of Application.xml

(continued from last page)

Constant value: **dvrSmoothManifestRecordedSpecifyDuration**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION

```
public static final boolean DEFAULT_PROPERTY_SMOOTH_MANIFEST_RECORDED_SPECIFY_DURATION
```

Constant value: **true**

PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION
```

DVR Property "dvrSmoothManifestMajorVersion": used to determine Smooth manifest major version

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestMajorVersion**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION

```
public static final int DEFAULT_PROPERTY_SMOOTH_MANIFEST_MAJOR_VERSION
```

Constant value: **2**

PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION
```

DVR Property "dvrSmoothManifestMinorVersion": used to determine Smooth manifest major version

Default value is #DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION.

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestMinorVersion**

DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION

```
public static final int DEFAULT_PROPERTY_SMOOTH_MANIFEST_MINOR_VERSION
```

Constant value: **1**

PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_VERBOSE_DURATION
```

DVR Property "dvrSmoothManifestVerboseDuration": used to force Smooth Manifest to include durations for each record

Default value is false

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrSmoothManifestVerboseDuration**

PROPERTY_SMOOTH_MANIFEST_H264_CODEC

```
public static final java.lang.String PROPERTY_SMOOTH_MANIFEST_H264_CODEC
```

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DVR Property "dvrSmoothManifestH264Codec": used to force Smooth Manifest to use this as its FourCC H264 codec info.

Default value is set by Smooth Streaming

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrSmoothManifestH264Codec**

PROPERTY_STREAM_DATA

```
public static final java.lang.String PROPERTY_STREAM_DATA
```

Constant value: **dvrStreamRecordedData**

PROPERTY_CUPERTINO_ENABLE_DATE_EVENTS

```
public static final java.lang.String PROPERTY_CUPERTINO_ENABLE_DATE_EVENTS
```

HTTP Streamer Property "dvrCupertinoEnableDataEvents": used to stream ID3 data for HLS DVR streams

Default value is true

Add this to Application/HTTPStreamer/Properties section of Application.xml
Constant value: **dvrCupertinoEnableDataEvents**

PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES

```
public static final java.lang.String PROPERTY_CUPERTINO_PLAYLIST_DISC_AT_ALTERNATES
```

HTTP Streamer Property "dvrCupertinoPlaylistDiscontinuityAtAlternates": used to insert discontinuity tags into HLS stream if DVR store switches mid-playlist. The DVR store switches when alternates are pulled from other renditions to fill gaps.

Default value is true

Add this to Application/HTTPStreamer/Properties section of Application.xml
Constant value: **dvrCupertinoPlaylistDiscontinuityAtAlternates**

PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP

```
public static final java.lang.String PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP
```

DVR Property "dvrMPEDashPlaylistUseGzip": used to enable creation MPEG-DASH playlists with GZIP encoding

Default value is true

Add this to Application/DVR/Properties section of Application.xml
Constant value: **dvrMPEDashPlaylistUseGzip**

DEFAULT_PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP

```
public static final boolean DEFAULT_PROPERTY_MPEG_DASH_PLAYLIST_USE_GZIP
```

Constant value: **true**

PROPERTY_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD

```
public static final java.lang.String PROPERTY_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD
```

(continued from last page)

DVR Property "dvrMPEGDashPlaylistGzipThreshold": when playlist is larger than this number of bytes, and gzip is enabled and accepted by the requesting client, the playlist will be compressed

Default value is [DEFAULT_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD](#)

Add this to Application/DVR/Properties section of Application.xml

Constant value: **dvrMPEGDashPlaylistGzipThreshold**

DEFAULT_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD

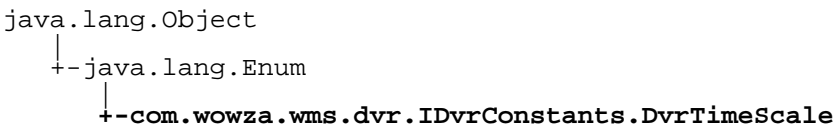
```
public static final int DEFAULT_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD
```

Default value for property "dvrMPEGDashPlaylistGzipThreshold" #see

[PROPERTY_MPEG_DASH_PLAYLIST_GZIP_THRESHOLD](#)

Constant value: **4000**

com.wowza.wms.dvr
Class IDvrConstants.DvrTimeScale



All Implemented Interfaces:
java.io.Serializable, Comparable

public static final class IDvrConstants.DvrTimeScale
extends Enum

Field Summary

public static final	DVR_TIME
public static final	PACKET_TIME
public static final	UTC_TIME

Method Summary

static IDvrConstants.DvrTimeScale	valueOf (String name)
static IDvrConstants.DvrTimeScale[]	values ()

Methods inherited from class java.lang.Enum
clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable
compareTo

Fields

(continued from last page)

DVR_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale DVR_TIME
```

PACKET_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale PACKET_TIME
```

UTC_TIME

```
public static final com.wowza.wms.dvr.IDvrConstants.DvrTimeScale UTC_TIME
```

Methods

values

```
public static IDvrConstants.DvrTimeScale\[\] values()
```

valueOf

```
public static IDvrConstants.DvrTimeScale valueOf(String name)
```

com.wowza.wms.dvr Interface IDvrEncryptionInfo

All Known Implementing Classes:

[CencInfo](#)

public interface **IDvrEncryptionInfo**
extends Cloneable

Interface for persisting encryption information for DVR.

Field Summary

public static final	ENCRYPTION_TYPE_CENC Common Encryption encryption type. Value: 3
public static final	ENCRYPTION_TYPE_CUPERTINO Cupertino AES encryption type. Value: 1
public static final	ENCRYPTION_TYPE_PLAYREADY Playready encryption type. Value: 2

Method Summary

abstract Object	clone()
abstract int	getEncryptionType() Serialize encryption info.
abstract int	getSerializeSize() Return number of bytes required to serialize this encryption info.
abstract byte[]	serialize() Serialize the encryption info, returning a byte buffer containing the serialized data.
abstract int	serialize(byte[] buffer, int pos) Serialize the encryption info into buffer starting at position 'pos'.

Fields

ENCRYPTION_TYPE_CUPERTINO

public static final int **ENCRYPTION_TYPE_CUPERTINO**

Cupertino AES encryption type.
Constant value: **1**

(continued from last page)

ENCRYPTION_TYPE_PLAYREADY

```
public static final int ENCRYPTION_TYPE_PLAYREADY
```

Playready encryption type.
Constant value: **2**

ENCRYPTION_TYPE_CENC

```
public static final int ENCRYPTION_TYPE_CENC
```

Common Encryption encryption type.
Constant value: **3**

Methods

getSerializeSize

```
public abstract int getSerializeSize()
```

Return number of bytes required to serialize this encryption info.

Returns:

number of bytes to serialize.

getEncryptionType

```
public abstract int getEncryptionType()
```

Serialize encryption info.

The encryption should consist of the following:

- version (1 byte)
- encryption type (1 byte)
- length of 'blob' (2 bytes)
- byte blob (n bytes)

Returns:

encryption type (constants defined in this class)

serialize

```
public abstract int serialize(byte[] buffer,  
int pos)
```

Serialize the encryption info into buffer starting at position 'pos'.

Parameters:

buffer - buffer to serialize to
pos - position to start serializing

Returns:

new position into buffer

(continued from last page)

serialize

```
public abstract byte[] serialize()
```

Serialize the encryption info, returning a byte buffer containing the serialized data.

Returns:

byte buffer of serialized data

clone

```
public abstract Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.dvr Interface IDvrManifest

public interface **IDvrManifest**
extends

Interface for a DVR Store manifest. A DVR manifest collects type-specific manifest info, including:

- Audio manifest
- Video manifest
- data manifest
- time map manifest, to map DVR, packet and real time
- codec manifest to track codec information
- onMetadata manifest

The difference between retrieving 'recorded entries' and 'live entries' is an important one. Recorded Entries means every current manifest entry. Live Entries refers to a subset of these because a playlist will not include the very last entries, as some chunks must be available for buffering.

Field Summary	
public static final	CODEC_TYPE Constant for codec manifest type. Value: 999
public static final	MANIFEST_TAGNAME_CAN_PLAY Value: CanPlay
public static final	MANIFEST_TAGNAME_CAN_RECORD Value: CanRecord
public static final	MANIFEST_TAGNAME_CHUNK_GROUPING Value: ChunkGrouping
public static final	MANIFEST_TAGNAME_CURRENT_TIME Value: CurrentTime
public static final	MANIFEST_TAGNAME_HAS_ENCRYPTION Value: HasEncryption
public static final	MANIFEST_TAGNAME_PURGE_TIME Value: PurgeTime
public static final	ON_METADATA_TYPE Constant for 'onMetadata' manifest type. Value: 0
public static final	TIME_MAP_TYPE Constant for time map manifest type. Value: 998

Method Summary

abstract void	<code>addToManifest</code> (java.util.List entries) Add manifest entries to the manifest
abstract void	<code>deserialize</code> (byte[] bytes) Deserialize the manifest.
abstract long	<code>expandEndTime</code> (int type, long dvrEndTime)
abstract long	<code>expandStartTime</code> (int type, long dvrStartTime)
abstract <code>IDvrChunkIDHandler3</code>	<code>getChunkIDHandler</code> ()
abstract long	<code>getClosestStartTime</code> (int type, long dvrTime) Given a dvrTime and a manifest type, find the closest chunk starting time.
abstract <code>DvrManifestCodecEntry</code>	<code>getCodecEntryForTime</code> (long dvrTime) Return most recent codec entry for a given DVR time.
abstract long	<code>getDvrTime</code> (int type)
abstract <code>DvrManifestEntryRangeGroup</code>	<code>getEntriesToPurge</code> (long purgeTime) Given a purge time, return a group of manifest ranges to purge.
abstract <code>DvrManifestEntry</code>	<code>getFirstEntry</code> (int type) Given manifest type, get the first playlist manifest entry.
abstract <code>DvrManifestEntry</code>	<code>getLastLiveEntry</code> (int type) Given manifest type, get the last playlist manifest entry.
abstract <code>DvrManifestEntry</code>	<code>getLastRecordedEntry</code> (int type) Given manifest type and DVR time, get last entry.
abstract long	<code>getLastRecordedIndex</code> (int type) Return last index of DVR entry for given type.
abstract long	<code>getLiveDuration</code> (int type) Given manifest type, return DVR live duration in seconds
abstract java.util.List	<code>getLiveEntries</code> (int type, long dvrStart) Given manifest type and DVR time, get a list of the live entries.
abstract java.util.List	<code>getLiveEntriesWithLimit</code> (int type, long dvrTime, int limit) Given manifest type and DVR time, get a list of the live entries limiting number of returned items.
abstract DvrChannelManifest	<code>getManifestChannel</code> (int type) For a given manifest type, return the channel manifest.
abstract <code>DvrManifestOnMetadataEntry</code>	<code>getMetadataEntryForTime</code> (long dvrTime) Return most recent metadataEntry for a given DVR time.
abstract long	<code>getNextChunkIndex</code> (String streamName, DvrPacketHolder vPackets, DvrPacketHolder aPackets)

abstract long	<u>getNextCodecIndex()</u>
abstract long	<u>getNextMetadataIndex()</u>
abstract long	<u>getNextTimeMapIndex()</u>
abstract int	<u>getNumberLiveEntries</u> (int type, long dvrStart) Given manifest type and DVR time, get the number of live entries at the given time.
abstract int	<u>getNumberLiveEntries</u> (int type, long dvrStart, long dvrEnd) Given manifest type and DVR time, get the number of live entries at the given time.
abstract int	<u>getNumberRecordedEntries</u> (int type, long dvrStart) Given manifest type and DVR time, get the number of entries at the given time.
abstract int	<u>getNumberRecordedEntries</u> (int type, long dvrStart, long dvrEnd) Given manifest type and DVR time, get the number of live entries at the given time.
abstract long	<u>getRecordedDuration</u> (int type) Given manifest type, return DVR recorded duration in seconds
abstract java.util.List	<u>getRecordedEntries</u> (int type) Get a copy of all manifest entries of a given type.
abstract java.util.List	<u>getRecordedEntries</u> (int type, long dvrStartTime) Given manifest type and DVR time, get a list of recorded entries.
abstract java.util.List	<u>getRecordedEntries</u> (int type, long dvrStartTime, long dvrEndTime) Given manifest type and DVR time, get a list of recorded entries.
abstract java.util.List	<u>getRecordedEntriesInRange</u> (<u>DvrManifestEntryRange</u> range) Given a DvrManifestEntryRange, get a list of recorded entries in this range.
abstract java.util.Map	<u>getRecordedEntriesMap</u> (int type) Get a copy of all manifest entries of a given type as a Map of indices.
abstract java.util.List	<u>getRecordedEntriesWithLimit</u> (int type, long dvrTime, int limit) Given manifest type and DVR time, get a list of recorded entries limiting number of returned items.
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByIndex</u> (int type, long index) Get the manifest entry given a manifest type and an index.
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByTimeKey</u> (int type, long dvrTime) Get the manifest entry given a manifest type and a time (in DVR units)
abstract <u>IDvrTimeMap</u>	<u>getTimeMap</u> ()
abstract boolean	<u>hasAudio</u> () Does manifest contain audio.
abstract boolean	<u>hasCodecData</u> () Does manifest contain codec data.
abstract boolean	<u>hasData</u> () Does manifest contain data.

abstract boolean	<code>hasOnMetadata()</code> Does manifest contain onMetadata.
abstract boolean	<code>hasTimeMapData()</code> Does manifest contain time map info.
abstract boolean	<code>hasVideo()</code> Does manifest contain video.
abstract void	<code>importManifest(IDvrManifest manifest, boolean persist)</code> Import the specified manifest into this manifest
abstract void	<code>initialize()</code> Initialize the manifest.
abstract java.util.List	<code>purgeEntries(DvrManifestEntryRangeGroup ranges)</code> Given a group of ranges, purge the manifest entries.
abstract void	<code>refreshManifest()</code> Refresh the manifest.
abstract byte[]	<code>serialize(boolean ignoreEntries)</code> Serialize the manifest.

Fields

ON_METADATA_TYPE

public static final int **ON_METADATA_TYPE**

Constant for 'onMetadata' manifest type.
Constant value: **0**

CODEC_TYPE

public static final int **CODEC_TYPE**

Constant for codec manifest type.
Constant value: **999**

TIME_MAP_TYPE

public static final int **TIME_MAP_TYPE**

Constant for time map manifest type.
Constant value: **998**

MANIFEST_TAGNAME_CAN_RECORD

public static final java.lang.String **MANIFEST_TAGNAME_CAN_RECORD**

Constant value: **CanRecord**

MANIFEST_TAGNAME_CAN_PLAY

public static final java.lang.String **MANIFEST_TAGNAME_CAN_PLAY**

(continued from last page)

Constant value: **CanPlay**

MANIFEST_TAGNAME_HAS_ENCRYPTION

```
public static final java.lang.String MANIFEST_TAGNAME_HAS_ENCRYPTION
```

Constant value: **HasEncryption**

MANIFEST_TAGNAME_CHUNK_GROUPING

```
public static final java.lang.String MANIFEST_TAGNAME_CHUNK_GROUPING
```

Constant value: **ChunkGrouping**

MANIFEST_TAGNAME_PURGE_TIME

```
public static final java.lang.String MANIFEST_TAGNAME_PURGE_TIME
```

Constant value: **PurgeTime**

MANIFEST_TAGNAME_CURRENT_TIME

```
public static final java.lang.String MANIFEST_TAGNAME_CURRENT_TIME
```

Constant value: **CurrentTime**

Methods

initialize

```
public abstract void initialize()
```

Initialize the manifest. Called after the previous storage has been loaded but before any chunks are added.

refreshManifest

```
public abstract void refreshManifest()
```

Refresh the manifest.

addToManifest

```
public abstract void addToManifest(java.util.List entries)
```

Add manifest entries to the manifest

Parameters:

entries - list of entries.

getRecordedEntries

```
public abstract java.util.List getRecordedEntries(int type)
```

(continued from last page)

Get a copy of all manifest entries of a given type. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [ON_METADATA_TYPE](#), [CODEC_TYPE](#), or [TIME_MAP_TYPE](#)

Parameters:

type - The manifest type.

Returns:

list of entries

getRecordedEntriesMap

```
public abstract java.util.Map getRecordedEntriesMap(int type)
```

Get a copy of all manifest entries of a given type as a Map of indices. Valid types include: [IVHost.CONTENTTYPE_AUDIO](#), [IVHost.CONTENTTYPE_VIDEO](#), [IVHost.CONTENTTYPE_DATA](#), [ON_METADATA_TYPE](#), [CODEC_TYPE](#), or [TIME_MAP_TYPE](#)

Parameters:

type - the manifest type.

Returns:

map of entries

getRecordedEntriesInRange

```
public abstract java.util.List getRecordedEntriesInRange(DvrManifestEntryRange range)
```

Given a DvrManifestEntryRange, get a list of recorded entries in this range.

Parameters:

range - a range (which consists of a manifest type and a start and end index)

Returns:

list of entries

getLastRecordedEntry

```
public abstract DvrManifestEntry getLastRecordedEntry(int type)
```

Given manifest type and DVR time, get last entry.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.

Returns:

manifest entry

getRecordedEntryByTimeKey

```
public abstract DvrManifestEntry getRecordedEntryByTimeKey(int type,  
long dvrTime)
```

Get the manifest entry given a manifest type and a time (in DVR units)

Parameters:

type - the manifest type.

dvrTime - DVR time

Returns:

(continued from last page)

manifest entry

getRecordedEntryByIndex

```
public abstract DvrManifestEntry getRecordedEntryByIndex(int type,  
long index)
```

Get the manifest entry given a manifest type and an index.

Parameters:

type - the manifest type.
index - the index into the manifest

Returns:

manifest entry

getEntriesToPurge

```
public abstract DvrManifestEntryRangeGroup getEntriesToPurge(long purgeTime)
```

Given a purge time, return a group of manifest ranges to purge. This method ensures that the purge entries are aligned by index so that audio and video always remain index aligned.

Parameters:

purgeTime - The DVR time to purge

Returns:

a group of ranges.

purgeEntries

```
public abstract java.util.List purgeEntries(DvrManifestEntryRangeGroup ranges)
```

Given a group of ranges, purge the manifest entries.

Parameters:

ranges - Group of ranges

Returns:

A list of the purged items.

getMetadataEntryForTime

```
public abstract DvrManifestOnMetadataEntry getMetadataEntryForTime(long dvrTime)
```

Return most recent metadataEntry for a given DVR time. The manifest for metadata entries is sparse-- it only stores items periodically. So for a given time t, the returned entry will exist at or before time t.

Parameters:

dvrTime - DVR time

Returns:

onMetadata Entry

getCodecEntryForTime

```
public abstract DvrManifestCodecEntry getCodecEntryForTime(long dvrTime)
```

(continued from last page)

Return most recent codec entry for a given DVR time. The manifest for codec entries is sparse-- it only stores items periodically. So for a given time t, the returned entry will exist at or before time t.

Parameters:

dvrTime - DVR time

Returns:

Codec Entry

getNumberLiveEntries

```
public abstract int getNumberLiveEntries(int type,  
    long dvrStart)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

dvrStart - DVR time

Returns:

number of entries.

getNumberLiveEntries

```
public abstract int getNumberLiveEntries(int type,  
    long dvrStart,  
    long dvrEnd)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

dvrStart - DVR time

dvrEnd - end DVR time

Returns:

number of entries.

getNumberRecordedEntries

```
public abstract int getNumberRecordedEntries(int type,  
    long dvrStart)
```

Given manifest type and DVR time, get the number of entries at the given time.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.

dvrStart - DVR time

Returns:

number of entries.

getNumberRecordedEntries

```
public abstract int getNumberRecordedEntries(int type,  
                                             long dvrStart,  
                                             long dvrEnd)
```

Given manifest type and DVR time, get the number of live entries at the given time.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrStart - DVR time
dvrEnd - end DVR time

Returns:

number of entries.

getFirstEntry

```
public abstract DvrManifestEntry getFirstEntry(int type)
```

Given manifest type, get the first playlist manifest entry.

Parameters:

type - the manifest type.

Returns:

manifest entry

getLastLiveEntry

```
public abstract DvrManifestEntry getLastLiveEntry(int type)
```

Given manifest type, get the last playlist manifest entry.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

Returns:

manifest entry

getLiveEntries

```
public abstract java.util.List getLiveEntries(int type,  
                                             long dvrStart)
```

Given manifest type and DVR time, get a list of the live entries.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.
dvrStart - DVR time

(continued from last page)

Returns:

list of entries.

getLiveEntriesWithLimit

```
public abstract java.util.List getLiveEntriesWithLimit(int type,  
    long dvrTime,  
    int limit)
```

Given manifest type and DVR time, get a list of the live entries limiting number of returned items.

"Live Entries" means that a couple of the last entries will not be included as they are too close to the live point to be part of the playlist.

Parameters:

type - the manifest type.

dvrTime - DVR time

limit - maximum number of returned items

Returns:

list of entries.

getRecordedEntriesWithLimit

```
public abstract java.util.List getRecordedEntriesWithLimit(int type,  
    long dvrTime,  
    int limit)
```

Given manifest type and DVR time, get a list of recorded entries limiting number of returned items.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.

dvrTime - DVR time

limit - maximum number of returned items

Returns:

list of entries.

getRecordedEntries

```
public abstract java.util.List getRecordedEntries(int type,  
    long dvrStartTime)
```

Given manifest type and DVR time, get a list of recorded entries.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.

dvrStartTime - DVR time

Returns:

list of entries.

(continued from last page)

getRecordedEntries

```
public abstract java.util.List getRecordedEntries(int type,  
    long dvrStartTime,  
    long dvrEndTime)
```

Given manifest type and DVR time, get a list of recorded entries.

"Recorded Entries" includes those entries after the end of the playlist.

Parameters:

type - the manifest type.
dvrStartTime - DVR time
dvrEndTime - DVR end time

Returns:

list of entries.

getRecordedDuration

```
public abstract long getRecordedDuration(int type)
```

Given manifest type, return DVR recorded duration in seconds

"Recorded Entries" includes those entries after the end of the "live" playlist.

Parameters:

type - the manifest type.

Returns:

duration in seconds

getLiveDuration

```
public abstract long getLiveDuration(int type)
```

Given manifest type, return DVR live duration in seconds

"Recorded Entries" includes those entries after the end of the "live" playlist.

Parameters:

type - the manifest type.

Returns:

duration in seconds

getDvrTime

```
public abstract long getDvrTime(int type)
```

getLastRecordedIndex

```
public abstract long getLastRecordedIndex(int type)
```

Return last index of DVR entry for given type.

Parameters:

type

(continued from last page)

Returns:

index, or -1 if type does not exist

getNextChunkIndex

```
public abstract long getNextChunkIndex(String streamName,  
    DvrPacketHolder vPackets,  
    DvrPacketHolder aPackets)
```

getNextMetadataIndex

```
public abstract long getNextMetadataIndex()
```

getNextCodecIndex

```
public abstract long getNextCodecIndex()
```

getNextTimeMapIndex

```
public abstract long getNextTimeMapIndex()
```

getManifestChannel

```
public abstract DvrChannelManifest getManifestChannel(int type)
```

For a given manifest type, return the channel manifest.

Parameters:

type

Returns:

channel manifest

importManifest

```
public abstract void importManifest(IDvrManifest manifest,  
    boolean persist)
```

Import the specified manifest into this manifest

Parameters:

manifest

persist

getClosestStartTime

```
public abstract long getClosestStartTime(int type,  
    long dvrTime)
```

Given a dvrTime and a manifest type, find the closest chunk starting time.

(continued from last page)

Parameters:

type - manifest type
dvrTime - DVR time

Returns:

time that corresponds to the closest start time of the given manifest type

expandEndTime

```
public abstract long expandEndTime(int type,  
    long dvrEndTime)
```

expandStartTime

```
public abstract long expandStartTime(int type,  
    long dvrStartTime)
```

hasVideo

```
public abstract boolean hasVideo()
```

Does manifest contain video.

Returns:

true if it contains video.

hasAudio

```
public abstract boolean hasAudio()
```

Does manifest contain audio.

Returns:

true if it contains audio.

hasData

```
public abstract boolean hasData()
```

Does manifest contain data.

Returns:

true if it contains data.

hasOnMetadata

```
public abstract boolean hasOnMetadata()
```

Does manifest contain onMetadata.

Returns:

true if it contains onMetadata.

(continued from last page)

hasCodecData

```
public abstract boolean hasCodecData()
```

Does manifest contain codec data.

Returns:

true if it contains codec data

hasTimeMapData

```
public abstract boolean hasTimeMapData()
```

Does manifest contain time map info.

Returns:

true if it contains time map info.

serialize

```
public abstract byte[] serialize(boolean ignoreEntries)
```

Serialize the manifest.

Parameters:

`ignoreEntries` - If true, the individual manifest entries are not serialized.

Returns:

byte array of serialized data

deserialize

```
public abstract void deserialize(byte[] bytes)
```

Deserialize the manifest. Should be called after default constructor for manifest has been called.

Parameters:

`bytes` - buffer of bytes to deserialize

getTimeMap

```
public abstract IDvrTimeMap getTimeMap()
```

getChunkIDHandler

```
public abstract IDvrChunkIDHandler3 getChunkIDHandler()
```

com.wowza.wms.dvr Interface IDvrPacketConverter

public interface **IDvrPacketConverter**
extends

Interface for creating DVR chunks from a set of packets.

Method Summary

abstract DvrChunk	createDvrAudioChunk (long dvrTime, long index, int duration, DvrPacketHolder holder) Create audio chunk from set of packets.
abstract DvrChunk	createDvrDataChunk (long dvrTime, long index, int duration, DvrPacketHolder holder) Create data chunk from set of packets.
abstract DvrChunk	createDvrOnMetadataChunk (long dvrTime, long pt, AMFPacket metaPacket) Create onMetadata chunk from set of packets.
abstract DvrChunk	createDvrVideoChunk (long dvrTime, long index, int duration, DvrPacketHolder holder) Create video chunk from set of packets.

Methods

createDvrAudioChunk

```
public abstract DvrChunk createDvrAudioChunk(long dvrTime,  
    long index,  
    int duration,  
    DvrPacketHolder holder)
```

Create audio chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrVideoChunk

```
public abstract DvrChunk createDvrVideoChunk(long dvrTime,  
    long index,  
    int duration,  
    DvrPacketHolder holder)
```

Create video chunk from set of packets.

Parameters:

(continued from last page)

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrDataChunk

```
public abstract DvrChunk createDvrDataChunk(long dvrTime,  
    long index,  
    int duration,  
    DvrPacketHolder holder)
```

Create data chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
index - index of DVR chunk
duration - Duration in milliseconds
holder - packet holder

Returns:

the created chunk or null if chunk not created.

createDvrOnMetadataChunk

```
public abstract DvrChunk createDvrOnMetadataChunk(long dvrTime,  
    long pt,  
    AMFPacket metaPacket)
```

Create onMetadata chunk from set of packets.

Parameters:

dvrTime - DVR start time in milliseconds
pt - Packet time
metaPacket - metadata packet

Returns:

the created chunk or null if chunk not created.

com.wowza.wms.dvr Interface IDvrPacketWriter

public interface **IDvrPacketWriter**
extends

Interface for chunking and storing packets for DVR.

Method Summary

abstract void	addToChunk (DvrPacketHolder holder)
abstract boolean	canRecordAudio ()
abstract boolean	canRecordData ()
abstract boolean	canRecordVideo ()
abstract void	endChunk (long videoEndTime, long audioEndTime)
abstract void	resetStream ()
abstract void	sendOnMetadata (long pt, AMFPacket metaPacket)
abstract void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
abstract void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
abstract void	startChunk (int streamMode, int videoCodecId, int audioCodecId, long timecode, long utcTimecode)

Methods

sendOnMetadata

```
public abstract void sendOnMetadata(long pt,
    AMFPacket metaPacket)
```

startChunk

```
public abstract void startChunk(int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    long utcTimecode)
```

(continued from last page)

addToChunk

```
public abstract void addToChunk(DvrPacketHolder holder)
```

endChunk

```
public abstract void endChunk(long videoEndTime,  
    long audioEndTime)
```

setCodecInfoAudio

```
public abstract void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
    codecInfoAudio)
```

setCodecInfoVideo

```
public abstract void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
    codecInfoVideo)
```

resetStream

```
public abstract void resetStream()
```

canRecordAudio

```
public abstract boolean canRecordAudio()
```

canRecordVideo

```
public abstract boolean canRecordVideo()
```

canRecordData

```
public abstract boolean canRecordData()
```

com.wowza.wms.dvr Interface IDvrPlayerAdapter

public interface **IDvrPlayerAdapter**
extends

Field Summary

public static final	QUERY_PARAM_DVR Value: DVR
---------------------	--

Method Summary

abstract int	calcBitrate (IDvrStreamStore store, int type, long t)
abstract String	determineStreamVersion (IDvrStreamManager dvrMgr, String baseStreamName)
abstract DvrPlaylistRequest	getDvrPlaylistRequest (IHTTPStreamerApplicationContext appContext, IDvrStreamStore store, java.util.Map queryMap)
abstract DvrPlaylistRequest	getDvrPlaylistRequest (IHTTPStreamerApplicationContext appContext, java.util.List stores, java.util.Map queryMap)
abstract IDvrMbrPlaylistAlignm ent	getPlaylistAlignment (IHTTPStreamerSession httpStreamerSession)
abstract boolean	isPlaylistReady (IDvrStreamStore store, DvrPlaylistRequest playlistRequest)
abstract boolean	isPlaylistReady (java.util.List stores, DvrPlaylistRequest dvrPlaylistRequest)
abstract void	setEnabledDataEvents (boolean enableDataEvents)

Fields

QUERY_PARAM_DVR

public static final java.lang.String **QUERY_PARAM_DVR**

Constant value: **DVR**

Methods

(continued from last page)

isPlaylistReady

```
public abstract boolean isPlaylistReady(IDvrStreamStore store,  
    DvrPlaylistRequest playlistRequest)
```

isPlaylistReady

```
public abstract boolean isPlaylistReady(java.util.List stores,  
    DvrPlaylistRequest dvrPlaylistRequest)
```

determineStreamVersion

```
public abstract String determineStreamVersion(IDvrStreamManager dvrMgr,  
    String baseStreamName)
```

calcBitrate

```
public abstract int calcBitrate(IDvrStreamStore store,  
    int type,  
    long t)
```

getDvrPlaylistRequest

```
public abstract DvrPlaylistRequest  
getDvrPlaylistRequest(IHTTPStreamerApplicationContext appContext,  
    IDvrStreamStore store,  
    java.util.Map queryMap)
```

getDvrPlaylistRequest

```
public abstract DvrPlaylistRequest  
getDvrPlaylistRequest(IHTTPStreamerApplicationContext appContext,  
    java.util.List stores,  
    java.util.Map queryMap)
```

getPlaylistAlignment

```
public abstract IDvrMbrPlaylistAlignment getPlaylistAlignment(IHTTPStreamerSession  
    httpStreamerSession)
```

setEnabledDataEvents

```
public abstract void setEnabledDataEvents(boolean enableDataEvents)
```


com.wowza.wms.dvr Interface IDvrPrivateConstants

All Subinterfaces:

[IDvrConstants](#)

public interface **IDvrPrivateConstants**
extends

Internal and public constants. Public constants are contained in [IDvrConstants](#). Undocumented/Private in this file. To make the constant public (and documented in javadocs, simply move to IDvrConstants)

Field Summary	
public static final	CHUNK_FILENAME_FORMAT_AUDIO Value: A-%04d_%02d_%02d_%03d.m4fa
public static final	CHUNK_FILENAME_FORMAT_DATA Value: D-%04d_%02d_%02d_%03d.m4fd
public static final	CHUNK_FILENAME_FORMAT_METADATA Value: M-%04d_%02d_%02d_%03d.m4fm
public static final	CHUNK_FILENAME_FORMAT_VIDEO Value: V-%04d_%02d_%02d_%03d.m4fv
public static final	CHUNK_FOLDER_FORMAT Value: %04d_%02d_%02d
public static final	DEFAULT_PROPERTY_AUDIO_GROUP_COUNT Default value for DVR Property "dvrAudioGroupCount". Value: 3
public static final	DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE Default value for DVR Property "dvrManifestPurgeCacheSize". Value: 10
public static final	DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION Default value for DVR Property "dvrMaxAllowableChunkDuration". Value: 120000
public static final	DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE Value: 500
public static final	DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS Default value for DVR Property "dvrMinimumAvailableChunks". Value: 3
public static final	DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK Default value for DVR Property "dvrPlaylistChunksHeldBack". Value: 2

public static final	DEFAULT_PROPERTY_PURGE_CONTROL_CLASS Default value for DVR Property "dvrPurgeControlClass". Value: com.wowza.wms.dvr.impl.DvrPurgeController
public static final	DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER Default value for DVR Property "dvrRecalcDurationMaxAVStartDifference". Value: 500
public static final	DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE Default value for DVR Property "dvrRecalcDurationMaxChunkSize". Value: 60000
public static final	DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT Default value for DVR Property "streamTimeout". Value: 300000
public static final	DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT Default value for DVR Property "streamStartupTimeout". Value: 60000
public static final	DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO Default value for DVR Property "dvrUtcAlignToAudio". Value: true
public static final	DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL Default value for DVR Property "dvrUtcUseWowzaPacketArrivalTime". Value: false
public static final	DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME Default value for DVR Property "dvrWaitForCodecTime". Value: 8000
public static final	PROPERTY_AUDIO_GROUP_COUNT DVR Property "dvrAudioGroupCount": for number of audio packets to group together. Value: dvrAudioGroupCount
public static final	PROPERTY_DEBUG_DISCONTINUITY Value: dvrDebugDiscontinuity
public static final	PROPERTY_DEBUG_MBR_RESOLVER Value: dvrDebugMbrResolver
public static final	PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS Value: dvrDebugMbrResolverGapDetails
public static final	PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS Value: dvrDebugMbrResolverIntersectionDetails
public static final	PROPERTY_INTERCEPTOR_CHUNK_DELEGATE DVR Property "dvrChunkInterceptorDelegate": for specifying a delegate that determines if DVR chunk should be stored or not. Value: dvrChunkInterceptorDelegate

public static final	<u>PROPERTY_MANIFEST_PURGE_CACHE_SIZE</u> DVR Property "dvrManifestPurgeCacheSize": for specifying how many purged chunks are kept around just in case they are requested. Value: dvrManifestPurgeCacheSize
public static final	<u>PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION</u> DVR Property "dvrMaxAllowableChunkDuration": for setting maximum chunk duration. Value: dvrMaxAllowableChunkDuration
public static final	<u>PROPERTY_MAX_SAVE HOLDER_SIZE</u> Value: dvrMaxSaveHolderSize
public static final	<u>PROPERTY_MBR_USE_SIMPLEALIGNMENT</u> HTTP Streamer Property "dvrMbrUseSimpleAligner": for defaulting to a simple mbr aligner Value: dvrMbrUseSimpleAligner
public static final	<u>PROPERTY_MINIMUM_AVAILABLE_CHUNKS</u> DVR Property "dvrMinimumAvailableChunks": for specifying how many chunks must be available in order to play back the DVR recording. Value: dvrMinimumAvailableChunks
public static final	<u>PROPERTY_PLAYLIST_CHUNKS_HELD_BACK</u> DVR Property "dvrPlaylistChunksHeldBack": for specifying how many chunks are held back must be available in order to play back the DVR recording. Value: dvrPlaylistChunksHeldBack
public static final	<u>PROPERTY_PURGE_CONTROL_CLASS</u> DVR Property "dvrPurgeControlClass": for controlling the class responsible for determining which chunks to purge Value: dvrPurgeControlClass
public static final	<u>PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER</u> DVR Property "dvrRecalcDurationMaxAVStartDifference": for triggering recalculation of DVR chunk duration by examining each packet Value: dvrRecalcDurationMaxAVStartDifference
public static final	<u>PROPERTY_RECALC_DURATION_TRIGGER_SIZE</u> DVR Property "dvrRecalcDurationMaxChunkSize": for triggering recalculation of DVR chunk duration by examining each packet Value: dvrRecalcDurationMaxChunkSize
public static final	<u>PROPERTY_UTC_ALIGN_TO_AUDIO</u> DVR Property "dvrUtcAlignToAudio": determines if calculated Utc time gets aligned to audio or video. Value: dvrUtcAlignToAudio
public static final	<u>PROPERTY_UTC_DELEGATE_CLASS</u> DVR Property "dvrUtcTimeDelegate": for specifying a delegate that the utc time for a given chunk. Value: dvrUtcTimeDelegate
public static final	<u>PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL</u> DVR Property "dvrUtcUseWowzaPacketArrivalTime": determines if Utc times are based on the time the packet reaches Wowza or the time the chunks reach DVR (default). Value: dvrUtcUseWowzaPacketArrivalTime

public static final	PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD Value: dvrVerifyChunkExistenceOnManifestLoad
public static final	PROPERTY_WAIT_FOR_CODEC_TIME DVR Property "dvrWaitForCodecTime": for how long DVR will wait to get the codec information. Value: dvrWaitForCodecTime

Fields

PROPERTY_INTERCEPTOR_CHUNK_DELEGATE

```
public static final java.lang.String PROPERTY_INTERCEPTOR_CHUNK_DELEGATE
```

DVR Property "dvrChunkInterceptorDelegate": for specifying a delegate that determines if DVR chunk should be stored or not. It's only here to allow a backdoor method of testing mbr streams that have gaps.
Constant value: **dvrChunkInterceptorDelegate**

PROPERTY_UTC_DELEGATE_CLASS

```
public static final java.lang.String PROPERTY_UTC_DELEGATE_CLASS
```

DVR Property "dvrUtcTimeDelegate": for specifying a delegate that the utc time for a given chunk. Currently in private constants until article is written.
Constant value: **dvrUtcTimeDelegate**

PROPERTY_UTC_ALIGN_TO_AUDIO

```
public static final java.lang.String PROPERTY_UTC_ALIGN_TO_AUDIO
```

DVR Property "dvrUtcAlignToAudio": determines if calculated Utc time gets aligned to audio or video. Note: Currently in private constants until article is written.
Constant value: **dvrUtcAlignToAudio**

DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO

```
public static final boolean DEFAULT_PROPERTY_UTC_ALIGN_TO_AUDIO
```

Default value for DVR Property "dvrUtcAlignToAudio". Default value is true.
Constant value: **true**

See Also:

[PROPERTY_UTC_ALIGN_TO_AUDIO](#)

PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL

```
public static final java.lang.String PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL
```

DVR Property "dvrUtcUseWowzaPacketArrivalTime": determines if Utc times are based on the time the packet reaches Wowza or the time the chunks reach DVR (default). Note: Currently in private constants until article is written.
Constant value: **dvrUtcUseWowzaPacketArrivalTime**

DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL

```
public static final boolean DEFAULT_PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL
```

Default value for DVR Property "dvrUtcUseWowzaPacketArrivalTime". Default value is false.

(continued from last page)

Constant value: **false**

See Also:

[PROPERTY_UTC_USE_WOWZA_PACKET_ARRIVAL](#)

PROPERTY_MINIMUM_AVAILABLE_CHUNKS

```
public static final java.lang.String PROPERTY_MINIMUM_AVAILABLE_CHUNKS
```

DVR Property "dvrMinimumAvailableChunks": for specifying how many chunks must be available in order to play back the DVR recording.

It is not recommended to have this set to less than three, as players typically require this many chunks.

Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrMinimumAvailableChunks**

See Also:

[DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#)

DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS

```
public static final int DEFAULT_PROPERTY_MINIMUM_AVAILABLE_CHUNKS
```

Default value for DVR Property "dvrMinimumAvailableChunks".

Default value is 3.

Constant value: **3**

See Also:

[PROPERTY_MINIMUM_AVAILABLE_CHUNKS](#)

PROPERTY_PLAYLIST_CHUNKS_HELD_BACK

```
public static final java.lang.String PROPERTY_PLAYLIST_CHUNKS_HELD_BACK
```

DVR Property "dvrPlaylistChunksHeldBack": for specifying how many chunks are held back must be available in order to play back the DVR recording. Add the property to Application/DVR/Properties section of Application.xml.

Constant value: **dvrPlaylistChunksHeldBack**

See Also:

[PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#)

DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK

```
public static final int DEFAULT_PROPERTY_PLAYLIST_CHUNKS_HELD_BACK
```

Default value for DVR Property "dvrPlaylistChunksHeldBack".

Default value is 2.

Constant value: **2**

See Also:

[PROPERTY_PLAYLIST_CHUNKS_HELD_BACK](#)

PROPERTY_MANIFEST_PURGE_CACHE_SIZE

```
public static final java.lang.String PROPERTY_MANIFEST_PURGE_CACHE_SIZE
```

(continued from last page)

DVR Property "dvrManifestPurgeCacheSize": for specifying how many purged chunks are kept around just in case they are requested.

When purging chunks occurs, the DVR keeps a few chunks around that normally would have been purged just in case they are requested.

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrManifestPurgeCacheSize**

See Also:

[DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE](#)

DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE

```
public static final int DEFAULT_PROPERTY_MANIFEST_PURGE_SIZE
```

Default value for DVR Property "dvrManifestPurgeCacheSize".

Default value is 10.
Constant value: **10**

See Also:

[PROPERTY_MANIFEST_PURGE_CACHE_SIZE](#)

PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD

```
public static final java.lang.String PROPERTY_VERIFY_CHUNK_EXISTENCE_ON_MANIFEST_LOAD
```

Constant value: **dvrVerifyChunkExistenceOnManifestLoad**

PROPERTY_PURGE_CONTROL_CLASS

```
public static final java.lang.String PROPERTY_PURGE_CONTROL_CLASS
```

DVR Property "dvrPurgeControlClass": for controlling the class responsible for determining which chunks to purge

The class must implement [IDvrPurgeController](#) and may sub-class DvrPurgeControllerBase

Add the property to Application/DVR/Properties section of Application.xml.
Constant value: **dvrPurgeControlClass**

See Also:

[IDvrPurgeController](#)

[DEFAULT_PROPERTY_PURGE_CONTROL_CLASS](#)

DEFAULT_PROPERTY_PURGE_CONTROL_CLASS

```
public static final java.lang.String DEFAULT_PROPERTY_PURGE_CONTROL_CLASS
```

Default value for DVR Property "dvrPurgeControlClass".

Default value is "com.wowza.wms.dvr.impl.DvrPurgeController".
Constant value: **com.wowza.wms.dvr.impl.DvrPurgeController**

See Also:

[PROPERTY_PURGE_CONTROL_CLASS](#)

PROPERTY_MBR_USE_SIMPLEALIGNMENT

```
public static final java.lang.String PROPERTY_MBR_USE_SIMPLEALIGNMENT
```

(continued from last page)

HTTP Streamer Property "dvrMbrUseSimpleAligner": for defaulting to a simple mbr aligner

Add the property to Application/HTTPStreamer/Properties section of Application.xml.
Constant value: **dvrMbrUseSimpleAligner**

PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION

```
public static final java.lang.String PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION
```

DVR Property "dvrMaxAllowableChunkDuration": for setting maximum chunk duration.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrMaxAllowableChunkDuration**

See Also:

[DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#)

DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION

```
public static final int DEFAULT_PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION
```

Default value for DVR Property "dvrMaxAllowableChunkDuration".

Default value is 120000 ms (120 seconds).
Constant value: **120000**

See Also:

[PROPERTY_MAX_ALLOWABLE_CHUNK_DURATION](#)

PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER

```
public static final java.lang.String  
PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER
```

DVR Property "dvrRecalcDurationMaxAVStartDifference": for triggering recalculation of DVR chunk duration by examining each packet

This is a fallback setting for when the aligned audio and video packets differ their start times. When this happens, fallback logic is triggered which examines the actual packets and tries to adjust the packet times and duration accordingly.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrRecalcDurationMaxAVStartDifference**

See Also:

[DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#)

DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER

```
public static final int DEFAULT_PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER
```

Default value for DVR Property "dvrRecalcDurationMaxAVStartDifference".

Default value is 500 ms.
Constant value: **500**

See Also:

[PROPERTY_RECALC_DURATION_MAX_AV_DIFFERENCE_TRIGGER](#)

PROPERTY_RECALC_DURATION_TRIGGER_SIZE

```
public static final java.lang.String PROPERTY_RECALC_DURATION_TRIGGER_SIZE
```

(continued from last page)

DVR Property "dvrRecalcDurationMaxChunkSize": for triggering recalculation of DVR chunk duration by examining each packet

This is a fallback setting for when the DVR packetizer determines the chunk is quite large, usually because the incoming packet times have done something odd like suddenly diverged. When this happens, asome fallback logic is triggered which examines the acual packets and tries to adjust the duration accordingly.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrRecalcDurationMaxChunkSize**

See Also:

[DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#)

DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE

```
public static final int DEFAULT_PROPERTY_RECALC_DURATION_TRIGGER_SIZE
```

Default value for DVR Property "dvrRecalcDurationMaxChunkSize".

Default value is 60000 ms (60 seconds).
Constant value: **60000**

See Also:

[PROPERTY_RECALC_DURATION_TRIGGER_SIZE](#)

PROPERTY_MAX_SAVE HOLDER_SIZE

```
public static final java.lang.String PROPERTY_MAX_SAVE HOLDER_SIZE
```

Constant value: **dvrMaxSaveHolderSize**

DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE

```
public static final int DEFAULT_PROPERTY_MAX_SAVE HOLDER_SIZE
```

Constant value: **500**

PROPERTY_WAIT_FOR_CODEC_TIME

```
public static final java.lang.String PROPERTY_WAIT_FOR_CODEC_TIME
```

DVR Property "dvrWaitForCodecTime": for how long DVR will wait to get the codec information.

Amount of time Wowza nDVR will wait to receive audio and video codec information after streaming has begun. The unit is in ms. The default value is 8000 ms.

Add the property to Application/DVR/Properties section of Application.xml
Constant value: **dvrWaitForCodecTime**

See Also:

[DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME](#)

DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME

```
public static final int DEFAULT_PROPERTY_WAIT_FOR_CODEC_TIME
```

Default value for DVR Property "dvrWaitForCodecTime".

Default value is 8000 ms.
Constant value: **8000**

(continued from last page)

See Also:

[PROPERTY_WAIT_FOR_CODEC_TIME](#)

PROPERTY_AUDIO_GROUP_COUNT

```
public static final java.lang.String PROPERTY_AUDIO_GROUP_COUNT
```

DVR Property "dvrAudioGroupCount": for number of audio packets to group together.

Default is 3. @see [DEFAULT_PROPERTY_AUDIO_GROUP_COUNT](#)

Constant value: **dvrAudioGroupCount**

DEFAULT_PROPERTY_AUDIO_GROUP_COUNT

```
public static final int DEFAULT_PROPERTY_AUDIO_GROUP_COUNT
```

Default value for DVR Property "dvrAudioGroupCount".

Default value is 3.

Constant value: **3**

See Also:

[PROPERTY_AUDIO_GROUP_COUNT](#)

DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT

```
public static final int DEFAULT_PROPERTY_STREAM_IDLE_TIMEOUT
```

Default value for DVR Property "streamTimeout".

Default value is 300000 ms (5 minutes).

Constant value: **300000**

DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT

```
public static final int DEFAULT_PROPERTY_STREAM_STARTUP_TIMEOUT
```

Default value for DVR Property "streamStartupTimeout".

Default value is 60000 ms (60 seconds).

Constant value: **60000**

PROPERTY_DEBUG_MBR_RESOLVER

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER
```

Constant value: **dvrDebugMbrResolver**

PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER_GAP_DETAILS
```

Constant value: **dvrDebugMbrResolverGapDetails**

PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS

```
public static final java.lang.String PROPERTY_DEBUG_MBR_RESOLVER_INTERSECTION_DETAILS
```

(continued from last page)

Constant value: **dvrDebugMbrResolverIntersectionDetails**

PROPERTY_DEBUG_DISCONTINUITY

```
public static final java.lang.String PROPERTY_DEBUG_DISCONTINUITY
```

Constant value: **dvrDebugDiscontinuity**

CHUNK_FILENAME_FORMAT_METADATA

```
public static final java.lang.String CHUNK_FILENAME_FORMAT_METADATA
```

Constant value: **M-%04d_%02d_%02d_%03d.m4fm**

CHUNK_FILENAME_FORMAT_VIDEO

```
public static final java.lang.String CHUNK_FILENAME_FORMAT_VIDEO
```

Constant value: **V-%04d_%02d_%02d_%03d.m4fv**

CHUNK_FILENAME_FORMAT_AUDIO

```
public static final java.lang.String CHUNK_FILENAME_FORMAT_AUDIO
```

Constant value: **A-%04d_%02d_%02d_%03d.m4fa**

CHUNK_FILENAME_FORMAT_DATA

```
public static final java.lang.String CHUNK_FILENAME_FORMAT_DATA
```

Constant value: **D-%04d_%02d_%02d_%03d.m4fd**

CHUNK_FOLDER_FORMAT

```
public static final java.lang.String CHUNK_FOLDER_FORMAT
```

Constant value: **%04d_%02d_%02d**

com.wowza.wms.dvr Interface IDvrPurgeController

public interface **IDvrPurgeController**
extends

Interface for controlling DVR chunk purging. The purge controller is instantiated using a factory class DvrPurgeControllerFactory.
See Also:

[com.wowza.wms.dvr.impl.DvrPurgeControllerFactory](#),
[IDvrPrivateConstants.PROPERTY_PURGE_CONTROL_CLASS](#)

Method Summary

abstract long	getCurrentTime() Get current DVR time.
abstract long	getLastPurgeTime() Get the DVR time when the last purge occurred.
abstract void	init(IDvrStreamStore store) Initialize the controller.
abstract boolean	isPurgingEnabled() Is Purging enabled for this controller.
abstract void	setCurrentDvrTime(long newDvrTime) Set the current DVR time and perform purge if necessary.

Methods

init

public abstract void **init**([IDvrStreamStore](#) store)

Initialize the controller.

Parameters:

store - the DVR stream store

isPurgingEnabled

public abstract boolean **isPurgingEnabled**()

Is Purging enabled for this controller.

Returns:

true if purging is active, false otherwise.

setCurrentDvrTime

public abstract void **setCurrentDvrTime**(long newDvrTime)

Set the current DVR time and perform purge if necessary. This method checks the DVR time against its internal rules for purging and performs the purge. It is also responsible for setting the last purge time and the next purge time.

(continued from last page)

Parameters:newDvrTime

getCurrentTime

```
public abstract long getCurrentTime()
```

Get current DVR time. The store is responsible for setting the DVR time via setCurrentDvrTime.

Returns:current DVR time.

getLastPurgeTime

```
public abstract long getLastPurgeTime()
```

Get the DVR time when the last purge occurred.

Returns:DVR time of last purge

com.wowza.wms.dvr Interface IDvrRawChunkProvider

All Subinterfaces:

[IDvrChunkMemoryCache](#)

public interface **IDvrRawChunkProvider**
extends

Interface for providing raw DVR chunks based on a DVR manifest entry.

Method Summary

abstract DvrChunk	retrieveRawChunk (DvrManifestChunkEntry entry) Given the specified manifest entry, return the raw DVR chunk.
-------------------	--

Methods

retrieveRawChunk

public abstract DvrChunk **retrieveRawChunk**([DvrManifestChunkEntry](#) entry)

Given the specified manifest entry, return the raw DVR chunk.

Parameters:

entry - The DVR manifest entry

Returns:

the DVR chunk or null if not able to return the chunk.

com.wowza.wms.dvr Interface IDvrRecordingListener

public interface **IDvrRecordingListener**
extends

Listener for DVR Recording events.

See Also:

[IDvrStreamManager.addDvrRecordingListener\(IDvrRecordingListener\)](#),
[IDvrStreamManager.removeDvrRecordingListener\(IDvrRecordingListener\)](#)

Method Summary

abstract void	recordingPaused (IDvrStreamStore store) Callback when DVR moves to paused state.
abstract void	recordingReset (IDvrStreamStore store) Callback when DVR gets reset.
abstract void	recordingResumed (IDvrStreamStore store) Callback when DVR moves out of paused state.
abstract void	recordingStarted (IDvrStreamStore store) Callback when DVR moves to recording state.
abstract void	recordingStopped (IDvrStreamStore store) Callback when DVR recording stops
abstract void	timeReset (IDvrStreamStore store, long oldDvrTime, long oldPacketTime, TimeMapRecord newTime) Callback when DVR time is adjusted.

Methods

recordingStarted

public abstract void **recordingStarted**([IDvrStreamStore](#) store)

Callback when DVR moves to recording state.

Parameters:

store - stream store

recordingPaused

public abstract void **recordingPaused**([IDvrStreamStore](#) store)

Callback when DVR moves to paused state.

Parameters:

store - stream store

(continued from last page)

recordingResumed

```
public abstract void recordingResumed(IDvrStreamStore store)
```

Callback when DVR moves out of paused state.

Parameters:

store - stream store

recordingReset

```
public abstract void recordingReset(IDvrStreamStore store)
```

Callback when DVR gets reset. For example, if the incoming stream resets.

Parameters:

store - stream store

recordingStopped

```
public abstract void recordingStopped(IDvrStreamStore store)
```

Callback when DVR recording stops

Parameters:

store - stream store

timeReset

```
public abstract void timeReset(IDvrStreamStore store,  
    long oldDvrTime,  
    long oldPacketTime,  
    TimeMapRecord newTime)
```

Callback when DVR time is adjusted.

Parameters:

store - stream store

oldDvrTime

oldPacketTime - old packet time associated to oldDvrTime

newTime

com.wowza.wms.dvr Interface IDvrRecordingsLoader

public interface **IDvrRecordingsLoader**
extends

Interface for loading recordings during DVR Stream Manager initialization.

See Also:

[com.wowza.wms.dvr.impl.DvrRecordingsLoaderFactory](#),
[IDvrConstants.PROPERTY_RECORDINGS_LOADER_CLASS](#)

Method Summary

abstract void	init (IDvrStreamManager dvrMgr) Initialize recordings loader
abstract void	loadArchivedRecordings () Discover and load archived recording
abstract boolean	shouldLoadStream (String streamName, java.util.SortedSet versions) Should the given archived streams be laoded.
abstract boolean	shouldLoadStreamVersion (String streamName, Integer version, java.util.SortedSet versions) Should the given archived stream of specific version be laoded.

Methods

init

public abstract void **init**([IDvrStreamManager](#) dvrMgr)

Initialize recordings loader

Parameters:

dvrMgr - the DVR Stream Manager

loadArchivedRecordings

public abstract void **loadArchivedRecordings**()

Discover and load archived recording

shouldLoadStream

public abstract boolean **shouldLoadStream**(String streamName,
java.util.SortedSet versions)

Should the given archived streams be laoded. The method contains logic which determines if all versions of the given stream Name should be loaded or not.

Parameters:

streamName - Stream name (unversioned)

versions - sorted set of available versions of this stream

(continued from last page)

Returns:

true if one or more of the streams should be loaded, false otherwise.

shouldLoadStreamVersion

```
public abstract boolean shouldLoadStreamVersion(String streamName,  
        Integer version,  
        java.util.SortedSet versions)
```

Should the given archived stream of specific version be loaded. The method contains logic which determines if all versions of the given stream Name should be loaded or not.

Parameters:

streamName - Stream name (unversioned)

version - the specific version of the stream we are determining if we should load

versions - sorted set of all available versions of this stream

Returns:

true if one or more of the streams should be loaded, false otherwise.

com.wowza.wms.dvr Interface IDvrStoreChunkListener

public interface **IDvrStoreChunkListener**
extends

Listener for DVR Store chunk events.

Note that this listener traffic is very high.

See Also:

[IDvrStreamStore.addDvrChunkListener\(IDvrStoreChunkListener\)](#),
[IDvrStreamStore.removeDvrChunkListener\(IDvrStoreChunkListener\)](#)

Method Summary

abstract void	postChunkAdded (IDvrStreamStore store) Callback after a chunk is written to DVR store
abstract void	postChunksPurged (IDvrStreamStore store, DvrManifestEntryRangeGroup entries, java.util.List deletedEntries) Callback after DVR store performs a purge
abstract void	preChunkAdded (IDvrStreamStore store) Callback before a chunk is written to DVR store
abstract void	preChunksPurged (IDvrStreamStore store, DvrManifestEntryRangeGroup entries) Callback before DVR store performs a purge

Methods

preChunkAdded

public abstract void **preChunkAdded**([IDvrStreamStore](#) store)

Callback before a chunk is written to DVR store

Parameters:

store - the stream store

postChunkAdded

public abstract void **postChunkAdded**([IDvrStreamStore](#) store)

Callback after a chunk is written to DVR store

Parameters:

store - the stream store

preChunksPurged

public abstract void **preChunksPurged**([IDvrStreamStore](#) store, [DvrManifestEntryRangeGroup](#) entries)

(continued from last page)

Callback before DVR store performs a purge

Parameters:

store - the stream store

entries - list of DVR chunks to be purged

postChunksPurged

```
public abstract void postChunksPurged(IDvrStreamStore store,  
    DvrManifestEntryRangeGroup entries,  
    java.util.List deletedEntries)
```

Callback after DVR store performs a purge

Parameters:

store - the stream store

entries - list of DVR chunks purged

deletedEntries - list of entries deleted

com.wowza.wms.dvr Interface IDvrStoreListener

public interface **IDvrStoreListener**
extends

Listener for DVR Store lifecycle events.

See Also:

[IDvrStreamManager.addDvrStoreListener\(IDvrStoreListener\)](#),
[IDvrStreamManager.removeDvrStoreListener\(IDvrStoreListener\)](#)

Method Summary

abstract void	dvrStreamStorageDeleted (IDvrStreamStore store, IDvrFileSystem FileSystem , boolean success) Callback after DVR store is deleted from disk.
abstract void	dvrStreamStorageLoaded (IDvrStreamManager dvrMgr, IDvrStreamStore store) Callback after DVR store is loaded from disk.
abstract void	dvrStreamStoreCreate (IDvrStreamStore store) Callback after DVR stream store is created.
abstract void	dvrStreamStoreDestroy (IDvrStreamStore store) Callback after DVR stream store is destroyed.
abstract void	dvrStreamStoreInit (IDvrStreamStore store) Callback after DVR stream store is initialized.

Methods

dvrStreamStoreCreate

public abstract void **dvrStreamStoreCreate**([IDvrStreamStore](#) store)

Callback after DVR stream store is created.

Parameters:

store - stream store

dvrStreamStoreInit

public abstract void **dvrStreamStoreInit**([IDvrStreamStore](#) store)

Callback after DVR stream store is initialized.

Parameters:

store - stream store

dvrStreamStoreDestroy

public abstract void **dvrStreamStoreDestroy**([IDvrStreamStore](#) store)

Callback after DVR stream store is destroyed.

(continued from last page)

Parameters:

store - stream store

dvrStreamStorageLoaded

```
public abstract void dvrStreamStorageLoaded(IDvrStreamManager dvrMgr,  
      IDvrStreamStore store)
```

Callback after DVR store is loaded from disk.

Parameters:

dvrMgr - DVR Application Store Manager

store - stream store

dvrStreamStorageDeleted

```
public abstract void dvrStreamStorageDeleted(IDvrStreamStore store,  
      IDvrFileSystem fileSystem,  
      boolean success)
```

Callback after DVR store is deleted from disk.

Parameters:

store

fileSystem - stream store file system

success - whether delete succeeded or failed

com.wowza.wms.dvr Interface IDvrStreamManager

All Superinterfaces:

[ILiveStreamPacketizer](#)

public interface **IDvrStreamManager**

extends [ILiveStreamPacketizer](#)

DVR Stream manager. Manages a live stream and associated DVR stores.

Method Summary

abstract void	addDvrRecordingListener (IDvrRecordingListener listener) Add listener to DVR recording events.
abstract void	addDvrStoreListener (IDvrStoreListener listener) Add listener to DVR store lifecycle events.
abstract void	addManifestEntries (String vStreamName, java.util.List entries, String serverGuid) Add to stream stores manifest.
abstract void	addRepeaterHeartBeatItem ()
abstract boolean	canRecord () Is this stream able to record.
abstract void	deleteArchivedStore (String vStreamName) Delete archived stream store.
abstract String	getArchiveStrategy () Get the DVR archive strategy.
abstract String	getContextStr () Get stream context string, useful for logging.
abstract IHTTPStreamerCupertinoLivePacketizerDataHandler	getDataHandler ()
abstract IDvrStreamStore	getDefaultStreamingStore () Get the store to be used for streaming.
abstract String	getDvrFileSystemClass () Get the class used for the DVR file system.
abstract String	getDvrStorageDir () Get the storage directory.
abstract int	getDvrStorageWindowSeconds () Get DVR window size.
abstract DvrBaseEncryptionInfoDelegate	getEncryptionDelegate () Get the encryption delegate for providing streaming side encryption info objects.

abstract String	<u>getEncryptionRepeaterSharedSecret()</u> Get the DVR encryption shared secret.
abstract <u>IDvrStreamStore</u>	<u>getHighestVersionedStore()</u> Return stream store that is highest known version.
abstract void	<u>getInitialRepeaterItems()</u> (java.util.List items) Get initial repeater items to send to repeater receiver.
abstract int	<u>getMinimumAvailableChunks()</u> Return number of chunks that must be available to stream.
abstract String	<u>getPacketizerName()</u> Get live stream packetizer name.
abstract <u>IDvrStreamStore</u>	<u>getRecordingStreamStore()</u> Get current recording store
abstract void	<u>getRepeaterItemsDvr()</u> (java.util.List items, long lastSeq)
abstract String	<u>getStreamBaseName()</u> Get input streamName (no version info).
abstract <u>IDvrStreamStore</u>	<u>getStreamStore()</u> (String vStreamName) Given a stream name containing version info, return the associated stream store.
abstract java.util.List	<u>getStreamStores()</u> Get list of all stream stores known to this stream manager.
abstract <u>IDvrStreamVersionHandler</u>	<u>getStreamVersionHandler()</u> Get the stream version handler object.
abstract void	<u>initialAttributes()</u> (String vStreamName, int dvrWindow)
abstract void	<u>initialManifest()</u> (String vStreamName, <u>IDvrManifest</u> manifest)
abstract void	<u>initialManifestEnd()</u> (String vStreamName)
abstract boolean	<u>isRecording()</u> Is this stream currently recording.
abstract boolean	<u>isRecordingPaused()</u> Is this stream currently paused from recording.
abstract <u>IDvrStreamStore</u>	<u>loadArchivedStore()</u> (String vStreamName, DvrManifestHolder manifestHolder) Load archived stream store.
abstract void	<u>notifyDvrStreamStorageDeleted()</u> (<u>IDvrStreamStore</u> store, IDvrFileSystem FileSystem, boolean success)
abstract void	<u>notifyDvrStreamStoreCreate()</u> (<u>IDvrStreamStore</u> store)
abstract void	<u>notifyDvrStreamStoreDestroy()</u> (<u>IDvrStreamStore</u> store)
abstract void	<u>notifyDvrStreamStoreInit()</u> (<u>IDvrStreamStore</u> store)

abstract void	<u>notifyDvrStreamStoreLoaded</u> (<u>IDvrStreamStore</u> store)
abstract void	<u>notifyTimeReset</u> (<u>IDvrStreamStore</u> store, long oldDvrTime, long oldPacketTime, <u>TimeMapRecord</u> newTimeMapRecord)
abstract <u>IDvrStreamStore</u>	<u>pauseRecording</u> () Request that stream recording pause.
abstract void	<u>purgeManifestEntries</u> (String vStreamName, <u>DvrManifestEntryRangeGroup</u> rangeGroup) Purge entries from store
abstract void	<u>removeDvrRecordingListener</u> (<u>IDvrRecordingListener</u> listener) Remove listener to DVR recording events.
abstract void	<u>removeDvrStoreListener</u> (<u>IDvrStoreListener</u> listener) Remove listener of DVR store lifecycle events.
abstract void	<u>removeStreamStore</u> (String vStreamName)
abstract void	<u>resetStream</u> () Reset the stream.
abstract <u>IDvrStreamStore</u>	<u>resumeRecording</u> () Request that stream recording resume.
abstract void	<u>setDataHandler</u> (<u>IHTTPStreamerCupertinoLivePacketizerDataHandler</u> dataHandler)
abstract void	<u>setDefaultStreamingStore</u> (<u>IDvrStreamStore</u> store) Set the store to be used for streaming.
abstract void	<u>setRecordingStreamStore</u> (<u>IDvrStreamStore</u> store) Set the store used for recording.
abstract void	<u>setStreamVersionHandler</u> (<u>IDvrStreamVersionHandler</u> handler) Set the stream version handler object.
abstract <u>IDvrStreamStore</u>	<u>startRecording</u> () Request that stream recording start.
abstract void	<u>stateChange</u> (String vStreamName, <u>DvrStreamStoreState</u> state)
abstract <u>IDvrStreamStore</u>	<u>stopRecording</u> () Request that stream recording stop.
abstract DvrChunkStorageInfo	<u>storeChunks</u> (int vDuration, <u>DvrPacketHolder</u> vPackets, int aDuration, <u>DvrPacketHolder</u> aPackets, int dDuration, <u>DvrPacketHolder</u> dPackets)
abstract boolean	<u>storeOnMetadata</u> (long pt, long utc, <u>AMFPacket</u> metaPacket)

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getChunkDurationTarget](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [getSegmentDurationTarget](#), [getSessionFormat](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods

getContextStr

```
public abstract String getContextStr()
```

Get stream context string, useful for logging.

Returns:

stream context string

getStreamBaseName

```
public abstract String getStreamBaseName()
```

Get input streamName (no version info).

Returns:

unversioned incoming stream name

getStreamStore

```
public abstract IDvrStreamStore getStreamStore(String vStreamName)
```

Given a stream name containing version info, return the associated stream store.

Parameters:

vStreamName - versioned stream name

Returns:

store or null

getPacketizerName

```
public abstract String getPacketizerName()
```

Get live stream packetizer name.

Returns:

live stream packetizer name

getStreamStores

```
public abstract java.util.List getStreamStores()
```

Get list of all stream stores known to this stream manager.

Returns:

(continued from last page)

list of stream stores.

getHighestVersionedStore

```
public abstract IDvrStreamStore getHighestVersionedStore()
```

Return stream store that is highest known version.

Returns:

stream store

getMinimumAvailableChunks

```
public abstract int getMinimumAvailableChunks()
```

Return number of chunks that must be available to stream.

Returns:

minimum available chunks

setRecordingStreamStore

```
public abstract void setRecordingStreamStore(IDvrStreamStore store)
```

Set the store used for recording.

Parameters:

store - stream store, or null

getRecordingStreamStore

```
public abstract IDvrStreamStore getRecordingStreamStore()
```

Get current recording store

Returns:

current recording store (may be null)

setDefaultStreamingStore

```
public abstract void setDefaultStreamingStore(IDvrStreamStore store)
```

Set the store to be used for streaming.

Parameters:

store - store to stream.

getDefaultStreamingStore

```
public abstract IDvrStreamStore getDefaultStreamingStore()
```

Get the store to be used for streaming.

Returns:

store to stream.

(continued from last page)

getDvrStorageWindowSeconds

```
public abstract int getDvrStorageWindowSeconds()
```

Get DVR window size.

Returns:

window size in seconds (0 means infinite window size)

getDvrStorageDir

```
public abstract String getDvrStorageDir()
```

Get the storage directory.

Returns:

storage directory

getDvrFileSystemClass

```
public abstract String getDvrFileSystemClass()
```

Get the class used for the DVR file system.

Returns:

fully qualified class name

getArchiveStrategy

```
public abstract String getArchiveStrategy()
```

Get the DVR archive strategy.

Returns:

The archive strategy

getEncryptionRepeaterSharedSecret

```
public abstract String getEncryptionRepeaterSharedSecret()
```

Get the DVR encryption shared secret.

Returns:

shared secret.

getEncryptionDelegate

```
public abstract DvrBaseEncryptionInfoDelegate getEncryptionDelegate()
```

Get the encryption delegate for providing streaming side encryption info objects.

Returns:

delegate

getStreamVersionHandler

```
public abstract IDvrStreamVersionHandler getStreamVersionHandler()
```

(continued from last page)

Get the stream version handler object.

Returns:

stream version handler object.

setStreamVersionHandler

```
public abstract void setStreamVersionHandler(IDvrStreamVersionHandler handler)
```

Set the stream version handler object. Must be called after the stream manager is created and before it is initialized.

Parameters:

handler - stream version handler object.

resetStream

```
public abstract void resetStream()
```

Reset the stream.

canRecord

```
public abstract boolean canRecord()
```

Is this stream able to record.

Returns:

true if this stream is recordable.

isRecording

```
public abstract boolean isRecording()
```

Is this stream currently recording. If this stream is not recordable, the method returns false.

Returns:

true if has a recording stream and it is recording.

isRecordingPaused

```
public abstract boolean isRecordingPaused()
```

Is this stream currently paused from recording. If this stream is not recording and not paused, the method returns false.

Returns:

true if has a recording is paused.

startRecording

```
public abstract IDvrStreamStore startRecording()
```

(continued from last page)

Request that stream recording start.

Used internally. Clients should call [ILiveStreamDvrRecorder.startRecording\(\)](#). Note that this call places the DVR stream store in the recording state. If the stream store is in the paused state, DVR recording will not occur.

If there is not currently a stream store for recording, one will attempt to be created. A successful start will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStarted\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream canRecord [IDvrStreamStore.canRecord\(\)](#) and the stream is not already in the recording state.

Returns:

store if successful. null otherwise.

stopRecording

public abstract [IDvrStreamStore](#) stopRecording()

Request that stream recording stop.

Used internally. Clients should call [ILiveStreamDvrRecorder.stopRecording\(\)](#). Note that this call places the DVR stream in the *not* recording state.

A successful stop will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStopped\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream is already in the recording state [IDvrStreamStore.isRecording\(\)](#).

Returns:

store if successful. null otherwise.

pauseRecording

public abstract [IDvrStreamStore](#) pauseRecording()

Request that stream recording pause.

Used internally. Clients should call [ILiveStreamDvrRecorder.pauseRecording\(\)](#). The stream does not have to be actively recording to be paused. For example, it could be paused before packets start flowing.

A successful pause will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingPaused\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

resumeRecording

public abstract [IDvrStreamStore](#) resumeRecording()

Request that stream recording resume.

Used internally. Clients should call [ILiveStreamDvrRecorder.resumeRecording\(\)](#). The stream does not have to be actively recording to be resumed. For example, it could have been paused before the stream started, and this call would move it out of the paused state.

A successful resume will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingResumed\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

(continued from last page)

loadArchivedStore

```
public abstract IDvrStreamStore loadArchivedStore(String vStreamName,  
        DvrManifestHolder manifestHolder)
```

Load archived stream store.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

manifestHolder - manifest holder containing list of manifest properties

Returns:

stream store

deleteArchivedStore

```
public abstract void deleteArchivedStore(String vStreamName)
```

Delete archived stream store.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

addManifestEntries

```
public abstract void addManifestEntries(String vStreamName,  
        java.util.List entries,  
        String serverGuid)
```

Add to stream stores manifest.

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

entries - list of manifest entries.

serverGuid

purgeManifestEntries

```
public abstract void purgeManifestEntries(String vStreamName,  
        DvrManifestEntryRangeGroup rangeGroup)
```

Purge entries from store

Parameters:

vStreamName - versioned stream Name (e.g. myStream.0)

rangeGroup - set of ranges for purging

storeChunks

```
public abstract DvrChunkStorageInfo storeChunks(int vDuration,  
        DvrPacketHolder vPackets,  
        int aDuration,  
        DvrPacketHolder aPackets,  
        int dDuration,  
        DvrPacketHolder dPackets)
```

(continued from last page)

storeOnMetadata

```
public abstract boolean storeOnMetadata(long pt,  
    long utc,  
    AMFPacket metaPacket)
```

addDvrStoreListener

```
public abstract void addDvrStoreListener(IDvrStoreListener listener)
```

Add listener to DVR store lifecycle events.

Parameters:

listener - listener

removeDvrStoreListener

```
public abstract void removeDvrStoreListener(IDvrStoreListener listener)
```

Remove listener of DVR store lifecycle events.

Parameters:

listener - listener

addDvrRecordingListener

```
public abstract void addDvrRecordingListener(IDvrRecordingListener listener)
```

Add listener to DVR recording events.

Parameters:

listener - listener

removeDvrRecordingListener

```
public abstract void removeDvrRecordingListener(IDvrRecordingListener listener)
```

Remove listener to DVR recording events.

Parameters:

listener - listener

notifyDvrStreamStoreCreate

```
public abstract void notifyDvrStreamStoreCreate(IDvrStreamStore store)
```

notifyDvrStreamStoreInit

```
public abstract void notifyDvrStreamStoreInit(IDvrStreamStore store)
```

(continued from last page)

notifyDvrStreamStoreDestroy

```
public abstract void notifyDvrStreamStoreDestroy(IDvrStreamStore store)
```

notifyDvrStreamStoreLoaded

```
public abstract void notifyDvrStreamStoreLoaded(IDvrStreamStore store)
```

notifyDvrStreamStorageDeleted

```
public abstract void notifyDvrStreamStorageDeleted(IDvrStreamStore store,  
    IDvrFileSystem fileSystem,  
    boolean success)
```

notifyTimeReset

```
public abstract void notifyTimeReset(IDvrStreamStore store,  
    long oldDvrTime,  
    long oldPacketTime,  
    TimeMapRecord newTimeMapRecord)
```

getInitialRepeaterItems

```
public abstract void getInitialRepeaterItems(java.util.List items)
```

Get initial repeater items to send to repeater receiver.

When an edge initially requests the items, instead of sending the entire manifest and all repeater items up until that point, the player sends a `DvrRepeaterHolder.REPEATER_INITIAL_MANIFEST` event followed by several `DvrRepeaterHolder.REPEATER_ADD_MANIFEST_ENTRIES` events.

This allows us to not bother sending any purged manifest entries.

Parameters:

items

getRepeaterItemsDvr

```
public abstract void getRepeaterItemsDvr(java.util.List items,  
    long lastSeq)
```

initialManifest

```
public abstract void initialManifest(String vStreamName,  
    IDvrManifest manifest)
```

(continued from last page)

initialManifestEnd

```
public abstract void initialManifestEnd(String vStreamName)
```

initialAttributes

```
public abstract void initialAttributes(String vStreamName,  
    int dvrWindow)
```

stateChange

```
public abstract void stateChange(String vStreamName,  
    DvrStreamStoreState state)
```

removeStreamStore

```
public abstract void removeStreamStore(String vStreamName)
```

addRepeaterHeartBeatItem

```
public abstract void addRepeaterHeartBeatItem()
```

setDataHandler

```
public abstract void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler  
dataHandler)
```

getDataHandler

```
public abstract IHTTPStreamerCupertinoLivePacketizerDataHandler getDataHandler()
```

com.wowza.wms.dvr Interface IDvrStreamStore

public interface **IDvrStreamStore**
extends

Method Summary

abstract void	addDvrChunkListener (IDvrStoreChunkListener listener) Add (very fine) listener for chunk events.
abstract void	addManifestEntries (java.util.List entries)
abstract boolean	canPlay () Is this store capable of playing.
abstract boolean	canRecord () Is this store capable of recording.
abstract IApplicationInstance	getAppInstance () Get associated application instance.
abstract IDvrChunker	getChunker ()
abstract long	getClosestStartTime (int type, long t)
abstract String	getContextStr () Get stream context string, useful for logging.
abstract DvrChunk	getDvrChunkAtTime (int fragmentType, long t)
abstract DvrChunk	getDvrChunkByIndex (int fragmentType, long index)
abstract DvrChunk	getDvrChunkNearTime (int fragmentType, long t, long delta)
abstract IDvrStreamManager	getDvrManager () Get DVR Stream Manager
abstract int	getDvrStorageWindowSeconds () Get DVR window size.
abstract IDvrFileSystem	getFileSystem ()
abstract IDvrManifest	getManifest () Get manifest
abstract WMSProperties	getProperties () Get stream store properties.
abstract IDvrPurgeController	getPurgeController () Get purge controller for stream store.

abstract java.util.List	<u>getRecordedEntriesWithLimit</u> (int fragmentType, long t, int limit)
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByIndex</u> (int fragmentType, long index)
abstract <u>DvrManifestEntry</u>	<u>getRecordedEntryByTime</u> (int fragmentType, long t)
abstract String	<u>getStreamName</u> () Get versioned stream name.
abstract DvrTimeMapper	<u>getTimeMapper</u> () Get time mapper, which maps between DVR, real and packet time.
abstract boolean	<u>hasAudio</u> () Does this store have audio.
abstract boolean	<u>hasData</u> () Does this store have data.
abstract boolean	<u>hasEncryption</u> () Does this store contain encryption information
abstract boolean	<u>hasOnMetadata</u> () Does this store have on metadata.
abstract boolean	<u>hasVideo</u> () Does this store have video.
abstract void	<u>init</u> () Initialize DVR stream store.
abstract boolean	<u>isLive</u> () Is store currently live For an origin, <u>isRecording</u> () and <u>isLive</u> () will typically return the same result.
abstract boolean	<u>isLoaded</u> ()
abstract boolean	<u>isRecording</u> () Is store currently recording.
abstract boolean	<u>isRecordingPaused</u> () Is store currently paused while recording.
abstract boolean	<u>pauseRecording</u> () Request that stream recording pause.
abstract void	<u>purgeEntries</u> (<u>DvrManifestEntryRangeGroup</u> rangeGroup) Purge entries from store
abstract void	<u>removeDvrChunkListener</u> (<u>IDvrStoreChunkListener</u> listener) Remove (very fine) listener for chunk events.
abstract void	<u>reset</u> ()
abstract boolean	<u>resumeRecording</u> () Request that stream recording resume.

abstract void	<code>setCanPlay</code> (boolean canPlay) Set the Stream Stores ability to play.
abstract void	<code>setCanRecord</code> (boolean canRecord) Set the Stream Stores ability to record.
abstract void	<code>setHasEncryption</code> (boolean hasEncryption) Set whether the store has encryption.
abstract void	<code>setReadCacheEnable</code> (boolean enable) Set the state of the read cache
abstract void	<code>shutdown</code> ()
abstract void	<code>shutdownReadCache</code> () Shutdown the read cache, this should get called when the store shuts down.
abstract boolean	<code>startRecording</code> () Request that recording start.
abstract boolean	<code>stopRecording</code> () Request that stream recording stop.
abstract DvrChunkStorageInfo	<code>storeChunks</code> (int vDuration, DvrPacketHolder vPackets, int aDuration, DvrPacketHolder aPackets, int dDuration, DvrPacketHolder dPackets)
abstract boolean	<code>storeOnMetadata</code> (long pt, long utc, <code>AMFPacket</code> metaPacket)

Methods

init

public abstract void **init**()

Initialize DVR stream store.

reset

public abstract void **reset**()

shutdown

public abstract void **shutdown**()

setReadCacheEnable

public abstract void **setReadCacheEnable**(boolean enable)

Set the state of the read cache

Parameters:

(continued from last page)

enable

shutdownReadCache

```
public abstract void shutdownReadCache()
```

Shutdown the read cache, this should get called when the store shuts down.

getProperties

```
public abstract WMSProperties getProperties()
```

Get stream store properties.

Returns:

properties

getDvrStorageWindowSeconds

```
public abstract int getDvrStorageWindowSeconds()
```

Get DVR window size. This may be set by setting the IDvrStreamStore's property [IDvrConstants.PROPERTY_WINDOW_DURATION](#) after the store is created and before it is initialized by using the [IDvrStoreListener.dvrStreamStoreCreate\(IDvrStreamStore\)](#)

Returns:

window size in seconds (0 means infinite window size)

getStreamName

```
public abstract String getStreamName()
```

Get versioned stream name.

Returns:

(versioned) stream name

getContextStr

```
public abstract String getContextStr()
```

Get stream context string, useful for logging.

Returns:

stream context string

getDvrManager

```
public abstract IDvrStreamManager getDvrManager()
```

Get DVR Stream Manager

Returns:

DVR Stream Manager

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

(continued from last page)

Get associated application instance.

Returns:

application instance.

getManifest

```
public abstract IDvrManifest getManifest()
```

Get manifest

Returns:

manifest

getTimeMapper

```
public abstract DvrTimeMapper getTimeMapper()
```

Get time mapper, which maps between DVR, real and packet time.

Returns:

time mapper

getPurgeController

```
public abstract IDvrPurgeController getPurgeController()
```

Get purge controller for stream store.

Returns:

purge controller

getFileSystem

```
public abstract IDvrFileSystem getFileSystem()
```

getChunker

```
public abstract IDvrChunker getChunker()
```

canRecord

```
public abstract boolean canRecord()
```

Is this store capable of recording.

Returns:

true if store can record

isLoaded

```
public abstract boolean isLoaded()
```

setCanRecord

```
public abstract void setCanRecord(boolean canRecord)
```

Set the Stream Stores ability to record.

Note: Must be called when stream is not recording.

Parameters:

canRecord

canPlay

```
public abstract boolean canPlay()
```

Is this store capable of playing.

Returns:

true if store can play

setCanPlay

```
public abstract void setCanPlay(boolean canPlay)
```

Set the Stream Stores ability to play.

Note: Must be called when stream is not playing.

Parameters:

canPlay

setHasEncryption

```
public abstract void setHasEncryption(boolean hasEncryption)
```

Set whether the store has encryption. Used internally.

Note: Must be called when stream is not playing.

Parameters:

hasEncryption - if store has encryption

hasEncryption

```
public abstract boolean hasEncryption()
```

Does this store contain encryption information

Returns:

true if store contains encryption

hasVideo

```
public abstract boolean hasVideo()
```

Does this store have video.

Returns:

(continued from last page)

true if store contains video, false otherwise.

hasAudio

```
public abstract boolean hasAudio()
```

Does this store have audio.

Returns:

true if store contains audio, false otherwise.

hasData

```
public abstract boolean hasData()
```

Does this store have data.

Returns:

true if store contains data, false otherwise.

hasOnMetadata

```
public abstract boolean hasOnMetadata()
```

Does this store have on metadata.

Returns:

true if store contains on metadata, false otherwise.

startRecording

```
public abstract boolean startRecording()
```

Request that recording start.

Used internally. Clients should call [ILiveStreamDvrRecorder.startRecording\(\)](#).

Success occurs if the stream canRecord [canRecord\(\)](#) and the stream is not already in the recording state [isRecording\(\)](#).

Returns:

true if successful.

pauseRecording

```
public abstract boolean pauseRecording()
```

Request that stream recording pause.

Used internally. Clients should call [ILiveStreamDvrRecorder.pauseRecording\(\)](#).

Success occurs if the stream is not already paused.

Returns:

true if successful.

resumeRecording

```
public abstract boolean resumeRecording()
```

(continued from last page)

Request that stream recording resume.

Used internally. Clients should call [ILiveStreamDvrRecorder.resumeRecording\(\)](#).

Success occurs if the stream was previously paused.

Returns:

true if successful.

stopRecording

```
public abstract boolean stopRecording()
```

Request that stream recording stop. This shuts down saving of chunks

Used internally. Clients should call [ILiveStreamDvrRecorder.stopRecording\(\)](#).

Success only occurs if the stream is already in the recording state [isRecording\(\)](#).

Returns:

true if successful.

isRecordingPaused

```
public abstract boolean isRecordingPaused()
```

Is store currently paused while recording.

Returns:

true if recording is paused.

isRecording

```
public abstract boolean isRecording()
```

Is store currently recording. This will always be false for an edge.

Returns:

true if recording

isLive

```
public abstract boolean isLive()
```

Is store currently live For an origin, [isRecording\(\)](#) and [isLive\(\)](#) will typically return the same result. On an edge, [isRecording\(\)](#) will always be false. But [isLive\(\)](#) will reflect the status of the repeated stream.

Returns:

true if live

storeChunks

```
public abstract DvrChunkStorageInfo storeChunks(int vDuration,
        DvrPacketHolder vPackets,
        int aDuration,
        DvrPacketHolder aPackets,
        int dDuration,
        DvrPacketHolder dPackets)
```

storeOnMetadata

```
public abstract boolean storeOnMetadata(long pt,  
    long utc,  
    AMFPacket metaPacket)
```

purgeEntries

```
public abstract void purgeEntries(DvrManifestEntryRangeGroup rangeGroup)
```

Purge entries from store

Parameters:

rangeGroup - s set of ranges for purging

addManifestEntries

```
public abstract void addManifestEntries(java.util.List entries)
```

addDvrChunkListener

```
public abstract void addDvrChunkListener(IDvrStoreChunkListener listener)
```

Add (very fine) listener for chunk events.

Parameters:

listener - listener

removeDvrChunkListener

```
public abstract void removeDvrChunkListener(IDvrStoreChunkListener listener)
```

Remove (very fine) listener for chunk events.

Parameters:

listener - listener

getRecordedEntriesWithLimit

```
public abstract java.util.List getRecordedEntriesWithLimit(int fragmentType,  
    long t,  
    int limit)
```

getRecordedEntryByIndex

```
public abstract DvrManifestEntry getRecordedEntryByIndex(int fragmentType,  
    long index)
```

(continued from last page)

getRecordedEntryByTime

```
public abstract DvrManifestEntry getRecordedEntryByTime(int fragmentType,  
    long t)
```

getDvrChunkByIndex

```
public abstract DvrChunk getDvrChunkByIndex(int fragmentType,  
    long index)
```

getDvrChunkAtTime

```
public abstract DvrChunk getDvrChunkAtTime(int fragmentType,  
    long t)
```

getDvrChunkNearTime

```
public abstract DvrChunk getDvrChunkNearTime(int fragmentType,  
    long t,  
    long delta)
```

getClosestStartTime

```
public abstract long getClosestStartTime(int type,  
    long t)
```

com.wowza.wms.dvr Interface IDvrStreamVersionHandler

All Known Implementing Classes:
[DefaultDvrStreamVersionHandler](#)

public interface **IDvrStreamVersionHandler**
 extends

Callback to manage (archival) versions of DVR stream stores

Method Summary

abstract IDvrStreamStore	determineExistingStoreForPlaying (IDvrStreamManager dvrManager, String baseStreamName) When a session requests a stream store w/o specifying the version, we need gto determine the version of the stream to store.
abstract IDvrStreamStore	determineExistingStoreForRecording (IDvrStreamManager dvrManager, String baseStreamName) After a set of versioned streams are loaded from disk, one of them may be designated the stream that will be recorded to (i.e.
abstract String	getArchiveStrategy (IDvrStreamManager dvrManager, String baseStreamName) Determine the archive strategy for a given set of streams.
abstract boolean	handleArchivedStream (IDvrStreamManager dvrManager, String baseStreamName, String version, java.util.SortedSet versions, DvrManifestHolder manifest) When a stream group inits, the file system is checked for older versions of the streams.
abstract boolean	shouldDeleteArchivedStream (IDvrStreamManager dvrManager, IDvrStreamStore store) Determine if a given stream store version should be deleted.
abstract boolean	shouldLoadArchivedStream (IDvrStreamManager dvrManager, String baseStreamName, String version, java.util.SortedSet versions, DvrManifestHolder manifest) Determine if a given stream store version should be loaded into WMS.

Methods

determineExistingStoreForRecording

public abstract [IDvrStreamStore](#) **determineExistingStoreForRecording**([IDvrStreamManager](#) dvrManager, String baseStreamName)

After a set of versioned streams are loaded from disk, one of them may be designated the stream that will be recorded to (i.e. append mode).

The default implementation says that if append mode, then the highest versioned stream that has canRecord set to true is used. But this API, allows for a more detailed logic.

Parameters:

dvrManager - The DVR Stream Manager

(continued from last page)

baseStreamName - The base stream name (no version info). e.g. myStream

Returns:

stream store to append to, null if no stream in the stream group is to be appended to.

See Also:

[DefaultDvrStreamVersionHandler](#)

determineExistingStoreForPlaying

```
public abstract IDvrStreamStore determineExistingStoreForPlaying(IDvrStreamManager
dvrManager,
    String baseStreamName)
```

When a session requests a stream store w/o specifying the version, we need to determine the version of the stream to store.

The default implementation first checks the recording stream. If it 'canPlay()', it is returned. Otherwise, the highest versioned stream that canRecord set to true is used.

Parameters:

dvrManager - The DVR Stream Manager

baseStreamName - The base stream name (no version info). e.g. myStream

Returns:

stream store to stream, null if no stream in the stream group can be played.

See Also:

[DefaultDvrStreamVersionHandler](#)

getArchiveStrategy

```
public abstract String getArchiveStrategy(IDvrStreamManager dvrManager,
    String baseStreamName)
```

Determine the archive strategy for a given set of streams.

Typically, this returns the archive strategy as specified in Application.xml, but this API provides a hook for more detailed logic in determining the strategy.

Parameters:

dvrManager - The DVR App Instance Manager

baseStreamName - The base stream name (no version info). e.g. myStream

Returns:

the archive strategy

See Also:

[DefaultDvrStreamVersionHandler](#)

[IDvrConstants.ARCHIVE_STRATEGY_APPEND](#)

[IDvrConstants.ARCHIVE_STRATEGY_DELETE](#)

[IDvrConstants.ARCHIVE_STRATEGY_VERSION](#)

handleArchivedStream

```
public abstract boolean handleArchivedStream(IDvrStreamManager dvrManager,
    String baseStreamName,
    String version,
    java.util.SortedSet versions,
    DvrManifestHolder manifest)
```

(continued from last page)

When a stream group inits, the file system is checked for older versions of the streams. This method is called to handle the streams.

Typically, 3 things can happen: The stream is ignored, loaded, or deleted.

Parameters:

dvrManager - The DVR Stream Manager
baseStreamName - The base stream name (no version info). e.g. myStream
version - The version of the stream to be loaded.
versions - A sorted set of all the versions that are attempting to be loaded
manifest - The main manifest info of the stream

Returns:

true if handled in some manner, false if ignored (unhandled)

See Also:

[DefaultDvrStreamVersionHandler](#)

shouldLoadArchivedStream

```
public abstract boolean shouldLoadArchivedStream(IDvrStreamManager dvrManager,  
    String baseStreamName,  
    String version,  
    java.util.SortedSet versions,  
    DvrManifestHolder manifest)
```

Determine if a given stream store version should be loaded into WMS.

Parameters:

dvrManager - The DVR Stream Manager
baseStreamName - The base stream name (no version info). e.g. myStream
version - The version of the stream to be loaded.
versions - A sorted set of all the versions that are attempting to be loaded
manifest - The main manifest info of the stream

Returns:

true if should be loaded. false if not.

See Also:

[DefaultDvrStreamVersionHandler](#)

shouldDeleteArchivedStream

```
public abstract boolean shouldDeleteArchivedStream(IDvrStreamManager dvrManager,  
    IDvrStreamStore store)
```

Determine if a given stream store version should be deleted.

Parameters:

dvrManager - The DVR Stream Manager
store - The DVR store

Returns:

true if should be deleted. false if not.

See Also:

[DefaultDvrStreamVersionHandler](#)

com.wowza.wms.dvr Interface IDvrTextReader

All Superinterfaces:
[ITextReader](#)

public interface **IDvrTextReader**
extends [ITextReader](#)

Method Summary

abstract void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName)
---------------	---

Methods inherited from interface [com.wowza.io.ITextReader](#)

[close](#), [exists](#), [getBasePath](#), [getMediaName](#), [getPath](#), [init](#), [isOpen](#), [lastModified](#), [length](#), [open](#), [read](#), [ready](#)

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    IDvrFileSystem fileSystem,  
    String artifactName)
```

com.wowza.wms.dvr Interface IDvrTextWriter

All Superinterfaces:
[ITextWriter](#)

public interface **IDvrTextWriter**
extends [ITextWriter](#)

Method Summary

abstract void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName)
abstract void	init (IApplicationInstance appInstance, IMediaStream stream, IDvrFileSystem fileSystem, String artifactName, IDvrStreamStore store)

Methods inherited from interface [com.wowza.io.ITextWriter](#)

[close](#), [exists](#), [getBasePath](#), [getMediaName](#), [getPath](#), [init](#), [isAppend](#), [isOpen](#), [lastModified](#), [length](#), [open](#), [setAppend](#), [write](#), [write](#), [write](#), [write](#)

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    IDvrFileSystem fileSystem,  
    String artifactName)
```

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    IDvrFileSystem fileSystem,  
    String artifactName,  
    IDvrStreamStore store)
```


com.wowza.wms.dvr Interface IDvrTimeMap

All Superinterfaces:

[IDvrChannelManifest](#)

public interface **IDvrTimeMap**

extends [IDvrChannelManifest](#)

Method Summary

abstract boolean	containsTime (long startTime, IDvrConstants.DvrTimeScale timeScale)
abstract long	dvrToPt (long dt)
abstract long	dvrToUtc (long dt)
abstract java.util.List	getTimeMap ()
abstract java.util.List	getTimeMapEntries ()
abstract long	ptToDvr (long pt)
abstract long	toDvr (long t, IDvrConstants.DvrTimeScale timeScale)
abstract long	utcToDvr (long utc)

Methods inherited from interface [com.wowza.wms.dvr.IDvrChannelManifest](#)

[expandEndTime](#), [expandStartTime](#), [getClosestStartTime](#), [getFirstEntry](#), [getFirstIndex](#), [getIndexMap](#), [getLastLiveEntry](#), [getLastRecordedEntry](#), [getLastRecordedIndex](#), [getLiveDuration](#), [getLiveEntries](#), [getLiveEntries](#), [getLiveEntriesWithLimit](#), [getLiveRangeEndingBeforeTime](#), [getLiveRangeEndingBeforeTime](#), [getLiveTailEntries](#), [getNumberLiveEntries](#), [getNumberLiveEntries](#), [getNumberRecordedEntries](#), [getNumberRecordedEntries](#), [getRecordedDuration](#), [getRecordedEntries](#), [getRecordedEntries](#), [getRecordedEntries](#), [getRecordedEntriesInRange](#), [getRecordedEntriesWithLimit](#), [getRecordedEntryByIndex](#), [getRecordedEntryByTimeKey](#), [getRecordedEntryStartingBeforeTime](#), [getType](#), [isEmpty](#), [setManifestDebug](#)

Methods

getTimeMap

public abstract java.util.List **getTimeMap**()

getTimeMapEntries

```
public abstract java.util.List getTimeMapEntries()
```

dvrToUtc

```
public abstract long dvrToUtc(long dt)
```

dvrToPt

```
public abstract long dvrToPt(long dt)
```

ptToDvr

```
public abstract long ptToDvr(long pt)
```

utcToDvr

```
public abstract long utcToDvr(long utc)
```

toDvr

```
public abstract long toDvr(long t,  
    IDvrConstants.DvrTimeScale timeScale)
```

containsTime

```
public abstract boolean containsTime(long startTime,  
    IDvrConstants.DvrTimeScale timeScale)
```

Package

com.wowza.wms.http

com.wowza.wms.http Class HTTPProvider2Base

```
java.lang.Object
|
+-com.wowza.wms.http.HTTPProvider2Base
|
+-com.wowza.wms.http.HTTPProvider2Base
```

All Implemented Interfaces:

[IHTTPProvider2](#)

```
public abstract class HTTPProvider2Base
extends HTTPProvider2Base
```

HTTPProvider2Base: public base class for implementing HTTP Providers.

Simple HTTPProvider class

```

package com.wowza.wms.plugin.test.http;

public class HTTPHelloWowza extends HTTPProvider2Base
{
    public void onBind(IVHost vhost, HostPort hostPort)
    {
        super.onBind(vhost, hostPort);
        // Called when the HTTP Provider is added to the VHost it is configured for.
    }

    public void onUnbind(IVHost vhost, HostPort hostPort)
    {
        // Called when the VHost is shutting down for the hostPort configured
    }

    public void onHTTPRequest(IVHost vhost, IHTTPRequest req, IHTTPResponse resp)
    {
        // If you omit this no authentication is checked regardless of the
configuration
        if (!doHTTPAuthentication(vhost, req, resp))
            return;

        String retStr = "<head><title>Hello Wowza</title></head><body>Hello
Wowza</body>";
        try
        {
            OutputStream out = resp.getOutputStream();
            byte[] outBytes = retStr.getBytes();
            out.write(outBytes);
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(HTTPHelloWowza.class).error("HTTPHelloWowza ", e);
        }
    }
}

```

Can be added with the following HTTPProvider XML configuration

```

<httpprovider>

<baseclass>com.wowza.wms.plugin.test.http.HTTPHelloWowza</baseclass>
    <requestfilters>hellowowza*</requestfilters>
    <authenticationmethod>none</authenticationmethod>

</httpprovider>

```

Fields inherited from class `com.wowza.wms.http.HTTPProvider2Base`

`authenticateHandler`, `authenticateHTTPProviderHandler`, `authenticationMethod`, `corsHeaders`, `DATEFORMAT`, `DATEFORMAT_LOCALE`, `DATEFORMAT_LOCALE_COUNTRY`, `DATEFORMAT_LOCALE_LANGUAGE`, `DATEFORMAT_ZONE`, `DATEHEADER_ENABLE`, `dateHeaderFormat`, `dateHeaderLocale`, `dateHeaderLocaleString`, `dateHeaderZone`, `enableDate`, `fastDateFormat`, `filters`, `properties`, `PROPERTY_DATE_HEADER_ENABLE`, `PROPERTY_DATE_HEADER_FORMAT`, `PROPERTY_DATE_HEADER_LOCALE`, `PROPERTY_DATE_HEADER_ZONE`, `requestFilters`, `websocketSessions`

Constructor Summary

<code>public</code>	<code>HTTPProvider2Base()</code>
---------------------	--

Methods inherited from class `com.wowza.wms.http.HTTPProvider2Base`

`addCORSHeaders`, `addCORSHeaders`, `addDateHeader`, `addWebSocketSession`, `broadcastWebSocketMessage`, `canHandle`, `doHTTPAuthentication`, `getAuthenticationMethod`, `getHostPort`, `getPath`, `getRequestFilters`, `getWebSocketSessionCount`, `getWebSocketSessions`, `init`, `onBind`, `onUnbind`, `removeWebSocketSession`, `setAuthenticationMethod`, `setProperties`, `setRequestFilters`, `validatePath`

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface `com.wowza.wms.http.IHTTPProvider2`

[`canHandle`](#), [`getAuthenticationMethod`](#), [`getRequestFilters`](#), [`init`](#), [`setAuthenticationMethod`](#), [`setRequestFilters`](#)

Methods inherited from interface `com.wowza.wms.http.IHTTPProvider`

[`addCORSHeaders`](#), [`addCORSHeaders`](#), [`addDateHeader`](#), [`addWebSocketSession`](#), [`broadcastWebSocketMessage`](#), [`getWebSocketSessionCount`](#), [`getWebSocketSessions`](#), [`onBind`](#), [`onHTTPRequest`](#), [`onUnbind`](#), [`removeWebSocketSession`](#), [`setProperties`](#), [`validatePath`](#)

Constructors

HTTPProvider2Base

```
public HTTPProvider2Base()
```

com.wowza.wms.http Interface IHTTPProvider

All Subinterfaces:

[IHTTPProvider2](#)

public interface **IHTTPProvider**
extends

IHTTPProvider: HTTP provider class for a given HostPort definition. Receive all HTTP requests that are not RTMPT requests. See IHTTPProvider2 for the extended version of this interface.

Method Summary

abstract void	addCORSHeaders (IHTTPRequest req, IHTTPResponse resp) Called to provide CORS Headers to the output
abstract void	addCORSHeaders (IHTTPResponse resp) Called to provide CORS Headers to the output, no dynamic CORS output
abstract void	addDateHeader (IHTTPResponse resp) Called to provide Date Header to the output
abstract void	addWebSocketSession (IWebSocketSession webSocketSession) Add WebSocket session
abstract int	broadcastWebSocketMessage (WebSocketMessage message) Broadcast a WebSocket message to all connected WebSocket sessions.
abstract int	getWebSocketSessionCount () Get total count of WebSocket sessions for this HTTPProvider
abstract java.util.List	getWebSocketSessions () Get a list of all WebSocket sessions for this HTTPProvider
abstract void	onBind (IVHost vhost, HostPort hostPort) Triggered after hostPort binds to socket
abstract void	onHTTPRequest (IVHost vhost, IHTTPRequest req, IHTTPResponse resp) Triggered for each HTTP request to the given hostPort that is not an RTMPT request.
abstract void	onUnbind (IVHost vhost, HostPort hostPort) Triggered after hostPort unbinds
abstract boolean	removeWebSocketSession (IWebSocketSession webSocketSession) Remove WebSocket session
abstract void	setProperties (WMSProperties properties) Called to provide properties set in configuration files
abstract boolean	validatePath (String path) Called to check path request is within scope

(continued from last page)

Methods

onBind

```
public abstract void onBind(IVHost vhost,  
    HostPort hostPort)
```

Triggered after hostPort binds to socket

Parameters:

vhost - parent vhost
hostPort - host port definition

onHTTPRequest

```
public abstract void onHTTPRequest(IVHost vhost,  
    IHTTPRequest req,  
    IHTTPResponse resp)
```

Triggered for each HTTP request to the given hostPort that is not an RTMPT request.

Parameters:

vhost - parent vhost
req - HTML request object
resp - HTML response object

onUnbind

```
public abstract void onUnbind(IVHost vhost,  
    HostPort hostPort)
```

Triggered after hostPort unbinds

Parameters:

vhost - parent vhost
hostPort - host port definition

setProperties

```
public abstract void setProperties(WMSProperties properties)
```

Called to provide properties set in configuration files

addCORSHeaders

```
public abstract void addCORSHeaders(IHTTPResponse resp)
```

Called to provide CORS Headers to the output, no dynamic CORS output

Parameters:

resp

addCORSHeaders

```
public abstract void addCORSHeaders(IHTTPRequest req,  
    IHTTPResponse resp)
```

Called to provide CORS Headers to the output

(continued from last page)

Parameters:resp

addDateHeader

```
public abstract void addDateHeader(IHTTPResponse resp)
```

Called to provide Date Header to the output

Parameters:resp

validatePath

```
public abstract boolean validatePath(String path)
```

Called to check path request is within scope

Parameters:

path

Returns:

addWebSocketSession

```
public abstract void addWebSocketSession(IWebSocketSession websocketSession)
```

Add WebSocket session

Parameters:websocketSession - WebSocket session

removeWebSocketSession

```
public abstract boolean removeWebSocketSession(IWebSocketSession websocketSession)
```

Remove WebSocket session

Parameters:

websocketSession - WebSocket session

Returns:true, if session removed

getWebSocketSessions

```
public abstract java.util.List getWebSocketSessions()
```

Get a list of all WebSocket sessions for this HTTPProvider

Returns:list of all WebSocket sessions

getWebSocketSessionCount

```
public abstract int getWebSocketSessionCount()
```

(continued from last page)

Get total count of WebSocket sessions for this HTTPProvider

Returns:

total count of WebSocket sessions for this HTTPProvider

broadcastWebSocketMessage

```
public abstract int broadcastWebSocketMessage(WebSocketMessage message)
```

Broadcast a WebSocket message to all connected WebSocket sessions.

Parameters:

message - message to broadcast

Returns:

number of sessions the message was sent to

com.wowza.wms.http Interface IHTTPProvider2

All Superinterfaces:
[IHTTPProvider](#)

public interface **IHTTPProvider2**
extends [IHTTPProvider](#)

IHTTPProvider2: Extension of IHTTPProvider that adds support for multiple HTTPProviders attached to a single HostPort along with authentication. Multiple HTTPProviders can be added to a HostPort definition. They are configured as follows:

```
<HTTPProvider>
  <BaseClass>com.wowza.wms.http.HTTPServerVersion</BaseClass>
  <RequestFilters>*serverversion</RequestFilters>
  <AuthenticationMethod>none</AuthenticationMethod>
</HTTPProvider>
```

Below is an sample implementation of the HTTPServerVersion provider:

```

import java.io.*;

import com.wowza.wms.server.*;
import com.wowza.wms.stream.*;
import com.wowza.wms.vhost.*;
import com.wowza.wms.logging.*;

public class HTTPServerVersion extends HTTPProvider2Base
{
    public void onHTTPRequest(IVHost vhost, IHTTPRequest req, IHTTPResponse resp)
    {
        if (!doHTTPAuthentication(vhost, req, resp))
            return;

        String version = MediaStreamBase.p+" "+ReleaseInfo.getVersion()+"
build"+ReleaseInfo.getBuildNumber();
        String retStr =
"<html><head><title>"+version+"</title></head><body>"+version+"</body></html>";
        try
        {
            OutputStream out = resp.getOutputStream();
            byte[] outBytes = retStr.getBytes();
            out.write(outBytes);
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(HTTPServerVersion.class).error("HTMLServerVersion ", e);
        }
    }
}

```

Method Summary

abstract boolean	canHandle (String path)
abstract String	getAuthenticationMethod ()
abstract String	getRequestFilters ()
abstract void	init ()
abstract void	setAuthenticationMethod (String authenticationMethod)
abstract void	setRequestFilters (String requestFilters)

Methods inherited from interface [com.wowza.wms.http.IHTTPProvider](#)

[addCORSHeaders](#), [addCORSHeaders](#), [addDateHeader](#), [addWebSocketSession](#),
[broadcastWebSocketMessage](#), [getWebSocketSessionCount](#), [getWebSocketSessions](#), [onBind](#),
[onHTTPRequest](#), [onUnbind](#), [removeWebSocketSession](#), [setProperties](#), [validatePath](#)

Methods

canHandle

```
public abstract boolean canHandle(String path)
```

setRequestFilters

```
public abstract void setRequestFilters(String requestFilters)
```

getRequestFilters

```
public abstract String getRequestFilters()
```

init

```
public abstract void init()
```

getAuthenticationMethod

```
public abstract String getAuthenticationMethod()
```

setAuthenticationMethod

```
public abstract void setAuthenticationMethod(String authenticationMethod)
```

com.wowza.wms.http Interface IHttpRequest

public interface **IHttpRequest**
extends

Field Summary

public static final	<u>HTTP_HEADER_X_FORWARDED_FOR</u> Value: x-forwarded-for
public static final	<u>HTTP_HEADER_X_REAL_IP</u> Value: x-real-ip
public static final	<u>PROPERTY_X_FORWARDED_LIST</u> Value: httpForwardedProxyList

Method Summary

abstract int	<u>getContentLength()</u> Get the content length of the body of the message
abstract String	<u>getContentType()</u> Get the request content type
abstract String	<u>getForwardedIP(String excludeAddresses)</u> Get X-[real-forwarded] address
abstract String	<u>getHeader(String name)</u> Get a HTTP header value such as 'Content-Length'
abstract byte[]	<u>getHeaderBytes()</u> Returns the header as bytes
abstract java.util.Map	<u>getHeaderMap()</u> Get a copy of the HTTP request header map
abstract java.util.Set	<u>getHeaderNames()</u> Get a Set of the header names
abstract String	<u>getHost()</u> Returns the domain name and possibly the port of the server for which the HTTP Request is being sent to, for both HTTP 1.1 and HTTP 2.0
abstract java.io.InputStream	<u>getInputStream()</u> Get the body of the message as an input stream
abstract int	<u>getIntHeader(String name)</u> Get a HTTP header value such as 'Content-Length' and return as int
abstract java.util.Locale	<u>getLocale()</u> Get locale of request (Example: en-us)

abstract String	<u>getMethod()</u> Get the method invocation method: GET, POST, HEAD
abstract byte[]	<u>getMsgBytes()</u> Return the message bytes
abstract String	<u>getParameter(String name)</u> Get a parameter value
abstract java.util.Map	<u>getParameterMap()</u> Get the entire parameter Map
abstract java.util.Set	<u>getParameterNames()</u> Get a Set of parameter names
abstract String[]	<u>getParameterValues(String name)</u> Get a multi-value parameter as an array of String
abstract String	<u>getPath()</u> Returns the HTTP path element of the request
abstract String	<u>getProtocol()</u> Get the request protocol (example: HTTP/1.1)
abstract String	<u>getQueryString()</u> Get the query string part of the url (everything after the ?)
abstract String	<u>getRemoteAddr()</u> Get the remote ip address of the request
abstract String	<u>getRemoteHost()</u> Get the remote host name (if known) if not return ip address
abstract String	<u>getRequestURI()</u> Get the full request URI
abstract String	<u>getRequestURL()</u> Get the request url (same as URI minus the query string)
abstract String	<u>getScheme()</u> Get the request scheme (Example "http")
abstract String	<u>getServerName()</u> Get the name of the server (Example: "Wowza Streaming Engine")
abstract int	<u>getServerPort()</u> Get the port this request was received on
abstract boolean	<u>isHeadRequest()</u> Returns true if the request is a HEAD request
abstract boolean	<u>isSecure()</u> Returns true is the request is protected by SSL
abstract boolean	<u>isUpgradeRequest()</u> Returns true if upgrade request (WebSocket,...)
abstract void	<u>parseBodyForParams()</u> If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

abstract void

[parseBodyForParams](#)(boolean doDecode)

If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

Fields

HTTP_HEADER_X_REAL_IP

```
public static final java.lang.String HTTP_HEADER_X_REAL_IP
```

Constant value: **x-real-ip**

HTTP_HEADER_X_FORWARDED_FOR

```
public static final java.lang.String HTTP_HEADER_X_FORWARDED_FOR
```

Constant value: **x-forwarded-for**

PROPERTY_X_FORWARDED_LIST

```
public static final java.lang.String PROPERTY_X_FORWARDED_LIST
```

Constant value: **httpForwardedProxyList**

Methods

getHeaderMap

```
public abstract java.util.Map getHeaderMap()
```

Get a copy of the HTTP request header map

Returns:

copy of the HTTP request header map

getHeader

```
public abstract String getHeader(String name)
```

Get a HTTP header value such as 'Content-Length'

Parameters:

name - header name

Returns:

header value

getIntHeader

```
public abstract int getIntHeader(String name)
```

Get a HTTP header value such as 'Content-Length' and return as int

(continued from last page)

Parameters:

name - header name

Returns:header value

getHeaderNames

```
public abstract java.util.Set getHeaderNames()
```

Get a Set of the header names

Returns:Set of header names

getMethod

```
public abstract String getMethod()
```

Get the method invocation method: GET, POST, HEAD

Returns:method

getQueryString

```
public abstract String getQueryString()
```

Get the query string part of the url (everything after the ?)

Returns:query string

getContentLength

```
public abstract int getContentLength()
```

Get the content length of the body of the message

Returns:content length of the body of the message

getRequestURI

```
public abstract String getRequestURI()
```

Get the full request URI

Returns:full request URI

getRequestURL

```
public abstract String getRequestURL()
```

Get the request url (same as URI minus the query string)

Returns:

(continued from last page)

request url

getContentType

```
public abstract String getContentType()
```

Get the request content type

Returns:

request content type

parseBodyForParams

```
public abstract void parseBodyForParams(boolean doDecode)
```

If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

Parameters:

doDecode - true to decode the params as though they are url params

parseBodyForParams

```
public abstract void parseBodyForParams()
```

If the body of the message contains parameter data (data in name value pairs separated by & character) call this routine to decode those parameters and add them to the parameter map.

getParameter

```
public abstract String getParameter(String name)
```

Get a parameter value

Parameters:

name - parameter name

Returns:

parameter value

getParameterNames

```
public abstract java.util.Set getParameterNames()
```

Get a Set of parameter names

Returns:

Set of parameter names

getParameterValues

```
public abstract String[] getParameterValues(String name)
```

Get a multi-value parameter as an array of String

Parameters:

name - parameter name

Returns:

(continued from last page)

multi-value parameter as an array of String

getParameterMap

```
public abstract java.util.Map getParameterMap()
```

Get the entire parameter Map

Returns:
parameter Map

getInputStream

```
public abstract java.io.InputStream getInputStream()
```

Get the body of the message as an input stream

Returns:
body of the message as an input stream

getProtocol

```
public abstract String getProtocol()
```

Get the request protocol (example: HTTP/1.1)

Returns:
request protocol

getScheme

```
public abstract String getScheme()
```

Get the request scheme (Example "http")

Returns:
request scheme

getServerName

```
public abstract String getServerName()
```

Get the name of the server (Example: "Wowza Streaming Engine")

Returns:
name of the server

getServerPort

```
public abstract int getServerPort()
```

Get the port this request was received on

Returns:
the port this request was received on

(continued from last page)

getRemoteAddr

```
public abstract String getRemoteAddr()
```

Get the remote ip address of the request

Returns:

remote ip address of the request

getForwardedIP

```
public abstract String getForwardedIP(String excludeAddresses)
```

Get X-[real-forwarded] address

getRemoteHost

```
public abstract String getRemoteHost()
```

Get the remote host name (if known) if not return ip address

Returns:

remote host name

getLocale

```
public abstract java.util.Locale getLocale()
```

Get locale of request (Example: en-us)

Returns:

locale of request

isSecure

```
public abstract boolean isSecure()
```

Returns true is the request is protected by SSL

Returns:

true is the request is protected by SSL

getPath

```
public abstract String getPath()
```

Returns the HTTP path element of the request

Returns:

HTTP path element of the request

getHeaderBytes

```
public abstract byte[] getHeaderBytes()
```

Returns the header as bytes

Returns:

(continued from last page)

header as bytes

getMsgBytes

```
public abstract byte[] getMsgBytes()
```

Return the message bytes

Returns:

message bytes

isHeadRequest

```
public abstract boolean isHeadRequest()
```

Returns true if the request is a HEAD request

Returns:

true if the request is a HEAD request

isUpgradeRequest

```
public abstract boolean isUpgradeRequest()
```

Returns true if upgrade request (WebSocket,...)

Returns:

Returns true if upgrade request

getHost

```
public abstract String getHost()
```

Returns the domain name and possibly the port of the server for which the HTTP Request is being sent to, for both HTTP 1.1 and HTTP 2.0

Returns:

the domain name, to possibly include the port for the service requested (if it is non-standard), or an empty string if it is not defined

com.wowza.wms.http Interface IHTTPResponse

public interface **IHTTPResponse**
extends

Field Summary

public static final	<u>UPGRADE_PROTOCOL_WEBSOCKETS</u> Value: 1
---------------------	---

Method Summary

abstract boolean	<u>containsHeader</u> (String name) Returns true if response header contains parameter name
abstract String	<u>getHeader</u> (String name) Get header value
abstract java.util.Map	<u>getHeaders</u> () Get the current response headers as a map
abstract int	<u>getHeaderSize</u> () Get the size in bytes of the HTTP header
abstract int	<u>getIntHeader</u> (String name) Get header value as int
abstract java.io.OutputStream	<u>getOutputStream</u> () Get the output stream for the response.
abstract int	<u>getUpgradeRequestProtocol</u> () Get the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*
abstract boolean	<u>isHeadResponse</u> () returns true if the response is due to a HEAD request
abstract void	<u>removeHeader</u> (String name) Remove header value
abstract void	<u>setHeader</u> (String name, String value) Set header value
abstract void	<u>setHeadResponse</u> (boolean isHeadResponse) indicates if the response is a response to a HEAD request
abstract void	<u>setIntHeader</u> (String name, int value) Set header value as int
abstract void	<u>setIsCte</u> (boolean b)
abstract void	<u>setResponseCode</u> (int responseCode) Set the HTTP response code

abstract void

[setUpgradeRequestProtocol](#)(int upgradeRequestProtocol,
[IWebSocketEventNotify](#) listener)

Set the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*

Fields

UPGRADE_PROTOCOL_WEBSOCKETS

```
public static final int UPGRADE_PROTOCOL_WEBSOCKETS
```

Constant value: **1**

Methods

getOutputStream

```
public abstract java.io.OutputStream getOutputStream()
```

Get the output stream for the response. You can then write directly into the output stream.

Returns:

output stream for the response

containsHeader

```
public abstract boolean containsHeader(String name)
```

Returns true if response header contains parameter name

Parameters:

name - header parameter name

Returns:

true if header contains value

setHeader

```
public abstract void setHeader(String name,  
                                String value)
```

Set header value

Parameters:

name - header parameter name

value - parameter value

removeHeader

```
public abstract void removeHeader(String name)
```

Remove header value

Parameters:

name - name

setIntHeader

```
public abstract void setIntHeader(String name,  
    int value)
```

Set header value as int

Parameters:

name - header parameter name
value - parameter value

getHeaders

```
public abstract java.util.Map getHeaders()
```

Get the current response headers as a map

Returns:

current response headers as a map

getHeader

```
public abstract String getHeader(String name)
```

Get header value

Parameters:

name - header parameter name

Returns:

parameter value

getIntHeader

```
public abstract int getIntHeader(String name)
```

Get header value as int

Parameters:

name - header parameter name

Returns:

parameter value

setResponseCode

```
public abstract void setResponseCode(int responseCode)
```

Set the HTTP response code

Parameters:

responseCode - HTTP response code

getHeaderSize

```
public abstract int getHeaderSize()
```

Get the size in bytes of the HTTP header

(continued from last page)

Returns:

header size in bytes

setHeadResponse

```
public abstract void setHeadResponse(boolean isHeadResponse)
```

indicates if the response is a response to a HEAD request

Parameters:

isHeadResponse - indicating if this is a response to a HEAD request

isHeadResponse

```
public abstract boolean isHeadResponse()
```

returns true if the response is due to a HEAD request

Returns:

true if the response is due to a HEAD request

getUpgradeRequestProtocol

```
public abstract int getUpgradeRequestProtocol()
```

Get the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*

Returns:

upgrade request protocol

setUpgradeRequestProtocol

```
public abstract void setUpgradeRequestProtocol(int upgradeRequestProtocol,  
IWebSocketEventNotify listener)
```

Set the upgrade request protocol, -1 means no upgrade, see UPGRADE_PROTOCOL_*

Parameters:

upgradeRequestProtocol - upgrade request protocol
listener - event listener

setIsCte

```
public abstract void setIsCte(boolean b)
```

Package

com.wowza.wms.httpstreamer.cupertinostreaming.file

com.wowza.wms.httpstreamer.cupertinostreaming.file Interface IHTTPStreamerCupertinoIndex

public interface IHTTPStreamerCupertinoIndex
extends

Method Summary

abstract int	<u>addIndexItem</u> (<u>IHTTPStreamerCupertinoIndexItem</u> item)
abstract int	<u>addIndexKeyFrameItem</u> (<u>IHTTPStreamerCupertinoIndexItem</u> item)
abstract void	<u>close</u> ()
abstract void	<u>fillChunk</u> (<u>IHTTPStreamerCupertinoIndexItem</u> item, <u>LiveStreamPacketizerCupertinoChunk</u> chunk, CupertinoStreamingRendition rendition, long bitrate, boolean isByteRangeRequest)
abstract <u>IHTTPStreamerApplicationContext</u>	<u>getApplicationContext</u> ()
abstract int	<u>getAudioBitrate</u> ()
abstract int	<u>getAudioCodec</u> ()
abstract TimedTextRequest	<u>getCaptionRequest</u> ()
abstract ITimedTextProviderCEA608	<u>getCEA608CaptionProvider</u> ()
abstract <u>LiveStreamPacketizerCupertinoChunk</u>	<u>getChunk</u> (String filename, CupertinoStreamingRendition rendition, long bitrate, boolean isByteRangeRequest)
abstract com.wowza.wms.media.model.MediaCodecInfoAudio	<u>getCodecInfoAudio</u> ()
abstract com.wowza.wms.media.model.MediaCodecInfoVideo	<u>getCodecInfoVideo</u> ()
abstract String	<u>getCodecsAudioStr</u> (int codecStrFormatId)
abstract String	<u>getCodecsStr</u> (int codecStrFormatId)
abstract String	<u>getCodecsVideoStr</u> (int codecStrFormatId)

abstract double	getDuration()
abstract CupertinoEncInfo	getEncInfo()
abstract CupertinoEncInfo	getEncKeyFrameInfo()
abstract String	getEncKeyFrameURL()
abstract String	getEncURL()
abstract IHTTPStreamerSession	getHttpStreamerSession()
abstract int	getID3Bitrate (CupertinoStreamingRendition rendition)
abstract ID3Frames	getID3FramesFooter()
abstract ID3Frames	getID3FramesFooterAudio()
abstract ID3Frames	getID3FramesHeader()
abstract ID3Frames	getID3FramesHeaderAudio()
abstract int	getIndexCount()
abstract IHTTPStreamerCupertinoIndexItem	getIndexItem (int index)
abstract int	getIndexKeyFrameCount()
abstract IHTTPStreamerCupertinoIndexItem	getIndexKeyFrameItem (int index)
abstract int	getKeyFrameOnlyBitrate()
abstract long	getPlayDuration()
abstract String	getPlaylistStr (CupertinoStreamingRendition rendition)
abstract long	getPlaySeek()
abstract long	getPlayStart()
abstract WMSProperties	getProperties()
abstract String	getResolutionStr()
abstract java.util.List	getStreamBitrates()

abstract int	<u>getStreamMode()</u>
abstract String	<u>getStreamName()</u>
abstract String	<u>getStreamNameByBitrate()</u> (long bitrate)
abstract String	<u>getStreamNameByBitrate()</u> (long bitrate, String languageStr, String titleStr)
abstract java.util.List	<u>getStreamNames()</u>
abstract java.util.List	<u>getStreamNamesRaw()</u>
abstract String	<u>getSubtitleChunk()</u> (String filename, String languageID, boolean isByteRangeRequest)
abstract String	<u>getSubtitleListStr()</u> (String languageID, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
abstract String	<u>getTitleStr()</u>
abstract int	<u>getVideoBitrateAverage()</u>
abstract int	<u>getVideoBitratePeak()</u>
abstract String	<u>getVODTranscodeNGRP()</u>
abstract com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT	<u>getWebVTTCaptionProvider()</u>
abstract void	<u>indexFile()</u> (<u>IHTTPStreamerSession</u> httpStreamerSession)
abstract void	<u>init()</u> (<u>IHTTPStreamerApplicationContext</u> appContext, <u>IHTTPStreamerSession</u> httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest timedTextRequest, String vodTranscodeNGRP)
abstract boolean	<u>isCreateKeyFrameOnlyPlaylist()</u>
abstract boolean	<u>isDoEncryption()</u>
abstract boolean	<u>isDoKeyFrameEncryption()</u>
abstract boolean	<u>isReloadMediaList()</u>
abstract boolean	<u>isUseWebVTTForVODCaptions()</u>
abstract void	<u>open()</u>

abstract void	<u>setAudioBitrate</u> (int audioBitrate)
abstract void	<u>setAudioCodec</u> (int audioCodec)
abstract void	<u>setCaptionRequest</u> (TimedTextRequest request)
abstract void	<u>setCEA608CaptionProvider</u> (ITimedTextProviderCEA608 captionProviderCEA608)
abstract void	<u>setDuration</u> (double duration)
abstract void	<u>setKeyFrameOnlyBitrate</u> (int keyFrameOnlyBitrate)
abstract void	<u>setPlayDuration</u> (long playDuration)
abstract void	<u>setPlaySeek</u> (long playSeek)
abstract void	<u>setPlayStart</u> (long playStart)
abstract void	<u>setStreamMode</u> (int streamMode)
abstract void	<u>setTitleStr</u> (String titleStr)
abstract void	<u>setUseWebVTTForVODCaptions</u> (boolean useWebVTTForCaption)
abstract void	<u>setVideoBitrateAverage</u> (int videoBitrate)
abstract void	<u>setVideoBitratePeak</u> (int videoBitrate)
abstract void	<u>setVODTranscodeNGRP</u> (String vodTranscodeNGRP)
abstract void	<u>setWebVTTCaptionProvider</u> (com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT captionProviderWebVTT)

Methods

getPlaylistStr

public abstract String **getPlaylistStr**(CupertinoStreamingRendition rendition)

(continued from last page)

init

```
public abstract void init(IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName,  
    long playStart,  
    long playDuration,  
    long playSeek,  
    TimedTextRequest timedTextRequest,  
    String vodTranscodeNGRP)
```

indexFile

```
public abstract void indexFile(IHTTPStreamerSession httpStreamerSession)
```

close

```
public abstract void close()
```

open

```
public abstract void open()
```

addIndexItem

```
public abstract int addIndexItem(IHTTPStreamerCupertinoIndexItem item)
```

addIndexKeyFrameItem

```
public abstract int addIndexKeyFrameItem(IHTTPStreamerCupertinoIndexItem item)
```

getIndexCount

```
public abstract int getIndexCount()
```

getIndexKeyFrameCount

```
public abstract int getIndexKeyFrameCount()
```

(continued from last page)

getIndexItem

public abstract [IHTTPStreamerCupertinoIndexItem](#) **getIndexItem**(int index)

getIndexKeyFrameItem

public abstract [IHTTPStreamerCupertinoIndexItem](#) **getIndexKeyFrameItem**(int index)

getTitleStr

public abstract String **getTitleStr**()

setTitleStr

public abstract void **setTitleStr**(String titleStr)

isDoEncryption

public abstract boolean **isDoEncryption**()

isDoKeyFrameEncryption

public abstract boolean **isDoKeyFrameEncryption**()

getEncURL

public abstract String **getEncURL**()

getEncKeyFrameURL

public abstract String **getEncKeyFrameURL**()

getEncInfo

public abstract CupertinoEncInfo **getEncInfo**()

getEncKeyFrameInfo

public abstract CupertinoEncInfo **getEncKeyFrameInfo**()

(continued from last page)

getChunk

```
public abstract LiveStreamPacketizerCupertinoChunk getChunk(String filename,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    boolean isByteRangeRequest)
```

fillChunk

```
public abstract void fillChunk(IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    boolean isByteRangeRequest)
```

getApplicationContext

```
public abstract IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public abstract IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public abstract String getStreamName()
```

getStreamNames

```
public abstract java.util.List getStreamNames()
```

getStreamBitrates

```
public abstract java.util.List getStreamBitrates()
```

getStreamNamesRaw

```
public abstract java.util.List getStreamNamesRaw()
```

(continued from last page)

getStreamMode

```
public abstract int getStreamMode()
```

setStreamMode

```
public abstract void setStreamMode(int streamMode)
```

getAudioBitrate

```
public abstract int getAudioBitrate()
```

setAudioBitrate

```
public abstract void setAudioBitrate(int audioBitrate)
```

getVideoBitrateAverage

```
public abstract int getVideoBitrateAverage()
```

setVideoBitrateAverage

```
public abstract void setVideoBitrateAverage(int videoBitrate)
```

getVideoBitratePeak

```
public abstract int getVideoBitratePeak()
```

setVideoBitratePeak

```
public abstract void setVideoBitratePeak(int videoBitrate)
```

getAudioCodec

```
public abstract int getAudioCodec()
```

setAudioCodec

```
public abstract void setAudioCodec(int audioCodec)
```

(continued from last page)

getID3Bitrate

```
public abstract int getID3Bitrate(CupertinoStreamingRendition rendition)
```

getID3FramesHeader

```
public abstract ID3Frames getID3FramesHeader()
```

getID3FramesFooter

```
public abstract ID3Frames getID3FramesFooter()
```

getID3FramesHeaderAudio

```
public abstract ID3Frames getID3FramesHeaderAudio()
```

getID3FramesFooterAudio

```
public abstract ID3Frames getID3FramesFooterAudio()
```

getCodecInfoVideo

```
public abstract com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

getCodecInfoAudio

```
public abstract com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

getCodecsStr

```
public abstract String getCodecsStr(int codecStrFormatId)
```

getCodecsAudioStr

```
public abstract String getCodecsAudioStr(int codecStrFormatId)
```

(continued from last page)

getCodecsVideoStr

```
public abstract String getCodecsVideoStr(int codecStrFormatId)
```

getResolutionStr

```
public abstract String getResolutionStr()
```

getDuration

```
public abstract double getDuration()
```

setDuration

```
public abstract void setDuration(double duration)
```

getProperties

```
public abstract WMSPProperties getProperties()
```

getPlayStart

```
public abstract long getPlayStart()
```

setPlayStart

```
public abstract void setPlayStart(long playStart)
```

getPlayDuration

```
public abstract long getPlayDuration()
```

setPlayDuration

```
public abstract void setPlayDuration(long playDuration)
```

getPlaySeek

```
public abstract long getPlaySeek()
```

(continued from last page)

setPlaySeek

```
public abstract void setPlaySeek(long playSeek)
```

getStreamNameByBitrate

```
public abstract String getStreamNameByBitrate(long bitrate)
```

getStreamNameByBitrate

```
public abstract String getStreamNameByBitrate(long bitrate,  
        String languageStr,  
        String titleStr)
```

getVODTranscodeNGRP

```
public abstract String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public abstract void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

getSubtitleListStr

```
public abstract String getSubtitleListStr(String languageID,  
        HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

getCaptionRequest

```
public abstract TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public abstract void setCaptionRequest(TimedTextRequest request)
```

setWebVTTCaptionProvider

```
public abstract void  
setWebVTTCaptionProvider(com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT  
captionProviderWebVTT)
```

(continued from last page)

getWebVTTCaptionProvider

```
public abstract com.wowza.wms.timedtext.webvtt.ITimedTextProviderWebVTT
getWebVTTCaptionProvider()
```

setCEA608CaptionProvider

```
public abstract void setCEA608CaptionProvider(ITimedTextProviderCEA608
captionProviderCEA608)
```

getCEA608CaptionProvider

```
public abstract ITimedTextProviderCEA608 getCEA608CaptionProvider()
```

isUseWebVTTForVODCaptions

```
public abstract boolean isUseWebVTTForVODCaptions()
```

setUseWebVTTForVODCaptions

```
public abstract void setUseWebVTTForVODCaptions(boolean useWebVTTForCaption)
```

getSubtitleChunk

```
public abstract String getSubtitleChunk(String filename,
String languageID,
boolean isByteRangeRequest)
```

isReloadMediaList

```
public abstract boolean isReloadMediaList()
```

isCreateKeyFrameOnlyPlaylist

```
public abstract boolean isCreateKeyFrameOnlyPlaylist()
```

getKeyFrameOnlyBitrate

```
public abstract int getKeyFrameOnlyBitrate()
```

setKeyFrameOnlyBitrate

```
public abstract void setKeyFrameOnlyBitrate(int keyFrameOnlyBitrate)
```

com.wowza.wms.httpstreamer.cupertinostreaming.file Interface IHTTPStreamerCupertinoIndexItem

public interface **IHTTPStreamerCupertinoIndexItem**
extends

Method Summary

abstract CupertinoEncInfo	<u>getEncInfo()</u>
abstract long	<u>getIndex()</u>
abstract long	<u>getStartTimecode()</u>
abstract long	<u>getStopTimecode()</u>
abstract void	<u>setEncInfo</u> (CupertinoEncInfo encInfo)
abstract void	<u>setIndex</u> (long index)
abstract void	<u>setStartTimecode</u> (long startTimecode)
abstract void	<u>setStopTimecode</u> (long stopTimecode)

Methods

getStartTimecode

public abstract long **getStartTimecode()**

setStartTimecode

public abstract void **setStartTimecode**(long startTimecode)

getStopTimecode

public abstract long **getStopTimecode()**

setStopTimecode

public abstract void **setStopTimecode**(long stopTimecode)

(continued from last page)

getIndex

public abstract long **getIndex**()

setIndex

public abstract void **setIndex**(long index)

getEncInfo

public abstract CupertinoEncInfo **getEncInfo**()

setEncInfo

public abstract void **setEncInfo**(CupertinoEncInfo encInfo)

com.wowza.wms.httpstreamer.cupertinostreaming.file Interface IMediaReaderCupertino

All Superinterfaces:
[IMediaReader](#)

public interface **IMediaReaderCupertino**
extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX Value: cupertino
---------------------	--

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

abstract void	fillChunk (HTTPStreamerApplicationContextCupertinoStreamer appContext, IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition, long bitrate, ID3Frames headerFrames, ID3Frames footerFrames, ICupertinoEncryptor encryptor, boolean isByteRangeRequest)
abstract void	indexFile (IHTTPStreamerCupertinoIndex index)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **cupertino**

Methods

(continued from last page)

indexFile

```
public abstract void indexFile(IHTTPStreamerCupertinoIndex index)
```

fillChunk

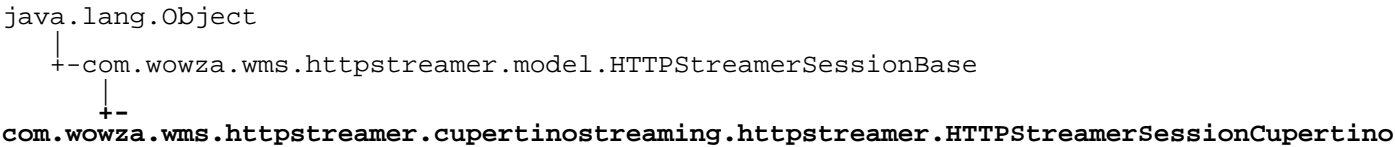
```
public abstract void fillChunk(HTTPStreamerApplicationContextCupertinoStreamer  
appContext,  
    IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    long bitrate,  
    ID3Frames headerFrames,  
    ID3Frames footerFrames,  
    ICupertinoEncryptor encryptor,  
    boolean isByteRangeRequest)
```

Package

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer

Class HTTPStreamerSessionCupertino



All Implemented Interfaces:
[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

public class **HTTPStreamerSessionCupertino**
extends HTTPStreamerSessionBase
implements [IHTTPStreamerSession](#), [IHTTPSessionNotify](#)

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase
acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface com.wowza.wms.httpstreamer.model.IHTTPStreamerSession
SESSIONFORMAT_CMAF , SESSIONFORMAT_CMAF_LL , SESSIONFORMAT_DEFAULT , SESSIONPROTOCOL_COUNT , SESSIONPROTOCOL_CUPERTINOSTREAMING , SESSIONPROTOCOL_DIRECTSTREAMING , SESSIONPROTOCOL_DVRCHUNKSTREAMING , SESSIONPROTOCOL_MPEGDASHSTREAMING , SESSIONPROTOCOL_SANJOSESTREAMING , SESSIONPROTOCOL_SMOOTHSTREAMING , SESSIONPROTOCOL_TSSTREAMING , SESSIONPROTOCOL_UNKNOWN , SESSIONPROTOCOL_WEBMSTREAMING , SESSIONTYPE_LIVE , SESSIONTYPE_LIVEDVR , SESSIONTYPE_UNKNOWN , SESSIONTYPE_VOD

Constructor Summary

public	HTTPStreamerSessionCupertino()
--------	--

Method Summary

void	clearLoggingValues()
boolean	containsIndex (String streamName)

IHTTPStreamerCupertinoIndex	getIndex(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
java.util.concurrent.atomic.AtomicBoolean	getIsFirstChunk()
CupertinoUserManifestHeaders	getUserManifestHeaders()
CupertinoUserManifestHeaders	getUserManifestHeaders(CupertinoStreamingRendition rendition)
CupertinoUserManifestHeaders	getUserManifestHeadersAudio()
CupertinoUserManifestHeaders	getUserManifestHeadersVideo()
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
boolean	isAutoCreateMultibitratePlaylist()
void	logLiveChunk(LiveStreamPacketizerCupertinoChunk chunk)
void	logLiveSegment(CmafSegment segment)
void	logVODChunk(LiveStreamPacketizerCupertinoChunk chunk)
void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	setAutoCreateMultibitratePlaylist(boolean autoCreateMultibitratePlaylist)
void	shutdown()
void	updateLoggingValues()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionCupertino

```
public HTTPStreamerSessionCupertino()
```

Methods

shutdown

```
public void shutdown()
```

containsIndex

```
public boolean containsIndex(String streamName)
```

getIndex

```
public IHTTPStreamerCupertinoIndex getIndex(IHTTPStreamerApplicationContext
appContext,
IHTTPStreamerSession httpStreamerSession,
String rawStreamName,
String streamExt,
String streamName,
long playStart,
long playDuration,
long playSeek,
TimedTextRequest captionRequest,
String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(LiveStreamPacketizerCupertinoChunk chunk)
```

logLiveSegment

```
public void logLiveSegment(CmafSegment segment)
```

logVODChunk

```
public void logVODChunk(LiveStreamPacketizerCupertinoChunk chunk)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,
IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

getIsFirstChunk

```
public java.util.concurrent.atomic.AtomicBoolean getIsFirstChunk()
```

isAutoCreateMultibitratePlaylist

```
public boolean isAutoCreateMultibitratePlaylist()
```

setAutoCreateMultibitratePlaylist

```
public void setAutoCreateMultibitratePlaylist(boolean autoCreateMultibitratePlaylist)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders(CupertinoStreamingRendition  
    rendition)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

getUserManifestHeadersAudio

```
public CupertinoUserManifestHeaders getUserManifestHeadersAudio()
```

getUserManifestHeadersVideo

```
public CupertinoUserManifestHeaders getUserManifestHeadersVideo()
```

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify

All Subinterfaces:

[IHTTPStreamerCupertinoVODActionNotify2](#), [IHTTPStreamerCupertinoVODActionNotify3](#)

public interface **IHTTPStreamerCupertinoVODActionNotify**

extends

IHTTPStreamerCupertinoVODActionNotify: listener interface for video on demand iOS streaming. See

HTTPStreamerApplicationContextCupertinoStreamer.addVODActionListener(IHTTPStreamerCupertinoVODActionNotify listener)

Method Summary

abstract void	onCreate(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName) Called when file index created
abstract void	onDestroy(IHTTPStreamerCupertinoIndex fileIndex) Called after file index is destroyed
abstract void	onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly) Called after each chunk is filled.
abstract void	onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly) Called each time a chunk is filled.
abstract void	onIndex(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName) Called after file is indexed
abstract void	onInit(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName) Called after initialized
abstract void	onOpen(IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName) Called after open

Methods

(continued from last page)

onCreate

```
public abstract void onCreate(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called when file index created

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onInit

```
public abstract void onInit(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after initialized

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onOpen

```
public abstract void onOpen(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after open

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

(continued from last page)

onIndex

```
public abstract void onIndex(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerApplicationContext appContext,  
    IHTTPStreamerSession httpStreamerSession,  
    String rawStreamName,  
    String streamExt,  
    String streamName)
```

Called after file is indexed

Parameters:

fileIndex - file index
appContext - HTTP application context
httpStreamerSession - HTTP streaming session
rawStreamName - stream name
streamExt - stream extension
streamName - adjusted stream name

onFillChunkStart

```
public abstract void onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    boolean audioOnly)
```

Called each time a chunk is filled. Can be used to add ID3 data to the header of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
audioOnly - is audio-only chunk

onFillChunkEnd

```
public abstract void onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    boolean audioOnly)
```

Called after each chunk is filled. Can be used to add ID3 data to the end of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
audioOnly - is audio-only chunk

onDestroy

```
public abstract void onDestroy(IHTTPStreamerCupertinoIndex fileIndex)
```

Called after file index is destroyed

Parameters:

fileIndex - file index

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify2

All Superinterfaces:

[IHTTPStreamerCupertinoVODActionNotify](#)

All Subinterfaces:

[IHTTPStreamerCupertinoVODActionNotify3](#)

public interface **IHTTPStreamerCupertinoVODActionNotify2**

extends [IHTTPStreamerCupertinoVODActionNotify](#)

Method Summary

abstract void	onFillChunkDataPacket (IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, boolean audioOnly, AMFPacket packet, ID3Frames id3Frames) Called when data packet is encountered.
---------------	---

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify](#)

[onCreate](#), [onDestroy](#), [onFillChunkEnd](#), [onFillChunkStart](#), [onIndex](#), [onInit](#), [onOpen](#)

Methods

onFillChunkDataPacket

```
public abstract void onFillChunkDataPacket(IHTTPStreamerCupertinoIndex fileIndex,
IHTTPStreamerCupertinoIndexItem item,
LiveStreamPacketizerCupertinoChunk chunk,
boolean audioOnly,
AMFPacket packet,
ID3Frames id3Frames)
```

Called when data packet is encountered. Used to convert AMF events into ID3 tags for iOS streaming

Parameters:

fileIndex - file index
item - item
chunk - chunk
audioOnly - is audio-only chunk
packet - amf packet
id3Frames - ID3 frames

com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer Interface IHTTPStreamerCupertinoVODActionNotify3

All Superinterfaces:

[IHTTPStreamerCupertinoVODActionNotify2](#), [IHTTPStreamerCupertinoVODActionNotify](#)

public interface **IHTTPStreamerCupertinoVODActionNotify3**

extends [IHTTPStreamerCupertinoVODActionNotify2](#)

Method Summary

abstract void	onFillChunkDataPacket (IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition, AMFPacket packet, ID3Frames id3Frames) Called when data packet is encountered.
abstract void	onFillChunkEnd (IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition) Called after each chunk is filled.
abstract void	onFillChunkStart (IHTTPStreamerCupertinoIndex fileIndex, IHTTPStreamerCupertinoIndexItem item, LiveStreamPacketizerCupertinoChunk chunk, CupertinoStreamingRendition rendition) Called each time a chunk is filled.

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify2](#)

[onFillChunkDataPacket](#)

Methods inherited from interface

[com.wowza.wms.httpstreamer.cupertinostreaming.httpstreamer.IHTTPStreamerCupertinoVODActionNotify](#)

[onCreate](#), [onDestroy](#), [onFillChunkEnd](#), [onFillChunkStart](#), [onIndex](#), [onInit](#), [onOpen](#)

Methods

onFillChunkStart

```
public abstract void onFillChunkStart(IHTTPStreamerCupertinoIndex fileIndex,
    IHTTPStreamerCupertinoIndexItem item,
    LiveStreamPacketizerCupertinoChunk chunk,
    CupertinoStreamingRendition rendition)
```

Called each time a chunk is filled. Can be used to add ID3 data to the header of a chunk.

Parameters:

fileIndex - file index

item - index item

(continued from last page)

chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)

onFillChunkEnd

```
public abstract void onFillChunkEnd(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition)
```

Called after each chunk is filled. Can be used to add ID3 data to the end of a chunk.

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)

onFillChunkDataPacket

```
public abstract void onFillChunkDataPacket(IHTTPStreamerCupertinoIndex fileIndex,  
    IHTTPStreamerCupertinoIndexItem item,  
    LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoStreamingRendition rendition,  
    AMFPacket packet,  
    ID3Frames id3Frames)
```

Called when data packet is encountered. Used to convert AMF events into ID3 tags for iOS streaming

Parameters:

fileIndex - file index
item - index item
chunk - chunk being filled
rendition - rendition (audioOnly, videoOnly...)
packet - amf packet
id3Frames - ID3 frames

Package

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface ICupertinoChunkWriter

All Known Implementing Classes:

[LiveStreamPacketizerCupertino](#)

public interface **ICupertinoChunkWriter**
extends

Method Summary

abstract void	addToChunk (CupertinoPacketHolder holder)
abstract void	endChunk (long timecode)
abstract boolean	isPacketizeAudio ()
abstract boolean	isPacketizeData ()
abstract boolean	isPacketizeVideo ()
abstract void	resetStream ()
abstract void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
abstract void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
abstract void	startChunk (int streamMode, int videoCodecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int audioCodecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, long timecode, long timecode90)

Methods

startChunk

```
public abstract void startChunk(int streamMode,
    int videoCodecId,
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo,
    int audioCodecId,
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio,
    long timecode,
    long timecode90)
```

(continued from last page)

endChunk

```
public abstract void endChunk(long timecode)
```

addToChunk

```
public abstract void addToChunk(CupertinoPacketHolder holder)
```

setCodecInfoAudio

```
public abstract void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public abstract void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

resetStream

```
public abstract void resetStream()
```

isPacketizeAudio

```
public abstract boolean isPacketizeAudio()
```

isPacketizeVideo

```
public abstract boolean isPacketizeVideo()
```

isPacketizeData

```
public abstract boolean isPacketizeData()
```

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface ICupertinoTSMakeChunk

public interface **ICupertinoTSMakeChunk**
extends

Method Summary

abstract void	makeChunk (java.util.List tsList)
---------------	---

Methods

makeChunk

public abstract void **makeChunk**(java.util.List tsList)

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface IHTTPStreamerCupertinoLivePacketizerDataHandler

public interface IHTTPStreamerCupertinoLivePacketizerDataHandler
extends

Interface for Cupertino live packetizer data events

This interface provides access to data being added to a chunk.

IHTTPStreamerCupertinoLivePacketizerDataHandler2 should be used in preference to this interface

Example implementation

```
public class Control extends ModuleBase
{

    public void onAppStart(IApplicationInstance appInstance)
    {
        appInstance.addLiveStreamPacketizerListener(new LiveStreamPacketizer());
    }

    class LiveStreamPacketizer implements ILiveStreamPacketizerActionNotify
    {
        public void onLiveStreamPacketizerCreate(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName) { }

        public void onLiveStreamPacketizerDestroy(ILiveStreamPacketizer
liveStreamPacketizer) { }

        public void onLiveStreamPacketizerInit(ILiveStreamPacketizer
liveStreamPacketizer,
                                String streamName)
        {
            if ( liveStreamPacketizer instanceof LiveStreamPacketizerCupertino )
            {
                LiveStreamPacketizerCupertino cupertinoPacketizer =
                    (LiveStreamPacketizerCupertino)liveStreamPacketizer;
                cupertinoPacketizer.setDataHandler(new
CupertinoLivePacketizerDataHandler());
            }
        }

        class CupertinoLivePacketizerDataHandler implements
IHTTPStreamerCupertinoLivePacketizerDataHandler
        {
            public void onFillChunkDataPacket(CupertinoPacketHolder arg0, AMFPacket arg1,
ID3Frames arg2) { }
        }
    }
}
```

Method Summary

abstract void	onFillChunkDataPacket (CupertinoPacketHolder holder, AMFPacket packet, ID3Frames id3Frames) This is called when a data packet is being processed.
---------------	--

Methods

(continued from last page)

onFillChunkDataPacket

```
public abstract void onFillChunkDataPacket(CupertinoPacketHolder holder,  
    AMFPacket packet,  
    ID3Frames id3Frames)
```

This is called when a data packet is being processed. This provides access to the packet and ID3 frame object being populated with data

Parameters:

- holder
- packet
- id3Frames

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Interface IHTTPStreamerCupertinoLivePacketizerDataHandler2

public interface **IHTTPStreamerCupertinoLivePacketizerDataHandler2**
extends

Interface for Cupertino live packetizer data events

This interface provides access to chunk start, end, data packet and media packet events when Cupertino chunks are being created.

It supersedes and should be used in preference to **IHTTPStreamerCupertinoLivePacketizerDataHandler**

Example implementation


```

public class Control extends ModuleBase
{

    public void onAppStart(IApplicationInstance appInstance)
    {
        appInstance.addLiveStreamPacketizerListener(new LiveStreamPacketizer());
    }

    class LiveStreamPacketizer implements ILiveStreamPacketizerActionNotify
    {
        public void onLiveStreamPacketizerCreate(ILiveStreamPacketizer
liveStreamPacketizer,
                                                String streamName) { }

        public void onLiveStreamPacketizerDestroy(ILiveStreamPacketizer
liveStreamPacketizer) { }

        public void onLiveStreamPacketizerInit(ILiveStreamPacketizer
liveStreamPacketizer,
                                                String streamName)
        {
            if ( liveStreamPacketizer instanceof LiveStreamPacketizerCupertino )
            {
                LiveStreamPacketizerCupertino cupertinoPacketizer =
                    (LiveStreamPacketizerCupertino)liveStreamPacketizer;
                cupertinoPacketizer.setDataHandler(new
CupertinoLivePacketizerDataHandler2());
            }
        }

        class CupertinoLivePacketizerDataHandler2 implements
IHTTPStreamerCupertinoLivePacketizerDataHandler2
        {
            public void onFillChunkDataPacket( LiveStreamPacketizerCupertinoChunk arg0,
                                                CupertinoPacketHolder arg1, AMFPacket arg2, ID3Frames
arg3) { }

            public void onFillChunkEnd(LiveStreamPacketizerCupertinoChunk arg0, long
arg1) { }

            public void onFillChunkMediaPacket(LiveStreamPacketizerCupertinoChunk arg0,
                                                CupertinoPacketHolder arg1, AMFPacket arg2) { }

            public void onFillChunkStart(LiveStreamPacketizerCupertinoChunk arg0) { }
        }
    }
}

```

Method Summary

abstract void	onFillChunkDataPacket (LiveStreamPacketizerCupertinoChunk chunk, CupertinoPacketHolder holder, AMFPacket packet, ID3Frames id3Frames) This is called when a data packet is being processed.
abstract void	onFillChunkEnd (LiveStreamPacketizerCupertinoChunk chunk, long timecode) This is called when a chunk has been filled with data.
abstract void	onFillChunkMediaPacket (LiveStreamPacketizerCupertinoChunk chunk, CupertinoPacketHolder holder, AMFPacket packet) This is called when a media packet is being processed.
abstract void	onFillChunkStart (LiveStreamPacketizerCupertinoChunk chunk) This is called when a chunk is about to be filled with data.

Methods

onFillChunkStart

```
public abstract void onFillChunkStart(LiveStreamPacketizerCupertinoChunk chunk)
```

This is called when a chunk is about to be filled with data. The chunk could have audio or video or both. At this point there is no data in the chunk.

Parameters:

chunk

onFillChunkEnd

```
public abstract void onFillChunkEnd(LiveStreamPacketizerCupertinoChunk chunk,  
    long timecode)
```

This is called when a chunk has been filled with data. The chunk could have audio or video or both. In addition to the chunk the timecode for the chunk is accessible.

Parameters:

chunk

timecode

onFillChunkDataPacket

```
public abstract void onFillChunkDataPacket(LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoPacketHolder holder,  
    AMFPacket packet,  
    ID3Frames id3Frames)
```

This is called when a data packet is being processed. This provides access to the packet and ID3 frame object being populated with data

Parameters:

chunk

holder

packet

id3Frames

(continued from last page)

onFillChunkMediaPacket

```
public abstract void onFillChunkMediaPacket(LiveStreamPacketizerCupertinoChunk chunk,  
      CupertinoPacketHolder holder,  
      AMFPacket packet)
```

This is called when a media packet is being processed. This provides access to the packets being pushed into this chunk from the stream.

Parameters:

- chunk
- holder
- packet

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer
Interface IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler
extends

Method Summary	
abstract void	init (LiveStreamPacketizerCupertino liveStreamPacketizer)
abstract long	onAssignChunkId (HTTPStreamerCupertinoLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public abstract void **init**([LiveStreamPacketizerCupertino](#) liveStreamPacketizer)

onAssignChunkId

public abstract long
onAssignChunkId(HTTPStreamerCupertinoLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Class LiveStreamPacketizerCupertino

java.lang.Object

└─com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└─

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.LiveStreamPacketizerCupertino

All Implemented Interfaces:

[ICupertinoChunkWriter](#), [Runnable](#), [IdleNotify](#), [ILiveStreamPacketizer](#)

public class **LiveStreamPacketizerCupertino**

extends [LiveStreamPacketizerBase](#)

implements [ILiveStreamPacketizer](#), [IdleNotify](#), [Runnable](#), [ICupertinoChunkWriter](#)

Field Summary

public static final	AUDIOGROUPCOUNT Value: 3
public static final	CHUNKDURATIONTARGET Value: 10000
public static final	CHUNKDURATIONTOLERANCE Value: 500
public static final	DEFAULT_ALLOW_CACHING Value: false
public static final	DEFAULT_ALWAYSSENDZEROPACKETLEN Value: false
public static final	DEFAULT_CHUNKDURATION_MAX Value: -1
public static final	DEFAULT_CHUNKDURATION_MIN Value: 0
public static final	DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD Value: -1
public static final	DEFAULT_CREATEAUDIOONLYRENDITION Value: false
public static final	DEFAULT_CUPERTINO_FORCE_END_CHUNK_WHEN_NO_KEYFRAMES Value: false

public static final	DEFAULT_ENABLEWEBVTTCAPTIONS Value: false
public static final	DEFAULT_RELATIVE_PLAYLIST_ITEMS Value: true
public static final	DEFAULT_RESET_TARGET_DURATION_ON_NEW_CHUNK Value: true
public static final	KEYFRAMEONLYDURATIONTARGET Value: 2000
public static final	MAXCHUNKCOUNT Value: 10
public static final	MAXCHUNKLOGCOUNT Value: 10
protected	originRepeaterContext
public static final	PACKETIZER_NAME Value: cupertinostreamingpacketizer
public static final	PLAYLISTCHUNKCOUNT Value: 3
public static final	PLAYSTARTTOLERANCE Value: 500
protected	randomSessionStr
public static final	REPEATERCHUNKCOUNT Value: -1
public static final	STREAMMODE_AAC Value: 3
public static final	STREAMMODE_AAC_FILEEXTENSION Value: .aac
public static final	STREAMMODE_AC3 Value: 4
public static final	STREAMMODE_AC3_FILEEXTENSION Value: .ac3
public static final	STREAMMODE_EC3 Value: 5

public static final	STREAMMODE_EC3_FILEEXTENSION Value: .ec3
public static final	STREAMMODE_MP3 Value: 2
public static final	STREAMMODE_MP3_FILEEXTENSION Value: .mp3
public static final	STREAMMODE_TS Value: 1
public static final	STREAMMODE_TS_FILEEXTENSION Value: .ts
public static final	WAITFORCODECTIME Value: 8000

Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, MEDIA_CHUNK_DURATION, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerCupertino()
--------	---

Method Summary

String	addAdditionalManifestHeaders (java.util.Map userHeaders)
void	addToChunk (CupertinoPacketHolder holder)
void	addToChunkAudioTS (CupertinoTSHolder tsHolder)
void	addToChunkTS (CupertinoTSHolder tsHolder)
void	addToChunkVideoTS (CupertinoTSHolder tsHolder)
long	calculateChunkIndexForPlaylist (long chunkIndex, long timecode)
void	encryptAudioTS (CupertinoTSHolder tsHolder)

void	encryptTS (CupertinoTSHolder tsHolder)
void	encryptVideoTS (CupertinoTSHolder tsHolder)
void	endChunk (long timecode)
void	endChunkAudioTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)
void	endChunkSubtitles (long timecode)
void	endChunkSubtitlesRepeater (LiveStreamPacketizerWebVTTChunk captions)
void	endChunkTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)
void	endChunkVideoTS (long timecode, java.util.Map userManifestHeaders, String programDateTime)
long	getCalculatedAudioBitrateAverage ()
long	getCalculatedAudioBitratePeak ()
long	getCalculatedBitrateAverage ()
long	getCalculatedBitratePeak ()
long	getCalculatedVideoBitrateAverage ()
long	getCalculatedVideoBitratePeak ()
LiveStreamPacketizerCupertinoChunk	getChunkAudioByFilename (String filename)
LiveStreamPacketizerCupertinoChunk	getChunkByFilename (String filename)
LiveStreamPacketizerCupertinoChunk	getChunkById (int rendition, long index)
int	getChunkCount ()
int	getChunkCount (int rendition)
int	getChunkDurationTarget ()
static int	getChunkDurationTarget (IApplicationInstance appInstance, String packetizer)
IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler	getChunkIdHandler ()

LiveStreamPacketizerCupertinoChunk	getChunkVideoByFilename (String filename)
ICupertinoChunkWriter	getChunkWriter ()
String	getCodecsAudioStr (int codecStrFormatId)
String	getCodecsStr (int codecStrFormatId)
String	getCodecsVideoStr (int codecStrFormatId)
IHTTPStreamerCupertinoLivePacketizerDataHandler	getDataHandler ()
IHTTPStreamerCupertinoLivePacketizerDataHandler2	getDataHandler2 ()
CupertinoEncInfo	getEncryptionInfo ()
int	getFirstChunkId ()
int	getFirstChunkId (int rendition)
ID3Frames	getID3FramesFooter ()
ID3Frames	getID3FramesFooter (CupertinoStreamingRendition rendition)
ID3Frames	getID3FramesFooterAudio ()
ID3Frames	getID3FramesFooterVideo ()
ID3Frames	getID3FramesHeader ()
ID3Frames	getID3FramesHeader (CupertinoStreamingRendition rendition)
ID3Frames	getID3FramesHeaderAudio ()
ID3Frames	getID3FramesHeaderVideo ()
int	getLastChunkId ()
int	getLastChunkId (int rendition)
Object	getLock ()
int	getMaxChunkDuration ()
int	getMinChunkDuration ()

String	<u>getPlaylistAudioStr()</u>
int	<u>getPlaylistChunkCount()</u>
Object	<u>getPlaylistLock()</u>
String	<u>getPlaylistStr()</u>
String	<u>getPlaylistVideoStr()</u>
String	<u>getPlayReadySampleEncHeaderFromEarliestChunk()</u>
String	<u>getRandomSessionStr()</u>
void	<u>getRepeaterItems()</u> (java.util.List items, long seq)
long	<u>getRepeaterLastSequence()</u>
String	<u>getResolutionStr()</u>
int	<u>getSegmentDurationTarget()</u>
String	<u>getSubtitleChunk()</u> (String filename, String languageID, boolean isByteRangeRequest)
String	<u>getSubtitleListStr()</u> (HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo, String languageID)
String	<u>getTitleStr()</u>
CupertinoUserManifest Headers	<u>getUserManifestHeaders()</u>
CupertinoUserManifest Headers	<u>getUserManifestHeaders()</u> (CupertinoStreamingRendition rendition)
CupertinoUserManifest Headers	<u>getUserManifestHeadersAudio()</u>
CupertinoUserManifest Headers	<u>getUserManifestHeadersVideo()</u>
boolean	<u>hasCaptionChunks()</u>
void	<u>init()</u> (String streamName, String packetizerName, <u>IApplicationInstance</u> appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	<u>internalHandlePacket()</u> (<u>IMediaStream</u> stream, <u>AMFPacket</u> packet)
void	<u>internalResetStream()</u> (<u>IMediaStream</u> stream)
void	<u>internalStartStream()</u> (<u>IMediaStream</u> stream)

boolean	<u>isAudioOnlyRendition()</u>
boolean	<u>isAudioVideoRendition()</u>
boolean	<u>isAutoAdjustDurationIfOutOfBounds()</u>
boolean	<u>isCaptionTargetCEA608()</u>
boolean	<u>isCaptionTargetWebVTT()</u>
boolean	<u>isChunkIdFromRepeater()</u>
boolean	<u>isCustomChunkId()</u>
boolean	<u>isEmptyAllPlaylist()</u>
boolean	<u>isEmptyAudioPlaylist()</u>
boolean	<u>isEmptyPlaylist()</u>
boolean	<u>isEmptyVideoPlaylist()</u>
boolean	<u>isEnabledDataEvents()</u>
boolean	<u>isOnChunkStartResetCounter()</u>
boolean	<u>isPacketizeAllStreamsAsTS()</u>
boolean	<u>isVideoOnlyRendition()</u>
void	<u>mergeUserManifestHeaders(LiveStreamPacketizerCupertinoChunk chunk, java.util.Map userManifestHeaders)</u>
void	<u>resetStream()</u>
void	<u>sendECMBytesAudioTS(java.util.List ecmHolders)</u>
void	<u>sendECMBytesTS(java.util.List ecmHolders)</u>
void	<u>sendECMBytesVideoTS(java.util.List ecmHolders)</u>
void	<u>setAutoAdjustDurationIfOutOfBounds(boolean autoAdjustDurationIfOutOfBounds)</u>
void	<u>setChunkIdFromRepeater(boolean chunkIdFromRepeater)</u>
void	<u>setChunkIdHandler(IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler chunkIdHandler)</u>

void	<u>setChunkWriter</u> (<u>ICupertinoChunkWriter</u> chunkWriter)
void	<u>setCodecInfoAudio</u> (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	<u>setCodecInfoVideo</u> (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	<u>setDataHandler</u> (<u>IHTTPStreamerCupertinoLivePacketizerDataHandler</u> dataHandler)
void	<u>setDataHandler</u> (<u>IHTTPStreamerCupertinoLivePacketizerDataHandler2</u> dataHandler)
void	<u>setEnableDataEvents</u> (boolean enableDataEvents)
void	<u>setMaxChunkDuration</u> (int maxChunkDuration)
void	<u>setMinChunkDuration</u> (int minChunkDuration)
void	<u>setOnChunkStartResetCounter</u> (boolean onChunkStartResetCounter)
void	<u>setPacketizeAllStreamsAsTS</u> (boolean packetizeAllStreamsAsTS)
void	<u>setTitleStr</u> (String titleStr)
void	<u>sortAudioTS</u> (CupertinoTSHolder tsHolder, boolean doFlush)
void	<u>sortTS</u> (CupertinoTSHolder tsHolder, boolean doFlush)
void	<u>sortVideoTS</u> (CupertinoTSHolder tsHolder, boolean doFlush)
void	<u>startChunk</u> (int streamMode, int videoCodecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int audioCodecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, long timecode, long timecode90)
void	<u>startChunkAudioTS</u> (long chunkId, long chunkIdForPlaylist, long discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId, int audioCodecId, long timecode, int encMethod, String encUrl, byte[] encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist, String encKeyFormat, String encKeyFormatVersion, String encPlayReadyHeader, String originRepeaterContext, java.util.Map userManifestHeaders)
void	<u>startChunkTS</u> (long chunkId, long chunkIdForPlaylist, long discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId, int audioCodecId, long timecode, int encMethod, String encUrl, byte[] encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist, String encKeyFormat, String encKeyFormatVersion, String encPlayReadyHeader, String originRepeaterContext, java.util.Map userManifestHeaders)

void

```
startChunkVideoTS(long chunkId, long chunkIdForPlaylist, long
discontinuitySeq, boolean isRepeater, int streamMode, int videoCodecId,
int audioCodecId, long timecode, int encMethod, String encUrl, byte[]
encRepeaterBytes, byte[] encIVBytes, boolean encIVBytesInChunklist,
String encKeyFormat, String encKeyFormatVersion, String
encPlayReadyHeader, String originRepeaterContext, java.util.Map
userManifestHeaders)
```

Methods inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

```
addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance,
getCaptionProvider, getChunkDurationTarget, getContextStr, getLiveStreamPacketizerId,
getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose,
getRepeaterLastSequence, getSegmentDurationTarget, getStreamStartupTimeout,
getStreamTimeout, handlePacket, init, initLiveCaptionIngestor, internalHandlePacket,
internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled,
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle,
resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio,
setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout,
setStreamTimeout, shutdown, startStream, touch
```

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer

```
getAndSetStartStream, getApplicationInstance, getChunkDurationTarget,
getLiveStreamPacketizerId, getProperties, getRepeaterLastSequence,
getSegmentDurationTarget, getSessionFormat, handlePacket, init, isActive,
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, resetStream,
setLiveStreamPacketizerId, setPacketizeAudio, setPacketizeData, setPacketizeVideo,
setRepeaterEdge, shutdown, startStream, touch
```

Methods inherited from interface com.wowza.wms.util.IIdleNotify

```
onIdle
```

Methods inherited from interface java.lang.Runnable

```
run
```

Methods inherited from interface

```
com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.ICupertinoChunkWrite
r
```

```
addToChunk, endChunk, isPacketizeAudio, isPacketizeData, isPacketizeVideo,
resetStream, setCodecInfoAudio, setCodecInfoVideo, startChunk
```

Fields

PACKETIZER_NAME

```
public static final java.lang.String PACKETIZER_NAME
```

(continued from last page)

Constant value: **cupertinostreamingpacketizer**

DEFAULT_ENABLEWEBVTTCAPTIONS

```
public static final boolean DEFAULT_ENABLEWEBVTTCAPTIONS
```

Constant value: **false**

DEFAULT_CREATEAUDIOONLYRENDITION

```
public static final boolean DEFAULT_CREATEAUDIOONLYRENDITION
```

Constant value: **false**

DEFAULT_ALWAYSSENDZEROPACKETLEN

```
public static final boolean DEFAULT_ALWAYSSENDZEROPACKETLEN
```

Constant value: **false**

STREAMMODE_TS

```
public static final int STREAMMODE_TS
```

Constant value: **1**

STREAMMODE_MP3

```
public static final int STREAMMODE_MP3
```

Constant value: **2**

STREAMMODE_AAC

```
public static final int STREAMMODE_AAC
```

Constant value: **3**

STREAMMODE_AC3

```
public static final int STREAMMODE_AC3
```

Constant value: **4**

STREAMMODE_EC3

```
public static final int STREAMMODE_EC3
```

Constant value: **5**

(continued from last page)

STREAMMODE_TS_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_TS_FILEEXTENSION
```

Constant value: **.ts**

STREAMMODE_MP3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_MP3_FILEEXTENSION
```

Constant value: **.mp3**

STREAMMODE_AAC_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_AAC_FILEEXTENSION
```

Constant value: **.aac**

STREAMMODE_AC3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_AC3_FILEEXTENSION
```

Constant value: **.ac3**

STREAMMODE_EC3_FILEEXTENSION

```
public static final java.lang.String STREAMMODE_EC3_FILEEXTENSION
```

Constant value: **.ec3**

MAXCHUNKCOUNT

```
public static final int MAXCHUNKCOUNT
```

Constant value: **10**

MAXCHUNKLOGCOUNT

```
public static final int MAXCHUNKLOGCOUNT
```

Constant value: **10**

PLAYLISTCHUNKCOUNT

```
public static final int PLAYLISTCHUNKCOUNT
```

Constant value: **3**

REPEATERCHUNKCOUNT

```
public static final int REPEATERCHUNKCOUNT
```

(continued from last page)

Constant value: **-1**

CHUNKDURATIONTARGET

```
public static final int CHUNKDURATIONTARGET
```

Constant value: **10000**

KEYFRAMEONLYDURATIONTARGET

```
public static final int KEYFRAMEONLYDURATIONTARGET
```

Constant value: **2000**

CHUNKDURATIONTOLERANCE

```
public static final int CHUNKDURATIONTOLERANCE
```

Constant value: **500**

PLAYSTARTTOLERANCE

```
public static final int PLAYSTARTTOLERANCE
```

Constant value: **500**

AUDIOGROUPCOUNT

```
public static final int AUDIOGROUPCOUNT
```

Constant value: **3**

WAITFORCODECTIME

```
public static final int WAITFORCODECTIME
```

Constant value: **8000**

DEFAULT_CHUNKDURATION_MAX

```
public static final int DEFAULT_CHUNKDURATION_MAX
```

Constant value: **-1**

DEFAULT_CHUNKDURATION_MIN

```
public static final int DEFAULT_CHUNKDURATION_MIN
```

Constant value: **0**

DEFAULT_CUPERTINO_FORCE_END_CHUNK_WHEN_NO_KEYFRAMES

```
public static final boolean DEFAULT_CUPERTINO_FORCE_END_CHUNK_WHEN_NO_KEYFRAMES
```

Constant value: **false**

DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD

```
public static final int DEFAULT_CHUNKDURATION_OVERFLOW_THRESHOLD
```

Constant value: **-1**

DEFAULT_RELATIVE_PLAYLIST_ITEMS

```
public static final boolean DEFAULT_RELATIVE_PLAYLIST_ITEMS
```

Constant value: **true**

DEFAULT_RESET_TARGET_DURATION_ON_NEW_CHUNK

```
public static final boolean DEFAULT_RESET_TARGET_DURATION_ON_NEW_CHUNK
```

Constant value: **true**

DEFAULT_ALLOW_CACHING

```
public static final boolean DEFAULT_ALLOW_CACHING
```

Constant value: **false**

randomSessionStr

```
protected java.lang.String randomSessionStr
```

originRepeaterContext

```
protected java.lang.String originRepeaterContext
```

Constructors

LiveStreamPacketizerCupertino

```
public LiveStreamPacketizerCupertino()
```

Methods

(continued from last page)

getChunkDurationTarget

```
public static int getChunkDurationTarget(IApplicationInstance appInstance,  
    String packetizer)
```

init

```
public void init(String streamName,  
    String packetizerName,  
    IApplicationInstance appInstance,  
    LiveStreamPacketizerItem liveStreamPacketizerItem)
```

getEncryptionInfo

```
public CupertinoEncInfo getEncryptionInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

resetStream

```
public void resetStream()
```

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

isCustomChunkId

```
public boolean isCustomChunkId()
```

calculateChunkIndexForPlaylist

```
public long calculateChunkIndexForPlaylist(long chunkIndex,  
    long timecode)
```

(continued from last page)

startChunk

```
public void startChunk(int streamMode,
    int videoCodecId,
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo,
    int audioCodecId,
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio,
    long timecode,
    long timecode90)
```

sendECMBytesTS

```
public void sendECMBytesTS(java.util.List ecmHolders)
```

sendECMBytesAudioTS

```
public void sendECMBytesAudioTS(java.util.List ecmHolders)
```

sendECMBytesVideoTS

```
public void sendECMBytesVideoTS(java.util.List ecmHolders)
```

endChunk

```
public void endChunk(long timecode)
```

sortAudioTS

```
public void sortAudioTS(CupertinoTSHolder tsHolder,
    boolean doFlush)
```

sortVideoTS

```
public void sortVideoTS(CupertinoTSHolder tsHolder,
    boolean doFlush)
```

sortTS

```
public void sortTS(CupertinoTSHolder tsHolder,
    boolean doFlush)
```

(continued from last page)

encryptTS

```
public void encryptTS(CupertinoTSHolder tsHolder)
```

encryptAudioTS

```
public void encryptAudioTS(CupertinoTSHolder tsHolder)
```

encryptVideoTS

```
public void encryptVideoTS(CupertinoTSHolder tsHolder)
```

addToChunk

```
public void addToChunk(CupertinoPacketHolder holder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

startChunkAudioTS

```
public void startChunkAudioTS(long chunkId,  
    long chunkIdForPlaylist,  
    long discontinuitySeq,  
    boolean isRepeater,  
    int streamMode,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    int encMethod,  
    String encUrl,  
    byte[] encRepeaterBytes,  
    byte[] encIVBytes,  
    boolean encIVBytesInChunklist,  
    String encKeyFormat,  
    String encKeyFormatVersion,  
    String encPlayReadyHeader,  
    String originRepeaterContext,  
    java.util.Map userManifestHeaders)
```

startChunkVideoTS

```
public void startChunkVideoTS(long chunkId,
    long chunkIdForPlaylist,
    long discontinuitySeq,
    boolean isRepeater,
    int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    int encMethod,
    String encUrl,
    byte[] encRepeaterBytes,
    byte[] encIVBytes,
    boolean encIVBytesInChunklist,
    String encKeyFormat,
    String encKeyFormatVersion,
    String encPlayReadyHeader,
    String originRepeaterContext,
    java.util.Map userManifestHeaders)
```

startChunkTS

```
public void startChunkTS(long chunkId,
    long chunkIdForPlaylist,
    long discontinuitySeq,
    boolean isRepeater,
    int streamMode,
    int videoCodecId,
    int audioCodecId,
    long timecode,
    int encMethod,
    String encUrl,
    byte[] encRepeaterBytes,
    byte[] encIVBytes,
    boolean encIVBytesInChunklist,
    String encKeyFormat,
    String encKeyFormatVersion,
    String encPlayReadyHeader,
    String originRepeaterContext,
    java.util.Map userManifestHeaders)
```

mergeUserManifestHeaders

```
public void mergeUserManifestHeaders(LiveStreamPacketizerCupertinoChunk chunk,
    java.util.Map userManifestHeaders)
```

endChunkAudioTS

```
public void endChunkAudioTS(long timecode,
    java.util.Map userManifestHeaders,
    String programDateTime)
```

(continued from last page)

endChunkVideoTS

```
public void endChunkVideoTS(long timecode,  
    java.util.Map userManifestHeaders,  
    String programDateTime)
```

endChunkTS

```
public void endChunkTS(long timecode,  
    java.util.Map userManifestHeaders,  
    String programDateTime)
```

endChunkSubtitles

```
public void endChunkSubtitles(long timecode)
```

endChunkSubtitlesRepeater

```
public void endChunkSubtitlesRepeater(LiveStreamPacketizerWebVTTChunk captions)
```

addToChunkAudioTS

```
public void addToChunkAudioTS(CupertinoTSHolder tsHolder)
```

addToChunkVideoTS

```
public void addToChunkVideoTS(CupertinoTSHolder tsHolder)
```

addToChunkTS

```
public void addToChunkTS(CupertinoTSHolder tsHolder)
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterItems

```
public void getRepeaterItems(java.util.List items,  
    long seq)
```

getChunkByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkByFilename(String filename)
```

getChunkAudioByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkAudioByFilename(String filename)
```

getChunkVideoByFilename

```
public LiveStreamPacketizerCupertinoChunk getChunkVideoByFilename(String filename)
```

getLock

```
public Object getLock()
```

getPlaylistLock

```
public Object getPlaylistLock()
```

getPlaylistStr

```
public String getPlaylistStr()
```

getCodecsStr

```
public String getCodecsStr(int codecStrFormatId)
```

getResolutionStr

```
public String getResolutionStr()
```

getPlaylistAudioStr

```
public String getPlaylistAudioStr()
```

getCodecsAudioStr

```
public String getCodecsAudioStr(int codecStrFormatId)
```

(continued from last page)

getPlaylistVideoStr

```
public String getPlaylistVideoStr()
```

getCodecsVideoStr

```
public String getCodecsVideoStr(int codecStrFormatId)
```

isEmptyAllPlaylist

```
public boolean isEmptyAllPlaylist()
```

getPlayReadySampleEncHeaderFromEarliestChunk

```
public String getPlayReadySampleEncHeaderFromEarliestChunk()
```

isEmptyPlaylist

```
public boolean isEmptyPlaylist()
```

isEmptyAudioPlaylist

```
public boolean isEmptyAudioPlaylist()
```

isEmptyVideoPlaylist

```
public boolean isEmptyVideoPlaylist()
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders(CupertinoStreamingRendition rendition)
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

(continued from last page)

getUserManifestHeadersAudio

```
public CupertinoUserManifestHeaders getUserManifestHeadersAudio()
```

getUserManifestHeadersVideo

```
public CupertinoUserManifestHeaders getUserManifestHeadersVideo()
```

addAdditionalManifestHeaders

```
public String addAdditionalManifestHeaders(java.util.Map userHeaders)
```

getTitleStr

```
public String getTitleStr()
```

setTitleStr

```
public void setTitleStr(String titleStr)
```

isCaptionTargetCEA608

```
public boolean isCaptionTargetCEA608()
```

isCaptionTargetWebVTT

```
public boolean isCaptionTargetWebVTT()
```

isAudioOnlyRendition

```
public boolean isAudioOnlyRendition()
```

isVideoOnlyRendition

```
public boolean isVideoOnlyRendition()
```

isAudioVideoRendition

```
public boolean isAudioVideoRendition()
```

(continued from last page)

getCalculatedBitrateAverage

```
public long getCalculatedBitrateAverage()
```

getCalculatedAudioBitrateAverage

```
public long getCalculatedAudioBitrateAverage()
```

getCalculatedVideoBitrateAverage

```
public long getCalculatedVideoBitrateAverage()
```

getCalculatedBitratePeak

```
public long getCalculatedBitratePeak()
```

getCalculatedAudioBitratePeak

```
public long getCalculatedAudioBitratePeak()
```

getCalculatedVideoBitratePeak

```
public long getCalculatedVideoBitratePeak()
```

getID3FramesHeader

```
public ID3Frames getID3FramesHeader(CupertinoStreamingRendition rendition)
```

getID3FramesFooter

```
public ID3Frames getID3FramesFooter(CupertinoStreamingRendition rendition)
```

getID3FramesHeader

```
public ID3Frames getID3FramesHeader()
```

(continued from last page)

getID3FramesFooter

```
public ID3Frames getID3FramesFooter()
```

getID3FramesHeaderAudio

```
public ID3Frames getID3FramesHeaderAudio()
```

getID3FramesFooterAudio

```
public ID3Frames getID3FramesFooterAudio()
```

getID3FramesHeaderVideo

```
public ID3Frames getID3FramesHeaderVideo()
```

getID3FramesFooterVideo

```
public ID3Frames getID3FramesFooterVideo()
```

getChunkWriter

```
public ICupertinoChunkWriter getChunkWriter()
```

setChunkWriter

```
public void setChunkWriter(ICupertinoChunkWriter chunkWriter)
```

getDataHandler

```
public IHTTPStreamerCupertinoLivePacketizerDataHandler getDataHandler()
```

getDataHandler2

```
public IHTTPStreamerCupertinoLivePacketizerDataHandler2 getDataHandler2()
```

setDataHandler

```
public void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler  
dataHandler)
```

(continued from last page)

setDataHandler

```
public void setDataHandler(IHTTPStreamerCupertinoLivePacketizerDataHandler2
dataHandler)
```

isEnabledDataEvents

```
public boolean isEnabledDataEvents()
```

setEnabledDataEvents

```
public void setEnabledDataEvents(boolean enableDataEvents)
```

isOnChunkStartResetCounter

```
public boolean isOnChunkStartResetCounter()
```

setOnChunkStartResetCounter

```
public void setOnChunkStartResetCounter(boolean onChunkStartResetCounter)
```

isPacketizeAllStreamsAsTS

```
public boolean isPacketizeAllStreamsAsTS()
```

setPacketizeAllStreamsAsTS

```
public void setPacketizeAllStreamsAsTS(boolean packetizeAllStreamsAsTS)
```

getSubtitleListStr

```
public String getSubtitleListStr(HTTPStreamerAdapterCupertinoStreamer.RequestInfo
requestInfo,
    String languageID)
```

getSubtitleChunk

```
public String getSubtitleChunk(String filename,
    String languageID,
    boolean isByteRangeRequest)
```

(continued from last page)

getLastChunkId

```
public int getLastChunkId()
```

getLastChunkId

```
public int getLastChunkId(int rendition)
```

getFirstChunkId

```
public int getFirstChunkId()
```

getFirstChunkId

```
public int getFirstChunkId(int rendition)
```

getChunkCount

```
public int getChunkCount()
```

getChunkCount

```
public int getChunkCount(int rendition)
```

getChunkById

```
public LiveStreamPacketizerCupertinoChunk getChunkById(int rendition,  
long index)
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

(continued from last page)

getPlaylistChunkCount

```
public int getPlaylistChunkCount()
```

getChunkIdHandler

```
public IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler getChunkIdHandler()
```

setChunkIdHandler

```
public void setChunkIdHandler(IHTTPStreamerCupertinoLiveStreamPacketizerChunkIdHandler  
chunkIdHandler)
```

hasCaptionChunks

```
public boolean hasCaptionChunks()
```

getMaxChunkDuration

```
public int getMaxChunkDuration()
```

setMaxChunkDuration

```
public void setMaxChunkDuration(int maxChunkDuration)
```

getMinChunkDuration

```
public int getMinChunkDuration()
```

setMinChunkDuration

```
public void setMinChunkDuration(int minChunkDuration)
```

isAutoAdjustDurationIfOutOfBounds

```
public boolean isAutoAdjustDurationIfOutOfBounds()
```

(continued from last page)

setAutoAdjustDurationIfOutOfBounds

```
public void setAutoAdjustDurationIfOutOfBounds(boolean  
autoAdjustDurationIfOutOfBounds)
```

isChunkIdFromRepeater

```
public boolean isChunkIdFromRepeater()
```

setChunkIdFromRepeater

```
public void setChunkIdFromRepeater(boolean chunkIdFromRepeater)
```

getSegmentDurationTarget

```
public int getSegmentDurationTarget()
```

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer Class LiveStreamPacketizerCupertinoChunk

java.lang.Object



com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.LiveStreamPacketizerCupertinoChunk

public class **LiveStreamPacketizerCupertinoChunk**
extends Object

Field Summary

public static final	AUDIO_PACKET_DEFAULT_DURATION Value: 21
public static final	AUDIO_PACKET_MAX_DURATION Value: 2000
public static final	AUDIO_PACKET_MIN_DURATION Value: -500
public static final	VIDEO_PACKET_DEFAULT_DURATION Value: 33
public static final	VIDEO_PACKET_MAX_DURATION Value: 2000
public static final	VIDEO_PACKET_MIN_DURATION Value: 0

Constructor Summary

public	LiveStreamPacketizerCupertinoChunk (long chunkIndex, int rendition)
--------	---

Method Summary

int	addBlock (byte[] buffer, int offset, int len)
int	addBlock (byte[] buffer, int offset, int len, CupertinoTSHolder tsHolder)
void	addDataPacket (AMFPacket packet)
void	forceDiscontinuity (boolean force)
int	getAudioCount ()

int	<u>getBlockCount()</u>
java.util.List	<u>getBlockList()</u>
long	<u>getCalcDuration()</u>
long	<u>getCalcDurationAudio()</u>
long	<u>getCalcDurationVideo()</u>
long	<u>getChunkIndex()</u>
long	<u>getChunkIndexByTime()</u>
long	<u>getChunkIndexForPlaylist()</u>
CupertinoChunkMap	<u>getChunkMap()</u>
com.wowza.wms.media.m odel.MediaCodecInfoAu dio	<u>getCodecInfoAudio()</u>
com.wowza.wms.media.m odel.MediaCodecInfoVi deo	<u>getCodecInfoVideo()</u>
java.util.List	<u>getDataPackets()</u>
int	<u>getDataSize()</u>
long	<u>getDiscontinuitySequence()</u>
long	<u>getDuration()</u>
byte[]	<u>getEncIVBytes()</u>
String	<u>getEncKeyFormat()</u>
String	<u>getEncKeyFormatVersion()</u>
int	<u>getEncMethod()</u>
String	<u>getEncPlayReadyHeader()</u>
byte[]	<u>getEncRepeaterBytes()</u>
String	<u>getEncUrl()</u>
long	<u>getFirstAudioTimecode()</u>

long	getFirstVideoTimecode()
long	getLastAudioTimecode()
long	getLastVideoTimecode()
String	getProgramDateTime()
WMSProperties	getProperties()
CupertinoStreamingRendition	getRendition()
int	getSize()
long	getStartTimecode()
int	getStreamMode()
CupertinoUserManifestHeaders	getUserManifestHeaders()
int	getVideoCount()
int	getVideoKeyCount()
void	incAudioCount()
void	incDataSize(int incSize)
void	incVideoCount()
void	incVideoKeyCount()
int	insertBlock(int index, byte[] buffer, int offset, int len)
int	insertBlock(int index, byte[] buffer, int offset, int len, CupertinoTSHolder tsHolder)
boolean	isCacheable()
boolean	isDiscontinuity()
boolean	isDurationDiscontinuity()
boolean	isEncIVBytesInChunklist()
boolean	isFillSuccessful()
boolean	isNewCodecInfo()

boolean	<u>isStreamModeDiscontinuity()</u>
boolean	<u>isWritePAT()</u>
void	<u>newAudioTimecode</u> (long timecode)
void	<u>newVideoTimecode</u> (long timecode)
void	<u>setAudioCount</u> (int audioCount)
void	<u>setBlockList</u> (java.util.List blocks)
void	<u>setCacheable</u> (boolean cacheable)
void	<u>setChunkIndex</u> (int chunkIndex)
void	<u>setChunkIndexByTime</u> (long chunkIndexByTime)
void	<u>setCodecInfoAudio</u> (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	<u>setCodecInfoVideo</u> (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	<u>setDataSize</u> (int dataSize)
void	<u>setDiscontinuitySequence</u> (long discontinuitySequence)
void	<u>setDuration</u> (long duration)
void	<u>setDurationDiscontinuity</u> (boolean isDurationDiscontinuity)
void	<u>setEncIVBytes</u> (byte[] encIVBytes)
void	<u>setEncIVBytesInChunklist</u> (boolean encIVBytesInChunklist)
void	<u>setEncKeyFormat</u> (String encKeyFormat)
void	<u>setEncKeyFormatVersion</u> (String encKeyFormatVersion)
void	<u>setEncMethod</u> (int encMethod)
void	<u>setEncPlayReadyHeader</u> (String encPlayReadyHeader)
void	<u>setEncRepeaterBytes</u> (byte[] encRepeaterBytes)
void	<u>setEncUrl</u> (String encUrl)

void	<code>setFillSuccessful</code> (boolean fillSuccessful)
void	<code>setFirstAudioTimecode</code> (long firstAudioTimecode)
void	<code>setFirstVideoTimecode</code> (long firstVideoTimecode)
void	<code>setLastAudioTimecode</code> (long lastAudioTimecode)
void	<code>setLastVideoTimecode</code> (long lastVideoTimecode)
void	<code>setNewCodecInfo</code> (boolean isNewCodecInfo)
void	<code>setProgramDateTime</code> (String programDateTime)
void	<code>setStartTimecode</code> (long startTimecode)
void	<code>setStreamMode</code> (int streamMode)
void	<code>setStreamModeDiscontinuity</code> (boolean isStreamModeDiscontinuity)
void	<code>setVideoCount</code> (int videoCount)
void	<code>setVideoKeyCount</code> (int videoKeyCount)
void	<code>setWritePAT</code> (boolean writePAT)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

AUDIO_PACKET_MIN_DURATION

```
public static final int AUDIO_PACKET_MIN_DURATION
```

Constant value: **-500**

AUDIO_PACKET_MAX_DURATION

```
public static final int AUDIO_PACKET_MAX_DURATION
```

Constant value: **2000**

AUDIO_PACKET_DEFAULT_DURATION

```
public static final int AUDIO_PACKET_DEFAULT_DURATION
```

(continued from last page)

Constant value: **21**

VIDEO_PACKET_MIN_DURATION

```
public static final int VIDEO_PACKET_MIN_DURATION
```

Constant value: **0**

VIDEO_PACKET_MAX_DURATION

```
public static final int VIDEO_PACKET_MAX_DURATION
```

Constant value: **2000**

VIDEO_PACKET_DEFAULT_DURATION

```
public static final int VIDEO_PACKET_DEFAULT_DURATION
```

Constant value: **33**

Constructors

LiveStreamPacketizerCupertinoChunk

```
public LiveStreamPacketizerCupertinoChunk(long chunkIndex,  
                                           int rendition)
```

Methods

getChunkIndex

```
public long getChunkIndex()
```

addBlock

```
public int addBlock(byte[] buffer,  
                   int offset,  
                   int len,  
                   CupertinoTSHolder tsHolder)
```

addBlock

```
public int addBlock(byte[] buffer,  
                   int offset,  
                   int len)
```

(continued from last page)

insertBlock

```
public int insertBlock(int index,
    byte[] buffer,
    int offset,
    int len,
    CupertinoTSHolder tsHolder)
```

insertBlock

```
public int insertBlock(int index,
    byte[] buffer,
    int offset,
    int len)
```

getSize

```
public int getSize()
```

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

getBlockList

```
public java.util.List getBlockList()
```

setBlockList

```
public void setBlockList(java.util.List blocks)
```

(continued from last page)

isCacheable

```
public boolean isCacheable()
```

setCacheable

```
public void setCacheable(boolean cacheable)
```

getBlockCount

```
public int getBlockCount()
```

getEncUrl

```
public String getEncUrl()
```

setEncUrl

```
public void setEncUrl(String encUrl)
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

getDataSize

```
public int getDataSize()
```

setDataSize

```
public void setDataSize(int dataSize)
```

(continued from last page)

incDataSize

```
public void incDataSize(int incSize)
```

isWritePAT

```
public boolean isWritePAT()
```

setWritePAT

```
public void setWritePAT(boolean writePAT)
```

incAudioCount

```
public void incAudioCount()
```

incVideoCount

```
public void incVideoCount()
```

incVideoKeyCount

```
public void incVideoKeyCount()
```

getAudioCount

```
public int getAudioCount()
```

setAudioCount

```
public void setAudioCount(int audioCount)
```

getVideoCount

```
public int getVideoCount()
```

setVideoCount

```
public void setVideoCount(int videoCount)
```

(continued from last page)

getVideoKeyCount

```
public int getVideoKeyCount()
```

setVideoKeyCount

```
public void setVideoKeyCount(int videoKeyCount)
```

getStreamMode

```
public int getStreamMode()
```

setStreamMode

```
public void setStreamMode(int streamMode)
```

getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

isNewCodecInfo

```
public boolean isNewCodecInfo()
```

setNewCodecInfo

```
public void setNewCodecInfo(boolean isNewCodecInfo)
```

getEncMethod

```
public int getEncMethod()
```

setEncMethod

```
public void setEncMethod(int encMethod)
```

getEncIVBytes

```
public byte[] getEncIVBytes()
```

setEncIVBytes

```
public void setEncIVBytes(byte[] encIVBytes)
```

getEncKeyFormat

```
public String getEncKeyFormat()
```

setEncKeyFormat

```
public void setEncKeyFormat(String encKeyFormat)
```

getEncKeyFormatVersion

```
public String getEncKeyFormatVersion()
```

setEncKeyFormatVersion

```
public void setEncKeyFormatVersion(String encKeyFormatVersion)
```

getEncPlayReadyHeader

```
public String getEncPlayReadyHeader()
```

(continued from last page)

setEncPlayReadyHeader

```
public void setEncPlayReadyHeader(String encPlayReadyHeader)
```

getFirstAudioTimecode

```
public long getFirstAudioTimecode()
```

setFirstAudioTimecode

```
public void setFirstAudioTimecode(long firstAudioTimecode)
```

getFirstVideoTimecode

```
public long getFirstVideoTimecode()
```

setFirstVideoTimecode

```
public void setFirstVideoTimecode(long firstVideoTimecode)
```

newAudioTimecode

```
public void newAudioTimecode(long timecode)
```

newVideoTimecode

```
public void newVideoTimecode(long timecode)
```

setChunkIndex

```
public void setChunkIndex(int chunkIndex)
```

getChunkIndexByTime

```
public long getChunkIndexByTime()
```

(continued from last page)

setChunkIndexByTime

```
public void setChunkIndexByTime(long chunkIndexByTime)
```

getChunkIndexForPlaylist

```
public long getChunkIndexForPlaylist()
```

isFillSuccessful

```
public boolean isFillSuccessful()
```

setFillSuccessful

```
public void setFillSuccessful(boolean fillSuccessful)
```

getRendition

```
public CupertinoStreamingRendition getRendition()
```

getUserManifestHeaders

```
public CupertinoUserManifestHeaders getUserManifestHeaders()
```

isDurationDiscontinuity

```
public boolean isDurationDiscontinuity()
```

setDurationDiscontinuity

```
public void setDurationDiscontinuity(boolean isDurationDiscontinuity)
```

isStreamModeDiscontinuity

```
public boolean isStreamModeDiscontinuity()
```

setStreamModeDiscontinuity

```
public void setStreamModeDiscontinuity(boolean isStreamModeDiscontinuity)
```

(continued from last page)

getDiscontinuitySequence

```
public long getDiscontinuitySequence()
```

setDiscontinuitySequence

```
public void setDiscontinuitySequence(long discontinuitySequence)
```

forceDiscontinuity

```
public void forceDiscontinuity(boolean force)
```

isDiscontinuity

```
public boolean isDiscontinuity()
```

getCalcDurationAudio

```
public long getCalcDurationAudio()
```

getCalcDurationVideo

```
public long getCalcDurationVideo()
```

getCalcDuration

```
public long getCalcDuration()
```

getProgramDateTime

```
public String getProgramDateTime()
```

setProgramDateTime

```
public void setProgramDateTime(String programDateTime)
```

(continued from last page)

getChunkMap

```
public CupertinoChunkMap getChunkMap()
```

getLastAudioTimecode

```
public long getLastAudioTimecode()
```

setLastAudioTimecode

```
public void setLastAudioTimecode(long lastAudioTimecode)
```

getLastVideoTimecode

```
public long getLastVideoTimecode()
```

setLastVideoTimecode

```
public void setLastVideoTimecode(long lastVideoTimecode)
```

getProperties

```
public WMSProperties getProperties()
```

addDataPacket

```
public void addDataPacket(AMFPacket packet)
```

getDataPackets

```
public java.util.List getDataPackets()
```

isEncIVBytesInChunklist

```
public boolean isEncIVBytesInChunklist()
```

setEncIVBytesInChunklist

```
public void setEncIVBytesInChunklist(boolean encIVBytesInChunklist)
```

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Package

**com.wowza.wms.httpstreamer.cupertinostrea
ming.util**

com.wowza.wms.httpstreamer.cupertinostreaming.util Interface ICupertinoEncInfoFrame

public interface **ICupertinoEncInfoFrame**
extends

Method Summary

abstract int	getFrameType()
abstract long	getPTS()
abstract void	setFrameType(int frameType)
abstract void	setPTS(long pts)

Methods

getFrameType

public abstract int **getFrameType()**

setFrameType

public abstract void **setFrameType(int frameType)**

getPTS

public abstract long **getPTS()**

setPTS

public abstract void **setPTS(long pts)**

com.wowza.wms.httpstreamer.cupertinostreaming.util Interface ICupertinoEncryptor

public interface **ICupertinoEncryptor**
extends

Method Summary

abstract void	<u>close()</u>
abstract byte[]	<u>encryptAudioFrame</u> (int codec, byte[] data, int offset, int len, int frameOffset)
abstract void	<u>encryptAudioFrames</u> (int codec, long pts, java.util.List fragments)
abstract byte[]	<u>encryptChunk</u> (byte[] data, int offset, int len, boolean isLast)
abstract void	<u>encryptVideoFrame</u> (int codec, long pts, long dts, java.util.List fragments)
abstract java.util.List	<u>getECMPESBytes</u> (CupertinoTransportStreamPIDContext pidContextECM, int videoPID, int audioPID, int dataPID, int ecmPID)
abstract IEncryptionInfoPlayReady	<u>getEncInfo()</u>
abstract byte[]	<u>getPMTDescriptorForEncryption</u> (int mediaPID, int ecmPID, int contentType)
abstract void	<u>init</u> (IEncryptionInfoPlayReady encInfo, long chunkIndex)
abstract boolean	<u>isAES128SampleEncryptor</u> ()
abstract boolean	<u>isChunkEncryptor</u> ()
abstract boolean	<u>isPlayReadySampleEncryptor</u> ()
abstract boolean	<u>isSampleEncryptor</u> ()
abstract void	<u>setEncryptorContextStr</u> (String encryptorContextStr)
abstract void	<u>setupPIDContextForEncryption</u> (CupertinoTransportStreamPIDContext pidContext, int contentType)

Methods

(continued from last page)

init

```
public abstract void init(IEncryptionInfoPlayReady encInfo,  
    long chunkIndex)
```

close

```
public abstract void close()
```

encryptChunk

```
public abstract byte[] encryptChunk(byte[] data,  
    int offset,  
    int len,  
    boolean isLast)
```

encryptVideoFrame

```
public abstract void encryptVideoFrame(int codec,  
    long pts,  
    long dts,  
    java.util.List fragments)
```

encryptAudioFrames

```
public abstract void encryptAudioFrames(int codec,  
    long pts,  
    java.util.List fragments)
```

encryptAudioFrame

```
public abstract byte[] encryptAudioFrame(int codec,  
    byte[] data,  
    int offset,  
    int len,  
    int frameOffset)
```

isChunkEncryptor

```
public abstract boolean isChunkEncryptor()
```

isSampleEncryptor

```
public abstract boolean isSampleEncryptor()
```

isAES128SampleEncryptor

```
public abstract boolean isAES128SampleEncryptor()
```

isPlayReadySampleEncryptor

```
public abstract boolean isPlayReadySampleEncryptor()
```

setEncryptorContextStr

```
public abstract void setEncryptorContextStr(String encryptorContextStr)
```

getEncInfo

```
public abstract IEncryptionInfoPlayReady getEncInfo()
```

setupPIDContextForEncryption

```
public abstract void setupPIDContextForEncryption(CupertinoTransportStreamPIDContext  
pidContext,  
int contentType)
```

getPMTDescriptorForEncryption

```
public abstract byte[] getPMTDescriptorForEncryption(int mediaPID,  
int ecmPID,  
int contentType)
```

getECMPESBytes

```
public abstract java.util.List getECMPESBytes(CupertinoTransportStreamPIDContext  
pidContextECM,  
int videoPID,  
int audioPID,  
int dataPID,  
int ecmPID)
```

com.wowza.wms.httpstreamer.cupertinostreaming.util Class LiveStreamPacketizerCupertinoUtils

java.lang.Object



com.wowza.wms.httpstreamer.cupertinostreaming.util.LiveStreamPacketizerCupertinoUtils

public class **LiveStreamPacketizerCupertinoUtils**
extends Object

Field Summary

public static final	<u>APPINSTANCEPLACHOLDER</u> Value: {appInstance}
public static final	<u>APPLICATIONPLACHOLDER</u> Value: {application}
public static final	<u>AUDIOONLYKEY</u> Value: ao
public static final	<u>BITRATEKEY</u> Value: b
public static final	<u>BITRATEPLACEHOLDER</u> Value: {bitrate}
public static final	<u>CACHECONTROLSTR</u> Value: #EXT-X-ALLOW-CACHE
public static final	<u>CAPTIONFILEKEY</u> Value: cf
public static final	<u>CAPTIONFILEPLACEHOLDER</u> Value: {captionFile}
public static final	<u>CHUNKLISTFILENAMEPATTERN</u> Value: {chunklistName}{sessionid}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngroup}{captionFile}{secureToken}
public static final	<u>CHUNKLISTNAMEPLACEHOLDER</u> Value: {chunklistName}
public static final	<u>CODEC_H264_ID</u> Value: avc1

public static final	CRLF_STR Value:
public static final	DEFAULT_CHUNKLISTNAME Value: chunklist
public static final	DEFAULT_CORS_ENABLED Value: true
public static final	DEFAULT_EXT Value: .m3u8
public static final	DEFAULT_MEDIANAME Value: media
public static final	DEFAULT_SUBTITLECHUNKLISTNAME Value: subtitlechunk
public static final	DEFAULT_SUBTITLEGROUPNAME Value: subs
public static final	DEFAULT_SUBTITLELISTNAME Value: subtitlelist
public static final	DISCONTINUITYSTR Value: #EXT-X-DISCONTINUITY
public static final	DOMAINPLACHOLDER Value: {domain}
public static final	DVRKEY Value: DVR
public static final	DVRPLACEHOLDER Value: {dvr}
public static final	EMPTYPLAYLISTSTR Value: #EXTM3U #EXT-X-ENDLIST
public static final	ENCIVPLACEHOLDER Value: {encIV}
public static final	ENCKEYONLYSTR Value: #EXT-X-KEY:
public static final	ENCKEYPLACEHOLDERPLACHOLDER Value: {enckeyurl}

public static final	ENCKEYSTR Value: #EXT-X-KEY:METHOD={encmethod},{enckeyurl}
public static final	ENCKEYSTRWITHIV Value: #EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}",IV="{encIV}"
public static final	ENCKEYSTRWITHURI Value: #EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}"
public static final	ENCKEYURLSESSIONIDPLACEHOLDER Value: {encKeySessionid}
public static final	ENCMETHOD_DEFAULT Value: AES-128
public static final	ENCMETHODPLACEHOLDERPLACHOLDER Value: {encmethod}
public static final	ENCPLAYREADYHEADER Value: #EXT-X-INIT-PRHDR:{playReadyHeader}
public static final	ENCPLAYREADYHEADERMSFT Value: #EXT-X-PLAYREADYHEADER:{playReadyHeader}
public static final	ENCPLAYREADYHEADERPLACEHOLDER Value: {playReadyHeader}
public static final	EXTPLACEHOLDER Value: {ext}
public static final	EXTXVERSIONPLACEHOLDER Value: {ext-x-version}
public static final	EXTXVERSIONSTR Value: #EXT-X-VERSION:{ext-x-version}
public static final	FILENAMEBASEPATTERN Value: {sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngrp}{captionFile}{secureToken}
public static final	FILENAMEPLACHOLDER Value: {filename}
public static final	HOSTPLACHOLDER Value: {host}

public static final	<u>INDEXPLACHOLDER</u> Value: {index}
public static final	<u>INITIALIZTIONSEGMENTPREFIX</u> Value: header
public static	<u>initProvider</u>
public static final	<u>KEYFRAMEONLYKEY</u> Value: ko
public static final	<u>LANGUAGEIDKEY</u> Value: 1
public static final	<u>LANGUAGEPLACHOLDER</u> Value: {language}
public static final	<u>MEDIAFILENAMEPATTERN</u> Value: {mediaName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngroup}{captionFile}{secureToken}_{index}{ext}
public static final	<u>MEDIANAMEPLACEHOLDER</u> Value: {mediaName}
public static final	<u>MEDIASEGMENTPREFIX</u> Value: media
public static final	<u>NGRPEPLACHOLDER</u> Value: {ngroup}
public static final	<u>NGRPKEY</u> Value: ngroup
public static final	<u>PARAMETERDELIMITERKEY</u> Value: _
public static final	<u>PLAYDURATIONKEY</u> Value: pd
public static final	<u>PLAYDURATIONPLACEHOLDER</u> Value: {playDuration}
public static final	<u>PLAYLIST_GROUPID_AUDIO</u> Value: audioGroup
public static final	<u>PLAYLIST_GROUPID_VIDEO</u> Value: videoGroup

public static final	<u>PLAYLISTBYTERANGE</u> Value: #EXT-X-BYTERANGE
public static final	<u>PLAYLISTDISCONTINUITYSEQSTR</u> Value: #EXT-X-DISCONTINUITY-SEQUENCE
public static final	<u>PLAYLISTIFRAMESONLY</u> Value: #EXT-X-I-FRAMES-ONLY
public static final	<u>PLAYLISTIFRAMESTREAMINF</u> Value: #EXT-X-I-FRAME-STREAM-INF
public static final	<u>PLAYLISTINDEPENDENTSEGMENTSSTR</u> Value: #EXT-X-INDEPENDENT-SEGMENTS
public static final	<u>PLAYLISTITEMSTR</u> Value: #EXTINF
public static final	<u>PLAYLISTMEDIA</u> Value: #EXT-X-MEDIA
public static final	<u>PLAYLISTMEDIASEQSTR</u> Value: #EXT-X-MEDIA-SEQUENCE
public static final	<u>PLAYLISTPLAYLISTTYPESTR</u> Value: #EXT-X-PLAYLIST-TYPE
public static final	<u>PLAYLISTSTART</u> Value: #EXT-X-START
public static final	<u>PLAYLISTSTARTSTR</u> Value: #EXTM3U
public static final	<u>PLAYLISTSTOPSTR</u> Value: #EXT-X-ENDLIST
public static final	<u>PLAYLISTSTREAMINF</u> Value: #EXT-X-STREAM-INF
public static final	<u>PLAYLISTTARGETDURATIONSTR</u> Value: #EXT-X-TARGETDURATION
public static final	<u>PLAYSEEKKEY</u> Value: pk
public static final	<u>PLAYSEEKPLACEHOLDER</u> Value: {playSeek}

public static final	<u>PLAYSTARTKEY</u> Value: ps
public static final	<u>PLAYSTARTPLACEHOLDER</u> Value: {playStart}
public static final	<u>PROGRAMDATETIME_DATEFORMAT</u> Value: yyyy-MM-dd'T'HH:mm:ss.SSSZ
public static final	<u>PROGRAMDATETIMESTR</u> Value: #EXT-X-PROGRAM-DATE-TIME
public static final	<u>QUERYSTRPLACHOLDER</u> Value: {query}
public static final	<u>RENDITIONPLACHOLDER</u> Value: {rendition}
public static final	<u>RESOLUTIONHEIGHTPLACEHOLDER</u> Value: {resolution-height}
public static final	<u>RESOLUTIONPLACEHOLDER</u> Value: {resolution}
public static final	<u>RESOLUTIONSTR</u> Value: ,RESOLUTION={resolution-width}x{resolution-height}
public static final	<u>RESOLUTIONWIDTHPLACEHOLDER</u> Value: {resolution-width}
public static final	<u>SECURETOKENKEY</u> Value: tk
public static final	<u>SECURETOKENPLACEHOLDER</u> Value: {secureToken}
public static final	<u>SEGMENTFORMATKEY</u> Value: sf
public static final	<u>SEGMENTFORMATPLACEHOLDER</u> Value: {segmentFormat}
public static final	<u>SESSIONIDKEY</u> Value: w
public static final	<u>SESSIONIDPLACEHOLDER</u> Value: {sessionId}

public static final	STREAMPLACHOLDER Value: {stream}
public static final	SUBTITLEBASEPATTERN Value: {sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}
public static final	SUBTITLELISTFILENAMEPATTERN Value: {subtitlelistName}{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}
public static final	SUBTITLELISTNAMEPLACEHOLDER Value: {subtitlelistName}
public static final	SYSTEMLANGUAGEIDKEY Value: s1
public static final	TITLEKEY Value: t64
public static final	TITLEPLACHOLDER Value: {title}
public static final	URLPATTERN Value: {domain}/{application}/{appInstance}/{stream}/{filename}?{query}
public static final	URLPATTERN_RELATIVE Value: {filename}?{query}
public static final	VIDEOONLYKEY Value: vo

Constructor Summary

public	LiveStreamPacketizerCupertinoUtils ()
--------	---

Method Summary

static void	appendUserManifestHeaders (StringBuffer strBuf, LiveStreamPacketizerCupertinoChunk chunk)
static long	chunkFilenameToIndex (String filename)
static int	chunkFilenameToStreamMode (String filename)

static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (int codec, int profile, int level, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (int codec, int profile, int level, int codecStrFormatId, boolean forceH264BaselineProfile)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId, boolean forceH264BaselineProfile)
static String	codecInfoVideoToCodecsStr (String codecStr, int codecStrFormatId)
static String	codecInfoVideoToResolutionStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
static java.util.Map	createUserManifestHeaderMapFromString (String userManifestHeaders)
static String	createUserManifestParameterString (java.util.Map encUserParams)
static java.util.Map	deepCopyUserManifestHeaders (java.util.Map userManifestHeaders)
static void	encryptChunk (LiveStreamPacketizerCupertinoChunk chunk, ICupertinoEncryptor encryptor)
static void	encryptChunk2 (LiveStreamPacketizerCupertinoChunk chunk, CupertinoEncInfo encInfo)
static long	floatingPointToWholeNumberDuration (double seconds)
static CupertinoEncInfo	getEncInfo (IApplicationInstance appInstance, String streamName)
static boolean	isValidAudioCodec (int codec)
static boolean	isValidVideoCodec (int codec)
static void	mergeUserManifestHeaders (java.util.Map dst, java.util.Map src)
static int	millisToSecondsCeilDuration (long millis)
static int	millisToSecondsDuration (long millis)
static long	segmentFilenameToIndex (String filename)

static String	segmentFilenameToIndexStr (String filename)
static String	streamModeToFileExtension (int streamMode)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

`initProvider`

```
public static boolean initProvider
```

`CODEC_H264_ID`

```
public static final java.lang.String CODEC_H264_ID
```

Constant value: **avc1**

`PROGRAMDATETIME_DATEFORMAT`

```
public static final java.lang.String PROGRAMDATETIME_DATEFORMAT
```

Constant value: **yyyy-MM-dd'T'HH:mm:ss.SSSZ**

`CRLF_STR`

```
public static final java.lang.String CRLF_STR
```

Constant value:

`EMPTYPLAYLISTSTR`

```
public static final java.lang.String EMPTYPLAYLISTSTR
```

Constant value: **#EXTM3U**
#EXT-X-ENDLIST

`PLAYLISTSTARTSTR`

```
public static final java.lang.String PLAYLISTSTARTSTR
```

Constant value: **#EXTM3U**

(continued from last page)

EXTXVERSIONPLACEHOLDER

```
public static final java.lang.String EXTXVERSIONPLACEHOLDER
```

Constant value: **{ext-x-version}**

EXTXVERSIONSTR

```
public static final java.lang.String EXTXVERSIONSTR
```

Constant value: **#EXT-X-VERSION:{ext-x-version}**

PLAYLISTSTOPSTR

```
public static final java.lang.String PLAYLISTSTOPSTR
```

Constant value: **#EXT-X-ENDLIST**

PLAYLISTTARGETDURATIONSTR

```
public static final java.lang.String PLAYLISTTARGETDURATIONSTR
```

Constant value: **#EXT-X-TARGETDURATION**

PLAYLISTINDEPENDENTSEGMENTSSTR

```
public static final java.lang.String PLAYLISTINDEPENDENTSEGMENTSSTR
```

Constant value: **#EXT-X-INDEPENDENT-SEGMENTS**

PLAYLISTIFRAMESONLY

```
public static final java.lang.String PLAYLISTIFRAMESONLY
```

Constant value: **#EXT-X-I-FRAMES-ONLY**

PLAYLISTMEDIASEQSTR

```
public static final java.lang.String PLAYLISTMEDIASEQSTR
```

Constant value: **#EXT-X-MEDIA-SEQUENCE**

PLAYLISTDISCONTINUITYSEQSTR

```
public static final java.lang.String PLAYLISTDISCONTINUITYSEQSTR
```

Constant value: **#EXT-X-DISCONTINUITY-SEQUENCE**

PLAYLISTITEMSTR

```
public static final java.lang.String PLAYLISTITEMSTR
```

(continued from last page)

Constant value: **#EXTINF**

CACHECONTROLSTR

```
public static final java.lang.String CACHECONTROLSTR
```

Constant value: **#EXT-X-ALLOW-CACHE**

PLAYLISTPLAYLISTTYPESTR

```
public static final java.lang.String PLAYLISTPLAYLISTTYPESTR
```

Constant value: **#EXT-X-PLAYLIST-TYPE**

PLAYLISTSTART

```
public static final java.lang.String PLAYLISTSTART
```

Constant value: **#EXT-X-START**

PLAYLISTBYTERANGE

```
public static final java.lang.String PLAYLISTBYTERANGE
```

Constant value: **#EXT-X-BYTERANGE**

PLAYLISTSTREAMINF

```
public static final java.lang.String PLAYLISTSTREAMINF
```

Constant value: **#EXT-X-STREAM-INF**

PLAYLISTIFRAMESTREAMINF

```
public static final java.lang.String PLAYLISTIFRAMESTREAMINF
```

Constant value: **#EXT-X-I-FRAME-STREAM-INF**

PLAYLISTMEDIA

```
public static final java.lang.String PLAYLISTMEDIA
```

Constant value: **#EXT-X-MEDIA**

PLAYLIST_GROUPID_AUDIO

```
public static final java.lang.String PLAYLIST_GROUPID_AUDIO
```

Constant value: **audioGroup**

PLAYLIST_GROUPID_VIDEO

```
public static final java.lang.String PLAYLIST_GROUPID_VIDEO
```

Constant value: **videoGroup**

DOMAINPLACHOLDER

```
public static final java.lang.String DOMAINPLACHOLDER
```

Constant value: **{domain}**

HOSTPLACHOLDER

```
public static final java.lang.String HOSTPLACHOLDER
```

Constant value: **{host}**

APPLICATIONPLACHOLDER

```
public static final java.lang.String APPLICATIONPLACHOLDER
```

Constant value: **{application}**

APPINSTANCEPLACHOLDER

```
public static final java.lang.String APPINSTANCEPLACHOLDER
```

Constant value: **{appInstance}**

STREAMPLACHOLDER

```
public static final java.lang.String STREAMPLACHOLDER
```

Constant value: **{stream}**

FILENAMEPLACHOLDER

```
public static final java.lang.String FILENAMEPLACHOLDER
```

Constant value: **{filename}**

INDEXPLACHOLDER

```
public static final java.lang.String INDEXPLACHOLDER
```

Constant value: **{index}**

(continued from last page)

EXTPLACEHOLDER

```
public static final java.lang.String EXTPLACEHOLDER
```

Constant value: **{ext}**

QUERYSTRPLACHOLDER

```
public static final java.lang.String QUERYSTRPLACHOLDER
```

Constant value: **{query}**

RESOLUTIONPLACEHOLDER

```
public static final java.lang.String RESOLUTIONPLACEHOLDER
```

Constant value: **{resolution}**

RESOLUTIONWIDTHPLACEHOLDER

```
public static final java.lang.String RESOLUTIONWIDTHPLACEHOLDER
```

Constant value: **{resolution-width}**

RESOLUTIONHEIGHTPLACEHOLDER

```
public static final java.lang.String RESOLUTIONHEIGHTPLACEHOLDER
```

Constant value: **{resolution-height}**

RENDITIONPLACHOLDER

```
public static final java.lang.String RENDITIONPLACHOLDER
```

Constant value: **{rendition}**

LANGUAGEPLACHOLDER

```
public static final java.lang.String LANGUAGEPLACHOLDER
```

Constant value: **{language}**

TITLEPLACHOLDER

```
public static final java.lang.String TITLEPLACHOLDER
```

Constant value: **{title}**

PLAYSTARTPLACEHOLDER

```
public static final java.lang.String PLAYSTARTPLACEHOLDER
```

(continued from last page)

Constant value: **{playStart}**

PLAYDURATIONPLACEHOLDER

```
public static final java.lang.String PLAYDURATIONPLACEHOLDER
```

Constant value: **{playDuration}**

PLAYSEEKPLACEHOLDER

```
public static final java.lang.String PLAYSEEKPLACEHOLDER
```

Constant value: **{playSeek}**

NGRPEPLACHOLDER

```
public static final java.lang.String NGRPEPLACHOLDER
```

Constant value: **{ngrp}**

ENCKEYPLACEHOLDERPLACHOLDER

```
public static final java.lang.String ENCKEYPLACEHOLDERPLACHOLDER
```

Constant value: **{enckeyurl}**

ENCMETHODPLACEHOLDERPLACHOLDER

```
public static final java.lang.String ENCMETHODPLACEHOLDERPLACHOLDER
```

Constant value: **{encmethod}**

ENCIVPLACEHOLDER

```
public static final java.lang.String ENCIVPLACEHOLDER
```

Constant value: **{encIV}**

ENCPLAYREADYHEADERPLACEHOLDER

```
public static final java.lang.String ENCPLAYREADYHEADERPLACEHOLDER
```

Constant value: **{playReadyHeader}**

SESSIONIDPLACEHOLDER

```
public static final java.lang.String SESSIONIDPLACEHOLDER
```

Constant value: **{sessionid}**

DVRPLACEHOLDER

```
public static final java.lang.String DVRPLACEHOLDER
```

Constant value: **{dvr}**

SECURETOKENPLACEHOLDER

```
public static final java.lang.String SECURETOKENPLACEHOLDER
```

Constant value: **{secureToken}**

CAPTIONFILEPLACEHOLDER

```
public static final java.lang.String CAPTIONFILEPLACEHOLDER
```

Constant value: **{captionFile}**

PARAMETERDELIMITERKEY

```
public static final java.lang.String PARAMETERDELIMITERKEY
```

Constant value: **_**

DVRKEY

```
public static final java.lang.String DVRKEY
```

Constant value: **DVR**

PLAYSTARTKEY

```
public static final java.lang.String PLAYSTARTKEY
```

Constant value: **ps**

PLAYDURATIONKEY

```
public static final java.lang.String PLAYDURATIONKEY
```

Constant value: **pd**

PLAYSEEKKEY

```
public static final java.lang.String PLAYSEEKKEY
```

Constant value: **pk**

(continued from last page)

SESSIONIDKEY

```
public static final java.lang.String SESSIONIDKEY
```

Constant value: **w**

BITRATEKEY

```
public static final java.lang.String BITRATEKEY
```

Constant value: **b**

NGRPKEY

```
public static final java.lang.String NGRPKEY
```

Constant value: **ngrp**

AUDIOONLYKEY

```
public static final java.lang.String AUDIOONLYKEY
```

Constant value: **ao**

VIDEOONLYKEY

```
public static final java.lang.String VIDEOONLYKEY
```

Constant value: **vo**

KEYFRAMEONLYKEY

```
public static final java.lang.String KEYFRAMEONLYKEY
```

Constant value: **ko**

LANGUAGEIDKEY

```
public static final java.lang.String LANGUAGEIDKEY
```

Constant value: **l**

SYSTEMLANGUAGEIDKEY

```
public static final java.lang.String SYSTEMLANGUAGEIDKEY
```

Constant value: **sl**

TITLEKEY

```
public static final java.lang.String TITLEKEY
```

(continued from last page)

Constant value: **t64**

SECURETOKENKEY

```
public static final java.lang.String SECURETOKENKEY
```

Constant value: **tk**

CAPTIONFILEKEY

```
public static final java.lang.String CAPTIONFILEKEY
```

Constant value: **cf**

SEGMENTFORMATKEY

```
public static final java.lang.String SEGMENTFORMATKEY
```

Constant value: **sf**

INITIALIZTIONSEGMENTPREFIX

```
public static final java.lang.String INITIALIZTIONSEGMENTPREFIX
```

Constant value: **header**

MEDIASEGMENTPREFIX

```
public static final java.lang.String MEDIASEGMENTPREFIX
```

Constant value: **media**

ENCKEYSTR

```
public static final java.lang.String ENCKEYSTR
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},{enckeyurl}**

ENCKEYSTRWITHURI

```
public static final java.lang.String ENCKEYSTRWITHURI
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}"**

ENCKEYSTRWITHIV

```
public static final java.lang.String ENCKEYSTRWITHIV
```

Constant value: **#EXT-X-KEY:METHOD={encmethod},URI="{enckeyurl}",IV="{encIV}"**

ENCKEYONLYSTR

```
public static final java.lang.String ENCKEYONLYSTR
```

Constant value: **#EXT-X-KEY:**

ENCKEYURLSESSIONIDPLACEHOLDER

```
public static final java.lang.String ENCKEYURLSESSIONIDPLACEHOLDER
```

Constant value: **{encKeySessionid}**

ENCPLAYREADYHEADER

```
public static final java.lang.String ENCPLAYREADYHEADER
```

Constant value: **#EXT-X-INIT-PRHDR:{playReadyHeader}**

ENCPLAYREADYHEADERMSFT

```
public static final java.lang.String ENCPLAYREADYHEADERMSFT
```

Constant value: **#EXT-X-PLAYREADYHEADER:{playReadyHeader}**

DISCONTINUITYSTR

```
public static final java.lang.String DISCONTINUITYSTR
```

Constant value: **#EXT-X-DISCONTINUITY**

PROGRAMDATETIMESTR

```
public static final java.lang.String PROGRAMDATETIMESTR
```

Constant value: **#EXT-X-PROGRAM-DATE-TIME**

RESOLUTIONSTR

```
public static final java.lang.String RESOLUTIONSTR
```

Constant value: **,RESOLUTION={resolution-width}x{resolution-height}**

CHUNKLISTNAMEPLACEHOLDER

```
public static final java.lang.String CHUNKLISTNAMEPLACEHOLDER
```

Constant value: **{chunklistName}**

(continued from last page)

MEDIANAMEPLACEHOLDER

```
public static final java.lang.String MEDIANAMEPLACEHOLDER
```

Constant value: **{mediaName}**

BITRATEPLACEHOLDER

```
public static final java.lang.String BITRATEPLACEHOLDER
```

Constant value: **{bitrate}**

SEGMENTFORMATPLACEHOLDER

```
public static final java.lang.String SEGMENTFORMATPLACEHOLDER
```

Constant value: **{segmentFormat}**

FILENAMEBASEPATTERN

```
public static final java.lang.String FILENAMEBASEPATTERN
```

Constant value:

```
{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngroup}{captionFile}{secureToken}
```

MEDIAFILENAMEPATTERN

```
public static final java.lang.String MEDIAFILENAMEPATTERN
```

Constant value:

```
{mediaName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngroup}{captionFile}{secureToken}_{index}{ext}
```

CHUNKLISTFILENAMEPATTERN

```
public static final java.lang.String CHUNKLISTFILENAMEPATTERN
```

Constant value:

```
{chunklistName}{sessionId}{bitrate}{playStart}{playDuration}{playSeek}{dvr}{rendition}{segmentFormat}{language}{title}{ngroup}{captionFile}{secureToken}
```

URLPATTERN

```
public static final java.lang.String URLPATTERN
```

Constant value: **{domain}/{application}/{appInstance}/{stream}/{filename}?{query}**

URLPATTERN_RELATIVE

```
public static final java.lang.String URLPATTERN_RELATIVE
```

Constant value: **{filename}?{query}**

ENCMETHOD_DEFAULT

```
public static final java.lang.String ENCMETHOD_DEFAULT
```

Constant value: **AES-128**

SUBTITLELISTNAMEPLACEHOLDER

```
public static final java.lang.String SUBTITLELISTNAMEPLACEHOLDER
```

Constant value: **{subtitlelistName}**

SUBTITLEBASEPATTERN

```
public static final java.lang.String SUBTITLEBASEPATTERN
```

Constant value:
{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}

SUBTITLELISTFILENAMEPATTERN

```
public static final java.lang.String SUBTITLELISTFILENAMEPATTERN
```

Constant value:
{subtitlelistName}{sessionId}{bitrate}{language}{title}{playStart}{playDuration}{playSeek}{dvr}{captionFile}

DEFAULT_MEDIANAME

```
public static final java.lang.String DEFAULT_MEDIANAME
```

Constant value: **media**

DEFAULT_CHUNKLISTNAME

```
public static final java.lang.String DEFAULT_CHUNKLISTNAME
```

Constant value: **chunklist**

DEFAULT_EXT

```
public static final java.lang.String DEFAULT_EXT
```

Constant value: **.m3u8**

DEFAULT_SUBTITLELISTNAME

```
public static final java.lang.String DEFAULT_SUBTITLELISTNAME
```

Constant value: **subtitlelist**

DEFAULT_SUBTITLECHUNKLISTNAME

```
public static final java.lang.String DEFAULT_SUBTITLECHUNKLISTNAME
```

Constant value: **subtitlechunk**

DEFAULT_SUBTITLEGROUPNAME

```
public static final java.lang.String DEFAULT_SUBTITLEGROUPNAME
```

Constant value: **subs**

DEFAULT_CORS_ENABLED

```
public static final boolean DEFAULT_CORS_ENABLED
```

Constant value: **true**

Constructors

LiveStreamPacketizerCupertinoUtils

```
public LiveStreamPacketizerCupertinoUtils()
```

Methods

streamModeToFileExtension

```
public static String streamModeToFileExtension(int streamMode)
```

chunkFilenameToIndex

```
public static long chunkFilenameToIndex(String filename)
```

segmentFilenameToIndex

```
public static long segmentFilenameToIndex(String filename)
```

segmentFilenameToIndexStr

```
public static String segmentFilenameToIndexStr(String filename)
```

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encryptChunk

```
public static void encryptChunk(LiveStreamPacketizerCupertinoChunk chunk,  
    ICupertinoEncryptor encryptor)
```

encryptChunk2

```
public static void encryptChunk2(LiveStreamPacketizerCupertinoChunk chunk,  
    CupertinoEncInfo encInfo)
```

getEncInfo

```
public static CupertinoEncInfo getEncInfo(IApplicationInstance appInstance,  
    String streamName)
```

mergeUserManifestHeaders

```
public static void mergeUserManifestHeaders(java.util.Map dst,  
    java.util.Map src)
```

appendUserManifestHeaders

```
public static void appendUserManifestHeaders(StringBuffer strBuf,  
    LiveStreamPacketizerCupertinoChunk chunk)
```

deepCopyUserManifestHeaders

```
public static java.util.Map deepCopyUserManifestHeaders(java.util.Map  
    userManifestHeaders)
```

createUserManifestHeaderMapFromString

```
public static java.util.Map createUserManifestHeaderMapFromString(String  
    userManifestHeaders)
```

createUserManifestParameterString

```
public static String createUserManifestParameterString(java.util.Map encUserParams)
```

millisToSecondsDuration

```
public static int millisToSecondsDuration(long millis)
```

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floatingPointToWholeNumberDuration

```
public static long floatingPointToWholeNumberDuration(double seconds)
```

millisToSecondsCeilDuration

```
public static int millisToSecondsCeilDuration(long millis)
```

codecInfoVideoToResolutionStr

```
public static String  
codecInfoVideoToResolutionStr(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

chunkFilenameToStreamMode

```
public static int chunkFilenameToStreamMode(String filename)
```

codecInfoAudioToCodecsStr

```
public static String  
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

codecInfoAudioToCodecsStr

```
public static String  
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio,  
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String  
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo,  
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(int codec,  
    int profile,  
    int level,  
    int codecStrFormatId)
```

(continued from last page)

codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(int codec,
        int profile,
        int level,
        int codecStrFormatId,
        boolean forceH264BaselineProfile)
```

codecInfoVideoToCodecsStr

```
public static String codecInfoVideoToCodecsStr(String codecStr,
        int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
codecInfoVideo,
        int codecStrFormatId,
        boolean forceH264BaselineProfile)
```

isValidVideoCodec

```
public static boolean isValidVideoCodec(int codec)
```

isValidAudioCodec

```
public static boolean isValidAudioCodec(int codec)
```

Package

**com.wowza.wms.httpstreamer.directstreamin
g.httpstreamer**

com.wowza.wms.httpstreamer.directstreaming.httpstreamer Class HTTPStreamerSessionDirect

java.lang.Object

└-com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└-

com.wowza.wms.httpstreamer.directstreaming.httpstreamer.HTTPStreamerSessionDirect

All Implemented Interfaces:

[IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionDirect
extends HTTPStreamerSessionBase
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONFORMAT_CMAF](#), [SESSIONFORMAT_CMAF_LL](#), [SESSIONFORMAT_DEFAULT](#), [SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionDirect()
--------	---

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionDirect

```
public HTTPStreamerSessionDirect()
```

Package

com.wowza.wms.httpstreamer.model

com.wowza.wms.httpstreamer.model Interface IHTTPCryptoHolder

public interface IHTTPCryptoHolder
extends

Method Summary

abstract byte[]	getBuffer()
abstract int	getOffset()
abstract int	getPacketType()
abstract long	getSample()
abstract int	getSize()
abstract void	setBuffer (byte[] buffer)
abstract void	setOffset (int offset)
abstract void	setPacketType (int packetType)
abstract void	setSample (long sample)
abstract void	setSize (int size)

Methods

getBuffer

public abstract byte[] **getBuffer**()

setBuffer

public abstract void **setBuffer**(byte[] buffer)

getOffset

public abstract int **getOffset**()

setOffset

```
public abstract void setOffset(int offset)
```

getSize

```
public abstract int getSize()
```

setSize

```
public abstract void setSize(int size)
```

getPacketType

```
public abstract int getPacketType()
```

setPacketType

```
public abstract void setPacketType(int packetType)
```

getSample

```
public abstract long getSample()
```

setSample

```
public abstract void setSample(long sample)
```

com.wowza.wms.httpstreamer.model Interface IHTTPSessionFactory

public interface IHTTPSessionFactory
extends

Method Summary

abstract IHTTPStreamerSession	createHTTPSessionInstance (IHTTPRequest req)
--	---

Methods

createHTTPSessionInstance

public abstract [IHTTPStreamerSession](#) **createHTTPSessionInstance**([IHTTPRequest](#) req)

com.wowza.wms.httpstreamer.model Interface IHTTPSessionNotify

All Known Implementing Classes:

[HTTPStreamerSessionSmoothStreamer](#), [HTTPStreamerSessionSanJose](#), [HTTPStreamerSessionMPEGDash](#),
[HTTPStreamerSessionCupertino](#)

public interface **IHTTPSessionNotify**
extends

Method Summary

abstract void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
abstract void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)

Methods

notifyHTTPSessionCreate

public abstract void **notifyHTTPSessionCreate**([IApplicationInstance](#) appInstance,
[IHTTPStreamerSession](#) httpStreamerSession)

notifyHTTPSessionDestroy

public abstract void **notifyHTTPSessionDestroy**([IApplicationInstance](#) appInstance,
[IHTTPStreamerSession](#) httpStreamerSession)

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerAdapter

public interface **IHTTPStreamerAdapter**
extends

IHTTPStreamerAdapter: HTTP streaming adapter interface

Method Summary

abstract boolean	<u>canHandle</u> (String path) Return true if can handle request
abstract String	<u>getAdapterName</u> () Get the name of this adapter
abstract HTTPStreamerItem	<u>getHTTPStreamerItem</u> () Get the HTTP streamer item associated with this adapter
abstract String	<u>getID</u> () Get the id of this adapter
abstract int	<u>getIdleFrequency</u> () Get the idle frequency (milliseconds) for HTTP requests.
abstract String	<u>getLiveStreamPacketizer</u> (<u>IApplicationInstance</u> appInstance) Get the default live stream packetizer.
abstract String	<u>getLiveStreamPacketizer</u> (<u>IApplicationInstance</u> appInstance, SegmentFormat segmentFormat) Get the default live stream packetizer.
abstract String	<u>getLiveStreamRepeater</u> (<u>IApplicationInstance</u> appInstance) Get the default live stream repeater.
abstract String	<u>getLiveStreamRepeater</u> (<u>IApplicationInstance</u> appInstance, SegmentFormat segmentFormat) Get the default live stream repeater.
abstract <u>WMSProperties</u>	<u>getProperties</u> () Get properties
abstract int	<u>getSessionProtocol</u> () Set the adapter session protocol.
abstract <u>IVHost</u>	<u>getVHost</u> () Get the vhost associated with this adapter
abstract void	<u>init</u> () Initialize the HTTP streaming adapter
abstract void	<u>service</u> (org.apache.mina.common.io.Session session, RtmpRequestMessage req, RtmpResponseMessage resp) Called to service each request

abstract void	setHTTPStreamerItem (HTTPStreamerItem httpStreamerItem) Set the HTTP streamer item associated with this adapter
abstract void	setID (String id) Set the id of this adapter
abstract void	setProperties (WMSProperties properties) Set properties
abstract void	setSessionProtocol (int sessionProtocol) Get the adapter session protocol.
abstract void	setVHost (IVHost vhost) Set the vhost associated with this adapter
abstract void	shutdownSession (IApplicationInstance appInstance, IHTTPStreamerSession session) Called when an HTTP streaming session is shutdown

Methods

canHandle

public abstract boolean **canHandle**(String path)

Return true if can handle request

Parameters:

path - request path

Returns:

true if can handle request

service

public abstract void **service**(org.apache.mina.common.Session session,
RtmpRequestMessage req,
RtmpResponseMessage resp)

Called to service each request

Parameters:

session - io session

req - request

resp - response

getProperties

public abstract [WMSProperties](#) **getProperties**()

Get properties

Returns:

properties

(continued from last page)

setProperties

```
public abstract void setProperties(WMSProperties properties)
```

Set properties

Parameters:

properties - properties

getHTTPStreamerItem

```
public abstract HTTPStreamerItem getHTTPStreamerItem()
```

Get the HTTP streamer item associated with this adapter

Returns:

HTTP streamer item

setHTTPStreamerItem

```
public abstract void setHTTPStreamerItem(HTTPStreamerItem httpStreamerItem)
```

Set the HTTP streamer item associated with this adapter

Parameters:

httpStreamerItem - HTTP streamer item

getVHost

```
public abstract IVHost getVHost()
```

Get the vhost associated with this adapter

Returns:

vhost

setVHost

```
public abstract void setVHost(IVHost vhost)
```

Set the vhost associated with this adapter

Parameters:

vhost - vhost

init

```
public abstract void init()
```

Initialize the HTTP streaming adapter

shutdownSession

```
public abstract void shutdownSession(IApplicationInstance appInstance,  
    IHTTPStreamerSession session)
```

Called when an HTTP streaming session is shutdown

Parameters:

(continued from last page)

appInstance - application instance

session - HTTP streaming session

getIdleFrequency

```
public abstract int getIdleFrequency()
```

Get the idle frequency (milliseconds) for HTTP requests. This is how often the session is called back while active.

Returns:

idle frequency (milliseconds)

getAdapterName

```
public abstract String getAdapterName()
```

Get the name of this adapter

Returns:

name of this adapter

getID

```
public abstract String getID()
```

Get the id of this adapter

Returns:

id of this adapter

setID

```
public abstract void setID(String id)
```

Set the id of this adapter

Parameters:

id - id of this adapter

getSessionProtocol

```
public abstract int getSessionProtocol()
```

Set the adapter session protocol. See IHTTPStreamerSession.SESSIONPROTOCOL_*

Returns:

adapter session protocol

setSessionProtocol

```
public abstract void setSessionProtocol(int sessionProtocol)
```

Get the adapter session protocol. See IHTTPStreamerSession.SESSIONPROTOCOL_*

Parameters:

sessionProtocol - adapter session protocol

(continued from last page)

getLiveStreamPacketizer

```
public abstract String getLiveStreamPacketizer(IApplicationInstance appInstance)
```

Get the default live stream packetizer.

Parameters:

appInstance - application instance

getLiveStreamPacketizer

```
public abstract String getLiveStreamPacketizer(IApplicationInstance appInstance,  
SegmentFormat segmentFormat)
```

Get the default live stream packetizer.

Parameters:

appInstance - application instance

segmentFormat - segmentFormat

getLiveStreamRepeater

```
public abstract String getLiveStreamRepeater(IApplicationInstance appInstance)
```

Get the default live stream repeater.

Parameters:

appInstance - application instance

getLiveStreamRepeater

```
public abstract String getLiveStreamRepeater(IApplicationInstance appInstance,  
SegmentFormat segmentFormat)
```

Get the default live stream repeater.

Parameters:

appInstance - application instance

segmentFormat - segmentFormat

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerApplicationContext

public interface IHTTPStreamerApplicationContext
extends

IHTTPStreamerApplicationContext: HTTP streamer application context interface. Used by HTTP streaming adapter to store per-application information.

Field Summary

public static final	<u>HTTPORIGINMODE_AUTO</u> Value: 1
public static final	<u>HTTPORIGINMODE_OFF</u> Value: 0
public static final	<u>HTTPORIGINMODE_ON</u> Value: 2

Method Summary

abstract void	<u>addQueryStrRemoveList</u> (String name) Add a name to the list of query string parameters that will not be copied to the media URLs for HTTP streaming
abstract java.util.Map	<u>filterQueryStr</u> (java.util.Map map) Internal
abstract <u>IApplicationInstance</u>	<u>getAppInstance</u> () Get application instance
abstract String	<u>getCacheControlStatus4xx</u> () Get the cache-control header for 4xx HTTP responses
abstract int	<u>getHTTPOriginMode</u> () Get current HTTP origin mode.
abstract <u>IHTTPStreamerHTTPOrig inSessionIdProvider</u>	<u>getHTTPOriginSessionIdProvider</u> () Get HTTP origin sessionId provider used to determine unique HTTP origin sessions.
abstract int	<u>getMaxHTTPSessionsPerTCPSession</u> () Get maximum number of HTTP sessions tracked per-TCP session
abstract <u>WMSProperties</u>	<u>getProperties</u> () Get properties
abstract <u>MediaCasterItem</u>	<u>getRepeaterMediaCasterDef</u> () Get the live repeater media caster definition
abstract int	<u>getResponseOnIncompleteChunk</u> () Get the response code used when an incomplete chunk (read error) is encountered.

abstract String	<u>getStreamTypeStr()</u> Get stream type
abstract java.util.Map	<u>getUserHTTPHeaders()</u> Get user HTTP headers.
abstract <u>IVHost</u>	<u>getVHost()</u> Get vhost
abstract void	<u>init(IApplicationInstance</u> appInstance, HTTPStreamerItem <u>httpStreamerItem</u>) Initialize context
abstract boolean	<u>isHTTPOriginOn()</u> Returns true if HTTP origin mode is set to ON.
abstract boolean	<u>isStreamDomainProtectionActive()</u> Return true if stream domain protection is on
abstract void	<u>setCacheControlStatus4xx</u> (String cacheControlStatus4xx) Set the cache-control header for 4xx HTTP responses
abstract void	<u>setHTTPOriginMode</u> (int httpOriginMode) Set current HTTP origin mode.
abstract void	<u>setHTTPOriginSessionIdProvider</u> (<u>IHTTPStreamerHTTPOriginSessionIdProvider</u> <u>httpOriginSessionIdProvider</u>) Set HTTP origin sessionId provider used to determine unique HTTP origin sessions.
abstract void	<u>setMaxHTTPSessionsPerTCPSession</u> (int maxHTTPSessionsPerTCPSession) Set maximum number of HTTP sessions tracked per-TCP session
abstract void	<u>setRepeaterMediaCasterDef</u> (<u>MediaCasterItem</u> repeaterMediaCasterDef) Set the live repeater media caster definition
abstract void	<u>setResponseOnIncompleteChunk</u> (int responseOnIncompleteChunk) Set the response code used when an incomplete chunk (read error) is encountered.
abstract void	<u>setStreamDomainProtectionActive</u> (boolean streamDomainProtectionActive) Turn on/off stream domain protection
abstract void	<u>setStreamTypeStr</u> (String streamTypeStr) Set stream type
abstract void	<u>setUserHTTPHeader</u> (String name, String value) Add a user HTTP header to the header map.

Fields

HTTPORIGINMODE_OFF

```
public static final int HTTPORIGINMODE_OFF
```

Constant value: 0

(continued from last page)

HTTPORIGINMODE_AUTO

```
public static final int HTTPORIGINMODE_AUTO
```

Constant value: **1**

HTTPORIGINMODE_ON

```
public static final int HTTPORIGINMODE_ON
```

Constant value: **2**

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    HTTPStreamerItem httpStreamerItem)
```

Initialize context

Parameters:

`appInstance` - application instance
`httpStreamerItem` - HTTP streamer

getProperties

```
public abstract WMSProperties getProperties()
```

Get properties

Returns:

properties

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

getVHost

```
public abstract IVHost getVHost()
```

Get vhost

Returns:

vhost

getRepeaterMediaCasterDef

```
public abstract MediaCasterItem getRepeaterMediaCasterDef()
```

Get the live repeater media caster definition

(continued from last page)

Returns:

live repeater media caster definition

setRepeaterMediaCasterDef

```
public abstract void setRepeaterMediaCasterDef(MediaCasterItem repeaterMediaCasterDef)
```

Set the live repeater media caster definition

Parameters:

repeaterMediaCasterDef - live repeater media caster definition

getStreamTypeStr

```
public abstract String getStreamTypeStr()
```

Get stream type

Returns:

stream type

setStreamTypeStr

```
public abstract void setStreamTypeStr(String streamTypeStr)
```

Set stream type

Parameters:

streamTypeStr - stream type

isStreamDomainProtectionActive

```
public abstract boolean isStreamDomainProtectionActive()
```

Return true if stream domain protection is on

Returns:

true if stream domain protection is on

setStreamDomainProtectionActive

```
public abstract void setStreamDomainProtectionActive(boolean  
streamDomainProtectionActive)
```

Turn on/off stream domain protection

Parameters:

streamDomainProtectionActive - true if stream domain protection is on

getHTTPOriginMode

```
public abstract int getHTTPOriginMode()
```

Get current HTTP origin mode. See HTTPORIGINMODE_ (auto is currently not supported)

Returns:

HTTP origin mode

setHTTPOriginMode

```
public abstract void setHTTPOriginMode(int httpOriginMode)
```

Set current HTTP origin mode. See HTTPORIGINMODE_ (auto is currently not supported)

Parameters:

httpOriginMode - HTTP origin mode

isHTTPOriginOn

```
public abstract boolean isHTTPOriginOn()
```

Returns true if HTTP origin mode is set to ON.

Returns:

true if HTTP origin mode is set to ON.

setUserHTTPHeader

```
public abstract void setUserHTTPHeader(String name,  
                                         String value)
```

Add a user HTTP header to the header map. These headers will be added to every HTTP response.

Parameters:

name - name

value - value (null if no value)

getUserHTTPHeaders

```
public abstract java.util.Map getUserHTTPHeaders()
```

Get user HTTP headers.

Returns:

header map

addQueryStrRemoveList

```
public abstract void addQueryStrRemoveList(String name)
```

Add a name to the list of query string parameters that will not be copied to the media URLs for HTTP streaming

Parameters:

name - query name

filterQueryStr

```
public abstract java.util.Map filterQueryStr(java.util.Map map)
```

Internal

Parameters:

map - query map

Returns:

query map

getCacheControlStatus4xx

```
public abstract String getCacheControlStatus4xx()
```

Get the cache-control header for 4xx HTTP responses

Returns:

cache-control header for 4xx HTTP responses

setCacheControlStatus4xx

```
public abstract void setCacheControlStatus4xx(String cacheControlStatus4xx)
```

Set the cache-control header for 4xx HTTP responses

Parameters:

cacheControlStatus4xx - cache-control header for 4xx HTTP responses

getResponseOnIncompleteChunk

```
public abstract int getResponseOnIncompleteChunk()
```

Get the response code used when an incomplete chunk (read error) is encountered. If zero, chunk is sent.

Returns:

response code

setResponseOnIncompleteChunk

```
public abstract void setResponseOnIncompleteChunk(int responseOnIncompleteChunk)
```

Set the response code used when an incomplete chunk (read error) is encountered. If zero, chunk is sent.

Parameters:

responseOnIncompleteChunk - response code

getMaxHTTPSessionsPerTCPSession

```
public abstract int getMaxHTTPSessionsPerTCPSession()
```

Get maximum number of HTTP sessions tracked per-TCP session

Returns:

maximum number of HTTP sessions tracked per-TCP session

setMaxHTTPSessionsPerTCPSession

```
public abstract void setMaxHTTPSessionsPerTCPSession(int maxHTTPSessionsPerTCPSession)
```

Set maximum number of HTTP sessions tracked per-TCP session

Parameters:

maxHTTPSessionsPerTCPSession - maximum number of HTTP sessions tracked per-TCP session

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getHTTPOriginSessionIdProvider

```
public abstract IHTTPStreamerHTTPOriginSessionIdProvider  
getHTTPOriginSessionIdProvider()
```

Get HTTP origin sessionId provider used to determine unique HTTP origin sessions.

Returns:

sessionId provider

setHTTPOriginSessionIdProvider

```
public abstract void  
setHTTPOriginSessionIdProvider(IHTTPStreamerHTTPOriginSessionIdProvider  
httpOriginSessionIdProvider)
```

Set HTTP origin sessionId provider used to determine unique HTTP origin sessions.

Parameters:

httpOriginSessionIdProvider - sessionId provider

com.wowza.wms.httpstreamer.model

Interface IHTTPStreamerHTTPOriginSessionIdProvider

public interface IHTTPStreamerHTTPOriginSessionIdProvider

extends

Method Summary	
abstract String	getHTTPOriginId (String httpOriginId, IHttpRequest req, IHTTPStreamerApplicationContext appContext, String oldSessionId, String streamDomainStr, boolean isHTTPOrigin, boolean isDvr, long currTime)

Methods

getHTTPOriginId

```
public abstract String getHTTPOriginId(String httpOriginId,
    IHttpRequest req,
    IHTTPStreamerApplicationContext appContext,
    String oldSessionId,
    String streamDomainStr,
    boolean isHTTPOrigin,
    boolean isDvr,
    long currTime)
```

com.wowza.wms.httpstreamer.model

Interface IHTTPStreamerRepeater

public interface IHTTPStreamerRepeater
extends

IHTTPStreamerRepeater: stream switching constants

Field Summary	
public static final	MSG_STARTSTREAM Value: startStream
public static final	MSG_SWITCHSTREAM Value: switchStream

Fields

MSG_STARTSTREAM

public static final java.lang.String MSG_STARTSTREAM

Constant value: **startStream**

MSG_SWITCHSTREAM

public static final java.lang.String MSG_SWITCHSTREAM

Constant value: **switchStream**

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerRequestContext

public interface IHTTPStreamerRequestContext
extends

Field Summary

public static final	<u>CUPERTINO_CHUNKLIST</u> Value: 2
public static final	<u>CUPERTINO_MANIFEST</u> Value: 1
public static final	<u>CUPERTINO_MEDIA</u> Value: 3
public static final	<u>CUPERTINO_SUBTITLE_CHUNK</u> Value: 5
public static final	<u>CUPERTINO_SUBTITLE_LIST</u> Value: 4
public static final	<u>MPEGDASH_DATA</u> Value: 32
public static final	<u>MPEGDASH_MANIFEST</u> Value: 30
public static final	<u>MPEGDASH_MEDIA</u> Value: 31
public static final	<u>MPEGDASH_SUBTITLE_CHUNK</u> Value: 33
public static final	<u>MPEGDASH_TIME</u> Value: 34
public static final	<u>NONE</u> Value: 0
public static final	<u>SANJOSE_MANIFEST</u> Value: 10
public static final	<u>SANJOSE_MEDIA</u> Value: 11

public static final	SMOOTHSTREAMING_AUDIO_FRAGMENT Value: 21
public static final	SMOOTHSTREAMING_DATA_FRAGMENT Value: 23
public static final	SMOOTHSTREAMING_MANIFEST Value: 20
public static final	SMOOTHSTREAMING_VIDEO_FRAGMENT Value: 22

Method Summary

abstract IHTTPRequest	getRequest()
abstract int	getRequestType()
abstract void	setRequest (IHTTPRequest request)
abstract void	setRequestType (int requestType)

Fields

NONE

public static final int **NONE**

Constant value: **0**

CUPERTINO_MANIFEST

public static final int **CUPERTINO_MANIFEST**

Constant value: **1**

CUPERTINO_CHUNKLIST

public static final int **CUPERTINO_CHUNKLIST**

Constant value: **2**

CUPERTINO_MEDIA

public static final int **CUPERTINO_MEDIA**

Constant value: **3**

CUPERTINO_SUBTITLE_LIST

```
public static final int CUPERTINO_SUBTITLE_LIST
```

Constant value: **4**

CUPERTINO_SUBTITLE_CHUNK

```
public static final int CUPERTINO_SUBTITLE_CHUNK
```

Constant value: **5**

SANJOSE_MANIFEST

```
public static final int SANJOSE_MANIFEST
```

Constant value: **10**

SANJOSE_MEDIA

```
public static final int SANJOSE_MEDIA
```

Constant value: **11**

SMOOTHSTREAMING_MANIFEST

```
public static final int SMOOTHSTREAMING_MANIFEST
```

Constant value: **20**

SMOOTHSTREAMING_AUDIO_FRAGMENT

```
public static final int SMOOTHSTREAMING_AUDIO_FRAGMENT
```

Constant value: **21**

SMOOTHSTREAMING_VIDEO_FRAGMENT

```
public static final int SMOOTHSTREAMING_VIDEO_FRAGMENT
```

Constant value: **22**

SMOOTHSTREAMING_DATA_FRAGMENT

```
public static final int SMOOTHSTREAMING_DATA_FRAGMENT
```

Constant value: **23**

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MPEGDASH_MANIFEST

```
public static final int MPEGDASH_MANIFEST
```

Constant value: **30**

MPEGDASH_MEDIA

```
public static final int MPEGDASH_MEDIA
```

Constant value: **31**

MPEGDASH_DATA

```
public static final int MPEGDASH_DATA
```

Constant value: **32**

MPEGDASH_SUBTITLE_CHUNK

```
public static final int MPEGDASH_SUBTITLE_CHUNK
```

Constant value: **33**

MPEGDASH_TIME

```
public static final int MPEGDASH_TIME
```

Constant value: **34**

Methods

getRequestType

```
public abstract int getRequestType()
```

setRequestType

```
public abstract void setRequestType(int requestType)
```

getRequest

```
public abstract IHTTPRequest getRequest()
```

setRequest

```
public abstract void setRequest(IHTTPRequest request)
```

(continued from last page)

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerRequestNotify

public interface **IHTTPStreamerRequestNotify**
extends

IHTTPStreamerRequestNotify: HTTP streamer request interface

Method Summary

abstract void	onHTTPStreamerRequest (IHTTPStreamerSession httpStreamerSession, IHTTPStreamerRequestContext requestContext) Called during an HTTP streaming request after the session has been created
---------------	--

Methods

onHTTPStreamerRequest

public abstract void **onHTTPStreamerRequest**([IHTTPStreamerSession](#) httpStreamerSession,
[IHTTPStreamerRequestContext](#) requestContext)

Called during an HTTP streaming request after the session has been created

Parameters:

httpStreamerSession - HTTP streaming session

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerSession

public interface **IHTTPStreamerSession**
extends

IHTTPStreamerSession: HTTP streaming session interface

Field Summary

public static final	<u>SESSIONFORMAT_CMAF</u> Value: 1
public static final	<u>SESSIONFORMAT_CMAF_LL</u> Value: 2
public static final	<u>SESSIONFORMAT_DEFAULT</u> Value: 0
public static final	<u>SESSIONPROTOCOL_COUNT</u> Value: 8
public static final	<u>SESSIONPROTOCOL_CUPERTINOSTREAMING</u> Value: 1
public static final	<u>SESSIONPROTOCOL_DIRECTSTREAMING</u> Value: 6
public static final	<u>SESSIONPROTOCOL_DVRCHUNKSTREAMING</u> Value: 5
public static final	<u>SESSIONPROTOCOL_MPEGDASHSTREAMING</u> Value: 4
public static final	<u>SESSIONPROTOCOL_SANJOSESTREAMING</u> Value: 2
public static final	<u>SESSIONPROTOCOL_SMOOTHSTREAMING</u> Value: 0
public static final	<u>SESSIONPROTOCOL_TSSTREAMING</u> Value: 7
public static final	<u>SESSIONPROTOCOL_UNKNOWN</u> Value: -1

public static final	SESSIONPROTOCOL_WEBMSTREAMING Value: 3
public static final	SESSIONTYPE_LIVE Value: 1
public static final	SESSIONTYPE_LIVEDVR Value: 3
public static final	SESSIONTYPE_UNKNOWN Value: 0
public static final	SESSIONTYPE_VOD Value: 2

Method Summary

abstract void	acceptSession() Accept the HTTP session.
abstract void	addHTTPSessionToTCPSession(RtmpSessionInfo wmsSessionInfo, IHTTPStreamerApplicationContext appContext) Add HTTP session to TCP session for tracking
abstract void	addIOPerformance(IOPerformanceCounter totalIOPerformanceResult) Internal user, keep track of IO performance
abstract void	addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult) Internal user, keep track of IO performance
abstract void	addStreamDomainStr(String streamDomainStr) Internal user, add stream name
abstract void	addStreamDomainStrs(java.util.List streamNames) Internal user, add stream names
abstract void	addTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotify listener) Add VOD Transcoder action listener
abstract void	addUserHTTPHeaders(IHTTPResponse resp) Internal
abstract boolean	checkAndSetPlayLogged() If play has not been logged return false, else returns true, sets play has been logged
abstract void	clearLoggingValues() Internal user, clear logging values
abstract boolean	containsStreamDomainStr(String streamDomainStr) Internal user, test stream name
abstract boolean	containsStreamNameParts(String streamName) Return true if stream name in stream name parts

abstract void	<u>doSessionRedirect</u> (<u>IHTTPResponse</u> resp) Internal
abstract void	<u>doSessionRedirect</u> (<u>IHTTPResponse</u> resp, String redirectSessionURL, String redirectSessionContentType, int redirectSessionCode) Internal
abstract void	<u>extractHTTPRequestInfo</u> (<u>IHTTPRequest</u> req) Extract information from HTTP request
abstract boolean	<u>getAndClearNotifyCreate</u> ()
abstract <u>IApplicationInstance</u>	<u>getAppInstance</u> () Get the application instance associated with this HTTP session
abstract ConnectionHolder	<u>getConnectionHolder</u> () Connection holder for this session
abstract String	<u>getCookieStr</u> () Get cookie string
abstract HTTPCORSHeaders	<u>getCORSHeaders</u> ()
abstract DvrSessionInfo	<u>getDvrSessionInfo</u> () This information is used to manage the connection to the DVR store.
abstract <u>ElapsedTimer</u>	<u>getElapsedTime</u> () Get the elapsed timer to see how long this session has been running
abstract HTTPStreamerFileInfo	<u>getFileInfo</u> (String streamName) Get the file information if video on demand streaming
abstract String	<u>getForwardedIP</u> () Get the x-[real forwarded] IP address
abstract String	<u>getHTTPHeader</u> (String name) Get a HTTP header value such as 'Content-Length'
abstract java.util.Map	<u>getHTTPHeaderMap</u> () Get a copy of the HTTP request header map
abstract java.util.Set	<u>getHTTPHeaderNames</u> () Get a Set of the header names
abstract int	<u>getHTTPIntHeader</u> (String name) Get a HTTP header value such as 'Content-Length' and return as int
abstract <u>IHTTPStreamerAdapter</u>	<u>getHTTPStreamerAdapter</u> () Get the HTTP streaming adapter associated with this HTTP session
abstract <u>IOPerformanceCounter</u>	<u>getIOPerformanceCounter</u> () Get IO performance counter
abstract String	<u>getIpAddress</u> () Get the IP address
abstract long	<u>getLastRequest</u> () Get the last timestamp of the last Io request

abstract String	<u>getLiveStreamingPacketizer()</u> Get the live stream packetizer name
abstract Object	<u>getLock()</u> Get the synchronization lock for this HTTP session
abstract long	<u>getPlayDuration()</u> Get the play duration (milliseconds) for video on demand playback.
abstract long	<u>getPlaySeek()</u> Get the seek location (milliseconds) where playback should start
abstract long	<u>getPlayStart()</u> Get the play start time offset (milliseconds) for video on demand playback.
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get the properties associated with this session
abstract String	<u>getQueryStr()</u> Get query string
abstract byte[]	<u>getRedirectSessionBody()</u> Get redirect session body
abstract int	<u>getRedirectSessionCode()</u> Get session redirect HTTP response code (default 302)
abstract String	<u>getRedirectSessionContentType()</u> Get redirect session HTTP Content-Type
abstract String	<u>getRedirectSessionURL()</u> Get redirect session URL
abstract String	<u>getReferrer()</u> Get referrer
abstract String	<u>getServerIp()</u> Get server IP address
abstract int	<u>getServerPort()</u> Get server port
abstract int	<u>getSessionFormat()</u> Get format, see SESSIONFORMAT_*
abstract String	<u>getSessionId()</u> Get session id
abstract int	<u>getSessionProtocol()</u> Get protocol, see SESSIONPROTOCOL_*
abstract int	<u>getSessionTimeout()</u> Get the session timeout for this session (milliseconds)
abstract int	<u>getSessionType()</u> Get session type: see SESSIONTYPE_*
abstract <u>IMediaStream</u>	<u>getStream()</u> Get the IMediaStream associated with this HTTP session

abstract String	<u>getStreamExt()</u> Get stream extension
abstract String	<u>getStreamName()</u> Get stream name
abstract HTTPStreamerStreamNameParts	<u>getStreamNameParts(String streamName)</u> Break the stream name into parts
abstract long	<u>getStreamPosition()</u> Get stream position
abstract String	<u>getTimeRunning()</u> Get the time this session has been running (milliseconds)
abstract double	<u>getTimeRunningSeconds()</u> Get the time this session has been running (seconds)
abstract <u>IHTTPStreamerTranscoderVODIndex</u>	<u>getTranscoderVODIndex()</u> Get the VOD Transcoder index information
abstract <u>IHTTPStreamerTranscoderVODDestinationIndex</u>	<u>getTranscoderVODIndex(String bitrateStr)</u> Get VOD transcoder index for given bitrate
abstract java.util.Map	<u>getTranscoderVODIndexDestinationsMap()</u> Get the VOD Transcoder destination map
abstract java.util.List	<u>getTranscoderVODIndexDestinationsOrder()</u> Get the list of VOD Transcoder destinations in playlist order
abstract com.wowza.wms.transcoder.vod.TranscoderVODSession	<u>getTranscoderVODSession()</u> Get the vod transcoder session associated with this HTTP session
abstract String	<u>getUri()</u> Get the URI associated with initial request
abstract String	<u>getUserAgent()</u> Get user agent
abstract java.util.Map	<u>getUserHTTPHeaders()</u> Get user HTTP header.
abstract String	<u>getUserQueryStr()</u> This query string will be added to URLs used in HTTP streaming
abstract <u>IVHost</u>	<u>getVHost()</u> Get vhost
abstract String	<u>getVODTranscodeNGRP()</u> Get the VOD Transcoder NGRP name
abstract void	<u>indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)</u> Index the HTTP session for VOD transcoder streaming
abstract boolean	<u>isAcceptSession()</u> Return true if this session has not been rejected

abstract boolean	<u>isActive()</u> Is this session active, false after shutdown
abstract boolean	<u>isDelete()</u> Return true if this session is flagged for deletion.
abstract boolean	<u>isDeleteSession()</u> Get is session to be deleted.
abstract boolean	<u>isFileInfo(String streamName)</u> Return true if the is file information for a given stream name
abstract boolean	<u>isHTTPOrigin()</u> Return true if session in an HTTP origin session
abstract boolean	<u>isPlayLogged()</u> true, if play has been logged
abstract boolean	<u>isRedirectSession()</u> Is session redirect
abstract boolean	<u>isSecure()</u> Returns true if the stream is being streamed over an SSL port
abstract boolean	<u>isTimeout(long timecode)</u> Return true if this session is timed out.
abstract boolean	<u>isTimeoutSession()</u> Get is session timeout.
abstract boolean	<u>isValidated()</u> Has this session been validated
abstract boolean	<u>isValidStreamDomainStr(String streamDomainStr)</u> Internal user, is stream name valid for HTTP session
abstract void	<u>lockRepeaterStreams(java.util.List streamNames, String liveStreamPacketizer, String liveStreamRepeater, String streamTypeStr)</u> Internal user, lock in reapter streams
abstract void	<u>notifyTranscoderVODFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination, MediaReaderH264Chunk mediaReaderChunk, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)</u> Called to notify of VOD Transcoder fill chunk start
abstract void	<u>notifyTranscoderVODFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)</u> Called to notify of VOD Transcoder fill stop
abstract void	<u>notifyTranscoderVODFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext, java.util.List packets)</u> Called to notify of VOD Transcoder fill chunk
abstract void	<u>putFileInfo(String streamName, HTTPStreamerFileInfo fileInfo)</u> Set the file information

abstract void	<u>putStreamNameParts</u> (String streamName, HTTPStreamerStreamNameParts streamNameParts) Add stream name to stream name parts
abstract void	<u>redirectSession</u> (String redirectSessionURL) Redirect session
abstract void	<u>redirectSession</u> (String redirectSessionURL, int redirectSessionCode) Redirect session
abstract void	<u>rejectSession</u> () Reject this HTTP session.
abstract void	<u>removeStreamDomainStr</u> (String streamDomainStr) Internal user, remove stream name
abstract boolean	<u>removeTranscoderVODListener</u> (<u>IHTTPStreamerTranscoderVODActionNotify</u> listener) Remove VOD Transcoder action listener
abstract void	<u>setAcceptSession</u> (boolean acceptSession) Set to false to reject session
abstract void	<u>setActive</u> (boolean isActive) Set session active
abstract void	<u>setAppInstance</u> (<u>IApplicationInstance</u> appInstance) Set the application instance associated with this HTTP session
abstract void	<u>setCookieStr</u> (String cookieStr) Set cookie string
abstract void	<u>setDeleteSession</u> () Set session to be deleted.
abstract void	<u>setDvrSessionInfo</u> (DvrSessionInfo dvr) This information is used to manage the connection to the DVR store.
abstract void	<u>setForwardedIP</u> (String ipAddress) Set the x-[real forwarded] IP address
abstract void	<u>setHTTPOrigin</u> (boolean isHTTPOrigin) Set to true if HTTP origin session
abstract void	<u>setHTTPStreamerAdapter</u> (<u>IHTTPStreamerAdapter</u> httpStreamerAdapter) Set the HTTP streaming adapter associated with this HTTP session
abstract void	<u>setIpAddress</u> (String ipAddress) Set the IP address
abstract void	<u>setLiveStreamingPacketizer</u> (String liveStreamingPacketizer) Set the live stream packetizer name
abstract void	<u>setPlayDuration</u> (long playDuration) Set the play duration (milliseconds) for video on demand playback.
abstract void	<u>setPlayLogged</u> (boolean isPlayLogged) true, if play has been logged

abstract void	<u>setPlaySeek</u> (long playSeek) Set the seek location (milliseconds) where playback should start
abstract void	<u>setPlayStart</u> (long playStart) Set the play start time offset (milliseconds) for video on demand playback.
abstract void	<u>setQueryStr</u> (String queryStr) Set query string
abstract void	<u>setRedirectSession</u> (boolean redirectSession) Set session redirect
abstract void	<u>setRedirectSessionBody</u> (byte[] redirectSessionBody) Set redirect session body
abstract void	<u>setRedirectSessionCode</u> (int redirectSessionCode) Set session redirect HTTP response code (default 302)
abstract void	<u>setRedirectSessionContentType</u> (String redirectSessionContentType) Set redirect session HTTP Content-Type
abstract void	<u>setRedirectSessionURL</u> (String redirectSessionURL) Set redirect session URL
abstract void	<u>setReferrer</u> (String referrer) Set referrer
abstract void	<u>setSecure</u> (boolean isSecure) Set to true if the stream is being streamed over an SSL port
abstract void	<u>setServerIp</u> (String serverIp) Set server IP address
abstract void	<u>setServerPort</u> (int serverPort) Set server port
abstract void	<u>setSessionFormat</u> (int sessionFormat) Set format, see SESSIONFORMAT_*
abstract void	<u>setSessionId</u> (String sessionId) Set session id
abstract void	<u>setSessionProtocol</u> (int sessionProtocol) Set protocol, see SESSIONPROTOCOL_*
abstract void	<u>setSessionTimeout</u> (int sessionTimeout) Set the session timeout for this session (milliseconds)
abstract void	<u>setSessionType</u> (int sessionType) Set session type: see SESSIONTYPE_*
abstract void	<u>setStream</u> (<u>IMediaStream</u> stream) Set the IMediaStream associated with this HTTP session
abstract void	<u>setStreamExt</u> (String streamExt) Set stream extension
abstract void	<u>setStreamName</u> (String streamName) Set stream name

abstract void	<u>setPosition</u> (long streamPosition) Set stream position (will not cause seek)
abstract void	<u>setTimeoutSession</u> (boolean timeoutSession) Set is session timeout.
abstract void	<u>setTranscoderVODIndex</u> (<u>IHTTPStreamerTranscoderVODIndex</u> transcoderVODIndex) Set the VOD Transcoder index information
abstract void	<u>setTranscoderVODSession</u> (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession) Set the vod transcoder session associated with this HTTP session
abstract void	<u>setUri</u> (String uri) Set the URI associated with initial request
abstract void	<u>setUserAgent</u> (String userAgent) Set user agent
abstract void	<u>setUserHTTPHeader</u> (String name, String value) Set user HTTP header.
abstract void	<u>setUserQueryStr</u> (String userQueryStr) This query string will be added to URLs used in HTTP streaming
abstract void	<u>setVHost</u> (<u>IVHost</u> vhost) Set vhost
abstract void	<u>setVODTranscodeNGRP</u> (String vodTranscodeNGRP) Set the VOD Transcoder NGRP name
abstract void	<u>shutdown</u> () Called then the HTTP session is shutting down
abstract void	<u>touch</u> (long timecode) Touch this session to keep it active.
abstract void	<u>updateLoggingValues</u> () Internal user, update logging values
abstract String	<u>validStreamDomainToString</u> () Return the valid domain strings as a string

Fields

SESSIONTYPE_UNKNOWN

public static final int **SESSIONTYPE_UNKNOWN**

Constant value: 0

SESSIONTYPE_LIVE

public static final int **SESSIONTYPE_LIVE**

(continued from last page)

Constant value: **1**

SESSIONTYPE_VOD

```
public static final int SESSIONTYPE_VOD
```

Constant value: **2**

SESSIONTYPE_LIVEDVR

```
public static final int SESSIONTYPE_LIVEDVR
```

Constant value: **3**

SESSIONPROTOCOL_UNKNOWN

```
public static final int SESSIONPROTOCOL_UNKNOWN
```

Constant value: **-1**

SESSIONPROTOCOL_SMOOTHSTREAMING

```
public static final int SESSIONPROTOCOL_SMOOTHSTREAMING
```

Constant value: **0**

SESSIONPROTOCOL_CUPERTINOSTREAMING

```
public static final int SESSIONPROTOCOL_CUPERTINOSTREAMING
```

Constant value: **1**

SESSIONPROTOCOL_SANJOSESTREAMING

```
public static final int SESSIONPROTOCOL_SANJOSESTREAMING
```

Constant value: **2**

SESSIONPROTOCOL_WEBMSTREAMING

```
public static final int SESSIONPROTOCOL_WEBMSTREAMING
```

Constant value: **3**

SESSIONPROTOCOL_MPEGDASHSTREAMING

```
public static final int SESSIONPROTOCOL_MPEGDASHSTREAMING
```

Constant value: **4**

(continued from last page)

SESSIONPROTOCOL_DVRCHUNKSTREAMING

```
public static final int SESSIONPROTOCOL_DVRCHUNKSTREAMING
```

Constant value: **5**

SESSIONPROTOCOL_DIRECTSTREAMING

```
public static final int SESSIONPROTOCOL_DIRECTSTREAMING
```

Constant value: **6**

SESSIONPROTOCOL_TSSTREAMING

```
public static final int SESSIONPROTOCOL_TSSTREAMING
```

Constant value: **7**

SESSIONPROTOCOL_COUNT

```
public static final int SESSIONPROTOCOL_COUNT
```

Constant value: **8**

SESSIONFORMAT_DEFAULT

```
public static final int SESSIONFORMAT_DEFAULT
```

Constant value: **0**

SESSIONFORMAT_CMAF

```
public static final int SESSIONFORMAT_CMAF
```

Constant value: **1**

SESSIONFORMAT_CMAF_LL

```
public static final int SESSIONFORMAT_CMAF_LL
```

Constant value: **2**

Methods

getSessionId

```
public abstract String getSessionId()
```

Get session id

Returns:

session id

setSessionId

```
public abstract void setSessionId(String sessionId)
```

Set session id

Parameters:

sessionId - session id

getVHost

```
public abstract IVHost getVHost()
```

Get vhost

Returns:

vhost

setVHost

```
public abstract void setVHost(IVHost vhost)
```

Set vhost

Parameters:

vhost - vhost

touch

```
public abstract void touch(long timecode)
```

Touch this session to keep it active.

Parameters:

timecode - timecode of touch - System.currentTimeMillis();

isTimeout

```
public abstract boolean isTimeout(long timecode)
```

Return true if this session is timed out.

Parameters:

timecode - last touch - System.currentTimeMillis();

Returns:

true, if timed out

isDelete

```
public abstract boolean isDelete()
```

Return true if this session is flagged for deletion.

Returns:

true, if flagged for deletion

getLock

```
public abstract Object getLock()
```

Get the synchronization lock for this HTTP session

Returns:

synchronization lock

shutdown

```
public abstract void shutdown()
```

Called then the HTTP session is shutting down

isActive

```
public abstract boolean isActive()
```

Is this session active, false after shutdown

Returns:

true if session is active

setActive

```
public abstract void setActive(boolean isActive)
```

Set session active

Parameters:

isActive - session active

getStream

```
public abstract IMediaStream getStream()
```

Get the IMediaStream associated with this HTTP session

Returns:

IMediaStream associated with this HTTP session

setStream

```
public abstract void setStream(IMediaStream stream)
```

Set the IMediaStream associated with this HTTP session

Parameters:

stream - IMediaStream associated with this HTTP session

isTimeoutSession

```
public abstract boolean isTimeoutSession()
```

Get is session timeout.

(continued from last page)

Returns:true if this session is timed out

setTimeoutSession

```
public abstract void setTimeoutSession(boolean timeoutSession)
```

Set is session timeout.

Parameters:timeoutSession - true if this session is timed out

isDeleteSession

```
public abstract boolean isDeleteSession()
```

Get is session to be deleted.

Returns:true if this session is flagged for deletion

setDeleteSession

```
public abstract void setDeleteSession()
```

Set session to be deleted.

getSessionTimeout

```
public abstract int getSessionTimeout()
```

Get the session timeout for this session (milliseconds)

Returns:session timeout for this session (milliseconds)

setSessionTimeout

```
public abstract void setSessionTimeout(int sessionTimeout)
```

Set the session timeout for this session (milliseconds)

Parameters:sessionTimeout - session timeout for this session (milliseconds)

isValidated

```
public abstract boolean isValidated()
```

Has this session been validated

Returns:true, if validated

checkAndSetPlayLogged

```
public abstract boolean checkAndSetPlayLogged()
```

(continued from last page)

If play has not been logged return false, else returns true, sets play has been logged

Returns:

true, if play has been logged

isPlayLogged

```
public abstract boolean isPlayLogged()
```

true, if play has been logged

Returns:

true, if play has been logged

setPlayLogged

```
public abstract void setPlayLogged(boolean isPlayLogged)
```

true, if play has been logged

Parameters:

isPlayLogged - true, if play has been logged

addIOPerformance

```
public abstract void addIOPerformance(IOPerformanceCounter totalIOPerformanceResult)
```

Internal user, keep track of IO performance

Parameters:

totalIOPerformanceResult - IO performance

addIOPerformance2

```
public abstract void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

Internal user, keep track of IO performance

Parameters:

totalIOPerformanceResult - IO performance

getConnectionHolder

```
public abstract ConnectionHolder getConnectionHolder()
```

Connection holder for this session

Returns:

connection holder

getHTTPStreamerAdapter

```
public abstract IHTTPStreamerAdapter getHTTPStreamerAdapter()
```

Get the HTTP streaming adapter associated with this HTTP session

Returns:

HTTP streaming adapter

setHTTPStreamerAdapter

```
public abstract void setHTTPStreamerAdapter(IHTTPStreamerAdapter httpStreamerAdapter)
```

Set the HTTP streaming adapter associated with this HTTP session

Parameters:

httpStreamerAdapter - HTTP streaming adapter

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get the application instance associated with this HTTP session

Returns:

application instance associated with this HTTP session

setAppInstance

```
public abstract void setAppInstance(IApplicationInstance appInstance)
```

Set the application instance associated with this HTTP session

Parameters:

appInstance - application instance associated with this HTTP session

getSessionType

```
public abstract int getSessionType()
```

Get session type: see SESSIONTYPE_*

Returns:

session type: see SESSIONTYPE_*

setSessionType

```
public abstract void setSessionType(int sessionType)
```

Set session type: see SESSIONTYPE_*

Parameters:

sessionType - session type: see SESSIONTYPE_*

getLiveStreamingPacketizer

```
public abstract String getLiveStreamingPacketizer()
```

Get the live stream packetizer name

Returns:

live stream packetizer name

setLiveStreamingPacketizer

```
public abstract void setLiveStreamingPacketizer(String liveStreamingPacketizer)
```

(continued from last page)

Set the live stream packetizer name

Parameters:

liveStreamingPacketizer - live stream packetizer name

getIpAddress

```
public abstract String getIpAddress()
```

Get the IP address

Returns:

IP address

setIpAddress

```
public abstract void setIpAddress(String ipAddress)
```

Set the IP address

Parameters:

ipAddress - IP address

getForwardedIP

```
public abstract String getForwardedIP()
```

Get the x-[real|forwarded] IP address

Returns:

IP address

setForwardedIP

```
public abstract void setForwardedIP(String ipAddress)
```

Set the x-[real|forwarded] IP address

Parameters:

ipAddress - IP address

updateLoggingValues

```
public abstract void updateLoggingValues()
```

Internal user, update logging values

clearLoggingValues

```
public abstract void clearLoggingValues()
```

Internal user, clear logging values

getSessionProtocol

```
public abstract int getSessionProtocol()
```

Get protocol, see SESSIONPROTOCOL_*

(continued from last page)

Returns:

protocol, see SESSIONPROTOCOL_*

setSessionProtocol

```
public abstract void setSessionProtocol(int sessionProtocol)
```

Set protocol, see SESSIONPROTOCOL_*

Parameters:

sessionProtocol - protocol, see SESSIONPROTOCOL_*

getSessionFormat

```
public abstract int getSessionFormat()
```

Get format, see SESSIONFORMAT_*

Returns:

format, see SESSIONFORMAT_*

setSessionFormat

```
public abstract void setSessionFormat(int sessionFormat)
```

Set format, see SESSIONFORMAT_*

Parameters:

sessionFormat - format, see SESSIONFORMAT_*

getServerIp

```
public abstract String getServerIp()
```

Get server IP address

Returns:

server IP address

setServerIp

```
public abstract void setServerIp(String serverIp)
```

Set server IP address

Parameters:

serverIp - server IP address

getServerPort

```
public abstract int getServerPort()
```

Get server port

Returns:

server port

setServerPort

```
public abstract void setServerPort(int serverPort)
```

Set server port

Parameters:

serverPort - server port

getUserAgent

```
public abstract String getUserAgent()
```

Get user agent

Returns:

user agent

setUserAgent

```
public abstract void setUserAgent(String userAgent)
```

Set user agent

Parameters:

userAgent - user agent

getUri

```
public abstract String getUri()
```

Get the URI associated with initial request

Returns:

URI associated with initial request

setUri

```
public abstract void setUri(String uri)
```

Set the URI associated with initial request

Parameters:

uri - URI associated with initial request

getReferrer

```
public abstract String getReferrer()
```

Get referrer

Returns:

referrer

setReferrer

```
public abstract void setReferrer(String referrer)
```

(continued from last page)

Set referrer

Parameters:

referrer - referrer

getQueryStr

```
public abstract String getQueryStr()
```

Get query string

Returns:

query string

setQueryStr

```
public abstract void setQueryStr(String queryStr)
```

Set query string

Parameters:

queryStr - query string

lockRepeaterStreams

```
public abstract void lockRepeaterStreams(java.util.List streamNames,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    String streamTypeStr)
```

Internal user, lock in reapter streams

Parameters:

streamNames - list of stream names

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live repeater name

streamTypeStr - stream type

rejectSession

```
public abstract void rejectSession()
```

Reject this HTTP session. No further processing should occur

acceptSession

```
public abstract void acceptSession()
```

Accept the HTTP session.

isAcceptSession

```
public abstract boolean isAcceptSession()
```

Return true if this session has not been rejected

Returns:

true if this session has not been rejected

setAcceptSession

```
public abstract void setAcceptSession(boolean acceptSession)
```

Set to false to reject session

Parameters:

acceptSession - false to reject session

getCookieStr

```
public abstract String getCookieStr()
```

Get cookie string

Returns:

cookie string

setCookieStr

```
public abstract void setCookieStr(String cookieStr)
```

Set cookie string

Parameters:

cookieStr - cookie string

getStreamName

```
public abstract String getStreamName()
```

Get stream name

Returns:

stream name

setStreamName

```
public abstract void setStreamName(String streamName)
```

Set stream name

Parameters:

streamName - stream name

getStreamExt

```
public abstract String getStreamExt()
```

Get stream extension

Returns:

stream extension

setStreamExt

```
public abstract void setStreamExt(String streamExt)
```

(continued from last page)

Set stream extension

Parameters:

streamExt - stream extension

getStreamNameParts

```
public abstract HTTPStreamerStreamNameParts getStreamNameParts(String streamName)
```

Break the stream name into parts

Parameters:

streamName - stream name

Returns:

stream name parts

containsStreamNameParts

```
public abstract boolean containsStreamNameParts(String streamName)
```

Return true if stream name in stream name parts

Parameters:

streamName - stream name

Returns:

true if stream name in stream name parts

putStreamNameParts

```
public abstract void putStreamNameParts(String streamName,  
    HTTPStreamerStreamNameParts streamNameParts)
```

Add stream name to stream name parts

Parameters:

streamName - stream name

streamNameParts - stream name parts

getStreamPosition

```
public abstract long getStreamPosition()
```

Get stream position

Returns:

stream position

setStreamPosition

```
public abstract void setStreamPosition(long streamPosition)
```

Set stream position (will not cause seek)

Parameters:

streamPosition - stream position

getIOPerformanceCounter

```
public abstract IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter

Returns:

IO performance counter

getFileInfo

```
public abstract HTTPStreamerFileInfo getFileInfo(String streamName)
```

Get the file information if video on demand streaming

Parameters:

streamName - stream name

Returns:

file information

putFileInfo

```
public abstract void putFileInfo(String streamName,  
    HTTPStreamerFileInfo fileInfo)
```

Set the file information

Parameters:

streamName - stream name

fileInfo - file information

isFileInfo

```
public abstract boolean isFileInfo(String streamName)
```

Return true if the is file information for a given stream name

Parameters:

streamName - stream name

Returns:

true if the is file information for a given stream name

isValidStreamDomainStr

```
public abstract boolean isValidStreamDomainStr(String streamDomainStr)
```

Internal user, is stream name valid for HTTP session

Parameters:

streamDomainStr - stream name

Returns:

true if valid

(continued from last page)

validStreamDomainToString

```
public abstract String validStreamDomainToString()
```

Return the valid domain strings as a string

Returns:

valid domain strings as a string

containsStreamDomainStr

```
public abstract boolean containsStreamDomainStr(String streamDomainStr)
```

Internal user, test stream name

Parameters:

streamDomainStr - stream name

Returns:

true if valid

removeStreamDomainStr

```
public abstract void removeStreamDomainStr(String streamDomainStr)
```

Internal user, remove stream name

Parameters:

streamDomainStr - stream name

addStreamDomainStr

```
public abstract void addStreamDomainStr(String streamDomainStr)
```

Internal user, add stream name

Parameters:

streamDomainStr - stream name

addStreamDomainStrs

```
public abstract void addStreamDomainStrs(java.util.List streamNames)
```

Internal user, add stream names

Parameters:

streamNames - stream names

getElapsedTime

```
public abstract ElapsedTimer getElapsedTime()
```

Get the elapsed timer to see how long this session has been running

Returns:

elapsed timer (milliseconds)

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getTimeRunning

```
public abstract String getTimeRunning()
```

Get the time this session has been running (milliseconds)

Returns:

time this session has been running (milliseconds)

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get the time this session has been running (seconds)

Returns:

time this session has been running (seconds)

getProperties

```
public abstract WMSProperties getProperties()
```

Get the properties associated with this session

Returns:

properties

getUserQueryStr

```
public abstract String getUserQueryStr()
```

This query string will be added to URLs used in HTTP streaming

Returns:

user query string

setUserQueryStr

```
public abstract void setUserQueryStr(String userQueryStr)
```

This query string will be added to URLs used in HTTP streaming

Parameters:

userQueryStr - user query string

setDvrSessionInfo

```
public abstract void setDvrSessionInfo(DvrSessionInfo dvr)
```

This information is used to manage the connection to the DVR store.

Parameters:

dvr - The DVR session info.

getDvrSessionInfo

```
public abstract DvrSessionInfo getDvrSessionInfo()
```

(continued from last page)

This information is used to manage the connection to the DVR store.

Returns:

DVR session info.

extractHTTPRequestInfo

```
public abstract void extractHTTPRequestInfo(IHTTPRequest req)
```

Extract information from HTTP request

Parameters:

req - HTTP request

getHTTPHeaderMap

```
public abstract java.util.Map getHTTPHeaderMap()
```

Get a copy of the HTTP request header map

Returns:

copy of the HTTP request header map

getHTTPHeader

```
public abstract String getHTTPHeader(String name)
```

Get a HTTP header value such as 'Content-Length'

Parameters:

name - header name

Returns:

header value

getHTTPIntHeader

```
public abstract int getHTTPIntHeader(String name)
```

Get a HTTP header value such as 'Content-Length' and return as int

Parameters:

name - header name

Returns:

header value

getHTTPHeaderNames

```
public abstract java.util.Set getHTTPHeaderNames()
```

Get a Set of the header names

Returns:

Set of header names

(continued from last page)

getPlayStart

```
public abstract long getPlayStart()
```

Get the play start time offset (milliseconds) for video on demand playback.

Returns:

play start time offset (milliseconds)

setPlayStart

```
public abstract void setPlayStart(long playStart)
```

Set the play start time offset (milliseconds) for video on demand playback.

Parameters:

playStart - play start time offset (milliseconds)

getPlayDuration

```
public abstract long getPlayDuration()
```

Get the play duration (milliseconds) for video on demand playback. A values of -1 means play to end.

Returns:

play duration (milliseconds)

setPlayDuration

```
public abstract void setPlayDuration(long playDuration)
```

Set the play duration (milliseconds) for video on demand playback. A values of -1 means play to end.

Parameters:

playDuration - play duration (milliseconds)

getPlaySeek

```
public abstract long getPlaySeek()
```

Get the seek location (milliseconds) where playback should start

Returns:

seek location (milliseconds)

setPlaySeek

```
public abstract void setPlaySeek(long playSeek)
```

Set the seek location (milliseconds) where playback should start

Parameters:

playSeek - seek location (milliseconds)

setUserHTTPHeader

```
public abstract void setUserHTTPHeader(String name,  
                                         String value)
```

(continued from last page)

Set user HTTP header. This header value will be added to all HTTP responses

Parameters:

name - name
value - value

getUserHTTPHeaders

```
public abstract java.util.Map getUserHTTPHeaders()
```

Get user HTTP header. This header value will be added to all HTTP responses

Returns:

header map

addUserHTTPHeaders

```
public abstract void addUserHTTPHeaders(IHTTPResponse resp)
```

Internal

Parameters:

resp - response

getCORSHeaders

```
public abstract HTTPCORSHeaders getCORSHeaders()
```

Returns:

HTTPCORSHeaders object

doSessionRedirect

```
public abstract void doSessionRedirect(IHTTPResponse resp)
```

Internal

Parameters:

resp - response

doSessionRedirect

```
public abstract void doSessionRedirect(IHTTPResponse resp,  
    String redirectSessionURL,  
    String redirectSessionContentType,  
    int redirectSessionCode)
```

Internal

Parameters:

resp - response
redirectSessionURL - redirect session URL
redirectSessionContentType
redirectSessionCode - redirect session response code (default 302)

(continued from last page)

isRedirectSession

```
public abstract boolean isRedirectSession()
```

Is session redirect

Returns:

session redirect

setRedirectSession

```
public abstract void setRedirectSession(boolean redirectSession)
```

Set session redirect

Parameters:

redirectSession - session redirect

getRedirectSessionCode

```
public abstract int getRedirectSessionCode()
```

Get session redirect HTTP response code (default 302)

Returns:

session redirect HTTP response code

setRedirectSessionCode

```
public abstract void setRedirectSessionCode(int redirectSessionCode)
```

Set session redirect HTTP response code (default 302)

Parameters:

redirectSessionCode - session redirect HTTP response code

getRedirectSessionURL

```
public abstract String getRedirectSessionURL()
```

Get redirect session URL

Returns:

redirect session URL

setRedirectSessionURL

```
public abstract void setRedirectSessionURL(String redirectSessionURL)
```

Set redirect session URL

Parameters:

redirectSessionURL - redirect session URL

redirectSession

```
public abstract void redirectSession(String redirectSessionURL)
```

(continued from last page)

Redirect session

Parameters:

redirectSessionURL - redirect session URL

redirectSession

```
public abstract void redirectSession(String redirectSessionURL,  
    int redirectSessionCode)
```

Redirect session

Parameters:

redirectSessionURL - redirect session URL

redirectSessionCode - redirect session response code (default 302)

getRedirectSessionBody

```
public abstract byte[] getRedirectSessionBody()
```

Get redirect session body

Returns:

redirect session body

setRedirectSessionBody

```
public abstract void setRedirectSessionBody(byte[] redirectSessionBody)
```

Set redirect session body

Parameters:

redirectSessionBody - redirect session body

getRedirectSessionContentType

```
public abstract String getRedirectSessionContentType()
```

Get redirect session HTTP Content-Type

Returns:

redirect session HTTP Content-Type

setRedirectSessionContentType

```
public abstract void setRedirectSessionContentType(String redirectSessionContentType)
```

Set redirect session HTTP Content-Type

Parameters:

redirectSessionContentType

getLastRequest

```
public abstract long getLastRequest()
```

Get the last timestamp of the last Io request

Returns:

(continued from last page)

last timestamp of the last Io request (milliseconds)

isHTTPOrigin

```
public abstract boolean isHTTPOrigin()
```

Return true if session in an HTTP origin session

Returns:

true if session in an HTTP origin session

setHTTPOrigin

```
public abstract void setHTTPOrigin(boolean isHTTPOrigin)
```

Set to true if HTTP origin session

Parameters:

isHTTPOrigin - true if HTTP origin session

getAndClearNotifyCreate

```
public abstract boolean getAndClearNotifyCreate()
```

getTranscoderVODSession

```
public abstract com.wowza.wms.transcoder.vod.TranscoderVODSession  
getTranscoderVODSession()
```

Get the vod transcoder session associated with this HTTP session

Returns:

vod transcoder session

setTranscoderVODSession

```
public abstract void  
setTranscoderVODSession(com.wowza.wms.transcoder.vod.TranscoderVODSession  
transcoderVODSession)
```

Set the vod transcoder session associated with this HTTP session

Parameters:

transcoderVODSession - vod transcoder session

getVODTranscodeNGRP

```
public abstract String getVODTranscodeNGRP()
```

Get the VOD Transcoder NGRP name

Returns:

VOD Transcoder NGRP name

(continued from last page)

setVODTranscodeNGRP

```
public abstract void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

Set the VOD Transcoder NGRP name

Parameters:

vodTranscodeNGRP - VOD Transcoder NGRP name

getTranscoderVODIndex

```
public abstract IHTTPStreamerTranscoderVODIndex getTranscoderVODIndex()
```

Get the VOD Transcoder index information

Returns:

VOD Transcoder index

setTranscoderVODIndex

```
public abstract void setTranscoderVODIndex(IHTTPStreamerTranscoderVODIndex transcoderVODIndex)
```

Set the VOD Transcoder index information

Parameters:

transcoderVODIndex - VOD Transcoder index

getTranscoderVODIndexDestinationsOrder

```
public abstract java.util.List getTranscoderVODIndexDestinationsOrder()
```

Get the list of VOD Transcoder destinations in playlist order

Returns:

list of VOD Transcoder destinations

getTranscoderVODIndexDestinationsMap

```
public abstract java.util.Map getTranscoderVODIndexDestinationsMap()
```

Get the VOD Transcoder destination map

Returns:

VOD Transcoder destination map

indexTranscoderVOD

```
public abstract void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
```

Index the HTTP session for VOD transcoder streaming

Parameters:

appContext - application context

vodTranscodeNGRP - transcoder name group

(continued from last page)

getTranscoderVODIndex

```
public abstract IHTTPStreamerTranscoderVODDestinationIndex  
getTranscoderVODIndex(String bitrateStr)
```

Get VOD transcoder index for given bitrate

Parameters:

bitrateStr - bitrate string

Returns:

VOD transcoder index

addHTTPSessionToTCPSession

```
public abstract void addHTTPSessionToTCPSession(RtmpSessionInfo wmsSessionInfo,  
IHTTPStreamerApplicationContext appContext)
```

Add HTTP session to TCP session for tracking

Parameters:

wmsSessionInfo - TCP session info

appContext - app context

isSecure

```
public abstract boolean isSecure()
```

Returns true if the stream is being streamed over an SSL port

Returns:

true if the stream is being streamed over an SSL port

setSecure

```
public abstract void setSecure(boolean isSecure)
```

Set to true if the stream is being streamed over an SSL port

Parameters:

isSecure - true if the stream is being streamed over an SSL port

addTranscoderVODListener

```
public abstract void addTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotify  
listener)
```

Add VOD Transcoder action listener

Parameters:

listener - VOD Transcoder action listener

removeTranscoderVODListener

```
public abstract boolean  
removeTranscoderVODListener(IHTTPStreamerTranscoderVODActionNotify listener)
```

Remove VOD Transcoder action listener

(continued from last page)

Parameters:

listener - VOD Transcoder action listener

Returns:

true/false is successful

notifyTranscoderVODFillChunkStart

```
public abstract void
notifyTranscoderVODFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODDestination
transcoderVODDestination,
    MediaReaderH264Chunk mediaReaderChunk,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext)
```

Called to notify of VOD Transcoder fill chunk start

Parameters:

transcoderVODSession - VOD Transcoder session
transcoderVODDestination - VOD Transcoder destination
mediaReaderChunk - media reader for the chunk
transcoderVODChunkContext - VOD Transcoder context

notifyTranscoderVODFillChunkTranscode

```
public abstract void
notifyTranscoderVODFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession
n transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext,
    java.util.List packets)
```

Called to notify of VOD Transcoder fill chunk

Parameters:

transcoderVODSession - VOD Transcoder session
transcoderVODChunkContext - VOD Transcoder context
packets

notifyTranscoderVODFillChunkStop

```
public abstract void
notifyTranscoderVODFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext)
```

Called to notify of VOD Transcoder fill stop

Parameters:

transcoderVODSession - VOD Transcoder session
transcoderVODChunkContext - VOD Transcoder context

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerSessionNotify

public interface **IHTTPStreamerSessionNotify**
extends

IHTTPStreamerSessionNotify: HTTP session create/destroy interface

Method Summary

abstract void	onHTTPStreamerSessionCreate (IHTTPStreamerSession httpStreamerSession) Called when an HTTP streaming session is created
abstract void	onHTTPStreamerSessionDestroy (IHTTPStreamerSession httpStreamerSession) Called when an HTTP streaming session is destroyed

Methods

onHTTPStreamerSessionCreate

public abstract void **onHTTPStreamerSessionCreate**([IHTTPStreamerSession](#) httpStreamerSession)

Called when an HTTP streaming session is created

Parameters:

httpStreamerSession - HTTP streaming session

onHTTPStreamerSessionDestroy

public abstract void **onHTTPStreamerSessionDestroy**([IHTTPStreamerSession](#) httpStreamerSession)

Called when an HTTP streaming session is destroyed

Parameters:

httpStreamerSession - HTTP streaming session

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerTranscoderVODActionNotify

public interface IHTTPStreamerTranscoderVODActionNotify
extends

Method Summary

abstract void	<code>onFillChunkStart</code> (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination, MediaReaderH264Chunk mediaReaderChunk, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)
abstract void	<code>onFillChunkStop</code> (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext)
abstract void	<code>onFillChunkTranscode</code> (com.wowza.wms.transcoder.vod.TranscoderVODSession transcoderVODSession, com.wowza.wms.transcoder.vod.TranscoderVODChunkContext transcoderVODChunkContext, java.util.List packets)

Methods

onFillChunkStart

```
public abstract void
onFillChunkStart(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODDestination
transcoderVODDestination,
    MediaReaderH264Chunk mediaReaderChunk,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext)
```

onFillChunkTranscode

```
public abstract void
onFillChunkTranscode(com.wowza.wms.transcoder.vod.TranscoderVODSession
transcoderVODSession,
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext
transcoderVODChunkContext,
    java.util.List packets)
```

(continued from last page)

onFillChunkStop

```
public abstract void onFillChunkStop(com.wowza.wms.transcoder.vod.TranscoderVODSession  
transcoderVODSession,  
    com.wowza.wms.transcoder.vod.TranscoderVODChunkContext  
transcoderVODChunkContext)
```

com.wowza.wms.httpstreamer.model Interface IHTTPStreamerTranscoderVODDestinationIndex

public interface IHTTPStreamerTranscoderVODDestinationIndex
extends

Method Summary

abstract int	getBitrate()
abstract com.wowza.wms.transcoder.vod.TranscoderVODDestination	getTranscoderVODDestination()
abstract void	setBitrate (int bitrate)
abstract void	setTranscoderVODDestination (com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination)

Methods

getTranscoderVODDestination

public abstract com.wowza.wms.transcoder.vod.TranscoderVODDestination
getTranscoderVODDestination()

setTranscoderVODDestination

public abstract void
setTranscoderVODDestination(com.wowza.wms.transcoder.vod.TranscoderVODDestination transcoderVODDestination)

getBitrate

public abstract int **getBitrate**()

setBitrate

public abstract void **setBitrate**(int bitrate)

com.wowza.wms.httpstreamer.model

Interface IHTTPStreamerTranscoderVODIndex

public interface IHTTPStreamerTranscoderVODIndex
extends

com.wowza.wms.httpstreamer.model Interface **ILiveStreamPacketizerSegmentWriter**

public interface **ILiveStreamPacketizerSegmentWriter**
extends

Field Summary

public static final	MAX_CHUNK_LOG_COUNT Value: maxChunkLogCount
public static final	MAX_SEGMENT_LOG_COUNT Value: maxSegmentLogCount

Method Summary

abstract void	addPacket (LiveStreamPacketizerPacketHolder holder)
abstract void	endChunk (long endTimeCode, long segmentChunkNum)
abstract void	endSegment (long endTimeCodeVideo, long endTimeCodeAudio)
abstract boolean	isM4S (int codecAudio, int codecVideo)
abstract boolean	isValidAudioCodec (int codec)
abstract boolean	isValidVideoCodec (int codec)
abstract boolean	isWebM (int codecAudio, int codecVideo)
abstract void	resetStream ()
abstract void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
abstract void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
abstract void	startChunk (long timecode, long timecodeUser, long segmentChunkNum)
abstract void	startSegment (long chunkId, long chunkIdUser, int videoCodecId, int audioCodecId, long timecode, long timecodeUser, String originRepeaterContext, CencInfo cencInfo)

Fields

(continued from last page)

MAX_CHUNK_LOG_COUNT

```
public static final java.lang.String MAX_CHUNK_LOG_COUNT
```

Constant value: **maxChunkLogCount**

MAX_SEGMENT_LOG_COUNT

```
public static final java.lang.String MAX_SEGMENT_LOG_COUNT
```

Constant value: **maxSegmentLogCount**

Methods

startSegment

```
public abstract void startSegment(long chunkId,  
    long chunkIdUser,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    long timecodeUser,  
    String originRepeaterContext,  
    CencInfo cencInfo)
```

endSegment

```
public abstract void endSegment(long endTimecodeVideo,  
    long endTimecodeAudio)
```

startChunk

```
public abstract void startChunk(long timecode,  
    long timecodeUser,  
    long segmentChunkNum)
```

endChunk

```
public abstract void endChunk(long endTimecode,  
    long segmentChunkNum)
```

addPacket

```
public abstract void addPacket(LiveStreamPacketizerPacketHolder holder)
```

(continued from last page)

setCodecInfoAudio

```
public abstract void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public abstract void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

resetStream

```
public abstract void resetStream()
```

isValidAudioCodec

```
public abstract boolean isValidAudioCodec(int codec)
```

isValidVideoCodec

```
public abstract boolean isValidVideoCodec(int codec)
```

isM4S

```
public abstract boolean isM4S(int codecAudio,  
int codecVideo)
```

isWebM

```
public abstract boolean isWebM(int codecAudio,  
int codecVideo)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.file

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IHTTPStreamerMPEGDashIndex

public interface IHTTPStreamerMPEGDashIndex
extends

Method Summary

abstract void	close()
abstract IHTTPStreamerApplicat ionContext	getApplicationContext()
abstract java.util.List	getBitratesAudio()
abstract java.util.List	getBitratesLongs()
abstract java.util.List	getBitratesStrings()
abstract java.util.List	getBitratesVideo()
abstract TimedTextRequest	getCaptionRequest()
abstract IHTTPStreamerSession	getHttpStreamerSession()
abstract MPEGDashProfileManife st	getManifest (int profile, int manifestId, java.util.Map queryMap)
abstract int	getNumStreams()
abstract long	getPlayDuration()
abstract long	getPlaySeek()
abstract long	getPlayStart()
abstract WMSProperties	getProperties()
abstract MPEGDashSegment	getSegment (MPEGDashSegmentId segmentId)
abstract String	getStreamName()
abstract java.util.List	getStreamNames()

abstract java.util.List	getStreamNamesRaw()
abstract String	getVODTranscodeNGRP()
abstract boolean	indexFile(IHTTPStreamerSession httpStreamerSession, String rawStreamName)
abstract void	init(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
abstract boolean	isReloadMediaList()
abstract void	open()
abstract void	setCaptionRequest (TimedTextRequest request)
abstract void	setPlayDuration (long playDuration)
abstract void	setPlaySeek (long playSeek)
abstract void	setPlayStart (long playStart)
abstract void	setVODTranscodeNGRP (String vodTranscodeNGRP)

Methods

init

```
public abstract void init(IHTTPStreamerApplicationContext appContext,
    IHTTPStreamerSession httpStreamerSession,
    String rawStreamName,
    String streamExt,
    String streamName,
    long playStart,
    long playDuration,
    long playSeek,
    TimedTextRequest captionRequest,
    String vodTranscodeNGRP)
```

indexFile

```
public abstract boolean indexFile(IHTTPStreamerSession httpStreamerSession,
    String rawStreamName)
```

close

```
public abstract void close()
```

(continued from last page)

open

```
public abstract void open()
```

getSegment

```
public abstract MPEGDashSegment getSegment(MPEGDashSegmentId segmentId)
```

getApplicationContext

```
public abstract IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public abstract IHTTPStreamerSession getHttpStreamerSession()
```

getNumStreams

```
public abstract int getNumStreams()
```

getStreamName

```
public abstract String getStreamName()
```

getStreamNames

```
public abstract java.util.List getStreamNames()
```

getStreamNamesRaw

```
public abstract java.util.List getStreamNamesRaw()
```

getBitratesLongs

```
public abstract java.util.List getBitratesLongs()
```

(continued from last page)

getBitratesStrings

```
public abstract java.util.List getBitratesStrings()
```

getBitratesAudio

```
public abstract java.util.List getBitratesAudio()
```

getBitratesVideo

```
public abstract java.util.List getBitratesVideo()
```

getManifest

```
public abstract MPEGDashProfileManifest getManifest(int profile,  
                                                    int manifestId,  
                                                    java.util.Map queryMap)
```

getPlayStart

```
public abstract long getPlayStart()
```

setPlayStart

```
public abstract void setPlayStart(long playStart)
```

getPlayDuration

```
public abstract long getPlayDuration()
```

setPlayDuration

```
public abstract void setPlayDuration(long playDuration)
```

getPlaySeek

```
public abstract long getPlaySeek()
```

(continued from last page)

setPlaySeek

```
public abstract void setPlaySeek(long playSeek)
```

getCaptionRequest

```
public abstract TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public abstract void setCaptionRequest(TimedTextRequest request)
```

getVODTranscodeNGRP

```
public abstract String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public abstract void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

isReloadMediaList

```
public abstract boolean isReloadMediaList()
```

getProperties

```
public abstract WMSProperties getProperties()
```

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IHTTPStreamerMPEDashIndexItem

public interface IHTTPStreamerMPEDashIndexItem
extends

Method Summary

abstract java.util.Date	getCreationDate()
abstract CencInfo	getEncInfo()
abstract int	getIndex()
abstract long	getStartTimecode()
abstract long	getStartTimecodeAudio()
abstract long	getStartTimecodeVideo()
abstract long	getStopTimecode()
abstract long	getStopTimecodeAudio()
abstract long	getStopTimecodeVideo()
abstract void	setCreationDate (java.util.Date creationDate)
abstract void	setEncInfo (CencInfo encInfo)
abstract void	setIndex (int index)
abstract void	setStartTimecode (long startTimecode)
abstract void	setStartTimecodeAudio (long startTimecode)
abstract void	setStartTimecodeVideo (long startTimecode)
abstract void	setStopTimecode (long stopTimecode)
abstract void	setStopTimecodeAudio (long stopTimecode)
abstract void	setStopTimecodeVideo (long stopTimecode)

(continued from last page)

Methods

getStartTimecode

```
public abstract long getStartTimecode()
```

setStartTimecode

```
public abstract void setStartTimecode(long startTimecode)
```

getStopTimecode

```
public abstract long getStopTimecode()
```

setStopTimecode

```
public abstract void setStopTimecode(long stopTimecode)
```

getIndex

```
public abstract int getIndex()
```

setIndex

```
public abstract void setIndex(int index)
```

setEncInfo

```
public abstract void setEncInfo(CencInfo encInfo)
```

getEncInfo

```
public abstract CencInfo getEncInfo()
```

setCreationDate

```
public abstract void setCreationDate(java.util.Date creationDate)
```

(continued from last page)

getCreationDate

```
public abstract java.util.Date getCreationDate()
```

getStartTimecodeVideo

```
public abstract long getStartTimecodeVideo()
```

setStartTimecodeVideo

```
public abstract void setStartTimecodeVideo(long startTimecode)
```

getStopTimecodeVideo

```
public abstract long getStopTimecodeVideo()
```

setStopTimecodeVideo

```
public abstract void setStopTimecodeVideo(long stopTimecode)
```

getStartTimecodeAudio

```
public abstract long getStartTimecodeAudio()
```

setStartTimecodeAudio

```
public abstract void setStartTimecodeAudio(long startTimecode)
```

getStopTimecodeAudio

```
public abstract long getStopTimecodeAudio()
```

setStopTimecodeAudio

```
public abstract void setStopTimecodeAudio(long stopTimecode)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.file Interface IMediaReaderMPEGDash

All Superinterfaces:
[IMediaReader](#)

public interface **IMediaReaderMPEGDash**
extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX
	Value: mpegdash

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

abstract void	fillChunk (HTTPStreamerMPEGDashIndexItem indexItem, IHTTPStreamerMPEGDashIndexItem item, MPEGDashSegment chunk)
abstract void	indexFile (HTTPStreamerMPEGDashIndexItem index)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **mpegdash**

Methods

(continued from last page)

indexFile

```
public abstract void indexFile(HTTPStreamerMPEGDashIndexItem index)
```

fillChunk

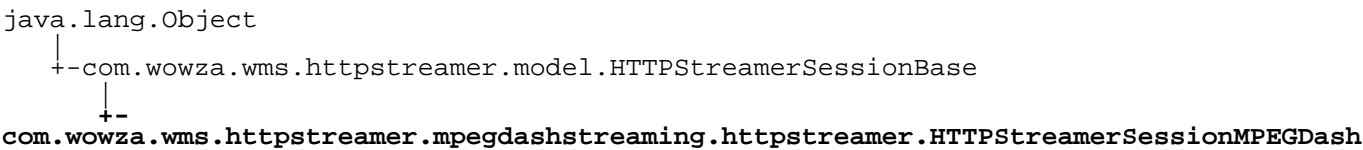
```
public abstract void fillChunk(HTTPStreamerMPEGDashIndexItem indexItem,  
    HTTPStreamerMPEGDashIndexItem item,  
    MPEGDashSegment chunk)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.httpstreamer

com.wowza.wms.httpstreamer.mpegdashstreaming.httpstreamer

Class HTTPStreamerSessionMPEGDash



All Implemented Interfaces:
[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

public class **HTTPStreamerSessionMPEGDash**
extends HTTPStreamerSessionBase
implements [IHTTPStreamerSession](#), [IHTTPSessionNotify](#)

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase
acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface com.wowza.wms.httpstreamer.model.IHTTPStreamerSession
SESSIONFORMAT_CMAF , SESSIONFORMAT_CMAF_LL , SESSIONFORMAT_DEFAULT , SESSIONPROTOCOL_COUNT , SESSIONPROTOCOL_CUPERTINOSTREAMING , SESSIONPROTOCOL_DIRECTSTREAMING , SESSIONPROTOCOL_DVRCHUNKSTREAMING , SESSIONPROTOCOL_MPEGDASHSTREAMING , SESSIONPROTOCOL_SANJOSESTREAMING , SESSIONPROTOCOL_SMOOTHSTREAMING , SESSIONPROTOCOL_TSSTREAMING , SESSIONPROTOCOL_UNKNOWN , SESSIONPROTOCOL_WEBMSTREAMING , SESSIONTYPE_LIVE , SESSIONTYPE_LIVEDVR , SESSIONTYPE_UNKNOWN , SESSIONTYPE_VOD

Constructor Summary

public	HTTPStreamerSessionMPEGDash()
--------	---

Method Summary

void	clearLoggingValues()
boolean	containsIndex (String streamName)

static IHTTPStreamerMPEGDashIndex	createIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
IHTTPStreamerMPEGDashIndex	getIndex (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
IHTTPStreamerMPEGDashIndex	getIndexLive (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
void	indexTranscoderVOD (IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
void	logLiveChunk (MPEGDashSegment chunk)
void	logVODChunk (MPEGDashSegment chunk)
void	notifyHTTPSessionCreate (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy (IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	shutdown ()
void	updateLoggingValues ()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHeaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionMPEGDash

```
public HTTPStreamerSessionMPEGDash()
```

Methods

shutdown

```
public void shutdown()
```

containsIndex

```
public boolean containsIndex(String streamName)
```

createIndexLive

```
public static IHTTPStreamerMPEGDashIndex  
createIndexLive(IHTTPStreamerApplicationContext appContext,  
                 IHTTPStreamerSession httpStreamerSession,  
                 String rawStreamName,  
                 String streamExt,  
                 String streamName)
```

getIndexLive

```
public IHTTPStreamerMPEGDashIndex getIndexLive(IHTTPStreamerApplicationContext  
appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName)
```

getIndex

```
public IHTTPStreamerMPEGDashIndex getIndex(IHTTPStreamerApplicationContext appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName,  
        long playStart,  
        long playDuration,  
        long playSeek,  
        TimedTextRequest captionRequest,  
        String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(MPEGDashSegment chunk)
```

logVODChunk

```
public void logVODChunk(MPEGDashSegment chunk)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer
Interface IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler
extends

Method Summary	
abstract void	init (LiveStreamPacketizerMPEGDash liveStreamPacketizer)
abstract HTTPStreamerMPEGDashL iveStreamPacketizerCh unkIdContext	onAssignChunkId (HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public abstract void **init**([LiveStreamPacketizerMPEGDash](#) liveStreamPacketizer)

onAssignChunkId

public abstract HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext
onAssignChunkId(HTTPStreamerMPEGDashLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Class LiveStreamPacketizerMPEGDash

java.lang.Object

└─ com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└─

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.LiveStreamPacketizerMPEGDash

All Implemented Interfaces:

Runnable, IdleNotify, [ILiveStreamPacketizer](#)

public class **LiveStreamPacketizerMPEGDash**
extends LiveStreamPacketizerBase

Field Summary

protected	additionalLiveProfiles
protected	appProps
protected	audioCodecId
public static final	AUDIOGROUPCOUNT Value: 3
protected	clazz
protected	clazzName
protected	enableHbbtvLiveProfile
protected	encInfo
protected	forceDisplaySizeToBeEven
protected	lastBogusSequence
protected	liveRepeaterEncryptionSharedSecret
protected	lock
protected	logRepeaterItems
protected	maxPackagingWarning
protected	maxSegmentCount

public static final	MAXSEGMENTLOGCOUNT Value: 10
protected	minimumUpdatePeriod
protected	originRepeaterContext
protected	packagingWarning
protected	packagingWarningCtr
public static final	PACKETIZER_NAME Value: mpegdashstreamingpacketizer
protected	playlistSegmentCount
public static final	PLAYSTARTTOLERANCE Value: 500
protected	randomizeMediaName
protected	randomSessionStr
protected	repeaterItems
protected	repeaterSegmentCount
protected	repeaterSeq
protected	segmentDurationTarget
public static final	SEGMENTDURATIONTOLERANCE Value: 500
protected	segmentIdHandler
protected	segmentWriterHandler
protected	segmentWriterHandlerToBeKilled
protected	stream
protected	videoCodecId
public static final	WAITFORCODECTIME Value: 8000

Fields inherited from class `com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase`

```

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled,
captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET,
EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive,
isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC,
lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider,
maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, MEDIA_CHUNK_DURATION,
packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock,
startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

```

Constructor Summary

public	LiveStreamPacketizerMPEGDash()
--------	--

Method Summary

void	addPacket (ContentPackaging contentPackaging, LiveStreamPacketizerPacketHolder holder)
void	addRepeaterItem (MPEGDashRepeaterHolder item)
void	createWriterHandler ()
void	doResetStream (IMediaStream stream)
void	endChunk (ContentPackaging contentPackaging, long endTimeCode, long segmentChunkCount)
void	endSegment (ContentPackaging contentPackaging, long endTimeCodeVideo, long timeCodeAudio)
String	getAdditionalLiveProfiles ()
CmafSegment	getAudioInit (SegmentFormat segmentFormat)
String	getAudioMimeType (SegmentFormat segmentFormat)
CmafSegment	getAudioSegment (SegmentFormat segmentFormat, long index)
CmafSegment	getAudioSegmentByTime (SegmentFormat segmentFormat, long time)
String	getAudioSegmentFileExtString (SegmentFormat segmentFormat)
String	getAudioSegmentFormatString (SegmentFormat segmentFormat)
long	getAudioSegmentIdFirst ()
long	getAudioSegmentIdLast ()
long	getBitrate ()

long	<u>getBitrateAudio()</u>
long	<u>getBitrateVideo()</u>
long	<u>getCalculatedAudioBitrateAverage()</u>
long	<u>getCalculatedAudioBitratePeak()</u>
long	<u>getCalculatedVideoBitrateAverage()</u>
long	<u>getCalculatedVideoBitratePeak()</u>
int	<u>getChunkDurationTarget()</u>
com.wowza.wms.media.model.MediaCodecInfoAudio	<u>getCodecInfoAudio()</u>
com.wowza.wms.media.model.MediaCodecInfoVideo	<u>getCodecInfoVideo()</u>
SegmentFormat	<u>getDefaultSegmentFormat()</u>
int	<u>getDefaultSegmentSetIndex()</u>
<u>EncInfo</u>	<u>getEncInfo()</u>
double	<u>getFrameRate()</u>
Object	<u>getLock()</u>
int	<u>getMaxSegmentCount()</u>
long	<u>getMinimumUpdatePeriod()</u>
int	<u>getPlaylistSegmentCount()</u>
String	<u>getRandomSessionStr()</u>
void	<u>getRepeaterItemsMPEGDash()</u> (java.util.List items, long seq)
long	<u>getRepeaterLastSequence()</u>
int	<u>getRepeaterSegmentCount()</u>
int	<u>getSegmentCount()</u>
int	<u>getSegmentCountAudio()</u>

int	<u>getSegmentCountVideo()</u>
int	<u>getSegmentDurationTarget()</u>
static int	<u>getSegmentDurationTarget()</u> (<u>IApplicationInstance</u> appInstance, String packetizer)
<u>IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler</u>	<u>getSegmentIdHandler()</u>
java.util.Date	<u>getStreamStartDate()</u>
CmafSegment	<u>getVideoInit()</u> (SegmentFormat segmentFormat)
String	<u>getVideoMimeType()</u> (SegmentFormat segmentFormat)
CmafSegment	<u>getVideoSegment()</u> (SegmentFormat segmentFormat, long index)
CmafSegment	<u>getVideoSegmentByTime()</u> (SegmentFormat segmentFormat, long time)
String	<u>getVideoSegmentFileExtString()</u> (SegmentFormat segmentFormat)
String	<u>getVideoSegmentFormatString()</u> (SegmentFormat segmentFormat)
long	<u>getVideoSegmentIdFirst()</u>
long	<u>getVideoSegmentIdLast()</u>
void	<u>indexStream()</u> (HTTPStreamerMPEGDashLiveIndexItem indexItem)
void	<u>init()</u> (String streamName, String packetizerName, <u>IApplicationInstance</u> appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	<u>internalHandlePacket()</u> (<u>IMediaStream</u> stream, <u>AMFPacket</u> packet)
void	<u>internalResetStream()</u> (<u>IMediaStream</u> stream)
void	<u>internalStartStream()</u> (<u>IMediaStream</u> stream)
boolean	<u>isHbbtvLiveProfileEnabled()</u>
boolean	<u>isPlaylistReady()</u>
boolean	<u>isRandomizeMediaName()</u>
void	<u>logEdgeConfigWarning()</u> (String method, ContentPackaging contentPackaging)
void	<u>parseProps()</u> (<u>IApplicationInstance</u> appInstance)

void	repeaterItemsMPEGDashflushed()
void	resetStream()
void	setAudioCodec (int codecId)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setEncryptionRepeaterBytes (CencInfo encInfo)
void	setMaxSegmentCount (int maxSegmentCount)
void	setPlaylistSegmentCount (int playlistSegmentCount)
void	setRandomizeMediaName (boolean randomizeMediaName)
void	setRepeaterSegmentCount (int repeaterSegmentCount)
void	setSegmentIdHandler (IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler segmentIdHandler)
void	setVideoCodec (int codecId)
void	startChunk (ContentPackaging contentPackaging, long timecode, long timecodeUser, long segmentChunkNum)
void	startSegment (ContentPackaging contentPackaging, long segmentId, long segmentIdUser, int videoCodecId, int audioCodecId, long timecode, long timecodeUser, String originRepeaterContext, CencInfo encInfo)
void	trimRepeaterItems (long segmentIndex)
CencInfo	updateCencInfo (long segmentId, ContentPackaging contentPackaging)

Methods inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance, getCaptionProvider, getChunkDurationTarget, getContextStr, getLiveStreamPacketizerId, getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose, getRepeaterLastSequence, getSegmentDurationTarget, getStreamStartupTimeout, getStreamTimeout, handlePacket, init, initLiveCaptionIngestor, internalHandlePacket, internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled, isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle, resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio, setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout, setStreamTimeout, shutdown, startStream, touch

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getChunkDurationTarget](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [getSegmentDurationTarget](#), [getSessionFormat](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from interface [com.wowza.wms.util.IIdleNotify](#)

[onIdle](#)

Methods inherited from interface [java.lang.Runnable](#)

[run](#)

Fields

PACKETIZER_NAME

```
public static final java.lang.String PACKETIZER_NAME
```

Constant value: **mpegdashstreamingpacketizer**

MAXSEGMENTLOGCOUNT

```
public static final int MAXSEGMENTLOGCOUNT
```

Constant value: **10**

SEGMENTDURATIONTOLERANCE

```
public static final int SEGMENTDURATIONTOLERANCE
```

Constant value: **500**

PLAYSTARTTOLERANCE

```
public static final int PLAYSTARTTOLERANCE
```

Constant value: **500**

AUDIOGROUPCOUNT

```
public static final int AUDIOGROUPCOUNT
```

Constant value: **3**

WAITFORCODECTIME

public static final int **WAITFORCODECTIME**

Constant value: **8000**

clazz

protected java.lang.Class **clazz**

clazzName

protected java.lang.String **clazzName**

appProps

protected com.wowza.wms.application.WMSProperties **appProps**

segmentWriterHandler

protected
com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashWriterHandle
r **segmentWriterHandler**

segmentWriterHandlerToBeKilled

protected
com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashWriterHandle
r **segmentWriterHandlerToBeKilled**

lock

protected java.lang.Object **lock**

stream

protected com.wowza.wms.stream.IMediaStream **stream**

audioCodecId

protected int **audioCodecId**

videoCodecId

protected int **videoCodecId**

randomSessionStr

protected java.lang.String **randomSessionStr**

randomizeMediaName

protected boolean **randomizeMediaName**

liveRepeaterEncryptionSharedSecret

protected java.lang.String **liveRepeaterEncryptionSharedSecret**

originRepeaterContext

protected java.lang.String **originRepeaterContext**

encInfo

protected com.wowza.wms.drm.cenc.CencInfo **encInfo**

minimumUpdatePeriod

protected long **minimumUpdatePeriod**

enableHbbtvLiveProfile

protected boolean **enableHbbtvLiveProfile**

additionalLiveProfiles

protected java.lang.String **additionalLiveProfiles**

forceDisplaySizeToBeEven

protected boolean **forceDisplaySizeToBeEven**

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segmentIdHandler

protected
com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler **segmentIdHandler**

segmentDurationTarget

protected int **segmentDurationTarget**

maxSegmentCount

protected int **maxSegmentCount**

playlistSegmentCount

protected int **playlistSegmentCount**

repeaterSegmentCount

protected int **repeaterSegmentCount**

repeaterSeq

protected long **repeaterSeq**

repeaterItems

protected java.util.List **repeaterItems**

packagingWarningCtr

protected int **packagingWarningCtr**

maxPackagingWarning

protected int **maxPackagingWarning**

packagingWarning

protected boolean **packagingWarning**

lastBogusSequence

protected int **lastBogusSequence**

logRepeaterItems

protected boolean **logRepeaterItems**

Constructors

LiveStreamPacketizerMPEGDash

```
public LiveStreamPacketizerMPEGDash()
```

Methods

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

parseProps

```
protected void parseProps(IApplicationInstance appInstance)
```

setEncryptionRepeaterBytes

```
protected void setEncryptionRepeaterBytes(CencInfo encInfo)
```

updateCencInfo

```
public CencInfo updateCencInfo(long segmentId,  
                               ContentPackaging contentPackaging)
```

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getLock

```
public Object getLock()
```

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

createWriterHandler

```
protected void createWriterHandler()
```

doResetStream

```
protected void doResetStream(IMediaStream stream)
```

getCalculatedAudioBitratePeak

```
public long getCalculatedAudioBitratePeak()
```

Returns:

calculated audio bitrate peak

getCalculatedAudioBitrateAverage

```
public long getCalculatedAudioBitrateAverage()
```

Returns:

calculated audio bitrate average

getCalculatedVideoBitratePeak

```
public long getCalculatedVideoBitratePeak()
```

(continued from last page)

Returns:

calculated video bitrate peak

getCalculatedVideoBitrateAverage

```
public long getCalculatedVideoBitrateAverage()
```

Returns:

calculated video bitrate average

getDefaultSegmentSetIndex

```
public int getDefaultSegmentSetIndex()
```

getDefaultSegmentFormat

```
public SegmentFormat getDefaultSegmentFormat()
```

indexStream

```
public void indexStream(HTTPStreamerMPEGDashLiveIndexItem indexItem)
```

getSegmentCount

```
public int getSegmentCount()
```

getSegmentCountVideo

```
public int getSegmentCountVideo()
```

getSegmentCountAudio

```
public int getSegmentCountAudio()
```

getFrameRate

```
public double getFrameRate()
```

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setAudioCodec

```
public void setAudioCodec(int codecId)
```

setVideoCodec

```
public void setVideoCodec(int codecId)
```

getVideoSegmentFormatString

```
public String getVideoSegmentFormatString(SegmentFormat segmentFormat)
```

getAudioSegmentFormatString

```
public String getAudioSegmentFormatString(SegmentFormat segmentFormat)
```

getVideoSegmentFileExtString

```
public String getVideoSegmentFileExtString(SegmentFormat segmentFormat)
```

getAudioSegmentFileExtString

```
public String getAudioSegmentFileExtString(SegmentFormat segmentFormat)
```

getAudioSegmentByTime

```
public CmafSegment getAudioSegmentByTime(SegmentFormat segmentFormat,  
                                           long time)
```

getVideoSegmentByTime

```
public CmafSegment getVideoSegmentByTime(SegmentFormat segmentFormat,  
                                           long time)
```

getAudioSegment

```
public CmafSegment getAudioSegment(SegmentFormat segmentFormat,  
                                    long index)
```

(continued from last page)

getVideoSegment

```
public CmafSegment getVideoSegment(SegmentFormat segmentFormat,  
    long index)
```

getAudioInit

```
public CmafSegment getAudioInit(SegmentFormat segmentFormat)
```

getVideoInit

```
public CmafSegment getVideoInit(SegmentFormat segmentFormat)
```

getVideoMimeType

```
public String getVideoMimeType(SegmentFormat segmentFormat)
```

getAudioMimeType

```
public String getAudioMimeType(SegmentFormat segmentFormat)
```

getBitrateAudio

```
public long getBitrateAudio()
```

getBitrateVideo

```
public long getBitrateVideo()
```

getBitrate

```
public long getBitrate()
```

getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

(continued from last page)

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

startSegment

```
public void startSegment(ContentPackaging contentPackaging,  
    long segmentId,  
    long segmentIdUser,  
    int videoCodecId,  
    int audioCodecId,  
    long timecode,  
    long timecodeUser,  
    String originRepeaterContext,  
    CencInfo encInfo)
```

endSegment

```
public void endSegment(ContentPackaging contentPackaging,  
    long endTimecodeVideo,  
    long timecodeAudio)
```

addPacket

```
public void addPacket(ContentPackaging contentPackaging,  
    LiveStreamPacketizerPacketHolder holder)
```

startChunk

```
public void startChunk(ContentPackaging contentPackaging,  
    long timecode,  
    long timecodeUser,  
    long segmentChunkNum)
```

(continued from last page)

endChunk

```
public void endChunk(ContentPackaging contentPackaging,  
    long endTimecode,  
    long segmentChunkCount)
```

logEdgeConfigWarning

```
protected void logEdgeConfigWarning(String method,  
    ContentPackaging contentPackaging)
```

resetStream

```
public void resetStream()
```

repeaterItemsMPEGDashflushed

```
public void repeaterItemsMPEGDashflushed()
```

isRandomizeMediaName

```
public boolean isRandomizeMediaName()
```

setRandomizeMediaName

```
public void setRandomizeMediaName(boolean randomizeMediaName)
```

isPlaylistReady

```
public boolean isPlaylistReady()
```

getVideoSegmentIdFirst

```
public long getVideoSegmentIdFirst()
```

getAudioSegmentIdFirst

```
public long getAudioSegmentIdFirst()
```

(continued from last page)

getVideoSegmentIdLast

```
public long getVideoSegmentIdLast()
```

getAudioSegmentIdLast

```
public long getAudioSegmentIdLast()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

getSegmentDurationTarget

```
public int getSegmentDurationTarget()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

getStreamStartDate

```
public java.util.Date getStreamStartDate()
```

getSegmentDurationTarget

```
public static int getSegmentDurationTarget(IApplicationInstance appInstance,  
String packetizer)
```

getMinimumUpdatePeriod

```
public long getMinimumUpdatePeriod()
```

isHbbtvLiveProfileEnabled

```
public boolean isHbbtvLiveProfileEnabled()
```

getAdditionalLiveProfiles

```
public String getAdditionalLiveProfiles()
```

(continued from last page)

getEncInfo

```
public CencInfo getEncInfo()
```

getSegmentIdHandler

```
public IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler getSegmentIdHandler()
```

setSegmentIdHandler

```
public void  
setSegmentIdHandler(IHTTPStreamerMPEGDashLiveStreamPacketizerChunkIdHandler  
segmentIdHandler)
```

getMaxSegmentCount

```
public int getMaxSegmentCount()
```

setMaxSegmentCount

```
public void setMaxSegmentCount(int maxSegmentCount)
```

getPlaylistSegmentCount

```
public int getPlaylistSegmentCount()
```

setPlaylistSegmentCount

```
public void setPlaylistSegmentCount(int playlistSegmentCount)
```

getRepeaterSegmentCount

```
public int getRepeaterSegmentCount()
```

setRepeaterSegmentCount

```
public void setRepeaterSegmentCount(int repeaterSegmentCount)
```

addRepeaterItem

```
public void addRepeaterItem(MPEGDashRepeaterHolder item)
```

trimRepeaterItems

```
protected void trimRepeaterItems(long segmentIndex)
```

getRepeaterLastSequence

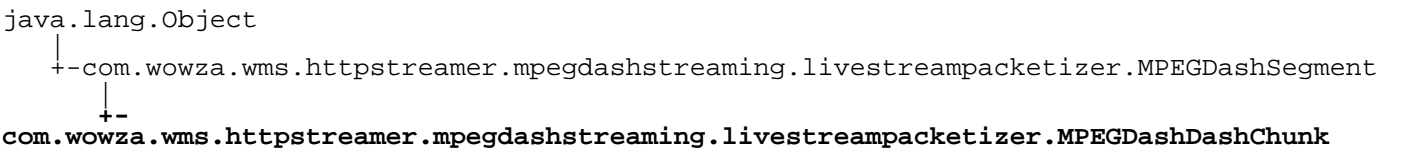
```
public long getRepeaterLastSequence()
```

getRepeaterItemsMPEGDash

```
public void getRepeaterItemsMPEGDash(java.util.List items,  
    long seq)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer

Class MPEGDashDashChunk



Deprecated. *replaced by MPEGDashSegment*

public class **MPEGDashDashChunk**
extends MPEGDashSegment

Constructor Summary

public	MPEGDashDashChunk() Deprecated.
--------	--

Method Summary

long	getChunkIndex() Deprecated.
int	getChunkType() Deprecated.
void	setChunkIndex() (long chunkIndex) Deprecated.
void	setChunkType() (int chunkType) Deprecated.

Methods inherited from class com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashSegment

getCreationDate, getDuration, getFragments, getSegmentIndex, getSegmentType, getTimecode, getTimescale, getVODTranscoderBitrate, isFillSuccessful, isValid, setDuration, setFillSuccessful, setSegmentIndex, setSegmentType, setTimecode, setTimescale, setVODTranscoderBitrate

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEGDashDashChunk

public **MPEGDashDashChunk()**

(continued from last page)

Deprecated.

Methods

getChunkType

```
public int getChunkType()
```

Deprecated.

setChunkType

```
public void setChunkType(int chunkType)
```

Deprecated.

getChunkIndex

```
public long getChunkIndex()
```

Deprecated.

setChunkIndex

```
public void setChunkIndex(long chunkIndex)
```

Deprecated.

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer Class MPEGDashDashChunkDescription

java.lang.Object



com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashSegmentDescription



com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashDashChunkDescription

Deprecated. *replaced by MPEGDashSegmentDescription*

public class **MPEGDashDashChunkDescription**

extends MPEGDashSegmentDescription

Constructor Summary

public

[MPEGDashDashChunkDescription\(\)](#)

Deprecated.

Methods inherited from class

com.wowza.wms.httpstreamer.mpegdashstreaming.livestreampacketizer.MPEGDashSegmentDescription

getVODTranscoderBitrate, setVODTranscoderBitrate

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEGDashDashChunkDescription

public **MPEGDashDashChunkDescription()**

Deprecated.

Package

com.wowza.wms.httpstreamer.mpegdashstreaming.util

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class IMPEGDashConstants

java.lang.Object

└─com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants

public class **IMPEGDashConstants**
extends Object

Nested Class Summary

class	IMPEGDashConstants.UTCTiming IMPEGDashConstants.UTCTiming
-------	--

Field Summary

public static final	ADAPTION_SET_KEY_ASPECT_RATIO_VAL Value: parValue
public static final	ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES Value: essentialProp
public static final	ADAPTION_SET_KEY_LANGUAGE Value: lang
public static final	ADAPTION_SET_KEY_ROLE Value: role
public static final	ADAPTION_SET_KEY_SEGMENT_FAMILY Value: sfam
public static final	ADAPTION_SET_KEY_SEGMENT_FORMAT Value: sf
public static final	COMPATIBLE_BRANDS_DEFAULT
public static final	CRLF_STR Value:
public static final	DASH_COMPATIBLE_BRANDS_INIT_FTYPE
public static final	DASH_COMPATIBLE_BRANDS_MEDIA_STYPE
public static final	DEFAULT_CORS_ENABLED Value: true

public static final	<u>DEFAULT_MAXSEGMENTCOUNT</u> Value: 10
public static final	<u>DEFAULT_PLAYLISTSEGMENTCOUNT</u> Value: 5
public static final	<u>DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT</u> Value: 6000
public static final	<u>DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE</u> Value: 307
public static final	<u>DEFAULT_REPEATERSEGMENTCOUNT</u> Value: 5
public static final	<u>DEFAULT_SEGMENTDURATIONTARGET</u> Value: 10000
public static final	<u>DEFAULT_UTCTIMING_HTTP_HEAD_LIST</u> Value: <code>\${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}/ dashtime.txt</code>
public static final	<u>DEFAULT_UTCTIMING_SCHEME_ORDER</u> Value: direct
public static final	<u>DEFAULT_VIDEO_TIMESCALE</u> Value: 90000
public static final	<u>DEFAULT_VIDEO_TIMESCALE_DVR</u> Value: 1000
public static final	<u>INITIALIZATION_SEGMENT_INDEX</u> Value: -1
public static final	<u>LANGUAGEIDKEY</u> Value: 1
public static final	<u>LEVEL1</u> Value:
public static final	<u>LEVEL2</u> Value:
public static final	<u>LEVEL3</u> Value:
public static final	<u>LEVEL4</u> Value:

public static final	LEVEL5 Value:
public static final	MAJOR_BRAND Value: iso6
public static final	MANIFEST_PLACEHOLDER_APPINSTANCE Value: {appInstance}
public static final	MANIFEST_PLACEHOLDER_APPLICATION Value: {application}
public static final	MANIFEST_PLACEHOLDER_BASEURLDOMAIN Value: {domain-baseurl}
public static final	MANIFEST_PLACEHOLDER_BITRATE_AUDIO Value: {bitrate-audio}
public static final	MANIFEST_PLACEHOLDER_BITRATE_MEDIA Value: {bitrate-media}
public static final	MANIFEST_PLACEHOLDER_BITRATE_VIDEO Value: {bitrate-video}
public static final	MANIFEST_PLACEHOLDER_DOMAIN Value: {domain}
public static final	MANIFEST_PLACEHOLDER_FILENAME Value: {filename}
public static final	MANIFEST_PLACEHOLDER_LANGUAGE Value: {language}
public static final	MANIFEST_PLACEHOLDER_MPDBASEURL Value: {mpd-baseurl}
public static final	MANIFEST_PLACEHOLDER_MPDBASEURLXML Value: <BaseURL>{domain-baseurl}/{application}/{appInstance}/{stream}</BaseURL>
public static final	MANIFEST_PLACEHOLDER_MPDLOCATION Value: {mpd-location}
public static final	MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING Value: {mpdloc-query-str}

public static final	MANIFEST_PLACEHOLDER_MPDLOCATIONXML Value: <Location>{domain}/{application}/{appInstance}/{stream}/{filename}{mpdloc-query-str}</Location>
public static final	MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST Value: <Location>{domain}/{application}/{stream}/{filename}{mpdloc-query-str}</Location>
public static final	MANIFEST_PLACEHOLDER_NGRP Value: {ngrp}
public static final	MANIFEST_PLACEHOLDER_PLAYDURATION Value: {playDuration}
public static final	MANIFEST_PLACEHOLDER_PLAYSEEK Value: {playSeek}
public static final	MANIFEST_PLACEHOLDER_PLAYSTART Value: {playStart}
public static final	MANIFEST_PLACEHOLDER_QUERYENCODED Value: {query-encoded}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO Value: {representation-audio}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA Value: {representation-media}
public static final	MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO Value: {representation-video}
public static final	MANIFEST_PLACEHOLDER_SECURETOKEN Value: {secureToken}
public static final	MANIFEST_PLACEHOLDER_SEGMENT_QUERYSTRING Value: {segment-query-str}
public static final	MANIFEST_PLACEHOLDER_SESSIONID Value: {sessionid}
public static final	MANIFEST_PLACEHOLDER_STREAM Value: {stream}
public static final	MANIFEST_STRINGS

public static final	<u>MANIFESTID_DEFAULT</u> Value: 0
public static final	<u>MANIFESTID_LISTBASED</u> Value: 2
public static final	<u>MANIFESTID_LISTBASED_AUDIO</u> Value: 4
public static final	<u>MANIFESTID_LISTBASED_VIDEO</u> Value: 3
public static final	<u>MANIFESTID_NUMBERBASED</u> Value: 1
public static final	<u>MANIFESTID_TIMEBASED</u> Value: 0
public static final	<u>MANIFESTID_UNKNOWN</u> Value: -1
public static final	<u>MAX_SUGGESTED_PRESENTATION_DELAY</u> Value: 10000
public static final	<u>MIMETYPE_AUDIO_WEBM</u> Value: audio/webm
public static final	<u>MIMETYPE_MEDIA_AAC_AUDIO</u> Value: audio/x-aac
public static final	<u>MIMETYPE_MEDIA_MP4_AUDIO</u> Value: audio/mp4
public static final	<u>MIMETYPE_MEDIA_MP4_VIDEO</u> Value: video/mp4
public static final	<u>MIMETYPE_MEDIA_MPEG_AUDIO</u> Value: audio/mpeg
public static final	<u>MIMETYPE_MEDIA_TS</u> Value: video/mp2t
public static final	<u>MIMETYPE_MEDIA_VTT_TEXT</u> Value: text/vtt
public static final	<u>MIMETYPE_MEDIA_WEBM</u> Value: video/webm

public static final	MIMETYPE_VIDEO_WEBM Value: video/webm
public static final	MPD_3GPP_MIMETYPE Value: video/3gpp
public static final	MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY Value: urn:dolby:dash:audio_channel_configuration:2011
public static final	MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG Value: urn:mpeg:dash:23003:3:audio_channel_configuration:2011
public static final	MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI Value: urn:tva:metadata:cs:AudioPurposeCS:2007
public static final	MPD_M4S_MIMETYPE_AUDIO Value: audio/mp4
public static final	MPD_M4S_MIMETYPE_VIDEO Value: video/mp4
public static final	MPD_M4S_XMLNS Value: urn:mpeg:dash:schema:mpd:2011
public static final	MPD_MP4_PROTECTION_SCHEME Value: urn:mpeg:dash:mp4protection:2011
public static final	MPD_MPEG2TS_PROTECTION_SCHEME Value: urn:mpeg:dash:13818:1:CA_descriptor:2011
public static final	MPD_MPEGB_SCHEMALOCATION Value: urn:mpeg:mpegB:schema:DASH:MPD:DIS2011
public static final	MPD_MPEGB_XMLNS Value: urn:mpeg:mpegB:schema:DASH:MPD:DIS2011
public static final	MPD_PROFILE_CMAF_CMFHD_NOENC Value: urn:mpeg:cmaf:presentation_profile:cmfhd:2017
public static final	MPD_PROFILE_CMAF_CMFHDC_CENC Value: urn:mpeg:cmaf:presentation_profile:cmfhdc:2017
public static final	MPD_PROFILE_CMAF_CMFHDS_CBCS Value: urn:mpeg:cmaf:presentation_profile:cmfhds:2017
public static final	MPD_PROFILE_DASHIF Value: urn:com:dashif:dash264

public static final	MPD_PROFILE_M4S_FULL Value: urn:mpeg:dash:profile:full:2011
public static final	MPD_PROFILE_M4S_LIVE Value: urn:mpeg:dash:profile:isoff-live:2011
public static final	MPD_PROFILE_M4S_LIVE_HBBTV Value: urn:hbbtv:dash:profile:isoff-live:2011
public static final	MPD_PROFILE_M4S_MAIN Value: urn:mpeg:dash:profile:isoff-main:2011
public static final	MPD_PROFILE_MPEGB_FULL Value: urn:mpeg:mpegB:profile:dash:isoff-basic-on-demand:cm
public static final	MPD_PROFILE_WEBM_VOD Value: urn:webm:dash:profile:webm-on-demand:2012
public static final	MPD_ROLE_SCHEME_URI Value: urn:mpeg:dash:role:2011
public static final	MPD_UTCTIMING_SCHEME_URI_DIRECT Value: urn:mpeg:dash:utc:direct:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD Value: urn:mpeg:dash:utc:http-head:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_ISO Value: urn:mpeg:dash:utc:http-iso:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_NTP Value: urn:mpeg:dash:utc:http-ntp:2014
public static final	MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE Value: urn:mpeg:dash:utc:http-xdate:2014
public static final	MPD_UTCTIMING_SCHEME_URI_NTP Value: urn:mpeg:dash:utc:ntp:2014
public static final	MPD_UTCTIMING_SCHEME_URI_Sntp Value: urn:mpeg:dash:utc:sntp:2014
public static final	MPD_WEBM_MIMETYPE Value: video/webm
public static final	MPD_WEBM_XMLNS Value: urn:webm:dash:profile:webm-on-demand:2012

public static final	MPD_XMLNS_CENC Value: urn:mpeg:cenc:2013
public static final	MPD_XMLNS_PLAYREADY Value: urn:microsoft:playready
public static final	MPD_XMLNS_XLINK Value: http://www.w3.org/1999/xlink
public static final	MPD_XMLNS_XSI Value: http://www.w3.org/2001/XMLSchema-instance
public static final	MPD_XSI_SCHEMALOCATION Value: urn:mpeg:DASH:schema:MPD:2011 http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-DASH_schema_files/DASH-MPD.xsd
public static final	MPEGDASH_DOMAIN_ENV_PARAM Value: com.wowza.wms.context.ApplicationInstance.MPEGDash.domain
public static final	MPEGDASH_DOMAIN_ENV_VARIABLE Value: \${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}
public static final	PARAMETERDELIMITERKEY Value: _
public static final	PROFILE_DEFAULT Value: 2
public static final	PROFILE_M4S_DISCRETE Value: 2
public static final	PROFILE_M4S_MUXED Value: 3
public static final	PROFILE_STRING_M4S_DISCRETE
public static final	PROFILE_STRING_M4S_MUXED
public static final	PROFILE_STRING_TS
public static final	PROFILE_STRING_WEBM_DISCRETE
public static final	PROFILE_STRING_WEBM_MUXED
public static final	PROFILE_STRINGS

public static final	<u>PROFILE_TOTAL</u> Value: 5
public static final	<u>PROFILE_TS</u> Value: 4
public static final	<u>PROFILE_UNKNOWN</u> Value: -1
public static final	<u>PROFILE_WEBM_DISCRETE</u> Value: 0
public static final	<u>PROFILE_WEBM_MUXED</u> Value: 1
public static final	<u>schemePattern</u>
public static final	<u>SEGMENT_FILEEXT_CMAF_AUDIO</u> Value: cmfa
public static final	<u>SEGMENT_FILEEXT_CMAF_TEXT</u> Value: cmft
public static final	<u>SEGMENT_FILEEXT_CMAF_VIDEO</u> Value: cmfv
public static final	<u>SEGMENT_FILEEXT_M4S</u> Value: m4s
public static final	<u>SEGMENT_FILEEXT_TS</u> Value: ts
public static final	<u>SEGMENT_FILEEXT_UNKNOWN</u> Value: unknown
public static final	<u>SEGMENT_FILEEXT_WEBM</u> Value: webm
public static final	<u>SEGMENT_NAME</u> Value: segment
public static final	<u>SEGMENT_TYPE_AUDIO</u> Value: 2
public static final	<u>SEGMENT_TYPE_DATA</u> Value: 3

public static final	SEGMENT_TYPE_MEDIA Value: 0
public static final	SEGMENT_TYPE_STRINGS
public static final	SEGMENT_TYPE_UNKNOWN Value: -1
public static final	SEGMENT_TYPE_VIDEO Value: 1
public static final	SEGMENTSET_M4S_AV Value: 0
public static final	SEGMENTSET_M4S_MUXED Value: 1
public static final	SEGMENTSET_TOTAL Value: 4
public static final	SEGMENTSET_TS Value: 2
public static final	SEGMENTSET_UNKNOWN Value: -1
public static final	SEGMENTSET_WEBM Value: 3
public static final	valuePattern
public static final	XMLHEADER_10_UTF8 Value: <?xml version="1.0" encoding="UTF-8"?>

Constructor Summary

public	IMPEGDashConstants()
--------	--------------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_SEGMENTDURATIONTARGET

public static final int **DEFAULT_SEGMENTDURATIONTARGET**

(continued from last page)

Constant value: **10000**

DEFAULT_MAXSEGMENTCOUNT

```
public static final int DEFAULT_MAXSEGMENTCOUNT
```

Constant value: **10**

DEFAULT_PLAYLISTSEGMENTCOUNT

```
public static final int DEFAULT_PLAYLISTSEGMENTCOUNT
```

Constant value: **5**

DEFAULT_REPEATERSEGMENTCOUNT

```
public static final int DEFAULT_REPEATERSEGMENTCOUNT
```

Constant value: **5**

LANGUAGEIDKEY

```
public static final java.lang.String LANGUAGEIDKEY
```

Constant value: **1**

PARAMETERDELIMITERKEY

```
public static final java.lang.String PARAMETERDELIMITERKEY
```

Constant value: **_**

SEGMENT_TYPE_UNKNOWN

```
public static final int SEGMENT_TYPE_UNKNOWN
```

Constant value: **-1**

SEGMENT_TYPE_MEDIA

```
public static final int SEGMENT_TYPE_MEDIA
```

Constant value: **0**

SEGMENT_TYPE_VIDEO

```
public static final int SEGMENT_TYPE_VIDEO
```

Constant value: **1**

SEGMENT_TYPE_AUDIO

```
public static final int SEGMENT_TYPE_AUDIO
```

Constant value: **2**

SEGMENT_TYPE_DATA

```
public static final int SEGMENT_TYPE_DATA
```

Constant value: **3**

SEGMENT_TYPE_STRINGS

```
public static final java.lang.String SEGMENT_TYPE_STRINGS
```

SEGMENT_FILEEXT_UNKNOWN

```
public static final java.lang.String SEGMENT_FILEEXT_UNKNOWN
```

Constant value: **unknown**

SEGMENT_FILEEXT_M4S

```
public static final java.lang.String SEGMENT_FILEEXT_M4S
```

Constant value: **m4s**

SEGMENT_FILEEXT_TS

```
public static final java.lang.String SEGMENT_FILEEXT_TS
```

Constant value: **ts**

SEGMENT_FILEEXT_WEBM

```
public static final java.lang.String SEGMENT_FILEEXT_WEBM
```

Constant value: **webm**

SEGMENT_FILEEXT_CMAF_AUDIO

```
public static final java.lang.String SEGMENT_FILEEXT_CMAF_AUDIO
```

Constant value: **cmfa**

SEGMENT_FILEEXT_CMAF_VIDEO

```
public static final java.lang.String SEGMENT_FILEEXT_CMAF_VIDEO
```

(continued from last page)

Constant value: **cmfv**

SEGMENT_FILEEXT_CMAF_TEXT

```
public static final java.lang.String SEGMENT_FILEEXT_CMAF_TEXT
```

Constant value: **cmft**

INITIALIZATION_SEGMENT_INDEX

```
public static final int INITIALIZATION_SEGMENT_INDEX
```

Constant value: **-1**

SEGMENTSET_UNKNOWN

```
public static final int SEGMENTSET_UNKNOWN
```

Constant value: **-1**

SEGMENTSET_M4S_AV

```
public static final int SEGMENTSET_M4S_AV
```

Constant value: **0**

SEGMENTSET_M4S_MUXED

```
public static final int SEGMENTSET_M4S_MUXED
```

Constant value: **1**

SEGMENTSET_TS

```
public static final int SEGMENTSET_TS
```

Constant value: **2**

SEGMENTSET_WEBM

```
public static final int SEGMENTSET_WEBM
```

Constant value: **3**

SEGMENTSET_TOTAL

```
public static final int SEGMENTSET_TOTAL
```

Constant value: **4**

MAJOR_BRAND

```
public static final java.lang.String MAJOR_BRAND
```

Constant value: **iso6**

COMPATIBLE_BRANDS_DEFAULT

```
public static final java.lang.String COMPATIBLE_BRANDS_DEFAULT
```

DASH_COMPATIBLE_BRANDS_INIT_FTYPE

```
public static final java.lang.String DASH_COMPATIBLE_BRANDS_INIT_FTYPE
```

DASH_COMPATIBLE_BRANDS_MEDIA_STYPE

```
public static final java.lang.String DASH_COMPATIBLE_BRANDS_MEDIA_STYPE
```

MIMETYPE_MEDIA_WEBM

```
public static final java.lang.String MIMETYPE_MEDIA_WEBM
```

Constant value: **video/webm**

MIMETYPE_VIDEO_WEBM

```
public static final java.lang.String MIMETYPE_VIDEO_WEBM
```

Constant value: **video/webm**

MIMETYPE_AUDIO_WEBM

```
public static final java.lang.String MIMETYPE_AUDIO_WEBM
```

Constant value: **audio/webm**

MIMETYPE_MEDIA_MP4_VIDEO

```
public static final java.lang.String MIMETYPE_MEDIA_MP4_VIDEO
```

Constant value: **video/mp4**

MIMETYPE_MEDIA_MP4_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_MP4_AUDIO
```

(continued from last page)

Constant value: **audio/mp4**

MIMETYPE_MEDIA_TS

```
public static final java.lang.String MIMETYPE_MEDIA_TS
```

Constant value: **video/mp2t**

MIMETYPE_MEDIA_MPEG_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_MPEG_AUDIO
```

Constant value: **audio/mpeg**

MIMETYPE_MEDIA_AAC_AUDIO

```
public static final java.lang.String MIMETYPE_MEDIA_AAC_AUDIO
```

Constant value: **audio/x-aac**

MIMETYPE_MEDIA_VTT_TEXT

```
public static final java.lang.String MIMETYPE_MEDIA_VTT_TEXT
```

Constant value: **text/vtt**

MANIFESTID_UNKNOWN

```
public static final int MANIFESTID_UNKNOWN
```

Constant value: **-1**

MANIFESTID_TIMEBASED

```
public static final int MANIFESTID_TIMEBASED
```

Constant value: **0**

MANIFESTID_NUMBERBASED

```
public static final int MANIFESTID_NUMBERBASED
```

Constant value: **1**

MANIFESTID_LISTBASED

```
public static final int MANIFESTID_LISTBASED
```

Constant value: **2**

(continued from last page)

MANIFESTID_LISTBASED_VIDEO

```
public static final int MANIFESTID_LISTBASED_VIDEO
```

Constant value: **3**

MANIFESTID_LISTBASED_AUDIO

```
public static final int MANIFESTID_LISTBASED_AUDIO
```

Constant value: **4**

MANIFESTID_DEFAULT

```
public static final int MANIFESTID_DEFAULT
```

Constant value: **0**

MANIFEST_STRINGS

```
public static final java.lang.String MANIFEST_STRINGS
```

LEVEL1

```
public static final java.lang.String LEVEL1
```

Constant value:

LEVEL2

```
public static final java.lang.String LEVEL2
```

Constant value:

LEVEL3

```
public static final java.lang.String LEVEL3
```

Constant value:

LEVEL4

```
public static final java.lang.String LEVEL4
```

Constant value:

LEVEL5

```
public static final java.lang.String LEVEL5
```

(continued from last page)

Constant value:

CRLF_STR

```
public static final java.lang.String CRLF_STR
```

Constant value:

MANIFEST_PLACEHOLDER_SECURETOKEN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_SECURETOKEN
```

Constant value: **{secureToken}**

MANIFEST_PLACEHOLDER_PLAYSTART

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYSTART
```

Constant value: **{playStart}**

MANIFEST_PLACEHOLDER_PLAYDURATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYDURATION
```

Constant value: **{playDuration}**

MANIFEST_PLACEHOLDER_PLAYSEEK

```
public static final java.lang.String MANIFEST_PLACEHOLDER_PLAYSEEK
```

Constant value: **{playSeek}**

MANIFEST_PLACEHOLDER_NGRP

```
public static final java.lang.String MANIFEST_PLACEHOLDER_NGRP
```

Constant value: **{ngrp}**

MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATION_QUERYSTRING
```

Constant value: **{mpdloc-query-str}**

MANIFEST_PLACEHOLDER_SEGMENT_QUERYSTRING

```
public static final java.lang.String MANIFEST_PLACEHOLDER_SEGMENT_QUERYSTRING
```

Constant value: **{segment-query-str}**

(continued from last page)

MANIFEST_PLACEHOLDER_QUERYENCODED

```
public static final java.lang.String MANIFEST_PLACEHOLDER_QUERYENCODED
```

Constant value: **{query-encoded}**

MANIFEST_PLACEHOLDER_SESSIONID

```
public static final java.lang.String MANIFEST_PLACEHOLDER_SESSIONID
```

Constant value: **{sessionid}**

MANIFEST_PLACEHOLDER_LANGUAGE

```
public static final java.lang.String MANIFEST_PLACEHOLDER_LANGUAGE
```

Constant value: **{language}**

MANIFEST_PLACEHOLDER_DOMAIN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_DOMAIN
```

Constant value: **{domain}**

MANIFEST_PLACEHOLDER_BASEURLDOMAIN

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BASEURLDOMAIN
```

Constant value: **{domain-baseurl}**

MANIFEST_PLACEHOLDER_APPLICATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_APPLICATION
```

Constant value: **{application}**

MANIFEST_PLACEHOLDER_APPINSTANCE

```
public static final java.lang.String MANIFEST_PLACEHOLDER_APPINSTANCE
```

Constant value: **{appInstance}**

MANIFEST_PLACEHOLDER_STREAM

```
public static final java.lang.String MANIFEST_PLACEHOLDER_STREAM
```

Constant value: **{stream}**

MANIFEST_PLACEHOLDER_FILENAME

```
public static final java.lang.String MANIFEST_PLACEHOLDER_FILENAME
```

(continued from last page)

Constant value: **{filename}**

MANIFEST_PLACEHOLDER_MPDLOCATION

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATION
```

Constant value: **{mpd-location}**

MANIFEST_PLACEHOLDER_MPDLOCATIONXML

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATIONXML
```

Constant value:

```
<Location>{domain}/{application}/{appInstance}/{stream}/{filename}{mpdloc-query-str}</Location>
```

MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDLOCATIONXML_NOAPPINST
```

Constant value: **<Location>{domain}/{application}/{stream}/{filename}{mpdloc-query-str}</Location>**

MANIFEST_PLACEHOLDER_MPDBASEURL

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDBASEURL
```

Constant value: **{mpd-baseurl}**

MANIFEST_PLACEHOLDER_MPDBASEURLXML

```
public static final java.lang.String MANIFEST_PLACEHOLDER_MPDBASEURLXML
```

Constant value: **<BaseURL>{domain-baseurl}/{application}/{appInstance}/{stream}</BaseURL>**

MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_MEDIA
```

Constant value: **{representation-media}**

MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_AUDIO
```

Constant value: **{representation-audio}**

MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_REPRESENTATION_VIDEO
```

(continued from last page)

Constant value: **{representation-video}**

MANIFEST_PLACEHOLDER_BITRATE_MEDIA

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_MEDIA
```

Constant value: **{bitrate-media}**

MANIFEST_PLACEHOLDER_BITRATE_AUDIO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_AUDIO
```

Constant value: **{bitrate-audio}**

MANIFEST_PLACEHOLDER_BITRATE_VIDEO

```
public static final java.lang.String MANIFEST_PLACEHOLDER_BITRATE_VIDEO
```

Constant value: **{bitrate-video}**

SEGMENT_NAME

```
public static final java.lang.String SEGMENT_NAME
```

Constant value: **segment**

MPEGDASH_DOMAIN_ENV_PARAM

```
public static final java.lang.String MPEGDASH_DOMAIN_ENV_PARAM
```

Constant value: **com.wowza.wms.context.ApplicationInstance.MPEGDash.domain**

MPEGDASH_DOMAIN_ENV_VARIABLE

```
public static final java.lang.String MPEGDASH_DOMAIN_ENV_VARIABLE
```

Constant value: **\${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}**

PROFILE_STRING_WEBM_DISCRETE

```
public static final java.lang.String PROFILE_STRING_WEBM_DISCRETE
```

PROFILE_STRING_WEBM_MUXED

```
public static final java.lang.String PROFILE_STRING_WEBM_MUXED
```

(continued from last page)

PROFILE_STRING_M4S_DISCRETE

```
public static final java.lang.String PROFILE_STRING_M4S_DISCRETE
```

PROFILE_STRING_M4S_MUXED

```
public static final java.lang.String PROFILE_STRING_M4S_MUXED
```

PROFILE_STRING_TS

```
public static final java.lang.String PROFILE_STRING_TS
```

PROFILE_UNKNOWN

```
public static final int PROFILE_UNKNOWN
```

Constant value: **-1**

PROFILE_WEBM_DISCRETE

```
public static final int PROFILE_WEBM_DISCRETE
```

Constant value: **0**

PROFILE_WEBM_MUXED

```
public static final int PROFILE_WEBM_MUXED
```

Constant value: **1**

PROFILE_M4S_DISCRETE

```
public static final int PROFILE_M4S_DISCRETE
```

Constant value: **2**

PROFILE_M4S_MUXED

```
public static final int PROFILE_M4S_MUXED
```

Constant value: **3**

PROFILE_TS

```
public static final int PROFILE_TS
```

Constant value: **4**

PROFILE_TOTAL

```
public static final int PROFILE_TOTAL
```

Constant value: **5**

PROFILE_DEFAULT

```
public static final int PROFILE_DEFAULT
```

Constant value: **2**

PROFILE_STRINGS

```
public static final java.lang.String PROFILE_STRINGS
```

MPD_WEBM_MIMETYPE

```
public static final java.lang.String MPD_WEBM_MIMETYPE
```

Constant value: **video/webm**

MPD_M4S_MIMETYPE_VIDEO

```
public static final java.lang.String MPD_M4S_MIMETYPE_VIDEO
```

Constant value: **video/mp4**

MPD_M4S_MIMETYPE_AUDIO

```
public static final java.lang.String MPD_M4S_MIMETYPE_AUDIO
```

Constant value: **audio/mp4**

MPD_3GPP_MIMETYPE

```
public static final java.lang.String MPD_3GPP_MIMETYPE
```

Constant value: **video/3gpp**

XMLHEADER_10_UTF8

```
public static final java.lang.String XMLHEADER_10_UTF8
```

Constant value: **<?xml version="1.0" encoding="UTF-8"?>**

MPD_XMLNS_XSI

```
public static final java.lang.String MPD_XMLNS_XSI
```

(continued from last page)

Constant value: **http://www.w3.org/2001/XMLSchema-instance**

MPD_XMLNS_PLAYREADY

```
public static final java.lang.String MPD_XMLNS_PLAYREADY
```

Constant value: **urn:microsoft:playready**

MPD_MP4_PROTECTION_SCHEME

```
public static final java.lang.String MPD_MP4_PROTECTION_SCHEME
```

Constant value: **urn:mpeg:dash:mp4protection:2011**

MPD_MPEG2TS_PROTECTION_SCHEME

```
public static final java.lang.String MPD_MPEG2TS_PROTECTION_SCHEME
```

Constant value: **urn:mpeg:dash:13818:1:CA_descriptor:2011**

MPD_XMLNS_CENC

```
public static final java.lang.String MPD_XMLNS_CENC
```

Constant value: **urn:mpeg:cenc:2013**

MPD_XSI_SCHEMALOCATION

```
public static final java.lang.String MPD_XSI_SCHEMALOCATION
```

Constant value: **urn:mpeg:DASH:schema:MPD:2011**
http://standards.iso.org/ittf/PubliclyAvailableStandards/MPEG-
DASH_schema_files/DASH-MPD.xsd

MPD_MPEGB_SCHEMALOCATION

```
public static final java.lang.String MPD_MPEGB_SCHEMALOCATION
```

Constant value: **urn:mpeg:mpegB:schema:DASH:MPD:DIS2011**

MPD_XMLNS_XLINK

```
public static final java.lang.String MPD_XMLNS_XLINK
```

Constant value: **http://www.w3.org/1999/xlink**

MPD_WEBM_XMLNS

```
public static final java.lang.String MPD_WEBM_XMLNS
```

Constant value: **urn:webm:dash:profile:webm-on-demand:2012**

MPD_M4S_XMLNS

```
public static final java.lang.String MPD_M4S_XMLNS
```

Constant value: **urn:mpeg:dash:schema:mpd:2011**

MPD_MPEGB_XMLNS

```
public static final java.lang.String MPD_MPEGB_XMLNS
```

Constant value: **urn:mpeg:mpegB:schema:DASH:MPD:DIS2011**

MPD_PROFILE_WEBM_VOD

```
public static final java.lang.String MPD_PROFILE_WEBM_VOD
```

Constant value: **urn:webm:dash:profile:webm-on-demand:2012**

MPD_PROFILE_M4S_MAIN

```
public static final java.lang.String MPD_PROFILE_M4S_MAIN
```

Constant value: **urn:mpeg:dash:profile:isoff-main:2011**

MPD_PROFILE_M4S_LIVE

```
public static final java.lang.String MPD_PROFILE_M4S_LIVE
```

Constant value: **urn:mpeg:dash:profile:isoff-live:2011**

MPD_PROFILE_M4S_FULL

```
public static final java.lang.String MPD_PROFILE_M4S_FULL
```

Constant value: **urn:mpeg:dash:profile:full:2011**

MPD_PROFILE_MPEGB_FULL

```
public static final java.lang.String MPD_PROFILE_MPEGB_FULL
```

Constant value: **urn:mpeg:mpegB:profile:dash:isoff-basic-on-demand:cm**

MPD_PROFILE_DASHIF

```
public static final java.lang.String MPD_PROFILE_DASHIF
```

Constant value: **urn:com:dashif:dash264**

(continued from last page)

MPD_PROFILE_M4S_LIVE_HBBTV

```
public static final java.lang.String MPD_PROFILE_M4S_LIVE_HBBTV
```

Constant value: **urn:hbbtv:dash:profile:isoff-live:2011**

MPD_PROFILE_CMAF_CMFHD_NOENC

```
public static final java.lang.String MPD_PROFILE_CMAF_CMFHD_NOENC
```

Constant value: **urn:mpeg:cmf:presentation_profile:cmfhd:2017**

MPD_PROFILE_CMAF_CMFHDC_CENC

```
public static final java.lang.String MPD_PROFILE_CMAF_CMFHDC_CENC
```

Constant value: **urn:mpeg:cmf:presentation_profile:cmfhdc:2017**

MPD_PROFILE_CMAF_CMFHDS_CBCS

```
public static final java.lang.String MPD_PROFILE_CMAF_CMFHDS_CBCS
```

Constant value: **urn:mpeg:cmf:presentation_profile:cmfhds:2017**

MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG

```
public static final java.lang.String MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_MPEG
```

Constant value: **urn:mpeg:dash:23003:3:audio_channel_configuration:2011**

MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY

```
public static final java.lang.String MPD_AUDIO_CHAN_CONFIG_SCHEME_URI_DOLBY
```

Constant value: **urn:dolby:dash:audio_channel_configuration:2011**

MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI

```
public static final java.lang.String MPD_AUDIO_PURPOSE_CLASSIFICATION_SCHEME_URI
```

Constant value: **urn:tva:metadata:cs:AudioPurposeCS:2007**

MPD_ROLE_SCHEME_URI

```
public static final java.lang.String MPD_ROLE_SCHEME_URI
```

Constant value: **urn:mpeg:dash:role:2011**

DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE

```
public static final int DEFAULT_PROPERTY_DASH_HTTP_REDIRECT_DEFAULT_STATUS_CODE
```

(continued from last page)

Constant value: **307**

DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT

```
public static final int DEFAULT_PROPERTY_DASH_AVAILABILITYSTARTTIME_ADJUSTMENT
```

Constant value: **6000**

MAX_SUGGESTED_PRESENTATION_DELAY

```
public static final int MAX_SUGGESTED_PRESENTATION_DELAY
```

Constant value: **10000**

DEFAULT_CORS_ENABLED

```
public static final boolean DEFAULT_CORS_ENABLED
```

Constant value: **true**

MPD_UTCTIMING_SCHEME_URI_DIRECT

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_DIRECT
```

Constant value: **urn:mpeg:dash:utc:direct:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_HEAD
```

Constant value: **urn:mpeg:dash:utc:http-head:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_XSDATE
```

Constant value: **urn:mpeg:dash:utc:http-xdate:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_ISO

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_ISO
```

Constant value: **urn:mpeg:dash:utc:http-iso:2014**

MPD_UTCTIMING_SCHEME_URI_HTTP_NTP

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_HTTP_NTP
```

Constant value: **urn:mpeg:dash:utc:http-ntp:2014**

MPD_UTCTIMING_SCHEME_URI_NTP

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_NTP
```

Constant value: **urn:mpeg:dash:utc:ntp:2014**

MPD_UTCTIMING_SCHEME_URI_SNTP

```
public static final java.lang.String MPD_UTCTIMING_SCHEME_URI_SNTP
```

Constant value: **urn:mpeg:dash:utc:sntp:2014**

DEFAULT_UTCTIMING_SCHEME_ORDER

```
public static final java.lang.String DEFAULT_UTCTIMING_SCHEME_ORDER
```

Constant value: **direct**

DEFAULT_UTCTIMING_HTTP_HEAD_LIST

```
public static final java.lang.String DEFAULT_UTCTIMING_HTTP_HEAD_LIST
```

Constant value:

```
${com.wowza.wms.context.ApplicationInstance.MPEGDash.domain}/dashtime.txt
```

ADAPTION_SET_KEY_ROLE

```
public static final java.lang.String ADAPTION_SET_KEY_ROLE
```

Constant value: **role**

ADAPTION_SET_KEY_ASPECT_RATIO_VAL

```
public static final java.lang.String ADAPTION_SET_KEY_ASPECT_RATIO_VAL
```

Constant value: **parValue**

ADAPTION_SET_KEY_SEGMENT_FORMAT

```
public static final java.lang.String ADAPTION_SET_KEY_SEGMENT_FORMAT
```

Constant value: **sf**

ADAPTION_SET_KEY_SEGMENT_FAMILY

```
public static final java.lang.String ADAPTION_SET_KEY_SEGMENT_FAMILY
```

Constant value: **sfam**

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ADAPTION_SET_KEY_LANGUAGE

```
public static final java.lang.String ADAPTION_SET_KEY_LANGUAGE
```

Constant value: **lang**

ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES

```
public static final java.lang.String ADAPTION_SET_KEY_ESSENTIAL_PROPERTIES
```

Constant value: **essentialProp**

DEFAULT_VIDEO_TIMESCALE

```
public static final int DEFAULT_VIDEO_TIMESCALE
```

Constant value: **90000**

DEFAULT_VIDEO_TIMESCALE_DVR

```
public static final int DEFAULT_VIDEO_TIMESCALE_DVR
```

Constant value: **1000**

valuePattern

```
public static final java.util.regex.Pattern valuePattern
```

schemePattern

```
public static final java.util.regex.Pattern schemePattern
```

Constructors

IMPEGDashConstants

```
public IMPEGDashConstants()
```

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class IMPEGDashConstants.UTCTiming

java.lang.Object

└─ java.lang.Enum

└─ com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **IMPEGDashConstants.UTCTiming**
extends Enum

Field Summary

public static final	DIRECT
public static final	HTTP_HEAD
public static final	HTTP_ISO
public static final	HTTP_NTP
public static final	HTTP_XSDATE
public static final	NTP
public static final	SNTP
public static final	UNKNOWN

Method Summary

static IMPEGDashConstants.UTCTiming	fromString (String text)
String	toString ()
static IMPEGDashConstants.UTCTiming	valueOf (String name)
static IMPEGDashConstants.UTCTiming[]	values ()

Methods inherited from class java.lang.Enum

```
clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal,
toString, valueOf
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Fields

DIRECT

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming DIRECT
```

HTTP_HEAD

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_HEAD
```

NTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming NTP
```

SNTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming SNTP
```

HTTP_XSDATE

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_XSDATE
```

HTTP_ISO

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_ISO
```

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HTTP_NTP

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming
HTTP_NTP
```

UNKNOWN

```
public static final
com.wowza.wms.httpstreamer.mpegdashstreaming.util.IMPEGDashConstants.UTCTiming UNKNOWN
```

Methods

values

```
public static IMPEGDashConstants.UTCTiming\[\] values()
```

valueOf

```
public static IMPEGDashConstants.UTCTiming valueOf(String name)
```

toString

```
public String toString()
```

fromString

```
public static IMPEGDashConstants.UTCTiming fromString(String text)
```

com.wowza.wms.httpstreamer.mpegdashstreaming.util Class MPEGDashUtils

java.lang.Object

└─com.wowza.wms.httpstreamer.mpegdashstreaming.util.MPEGDashUtils

public class **MPEGDashUtils**
extends Object

Constructor Summary

public	MPEGDashUtils()
--------	---------------------------------

Method Summary

static String	audioCodecIdToString (int codecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	codecInfoAudioToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId)
static String	codecInfoVideoToCodecsStr (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo, int codecStrFormatId, boolean forceH264BaselineProfile)
static String	dimensionsToAspectRatioString (int width, int height)
static int	filenameToManifestId (String filename)
static int	filenameToProfile (String filename)
static String	fixupAudioCodecString (String audioCodecStr, int codecId, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
static String	fixupVideoCodecString (String videoCodecStr, int codecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
static String	frameRateToFrString (double frameRate)
static CencInfo	getCencInfo (IApplicationInstance appInstance, String streamName, IHTTPStreamerSession httpStreamerSession, IHTTPStreamerMPEGDashIndex index, long segmentId, CencInfo cencInfo)

static CencInfo	getCencInfo (IApplicationInstance appInstance, String streamName, ILiveStreamPacketizer liveStreamPacketizer, long segmentId, CencInfo cencInfo)
static void	getCompatibleBrandsAudio (java.util.List brandsList, boolean isInit, int audioCodec)
static void	getCompatibleBrandsVideo (java.util.List brandsList, boolean isInit, int videoCodec)
static String	getMajorBrandAudio ()
static String	getMajorBrandVideo ()
static int	manifestIdStrToId (String value)
static String	millisToDurationStr (long millis)
static long	msecToTimescaled (long time, long timescale)
static int	profileStrToId (String value)
static double	roughAspectRatioValue (int width, int height)
static String	segmentFormatToFileExt (SegmentFormat segmentFormat)
static String	segmentTypeIdToStr (int id)
static int	segmentTypeStrToId (String value)
static long	timescaledToMsec (long time, long timescale)
static String	videoCodecIdToString (int codecId, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEGDashUtils

public **MPEGDashUtils**()

Methods

(continued from last page)

getCencInfo

```
public static CencInfo getCencInfo(IApplicationInstance appInstance,  
    String streamName,  
    IHTTPStreamerSession httpStreamerSession,  
    IHTTPStreamerMPEGDashIndex index,  
    long segmentId,  
    CencInfo cencInfo)
```

getCencInfo

```
public static CencInfo getCencInfo(IApplicationInstance appInstance,  
    String streamName,  
    ILiveStreamPacketizer liveStreamPacketizer,  
    long segmentId,  
    CencInfo cencInfo)
```

fixupVideoCodecString

```
public static String fixupVideoCodecString(String videoCodecStr,  
    int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

fixupAudioCodecString

```
public static String fixupAudioCodecString(String audioCodecStr,  
    int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

videoCodecIdToString

```
public static String videoCodecIdToString(int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

audioCodecIdToString

```
public static String audioCodecIdToString(int codecId,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

millisToDurationStr

```
public static String millisToDurationStr(long millis)
```

(continued from last page)

codecInfoAudioToCodecsStr

```
public static String
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio
codecInfoAudio)
```

codecInfoAudioToCodecsStr

```
public static String
codecInfoAudioToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoAudio
codecInfoAudio,
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
codecInfoVideo,
    int codecStrFormatId)
```

codecInfoVideoToCodecsStr

```
public static String
codecInfoVideoToCodecsStr(com.wowza.wms.media.model.MediaCodecInfoVideo
codecInfoVideo,
    int codecStrFormatId,
    boolean forceH264BaselineProfile)
```

filenameToManifestId

```
public static int filenameToManifestId(String filename)
```

segmentTypeIdToStr

```
public static String segmentTypeIdToStr(int id)
```

segmentTypeStrToId

```
public static int segmentTypeStrToId(String value)
```

manifestIdStrToId

```
public static int manifestIdStrToId(String value)
```

profileStrToId

```
public static int profileStrToId(String value)
```

filenameToProfile

```
public static int filenameToProfile(String filename)
```

roughAspectRatioValue

```
public static double roughAspectRatioValue(int width,  
                                             int height)
```

dimensionsToAspectRatioString

```
public static String dimensionsToAspectRatioString(int width,  
                                                    int height)
```

frameRateToFrString

```
public static String frameRateToFrString(double frameRate)
```

timescaledToMsec

```
public static long timescaledToMsec(long time,  
                                     long timescale)
```

msecToTimescaled

```
public static long msecToTimescaled(long time,  
                                     long timescale)
```

getMajorBrandAudio

```
public static String getMajorBrandAudio()
```

getMajorBrandVideo

```
public static String getMajorBrandVideo()
```

getCompatibleBrandsAudio

```
public static void getCompatibleBrandsAudio(java.util.List brandsList,  
        boolean isInit,  
        int audioCodec)
```

getCompatibleBrandsVideo

```
public static void getCompatibleBrandsVideo(java.util.List brandsList,  
        boolean isInit,  
        int videoCodec)
```

segmentFormatToFileExt

```
public static String segmentFormatToFileExt(SegmentFormat segmentFormat)
```

Package

com.wowza.wms.httpstreamer.sanjoesting.file

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IHTTPStreamerSanJoseIndex

public interface **IHTTPStreamerSanJoseIndex**
extends

Method Summary

abstract String	<u>bitrateStrToStreamName</u> (String bitrateStr)
abstract void	<u>close</u> ()
abstract byte[]	<u>getABSTData</u> (String bitrateStr)
abstract <u>IHTTPStreamerApplicat ionContext</u>	<u>getApplicationContext</u> ()
abstract java.util.List	<u>getBitrates</u> ()
abstract TimedTextRequest	<u>getCaptionRequest</u> ()
abstract <u>LiveStreamPacketizerS anJoseChunk</u>	<u>getChunk</u> (int bitrate, long chunkId)
abstract <u>IHTTPStreamerSession</u>	<u>getHttpStreamerSession</u> ()
abstract long	<u>getPlayDuration</u> ()
abstract String	<u>getPlaylistStr</u> ()
abstract long	<u>getPlaySeek</u> ()
abstract long	<u>getPlayStart</u> ()
abstract String	<u>getStreamName</u> ()
abstract java.util.List	<u>getStreamNames</u> ()
abstract java.util.List	<u>getStreamNamesRaw</u> ()
abstract String	<u>getVODTranscodeNGRP</u> ()
abstract void	<u>indexFile</u> (<u>IHTTPStreamerSession</u> httpStreamerSession)

abstract void	init (IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP)
abstract boolean	isReloadMediaList ()
abstract void	open ()
abstract void	setCaptionRequest (TimedTextRequest request)
abstract void	setPlayDuration (long playDuration)
abstract void	setPlaySeek (long playSeek)
abstract void	setPlayStart (long playStart)
abstract void	setVODTranscodeNGRP (String vodTranscodeNGRP)

Methods

init

```
public abstract void init(IHTTPStreamerApplicationContext appContext,
    IHTTPStreamerSession httpStreamerSession,
    String rawStreamName,
    String streamExt,
    String streamName,
    long playStart,
    long playDuration,
    long playSeek,
    TimedTextRequest captionRequest,
    String vodTranscodeNGRP)
```

indexFile

```
public abstract void indexFile(IHTTPStreamerSession httpStreamerSession)
```

close

```
public abstract void close()
```

open

```
public abstract void open()
```

(continued from last page)

getChunk

```
public abstract LiveStreamPacketizerSanJoseChunk getChunk(int bitrate,  
long chunkId)
```

getApplicationContext

```
public abstract IHTTPStreamerApplicationContext getApplicationContext()
```

getHttpStreamerSession

```
public abstract IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public abstract String getStreamName()
```

getStreamNames

```
public abstract java.util.List getStreamNames()
```

getStreamNamesRaw

```
public abstract java.util.List getStreamNamesRaw()
```

getBitrates

```
public abstract java.util.List getBitrates()
```

getPlaylistStr

```
public abstract String getPlaylistStr()
```

getABSTData

```
public abstract byte[] getABSTData(String bitrateStr)
```

bitrateStrToStreamName

```
public abstract String bitrateStrToStreamName(String bitrateStr)
```


(continued from last page)

getPlayStart

```
public abstract long getPlayStart()
```

setPlayStart

```
public abstract void setPlayStart(long playStart)
```

getPlayDuration

```
public abstract long getPlayDuration()
```

setPlayDuration

```
public abstract void setPlayDuration(long playDuration)
```

getPlaySeek

```
public abstract long getPlaySeek()
```

setPlaySeek

```
public abstract void setPlaySeek(long playSeek)
```

getCaptionRequest

```
public abstract TimedTextRequest getCaptionRequest()
```

setCaptionRequest

```
public abstract void setCaptionRequest(TimedTextRequest request)
```

getVODTranscodeNGRP

```
public abstract String getVODTranscodeNGRP()
```

(continued from last page)

setVODTranscodeNGRP

```
public abstract void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

isReloadMediaList

```
public abstract boolean isReloadMediaList()
```

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IHTTPStreamerSanJoseIndexItem

public interface **IHTTPStreamerSanJoseIndexItem**
extends

Method Summary

abstract int	<code>getIndex()</code>
abstract long	<code>getStartTimecode()</code>
abstract long	<code>getStopTimecode()</code>
abstract void	<code>setIndex(int index)</code>
abstract void	<code>setStartTimecode(long startTimecode)</code>
abstract void	<code>setStopTimecode(long stopTimecode)</code>

Methods

getStartTimecode

public abstract long **getStartTimecode()**

setStartTimecode

public abstract void **setStartTimecode**(long startTimecode)

getStopTimecode

public abstract long **getStopTimecode()**

setStopTimecode

public abstract void **setStopTimecode**(long stopTimecode)

(continued from last page)

getIndex

```
public abstract int getIndex()
```

setIndex

```
public abstract void setIndex(int index)
```

com.wowza.wms.httpstreamer.sanjosestreaming.file Interface IMediaReaderSanJose

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderSanJose**

extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX
	Value: sanjose

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

abstract void	fillChunk (HTTPStreamerSanJoseIndexItem indexItem, HTTPStreamerSanJoseIndexItem item, LiveStreamPacketizerSanJoseChunk chunk, int bitrate)
abstract void	indexFile (HTTPStreamerSanJoseIndexItem index)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#),
[getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#),
[setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#),
[writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

public static final java.lang.String **MEDIAREADER_POSTFIX**

Constant value: **sanjose**

Methods

(continued from last page)

indexFile

```
public abstract void indexFile(HTTPStreamerSanJoseIndexItem index)
```

fillChunk

```
public abstract void fillChunk(HTTPStreamerSanJoseIndexItem indexItem,  
    IHTTPStreamerSanJoseIndexItem item,  
    LiveStreamPacketizerSanJoseChunk chunk,  
    int bitrate)
```

Package

**com.wowza.wms.httpstreamer.sanjoestream
ing.httpstreamer**

com.wowza.wms.httpstreamer.sanjosestreaming.httpstreamer Class HTTPStreamerSessionSanJose

java.lang.Object

└─com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.sanjosestreaming.httpstreamer.HTTPStreamerSessionSanJose

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

public class **HTTPStreamerSessionSanJose**
 extends HTTPStreamerSessionBase
 implements [IHTTPStreamerSession](#), [IHTTPSessionNotify](#)

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface com.wowza.wms.httpstreamer.model.IHTTPStreamerSession

[SESSIONFORMAT_CMAF](#), [SESSIONFORMAT_CMAF_LL](#), [SESSIONFORMAT_DEFAULT](#), [SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionSanJose()
--------	--

Method Summary

void	addFirstABSTRequest (String streamName)
------	---

void	clearLoggingValues ()
------	---------------------------------------

boolean	containsIndex (String streamName)
---------	---

static IHTTPStreamerSanJoseIndex	createIndexLive(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
IHTTPStreamerSanJoseIndex	getIndex(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName, long playStart, long playDuration, long playSeek, TimedTextRequest captionRequest, String vodTranscodeNGRP, boolean saveIndex)
IHTTPStreamerSanJoseIndex	getIndexLive(IHTTPStreamerApplicationContext appContext, IHTTPStreamerSession httpStreamerSession, String rawStreamName, String streamExt, String streamName)
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
boolean	isFirstABSTRequest(String streamName)
void	logLiveChunk(LiveStreamPacketizerSanJoseChunk chunk)
void	logVODChunk(LiveStreamPacketizerSanJoseChunk chunk)
void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	shutdown()
void	updateLoggingValues()

Methods inherited from class `com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase`

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionSanJose

```
public HTTPStreamerSessionSanJose()
```

Methods

shutdown

```
public void shutdown()
```

containsIndex

```
public boolean containsIndex(String streamName)
```

createIndexLive

```
public static IHTTPStreamerSanJoseIndex  
createIndexLive(IHTTPStreamerApplicationContext appContext,  
                IHTTPStreamerSession httpStreamerSession,  
                String rawStreamName,  
                String streamExt,  
                String streamName)
```

getIndexLive

```
public IHTTPStreamerSanJoseIndex getIndexLive(IHTTPStreamerApplicationContext  
appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName)
```

getIndex

```
public IHTTPStreamerSanJoseIndex getIndex(IHTTPStreamerApplicationContext appContext,  
        IHTTPStreamerSession httpStreamerSession,  
        String rawStreamName,  
        String streamExt,  
        String streamName,  
        long playStart,  
        long playDuration,  
        long playSeek,  
        TimedTextRequest captionRequest,  
        String vodTranscodeNGRP,  
        boolean saveIndex)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

logLiveChunk

```
public void logLiveChunk(LiveStreamPacketizerSanJoseChunk chunk)
```

logVODChunk

```
public void logVODChunk(LiveStreamPacketizerSanJoseChunk chunk)
```

isFirstABSTRequest

```
public boolean isFirstABSTRequest(String streamName)
```

addFirstABSTRequest

```
public void addFirstABSTRequest(String streamName)
```

notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

Package

**com.wowza.wms.httpstreamer.sanjoestream
ing.livestreampacketizer**

com.wowza.wms.httpstreamer.sanjoestreaming.livestreampacketizer
Interface IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler

public interface IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler
extends

Method Summary	
abstract void	init (LiveStreamPacketizerSanJose liveStreamPacketizer)
abstract long	onAssignChunkId (HTTPStreamerSanJoseLiveStreamPacketizerChunkIdContext chunkIdContext)

Methods

init

public abstract void **init**([LiveStreamPacketizerSanJose](#) liveStreamPacketizer)

onAssignChunkId

public abstract long
onAssignChunkId(HTTPStreamerSanJoseLiveStreamPacketizerChunkIdContext chunkIdContext)

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Interface ISanJoseChunkWriter

All Known Implementing Classes:

[LiveStreamPacketizerSanJose](#)

public interface **ISanJoseChunkWriter**
extends

Method Summary

abstract void	addToChunk (SanJosePacketHolder holder)
abstract void	endChunk (long timecode)
abstract boolean	isPacketizeAudio ()
abstract boolean	isPacketizeData ()
abstract boolean	isPacketizeVideo ()
abstract void	resetStream ()
abstract void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
abstract void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
abstract void	setMetaData (SanJosePacketHolder holder)
abstract void	startChunk (int streamMode, int videoCodec, int audioCodec, long timecode)

Methods

startChunk

```
public abstract void startChunk(int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode)
```

endChunk

```
public abstract void endChunk(long timecode)
```


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addToChunk

```
public abstract void addToChunk(SanJosePacketHolder holder)
```

setMetaData

```
public abstract void setMetaData(SanJosePacketHolder holder)
```

resetStream

```
public abstract void resetStream()
```

setCodecInfoAudio

```
public abstract void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

setCodecInfoVideo

```
public abstract void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

isPacketizeAudio

```
public abstract boolean isPacketizeAudio()
```

isPacketizeVideo

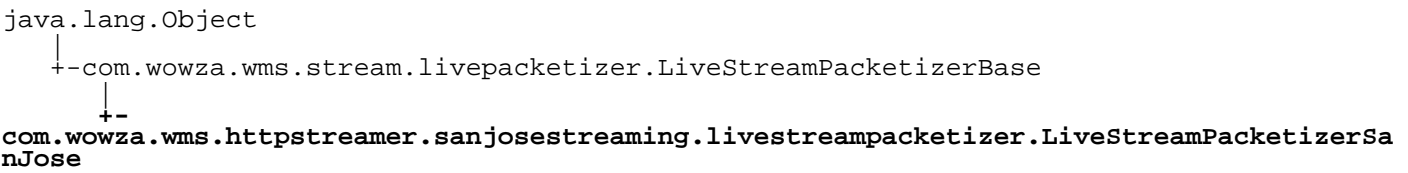
```
public abstract boolean isPacketizeVideo()
```

isPacketizeData

```
public abstract boolean isPacketizeData()
```

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer

Class LiveStreamPacketizerSanJose



All Implemented Interfaces:
[ISanJoseChunkWriter](#), [Runnable](#), [IdleNotify](#), [ILiveStreamPacketizer](#)

```
public class LiveStreamPacketizerSanJose
extends LiveStreamPacketizerBase
implements ILiveStreamPacketizer, IdleNotify, Runnable, ISanJoseChunkWriter
```

Field Summary	
public static final	CHUNKDURATIONTARGET Value: 10000
public static final	DEFAULT_MAXCHUNKCOUNT Value: 10
public static final	DEFAULT_PLAYLISTCHUNKCOUNT Value: 4
public static final	DEFAULT_REPEATERCHUNKCOUNT Value: -1
protected	originRepeaterContext
public static final	STREAMMODE_AAC Value: 3
public static final	STREAMMODE_MP3 Value: 2
public static final	STREAMMODE_TS Value: 1
Fields inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase	

```

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled,
captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET,
EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive,
isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC,
lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider,
maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, MEDIA_CHUNK_DURATION,
packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock,
startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

```

Constructor Summary

public	LiveStreamPacketizerSanJose()
--------	---

Method Summary

void	addToChunk (SanJosePacketHolder holder)
void	addToChunkTS (SanJoseTSHolder tsHolder)
void	debugDumpRepeater ()
void	encryptTS (SanJoseTSHolder tsHolder)
void	endChunk (long timecode)
void	endChunkTS (long timecode)
int	getABSTBootstrapVersion ()
byte[]	getABSTFullData ()
byte[]	getABSTStartData ()
int	getCalculatedBitrate ()
LiveStreamPacketizerSanJoseChunk	getChunkByCustomIndex (long chunkIndex)
LiveStreamPacketizerSanJoseChunk	getChunkByFilename (String filename)
LiveStreamPacketizerSanJoseChunk	getChunkByIndex (long chunkIndex)
int	getChunkCount ()
long[]	getChunkCustomRange ()
int	getChunkDurationTarget ()

IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler	getChunkIdHandler()
long[]	getChunkRange()
int	getDebugRepeaterItemsSize()
SanJoseEncInfo	getEncryptionInfo()
byte[]	getEncryptionKeyBytes()
String	getEncryptionURL()
int	getFirstChunkId()
long	getFirstCustomChunkId()
int	getLastChunkId()
long	getLastCustomChunkId()
Object	getLock()
SanJoseTSHolder	getMetaDataChunk()
static String	getMultibitratePlaylistF4M (String smilStreamName, IHTTPStreamerSanJoseIndex fileIndex, java.util.List liveStreamPacketizerOrder , java.util.Map liveStreamPacketizers)
int	getPlaylistChunkCount()
String	getPlaylistFragmentStr()
String	getPlaylistStr()
int	getProfileIDC()
String	getRandomSessionStr()
void	getRepeaterItemsSanJose (java.util.List items, long seq)
long	getRepeaterLastSequence()
String	getTitleStr()
void	init (String streamName, String packetizerName, IApplicationInstance appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)
void	internalHandlePacket (IMediaStream stream, AMFPacket packet)

void	internalResetStream (IMediaStream stream)
void	internalStartStream (IMediaStream stream)
boolean	isCustomChunkId ()
boolean	isPlaylistReady ()
void	resetStream ()
void	setChunkIdHandler (IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler chunkIdHandler)
void	setCodecInfoAudio (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	setCodecInfoVideo (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	setMetaData (SanJosePacketHolder holder)
void	setMetaData (SanJoseTSHolder tsHolder)
void	setTitleStr (String titleStr)
void	sortTS (SanJoseTSHolder tsHolder, boolean doFlush)
void	startChunk (int streamMode, int videoCodec, int audioCodec, long timecode)
void	startChunkTS (int chunkId, boolean isRepeater, int streamMode, int videoCodec, int audioCodec, long timecode, String encUrl, byte[] encRepeaterBytes, String originRepeaterContext)
static String	xmlCleanStr (String name)

Methods inherited from class com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance, getCaptionProvider, getChunkDurationTarget, getContextStr, getLiveStreamPacketizerId, getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose, getRepeaterLastSequence, getSegmentDurationTarget, getStreamStartupTimeout, getStreamTimeout, handlePacket, init, initLiveCaptionIngstor, internalHandlePacket, internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled, isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle, resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio, setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout, setStreamTimeout, shutdown, startStream, touch

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

[getAndSetStartStream](#), [getApplicationInstance](#), [getChunkDurationTarget](#), [getLiveStreamPacketizerId](#), [getProperties](#), [getRepeaterLastSequence](#), [getSegmentDurationTarget](#), [getSessionFormat](#), [handlePacket](#), [init](#), [isActive](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [isRepeaterEdge](#), [resetStream](#), [setLiveStreamPacketizerId](#), [setPacketizeAudio](#), [setPacketizeData](#), [setPacketizeVideo](#), [setRepeaterEdge](#), [shutdown](#), [startStream](#), [touch](#)

Methods inherited from interface [com.wowza.wms.util.IIdleNotify](#)

[onIdle](#)

Methods inherited from interface [java.lang.Runnable](#)

[run](#)

Methods inherited from interface

[com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.ISanJoseChunkWriter](#)

[addToChunk](#), [endChunk](#), [isPacketizeAudio](#), [isPacketizeData](#), [isPacketizeVideo](#), [resetStream](#), [setCodecInfoAudio](#), [setCodecInfoVideo](#), [setMetaData](#), [startChunk](#)

Fields

DEFAULT_REPEATERCHUNKCOUNT

```
public static final int DEFAULT_REPEATERCHUNKCOUNT
```

Constant value: **-1**

DEFAULT_PLAYLISTCHUNKCOUNT

```
public static final int DEFAULT_PLAYLISTCHUNKCOUNT
```

Constant value: **4**

DEFAULT_MAXCHUNKCOUNT

```
public static final int DEFAULT_MAXCHUNKCOUNT
```

Constant value: **10**

CHUNKDURATIONTARGET

```
public static final int CHUNKDURATIONTARGET
```

Constant value: **10000**

STREAMMODE_TS

```
public static final int STREAMMODE_TS
```

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Constant value: **1**

STREAMMODE_MP3

```
public static final int STREAMMODE_MP3
```

Constant value: **2**

STREAMMODE_AAC

```
public static final int STREAMMODE_AAC
```

Constant value: **3**

originRepeaterContext

```
protected java.lang.String originRepeaterContext
```

Constructors

LiveStreamPacketizerSanJose

```
public LiveStreamPacketizerSanJose()
```

Methods

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

isCustomChunkId

```
public boolean isCustomChunkId()
```

getEncryptionKeyBytes

```
public byte[] getEncryptionKeyBytes()
```

getEncryptionURL

```
public String getEncryptionURL()
```

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getEncryptionInfo

```
public SanJoseEncInfo getEncryptionInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

resetStream

```
public void resetStream()
```

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

setMetaData

```
public void setMetaData(SanJosePacketHolder holder)
```

setMetaData

```
public void setMetaData(SanJoseTSHolder tsHolder)
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
    codecInfoAudio)
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
    codecInfoVideo)
```

debugDumpRepeater

```
public void debugDumpRepeater()
```

startChunk

```
public void startChunk(int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode)
```

endChunk

```
public void endChunk(long timecode)
```

sortTS

```
public void sortTS(SanJoseTSHolder tsHolder,  
    boolean doFlush)
```

encryptTS

```
public void encryptTS(SanJoseTSHolder tsHolder)
```

addToChunk

```
public void addToChunk(SanJosePacketHolder holder)
```

startChunkTS

```
public void startChunkTS(int chunkId,  
    boolean isRepeater,  
    int streamMode,  
    int videoCodec,  
    int audioCodec,  
    long timecode,  
    String encUrl,  
    byte[] encRepeaterBytes,  
    String originRepeaterContext)
```

endChunkTS

```
public void endChunkTS(long timecode)
```

addToChunkTS

```
public void addToChunkTS(SanJoseTSHolder tsHolder)
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterItemsSanJose

```
public void getRepeaterItemsSanJose(java.util.List items,  
    long seq)
```

getChunkByFilename

```
public LiveStreamPacketizerSanJoseChunk getChunkByFilename(String filename)
```

getChunkRange

```
public long[] getChunkRange()
```

getChunkCustomRange

```
public long[] getChunkCustomRange()
```

getChunkByIndex

```
public LiveStreamPacketizerSanJoseChunk getChunkByIndex(long chunkIndex)
```

getChunkByCustomIndex

```
public LiveStreamPacketizerSanJoseChunk getChunkByCustomIndex(long chunkIndex)
```

isPlaylistReady

```
public boolean isPlaylistReady()
```

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getPlaylistStr

```
public String getPlaylistStr()
```

getPlaylistFragmentStr

```
public String getPlaylistFragmentStr()
```

getABSTFullData

```
public byte[] getABSTFullData()
```

getABSTStartData

```
public byte[] getABSTStartData()
```

getABSTBootstrapVersion

```
public int getABSTBootstrapVersion()
```

getLock

```
public Object getLock()
```

getTitleStr

```
public String getTitleStr()
```

setTitleStr

```
public void setTitleStr(String titleStr)
```

xmlCleanStr

```
public static String xmlCleanStr(String name)
```

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getMultibitratePlaylistF4M

```
public static String getMultibitratePlaylistF4M(String smilStreamName,  
    IHTTPStreamerSanJoseIndex fileIndex,  
    java.util.List liveStreamPacketizerOrder,  
    java.util.Map liveStreamPacketizers)
```

getMetaDataChunk

```
public SanJoseTSHolder getMetaDataChunk()
```

getProfileIDC

```
public int getProfileIDC()
```

getDebugRepeaterItemsSize

```
public int getDebugRepeaterItemsSize()
```

getFirstChunkId

```
public int getFirstChunkId()
```

getFirstCustomChunkId

```
public long getFirstCustomChunkId()
```

getLastChunkId

```
public int getLastChunkId()
```

getLastCustomChunkId

```
public long getLastCustomChunkId()
```

getChunkCount

```
public int getChunkCount()
```

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getCalculatedBitrate

```
public int getCalculatedBitrate()
```

getChunkDurationTarget

```
public int getChunkDurationTarget()
```

getPlaylistChunkCount

```
public int getPlaylistChunkCount()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

getChunkIdHandler

```
public IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler getChunkIdHandler()
```

setChunkIdHandler

```
public void setChunkIdHandler(IHTTPStreamerSanJoseLiveStreamPacketizerChunkIdHandler  
chunkIdHandler)
```

com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer Class LiveStreamPacketizerSanJoseChunk

java.lang.Object



com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.LiveStreamPacketizerSanJoseChunk

public class **LiveStreamPacketizerSanJoseChunk**
extends Object

Constructor Summary

public	LiveStreamPacketizerSanJoseChunk (int chunkIndex)
--------	---

Method Summary

void	addBlock (byte[] buffer, int offset, int len)
void	addMDATHeader ()
void	addRTMPFooter (int size)
void	addRTMPHeader (int type, int size, long timecode)
int	getAudioCount ()
int	getBlockCount ()
java.util.List	getBlockList ()
int	getChunkIndex ()
long	getChunkIndexByTime ()
com.wowza.wms.media.model.MediaCodecInfoAudio	getCodecInfoAudio ()
com.wowza.wms.media.model.MediaCodecInfoVideo	getCodecInfoVideo ()
int	getDataSize ()
long	getDuration ()
byte[]	getEncRepeaterBytes ()

String	<u>getEncUrl()</u>
SanJoseTSHolder	<u>getMetaDataHolder()</u>
int	<u>getSize()</u>
long	<u>getStartTimecode()</u>
int	<u>getStreamMode()</u>
int	<u>getVideoCount()</u>
int	<u>getVideoKeyCount()</u>
void	<u>incAudioCount()</u>
void	<u>incDataSize()</u> (int incSize)
void	<u>incVideoCount()</u>
void	<u>incVideoKeyCount()</u>
void	<u>insertBlock()</u> (int pos, byte[] buffer, int offset, int len)
boolean	<u>isCacheable()</u>
boolean	<u>isFillSuccessful()</u>
boolean	<u>isWritePAT()</u>
void	<u>setAudioCount()</u> (int audioCount)
void	<u>setBlockList()</u> (java.util.List blocks)
void	<u>setCacheable()</u> (boolean cacheable)
void	<u>setChunkIndexByTime()</u> (long chunkIndexByTime)
void	<u>setCodecInfoAudio()</u> (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	<u>setCodecInfoVideo()</u> (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	<u>setDataSize()</u> (int dataSize)
void	<u>setDuration()</u> (long duration)

void	<code>setEncRepeaterBytes</code> (byte[] encRepeaterBytes)
void	<code>setEncUrl</code> (String encUrl)
void	<code>setFillSuccessful</code> (boolean fillSuccessful)
void	<code>setMetaDataHolder</code> (SanJoseTSHolder metaDataHolder)
void	<code>setSize</code> (int size)
void	<code>setStartTimecode</code> (long startTimecode)
void	<code>setStreamMode</code> (int streamMode)
void	<code>setVideoCount</code> (int videoCount)
void	<code>setVideoKeyCount</code> (int videoKeyCount)
void	<code>setWritePAT</code> (boolean writePAT)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

LiveStreamPacketizerSanJoseChunk

```
public LiveStreamPacketizerSanJoseChunk(int chunkIndex)
```

Methods

getChunkIndex

```
public int getChunkIndex()
```

addBlock

```
public void addBlock(byte[] buffer,
                    int offset,
                    int len)
```


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insertBlock

```
public void insertBlock(int pos,  
                        byte[] buffer,  
                        int offset,  
                        int len)
```

getSize

```
public int getSize()
```

setSize

```
public void setSize(int size)
```

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

getBlockList

```
public java.util.List getBlockList()
```

setBlockList

```
public void setBlockList(java.util.List blocks)
```

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isCacheable

```
public boolean isCacheable()
```

setCacheable

```
public void setCacheable(boolean cacheable)
```

getBlockCount

```
public int getBlockCount()
```

getEncUrl

```
public String getEncUrl()
```

setEncUrl

```
public void setEncUrl(String encUrl)
```

getEncRepeaterBytes

```
public byte[] getEncRepeaterBytes()
```

setEncRepeaterBytes

```
public void setEncRepeaterBytes(byte[] encRepeaterBytes)
```

getDataSize

```
public int getDataSize()
```

setDataSize

```
public void setDataSize(int dataSize)
```

incDataSize

```
public void incDataSize(int incSize)
```

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isWritePAT

```
public boolean isWritePAT()
```

setWritePAT

```
public void setWritePAT(boolean writePAT)
```

incAudioCount

```
public void incAudioCount()
```

incVideoCount

```
public void incVideoCount()
```

incVideoKeyCount

```
public void incVideoKeyCount()
```

getAudioCount

```
public int getAudioCount()
```

setAudioCount

```
public void setAudioCount(int audioCount)
```

getVideoCount

```
public int getVideoCount()
```

setVideoCount

```
public void setVideoCount(int videoCount)
```

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getVideoKeyCount

```
public int getVideoKeyCount()
```

setVideoKeyCount

```
public void setVideoKeyCount(int videoKeyCount)
```

getStreamMode

```
public int getStreamMode()
```

setStreamMode

```
public void setStreamMode(int streamMode)
```

addRTMPHeader

```
public void addRTMPHeader(int type,  
                           int size,  
                           long timecode)
```

addRTMPFooter

```
public void addRTMPFooter(int size)
```

addMDATHeader

```
public void addMDATHeader()
```

getCodecInfoAudio

```
public com.wowza.wms.media.model.MediaCodecInfoAudio getCodecInfoAudio()
```

setCodecInfoAudio

```
public void setCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

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getCodecInfoVideo

```
public com.wowza.wms.media.model.MediaCodecInfoVideo getCodecInfoVideo()
```

setCodecInfoVideo

```
public void setCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

getMetaDataHolder

```
public SanJoseTSHolder getMetaDataHolder()
```

setMetaDataHolder

```
public void setMetaDataHolder(SanJoseTSHolder metaDataHolder)
```

isFillSuccessful

```
public boolean isFillSuccessful()
```

setFillSuccessful

```
public void setFillSuccessful(boolean fillSuccessful)
```

getChunkIndexByTime

```
public long getChunkIndexByTime()
```

setChunkIndexByTime

```
public void setChunkIndexByTime(long chunkIndexByTime)
```

Package

com.wowza.wms.httpstreamer.sanjoesting.util

com.wowza.wms.httpstreamer.sanjoestreaming.util Class SanJoseUtilities

java.lang.Object

└--com.wowza.wms.httpstreamer.sanjoestreaming.util.SanJoseUtilities

public class **SanJoseUtilities**
extends Object

Constructor Summary

public	SanJoseUtilities()
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Method Summary

static int	getABSTStringLength (String value)
static byte[]	holderToRTMPBlock (SanJosePacketHolder holder)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SanJoseUtilities

public **SanJoseUtilities**()

Methods

holderToRTMPBlock

public static byte[] **holderToRTMPBlock**(SanJosePacketHolder holder)

getABSTStringLength

public static int **getABSTStringLength**(String value)

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.file**

com.wowza.wms.httpstreamer.smoothstreaming.file Interface IHTTPStreamerSmoothStreamerIndex

public interface **IHTTPStreamerSmoothStreamerIndex**
extends

Method Summary

abstract void	close()
abstract IHTTPStreamerApplicat ionContext	getAppContext()
abstract byte[]	getEncryptionIVBytes()
abstract SmoothStreamerFileFra gmentList	getFragment (int fragmentType, int bitrate, long chunkTimecode, boolean isInfo)
abstract IHTTPStreamerSession	getHttpStreamerSession()
abstract long	getIndexVideoStartTimecode()
abstract String	getPlaylistStr()
abstract com.wowza.wms.drm.pla yready.PlayReadyEncry ptor	getPlayReadyEncryptorAudio()
abstract com.wowza.wms.drm.pla yready.PlayReadyEncry ptor	getPlayReadyEncryptorVideo()
abstract com.wowza.wms.drm.pla yready.PlayReadyKeyIn fo	getPlayReadyKeyInfo()
abstract String	getStreamName()
abstract java.util.List	getStreamNames()
abstract String	getTitleStr()
abstract void	indexFile()
abstract void	init (IHTTPStreamerSession httpStreamerSession, IHTTPStreamerApplicationContext appContext, String streamExt, String streamName, long playStart, long playDuration, long playSeek, String vodTranscodeNGRP)

abstract boolean	isEncryptionRandomIV()
abstract boolean	isReloadMediaList()
abstract void	open()
abstract void	setEncryptionIVBytes (byte[] encryptionIVBytes)
abstract void	setEncryptionRandomIV (boolean encryptionRandomIV)
abstract void	setIndexVideoStartTimeCode (long indexVideoStartTimeCode)
abstract void	setTitleStr (String titleStr)

Methods

getPlaylistStr

```
public abstract String getPlaylistStr()
```

getStreamNames

```
public abstract java.util.List getStreamNames()
```

init

```
public abstract void init(IHTTPStreamerSession httpStreamerSession,  
    IHTTPStreamerApplicationContext appContext,  
    String streamExt,  
    String streamName,  
    long playStart,  
    long playDuration,  
    long playSeek,  
    String vodTranscodeNGRP)
```

indexFile

```
public abstract void indexFile()
```

close

```
public abstract void close()
```

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open

```
public abstract void open()
```

getTitleStr

```
public abstract String getTitleStr()
```

setTitleStr

```
public abstract void setTitleStr(String titleStr)
```

getFragment

```
public abstract SmoothStreamerFileFragmentList getFragment(int fragmentType,  
    int bitrate,  
    long chunkTimecode,  
    boolean isInfo)
```

getHttpStreamerSession

```
public abstract IHTTPStreamerSession getHttpStreamerSession()
```

getStreamName

```
public abstract String getStreamName()
```

getPlayReadyKeyInfo

```
public abstract com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyKeyInfo()
```

getPlayReadyEncryptorAudio

```
public abstract com.wowza.wms.drm.playready.PlayReadyEncryptor  
getPlayReadyEncryptorAudio()
```

getPlayReadyEncryptorVideo

```
public abstract com.wowza.wms.drm.playready.PlayReadyEncryptor  
getPlayReadyEncryptorVideo()
```

getIndexVideoStartTimecode

```
public abstract long getIndexVideoStartTimecode()
```

setIndexVideoStartTimecode

```
public abstract void setIndexVideoStartTimecode(long indexVideoStartTimecode)
```

getAppContext

```
public abstract IHTTPStreamerApplicationContext getAppContext()
```

isReloadMediaList

```
public abstract boolean isReloadMediaList()
```

isEncryptionRandomIV

```
public abstract boolean isEncryptionRandomIV()
```

setEncryptionRandomIV

```
public abstract void setEncryptionRandomIV(boolean encryptionRandomIV)
```

getEncryptionIVBytes

```
public abstract byte[] getEncryptionIVBytes()
```

setEncryptionIVBytes

```
public abstract void setEncryptionIVBytes(byte[] encryptionIVBytes)
```

com.wowza.wms.httpstreamer.smoothstreaming.file Interface IHTTPStreamerSmoothStreamerIndexItem

public interface **IHTTPStreamerSmoothStreamerIndexItem**
extends

Method Summary

abstract int	<code>getIndex()</code>
abstract long	<code>getStartTimecode()</code>
abstract long	<code>getStopTimecode()</code>
abstract void	<code>setIndex(int index)</code>
abstract void	<code>setStartTimecode(long startTimecode)</code>
abstract void	<code>setStopTimecode(long stopTimecode)</code>

Methods

getStartTimecode

public abstract long **getStartTimecode()**

setStartTimecode

public abstract void **setStartTimecode**(long startTimecode)

getStopTimecode

public abstract long **getStopTimecode()**

setStopTimecode

public abstract void **setStopTimecode**(long stopTimecode)

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getIndex

```
public abstract int getIndex()
```

setIndex

```
public abstract void setIndex(int index)
```

com.wowza.wms.httpstreamer.smoothstreaming.file Interface IMediaReaderSmoothStreamer

All Superinterfaces:

[IMediaReader](#)

public interface **IMediaReaderSmoothStreamer**

extends [IMediaReader](#)

Field Summary

public static final	MEDIAREADER_POSTFIX Value: smooth
---------------------	---

Fields inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[CONTENTTYPE_MEDIA](#), [CONTENTTYPE_MEDIALIST](#), [DEFAULT_RANDOMACCESSREADER](#),
[DEFAULT_RANDOMACCESSREADEROPTIMIZER](#), [PLAYEVENT_AFTERBUFFERFILL](#), [PLAYEVENT_AFTERMETADATA](#),
[PLAYEVENT_BEFOREBUFFERFILL](#), [PLAYEVENT_BEFOREMETADATA](#), [PLAYEVENT_STARTPLAYBACK](#), [SEEK_EXACT](#),
[SEEK_KEYCLOSE](#), [SEEK_KEYDOWN](#), [SEEK_KEYUP](#), [SEEKTARGET_AUDIO](#), [SEEKTARGET_ENHANCED](#),
[SEEKTARGET_VIDEOKEYFRAME](#)

Method Summary

abstract SmoothStreamerFileFra gmentList	getAudioFragment (HTTPStreamerSmoothStreamerIndexEntry entry, long chunkTimecode, int bitrate)
abstract IHTTPStreamerSession	getHttpStreamerSession ()
abstract int	getSmoothStreamingMediaMajorVersion ()
abstract int	getSmoothStreamingMediaMinorVersion ()
abstract SmoothStreamerFileFra gmentList	getVideoFragment (HTTPStreamerSmoothStreamerIndexEntry entry, long chunkTimecode, int bitrate)
abstract void	indexEntry (HTTPStreamerSmoothStreamerIndexEntry entry)
abstract boolean	isSmoothAudio ()
abstract boolean	isSmoothVideo ()
abstract void	setHttpStreamerSession (IHTTPStreamerSession httpStreamerSession)
abstract void	setSmoothAudio (boolean isSmoothAudio)

abstract void	setSmoothStreamingMediaMajorVersion (int smoothStreamingMediaMajorVersion)
abstract void	setSmoothStreamingMediaMinorVersion (int smoothStreamingMediaMinorVersion)
abstract void	setSmoothVideo (boolean isSmoothVideo)

Methods inherited from interface [com.wowza.wms.stream.IMediaReader](#)

[close](#), [getDuration](#), [getLength](#), [getMediaExtension](#), [getMetadata](#), [getPath](#), [getStreamPosition](#), [init](#), [isOpen](#), [open](#), [rewind](#), [seek](#), [sendZeroLengthPacket](#), [setMediaReaderItem](#), [setProperties](#), [setStreamPosition](#), [startPlayback](#), [writeGeneratedKeyFrame](#), [writePackets](#), [writePackets](#)

Fields

MEDIAREADER_POSTFIX

```
public static final java.lang.String MEDIAREADER_POSTFIX
```

Constant value: **smooth**

Methods

indexEntry

```
public abstract void indexEntry(HTTPStreamerSmoothStreamerIndexEntry entry)
```

getSmoothStreamingMediaMajorVersion

```
public abstract int getSmoothStreamingMediaMajorVersion()
```

setSmoothStreamingMediaMajorVersion

```
public abstract void setSmoothStreamingMediaMajorVersion(int smoothStreamingMediaMajorVersion)
```

getSmoothStreamingMediaMinorVersion

```
public abstract int getSmoothStreamingMediaMinorVersion()
```

setSmoothStreamingMediaMinorVersion

```
public abstract void setSmoothStreamingMediaMinorVersion(int smoothStreamingMediaMinorVersion)
```


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getAudioFragment

```
public abstract SmoothStreamerFileFragmentList
getAudioFragment(HTTPStreamerSmoothStreamerIndexEntry entry,
    long chunkTimecode,
    int bitrate)
```

getVideoFragment

```
public abstract SmoothStreamerFileFragmentList
getVideoFragment(HTTPStreamerSmoothStreamerIndexEntry entry,
    long chunkTimecode,
    int bitrate)
```

isSmoothVideo

```
public abstract boolean isSmoothVideo()
```

setSmoothVideo

```
public abstract void setSmoothVideo(boolean isSmoothVideo)
```

isSmoothAudio

```
public abstract boolean isSmoothAudio()
```

setSmoothAudio

```
public abstract void setSmoothAudio(boolean isSmoothAudio)
```

getHttpStreamerSession

```
public abstract IHTTPStreamerSession getHttpStreamerSession()
```

setHttpStreamerSession

```
public abstract void setHttpStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.httpstreamer**

com.wowza.wms.httpstreamer.smoothstreaming.httpstreamer Class HTTPStreamerSessionSmoothStreamer

java.lang.Object

└─com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─

com.wowza.wms.httpstreamer.smoothstreaming.httpstreamer.HTTPStreamerSessionSmoothStreamer

All Implemented Interfaces:

[IHTTPSessionNotify](#), [IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionSmoothStreamer
extends HTTPStreamerSessionBase
implements IHTTPStreamerSession, IHTTPSessionNotify
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONFORMAT_CMAF](#), [SESSIONFORMAT_CMAF_LL](#), [SESSIONFORMAT_DEFAULT](#), [SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionSmoothStreamer()
--------	---

Method Summary

void	clearLoggingValues()
------	--------------------------------------

boolean	containsIndex (String streamName)
---------	---

IHTTPStreamerSmoothStreamerIndex	getIndex(IHTTPStreamerSession httpStreamerSession, IHTTPStreamerApplicationContext appContext, String streamExt, String streamName, long playStart, long playDuration, long playSeek, String vodTranscodeNGRP)
SmoothStreamingLivePlaylist	getLivePlaylist()
Object	getPublishData()
void	indexTranscoderVOD(IHTTPStreamerApplicationContext appContext, String vodTranscodeNGRP)
void	logLiveFragment(SmoothStreamerFragmentId fragmentId, PacketFragmentList FragmentData)
void	logVODFragment(SmoothStreamerFragmentId fragmentId, PacketFragmentList fragmentData)
void	notifyHTTPSessionCreate(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	notifyHTTPSessionDestroy(IApplicationInstance appInstance, IHTTPStreamerSession httpStreamerSession)
void	setLivePlaylist(SmoothStreamingLivePlaylist livePlaylist)
void	setPublishData(Object publishData)
void	shutdown()
void	updateLoggingValues()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPSessionNotify](#)

[notifyHTTPSessionCreate](#), [notifyHTTPSessionDestroy](#)

Constructors

HTTPStreamerSessionSmoothStreamer

```
public HTTPStreamerSessionSmoothStreamer()
```

Methods

shutdown

```
public void shutdown()
```

containsIndex

```
public boolean containsIndex(String streamName)
```

getIndex

```
public IHTTPStreamerSmoothStreamerIndex getIndex(IHTTPStreamerSession  
httpStreamerSession,  
    IHTTPStreamerApplicationContext appContext,  
    String streamExt,  
    String streamName,  
    long playStart,  
    long playDuration,  
    long playSeek,  
    String vodTranscodeNGRP)
```

updateLoggingValues

```
public void updateLoggingValues()
```

clearLoggingValues

```
public void clearLoggingValues()
```

getLivePlaylist

```
public SmoothStreamingLivePlaylist getLivePlaylist()
```

setLivePlaylist

```
public void setLivePlaylist(SmoothStreamingLivePlaylist livePlaylist)
```

logLiveFragment

```
public void logLiveFragment(SmoothStreamerFragmentId fragmentId,  
    PacketFragmentList fragmentData)
```

logVODFragment

```
public void logVODFragment(SmoothStreamerFragmentId fragmentId,  
    PacketFragmentList fragmentData)
```

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notifyHTTPSessionCreate

```
public void notifyHTTPSessionCreate(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

notifyHTTPSessionDestroy

```
public void notifyHTTPSessionDestroy(IApplicationInstance appInstance,  
    IHTTPStreamerSession httpStreamerSession)
```

indexTranscoderVOD

```
public void indexTranscoderVOD(IHTTPStreamerApplicationContext appContext,  
    String vodTranscodeNGRP)
```

getPublishData

```
public Object getPublishData()
```

setPublishData

```
public void setPublishData(Object publishData)
```

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.livestreampacketizer**

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer
Interface IHTTPStreamerSmoothLivePacketizerDataHandler

public interface IHTTPStreamerSmoothLivePacketizerDataHandler
extends

Method Summary	
abstract void	onFillChunkDataPacket (AMFPacket packet)

Methods

onFillChunkDataPacket

public abstract void **onFillChunkDataPacket**([AMFPacket](#) packet)

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer

Interface IHTTPStreamerSmoothLivePacketizerDataTrackHandler

public interface IHTTPStreamerSmoothLivePacketizerDataTrackHandler
extends

Interface for defining the

Method Summary	
abstract String	getTrackData (long timeCode) Called to return track data for the given timecode.
abstract SmoothStreamingDataTrack	getTrackInfo () Get the track info for this data track.

Methods

getTrackData

public abstract String **getTrackData**(long timeCode)

Called to return track data for the given timecode.

Parameters:
timeCode - ms

Returns:
track data

getTrackInfo

public abstract SmoothStreamingDataTrack **getTrackInfo**()

Get the track info for this data track.

Returns:
track data

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class LiveStreamPacketizerSmoothStreaming

java.lang.Object

└--com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase

└--

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.LiveStreamPacketizerSmoothStreaming

All Implemented Interfaces:

Runnable, IdleNotify, [ILiveStreamPacketizer](#)

```
public class LiveStreamPacketizerSmoothStreaming
extends LiveStreamPacketizerBase
```

Field Summary

protected	alignAudioWithVideo
protected	appContext
protected	audioFragments
protected	contextStr
protected	dataEventFrequency
protected	dataFragments
protected	dataTracks
public static final	DEFAULT_ALIGNAUDIOWITHVIDEO Value: false
public static final	DEFAULT_PACKETSORTTIME Value: 0
public static final	DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT Value: 4
public static final	DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION Value: 2000
public static final	DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT Value: 4

public static final	DEFAULT_SMOOTHMANIFESTTARGETDURATION Value: 24000
public static final	DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT Value: 4
public static final	DEFAULT_SMOOTHREPEATERTARGETDURATION Value: 24000
protected	enableDataEvents
protected	ismcXMLLock
public static final	MAX_READAHEAD_TIMECODES Value: 8
protected	maxChunkLogCount
public static final	MAXTIMECODE_BIGINTEGER Value: 922337203685
public static final	MILLISTOSILVERLIGHT Value: 10000
protected	nextFragmentIdAudio
protected	nextFragmentIdData
protected	nextFragmentIdVideo
protected	packetHandler
protected	packetSortTime
protected	pendingAudioFragments
protected	pendingVideoFragments
protected	playReadyEmptyLicenseSize
protected	playReadyEncryptorAudio
protected	playReadyEncryptorVideo
protected	playReadyKeyInfo
protected	readAheadSize

protected	readAheadTimecodesAudio
protected	readAheadTimecodesVideo
protected	repeaterItemsLock
protected	repeaterListAudio
protected	repeaterListVideo
protected	repeaterSeq
public static final	SECONDSTOSILVERLIGHT Value: 10000000
protected	smoothBufferMinFragmentCount
protected	smoothBufferTargetDuration
protected	smoothFragmentMaximumAudioDuration
protected	smoothFragmentTargetAudioDuration
protected	smoothManifestMinFragmentCount
protected	smoothManifestTargetDuration
protected	smoothMinimumVideoFragmentDuration
protected	smoothPlayReadyH264ClearSize
protected	smoothRepeaterMinFragmentCount
protected	smoothRepeaterTargetDuration
protected	smoothStreamingMediaMajorVersion
protected	smoothStreamingMediaMinorVersion
protected	videoFragments
protected	xmlData
protected	xmlIsAudio
protected	xmlIsData
protected	xmlIsLiveData

protected	xmlISMC
protected	xmlIsProtection
protected	xmlIsVideo
protected	xmlProtection
protected	xmlQualityLevelAudio
protected	xmlQualityLevelVideo
protected	xmlSamplesAudio
protected	xmlSamplesVideo
protected	xmlSmoothStreamingMedia
protected	xmlStreamIndexAudio
protected	xmlStreamIndexVideo

Fields inherited from class com.wowza.wms.stream.livestreampacketizer.LiveStreamPacketizerBase

appInstance, captionDefaultLanguages, captionIngestType, captionsEnabled, captionUseStreamNameGroups, checkTimeoutInterval, DEFAULT_STREAMTIMEOUT, EVENT_PACKET, EVENT_RESETSTREAM, EVENT_STARTSTREAM, eventProcessCount, events, id, inProcessEvent, isActive, isRepeater, isRepeaterEdge, isRunning, lastCheckTime, lastEventProcessTC, lastStreamStartTime, lastStreamUpdate, liveStreamPacketizerItem, liveTimedTextProvider, maxEventCount, maxEventCountErrors, maxEventsPerRun, MAXEVENTSPERRUN, MEDIA_CHUNK_DURATION, packetizeAudio, packetizeData, packetizerName, packetizeVideo, properties, runnerLock, startStream, streamName, streamStartupTimeout, streamTimeout, timeoutLock

Constructor Summary

public	LiveStreamPacketizerSmoothStreaming()
--------	---

Method Summary

void	addDataFragment (long startTime, long duration, SmoothStreamingFragmentHeader fragmentHeader)
void	addFragmentAudioMediaPacket (long startTime, SmoothStreamingMediaPacket mediaPacket)
void	addFragmentVideoMediaPacket (long startTime, SmoothStreamingMediaPacket mediaPacket)
void	addReadAheadTimecodeAudio (long timecode)

void	<u>addReadAheadTimecodeVideo</u> (long timecode)
void	<u>clearFragmentAudio</u> ()
void	<u>clearFragmentData</u> ()
void	<u>clearFragmentVideo</u> ()
void	<u>endFragmentAudio</u> (long startTime, long endTime)
void	<u>endFragmentVideo</u> (long startTime, long endTime)
int	<u>getAudioBitrate</u> ()
<u>PacketFragmentList</u>	<u>getAudioPacket</u> (long timecode, boolean isInfo)
<u>IHTTPStreamerSmoothLivePacketizerDataHandler</u>	<u>getDataHandler</u> ()
byte[]	<u>getDataPacket</u> (long timecode, boolean isInfo)
<u>IHTTPStreamerSmoothLivePacketizerDataTrackHandler</u>	<u>getDataTrackHandler</u> ()
SmoothStreamingDataTracks	<u>getDataTracks</u> ()
int	<u>getDisplayHeight</u> ()
int	<u>getDisplayWidth</u> ()
Object	<u>getManifestLock</u> ()
int	<u>getMaxReadAheadTimecodes</u> ()
long	<u>getPlaylistDuration</u> ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	<u>getPlayReadKeyInfo</u> ()
int	<u>getPlayReadyEmptyLicenseSize</u> ()
void	<u>getRepeaterAudioItems</u> (java.util.List items, long seq)
long	<u>getRepeaterAudioLastSequence</u> ()
long	<u>getRepeaterLastSequence</u> ()
void	<u>getRepeaterVideoItems</u> (java.util.List items, long seq)

long	<u>getRepeaterVideoLastSequence()</u>
int	<u>getVideoBitrate()</u>
int	<u>getVideoHeight()</u>
<u>PacketFragmentList</u>	<u>getVideoPacket(long timecode, boolean isInfo)</u>
<u>PacketFragmentList</u>	<u>getVideoPacket(long timecode, boolean isInfo, int keyFrameTolerance)</u>
int	<u>getVideoWidth()</u>
String	<u>getXMLData()</u>
String	<u>getXMLISMC()</u>
String	<u>getXMLProtection()</u>
String	<u>getXMLQualityLevelAudio()</u>
String	<u>getXMLQualityLevelVideo()</u>
String	<u>getXMLSamplesAudio()</u>
String	<u>getXMLSamplesVideo()</u>
String	<u>getXMLSmoothStreamingMedia()</u>
String	<u>getXMLStreamIndexAudio()</u>
String	<u>getXMLStreamIndexVideo()</u>
void	<u>init(String streamName, String packetizerName, <u>IApplicationInstance</u> appInstance, LiveStreamPacketizerItem liveStreamPacketizerItem)</u>
void	<u>internalHandlePacket(IMediaStream stream, <u>AMFPacket</u> packet)</u>
void	<u>internalResetStream(IMediaStream stream)</u>
void	<u>internalStartStream(IMediaStream stream)</u>
boolean	<u>isAudioFragmentDeleted(long timecode)</u>
boolean	<u>isAudioFragmentDeleted(long timecode, int tolerance)</u>
boolean	<u>isReadAheadTimecodeAudio(long timecode)</u>
boolean	<u>isReadAheadTimecodeVideo(long timecode)</u>

boolean	<u>isVideoFragmentDeleted</u> (long timecode)
boolean	<u>isVideoFragmentDeleted</u> (long timecode, int tolerance)
boolean	<u>isXMLIsAudio</u> ()
boolean	<u>isXMLIsData</u> ()
boolean	<u>isXMLIsProtection</u> ()
boolean	<u>isXMLIsVideo</u> ()
long	<u>recalculateDuration</u> (SmoothStreamingPendingFragment fragment, long nextTimecode)
void	<u>setDataHandler</u> (<u>IHTTPStreamerSmoothLivePacketizerDataHandler</u> dataHandler)
void	<u>setDataTrackHandler</u> (<u>IHTTPStreamerSmoothLivePacketizerDataTrackHandler</u> handler)
void	<u>setFragmentAudioHeader</u> (long startTime, <u>SmoothStreamingFragmentHeader</u> fragmentHeader, SmoothStreamingMediaInfoAudio mediaInfo)
void	<u>setFragmentVideoHeader</u> (long startTime, <u>SmoothStreamingFragmentHeader</u> fragmentHeader, SmoothStreamingMediaInfoVideo mediaInfo)
void	<u>setMaxReadAheadTimecodes</u> (int maxReadAheadTimecodes)
void	<u>setPlayReadyKeyInfo</u> (com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
void	<u>setPlayReadyEmptyLicenseSize</u> (int playReadyEmptyLicenseSize)
void	<u>startFragmentAudio</u> (long startTime)
void	<u>startFragmentVideo</u> (long startTime)
boolean	<u>testPlaylistDuration</u> (long testDuration)
void	<u>updateISMFXML</u> ()

Methods inherited from class `com.wowza.wms.stream.livepacketizer.LiveStreamPacketizerBase`

```
addPacketizerEvent, checkTimeout, getAndSetStartStream, getApplicationInstance,
getCaptionProvider, getChunkDurationTarget, getContextStr, getLiveStreamPacketizerId,
getMaxEventCount, getProperties, getRepeaterItems, getRepeaterItemsSanJose,
getRepeaterLastSequence, getSegmentDurationTarget, getStreamStartupTimeout,
getStreamTimeout, handlePacket, init, initLiveCaptionIngestor, internalHandlePacket,
internalResetStream, internalStartStream, isActive, isCEA608IngestModuleInstalled,
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, onIdle,
resetStream, run, setLiveStreamPacketizerId, setMaxEventCount, setPacketizeAudio,
setPacketizeData, setPacketizeVideo, setRepeaterEdge, setStreamStartupTimeout,
setStreamTimeout, shutdown, startStream, touch
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface [com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer](#)

```
getAndSetStartStream, getApplicationInstance, getChunkDurationTarget,
getLiveStreamPacketizerId, getProperties, getRepeaterLastSequence,
getSegmentDurationTarget, getSessionFormat, handlePacket, init, isActive,
isPacketizeAudio, isPacketizeData, isPacketizeVideo, isRepeaterEdge, resetStream,
setLiveStreamPacketizerId, setPacketizeAudio, setPacketizeData, setPacketizeVideo,
setRepeaterEdge, shutdown, startStream, touch
```

Methods inherited from interface `com.wowza.wms.util.IIdleNotify`

```
onIdle
```

Methods inherited from interface `java.lang.Runnable`

```
run
```

Fields

DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION

```
public static final int DEFAULT_SMOOTHFRAGMENTTARGETAUDIODURATION
```

Constant value: **2000**

DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHREPEATERMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_SMOOTHREPEATERTARGETDURATION

```
public static final int DEFAULT_SMOOTHREPEATERTARGETDURATION
```

Constant value: **24000**

DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHMANIFESTMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_SMOOTHMANIFESTTARGETDURATION

```
public static final int DEFAULT_SMOOTHMANIFESTTARGETDURATION
```

Constant value: **24000**

DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT

```
public static final int DEFAULT_SMOOTHBUFFERMINFRAGMENTCOUNT
```

Constant value: **4**

DEFAULT_ALIGNAUDIOWITHVIDEO

```
public static final boolean DEFAULT_ALIGNAUDIOWITHVIDEO
```

Constant value: **false**

DEFAULT_PACKETSORTTIME

```
public static final int DEFAULT_PACKETSORTTIME
```

Constant value: **0**

MILLISTOSILVERLIGHT

```
public static final int MILLISTOSILVERLIGHT
```

Constant value: **10000**

SECONDSTOSILVERLIGHT

```
public static final long SECONDSTOSILVERLIGHT
```

Constant value: **100000000**

MAXTIMECODE_BIGINTEGER

```
public static final long MAXTIMECODE_BIGINTEGER
```

Constant value: **922337203685**

(continued from last page)

MAX_READAHEAD_TIMECODES

```
public static final int MAX_READAHEAD_TIMECODES
```

Constant value: **8**

videoFragments

```
protected  
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragmen  
ts videoFragments
```

audioFragments

```
protected  
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragmen  
ts audioFragments
```

pendingVideoFragments

```
protected java.util.Map pendingVideoFragments
```

pendingAudioFragments

```
protected java.util.Map pendingAudioFragments
```

readAheadTimecodesVideo

```
protected java.util.List readAheadTimecodesVideo
```

readAheadTimecodesAudio

```
protected java.util.List readAheadTimecodesAudio
```

xmlISMC

```
protected java.lang.String xmlISMC
```

xmlSmoothStreamingMedia

```
protected java.lang.String xmlSmoothStreamingMedia
```

xmlIsVideo

protected boolean **xmlIsVideo**

xmlStreamIndexVideo

protected java.lang.String **xmlStreamIndexVideo**

xmlQualityLevelVideo

protected java.lang.String **xmlQualityLevelVideo**

xmlSamplesVideo

protected java.lang.String **xmlSamplesVideo**

xmlIsAudio

protected boolean **xmlIsAudio**

xmlStreamIndexAudio

protected java.lang.String **xmlStreamIndexAudio**

xmlQualityLevelAudio

protected java.lang.String **xmlQualityLevelAudio**

xmlSamplesAudio

protected java.lang.String **xmlSamplesAudio**

xmlIsData

protected boolean **xmlIsData**

xmlData

protected java.lang.String **xmlData**

(continued from last page)

xmlIsProtection

protected boolean **xmlIsProtection**

xmlProtection

protected java.lang.String **xmlProtection**

ismcXMLLock

protected java.lang.Object **ismcXMLLock**

packetHandler

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingPacketH
andler **packetHandler**

readAheadSize

protected int **readAheadSize**

smoothStreamingMediaMajorVersion

protected int **smoothStreamingMediaMajorVersion**

smoothStreamingMediaMinorVersion

protected int **smoothStreamingMediaMinorVersion**

smoothBufferTargetDuration

protected int **smoothBufferTargetDuration**

smoothMinimumVideoFragmentDuration

protected int **smoothMinimumVideoFragmentDuration**

smoothBufferMinFragmentCount

protected int **smoothBufferMinFragmentCount**

smoothManifestTargetDuration

protected int **smoothManifestTargetDuration**

smoothManifestMinFragmentCount

protected int **smoothManifestMinFragmentCount**

smoothRepeaterTargetDuration

protected int **smoothRepeaterTargetDuration**

smoothRepeaterMinFragmentCount

protected int **smoothRepeaterMinFragmentCount**

smoothPlayReadyH264ClearSize

protected int **smoothPlayReadyH264ClearSize**

smoothFragmentTargetAudioDuration

protected int **smoothFragmentTargetAudioDuration**

smoothFragmentMaximumAudioDuration

protected int **smoothFragmentMaximumAudioDuration**

nextFragmentIdVideo

protected long **nextFragmentIdVideo**

nextFragmentIdAudio

protected long **nextFragmentIdAudio**

(continued from last page)

maxChunkLogCount

protected int **maxChunkLogCount**

packetSortTime

protected int **packetSortTime**

alignAudioWithVideo

protected boolean **alignAudioWithVideo**

repeaterItemsLock

protected java.lang.Object **repeaterItemsLock**

repeaterSeq

protected long **repeaterSeq**

repeaterListAudio

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingRepeaterList **repeaterListAudio**

repeaterListVideo

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingRepeaterList **repeaterListVideo**

dataTracks

protected com.wowza.wms.httpstreamer.smoothstreaming.model.SmoothStreamingDataTracks
dataTracks

playReadyKeyInfo

protected com.wowza.wms.drm.playready.PlayReadyKeyInfo **playReadyKeyInfo**

(continued from last page)

playReadyEncryptorAudio

protected com.wowza.wms.drm.playready.PlayReadyEncryptor **playReadyEncryptorAudio**

playReadyEncryptorVideo

protected com.wowza.wms.drm.playready.PlayReadyEncryptor **playReadyEncryptorVideo**

contextStr

protected java.lang.String **contextStr**

appContext

protected com.wowza.wms.httpstreamer.model.IHTTPStreamerApplicationContext **appContext**

playReadyEmptyLicenseSize

protected int **playReadyEmptyLicenseSize**

dataFragments

protected
com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments **dataFragments**

nextFragmentIdData

protected long **nextFragmentIdData**

xmlIsLiveData

protected boolean **xmlIsLiveData**

enableDataEvents

protected boolean **enableDataEvents**

dataEventFrequency

protected int **dataEventFrequency**

Constructors

LiveStreamPacketizerSmoothStreaming

```
public LiveStreamPacketizerSmoothStreaming()
```

Methods

getManifestLock

```
public Object getManifestLock()
```

init

```
public void init(String streamName,  
                String packetizerName,  
                IApplicationInstance appInstance,  
                LiveStreamPacketizerItem liveStreamPacketizerItem)
```

setPlayReadKeyInfo

```
public void setPlayReadKeyInfo(com.wowza.wms.drm.playready.PlayReadyKeyInfo  
playReadyKeyInfo)
```

getPlayReadKeyInfo

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadKeyInfo()
```

internalStartStream

```
public void internalStartStream(IMediaStream stream)
```

internalResetStream

```
public void internalResetStream(IMediaStream stream)
```

(continued from last page)

internalHandlePacket

```
public void internalHandlePacket(IMediaStream stream,  
    AMFPacket packet)
```

getRepeaterAudioLastSequence

```
public long getRepeaterAudioLastSequence()
```

getRepeaterAudioItems

```
public void getRepeaterAudioItems(java.util.List items,  
    long seq)
```

getRepeaterVideoLastSequence

```
public long getRepeaterVideoLastSequence()
```

getRepeaterLastSequence

```
public long getRepeaterLastSequence()
```

getRepeaterVideoItems

```
public void getRepeaterVideoItems(java.util.List items,  
    long seq)
```

clearFragmentAudio

```
public void clearFragmentAudio()
```

startFragmentAudio

```
public void startFragmentAudio(long startTime)
```

addFragmentAudioMediaPacket

```
public void addFragmentAudioMediaPacket(long startTime,  
    SmoothStreamingMediaPacket mediaPacket)
```

(continued from last page)

setFragmentAudioHeader

```
public void setFragmentAudioHeader(long startTime,  
    SmoothStreamingFragmentHeader fragmentHeader,  
    SmoothStreamingMediaInfoAudio mediaInfo)
```

recalculateDuration

```
public long recalculateDuration(SmoothStreamingPendingFragment fragment,  
    long nextTimecode)
```

endFragmentAudio

```
public void endFragmentAudio(long startTime,  
    long endTime)
```

clearFragmentVideo

```
public void clearFragmentVideo()
```

startFragmentVideo

```
public void startFragmentVideo(long startTime)
```

addFragmentVideoMediaPacket

```
public void addFragmentVideoMediaPacket(long startTime,  
    SmoothStreamingMediaPacket mediaPacket)
```

setFragmentVideoHeader

```
public void setFragmentVideoHeader(long startTime,  
    SmoothStreamingFragmentHeader fragmentHeader,  
    SmoothStreamingMediaInfoVideo mediaInfo)
```

endFragmentVideo

```
public void endFragmentVideo(long startTime,  
    long endTime)
```

updateISMCXML

```
public void updateISMCXML()
```

(continued from last page)

getVideoBitrate

```
public int getVideoBitrate()
```

getAudioBitrate

```
public int getAudioBitrate()
```

isAudioFragmentDeleted

```
public boolean isAudioFragmentDeleted(long timecode)
```

isAudioFragmentDeleted

```
public boolean isAudioFragmentDeleted(long timecode,  
                                       int tolerance)
```

isVideoFragmentDeleted

```
public boolean isVideoFragmentDeleted(long timecode)
```

isVideoFragmentDeleted

```
public boolean isVideoFragmentDeleted(long timecode,  
                                       int tolerance)
```

getAudioPacket

```
public PacketFragmentList getAudioPacket(long timecode,  
                                           boolean isInfo)
```

getVideoPacket

```
public PacketFragmentList getVideoPacket(long timecode,  
                                           boolean isInfo)
```

(continued from last page)

getVideoPacket

```
public PacketFragmentList getVideoPacket(long timecode,  
    boolean isInfo,  
    int keyFrameTolerance)
```

getXMLSmoothStreamingMedia

```
public String getXMLSmoothStreamingMedia()
```

isXMLIsVideo

```
public boolean isXMLIsVideo()
```

getXMLStreamIndexVideo

```
public String getXMLStreamIndexVideo()
```

getXMLQualityLevelVideo

```
public String getXMLQualityLevelVideo()
```

getXMLSamplesVideo

```
public String getXMLSamplesVideo()
```

isXMLIsAudio

```
public boolean isXMLIsAudio()
```

isXMLIsData

```
public boolean isXMLIsData()
```

isXMLIsProtection

```
public boolean isXMLIsProtection()
```

(continued from last page)

getXMLStreamIndexAudio

```
public String getXMLStreamIndexAudio()
```

getXMLQualityLevelAudio

```
public String getXMLQualityLevelAudio()
```

getXMLSamplesAudio

```
public String getXMLSamplesAudio()
```

getXMLData

```
public String getXMLData()
```

getXMLProtection

```
public String getXMLProtection()
```

getXMLISMC

```
public String getXMLISMC()
```

getPlaylistDuration

```
public long getPlaylistDuration()
```

testPlaylistDuration

```
public boolean testPlaylistDuration(long testDuration)
```

getDataTracks

```
public SmoothStreamingDataTracks getDataTracks()
```

getDataHandler

```
public IHTTPStreamerSmoothLivePacketizerDataHandler getDataHandler()
```

(continued from last page)

setDataHandler

```
public void setDataHandler(IHTTPStreamerSmoothLivePacketizerDataHandler dataHandler)
```

getDataTrackHandler

```
public IHTTPStreamerSmoothLivePacketizerDataTrackHandler getDataTrackHandler()
```

setDataTrackHandler

```
public void setDataTrackHandler(IHTTPStreamerSmoothLivePacketizerDataTrackHandler handler)
```

clearFragmentData

```
public void clearFragmentData()
```

addDataFragment

```
public void addDataFragment(long startTime,  
                             long duration,  
                             SmoothStreamingFragmentHeader fragmentHeader)
```

getDataPacket

```
public byte[] getDataPacket(long timecode,  
                             boolean isInfo)
```

isReadAheadTimecodeVideo

```
public boolean isReadAheadTimecodeVideo(long timecode)
```

addReadAheadTimecodeVideo

```
public void addReadAheadTimecodeVideo(long timecode)
```

isReadAheadTimecodeAudio

```
public boolean isReadAheadTimecodeAudio(long timecode)
```

addReadAheadTimecodeAudio

```
public void addReadAheadTimecodeAudio(long timecode)
```

getMaxReadAheadTimecodes

```
public int getMaxReadAheadTimecodes()
```

setMaxReadAheadTimecodes

```
public void setMaxReadAheadTimecodes(int maxReadAheadTimecodes)
```

getVideoHeight

```
public int getVideoHeight()
```

getVideoWidth

```
public int getVideoWidth()
```

getDisplayHeight

```
public int getDisplayHeight()
```

getDisplayWidth

```
public int getDisplayWidth()
```

getPlayReadyEmptyLicenseSize

```
public int getPlayReadyEmptyLicenseSize()
```

setPlayReadyEmptyLicenseSize

```
public void setPlayReadyEmptyLicenseSize(int playReadyEmptyLicenseSize)
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class SmoothStreamingFragment

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragment

public class **SmoothStreamingFragment**
extends Object

Constructor Summary

public	SmoothStreamingFragment ()
--------	---

Method Summary

long	getDuration ()
PacketFragmentList	getFragmentList ()
SmoothStreamingMediaI nfoAudio	getMediaInfoAudio ()
SmoothStreamingMediaI nfoVideo	getMediaInfoVideo ()
long	getStartTimecode ()
long	getStopTimecode ()
void	setDuration (long duration)
void	setMediaInfoAudio (SmoothStreamingMediaInfoAudio mediaInfoAudio)
void	setMediaInfoVideo (SmoothStreamingMediaInfoVideo mediaInfoVideo)
void	setStartTimecode (long startTimecode)
void	setStopTimecode (long stopTimecode)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Constructors

(continued from last page)

SmoothStreamingFragment

```
public SmoothStreamingFragment()
```

Methods

getStartTimecode

```
public long getStartTimecode()
```

setStartTimecode

```
public void setStartTimecode(long startTimecode)
```

getStopTimecode

```
public long getStopTimecode()
```

setStopTimecode

```
public void setStopTimecode(long stopTimecode)
```

getFragmentList

```
public PacketFragmentList getFragmentList()
```

getMediaInfoVideo

```
public SmoothStreamingMediaInfoVideo getMediaInfoVideo()
```

setMediaInfoVideo

```
public void setMediaInfoVideo(SmoothStreamingMediaInfoVideo mediaInfoVideo)
```

getMediaInfoAudio

```
public SmoothStreamingMediaInfoAudio getMediaInfoAudio()
```

(continued from last page)

setMediaInfoAudio

```
public void setMediaInfoAudio(SmoothStreamingMediaInfoAudio mediaInfoAudio)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer Class SmoothStreamingFragmentHeader

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragmentHeader

public class **SmoothStreamingFragmentHeader**
extends Object

Constructor Summary

public	SmoothStreamingFragmentHeader()
--------	---

Method Summary

PacketFragment	getHeaderData()
java.util.List	getReadAheadTimecodes()
void	setHeaderData(PacketFragment headerData)
void	setReadAheadTimecodes (java.util.List readAheadTimecodes)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SmoothStreamingFragmentHeader

public **SmoothStreamingFragmentHeader()**

Methods

getHeaderData

public [PacketFragment](#) **getHeaderData()**

(continued from last page)

setHeaderData

```
public void setHeaderData(PacketFragment headerData)
```

setReadAheadTimecodes

```
public void setReadAheadTimecodes(java.util.List readAheadTimecodes)
```

getReadAheadTimecodes

```
public java.util.List getReadAheadTimecodes()
```

com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer

Class SmoothStreamingFragments

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.livestreampacketizer.SmoothStreamingFragments

public class **SmoothStreamingFragments**
extends Object

Field Summary

public static final	DEFAULT_DELETEFRAGMENT_MAX Value: 2000
---------------------	--

Constructor Summary

public	SmoothStreamingFragments (int contentType)
--------	--

Method Summary

void	addFragment (long timecode, SmoothStreamingFragment fragment)
void	clear ()
String	getContextStr ()
long	getDuration ()
PacketFragmentList	getFragmentBytes (long timecode, boolean isInfo)
PacketFragmentList	getFragmentBytes (long timecode, boolean isInfo, int tolerance)
int	getFragmentDeletedMax ()
long	getLastStartTimecode ()
long	getLastStopTimecode ()
Object	getLock ()
SmoothStreamingMediaInfoAudio	getMediaInfoAudio ()
SmoothStreamingMediaInfoVideo	getMediaInfoVideo ()

int	<code>getSmoothBufferMinFragmentCount()</code>
int	<code>getSmoothBufferTargetDuration()</code>
int	<code>getSmoothManifestMinFragmentCount()</code>
int	<code>getSmoothManifestTargetDuration()</code>
long[]	<code>getStartStopTimecodes(int minCount)</code>
java.util.List	<code>getTimecodes()</code>
java.util.List	<code>getTimeInfo(long startTimecode, long stopTimecode, int minCount)</code>
boolean	<code>isFragmentDeleted(long timecode, int tolerance)</code>
void	<code>setContextStr(String contextStr)</code>
void	<code>setFragmentDeletedMax(int fragmentDeletedMax)</code>
void	<code>setSmoothBufferMinFragmentCount(int smoothBufferMinFragmentCount)</code>
void	<code>setSmoothBufferTargetDuration(int smoothBufferTargetDuration)</code>
void	<code>setSmoothManifestMinFragmentCount(int smoothManifestMinFragmentCount)</code>
void	<code>setSmoothManifestTargetDuration(int smoothManifestTargetDuration)</code>
int	<code>size()</code>
void	<code>trim(long lastStopTimecode)</code>

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DEFAULT_DELETEFRAGMENT_MAX

```
public static final int DEFAULT_DELETEFRAGMENT_MAX
```

Constant value: **2000**

Constructors

(continued from last page)

SmoothStreamingFragments

```
public SmoothStreamingFragments(int contentType)
```

Methods

getLock

```
public Object getLock()
```

clear

```
public void clear()
```

getDuration

```
public long getDuration()
```

getMediaInfoAudio

```
public SmoothStreamingMediaInfoAudio getMediaInfoAudio()
```

getMediaInfoVideo

```
public SmoothStreamingMediaInfoVideo getMediaInfoVideo()
```

getLastStopTimecode

```
public long getLastStopTimecode()
```

getLastStartTimecode

```
public long getLastStartTimecode()
```

getStartStopTimecodes

```
public long[] getStartStopTimecodes(int minCount)
```

(continued from last page)

trim

```
public void trim(long lastStopTimecode)
```

addFragment

```
public void addFragment(long timecode,  
    SmoothStreamingFragment fragment)
```

size

```
public int size()
```

getFragmentBytes

```
public PacketFragmentList getFragmentBytes(long timecode,  
    boolean isInfo)
```

isFragmentDeleted

```
public boolean isFragmentDeleted(long timecode,  
    int tolerance)
```

getFragmentBytes

```
public PacketFragmentList getFragmentBytes(long timecode,  
    boolean isInfo,  
    int tolerance)
```

getTimeInfo

```
public java.util.List getTimeInfo(long startTimecode,  
    long stopTimecode,  
    int minCount)
```

getSmoothBufferTargetDuration

```
public int getSmoothBufferTargetDuration()
```

setSmoothBufferTargetDuration

```
public void setSmoothBufferTargetDuration(int smoothBufferTargetDuration)
```

(continued from last page)

getSmoothBufferMinFragmentCount

```
public int getSmoothBufferMinFragmentCount()
```

setSmoothBufferMinFragmentCount

```
public void setSmoothBufferMinFragmentCount(int smoothBufferMinFragmentCount)
```

getSmoothManifestTargetDuration

```
public int getSmoothManifestTargetDuration()
```

setSmoothManifestTargetDuration

```
public void setSmoothManifestTargetDuration(int smoothManifestTargetDuration)
```

getSmoothManifestMinFragmentCount

```
public int getSmoothManifestMinFragmentCount()
```

setSmoothManifestMinFragmentCount

```
public void setSmoothManifestMinFragmentCount(int smoothManifestMinFragmentCount)
```

getContextStr

```
public String getContextStr()
```

setContextStr

```
public void setContextStr(String contextStr)
```

getTimecodes

```
public java.util.List getTimecodes()
```

(continued from last page)

getFragmentDeletedMax

```
public int getFragmentDeletedMax()
```

setFragmentDeletedMax

```
public void setFragmentDeletedMax(int fragmentDeletedMax)
```

Package

**com.wowza.wms.httpstreamer.smoothstream
ing.util**

com.wowza.wms.httpstreamer.smoothstreaming.util Class LiveStreamPacketizerSmoothStreamerUtils

java.lang.Object



com.wowza.wms.httpstreamer.smoothstreaming.util.LiveStreamPacketizerSmoothStreamerUtils

public class **LiveStreamPacketizerSmoothStreamerUtils**
extends Object

Field Summary

public static final	AUDIOBITRATEPLACHOLDER Value: {audiobitrate}
public static final	CRLF_STR Value:
public static final	DEFAULT_CORS_ENABLED Value: true
public static final	EMPTYISMCXML Value: <?xml version="1.0" encoding="utf-8"?> <SmoothStreamingMedia></SmoothStreamingMedia>
public static final	NGRPNAME Value: {ngrp}
public static final	PLAYDURATIONNAME Value: {playDurationName}
public static final	PLAYSEEKNAME Value: {playSeekName}
public static final	PLAYSTARTNAME Value: {playStartName}
public static final	PROTECTIONHEADER_SYSTEMID Value: 9A04F079-9840-4286-AB92-E65BE0885F95
public static final	QUALITYINDEXPLACHOLDER Value: Index="0"
public static final	QUALITYLEVELSPLACHOLDER Value: {qualitylevels}

public static final	QUERYPRESENTPLACHOLDER Value: {queryPresent}
public static final	QUERYSTRPLACHOLDER Value: {query}
public static final	SESSIONIDPLACHOLDER Value: {sessionid}
public static final	SMOOTHSTREAMINGMEDIAEND Value: </SmoothStreamingMedia>
public static final	STREAMINDEXEND Value: </StreamIndex>
public static final	VIDEOBITRATEPLACHOLDER Value: {videobitrate}
public static final	VIDEODISPLAYHEIGHTPLACHOLDER Value: {videodisplayheight}
public static final	VIDEODISPLAYWIDTHPLACHOLDER Value: {videodisplaywidth}
public static final	VIDEOMAXHEIGHTPLACHOLDER Value: {videomaxheight}
public static final	VIDEOMAXWIDTHPLACHOLDER Value: {videomaxwidth}
public static final	XMLHEADER Value: <?xml version="1.0" encoding="utf-8"?>

Constructor Summary

public	LiveStreamPacketizerSmoothStreamerUtils()
--------	---

Method Summary

static com.wowza.wms.drm.playready.PlayReadyKeyInfo	getEncInfo (IApplicationInstance appInstance, String streamName)
static SmoothStreamingLivePlaylist	parseLivePlaylist (IHTTPStreamerApplicationContext appContext, String streamName, String streamExt, IHTTPStreamerSession httpStreamerSession)

Methods inherited from class `java.lang.Object`


```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

PROTECTIONHEADER_SYSTEMID

```
public static final java.lang.String PROTECTIONHEADER_SYSTEMID
```

Constant value: **9A04F079-9840-4286-AB92-E65BE0885F95**

EMPTYISMFXML

```
public static final java.lang.String EMPTYISMFXML
```

Constant value: **<?xml version="1.0" encoding="utf-8"?>
<SmoothStreamingMedia></SmoothStreamingMedia>**

CRLF_STR

```
public static final java.lang.String CRLF_STR
```

Constant value:

PLAYSTARTNAME

```
public static final java.lang.String PLAYSTARTNAME
```

Constant value: **{playStartName}**

PLAYDURATIONNAME

```
public static final java.lang.String PLAYDURATIONNAME
```

Constant value: **{playDurationName}**

PLAYSEEKNAME

```
public static final java.lang.String PLAYSEEKNAME
```

Constant value: **{playSeekName}**

NGRPNAME

```
public static final java.lang.String NGRPNAME
```

Constant value: **{ngrp}**

(continued from last page)

QUERYSTRPLACHOLDER

```
public static final java.lang.String QUERYSTRPLACHOLDER
```

Constant value: `{query}`

QUERYPRESENTPLACHOLDER

```
public static final java.lang.String QUERYPRESENTPLACHOLDER
```

Constant value: `{queryPresent}`

SESSIONIDPLACHOLDER

```
public static final java.lang.String SESSIONIDPLACHOLDER
```

Constant value: `{sessionid}`

VIDEOBITRATEPLACHOLDER

```
public static final java.lang.String VIDEOBITRATEPLACHOLDER
```

Constant value: `{videobitrate}`

AUDIOBITRATEPLACHOLDER

```
public static final java.lang.String AUDIOBITRATEPLACHOLDER
```

Constant value: `{audiobitrate}`

QUALITYLEVELSPLACHOLDER

```
public static final java.lang.String QUALITYLEVELSPLACHOLDER
```

Constant value: `{qualitylevels}`

VIDEOMAXHEIGHTPLACHOLDER

```
public static final java.lang.String VIDEOMAXHEIGHTPLACHOLDER
```

Constant value: `{videomaxheight}`

VIDEOMAXWIDTHPLACHOLDER

```
public static final java.lang.String VIDEOMAXWIDTHPLACHOLDER
```

Constant value: `{videomaxwidth}`

VIDEODISPLAYHEIGHTPLACHOLDER

```
public static final java.lang.String VIDEODISPLAYHEIGHTPLACHOLDER
```

(continued from last page)

Constant value: **{videodisplayheight}**

VIDEODISPLAYWIDTHPLACHOLDER

```
public static final java.lang.String VIDEODISPLAYWIDTHPLACHOLDER
```

Constant value: **{videodisplaywidth}**

XMLHEADER

```
public static final java.lang.String XMLHEADER
```

Constant value: **<?xml version="1.0" encoding="utf-8"?>**

STREAMINDEXEND

```
public static final java.lang.String STREAMINDEXEND
```

Constant value: **</StreamIndex>**

SMOOTHSTREAMINGMEDIAEND

```
public static final java.lang.String SMOOTHSTREAMINGMEDIAEND
```

Constant value: **</SmoothStreamingMedia>**

QUALITYINDEXPLACHOLDER

```
public static final java.lang.String QUALITYINDEXPLACHOLDER
```

Constant value: **Index="0"**

DEFAULT_CORS_ENABLED

```
public static final boolean DEFAULT_CORS_ENABLED
```

Constant value: **true**

Constructors

LiveStreamPacketizerSmoothStreamerUtils

```
public LiveStreamPacketizerSmoothStreamerUtils()
```

Methods

(continued from last page)

getEncInfo

```
public static com.wowza.wms.drm.playready.PlayReadyKeyInfo  
getEncInfo(IApplicationInstance appInstance,  
            String streamName)
```

parseLivePlaylist

```
public static SmoothStreamingLivePlaylist  
parseLivePlaylist(IHTTPStreamerApplicationContext appContext,  
                  String streamName,  
                  String streamExt,  
                  IHTTPStreamerSession httpStreamerSession)
```

Package

**com.wowza.wms.httpstreamer.tsstreaming.ht
tpstreamer**

com.wowza.wms.httpstreamer.tssstreaming.httpstreamer Class HTTPStreamerSessionTS

java.lang.Object

└─com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└─com.wowza.wms.httpstreamer.tssstreaming.httpstreamer.HTTPStreamerSessionTS

All Implemented Interfaces:

[IHTTPStreamerSession](#)

public class **HTTPStreamerSessionTS**
extends HTTPStreamerSessionBase

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONFORMAT_CMAF](#), [SESSIONFORMAT_CMAF_LL](#), [SESSIONFORMAT_DEFAULT](#), [SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public [HTTPStreamerSessionTS](#)()

Method Summary

TSPacketizerSessionTracker [getSessionTracker](#)()

void [setSessionTracker](#)(TSPacketizerSessionTracker sessionTracker)

void [shutdown](#)()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionTS

```
public HTTPStreamerSessionTS()
```

Methods

getSessionTracker

```
public TSPacketizerSessionTracker getSessionTracker()
```

setSessionTracker

```
public void setSessionTracker(TSPacketizerSessionTracker sessionTracker)
```


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shutdown

```
public void shutdown()
```

Package

**com.wowza.wms.httpstreamer.webmstreami
ng.httpstreamer**

com.wowza.wms.httpstreamer.webmstreaming.httpstreamer

Class HTTPStreamerSessionWebM

java.lang.Object

└-com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

└-com.wowza.wms.httpstreamer.webmstreaming.httpstreamer.HTTPStreamerSessionWebM

All Implemented Interfaces:

[IHTTPStreamerSession](#)

```
public class HTTPStreamerSessionWebM
extends HTTPStreamerSessionBase
```

Fields inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

acceptSession, appInstance, connectionHolder, cookieStr, corsHeaders, DATEFORMAT, elapsedTime, fastDateFormat, fileInfoMap, firstCheck, forwardedIP, httpHeaders, httpStreamerAdapter, ioPerformanceCounter, ipAddress, isActive, isDelete, isHTTPOrigin, isPlayLogged, isSecure, lastRequest, liveStreamingPacketizer, lock, mediaCasterStreamLock, notifyCreate, playDuration, playSeek, playStart, properties, queryStr, redirectSession, redirectSessionBody, redirectSessionCode, redirectSessionContentType, redirectSessionURL, referrer, serverIp, serverPort, sessionFormat, sessionId, sessionProtocol, sessionTimeout, sessionType, stream, streamDomainStrSet, streamExt, streamName, streamNamePartMap, streamPosition, timeoutSession, totalIOPerformance2Last, totalIOPerformanceLast, transcoderVODIndex, transcoderVODIndexDestinationsMap, transcoderVODIndexDestinationsOrder, transcoderVODListeners, transcoderVODSession, uri, userAgent, userHTTPHeaders, userManifestHeaders, userQueryStr, vhost, vodTranscodeNGRP

Fields inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[SESSIONFORMAT_CMAF](#), [SESSIONFORMAT_CMAF_LL](#), [SESSIONFORMAT_DEFAULT](#), [SESSIONPROTOCOL_COUNT](#), [SESSIONPROTOCOL_CUPERTINOSTREAMING](#), [SESSIONPROTOCOL_DIRECTSTREAMING](#), [SESSIONPROTOCOL_DVRCHUNKSTREAMING](#), [SESSIONPROTOCOL_MPEGDASHSTREAMING](#), [SESSIONPROTOCOL_SANJOSESTREAMING](#), [SESSIONPROTOCOL_SMOOTHSTREAMING](#), [SESSIONPROTOCOL_TSSTREAMING](#), [SESSIONPROTOCOL_UNKNOWN](#), [SESSIONPROTOCOL_WEBMSTREAMING](#), [SESSIONTYPE_LIVE](#), [SESSIONTYPE_LIVEDVR](#), [SESSIONTYPE_UNKNOWN](#), [SESSIONTYPE_VOD](#)

Constructor Summary

public	HTTPStreamerSessionWebM()
--------	---

Method Summary

WebMPacketizerSessionTracker	getSessionTracker()
void	setSessionTracker (WebMPacketizerSessionTracker sessionTracker)
void	shutdown()

Methods inherited from class com.wowza.wms.httpstreamer.model.HTTPStreamerSessionBase

```

acceptSession, addHTTPSessionToTCPSession, addIOPerformance, addIOPerformance2,
addStreamDomainStr, addStreamDomainStrs, addTranscoderVODListener,
addUserHTTPHeaders, checkAndSetPlayLogged, clearLoggingValues,
containsStreamDomainStr, containsStreamNameParts, doSessionRedirect,
doSessionRedirect, extractHTTPRequestInfo, getAndClearNotifyCreate, getAppInstance,
getConnectionHolder, getCookieStr, getCORSHaders, getDvrSessionInfo, getElapsedTime,
getFileInfo, getForwardedIP, getHTTPDate, getHTTPHeader, getHTTPHeaderMap,
getHTTPHeaderNames, getHTTPIntHeader, getHTTPStreamerAdapter,
getIOPerformanceCounter, getIpAddress, getLastRequest, getLiveStreamingPacketizer,
getLock, getPlayDuration, getPlaySeek, getPlayStart, getProperties, getQueryStr,
getRedirectSessionBody, getRedirectSessionCode, getRedirectSessionContentType,
getRedirectSessionURL, getReferrer, getServerIp, getServerPort, getSessionFormat,
getSessionId, getSessionProtocol, getSessionTimeout, getSessionType, getStream,
getStreamDomainStr, getStreamDomainStrList, getStreamExt, getStreamName,
getStreamNameParts, getStreamPosition, getTimeRunning, getTimeRunningSeconds,
getTranscoderVODIndex, getTranscoderVODIndex, getTranscoderVODIndexDestinationsMap,
getTranscoderVODIndexDestinationsOrder, getTranscoderVODSession, getUri,
getUserAgent, getUserHTTPHeaders, getUserQueryStr, getVHost, getVODTranscodeNGRP,
indexTranscoderVOD, isAcceptSession, isActive, isDelete, isDeleteSession, isFileInfo,
isHTTPOrigin, isPlayLogged, isRedirectSession, isSecure, isTimeout, isTimeoutSession,
isValidated, isValidStreamDomainStr, lockRepeaterStreams,
notifyTranscoderVODFillChunkStart, notifyTranscoderVODFillChunkStop,
notifyTranscoderVODFillChunkTranscode, putFileInfo, putStreamNameParts,
redirectSession, redirectSession, rejectSession, removeStreamDomainStr,
removeTranscoderVODListener, setAcceptSession, setActive, setAppInstance,
setCookieStr, setDeleteSession, setDvrSessionInfo, setForwardedIP, setHTTPOrigin,
setHTTPStreamerAdapter, setIpAddress, setLiveStreamingPacketizer, setPlayDuration,
setPlayLogged, setPlaySeek, setPlayStart, setQueryStr, setRedirectSession,
setRedirectSessionBody, setRedirectSessionCode, setRedirectSessionContentType,
setRedirectSessionURL, setReferrer, setSecure, setServerIp, setServerPort,
setSessionFormat, setSessionId, setSessionProtocol, setSessionTimeout,
setSessionType, setStream, setStreamExt, setStreamName, setStreamPosition,
setThreadContext, setTimeoutSession, setTranscoderVODIndex, setTranscoderVODSession,
setUri, setUserAgent, setUserHTTPHeader, setUserQueryStr, setValidated, setVHost,
setVODTranscodeNGRP, shutdown, shutdownLocked, touch, updateLoggingValues,
validStreamDomainToString

```

Methods inherited from class java.lang.Object

```

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

```

Methods inherited from interface [com.wowza.wms.httpstreamer.model.IHTTPStreamerSession](#)

[acceptSession](#), [addHTTPSessionToTCPSession](#), [addIOPerformance](#), [addIOPerformance2](#),
[addStreamDomainStr](#), [addStreamDomainStrs](#), [addTranscoderVODListener](#),
[addUserHTTPHeaders](#), [checkAndSetPlayLogged](#), [clearLoggingValues](#),
[containsStreamDomainStr](#), [containsStreamNameParts](#), [doSessionRedirect](#),
[doSessionRedirect](#), [extractHTTPRequestInfo](#), [getAndClearNotifyCreate](#), [getAppInstance](#),
[getConnectionHolder](#), [getCookieStr](#), [getCORSHeaders](#), [getDvrSessionInfo](#), [getElapsedTime](#),
[getFileInfo](#), [getForwardedIP](#), [getHTTPHeader](#), [getHTTPHeaderMap](#), [getHTTPHeaderNames](#),
[getHTTPIntHeader](#), [getHTTPStreamerAdapter](#), [getIOPerformanceCounter](#), [getIpAddress](#),
[getLastRequest](#), [getLiveStreamingPacketizer](#), [getLock](#), [getPlayDuration](#), [getPlaySeek](#),
[getPlayStart](#), [getProperties](#), [getQueryStr](#), [getRedirectSessionBody](#),
[getRedirectSessionCode](#), [getRedirectSessionContentType](#), [getRedirectSessionURL](#),
[getReferrer](#), [getServerIp](#), [getServerPort](#), [getSessionFormat](#), [getSessionId](#),
[getSessionProtocol](#), [getSessionTimeout](#), [getSessionType](#), [getStream](#), [getStreamExt](#),
[getStreamName](#), [getStreamNameParts](#), [getStreamPosition](#), [getTimeRunning](#),
[getTimeRunningSeconds](#), [getTranscoderVODIndex](#), [getTranscoderVODIndex](#),
[getTranscoderVODIndexDestinationsMap](#), [getTranscoderVODIndexDestinationsOrder](#),
[getTranscoderVODSession](#), [getUri](#), [getUserAgent](#), [getUserHTTPHeaders](#), [getUserQueryStr](#),
[getVHost](#), [getVODTranscodeNGRP](#), [indexTranscoderVOD](#), [isAcceptSession](#), [isActive](#),
[isDelete](#), [isDeleteSession](#), [isFileInfo](#), [isHTTPOrigin](#), [isPlayLogged](#), [isRedirectSession](#),
[isSecure](#), [isTimeout](#), [isTimeoutSession](#), [isValidated](#), [isValidStreamDomainStr](#),
[lockRepeaterStreams](#), [notifyTranscoderVODFillChunkStart](#),
[notifyTranscoderVODFillChunkStop](#), [notifyTranscoderVODFillChunkTranscode](#), [putFileInfo](#),
[putStreamNameParts](#), [redirectSession](#), [redirectSession](#), [rejectSession](#),
[removeStreamDomainStr](#), [removeTranscoderVODListener](#), [setAcceptSession](#), [setActive](#),
[setAppInstance](#), [setCookieStr](#), [setDeleteSession](#), [setDvrSessionInfo](#), [setForwardedIP](#),
[setHTTPOrigin](#), [setHTTPStreamerAdapter](#), [setIpAddress](#), [setLiveStreamingPacketizer](#),
[setPlayDuration](#), [setPlayLogged](#), [setPlaySeek](#), [setPlayStart](#), [setQueryStr](#),
[setRedirectSession](#), [setRedirectSessionBody](#), [setRedirectSessionCode](#),
[setRedirectSessionContentType](#), [setRedirectSessionURL](#), [setReferrer](#), [setSecure](#),
[setServerIp](#), [setServerPort](#), [setSessionFormat](#), [setSessionId](#), [setSessionProtocol](#),
[setSessionTimeout](#), [setSessionType](#), [setStream](#), [setStreamExt](#), [setStreamName](#),
[setStreamPosition](#), [setTimeoutSession](#), [setTranscoderVODIndex](#), [setTranscoderVODSession](#),
[setUri](#), [setUserAgent](#), [setUserHTTPHeader](#), [setUserQueryStr](#), [setVHost](#),
[setVODTranscodeNGRP](#), [shutdown](#), [touch](#), [updateLoggingValues](#), [validStreamDomainToString](#)

Constructors

HTTPStreamerSessionWebM

```
public HTTPStreamerSessionWebM()
```

Methods

getSessionTracker

```
public WebMPacketizerSessionTracker getSessionTracker()
```

setSessionTracker

```
public void setSessionTracker(WebMPacketizerSessionTracker sessionTracker)
```

(continued from last page)

shutdown

```
public void shutdown()
```

Package

com.wowza.wms.livestreamrecord.manager

com.wowza.wms.livestreamrecord.manager

Interface **ILiveStreamRecordManager**

public interface **ILiveStreamRecordManager**
extends

This interface provides access to the functionality of the LiveStreamRecordManager. The LiveStreamRecordManger is responsible for maintaining the list of IStreamRecorders as well as managing the IStreamRecorder life cycle.

Method Summary

abstract ILiveStreamRecordManagerActionNotify	addListener(ILiveStreamRecordManagerActionNotify listener) Used to add a listener to receive ILiveStreamRecordManagerActionNotify events from the LiveStreamRecordManager.
abstract IStreamRecorder	getRecorder(IApplicationInstance appInstance, String streamName) Used to get a specific IStreamRecorder from the LiveStreamRecordManager. Modifying the returned IStreamRecorder while a recording is active may result in undefined behavior.
abstract java.util.List	getRecordersList(IApplicationInstance appInstance) Used to get the list of IStreamRecorders for a specific application instance.
abstract java.util.Map	getRecordersMap(IApplicationInstance appInstance) Used to get the Map of stream Name to IStreamRecorder for a specific application instance.
abstract void	init(IVHost vhost) Called by vhost init to initialize the LiveStreamRecordManager
abstract boolean	removeListener(ILiveStreamRecordManagerActionNotify listener) Used to remove an ILiveStreamRecordManagerActionNotify listener from the LiveStreamRecordManager.
abstract void	splitRecording(IApplicationInstance appInstance, String streamName) Used to tell the LiveStreamRecordManager to split (a.k.a segment) a recording immediately for a specific stream in a specific application instance.
abstract void	startRecording(IApplicationInstance appInstance, StreamRecorderParameters params) Used to tell the LiveStreamRecordManager to create StreamRecorders for all streams which are published to the specified application instance.
abstract void	startRecording(IApplicationInstance appInstance, String streamName, StreamRecorderParameters params) Used to tell the LiveStreamRecordManager to create a StreamRecorder for a specific stream in a specific application instance.
abstract void	stopRecording(IApplicationInstance appInstance) Used to tell the LiveStreamRecordManager to stop all StreamRecorders on a specific application instance.
abstract void	stopRecording(IApplicationInstance appInstance, String streamName) Used to tell the LiveStreamRecordManager to stop a StreamRecorder for a specific stream in a specific application instance.

Methods

(continued from last page)

init

```
public abstract void init(IVHost vhost)
```

Called by vhost init to initialize the LiveStreamRecordManager

Parameters:

vhost - The vhost to associated with the instance of LiveStreamRecordManager

getRecorder

```
public abstract IStreamRecorder getRecorder(IApplicationInstance appInstance,  
String streamName)
```

Used to get a specific IStreamRecorder from the LiveStreamRecordManager. Modifying the returned IStreamRecorder while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder
streamName - The stream name associated with the desired IStreamRecorder

Returns:

The requested IStreamRecorder or null if it does not exist

getRecordersList

```
public abstract java.util.List getRecordersList(IApplicationInstance appInstance)
```

Used to get the list of IStreamRecorders for a specific application instance. Making changes to the returned list (e.g. removing an IStreamRecorder from the list) does not affect the LiveStreamRecordManager's list, however, changes made to the IStreamRecorders themselves will be reflected in the LiveStreamRecordManager's IStreamRecorder. Therefore, changing IStreamRecorders while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder List

Returns:

The requested IStreamRecorder List. The list can be empty if no IStreamRecorders are set.

getRecordersMap

```
public abstract java.util.Map getRecordersMap(IApplicationInstance appInstance)
```

Used to get the Map of stream Name to IStreamRecorder for a specific application instance. Making changes to the returned map (e.g. removing a mapping entry from the map) does not affect the LiveStreamRecordManager's map, however, changes made to the IStreamRecorders themselves will be reflected in the LiveStreamRecordManager's IStreamRecorder. Therefore, changing IStreamRecorders while a recording is active may result in undefined behavior.

Parameters:

appInstance - The application instance associated with the desired IStreamRecorder List

Returns:

The requested stream name to IStreamRecorder mappings. The map can be empty if no IStreamRecorders are set.

startRecording

```
public abstract void startRecording(IApplicationInstance appInstance,  
StreamRecorderParameters params)
```

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Used to tell the LiveStreamRecordManager to create StreamRecorders for all streams which are published to the specified application instance. The StreamRecorderParameters specified will be used for each StreamRecorder created. If the StreamRecordParameters are null the default StreamRecordParameters will be used.

Parameters:

appInstance - The application instance on which to record all incoming streams
params - The StreamRecorderParameters to use for all recorders

See Also:

[StreamRecorderParameters](#)
[IStreamRecorderConstants](#)

startRecording

```
public abstract void startRecording(IApplicationInstance appInstance,  
    String streamName,  
    StreamRecorderParameters params)
```

Used to tell the LiveStreamRecordManager to create a StreamRecorder for a specific stream in a specific application instance. The StreamRecorderParameters specified will be used for the StreamRecorder. If the StreamRecordParameters are null the default StreamRecordParameters will be used.

Parameters:

appInstance - The application instance on which to record the requested stream
streamName - The stream name associated with the incoming stream to record
params - The StreamRecorderParameters to use for the StreamRecorder

See Also:

[StreamRecorderParameters](#)
[IStreamRecorderConstants](#)

stopRecording

```
public abstract void stopRecording(IApplicationInstance appInstance,  
    String streamName)
```

Used to tell the LiveStreamRecordManager to stop a StreamRecorder for a specific stream in a specific application instance. If a StreamRecorder already exists for the specified application instance and stream name, nothing is done.

Parameters:

appInstance - The application instance of the StreamRecorder to stop
streamName - The stream name associated with the StreamRecorder to stop

stopRecording

```
public abstract void stopRecording(IApplicationInstance appInstance)
```

Used to tell the LiveStreamRecordManager to stop all StreamRecorders on a specific application instance. If no StreamRecorders exist for the specified application instance, nothing is done.

Parameters:

appInstance - The application instance on which to stop all StreamRecorders

splitRecording

```
public abstract void splitRecording(IApplicationInstance appInstance,  
    String streamName)
```

Used to tell the LiveStreamRecordManager to split (a.k.a segment) a recording immediately for a specific stream in a specific application instance. If no StreamRecorder exists for the specified application instance and stream name, nothing is done.

(continued from last page)

Parameters:

appInstance - The application instance of the StreamRecorder to split
streamName - The stream name associated with the StreamRecorder to split

addListener

```
public abstract ILiveStreamRecordManagerActionNotify  
addListener(ILiveStreamRecordManagerActionNotify listener)
```

Used to add a listener to receive [ILiveStreamRecordManagerActionNotify](#) events from the [LiveStreamRecordManager](#). Listeners are notified in the order in which they are added.

Parameters:

listener - An instance of a class which implements the [ILiveStreamRecordManagerActionNotify](#) interface

Returns:

The listener instance passed in

See Also:

[ILiveStreamRecordManagerActionNotify](#)

removeListener

```
public abstract boolean removeListener(ILiveStreamRecordManagerActionNotify listener)
```

Used to remove an [ILiveStreamRecordManagerActionNotify](#) listener from the [LiveStreamRecordManager](#).

Parameters:

listener - The listener passed into the [addListener](#) method.

Returns:

true if the listener was found in the list otherwise false.

com.wowza.wms.livestreamrecord.manager Interface **ILiveStreamRecordManagerActionNotify**

public interface **ILiveStreamRecordManagerActionNotify**
extends

This interface provides notifications to registered listeners for LiveStreamRecordManager events as it operates on IStreamRecorders. These notification are sent prior to invoking the associated method for a recorder.

Multiple Listener's can be registered for the LiveStreamRecordManager. The listeners are notified in the order in which they were added.

See Also:
[for API's to add and remove listeners](#)

Method Summary

abstract void	onCreateRecord (IStreamRecorder recorder) This notification occurs when a new recorder is created due to a call to one of the ILiveStreamRecordManager startRecording API's.
abstract void	onSplitRecord (IStreamRecorder recorder) This notification occurs due to a call to the ILiveStreamRecordManager splitRecording API.
abstract void	onStartRecord (IStreamRecorder recorder) This notification occurs due to a call to one of the ILiveStreamRecordManager startRecording API's.
abstract void	onStopRecord (IStreamRecorder recorder) This notification occurs due to a call to the ILiveStreamRecordManager stopRecording API.
abstract void	onSwitchRecord (IStreamRecorder recorder, IMediaStream newStream) This notification occurs when an existing stream is replaced with a stream of the same name.
abstract IStreamRecorder	recordFactory (String streamName, StreamRecorderParameters recordParams) This notification is the first one to occur when the ILiveStreamRecordManager is requested to start a recording via any of the ILiveStreamRecordManager startRecording API's It gives the listener the opportunity to return a custom class which implements the IStreamRecorder interface to handle the recording. If the listener returns null, the LiveStreamRecordManager will internally create an new StreamRecorder to handle the recording.

Methods

recordFactory

```
public abstract IStreamRecorder recordFactory(String streamName,
StreamRecorderParameters recordParams)
```

(continued from last page)

This notification is the first one to occur when the `ILiveStreamRecordManager` is requested to start a recording via any of the `ILiveStreamRecordManager` `startRecording` API's

It gives the listener the opportunity to return a custom class which implements the `IStreamRecorder` interface to handle the recording.

If the listener returns null, the `LiveStreamRecordManager` will internally create a new `StreamRecorder` to handle the recording. Since multiple listeners can be registered, `LiveStreamRecordManager` notifies listeners in the order in which they were added, and will use the first `IStreamRecorder` returned which is not null, however, remaining listeners will receive the notification.

Called before `LiveStreamRecordManager` internal action is taken

Parameters:

`recordParams` - the parameters passed into `IStreamRecordManager` `startRecording` API
`streamName` - the stream name passed into `IStreamRecordManager` `startRecording` API

Returns:

the `IStreamRecorder` which will handled recording or null

onCreateRecord

```
public abstract void onCreateRecord(IStreamRecorder recorder)
```

This notification occurs when a new recorder is created due to a call to one of the `ILiveStreamRecordManager` `startRecording` API's.

Called after the `recordFactory` notification is called, but before `LiveStreamRecordManager` calls the recorders own `createRecorder` method.

Parameters:

`recorder` - The new recorder

onStartRecord

```
public abstract void onStartRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to one of the `ILiveStreamRecordManager` `startRecording` API's.

Called after the `onCreateRecord` notification is called, but before `LiveStreamRecordManager` calls the recorders own `startRecorder` method.

Parameters:

`recorder` - The recorder which is starting

onSplitRecord

```
public abstract void onSplitRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to the `ILiveStreamRecordManager` `splitRecording` API.

Called before `LiveStreamRecordManager` calls the recorders own `splitRecorder` method.

Parameters:

`recorder` - The recorder for which the split has been requested.

onStopRecord

```
public abstract void onStopRecord(IStreamRecorder recorder)
```

This notification occurs due to a call to the `ILiveStreamRecordManager` `stopRecording` API.

Called before `LiveStreamRecordManager` calls the recorders own `stopRecorder` method.

Parameters:

`recorder` - The recorder for which a stop has been requested.

onSwitchRecord

```
public abstract void onSwitchRecord(IStreamRecorder recorder,  
    IMediaStream newStream)
```

This notification occurs when an existing stream is replaced with a stream of the same name. This can occur when a stream is published from an encoder, and then a different encoder publishes a stream using the same stream name.

Called before `LiveStreamRecordManager` calls the recorders own `switchRecorder` method.

Parameters:

`recorder` - The recorder for the existing stream

`newStream` - The new `IMediaStream` associated with the existing stream name

com.wowza.wms.livestreamrecord.manager

Interface IStreamRecorder

public interface **IStreamRecorder**
extends

This interface provides access to into a StreamRecorder.

The StreamRecorder is responsible for performing the actual recording functionality of a live stream, as directed by the LiveStreamRecordManager.

Method Summary

abstract IStreamRecorderActionNotify	addListener(IStreamRecorderActionNotify listener) Called to add a listener for IStreamRecorderActionNotify events generated by the recorder. Multiple listeners can be added.
abstract void	createRecorder() Called to tell the recorder to initialize itself after it has been created.
abstract IApplicationInstance	getAppInstance() Called to get the application Instance the recorder is associated with
abstract String	getBaseFilePath() Called to get the full path and filename used by the recorder as the PRIOR to any changes made due to the selected segmentationType and versioningOption.
abstract long	getCurrentDuration() Called to get the current segment duration regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.
abstract String	getCurrentFile() Called to get the current segments fully qualified file name regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.
abstract long	getCurrentSize() Called to get the current segment size regardless of segmentationType This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.
abstract org.joda.time.DateTim e	getEndTime() Called to get the end time of the recording regardless of segmentationType. When the recording is still active, the returned value is null. When the recording has been stopped, the returned value is for the time when the recording stopped.
abstract String	getErrorString() Called to get an error string describing the error, when the recorder state is RECORDER_STATE_ERROR.
abstract String	getFileFormat() Called to get output file format being used by the recorder.
abstract String	getFilePath() Called to get the full path and filename used by the recorder AFTER changes made due to the selected segmentationType and versioningOption. NOTE: When the recorder is not in RECORDER_STATE_RECORDING state, the returned value will be the basefilePath value.

abstract IStreamRecorderFileVersionDelegate	getFileVersionDelegate() Called to get the IStreamRecorderFileVersionDelegate being used by the recorder.
abstract StreamRecorderParameters	getRecorderParams() Called to get the StreamRecorderParameters for the recorder This is typically used to check or set the StreamRecorderParameters used to configure a recorder.
abstract int	getRecorderState() Called to get the current state of the recorder
abstract String	getRecorderStateString() Called to get the current state of the recorder as a text string.
abstract String	getSegmentationType() Called to get the SegmentationType being used by the recorder.
abstract long	getSegmentDuration() Called to get the segment duration used by the recorder when segmentationType is set to SEGMENT_BY_DURATION.
abstract int	getSegmentNumber() Called to get the current segment number regardless of segmentationType. This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.
abstract CrontabEvent	getSegmentSchedule() Called to get the CrontabEvent object associated with the recorder when the segmentationType is set to SEGMENT_BY_SCHEDULE When the recorder state is RECORDER_STATE_ERROR, RECORDER_STATE_PENDING or RECORDER_STATE_WAITING, the return value is null, otherwise the CrontabEvent use by the recorder is returned.
abstract String	getSegmentScheduleString() Called to get the segment schedule crontab string used by the recorder when segmentationType is set to SEGMENT_BY_SCHEDULE.
abstract long	getSegmentSize() Called to get the segment size used by the recorder when segmentationType is set to SEGMENT_BY_SIZE.
abstract org.joda.time.DateTime	getStartTime() Called to get the start time of the current recording regardless of segmentationType.
abstract IMediaStream	getStream() Called to get the IMediaStream object being used by the recorder
abstract String	getStreamName() Called to get the stream name being used by the recorder
abstract String	getVersioningOption() Called to get the method used by the recorder to version a file when a file exists of the same name.
abstract boolean	isAppendFile() Called to check the versioningOption used by the recorder. Users should use getVersioningOption instead.
abstract boolean	isMoveFirstVideoFrameToZero() Called to check the value of MoveFirstVideoFrameToZero being used by the recorder.

abstract boolean	<u>isRecordData()</u> Called to check the value of RecordData being used by the recorder.
abstract boolean	<u>isSplitOnTcDiscontinuity()</u> Called to check the value of splitOnTcDiscontinuity being used by the recorder.
abstract boolean	<u>isStartOnKeyFrame()</u> Called to check the value of StartOnKeyFrame being used by the recorder.
abstract boolean	<u>isVersionFile()</u> Called to check the versioningOption used by the recorder. Users should use getVersioningOption instead.
abstract boolean	<u>removeListener(IStreamRecorderActionNotify listener)</u> Called to remove a listener from the the recorder.
abstract void	<u>setInternalRecorder(ILiveStreamRecord internalRecorder)</u> Called to set the internal recorder used by the StreamRecorder This method should only be used if existing recorder workflows cannot be implemented using the IStreamRecorderActionNotify API's.
abstract void	<u>setStream(IMediaStream stream)</u> Called to set the IMediaStream object the recorder will use NOTE: This method is used by LiveStreamRecordManager to manage recorders and associated IMediaStream objects and should NOT be used directly when a StreamRecorder is under the control of LiveStreamRecordManager
abstract void	<u>splitRecorder()</u> Called to tell the recorder to stop writing to the current file, create a new file and write begin writing data to the new file. The recorder should start writing data to the new file beginning with a video key frame.
abstract void	<u>startRecorder()</u> Called to tell the recorder to start recording.
abstract void	<u>stopRecorder()</u> Called to tell the recorder to stop recording.
abstract void	<u>switchRecorder(IMediaStream newStream)</u> Called to tell the recorder to switch over to the data from a new IMediaStream. This occurs when an existing stream is replaced with a stream of the same name.

Methods

createRecorder

public abstract void **createRecorder()**

Called to tell the recorder to initialize itself after it has been created. This API should be called prior to calling the startRecorder() method.

startRecorder

public abstract void **startRecorder()**

Called to tell the recorder to start recording. This API should be called after createRecorder() method has been called to ensure the recorder has been properly initialized

(continued from last page)

switchRecorder

```
public abstract void switchRecorder(IMediaStream newStream)
```

Called to tell the recorder to switch over to the data from a new IMediaStream.
This occurs when an existing stream is replaced with a stream of the same name.

For example: When a stream is published from an encoder, and then a different encoder publishes a stream using the same stream name. Called before LiveStreamRecordManager calls the recorders own switchRecorder method.

Parameters:

newStream - The new IMediaStream the recorder should switch to.

stopRecorder

```
public abstract void stopRecorder()
```

Called to tell the recorder to stop recording.

splitRecorder

```
public abstract void splitRecorder()
```

Called to tell the recorder to stop writing to the current file, create a new file and begin writing data to the new file.
The recorder should start writing data to the new file beginning with a video key frame.

getRecorderParams

```
public abstract StreamRecorderParameters getRecorderParams()
```

Called to get the StreamRecorderParameters for the recorder
This is typically used to check or set the StreamRecorderParameters used to configure a recorder. To get the actual value used by the recorder, use the appropriate get method found below.

See Also:

[StreamRecorderParameters](#)

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Called to get the application Instance the recorder is associated with

Returns:

IApplicationInstance

getStreamName

```
public abstract String getStreamName()
```

Called to get the stream name being used by the recorder

(continued from last page)

Returns:

String Stream name

getStream

```
public abstract IMediaStream getStream()
```

Called to get the IMediaStream object being used by the recorder

Returns:

IMediaStream Stream object

setStream

```
public abstract void setStream(IMediaStream stream)
```

Called to set the IMediaStream object the recorder will use

NOTE: This method is used by LiveStreamRecordManager to manage recorders and associated IMediaStream objects and should NOT be used directly when a StreamRecorder is under the control of LiveStreamRecordManager

Parameters:

stream - IMediaStream The new Stream object

getRecorderState

```
public abstract int getRecorderState()
```

Called to get the current state of the recorder

Returns:

int Current state

See Also:

[IStreamRecorderConstants.RECORDER_STATE_ERROR](#)

[IStreamRecorderConstants.RECORDER_STATE_PENDING](#)

[IStreamRecorderConstants.RECORDER_STATE_WAITING](#)

[IStreamRecorderConstants.RECORDER_STATE_RECORDING](#)

getRecorderStateString

```
public abstract String getRecorderStateString()
```

Called to get the current state of the recorder as a text string.

Returns:

(continued from last page)

String Current state as a string

See Also:

[IStreamRecorderConstants.RECORDER_STATE_ERROR_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_PENDING_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_WAITING_STRING](#)
[IStreamRecorderConstants.RECORDER_STATE_RECORDING_STRING](#)

getFileFormat

```
public abstract String getFileFormat()
```

Called to get output file format being used by the recorder.

Returns:

String Output file format

See Also:

[IStreamRecorderConstants.FORMAT_MP4](#)
[IStreamRecorderConstants.FORMAT_FLV](#)

isStartOnKeyFrame

```
public abstract boolean isStartOnKeyFrame()
```

Called to check the value of StartOnKeyFrame being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.startOnKeyFrame](#)

isRecordData

```
public abstract boolean isRecordData()
```

Called to check the value of RecordData being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.recordData](#)

isSplitOnTcDiscontinuity

public abstract boolean **isSplitOnTcDiscontinuity**()

Called to check the value of splitOnTcDiscontinuity being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.splitOnTcDiscontinuity](#)

isMoveFirstVideoFrameToZero

public abstract boolean **isMoveFirstVideoFrameToZero**()

Called to check the value of MoveFirstVideoFrameToZero being used by the recorder.

Returns:

boolean true, false

See Also:

[StreamRecorderParameters.moveFirstVideoFrameToZero](#)

getSegmentationType

public abstract String **getSegmentationType**()

Called to get the SegmentationType being used by the recorder.

Returns:

String Segmentation type

See Also:

[StreamRecorderParameters.segmentationType](#)
[IStreamRecorderConstants.SEGMENT_NONE](#)
[IStreamRecorderConstants.SEGMENT_BY_DURATION](#)
[IStreamRecorderConstants.SEGMENT_BY_SIZE](#)
[IStreamRecorderConstants.SEGMENT_BY_SCHEDULE](#)

getVersioningOption

public abstract String **getVersioningOption**()

(continued from last page)

Called to get the method used by the recorder to version a file when a file exists of the same name.

Returns:

String Versioning option

See Also:

[StreamRecorderParameters.versioningOption](#)
[IStreamRecorderConstants.APPEND_FILE](#)
[IStreamRecorderConstants.OVERWRITE_FILE](#)
[IStreamRecorderConstants.VERSION_FILE](#)

getSegmentSize

```
public abstract long getSegmentSize()
```

Called to get the segment size used by the recorder when segmentationType is set to SEGMENT_BY_SIZE.

Returns:

long Segment size in bytes

See Also:

[StreamRecorderParameters.segmentSize](#)

getSegmentDuration

```
public abstract long getSegmentDuration()
```

Called to get the segment duration used by the recorder when segmentationType is set to SEGMENT_BY_DURATION.

Returns:

long Segment duration in milliseconds

See Also:

[StreamRecorderParameters.segmentDuration](#)

getSegmentScheduleString

```
public abstract String getSegmentScheduleString()
```

Called to get the segment schedule crontab string used by the recorder when segmentationType is set to SEGMENT_BY_SCHEDULE.

Returns:

(continued from last page)

String Segment schedule

See Also:

[StreamRecorderParameters.segmentSchedule](#)

getFilePath

```
public abstract String getFilePath()
```

Called to get the full path and filename used by the recorder AFTER changes made due to the selected segmentationType and versioningOption.

NOTE: When the recorder is not in RECORDER_STATE_RECORDING state, the returned value will be the basefilePath value.

Returns:

String Full path and filename

See Also:

[getBaseFilePath\(\)](#)

getBaseFilePath

```
public abstract String getBaseFilePath()
```

Called to get the full path and filename used by the recorder as the PRIOR to any changes made due to the selected segmentationType and versioningOption.

Returns:

String Full path and filename

See Also:

[getFilePath\(\)](#)

getCurrentSize

```
public abstract long getCurrentSize()
```

Called to get the current segment size regardless of segmentationType

This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

long Segment size in bytes

getCurrentDuration

```
public abstract long getCurrentDuration()
```

(continued from last page)

Called to get the current segment duration regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

long Segment duration in milliseconds

getCurrentFile

```
public abstract String getCurrentFile()
```

Called to get the current segments fully qualified file name regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

String The current fully qualified file name, packets are being written to.

getSegmentNumber

```
public abstract int getSegmentNumber()
```

Called to get the current segment number regardless of segmentationType.
This value is updated continuously while the recorder state is RECORDER_STATE_RECORDING.

Returns:

int Current segment number.

getStartTime

```
public abstract org.joda.time.DateTime getStartTime()
```

Called to get the start time of the current recording regardless of segmentationType.

Returns:

DateTime Current segment's start time.

getEndTime

```
public abstract org.joda.time.DateTime getEndTime()
```

Called to get the end time of the recording regardless of segmentationType.
When the recording is still active, the returned value is null.
When the recording has been stopped, the returned value is for the time when the recording stopped.

Returns:

DateTime Segment end time.

getErrorString

```
public abstract String getErrorString()
```

(continued from last page)

Called to get an error string describing the error, when the recorder state is is RECORDER_STATE_ERROR.

Returns:

String Error description string

getFileVersionDelegate

```
public abstract IStreamRecorderFileVersionDelegate getFileVersionDelegate()
```

Called to get the IStreamRecorderFileVersionDelegate being used by the recorder.

Returns:

IStreamRecorderFileVersionDelegate

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

addListener

```
public abstract IStreamRecorderActionNotify addListener(IStreamRecorderActionNotify listener)
```

Called to add a listener for IStreamRecorderActionNotify events generated by the recorder.
Multiple listeners can be added. All listeners will be called for each event, in the order in which they were added.

Parameters:

listener - An object which implements the IStreamRecorderActionNotify interface

Returns:

IStreamRecorderActionNotify The listener object passed in.

See Also:

[IStreamRecorderActionNotify](#)

removeListener

```
public abstract boolean removeListener(IStreamRecorderActionNotify listener)
```

Called to remove a listener from the the recorder.

Parameters:

listener - The listener which is to be removed

(continued from last page)

Returns:

boolean true, if listener was found in list, else false

isVersionFile

```
public abstract boolean isVersionFile()
```

Called to check the versioningOption used by the recorder.
Users should use getVersioningOption instead.

Returns:

boolean true when versioningOption is set to VERISON_FILE, otherwise false

isAppendFile

```
public abstract boolean isAppendFile()
```

Called to check the versioningOption used by the recorder.
Users should use getVersioningOption instead.

Returns:

boolean true when versioningOption is set to APPEND_FILE, otherwise false

getSegmentSchedule

```
public abstract CrontabEvent getSegmentSchedule()
```

Called to get the CrontabEvent object associated with the recorder when the segmentationType is set to SEGMENT_BY_SCHEDULE
When the recorder state is RECORDER_STATE_ERROR, RECORDER_STATE_PENDING or RECORDER_STATE_WAITING, the return value is null,
otherwise the CrontabEvent use by the recorder is returned.

Returns:

CrontabEvent

setInternalRecorder

```
public abstract void setInternalRecorder(ILiveStreamRecord internalRecorder)
```

Called to set the internal recorder used by the StreamRecorder
This method should only be used if existing recorder workflows cannot be implemented using the IStreamRecorderActionNotify API's.

Parameters:

internalRecorder

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderActionNotify

public interface **IStreamRecorderActionNotify**
extends

This interface provides notifications to registered listeners throughout the life cycle of a StreamRecorder. These events are similar to the ILiveStreamRecordManageActionNotify events, however, they are called by the StreamRecorder deeper in the action processing.

Multiple Listener's can be registered for each StreamRecorder. The listeners are notified in the order in which they were added.

See Also:
[for API's to add and remove listeners](#)

Method Summary

abstract void	onCreateRecorder (IStreamRecorder recorder) This notification occurs when a new recorder has been created, but before recording has started.
abstract void	onSegmentEnd (IStreamRecorder recorder) This notification occurs when a recorder stops writing to the current file
abstract void	onSegmentStart (IStreamRecorder recorder) This notification occurs when a recorder starts writing to the current file
abstract void	onSplitRecorder (IStreamRecorder recorder) This notification occurs when a recorder is directed to split the active recording.
abstract void	onStartRecorder (IStreamRecorder recorder) This notification occurs when a recorder starts recording.
abstract void	onStopRecorder (IStreamRecorder recorder) This notification occurs when a recorder stops recording.
abstract void	onSwitchRecorder (IStreamRecorder recorder, IMediaStream newStream) This notification occurs when an existing stream has been replaced by a new stream of the same name.

Methods

onCreateRecorder

public abstract void **onCreateRecorder**([IStreamRecorder](#) recorder)

This notification occurs when a new recorder has been created, but before recording has started. Within this method, changes can be made to the StreamRecorder's StreamRecorderParameters, which will then take affect when the recorder is started.

Called before action is taken

Parameters:

recorder - the new recorder

(continued from last page)

onStartRecorder

```
public abstract void onStartRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder starts recording.

Called after all configuration of the recorder is complete, but before the recording actually starts.

Parameters:

recorder - the recorder which is starting

onSplitRecorder

```
public abstract void onSplitRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder is directed to split the active recording.

Called after all configuration of the recorder is complete, but before the recording actually starts.

Parameters:

recorder - the recorder which is starting

onStopRecorder

```
public abstract void onStopRecorder(IStreamRecorder recorder)
```

This notification occurs when a recorder stops recording.

NOTE: Recorders are stopped whenever a stream is unpublished, or when a stream is "reset".

Within this method, calling; `getCurrentFile()`, `getCurrentDuration()`, `getCurrentSize()`, `segmentNumber()`, `getStartTime()`, `getEndTime()` will return the values accumulated from the time the `onStartRecorder` notification was called, to the time this notification was called.

Called after the recorder is stopped.

Parameters:

recorder - the recorder which is starting

onSwitchRecorder

```
public abstract void onSwitchRecorder(IStreamRecorder recorder,  
                                     IMediaStream newStream)
```

This notification occurs when an existing stream has been replaced by a new stream of the same name. The `StreamRecorder` will stop the recording associated with the existing stream and start a new recording for the new stream, using the same parameters as those used to originally start the recording.

Called before any action is taken

Parameters:

recorder - the current recorder for existing stream

newStream - the new stream which will be recorded

onSegmentStart

```
public abstract void onSegmentStart(IStreamRecorder recorder)
```

This notification occurs when a recorder starts writing to the current file

Called after a the file has been opened for writing, but before any data is written to the file.

Parameters:

(continued from last page)

recorder - the recorder which is writing the segment

onSegmentEnd

```
public abstract void onSegmentEnd(IStreamRecorder recorder)
```

This notification occurs when a recorder stops writing to the current file

Called after all packets have been written tot he file and the file has been closed.

Parameters:

recorder - the recorder which is wrote the segment

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderConstants

public interface **IStreamRecorderConstants**
extends

Defines the static constants used by the StreamRecorder system

The Properties for StreamRecorders should be placed in application.xml within the StreamRecorder properties container

for example:

```
</StreamRecorder>
  </Properties>
    </Property>
      </Name>streamRecorderDebugEnabled</Name>
      </Value>true</Value>
      </Type>Boolean</Type>
    </Property>
  </Properties>
</StreamRecorder>
```

Field Summary

public static final	<u>APPEND_FILE</u> Appends new stream data to the existing file. Value: append
public static final	<u>FORMAT_FLV</u> Value: flv
public static final	<u>FORMAT_MP4</u> Value: mp4
public static final	<u>OVERWRITE_FILE</u> Overwrites the existing file with the new file Value: overwrite
public static final	<u>PROPERTY_BACK_BUFFER_TIME</u> Application Property "streamRecorderBackBufferTime": for specifying the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording. Value: streamRecorderBackBufferTime
public static final	<u>PROPERTY_DEBUG_ENABLE</u> Application Property "streamRecorderDebugEnabled": for enabling additional log statements throughout StreamRecorder Value: streamRecorderDebugEnabled
public static final	<u>PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION</u> Application Property "streamRecorderDefaultAudioSearchPosition": for specifying how audio is found when it may not be in sync with the video Value: streamRecorderDefaultAudioSearchPosition

public static final	<u>PROPERTY_FILE_FORMAT</u> Application Property "streamRecorderFileFormat": for specifying the default file format used by StreamRecorder. Value: streamRecorderFileFormat
public static final	<u>PROPERTY_FILE_VERSION_DELEGATE</u> Application Property "streamRecorderFileVersionDelegate": for specifying a default custom file version delegate. Value: streamRecorderFileVersionDelegate
public static final	<u>PROPERTY_FILE_VERSION_TEMPLATE</u> Application Property "streamRecorderFileVersionTemplate": for specifying a default file version template string. Value: streamRecorderFileVersionTemplate
public static final	<u>PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO</u> Application Property "streamRecorderMoveFirstVideoFrameToZero": for specifying the default moveFirstVideoFrameToZero value used by StreamRecorder. Value: streamRecorderMoveFirstVideoFrameToZero
public static final	<u>PROPERTY_NOTIFY_LISTENER</u> Application Property "streamRecorderNotifyListener": for specifying the default listener which will receive StreamRecorder notifications. Value: streamRecorderNotifyListener
public static final	<u>PROPERTY_OUTPUT_FILE</u> Application Property "streamRecorderOutputFile": for specifying the default filename used by StreamRecorder for recordings. Value: streamRecorderOutputFile
public static final	<u>PROPERTY_OUTPUT_PATH</u> Application Property "streamRecorderOutputPath": for specifying the default path used by StreamRecorder to write recordings. Value: streamRecorderOutputPath
public static final	<u>PROPERTY_RECORD_DATA</u> Application Property "streamRecorderRecordData": for specifying the default recordData value used by StreamRecorders. Value: streamRecorderRecordData
public static final	<u>PROPERTY_SEGMENT_DURATION</u> Application Property "streamRecorderSegmentDuration": for specifying the default SegmentDuration used by StreamRecorder when the segmentationType is set to SEGMENT_BY_DURATION. Value: streamRecorderSegmentDuration
public static final	<u>PROPERTY_SEGMENT_SCHEDULE</u> Application Property "streamRecorderSegmentSchedule": for specifying the default SegmentSchedule string used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SCHEDULE. Value: streamRecorderSegmentSchedule
public static final	<u>PROPERTY_SEGMENT_SIZE</u> Application Property "streamRecorderSegmentSize": for specifying the default SegmentSize used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SIZE. Value: streamRecorderSegmentSize

public static final	<u>PROPERTY_SEGMENTATION_TYPE</u> Application Property "streamRecorderSegmentationType": for specifying the default segmentation type used by StreamRecorder. Value: streamRecorderSegmentationType
public static final	<u>PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT</u> Application Property "streamRecorderSkipKeyFrameUntilAudioTimeout": for specifying how long audio is waited for. Value: streamRecorderSkipKeyFrameUntilAudioTimeout
public static final	<u>PROPERTY_SPLIT_ON_TC_DISCONTINUITY</u> Application Property "streamRecorderSplitOnTcDiscontinuity": for specifying the default splitOnTcDiscontinuity value used by StreamRecorder. Value: streamRecorderSplitOnTcDiscontinuity
public static final	<u>PROPERTY_START_ON_KEYFRAME</u> Application Property "streamRecorderStartOnKeyFrame": for specifying the default startOnKeyFrame value used by StreamRecorder. Value: streamRecorderStartOnKeyFrame
public static final	<u>PROPERTY_TIMESCALE</u> Application Property "streamRecorderTimescale": for specifying the timescale used when writing packets to a file. Value: streamRecorderTimeScale
public static final	<u>PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING</u> Application Property "streamRecorderUseSimpleFileVersionNaming": for using StreamRecorderSimpleFileVersionDelegate instead of StreamRecorderFileVersionDelegate as the default file version naming delegate Value: streamRecorderUseSimpleFileVersionNaming
public static final	<u>PROPERTY_VERSIONING_OPTION</u> Application Property "streamRecorderVersioningOption": for specifying the default file versioning method used by StreamRecorders Value: streamRecorderVersioningOption
public static final	<u>RECORDER_STATE_ERROR</u> Value returned by IStreamRecorder getRecorderState() to indicate an error has occurred in the recorder. Value: -1
public static final	<u>RECORDER_STATE_ERROR_STRING</u> String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_ERROR. Value: Recorder Error
public static final	<u>RECORDER_STATE_PENDING</u> Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been created but it's IStreamRecorder startRecording() method has not yet been called. Value: 0
public static final	<u>RECORDER_STATE_PENDING_STRING</u> String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_PENDING. Value: Pending

public static final	<u>RECORDER_STATE_RECORDING</u> Value returned by IStreamRecorder getRecorderState() to indicate the recorder is actively recording data to file. Value: 2
public static final	<u>RECORDER_STATE_RECORDING_STRING</u> String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_RECORDING. Value: Recording
public static final	<u>RECORDER_STATE_WAITING</u> Value returned by IStreamRecorder getRecorderState() to indicate the recorder has been started but the associated stream is not currently being received by the server (for example the stream is not being published from the encoder) Value: 1
public static final	<u>RECORDER_STATE_WAITING_STRING</u> String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_WAITING. Value: Waiting for Stream
public static final	<u>SEGMENT_BY_DURATION</u> Value: duration
public static final	<u>SEGMENT_BY_SCHEDULE</u> Value: schedule
public static final	<u>SEGMENT_BY_SIZE</u> Value: size
public static final	<u>SEGMENT_NONE</u> Value: none
public static final	<u>VERSION_FILE</u> Uses the file name returned by the configured fileVersionDelegate to version the new file Value: version

Fields

PROPERTY_DEBUG_ENABLE

```
public static final java.lang.String PROPERTY_DEBUG_ENABLE
```

Application Property "streamRecorderDebugEnabled": for enabling additional log statements throughout StreamRecorder

Add the property to the StreamRecorder Properties section of Application.xml.

Default value is false

Valid values are true or false

Constant value: **streamRecorderDebugEnabled**

PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING

```
public static final java.lang.String PROPERTY_USE_SIMPLE_FILE_VERSION_NAMING
```

(continued from last page)

Application Property "streamRecorderUseSimpleFileVersionNaming": for using StreamRecorderSimpleFileVersionDelegate instead of StreamRecorderFileVersionDelegate as the default file version naming delegate

Add the property to the StreamRecorder Properties section of Application.xml.

Default value is false

Valid values are true, false

Constant value: **streamRecorderUseSimpleFileVersionNaming**

See Also:

[StreamRecorderSimpleFileVersionDelegate](#)

PROPERTY_SEGMENTATION_TYPE

```
public static final java.lang.String PROPERTY_SEGMENTATION_TYPE
```

Application Property "streamRecorderSegmentationType": for specifying the default segmentation type used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: none, schedule, size, duration

Constant value: **streamRecorderSegmentationType**

See Also:

[StreamRecorderParameters.segmentationType](#)

SEGMENT_NONE

```
public static final java.lang.String SEGMENT_NONE
```

Constant value: **none**

SEGMENT_BY_SCHEDULE

```
public static final java.lang.String SEGMENT_BY_SCHEDULE
```

Constant value: **schedule**

SEGMENT_BY_SIZE

```
public static final java.lang.String SEGMENT_BY_SIZE
```

Constant value: **size**

SEGMENT_BY_DURATION

```
public static final java.lang.String SEGMENT_BY_DURATION
```

Constant value: **duration**

(continued from last page)

PROPERTY_FILE_FORMAT

```
public static final java.lang.String PROPERTY_FILE_FORMAT
```

Application Property "streamRecorderFileFormat": for specifying the default file format used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: flv, mp4

Constant value: **streamRecorderFileFormat**

See Also:

[StreamRecorderParameters.fileFormat](#)

FORMAT_FLV

```
public static final java.lang.String FORMAT_FLV
```

Constant value: **flv**

FORMAT_MP4

```
public static final java.lang.String FORMAT_MP4
```

Constant value: **mp4**

PROPERTY_VERSIONING_OPTION

```
public static final java.lang.String PROPERTY_VERSIONING_OPTION
```

Application Property "streamRecorderVersioningOption": for specifying the default file versioning method used by StreamRecorders

Add the property to the StreamRecorder Properties section of Application.xml.

Valid values are: version, append, overwrite

Constant value: **streamRecorderVersioningOption**

See Also:

[StreamRecorderParameters.versioningOption](#)

VERSION_FILE

```
public static final java.lang.String VERSION_FILE
```

Uses the file name returned by the configured fileVersionDelegate to version the new file

Constant value: **version**

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

(continued from last page)

APPEND_FILE

```
public static final java.lang.String APPEND_FILE
```

Appends new stream data to the existing file. NOTE: To ensure playback compatibility, it is highly recommended that this option only be used if all streams recorded to the file will be using identical video and audio codecs and configurations.
Constant value: **append**

OVERWRITE_FILE

```
public static final java.lang.String OVERWRITE_FILE
```

Overwrites the existing file with the new file
Constant value: **overwrite**

PROPERTY_START_ON_KEYFRAME

```
public static final java.lang.String PROPERTY_START_ON_KEYFRAME
```

Application Property "streamRecorderStartOnKeyFrame": for specifying the default startOnKeyFrame value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderStartOnKeyFrame**

See Also:

[StreamRecorderParameters.startOnKeyFrame](#)

PROPERTY_RECORD_DATA

```
public static final java.lang.String PROPERTY_RECORD_DATA
```

Application Property "streamRecorderRecordData": for specifying the default recordData value used by StreamRecorders.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderRecordData**

See Also:

[StreamRecorderParameters.recordData](#)

PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO

```
public static final java.lang.String PROPERTY_MOVE_FIRST_VIDEO_FRAME_TO_ZERO
```

Application Property "streamRecorderMoveFirstVideoFrameToZero": for specifying the default moveFirstVideoFrameToZero value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderMoveFirstVideoFrameToZero**

See Also:

[StreamRecorderParameters.moveFirstVideoFrameToZero](#)

(continued from last page)

PROPERTY_SPLIT_ON_TC_DISCONTINUITY

```
public static final java.lang.String PROPERTY_SPLIT_ON_TC_DISCONTINUITY
```

Application Property "streamRecorderSplitOnTcDiscontinuity": for specifying the default splitOnTcDiscontinuity value used by StreamRecorder.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSplitOnTcDiscontinuity**

See Also:

[StreamRecorderParameters.splitOnTcDiscontinuity](#)

PROPERTY_SEGMENT_SIZE

```
public static final java.lang.String PROPERTY_SEGMENT_SIZE
```

Application Property "streamRecorderSegmentSize": for specifying the default SegmentSize used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SIZE.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentSize**

See Also:

[StreamRecorderParameters.segmentSize](#)

PROPERTY_SEGMENT_DURATION

```
public static final java.lang.String PROPERTY_SEGMENT_DURATION
```

Application Property "streamRecorderSegmentDuration": for specifying the default SegmentDuration used by StreamRecorder when the segmentationType is set to SEGMENT_BY_DURATION.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentDuration**

See Also:

[StreamRecorderParameters.segmentDuration](#)

PROPERTY_SEGMENT_SCHEDULE

```
public static final java.lang.String PROPERTY_SEGMENT_SCHEDULE
```

Application Property "streamRecorderSegmentSchedule": for specifying the default SegmentSchedule string used by StreamRecorder when the segmentationType is set to SEGMENT_BY_SCHEDULE.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSegmentSchedule**

See Also:

[StreamRecorderParameters.segmentSchedule](#)

(continued from last page)

PROPERTY_OUTPUT_PATH

```
public static final java.lang.String PROPERTY_OUTPUT_PATH
```

Application Property "streamRecorderOutputPath": for specifying the default path used by StreamRecorder to write recordings.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderOutputPath**

See Also:

[StreamRecorderParameters.outputPath](#)

PROPERTY_OUTPUT_FILE

```
public static final java.lang.String PROPERTY_OUTPUT_FILE
```

Application Property "streamRecorderOutputFile": for specifying the default filename used by StreamRecorder for recordings.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderOutputFile**

See Also:

[StreamRecorderParameters.outputFile](#)

PROPERTY_BACK_BUFFER_TIME

```
public static final java.lang.String PROPERTY_BACK_BUFFER_TIME
```

Application Property "streamRecorderBackBufferTime": for specifying the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderBackBufferTime**

See Also:

[StreamRecorderParameters.backBufferTime](#)

PROPERTY_NOTIFY_LISTENER

```
public static final java.lang.String PROPERTY_NOTIFY_LISTENER
```

Application Property "streamRecorderNotifyListener": for specifying the default listener which will receive StreamRecorder notifications.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderNotifyListener**

See Also:

[StreamRecorderParameters.notifyListener](#)

(continued from last page)

PROPERTY_FILE_VERSION_DELEGATE

```
public static final java.lang.String PROPERTY_FILE_VERSION_DELEGATE
```

Application Property "streamRecorderFileVersionDelegate": for specifying a default custom file version delegate.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderFileVersionDelegate**

See Also:

[StreamRecorderParameters.fileVersionDelegate](#)

PROPERTY_FILE_VERSION_TEMPLATE

```
public static final java.lang.String PROPERTY_FILE_VERSION_TEMPLATE
```

Application Property "streamRecorderFileVersionTemplate": for specifying a default file version template string.

NOTE: only applicable when using the default fileVersionDelegate

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderFileVersionTemplate**

See Also:

[StreamRecorderParameters.fileTemplate](#)

[StreamRecorderParameters.fileVersionDelegate](#)

PROPERTY_TIMESCALE

```
public static final java.lang.String PROPERTY_TIMESCALE
```

Application Property "streamRecorderTimescale": for specifying the timescale used when writing packets to a file. It ONLY applies to MP4 file outputs. The only VALID values are 90000 or 100000

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderTimeScale**

See Also:

streamRecorderTimescale

PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION

```
public static final java.lang.String PROPERTY_DEFAULT_AUDIO_SEARCH_POSITION
```

Application Property "streamRecorderDefaultAudioSearchPosition": for specifying how audio is found when it may not be in sync with the video

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderDefaultAudioSearchPosition**

See Also:

streamRecorderDefaultAudioSearchPosition

(continued from last page)

PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT

```
public static final java.lang.String PROPERTY_SKIP_KEYFRAME_AUDIO_TIMEOUT
```

Application Property "streamRecorderSkipKeyFrameUntilAudioTimeout": for specifying how long audio is waited for.

Add the property to the StreamRecorder Properties section of Application.xml.

Constant value: **streamRecorderSkipKeyFrameUntilAudioTimeout**

See Also:

`streamRecorderSkipKeyFrameUntilAudioTimeout`

RECORDER_STATE_ERROR

```
public static final int RECORDER_STATE_ERROR
```

Value returned by `IStreamRecorder getRecorderState()` to indicate an error has occurred in the recorder.

Constant value: **-1**

See Also:

[RECORDER_STATE_ERROR_STRING](#)

RECORDER_STATE_PENDING

```
public static final int RECORDER_STATE_PENDING
```

Value returned by `IStreamRecorder getRecorderState()` to indicate the recorder has been created but it's `IStreamRecorder startRecording()` method has not yet been called.

Constant value: **0**

See Also:

[RECORDER_STATE_PENDING_STRING](#)

RECORDER_STATE_WAITING

```
public static final int RECORDER_STATE_WAITING
```

Value returned by `IStreamRecorder getRecorderState()` to indicate the recorder has been started but the associated stream is not currently being received by the server (for example the stream is not being published from the encoder)

Constant value: **1**

See Also:

[RECORDER_STATE_WAITING_STRING](#)

RECORDER_STATE_RECORDING

```
public static final int RECORDER_STATE_RECORDING
```

Value returned by `IStreamRecorder getRecorderState()` to indicate the recorder is actively recording data to file.

Constant value: **2**

(continued from last page)

See Also:

[RECORDER_STATE_RECORDING_STRING](#)

RECORDER_STATE_ERROR_STRING

```
public static final java.lang.String RECORDER_STATE_ERROR_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_ERROR.

Constant value: **Recorder Error**

See Also:

[RECORDER_STATE_ERROR](#)

RECORDER_STATE_PENDING_STRING

```
public static final java.lang.String RECORDER_STATE_PENDING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_PENDING.

Constant value: **Pending**

See Also:

[RECORDER_STATE_PENDING](#)

RECORDER_STATE_WAITING_STRING

```
public static final java.lang.String RECORDER_STATE_WAITING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_WAITING.

Constant value: **Waiting for Stream**

See Also:

[RECORDER_STATE_PENDING](#)

RECORDER_STATE_RECORDING_STRING

```
public static final java.lang.String RECORDER_STATE_RECORDING_STRING
```

String value returned by IStreamRecorder getRecorderStateString() when the recorder state is RECORDER_STATE_RECORDING.

Constant value: **Recording**

See Also:

[RECORDER_STATE_RECORDING](#)

com.wowza.wms.livestreamrecord.manager Interface IStreamRecorderFileVersionDelegate

All Known Implementing Classes:

[StreamRecorderSimpleFileVersionDelegate](#), [StreamRecorderFileVersionDelegate](#)

public interface **IStreamRecorderFileVersionDelegate**
extends

This interface is used to implement a custom file versioning scheme during live stream recording.

The `getFilename` method is called under 2 conditions

- 1 - when a recorder needs to create a new output file, and an file already exists by the same name.
- 2 - when a recorder creates a new file and has been configured to use any `segmentationType` other than none

The string returned must be a valid and fully qualified filename, including the full path.

For example:

`c:\test\myFile.flv`

`usr/home/content/myFile.mp4`

See Also:

[StreamRecorderParameters.segmentationType](#)

Method Summary

abstract String	getFilename (IStreamRecorder recContext)
-----------------	---

Methods

getFilename

public abstract String **getFilename**([IStreamRecorder](#) recContext)

Parameters:

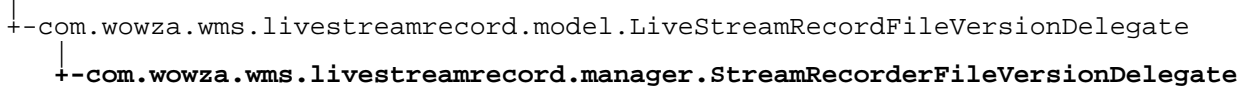
recContext - The IStreamRecorder requesting the file name

Returns:

String The versioned file name

com.wowza.wms.livestreamrecord.manager Class StreamRecorderFileVersionDelegate

java.lang.Object



All Implemented Interfaces:

[IStreamRecorderFileVersionDelegate](#), [ILiveStreamRecordFileVersionDelegate](#)

public class **StreamRecorderFileVersionDelegate**

extends [LiveStreamRecordFileVersionDelegate](#)

implements [ILiveStreamRecordFileVersionDelegate](#), [IStreamRecorderFileVersionDelegate](#)

Default FileVersionDelegate class

This delegate allows the configuration of a custom FileName using a template string. The tags in the template string are replaced with their associated values, to generate a filename.

Valid template tags are;

`${SourceStreamName}` - The name of the stream

`${BaseFileName}` - The basefile name, which is the filename prior to any versioning changes

`${SegmentNumber}` - An incrementing value representing the current number of segments which have been created for this recording, starting at 0

`${RecordingStartTime}` - The time at which the recording was started formatted as yyyy-MM-dd-HH.mm.ss.SSS-zzz

`${SegmentTime}` - Time time at which the segment was created

The default template string is

`${BaseFileName}_${RecordingStartTime}_${SegmentNumber}`

Fields inherited from class

com.wowza.wms.livestreamrecord.model.LiveStreamRecordFileVersionDelegate

BASE_NAME_TAG, DATETIME_LAYOUT_NORMAL, DATETIME_LAYOUT_NORMAL_ALT, SEGMENT_NUMBER_TAG, SEGMENT_TIME_TAG, START_TIME_TAG, STREAM_NAME_TAG

Constructor Summary

public [StreamRecorderFileVersionDelegate\(\)](#)

Method Summary

String [getFilename\(IStreamRecorder recContext\)](#)
Creates a new filename using the default template string,

Methods inherited from class

com.wowza.wms.livestreamrecord.model.LiveStreamRecordFileVersionDelegate

createFileName, getFilename, getFileTemplate, getSegmentationType, setFileTemplate

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.livestreamrecord.model.ILiveStreamRecordFileVersionDelegate](#)[getFilename](#)**Methods inherited from interface**[com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate](#)[getFilename](#)

Constructors

StreamRecorderFileVersionDelegate

```
public StreamRecorderFileVersionDelegate()
```

Methods

getFilename

```
public String getFilename(IStreamRecorder recContext)
```

Creates a new filename using the default template string,

Parameters:

recContext - The IStreamRecorder requesting the file name

Returns:

String The versioned file name

com.wowza.wms.livestreamrecord.manager Class StreamRecorderParameters

java.lang.Object

└─com.wowza.wms.livestreamrecord.manager.StreamRecorderParameters

public class **StreamRecorderParameters**
extends Object

This class is used to configure the recording parameters for the StreamRecorder class.
All members of this class are public and therefore can be accessed and modified directly.

Field Summary

public	<u>backBufferTime</u> Configures the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording.
public	<u>defaultAudioSearchPosition</u> Configures the default search position for audio before starting to record.
public	<u>fileFormat</u> Configures the output file format
public	<u>fileTemplate</u> Configures the file version template string used by the default fileVersionDelegate, to generate a versioned file name for the recorder NOTE: if set to null then a default file template string, as defined by StreamRecorderFileVersionDelegate, will be used
public	<u>fileVersionDelegate</u> Configures the fileVersionDelegate for the recorder Valid values are the fully qualified class path to the class which implements the IStreamRecorderFileVersionDelegate interface. Default value is com.wowza.wms.livestreamrecord.manager.StreamRecorderFileVersionDelegate
public	<u>moveFirstVideoFrameToZero</u> Configures whether or not the recorder will set the first packet's timecode to 0, when recording fileFormat is FORMAT_MP4
public	<u>notifyListener</u> Configures the StreamRecorder listener for the recorder Valid values are the fully qualified class path to the class which implements the IStreamRecorderActionNotify interface.
public	<u>outputFile</u> Configures the output file name used for the recording If segmentationType is not SEGMENT_NONE, then this value is used as the base file name for the file segments when using either of the fileVersionDelegates NOTE 1: When set to null or "", the recorder will create the filename based upon the stream name and the value of fileFormat.
public	<u>outputPath</u> Configures the output directory where recorded file will be written NOTE: When set to null or "", the recorder will write files to the default content directory for the application.
public	<u>recordData</u> Configures whether or not the recorder will write data packets to the output file.

public	segmentationType Configures the type of recording segmentation the recorder will use Segmentation provides a means by which the recording of an incoming live stream can be split into a series of files in order to manage them more easily.
public	segmentDuration Configures the output file size in milliseconds for each recording segment, when segmentationType is SEGMENT_BY_DURATION. This value is specified in milliseconds
public	segmentSchedule Configures the crontab schedule used to segment a recording, when segmentationType is SEGMENT_BY_SCHEDULE.
public	segmentSize Configures the output file size in bytes for each recording segment, when segmentationType is SEGMENT_BY_SIZE. This value is specified in bytes
public	skipKeyFrameUntilAudioTimeout Configures the audio timeout when waiting for audio sync.
public	splitOnTcDiscontinuity Configures whether or not the recorder will create a new segment for a recording when packet timecode discontinuities are detected A discontinuity is said to occur when 10 consecutive packets have timecodes which jump backward in time.
public	startOnKeyFrame Configures whether or not the recorder will wait until a video key frame is received to start writing packets to the output file, thus ensuring the first packet in the file contains a video key frame.
public	timeScale Configures the timescale in milliseconds for the recording
public	versioningOption Configures the behavior when a new recording file is created with a name that already exists

Constructor Summary

public	StreamRecorderParameters (IApplicationInstance appInstance) The constructor will read any defaults set via properties in application.xml and will use those values as the default values for this class.
public	StreamRecorderParameters (IApplicationInstance appInstance, StreamRecorderParameters params) The constructor will copy another StreamRecorderParameters object.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

segmentationType

public java.lang.String **segmentationType**

(continued from last page)

Configures the type of recording segmentation the recorder will use

Segmentation provides a means by which the recording of an incoming live stream can be split into a series of files in order to manage them more easily. The files can be limited by; size, duration, or split at a specific time (e.g. at the top of every hour). If SEGMENT_NONE is used, then the recording is written to a single file.

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.SEGMENT_NONE](#)

[IStreamRecorderConstants.SEGMENT_BY_DURATION](#)

[IStreamRecorderConstants.SEGMENT_BY_SIZE](#)

[IStreamRecorderConstants.SEGMENT_BY_SCHEDULE](#)

versioningOption

```
public java.lang.String versioningOption
```

Configures the behavior when a new recording file is created with a name that already exists

NOTE: APPEND_FILE and OVERWRITE_FILE are only applicable when the segmentationType is SEGMENT_NONE

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.VERSION_FILE](#)

[IStreamRecorderConstants.APPEND_FILE](#)

[IStreamRecorderConstants.OVERWRITE_FILE](#)

[segmentSize](#)

[segmentDuration](#)

[segmentSchedule](#)

fileFormat

```
public java.lang.String fileFormat
```

Configures the output file format

Valid values are defined in IStreamRecorderConstants

See Also:

[IStreamRecorderConstants.FORMAT_FLV](#)

[IStreamRecorderConstants.FORMAT_MP4](#)

startOnKeyFrame

```
public boolean startOnKeyFrame
```

Configures whether or not the recorder will wait until a video key frame is received to start writing packets to the output file, thus ensuring the first packet in the file contains a video key frame.

Valid values are true, false
default value is true

recordData

```
public boolean recordData
```

Configures whether or not the recorder will write data packets to the output file.

Valid values are true, false
default value is false

moveFirstVideoFrameToZero

```
public boolean moveFirstVideoFrameToZero
```

Configures whether or not the recorder will set the first packet's timecode to 0, when recording fileFormat is FORMAT_MP4

Valid values are true, false
default value is true

splitOnTcDiscontinuity

```
public boolean splitOnTcDiscontinuity
```

Configures whether or not the recorder will create a new segment for a recording when packet timecode discontinuities are detected

A discontinuity is said to occur when 10 consecutive packets have timecodes which jump backward in time. i.e. the current packet's timecode is less than the previous packet's timecode.

Valid values are true, false
default value is false

backBufferTime

```
public long backBufferTime
```

Configures the number of milliseconds of packets to pull from the incoming stream buffer and write to file, before beginning the recording. This parameter is typically used with manual recordings to mitigate the delay between a start recording request and when data is actually written to file, thus ensuring that the beginning of an event is recorded to file.

This value is in milliseconds.
default value is 0
NOTE: The incoming stream buffer contains approximately 8 seconds of packets

segmentSize

```
public long segmentSize
```

Configures the output file size in bytes for each recording segment, when segmentationType is SEGMENT_BY_SIZE. This value is specified in bytes

Valid values are any positive long value greater than 0, however a minimum size of 1048576 bytes (1 MB) is highly recommended to ensure the recorded file segments can start on a video key frame if configured to do so.
default value is 10485760 bytes (10 MB)

segmentDuration

```
public long segmentDuration
```

Configures the output file size in milliseconds for each recording segment, when segmentationType is SEGMENT_BY_DURATION. This value is specified in milliseconds

Valid values are any positive long value greater than 0, however a minimum size of 60000 ms (1 minute) is highly recommended to ensure the recorded file segments can start on a video key frame if configured to do so.
default value is 900000 ms (15 minutes)

segmentSchedule

```
public java.lang.String segmentSchedule
```

(continued from last page)

Configures the crontab schedule used to segment a recording, when segmentationType is SEGMENT_BY_SCHEDULE.

Crontab expressions

A crontab expression specifies the segmentation interval in minutes, hours, months, years, days of the month, or days of the week. The available crontab fields are (in order):

[Minute] [Hour] [Day_of_the_Month] [Month_of_the_Year] [Day_of_the_Week] [Year]

where:

Minute - Specifies the minute value (between 0 and 59) at which the segmentation occurs.

Hour - Specifies the hour (between 0 and 23 based on a 24-hour clock) at which the segmentation occurs.

Day_of_the_Month - Specifies the day (between 0 and 31) at which the split occurs. To specify that live recordings always be segmentation on the last day of the month, specify 31.

Month_of_the_Year - Specifies the month at which the segmentation occurs. You can specify the month by using the abbreviated name of the month (for example, Jan) or a numerical equivalent (for example, 1).

Day_of_the_Week - Specifies the day in a week at which the segmentation occurs. You can specify the day by using the abbreviated name of the day (for example, Mon) or a numerical equivalent (for example, 1).

Year - Specifies the year at which the segmentation occurs (for example, 2013).

Example

To segmentation a live recording every 30 minutes (at the top of each hour and every half-hour):

0,30 * * * * *

0,30 (simplified version)

for more details see (<http://www.nncron.ru/help/EN/working/cron-format.htm>).

Note: The nnCron nonstandard question mark character (?), which specifies that the server startup time is substituted into the cron expression, is NOT currently supported.

Valid values are any valid crontab expression exception for '?'

default value is "0 * * * * *" (segment every hour at the top of the hour)

outputFile

```
public java.lang.String outputFile
```

Configures the output file name used for the recording

If segmentationType is not SEGMENT_NONE, then this value is used as the base file name for the file segments when using either of the fileVersionDelegates

NOTE 1: When set to null or "", the recorder will create the filename based upon the stream name and the value of fileFormat.

NOTE 2: The fileFormat will be appended to the file name to ensure the file extension matches the actual file format written.

Example mytestRecording, with no fileFormat specified will result in the default fileFormat being used and a recorded file name of mytestRecording.mp4 myOtherTest.mp4, with the the fileFormat specified as 1 (FLV), will result in the recorded file name of myOtherTest.mp4.flv

Valid values are any valid filename

default value is null

outputPath

```
public java.lang.String outputPath
```

Configures the output directory where recorded file will be written

NOTE: When set to null or "", the recorder will write files to the default content directory for the application.

Examples c:\myfiles\recordings /home/user/myfiles/recordings

Valid values are any valid path.

default value is null

notifyListener

```
public com.wowza.wms.livestreamrecord.manager.IStreamRecorderActionNotify
notifyListener
```

(continued from last page)

Configures the StreamRecorder listener for the recorder

Valid values are the fully qualified class path to the class which implements the IStreamRecorderActionNotify interface. default value is null

See Also:

[IStreamRecorderActionNotify](#)

fileVersionDelegate

```
public com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate  
fileVersionDelegate
```

Configures the fileVersionDelegate for the recorder

Valid values are the fully qualified class path to the class which implements the IStreamRecorderFileVersionDelegate interface.

Default value is com.wowza.wms.livestreamrecord.manager.StreamRecorderFileVersionDelegate

See Also:

[IStreamRecorderFileVersionDelegate](#)

[StreamRecorderFileVersionDelegate](#)

[StreamRecorderSimpleFileVersionDelegate](#)

fileTemplate

```
public java.lang.String fileTemplate
```

Configures the file version template string used by the default fileVersionDelegate, to generate a versioned file name for the recorder

NOTE: if set to null then a default file template string, as defined by StreamRecorderFileVersionDelegate, will be used

Valid values are null or a valid file version template string

Default value is null

See Also:

[StreamRecorderFileVersionDelegate](#)

timeScale

```
public long timeScale
```

Configures the timescale in milliseconds for the recording

This value is in milliseconds.

default value is 90000

NOTE: There are only two valid values 90000 and 100000

defaultAudioSearchPosition

```
public boolean defaultAudioSearchPosition
```

Configures the default search position for audio before starting to record.

Default value is LiveStreamRecorderBase.DEFAULT_FORCE_AUDIO_SEARCH

skipKeyFrameUntilAudioTimeout

```
public int skipKeyFrameUntilAudioTimeout
```

Configures the audio timeout when waiting for audio sync. This value is in milliseconds.
default balue is LiveStreamRecorderBase.DEFAULT_SKIPKEYFRAMESUNTILAUDIOTIMEOUT

Constructors

StreamRecorderParameters

```
public StreamRecorderParameters(IApplicationInstance appInstance)
```

The constructor will read any defaults set via properties in application.xml and will use those values as the default values for this class.

Parameters:

appInstance

StreamRecorderParameters

```
public StreamRecorderParameters(IApplicationInstance appInstance,  
                                StreamRecorderParameters params)
```

The constructor will copy another StreamRecorderParameters object.

Parameters:

appInstance

params

com.wowza.wms.livestreamrecord.manager Class StreamRecorderSimpleFileVersionDelegate

java.lang.Object

```

    |
    |+-com.wowza.wms.livestreamrecord.model.LiveStreamRecordSimpleFileVersionDelegate
    |   |
    |   |+-com.wowza.wms.livestreamrecord.manager.StreamRecorderSimpleFileVersionDelegate
  
```

All Implemented Interfaces:

[IStreamRecorderFileVersionDelegate](#), [ILiveStreamRecordFileVersionDelegate](#)

public class **StreamRecorderSimpleFileVersionDelegate**
 extends [LiveStreamRecordSimpleFileVersionDelegate](#)
 implements [ILiveStreamRecordFileVersionDelegate](#), [IStreamRecorderFileVersionDelegate](#)

StreamRecorderSimpleFileVersionDelegate class

This delegate uses the simple file versioning method to generate a file version name. The simple method is to version the existing file and always use the "basename" for the current file

Simple File Versioning:

The simple file versioning scheme attempts to resolve file name conflicts by appending "_1" to the end of the existing file, so that the current recording can use the requested file name. If a file by that name already exists the appended number will be incremented and renaming will be tried again. This will continue until a non-conflicting file name is found.

For example: if the file name is "myStream.flv", and that file already exists, "myStream_1.flv" will be tried. If that still conflicts with an existing file, "myStream_2.flv" will be tried. This process continues until a non conflicting name is found. The recorder will then record to "mystream.flv"

Constructor Summary

public	StreamRecorderSimpleFileVersionDelegate()
--------	---

Method Summary

String	getFilename(IStreamRecorder recContext) Versions the existing file by appending _#, and returns the original file name for use as the current file.
--------	--

Methods inherited from class

com.wowza.wms.livestreamrecord.model.LiveStreamRecordSimpleFileVersionDelegate

createFileName, getFilename

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.livestreamrecord.model.ILiveStreamRecordFileVersionDelegate](#)

[getFilename](#)

Methods inherited from interface[com.wowza.wms.livestreamrecord.manager.IStreamRecorderFileVersionDelegate](#)[getFilename](#)

Constructors

StreamRecorderSimpleFileVersionDelegate

```
public StreamRecorderSimpleFileVersionDelegate()
```

Methods

getFilename

```
public String getFilename(IStreamRecorder recContext)
```

Versions the existing file by appending _#, and returns the original file name for use as the current file.

Parameters:

recContext - The IStreamRecorder requesting the file name

Returns:

String The original file name

Package

com.wowza.wms.livestreamrecord.model

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecord**

public interface **ILiveStreamRecord**
extends

Field Summary

public static final	<u>RECORDER_ERROR</u> Value: -1
public static final	<u>RECORDER_NOT_RUNNING</u> Value: 0
public static final	<u>RECORDER_RUNNING</u> Value: 1
public static final	<u>SPLIT_ON_DISCONTINUITY_ALWAYS</u> Value: 1
public static final	<u>SPLIT_ON_DISCONTINUITY_DEFAULT</u> Value: 0
public static final	<u>SPLIT_ON_DISCONTINUITY_NEVER</u> Value: 2
public static final	<u>SPLIT_TYPE_BY_DURATION</u> Value: 3
public static final	<u>SPLIT_TYPE_BY_SCHEDULE</u> Value: 1
public static final	<u>SPLIT_TYPE_BY_SIZE</u> Value: 2
public static final	<u>SPLIT_TYPE_NONE</u> Value: 0

Method Summary

abstract <u>ILiveStreamRecordNotify</u>	<u>addListener</u> (<u>ILiveStreamRecordNotify</u> listener)
abstract String	<u>getBaseFilePath</u> ()
abstract long	<u>getCurrentDuration</u> ()

abstract String	<u>getCurrentFile()</u>
abstract long	<u>getCurrentSize()</u>
abstract boolean	<u>getDefaultAudioSearchPosition()</u>
abstract String	<u>getErrorString()</u>
abstract String	<u>getFilePath()</u>
abstract <u>ILiveStreamRecordFileVersionDelegate</u>	<u>getFileVersionDelegate()</u>
abstract int	<u>getRecorderState()</u>
abstract long	<u>getSegmentDuration()</u>
abstract int	<u>getSegmentNumber()</u>
abstract <u>CrontabEvent</u>	<u>getSegmentSchedule()</u>
abstract long	<u>getSegmentSize()</u>
abstract int	<u>getSkipKeyFrameUntilAudioTimeout()</u>
abstract int	<u>getSplitType()</u>
abstract org.joda.time.DateTime	<u>getStartTime()</u>
abstract String	<u>getStreamName()</u>
abstract long	<u>getTimeScale()</u>
abstract Object	<u>getWriteLock()</u>
abstract void	<u>init()</u> (<u>IApplicationInstance</u> appInstance)
abstract void	<u>init()</u> (<u>IApplicationInstance</u> appInstance, <u>IStreamRecorder</u> streamRecorder)
abstract boolean	<u>isAppendFile()</u>
abstract boolean	<u>isMoveFirstVideoFrameToZero()</u>
abstract boolean	<u>isRecordData()</u>
abstract boolean	<u>isSplitOnTcDiscontinuity()</u>

abstract boolean	<u>isStartOnKeyFrame()</u>
abstract boolean	<u>isVersionFile()</u>
abstract void	<u>onPublish()</u>
abstract void	<u>onUnPublish()</u>
abstract boolean	<u>removeListener()</u> (<u>ILiveStreamRecordNotify</u> listener)
abstract void	<u>setBackBufferTime()</u> (long size)
abstract void	<u>setDebug()</u> (boolean debug)
abstract void	<u>setDefaultAudioSearchPosition()</u> (boolean searchDefault)
abstract void	<u>setFileVersionDelegate()</u> (<u>ILiveStreamRecordFileVersionDelegate</u> delegate)
abstract void	<u>setMoveFirstVideoFrameToZero()</u> (boolean moveFirstVideoFrameToZero)
abstract void	<u>setRecordData()</u> (boolean recordData)
abstract void	<u>setSegmentDuration()</u> (long duration)
abstract void	<u>setSegmentSize()</u> (long size)
abstract void	<u>setSkipKeyFrameUntilAudioTimeout()</u> (int audioTimeout)
abstract void	<u>setSplitOnTcDiscontinuity()</u> (boolean splitOnTcDiscontinuity)
abstract void	<u>setStartOnKeyFrame()</u> (boolean startOnKeyFrame)
abstract void	<u>setTimeScale()</u> (long timescale)
abstract void	<u>setVersionFile()</u> (boolean versionFile)
abstract void	<u>splitRecordingNow()</u>
abstract void	<u>startRecording()</u> (<u>IMediaStream</u> stream, boolean append)
abstract void	<u>startRecording()</u> (<u>IMediaStream</u> stream, String filePath, boolean append)
abstract void	<u>startRecording()</u> (<u>IMediaStream</u> stream, String filePath, boolean append, java.util.Map extraMetadata)
abstract void	<u>startRecording()</u> (<u>IMediaStream</u> stream, String filePath, boolean append, java.util.Map extraMetadata, int splitOnTcDiscontinuity)

abstract void	startRecordingSegmentByDuration(IMediaStream stream, String filePath, java.util.Map extraMetadata, long duration)
abstract void	startRecordingSegmentBySchedule(IMediaStream stream, String filePath, java.util.Map extraMetadata, String schedule)
abstract void	startRecordingSegmentBySize(IMediaStream stream, String filePath, java.util.Map extraMetadata, long size)
abstract void	stopRecording()
abstract void	work()
abstract void	workStop()

Fields

SPLIT_TYPE_NONE

```
public static final int SPLIT_TYPE_NONE
```

Constant value: **0**

SPLIT_TYPE_BY_SCHEDULE

```
public static final int SPLIT_TYPE_BY_SCHEDULE
```

Constant value: **1**

SPLIT_TYPE_BY_SIZE

```
public static final int SPLIT_TYPE_BY_SIZE
```

Constant value: **2**

SPLIT_TYPE_BY_DURATION

```
public static final int SPLIT_TYPE_BY_DURATION
```

Constant value: **3**

SPLIT_ON_DISCONTINUITY_DEFAULT

```
public static final int SPLIT_ON_DISCONTINUITY_DEFAULT
```

Constant value: **0**

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SPLIT_ON_DISCONTINUITY_ALWAYS

```
public static final int SPLIT_ON_DISCONTINUITY_ALWAYS
```

Constant value: **1**

SPLIT_ON_DISCONTINUITY_NEVER

```
public static final int SPLIT_ON_DISCONTINUITY_NEVER
```

Constant value: **2**

RECORDER_NOT_RUNNING

```
public static final int RECORDER_NOT_RUNNING
```

Constant value: **0**

RECORDER_RUNNING

```
public static final int RECORDER_RUNNING
```

Constant value: **1**

RECORDER_ERROR

```
public static final int RECORDER_ERROR
```

Constant value: **-1**

Methods

init

```
public abstract void init(IApplicationInstance appInstance)
```

startRecording

```
public abstract void startRecording(IMediaStream stream,  
    boolean append)
```

startRecording

```
public abstract void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append)
```

(continued from last page)

startRecording

```
public abstract void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append,  
    java.util.Map extraMetadata)
```

startRecording

```
public abstract void startRecording(IMediaStream stream,  
    String filePath,  
    boolean append,  
    java.util.Map extraMetadata,  
    int splitOnTcDiscontiuity)
```

startRecordingSegmentBySize

```
public abstract void startRecordingSegmentBySize(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    long size)
```

startRecordingSegmentByDuration

```
public abstract void startRecordingSegmentByDuration(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    long duration)
```

startRecordingSegmentBySchedule

```
public abstract void startRecordingSegmentBySchedule(IMediaStream stream,  
    String filePath,  
    java.util.Map extraMetadata,  
    String schedule)
```

stopRecording

```
public abstract void stopRecording()
```

splitRecordingNow

```
public abstract void splitRecordingNow()
```

(continued from last page)

onPublish

```
public abstract void onPublish()
```

onUnPublish

```
public abstract void onUnPublish()
```

workStop

```
public abstract void workStop()
```

work

```
public abstract void work()
```

getWriteLock

```
public abstract Object getWriteLock()
```

isStartOnKeyFrame

```
public abstract boolean isStartOnKeyFrame()
```

setStartOnKeyFrame

```
public abstract void setStartOnKeyFrame(boolean startOnKeyFrame)
```

isRecordData

```
public abstract boolean isRecordData()
```

setRecordData

```
public abstract void setRecordData(boolean recordData)
```

isVersionFile

```
public abstract boolean isVersionFile()
```

(continued from last page)

setVersionFile

```
public abstract void setVersionFile(boolean versionFile)
```

isAppendFile

```
public abstract boolean isAppendFile()
```

isMoveFirstVideoFrameToZero

```
public abstract boolean isMoveFirstVideoFrameToZero()
```

setMoveFirstVideoFrameToZero

```
public abstract void setMoveFirstVideoFrameToZero(boolean moveFirstVideoFrameToZero)
```

isSplitOnTcDiscontinuity

```
public abstract boolean isSplitOnTcDiscontinuity()
```

setSplitOnTcDiscontinuity

```
public abstract void setSplitOnTcDiscontinuity(boolean splitOnTcDiscontinuity)
```

setFileVersionDelegate

```
public abstract void setFileVersionDelegate(ILiveStreamRecordFileVersionDelegate delegate)
```

getFileVersionDelegate

```
public abstract ILiveStreamRecordFileVersionDelegate getFileVersionDelegate()
```

getSplitType

```
public abstract int getSplitType()
```

(continued from last page)

getSegmentSize

```
public abstract long getSegmentSize()
```

getSegmentDuration

```
public abstract long getSegmentDuration()
```

getCurrentSize

```
public abstract long getCurrentSize()
```

getCurrentDuration

```
public abstract long getCurrentDuration()
```

getSegmentSchedule

```
public abstract CrontabEvent getSegmentSchedule()
```

setSegmentSize

```
public abstract void setSegmentSize(long size)
```

setSegmentDuration

```
public abstract void setSegmentDuration(long duration)
```

getFilePath

```
public abstract String getFilePath()
```

getBaseFilePath

```
public abstract String getBaseFilePath()
```

getCurrentFile

```
public abstract String getCurrentFile()
```

(continued from last page)

getStreamName

```
public abstract String getStreamName()
```

getSegmentNumber

```
public abstract int getSegmentNumber()
```

getStartTime

```
public abstract org.joda.time.DateTime getStartTime()
```

setBackBufferTime

```
public abstract void setBackBufferTime(long size)
```

addListener

```
public abstract ILiveStreamRecordNotify addListener(ILiveStreamRecordNotify listener)
```

removeListener

```
public abstract boolean removeListener(ILiveStreamRecordNotify listener)
```

init

```
public abstract void init(IApplicationInstance appInstance,  
    IStreamRecorder streamRecorder)
```

setDebug

```
public abstract void setDebug(boolean debug)
```

getRecorderState

```
public abstract int getRecorderState()
```

(continued from last page)

getErrorString

```
public abstract String getErrorString()
```

setTimeScale

```
public abstract void setTimeScale(long timescale)
```

getTimeScale

```
public abstract long getTimeScale()
```

setDefaultAudioSearchPosition

```
public abstract void setDefaultAudioSearchPosition(boolean searchDefault)
```

getDefaultAudioSearchPosition

```
public abstract boolean getDefaultAudioSearchPosition()
```

setSkipKeyFrameUntilAudioTimeout

```
public abstract void setSkipKeyFrameUntilAudioTimeout(int audioTimeout)
```

getSkipKeyFrameUntilAudioTimeout

```
public abstract int getSkipKeyFrameUntilAudioTimeout()
```

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecordFileVersionDelegate**

public interface **ILiveStreamRecordFileVersionDelegate**
extends

Method Summary

abstract String	getFilename (ILiveStreamRecord recorder)
-----------------	---

Methods

getFilename

public abstract String **getFilename**([ILiveStreamRecord](#) recorder)

com.wowza.wms.livestreamrecord.model Interface **ILiveStreamRecordNotify**

public interface **ILiveStreamRecordNotify**
extends

Method Summary

abstract void	onSegmentEnd (ILiveStreamRecord recorder)
abstract void	onSegmentStart (ILiveStreamRecord recorder)

Methods

onSegmentStart

public abstract void **onSegmentStart**([ILiveStreamRecord](#) recorder)

onSegmentEnd

public abstract void **onSegmentEnd**([ILiveStreamRecord](#) recorder)

Package

com.wowza.wms.logging

com.wowza.wms.logging Interface Constants

public interface **Constants**
extends

Constants used internally throughout log4j.

Field Summary

public static final	<u>ABSOLUTE_FORMAT</u> ABSOLUTE string literal. Value: ABSOLUTE
public static final	<u>ABSOLUTE_TIME_PATTERN</u> SimpleTimePattern for ABSOLUTE. Value: HH:mm:ss,SSS
public static final	<u>APPLICATION_KEY</u> application string literal. Value: application
public static final	<u>CODES_HREF</u> Codes URL string literal. Value: http://logging.apache.org/log4j/docs/codes.html
public static final	<u>CONFIGURATOR_CLASS_KEY</u> log4j.configuratorClass string literal. Value: log4j.configuratorClass
public static final	<u>DATE_AND_TIME_FORMAT</u> DATE string literal. Value: DATE
public static final	<u>DATE_AND_TIME_PATTERN</u> SimpleTimePattern for DATE. Value: dd MMM yyyy HH:mm:ss,SSS
public static final	<u>DEFAULT_CONFIGURATION_FILE</u> The default property file name for automatic configuration. Value: log4j.properties
public static final	<u>DEFAULT_CONFIGURATION_KEY</u> log4j.configuration string literal. Value: log4j.configuration
public static final	<u>DEFAULT_REPOSITORY_NAME</u> The name of the default repository is "default" (without the quotes). Value: default
public static final	<u>DEFAULT_XML_CONFIGURATION_FILE</u> The default XML configuration file name for automatic configuration. Value: log4j.xml

public static final	<u>HOSTNAME_KEY</u> hostname string literal. Value: hostname
public static final	<u>ISO8601_FORMAT</u> ISO8601 string literal. Value: ISO8601
public static final	<u>ISO8601_PATTERN</u> SimpleTimePattern for ISO8601. Value: yyyy-MM-dd HH:mm:ss,SSS
public static final	<u>JNDI_CONTEXT_NAME</u> JNDI context name string literal. Value: java:comp/env/log4j/context-name
public static final	<u>LOG4J_ID_KEY</u> log4jid string literal. Value: log4jid
public static final	<u>LOG4J_PACKAGE_NAME</u> log4j package name string literal. Value: org.apache.log4j
public static final	<u>RECEIVER_NAME_KEY</u> receiver string literal. Value: receiver
public static final	<u>TEMP_CONSOLE_APPENDER_NAME</u> TEMP_CONSOLE_APPENDER string literal. Value: TEMP_CONSOLE_APPENDER
public static final	<u>TEMP_LIST_APPENDER_NAME</u> TEMP_LIST_APPENDER string literal. Value: TEMP_LIST_APPENDER
public static final	<u>TIMESTAMP_RULE_FORMAT</u> time stamp pattern string literal. Value: yyyy/MM/dd HH:mm:ss

Fields

LOG4J_PACKAGE_NAME

public static final java.lang.String **LOG4J_PACKAGE_NAME**

log4j package name string literal.
Constant value: **org.apache.log4j**

DEFAULT_REPOSITORY_NAME

public static final java.lang.String **DEFAULT_REPOSITORY_NAME**

The name of the default repository is "default" (without the quotes).
Constant value: **default**

APPLICATION_KEY

```
public static final java.lang.String APPLICATION_KEY
```

application string literal.

Constant value: **application**

HOSTNAME_KEY

```
public static final java.lang.String HOSTNAME_KEY
```

hostname string literal.

Constant value: **hostname**

RECEIVER_NAME_KEY

```
public static final java.lang.String RECEIVER_NAME_KEY
```

receiver string literal.

Constant value: **receiver**

LOG4J_ID_KEY

```
public static final java.lang.String LOG4J_ID_KEY
```

log4jid string literal.

Constant value: **log4jid**

TIMESTAMP_RULE_FORMAT

```
public static final java.lang.String TIMESTAMP_RULE_FORMAT
```

time stamp pattern string literal.

Constant value: **yyyy/MM/dd HH:mm:ss**

DEFAULT_CONFIGURATION_FILE

```
public static final java.lang.String DEFAULT_CONFIGURATION_FILE
```

The default property file name for automatic configuration.

Constant value: **log4j.properties**

DEFAULT_XML_CONFIGURATION_FILE

```
public static final java.lang.String DEFAULT_XML_CONFIGURATION_FILE
```

The default XML configuration file name for automatic configuration.

Constant value: **log4j.xml**

DEFAULT_CONFIGURATION_KEY

```
public static final java.lang.String DEFAULT_CONFIGURATION_KEY
```

log4j.configuration string literal.

Constant value: **log4j.configuration**

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CONFIGURATOR_CLASS_KEY

```
public static final java.lang.String CONFIGURATOR_CLASS_KEY
```

log4j.configuratorClass string literal.

Constant value: **log4j.configuratorClass**

JNDI_CONTEXT_NAME

```
public static final java.lang.String JNDI_CONTEXT_NAME
```

JNDI context name string literal.

Constant value: **java:comp/env/log4j/context-name**

TEMP_LIST_APPENDER_NAME

```
public static final java.lang.String TEMP_LIST_APPENDER_NAME
```

TEMP_LIST_APPENDER string literal.

Constant value: **TEMP_LIST_APPENDER**

TEMP_CONSOLE_APPENDER_NAME

```
public static final java.lang.String TEMP_CONSOLE_APPENDER_NAME
```

TEMP_CONSOLE_APPENDER string literal.

Constant value: **TEMP_CONSOLE_APPENDER**

CODES_HREF

```
public static final java.lang.String CODES_HREF
```

Codes URL string literal.

Constant value: **http://logging.apache.org/log4j/docs/codes.html**

ABSOLUTE_FORMAT

```
public static final java.lang.String ABSOLUTE_FORMAT
```

ABSOLUTE string literal.

Constant value: **ABSOLUTE**

ABSOLUTE_TIME_PATTERN

```
public static final java.lang.String ABSOLUTE_TIME_PATTERN
```

SimpleTimePattern for ABSOLUTE.

Constant value: **HH:mm:ss,SSS**

DATE_AND_TIME_FORMAT

```
public static final java.lang.String DATE_AND_TIME_FORMAT
```

DATE string literal.

Constant value: **DATE**

DATE_AND_TIME_PATTERN

```
public static final java.lang.String DATE_AND_TIME_PATTERN
```

(continued from last page)

SimpleTimePattern for DATE.

Constant value: **dd MMM yyyy HH:mm:ss,SSS**

ISO8601_FORMAT

```
public static final java.lang.String ISO8601_FORMAT
```

ISO8601 string literal.

Constant value: **ISO8601**

ISO8601_PATTERN

```
public static final java.lang.String ISO8601_PATTERN
```

SimpleTimePattern for ISO8601.

Constant value: **yyyy-MM-dd HH:mm:ss,SSS**

com.wowza.wms.logging Interface ILogNotify

All Known Implementing Classes:

[LogNotifyCalculateIncremental](#)

public interface **ILogNotify**
extends

ILogNotify: Interface to add custom fields to the Wowza Pro log files. To add your own custom log fields, define a class that implements this interface. The onLog method will be called each time the Wowza Pro server logs a message. Here is an example of a simple ILogNotify class that logs the current system time in milliseconds as a Long (systime-long) and as a String (systime-string).

```
package com.wowza.wms.plugin.newlogfields;

import org.apache.log4j.*;

import com.wowza.wms.logging.*;
import com.wowza.wms.stream.*;

public class LogNotifyDocs implements ILogNotify
{
    public void onLog(Level level, String comment, IMediaStream stream, String category,
String event, int status, String context)
    {
        long systime = System.currentTimeMillis();
        WMSLoggerFactory.putGlobalLogValue("systime-long", new Long(systime));
        WMSLoggerFactory.putGlobalLogValue("systime-string", systime+"");
    }
}
```

*Note: To get any of the values currently being logged use the logging API
WMSLoggerFactory.getGlobalLogValue(WMSLoggerIDs.FD_*)*

To add your class to Wowza Pro, compile your class into a .class file, bind the class into a .jar file and copy the .jar file into the Wowza Pro server /lib folder. Next, edit:

- [install-dir]/bin/setenv.bat (Windows)
- [install-dir]/bin/setenv.sh (Linux, OSX, Solaris)

Add **-Dcom.wowza.wms.logging.LogNotify=[full-path-to-your-ILogNotify-class]** to the **JAVA_OPTS**. For example for the class above the JAVA_OPTS would look like:

Linux/OSX

JAVA_OPTS="-Xmx768M -

Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.plugin.newlogfields.NewLogFields"

Windows

JAVA_OPTS=-Xmx768M -

Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.plugin.newlogfields.NewLogFields

Next, edit `[install-dir]/conf/log4j.properties` and add the new field names to any `log4j.appender.[appender-name].layout.Fields` fields lists to which you want to log these values. For example:

```
log4j.appender.stdout.layout.Fields=x-severity,x-category,x-event,x-ctx,x-comment,systemtime-long,systemtime-string
```

Method Summary

abstract void

[onLog](#)(org.apache.log4j.Level level, String comment, [IMediaStream](#) stream, String category, String event, int status, String context)

Called each time the server logs a message.

Methods

onLog

```
public abstract void onLog(org.apache.log4j.Level level,
    String comment,
    IMediaStream stream,
    String category,
    String event,
    int status,
    String context)
```

Called each time the server logs a message.

Parameters:

level - log level as defined by (org.apache.log4j.Level)
comment - comment part of the log statement
stream - if stream category log message it's the source stream
category - log category as defined by WMSLoggerIDs.CAT_*
event - log event as defined by WMSLoggerIDs.EVT_*
status - log status (same as HTTP status field) as defined by WMSLoggerIDs.STAT_*
context - log context value like stream name, vhost name, application name

com.wowza.wms.logging Class LogNotifyCalculateIncremental

java.lang.Object

└─com.wowza.wms.logging.LogNotifyCalculateIncremental

All Implemented Interfaces:

[ILogNotify](#)

public class **LogNotifyCalculateIncremental**
extends Object
implements [ILogNotify](#)

LogNotifyCalculateIncremental: pre-built implementation of ILogNotify that adds 5 new log fields:

- cs-bytes-inc (client to server bytes streamed since last log entry)
- sc-bytes-inc (server to client bytesstreamed since last log entry)
- cs-stream-bytes-inc (client to server stream bytesstreamed since last log entry)
- sc-stream-bytes-inc (server to client stream bytesstreamed since last log entry)
- x-duration-inc (time in seconds that have passed since the last log event)

These are incremental versions of the regular log values. To add this to Wowza Pro edit:

- [install-dir]/bin/setenv.bat (Windows)
- [install-dir]/bin/setenv.sh (Linux, OSX)

Add **-Dcom.wowza.wms.logging.LogNotify=com.wowza.wms.logging.LogNotifyCalculateIncremental** to the **JAVA_OPTS**. Also, edit [install-dir]/conf/log4j.properties and add these field names to any log4j.appender.[appender-name].layout.Fields fields lists to which you want to log these values.

*NOTE: These new log values are only accurate if all the events are included for the **session** and **stream** log categories.*

Field Summary

public static final	FD_cs_bytes_inc Value: cs-bytes-inc
public static final	FD_cs_stream_bytes_inc Value: cs-stream-bytes-inc
public static final	FD_sc_bytes_inc Value: sc-bytes-inc
public static final	FD_sc_stream_bytes_inc Value: sc-stream-bytes-inc
public static final	FD_x_duration_inc Value: x-duration-inc

Constructor Summary

public	LogNotifyCalculateIncremental()
--------	---

Method Summary

void	onLog (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context)
------	--

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.logging.ILogNotify](#)

[onLog](#)

Fields

FD_cs_bytes_inc

public static final java.lang.String **FD_cs_bytes_inc**

Constant value: **cs-bytes-inc**

FD_sc_bytes_inc

public static final java.lang.String **FD_sc_bytes_inc**

Constant value: **sc-bytes-inc**

FD_cs_stream_bytes_inc

public static final java.lang.String **FD_cs_stream_bytes_inc**

Constant value: **cs-stream-bytes-inc**

FD_sc_stream_bytes_inc

public static final java.lang.String **FD_sc_stream_bytes_inc**

Constant value: **sc-stream-bytes-inc**

FD_x_duration_inc

public static final java.lang.String **FD_x_duration_inc**

Constant value: **x-duration-inc**

Constructors

(continued from last page)

LogNotifyCalculateIncremental

```
public LogNotifyCalculateIncremental()
```

Methods

onLog

```
public void onLog(org.apache.log4j.Level level,  
    String comment,  
    IMediaStream stream,  
    String category,  
    String event,  
    int status,  
    String context)
```

com.wowza.wms.logging Class UDPAppender

```

java.lang.Object
|
+-org.apache.log4j.AppenderSkeleton
|
+-com.wowza.wms.logging.UDPAppender

```

All Implemented Interfaces:

PortBased, org.apache.log4j.spi.OptionHandler, org.apache.log4j.Appender

```

public class UDPAppender
extends org.apache.log4j.AppenderSkeleton
implements org.apache.log4j.Appender, org.apache.log4j.spi.OptionHandler, PortBased

```

Sends log information as a UDP datagrams.

The UDPAppender is meant to be used as a diagnostic logging tool so that logging can be monitored by a simple UDP client.

Messages are not sent as LoggingEvent objects but as text after applying the designated Layout.

The port and remoteHost properties can be set in configuration properties. By setting the remoteHost to a broadcast address any number of clients can listen for log messages.

This was inspired and really extended/copied from SocketAppender. Please see the docs for the proper credit to the authors of that class.

Field Summary

public static final	DEFAULT_PORT The default port number for the UDP packets, 9991. Value: 9991
---------------------	--

Fields inherited from class org.apache.log4j.AppenderSkeleton

closed, errorHandler, headFilter, layout, name, tailFilter, threshold

Constructor Summary

public	UDPAppender ()
public	UDPAppender (java.net.InetAddress address, int port) Sends UDP packets to the address and port.
public	UDPAppender (String host, int port) Sends UDP packets to the address and port.

Method Summary

void	activateOptions () Open the UDP sender for the RemoteHost and Port .
void	append (org.apache.log4j.spi.LoggingEvent event)

void	<code>cleanUp()</code> Close the UDP Socket and release the underlying connector thread if it has been created
void	<code>close()</code> Close this appender.
String	<code>getApplication()</code> Returns value of the App option.
String	<code>getEncoding()</code> Returns value of the Encoding option.
int	<code>getPort()</code> Returns value of the Port option.
String	<code>getRemoteHost()</code> Returns value of the RemoteHost option.
boolean	<code>isActive()</code>
boolean	<code>requiresLayout()</code> The UDPAppender uses layouts.
void	<code>setApplication(String app)</code> The App option takes a string value which should be the name of the application getting logged.
void	<code>setEncoding(String encoding)</code> The Encoding option specifies how the bytes are encoded.
void	<code>setPort(int port)</code> The Port option takes a positive integer representing the port where UDP packets will be sent.
void	<code>setRemoteHost(String host)</code> The RemoteHost option takes a string value which should be the host name or ipaddress to send the UDP packets.

Methods inherited from class org.apache.log4j.AppenderSkeleton

activateOptions, addFilter, append, clearFilters, doAppend, finalize, getErrorHandler, getFilter, getFirstFilter, getLayout, getName, getThreshold, isAsSevereAsThreshold, setErrorHandler, setLayout, setName, setThreshold

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.Appender

addFilter, clearFilters, close, doAppend, getErrorHandler, getFilter, getLayout, getName, requiresLayout, setErrorHandler, setLayout, setName

Methods inherited from interface org.apache.log4j.spi.OptionHandler

activateOptions

Methods inherited from interface com.wowza.wms.logging.PortBased


```
getPort
```

Methods inherited from interface `com.wowza.wms.logging.NetworkBased`

```
getName, isActive
```

Fields

DEFAULT_PORT

```
public static final int DEFAULT_PORT
```

The default port number for the UDP packets, 9991.
Constant value: **9991**

Constructors

UDPAppender

```
public UDPAppender()
```

UDPAppender

```
public UDPAppender(java.net.InetAddress address,  
                    int port)
```

Sends UDP packets to the address and port.

UDPAppender

```
public UDPAppender(String host,  
                    int port)
```

Sends UDP packets to the address and port.

Methods

activateOptions

```
public void activateOptions()
```

Open the UDP sender for the **RemoteHost** and **Port**.

close

```
public void close()
```

Close this appender.

This will mark the appender as closed and call then [cleanUp\(\)](#) method.

(continued from last page)

cleanUp

```
public void cleanUp()
```

Close the UDP Socket and release the underlying connector thread if it has been created

append

```
public void append(org.apache.log4j.spi.LoggingEvent event)
```

isActive

```
public boolean isActive()
```

requiresLayout

```
public boolean requiresLayout()
```

The **UDPAppender** uses layouts. Hence, this method returns true.

setRemoteHost

```
public void setRemoteHost(String host)
```

The **RemoteHost** option takes a string value which should be the host name or ipaddress to send the UDP packets.

getRemoteHost

```
public String getRemoteHost()
```

Returns value of the **RemoteHost** option.

setApplication

```
public void setApplication(String app)
```

The **App** option takes a string value which should be the name of the application getting logged. If property was already set (via system property), don't set here.

getApplication

```
public String getApplication()
```

Returns value of the **App** option.

setEncoding

```
public void setEncoding(String encoding)
```

The **Encoding** option specifies how the bytes are encoded. If this option is not specified, the System encoding is used.

getEncoding

```
public String getEncoding()
```

(continued from last page)

Returns value of the **Encoding** option.

setPort

```
public void setPort(int port)
```

The **Port** option takes a positive integer representing the port where UDP packets will be sent.

getPort

```
public int getPort()
```

Returns value of the **Port** option.

com.wowza.wms.logging Class WMSLogger

```

java.lang.Object
  |
  +-org.apache.log4j.Category
    |
    +-org.apache.log4j.Logger
      |
      +-com.wowza.wms.logging.WMSLogger
  
```

All Implemented Interfaces:

org.apache.log4j.spi.AppenderAttachable

```

public class WMSLogger
extends org.apache.log4j.Logger
  
```

Fields inherited from class org.apache.log4j.Category

additive, level, name, parent, repository, resourceBundle

Constructor Summary

public	WMSLogger (String name, org.apache.log4j.Logger tmpLogger)
public	WMSLogger (String name)

Method Summary

void	debug (Object o)
void	debug (Object o, Throwable e)
void	debug (String comment)
void	debug (String comment, IMediaStream stream)
void	debug (String comment, IMediaStream stream, String category, String event, int status, String context)
void	debug (String comment, String category, String event)
void	debug (String comment, String category, String event, int status, String context)
void	debug (String comment, Throwable e)
void	error (Object o)
void	error (Object o, Throwable e)

void	<u>error</u> (String comment)
void	<u>error</u> (String comment, <u>IMediaStream</u> stream)
void	<u>error</u> (String comment, <u>IMediaStream</u> stream, String category, String event, int status, String context)
void	<u>error</u> (String comment, String category, String event)
void	<u>error</u> (String comment, String category, String event, int status, String context)
void	<u>error</u> (String comment, Throwable e)
void	<u>error</u> (String comment, Throwable e, int stackDepth)
void	<u>fatal</u> (Object o)
void	<u>fatal</u> (Object o, Throwable e)
void	<u>fatal</u> (String comment)
void	<u>fatal</u> (String comment, <u>IMediaStream</u> stream)
void	<u>fatal</u> (String comment, <u>IMediaStream</u> stream, String category, String event, int status, String context)
void	<u>fatal</u> (String comment, String category, String event)
void	<u>fatal</u> (String comment, String category, String event, int status, String context)
void	<u>fatal</u> (String comment, Throwable e)
static <u>WMSLogger</u>	<u>getLogger</u> (String name)
void	<u>info</u> (Object o)
void	<u>info</u> (Object o, Throwable e)
void	<u>info</u> (String comment)
void	<u>info</u> (String comment, <u>IMediaStream</u> stream)
void	<u>info</u> (String comment, <u>IMediaStream</u> stream, String category, String event, int status, String context)
void	<u>info</u> (String comment, String category, String event)

void	info (String comment, String category, String event, int status, String context)
void	info (String comment, Throwable e)
boolean	isDebugEnabled ()
boolean	isEnabledFor (org.apache.log4j.Priority level)
boolean	isErrorEnabled ()
boolean	isInfoEnabled ()
boolean	isTraceEnabled ()
boolean	isWarnEnabled ()
void	log (org.apache.log4j.Level level, String comment)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context, Throwable e)
void	log (org.apache.log4j.Level level, String comment, IMediaStream stream, String category, String event, int status, String context, Throwable e, int stackDepth)
void	log (org.apache.log4j.Level level, String comment, String category, String event)
void	warn (Object o)
void	warn (Object o, Throwable e)
void	warn (String comment)
void	warn (String comment, IMediaStream stream)
void	warn (String comment, IMediaStream stream, String category, String event, int status, String context)
void	warn (String comment, String category, String event)

void	warn (String comment, String category, String event, int status, String context)
void	warn (String comment, Throwable e)

Methods inherited from class org.apache.log4j.Logger

getLogger, getLogger, getLogger, getLogger, isTraceEnabled, trace, trace

Methods inherited from class org.apache.log4j.Category

addAppender, assertLog, callAppenders, debug, debug, error, error, exists, fatal, fatal, forcedLog, getAdditivity, getAllAppenders, getAppender, getChainedPriority, getCurrentCategories, getDefaultHierarchy, getEffectiveLevel, getHierarchy, getInstance, getInstance, getLevel, getLoggerRepository, getName, getParent, getPriority, getResourceBundle, getResourceBundleString, getRoot, info, info, isAttached, isDebugEnabled, isEnabledFor, isInfoEnabled, l7dlog, l7dlog, log, log, log, removeAllAppenders, removeAppender, removeAppender, setAdditivity, setLevel, setPriority, setResourceBundle, shutdown, warn, warn

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.spi.AppenderAttachable

addAppender, getAllAppenders, getAppender, isAttached, removeAllAppenders, removeAppender, removeAppender

Constructors

WMSLogger

```
public WMSLogger(String name,
                 org.apache.log4j.Logger tmpLogger)
```

WMSLogger

```
public WMSLogger(String name)
```

Methods

getLogger

```
public static WMSLogger getLogger(String name)
```

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isWarnEnabled

```
public boolean isWarnEnabled()
```

isErrorEnabled

```
public boolean isErrorEnabled()
```

isTraceEnabled

```
public boolean isTraceEnabled()
```

isDebugEnabled

```
public boolean isDebugEnabled()
```

isInfoEnabled

```
public boolean isInfoEnabled()
```

isEnabledFor

```
public boolean isEnabledFor(org.apache.log4j.Priority level)
```

log

```
public void log(org.apache.log4j.Level level,  
               String comment,  
               IMediaStream stream,  
               String category,  
               String event,  
               int status,  
               String context,  
               Throwable e)
```

log

```
public void log(org.apache.log4j.Level level,  
               String comment,  
               IMediaStream stream,  
               String category,  
               String event,  
               int status,  
               String context,  
               Throwable e,  
               int stackDepth)
```

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log

```
public void log(org.apache.log4j.Level level,
               String comment,
               IMediaStream stream,
               String category,
               String event,
               int status,
               String context)
```

log

```
public void log(org.apache.log4j.Level level,
               String comment,
               IMediaStream stream,
               String category,
               String event)
```

log

```
public void log(org.apache.log4j.Level level,
               String comment,
               String category,
               String event)
```

log

```
public void log(org.apache.log4j.Level level,
               String comment)
```

log

```
public void log(org.apache.log4j.Level level,
               String comment,
               IMediaStream stream)
```

info

```
public void info(Object o)
```

info

```
public void info(Object o,
               Throwable e)
```

info

```
public void info(String comment)
```

info

```
public void info(String comment,  
                Throwable e)
```

info

```
public void info(String comment,  
                IMediaStream stream)
```

info

```
public void info(String comment,  
                String category,  
                String event)
```

info

```
public void info(String comment,  
                String category,  
                String event,  
                int status,  
                String context)
```

info

```
public void info(String comment,  
                IMediaStream stream,  
                String category,  
                String event,  
                int status,  
                String context)
```

error

```
public void error(Object o)
```

error

```
public void error(Object o,  
                Throwable e)
```

(continued from last page)

error

```
public void error(String comment)
```

error

```
public void error(String comment,  
                  Throwable e)
```

error

```
public void error(String comment,  
                  Throwable e,  
                  int stackDepth)
```

error

```
public void error(String comment,  
                  IMediaStream stream)
```

error

```
public void error(String comment,  
                  String category,  
                  String event)
```

error

```
public void error(String comment,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

error

```
public void error(String comment,  
                  IMediaStream stream,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

(continued from last page)

fatal

```
public void fatal(Object o)
```

fatal

```
public void fatal(Object o,  
                  Throwable e)
```

fatal

```
public void fatal(String comment)
```

fatal

```
public void fatal(String comment,  
                  Throwable e)
```

fatal

```
public void fatal(String comment,  
                  IMediaStream stream)
```

fatal

```
public void fatal(String comment,  
                  String category,  
                  String event)
```

fatal

```
public void fatal(String comment,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

fatal

```
public void fatal(String comment,  
                  IMediaStream stream,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

debug

```
public void debug(Object o)
```

debug

```
public void debug(Object o,  
                  Throwable e)
```

debug

```
public void debug(String comment)
```

debug

```
public void debug(String comment,  
                  Throwable e)
```

debug

```
public void debug(String comment,  
                  IMediaStream stream)
```

debug

```
public void debug(String comment,  
                  String category,  
                  String event)
```

debug

```
public void debug(String comment,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

debug

```
public void debug(String comment,  
                  IMediaStream stream,  
                  String category,  
                  String event,  
                  int status,  
                  String context)
```

(continued from last page)

warn

```
public void warn(Object o)
```

warn

```
public void warn(Object o,  
                Throwable e)
```

warn

```
public void warn(String comment)
```

warn

```
public void warn(String comment,  
                Throwable e)
```

warn

```
public void warn(String comment,  
                IMediaStream stream)
```

warn

```
public void warn(String comment,  
                String category,  
                String event)
```

warn

```
public void warn(String comment,  
                String category,  
                String event,  
                int status,  
                String context)
```

(continued from last page)

warn

```
public void warn(String comment,  
    IMediaStream stream,  
    String category,  
    String event,  
    int status,  
    String context)
```

com.wowza.wms.logging Class WMSLoggerFactory

java.lang.Object

└-com.wowza.wms.logging.WMSLoggerFactory

All Implemented Interfaces:

org.apache.log4j.spi.LoggerFactory

```
public class WMSLoggerFactory
  extends Object
  implements org.apache.log4j.spi.LoggerFactory
```

Field Summary

public static final	LOGGERNAME_SERVER
	Value: _Server_

Constructor Summary

public	WMSLoggerFactory()
--------	------------------------------------

Method Summary

WMSLogger	forceNewLoggerInstance (String name, org.apache.log4j.Logger tmpLogger)
---------------------------	---

static Object	getGlobalLogValue (String key)
---------------	--

static WMSLoggerFactory	getInstance ()
--	--------------------------------

static WMSLogger	getLogger (Class classObj)
----------------------------------	--

static WMSLogger	getLoggerObj (IApplication application)
----------------------------------	--

static WMSLogger	getLoggerObj (IApplicationInstance appInstance)
----------------------------------	--

static WMSLogger	getLoggerObj (IVHost vhost)
----------------------------------	--

WMSLogger	getLoggerObj (String name)
---------------------------	--

static void	initContextLogging (IApplication application)
-------------	--

static void	initContextLogging (IApplicationInstance appInstance)
-------------	--

static void	initContextLogging (IVHost vhost)
-------------	--

static WMSLogger	initializeLogging (String loggingConfigURL)
static WMSLogger	initializeLogging (String loggingConfigURL, IVHost vhost)
static boolean	isGlobalLogValueSet (String key)
org.apache.log4j.Logger	makeNewLoggerInstance (String name)
static void	putGlobalLogValue (String key, Object obj)
static void	removeGlobalLogValue (String key)
static void	removeGlobalLogValues ()
static void	resetMDC ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface org.apache.log4j.spi.LoggerFactory

makeNewLoggerInstance

Fields

LOGGERNAME_SERVER

```
public static final java.lang.String LOGGERNAME_SERVER
```

Constant value: **_Server_**

Constructors

WMSLoggerFactory

```
public WMSLoggerFactory()
```

Methods

getLoggerObj

```
public WMSLogger getLoggerObj(String name)
```

(continued from last page)

forceNewLoggerInstance

```
public WMSLogger forceNewLoggerInstance(String name,  
                                         org.apache.log4j.Logger tmpLogger)
```

getInstance

```
public static WMSLoggerFactory getInstance()
```

initContextLogging

```
public static void initContextLogging(IVHost vhost)
```

initContextLogging

```
public static void initContextLogging(IApplication application)
```

initContextLogging

```
public static void initContextLogging(IApplicationInstance appInstance)
```

initializeLogging

```
public static WMSLogger initializeLogging(String loggingConfigURL)
```

initializeLogging

```
public static WMSLogger initializeLogging(String loggingConfigURL,  
                                         IVHost vhost)
```

makeNewLoggerInstance

```
public org.apache.log4j.Logger makeNewLoggerInstance(String name)
```

resetMDC

```
public static void resetMDC()
```

(continued from last page)

removeGlobalLogValues

```
public static void removeGlobalLogValues()
```

removeGlobalLogValue

```
public static void removeGlobalLogValue(String key)
```

isGlobalLogValueSet

```
public static boolean isGlobalLogValueSet(String key)
```

putGlobalLogValue

```
public static void putGlobalLogValue(String key,  
                                     Object obj)
```

getGlobalLogValue

```
public static Object getGlobalLogValue(String key)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IVHost vhost)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IApplication application)
```

getLoggerObj

```
public static WMSLogger getLoggerObj(IApplicationInstance appInstance)
```

getLogger

```
public static WMSLogger getLogger(Class classObj)
```

com.wowza.wms.logging

Class WMSLoggerIDs

java.lang.Object

└─com.wowza.wms.logging.WMSLoggerIDs

public class **WMSLoggerIDs**
extends Object

Field Summary

public static final	CAT_ALL
public static final	CAT_application Value: application
public static final	CAT_cupertino Value: cupertino
public static final	CAT_dvrchunk Value: dvrchunk
public static final	CAT_mpegdash Value: mpegdash
public static final	CAT_rtsp Value: rtsp
public static final	CAT_sanjose Value: sanjose
public static final	CAT_server Value: server
public static final	CAT_session Value: session
public static final	CAT_smoothstreaming Value: smoothstreaming
public static final	CAT_stream Value: stream
public static final	CAT_transcoder Value: transcoder

public static final	CAT_ts Value: ts
public static final	CAT_vhost Value: vhost
public static final	CAT_webm Value: webm
public static final	CAT_webrtc Value: webrtc
public static final	CTRL_playlist_node Value: CTRL-playlist-node
public static final	EVT_ALL
public static final	EVT_announce Value: announce
public static final	EVT_app_start Value: app-start
public static final	EVT_app_stop Value: app-stop
public static final	EVT_comment Value: comment
public static final	EVT_connect Value: connect
public static final	EVT_connect_burst Value: connect-burst
public static final	EVT_connect_pending Value: connect-pending
public static final	EVT_create Value: create
public static final	EVT_decoderaudiostart Value: decoder-audio-start
public static final	EVT_decoderaudiostop Value: decoder-audio-stop

public static final	EVT_decodervideostart Value: decoder-video-start
public static final	EVT_decodervideostop Value: decoder-video-stop
public static final	EVT_describe Value: describe
public static final	EVT_destroy Value: destroy
public static final	EVT_disconnect Value: disconnect
public static final	EVT_encoderaudiostart Value: encoder-audio-start
public static final	EVT_encoderaudiostop Value: encoder-audio-stop
public static final	EVT_encodervideostart Value: encoder-video-start
public static final	EVT_encodervideostop Value: encoder-video-stop
public static final	EVT_pause Value: pause
public static final	EVT_play Value: play
public static final	EVT_publish Value: publish
public static final	EVT_push Value: push
public static final	EVT_record Value: record
public static final	EVT_recordstop Value: recordstop
public static final	EVT_seek Value: seek

public static final	EVT_server_start Value: server-start
public static final	EVT_server_stop Value: server-stop
public static final	EVT_setbuffertime Value: setbuffertime
public static final	EVT_setstreamtype Value: setstreamtype
public static final	EVT_stop Value: stop
public static final	EVT_transcoderstart Value: transcoder-start
public static final	EVT_transcoderstop Value: transcoder-stop
public static final	EVT_unpause Value: unpause
public static final	EVT_unpublish Value: unpublish
public static final	EVT_unpush Value: unpush
public static final	EVT_vhost_start Value: vhost-start
public static final	EVT_vhost_stop Value: vhost-stop
public static final	FD_ALL
public static final	FD_c_client_id Value: c-client-id
public static final	FD_c_ip Value: c-ip
public static final	FD_c_proto Value: c-proto

public static final	FD_c_referrer Value: c-referrer
public static final	FD_c_user_agent Value: c-user-agent
public static final	FD_cs_bytes Value: cs-bytes
public static final	FD_cs_stream_bytes Value: cs-stream-bytes
public static final	FD_cs_uri_query Value: cs-uri-query
public static final	FD_cs_uri_stem Value: cs-uri-stem
public static final	FD_date Value: date
public static final	FD_s_ip Value: s-ip
public static final	FD_s_port Value: s-port
public static final	FD_s_uri Value: s-uri
public static final	FD_sc_bytes Value: sc-bytes
public static final	FD_sc_stream_bytes Value: sc-stream-bytes
public static final	FD_time Value: time
public static final	FD_tz Value: tz
public static final	FD_x_app Value: x-app
public static final	FD_x_appinst Value: x-appinst

public static final	FD_x_category Value: x-category
public static final	FD_x_comment Value: x-comment
public static final	FD_x_ctx Value: x-ctx
public static final	FD_x_ctx_override Value: x-ctx-override
public static final	FD_x_duration Value: x-duration
public static final	FD_x_event Value: x-event
public static final	FD_x_file_ext Value: x-file-ext
public static final	FD_x_file_length Value: x-file-length
public static final	FD_x_file_name Value: x-file-name
public static final	FD_x_file_size Value: x-file-size
public static final	FD_x_forward_ip Value: x-forwarded-ip
public static final	FD_x_severity Value: x-severity
public static final	FD_x_sname Value: x-sname
public static final	FD_x_sname_query Value: x-sname-query
public static final	FD_x_spos Value: x-spos
public static final	FD_x_status Value: x-status

public static final	FD_x_stream_id Value: x-stream-id
public static final	FD_x_suri Value: x-suri
public static final	FD_x_suri_query Value: x-suri-query
public static final	FD_x_suri_stem Value: x-suri-stem
public static final	FD_x_vhost Value: x-vhost
public static final	PROTO_HTTP Value: http
public static final	PROTO_HTTPCUPERTINO Value: http (cupertino)
public static final	PROTO_HTTPDVRCHUNK Value: http (dvr)
public static final	PROTO_HTTPMPEGDASH Value: http (mpegdash)
public static final	PROTO_HTTPS Value: https
public static final	PROTO_HTTPSANJOSE Value: http (sanjose)
public static final	PROTO_HTTPSCUPERTINO Value: https (cupertino)
public static final	PROTO_HTTPSDVRCHUNK Value: https (dvr)
public static final	PROTO_HTTPSMOOTH Value: http (smooth)
public static final	PROTO_HTTPSMPEGDASH Value: https (mpegdash)
public static final	PROTO_HTTPSSANJOSE Value: https (sanjose)

public static final	PROTO_HTTPSSMOOTH Value: https (smooth)
public static final	PROTO_HTTPSSTREAMER Value: https (streamer)
public static final	PROTO_HTTPSTREAMER Value: http (streamer)
public static final	PROTO_RTMP Value: rtmp
public static final	PROTO_RTMP_E Value: rtmpe
public static final	PROTO_RTMP_S Value: rtmps
public static final	PROTO_RTMP_T Value: rtmpt (HTTP-1.1)
public static final	PROTO_RTMP_T_E Value: rtmpte (HTTP-1.1)
public static final	PROTO_RTMP_T_S Value: rtmpts (HTTP-1.1)
public static final	PROTO_RTSP Value: rtsp
public static final	PROTO_WEBRTC Value: webrtc
public static final	PROTO_WOWZ Value: wowz
public static final	PROTO_WOWZ_E Value: wowze
public static final	PROTO_WOWZ_S Value: wowzs
public static final	STAT_connect_application_not_available Value: 302
public static final	STAT_connect_application_not_found Value: 404

public static final	STAT_connect_bad_gateway Value: 502
public static final	STAT_connect_internal_error Value: 500
public static final	STAT_connect_license_limit Value: 413
public static final	STAT_connect_pending_wating Value: 100
public static final	STAT_connect_redirect Value: 302
public static final	STAT_connect_rejected_by_application Value: 401
public static final	STAT_connect_rejected_by_module Value: 403
public static final	STAT_connect_resource_limit Value: 409
public static final	STAT_connect_service_unavailable Value: 503
public static final	STAT_connect_successful Value: 200
public static final	STAT_connect_unknown_protocol Value: 400
public static final	STAT_general_internal_error Value: 500
public static final	STAT_general_successful Value: 200
public static final	STAT_play_bad_request Value: 400
public static final	STAT_play_internal_error Value: 500
public static final	STAT_play_rejected_by_application Value: 401

public static final	<u>STAT_play_rejected_by_module</u> Value: 403
public static final	<u>STAT_play_stream_not_found</u> Value: 404
public static final	<u>STAT_play_successful</u> Value: 200
public static final	<u>STAT_play_unsupported_media_type</u> Value: 415
public static final	<u>STAT_publish_bad_request</u> Value: 400
public static final	<u>STAT_publish_in_use</u> Value: 409
public static final	<u>STAT_publish_internal_error</u> Value: 500
public static final	<u>STAT_publish_rejected_by_application</u> Value: 401
public static final	<u>STAT_publish_successful</u> Value: 200
public static final	<u>STAT_publish_unsupported_media_type</u> Value: 415
public static final	<u>STAT_push_sucesseful</u> Value: 200
public static final	<u>STAT_stop_client_disconnect</u> Value: 408
public static final	<u>STAT_stop_successful</u> Value: 200

Constructor Summary

public	<u>WMSLoggerIDs()</u>
--------	---------------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Fields

FD_x_event

```
public static final java.lang.String FD_x_event
```

Constant value: **x-event**

FD_x_category

```
public static final java.lang.String FD_x_category
```

Constant value: **x-category**

FD_date

```
public static final java.lang.String FD_date
```

Constant value: **date**

FD_time

```
public static final java.lang.String FD_time
```

Constant value: **time**

FD_tz

```
public static final java.lang.String FD_tz
```

Constant value: **tz**

FD_x_ctx

```
public static final java.lang.String FD_x_ctx
```

Constant value: **x-ctx**

FD_x_ctx_override

```
public static final java.lang.String FD_x_ctx_override
```

Constant value: **x-ctx-override**

FD_x_vhost

```
public static final java.lang.String FD_x_vhost
```

Constant value: **x-vhost**

(continued from last page)

FD_x_app

```
public static final java.lang.String FD_x_app
```

Constant value: **x-app**

FD_x_appinst

```
public static final java.lang.String FD_x_appinst
```

Constant value: **x-appinst**

FD_c_ip

```
public static final java.lang.String FD_c_ip
```

Constant value: **c-ip**

FD_c_proto

```
public static final java.lang.String FD_c_proto
```

Constant value: **c-proto**

FD_s_uri

```
public static final java.lang.String FD_s_uri
```

Constant value: **s-uri**

FD_c_referrer

```
public static final java.lang.String FD_c_referrer
```

Constant value: **c-referrer**

FD_c_user_agent

```
public static final java.lang.String FD_c_user_agent
```

Constant value: **c-user-agent**

FD_c_client_id

```
public static final java.lang.String FD_c_client_id
```

Constant value: **c-client-id**

FD_cs_bytes

```
public static final java.lang.String FD_cs_bytes
```

(continued from last page)

Constant value: **cs-bytes**

FD_sc_bytes

```
public static final java.lang.String FD_sc_bytes
```

Constant value: **sc-bytes**

FD_x_sname

```
public static final java.lang.String FD_x_sname
```

Constant value: **x-sname**

FD_x_file_size

```
public static final java.lang.String FD_x_file_size
```

Constant value: **x-file-size**

FD_x_file_length

```
public static final java.lang.String FD_x_file_length
```

Constant value: **x-file-length**

FD_x_spos

```
public static final java.lang.String FD_x_spos
```

Constant value: **x-spos**

FD_cs_stream_bytes

```
public static final java.lang.String FD_cs_stream_bytes
```

Constant value: **cs-stream-bytes**

FD_sc_stream_bytes

```
public static final java.lang.String FD_sc_stream_bytes
```

Constant value: **sc-stream-bytes**

FD_s_ip

```
public static final java.lang.String FD_s_ip
```

Constant value: **s-ip**

FD_x_duration

```
public static final java.lang.String FD_x_duration
```

Constant value: **x-duration**

FD_x_status

```
public static final java.lang.String FD_x_status
```

Constant value: **x-status**

FD_cs_uri_stem

```
public static final java.lang.String FD_cs_uri_stem
```

Constant value: **cs-uri-stem**

FD_cs_uri_query

```
public static final java.lang.String FD_cs_uri_query
```

Constant value: **cs-uri-query**

FD_x_sname_query

```
public static final java.lang.String FD_x_sname_query
```

Constant value: **x-sname-query**

FD_x_file_name

```
public static final java.lang.String FD_x_file_name
```

Constant value: **x-file-name**

FD_x_file_ext

```
public static final java.lang.String FD_x_file_ext
```

Constant value: **x-file-ext**

FD_x_suri_query

```
public static final java.lang.String FD_x_suri_query
```

Constant value: **x-suri-query**

(continued from last page)

FD_x_suri_stem

```
public static final java.lang.String FD_x_suri_stem
```

Constant value: **x-suri-stem**

FD_x_suri

```
public static final java.lang.String FD_x_suri
```

Constant value: **x-suri**

FD_x_severity

```
public static final java.lang.String FD_x_severity
```

Constant value: **x-severity**

FD_x_comment

```
public static final java.lang.String FD_x_comment
```

Constant value: **x-comment**

FD_s_port

```
public static final java.lang.String FD_s_port
```

Constant value: **s-port**

FD_x_stream_id

```
public static final java.lang.String FD_x_stream_id
```

Constant value: **x-stream-id**

FD_x_forward_ip

```
public static final java.lang.String FD_x_forward_ip
```

Constant value: **x-forwarded-ip**

CAT_server

```
public static final java.lang.String CAT_server
```

Constant value: **server**

CAT_vhost

```
public static final java.lang.String CAT_vhost
```

(continued from last page)

Constant value: **vhost**

CAT_application

```
public static final java.lang.String CAT_application
```

Constant value: **application**

CAT_session

```
public static final java.lang.String CAT_session
```

Constant value: **session**

CAT_stream

```
public static final java.lang.String CAT_stream
```

Constant value: **stream**

CAT_rtsp

```
public static final java.lang.String CAT_rtsp
```

Constant value: **rtsp**

CAT_cupertino

```
public static final java.lang.String CAT_cupertino
```

Constant value: **cupertino**

CAT_sanjose

```
public static final java.lang.String CAT_sanjose
```

Constant value: **sanjose**

CAT_smoothstreaming

```
public static final java.lang.String CAT_smoothstreaming
```

Constant value: **smoothstreaming**

CAT_dvrchunk

```
public static final java.lang.String CAT_dvrchunk
```

Constant value: **dvrchunk**

CAT_webm

```
public static final java.lang.String CAT_webm
```

Constant value: **webm**

CAT_transcoder

```
public static final java.lang.String CAT_transcoder
```

Constant value: **transcoder**

CAT_mpegdash

```
public static final java.lang.String CAT_mpegdash
```

Constant value: **mpegdash**

CAT_ts

```
public static final java.lang.String CAT_ts
```

Constant value: **ts**

CAT_webrtc

```
public static final java.lang.String CAT_webrtc
```

Constant value: **webrtc**

EVT_connect_pending

```
public static final java.lang.String EVT_connect_pending
```

Constant value: **connect-pending**

EVT_connect

```
public static final java.lang.String EVT_connect
```

Constant value: **connect**

EVT_connect_burst

```
public static final java.lang.String EVT_connect_burst
```

Constant value: **connect-burst**

(continued from last page)

EVT_disconnect

```
public static final java.lang.String EVT_disconnect
```

Constant value: **disconnect**

EVT_publish

```
public static final java.lang.String EVT_publish
```

Constant value: **publish**

EVT_unpublish

```
public static final java.lang.String EVT_unpublish
```

Constant value: **unpublish**

EVT_play

```
public static final java.lang.String EVT_play
```

Constant value: **play**

EVT_pause

```
public static final java.lang.String EVT_pause
```

Constant value: **pause**

EVT_setbuffertime

```
public static final java.lang.String EVT_setbuffertime
```

Constant value: **setbuffertime**

EVT_create

```
public static final java.lang.String EVT_create
```

Constant value: **create**

EVT_destroy

```
public static final java.lang.String EVT_destroy
```

Constant value: **destroy**

EVT_setstreamtype

```
public static final java.lang.String EVT_setstreamtype
```

(continued from last page)

Constant value: **setstreamtype**

EVT_unpause

```
public static final java.lang.String EVT_unpause
```

Constant value: **unpause**

EVT_seek

```
public static final java.lang.String EVT_seek
```

Constant value: **seek**

EVT_stop

```
public static final java.lang.String EVT_stop
```

Constant value: **stop**

EVT_record

```
public static final java.lang.String EVT_record
```

Constant value: **record**

EVT_recordstop

```
public static final java.lang.String EVT_recordstop
```

Constant value: **recordstop**

EVT_server_start

```
public static final java.lang.String EVT_server_start
```

Constant value: **server-start**

EVT_server_stop

```
public static final java.lang.String EVT_server_stop
```

Constant value: **server-stop**

EVT_vhost_start

```
public static final java.lang.String EVT_vhost_start
```

Constant value: **vhost-start**

EVT_vhost_stop

```
public static final java.lang.String EVT_vhost_stop
```

Constant value: **vhost-stop**

EVT_app_start

```
public static final java.lang.String EVT_app_start
```

Constant value: **app-start**

EVT_app_stop

```
public static final java.lang.String EVT_app_stop
```

Constant value: **app-stop**

EVT_comment

```
public static final java.lang.String EVT_comment
```

Constant value: **comment**

EVT_announce

```
public static final java.lang.String EVT_announce
```

Constant value: **announce**

EVT_describe

```
public static final java.lang.String EVT_describe
```

Constant value: **describe**

EVT_transcoderstart

```
public static final java.lang.String EVT_transcoderstart
```

Constant value: **transcoder-start**

EVT_transcoderstop

```
public static final java.lang.String EVT_transcoderstop
```

Constant value: **transcoder-stop**

(continued from last page)

EVT_decoderaudiostart

```
public static final java.lang.String EVT_decoderaudiostart
```

Constant value: **decoder-audio-start**

EVT_decoderaudiostop

```
public static final java.lang.String EVT_decoderaudiostop
```

Constant value: **decoder-audio-stop**

EVT_decodervideostart

```
public static final java.lang.String EVT_decodervideostart
```

Constant value: **decoder-video-start**

EVT_decodervideostop

```
public static final java.lang.String EVT_decodervideostop
```

Constant value: **decoder-video-stop**

EVT_encoderaudiostart

```
public static final java.lang.String EVT_encoderaudiostart
```

Constant value: **encoder-audio-start**

EVT_encoderaudiostop

```
public static final java.lang.String EVT_encoderaudiostop
```

Constant value: **encoder-audio-stop**

EVT_encodervideostart

```
public static final java.lang.String EVT_encodervideostart
```

Constant value: **encoder-video-start**

EVT_encodervideostop

```
public static final java.lang.String EVT_encodervideostop
```

Constant value: **encoder-video-stop**

EVT_push

```
public static final java.lang.String EVT_push
```

(continued from last page)

Constant value: **push**

EVT_unpush

```
public static final java.lang.String EVT_unpush
```

Constant value: **unpush**

CTRL_playlist_node

```
public static final java.lang.String CTRL_playlist_node
```

Constant value: **CTRL-playlist-node**

STAT_connect_pending_wating

```
public static final int STAT_connect_pending_wating
```

Constant value: **100**

STAT_connect_successful

```
public static final int STAT_connect_successful
```

Constant value: **200**

STAT_connect_application_not_available

```
public static final int STAT_connect_application_not_available
```

Constant value: **302**

STAT_connect_unknown_protocol

```
public static final int STAT_connect_unknown_protocol
```

Constant value: **400**

STAT_connect_rejected_by_application

```
public static final int STAT_connect_rejected_by_application
```

Constant value: **401**

STAT_connect_rejected_by_module

```
public static final int STAT_connect_rejected_by_module
```

Constant value: **403**

STAT_connect_application_not_found

```
public static final int STAT_connect_application_not_found
```

Constant value: **404**

STAT_connect_resource_limit

```
public static final int STAT_connect_resource_limit
```

Constant value: **409**

STAT_connect_license_limit

```
public static final int STAT_connect_license_limit
```

Constant value: **413**

STAT_connect_redirect

```
public static final int STAT_connect_redirect
```

Constant value: **302**

STAT_connect_internal_error

```
public static final int STAT_connect_internal_error
```

Constant value: **500**

STAT_connect_bad_gateway

```
public static final int STAT_connect_bad_gateway
```

Constant value: **502**

STAT_connect_service_unavailable

```
public static final int STAT_connect_service_unavailable
```

Constant value: **503**

STAT_play_successful

```
public static final int STAT_play_successful
```

Constant value: **200**

(continued from last page)

STAT_play_bad_request

```
public static final int STAT_play_bad_request
```

Constant value: **400**

STAT_play_rejected_by_application

```
public static final int STAT_play_rejected_by_application
```

Constant value: **401**

STAT_play_rejected_by_module

```
public static final int STAT_play_rejected_by_module
```

Constant value: **403**

STAT_play_stream_not_found

```
public static final int STAT_play_stream_not_found
```

Constant value: **404**

STAT_play_unsupported_media_type

```
public static final int STAT_play_unsupported_media_type
```

Constant value: **415**

STAT_play_internal_error

```
public static final int STAT_play_internal_error
```

Constant value: **500**

STAT_publish_successful

```
public static final int STAT_publish_successful
```

Constant value: **200**

STAT_publish_bad_request

```
public static final int STAT_publish_bad_request
```

Constant value: **400**

STAT_publish_rejected_by_application

```
public static final int STAT_publish_rejected_by_application
```

(continued from last page)

Constant value: **401**

STAT_publish_in_use

```
public static final int STAT_publish_in_use
```

Constant value: **409**

STAT_publish_unsupported_media_type

```
public static final int STAT_publish_unsupported_media_type
```

Constant value: **415**

STAT_publish_internal_error

```
public static final int STAT_publish_internal_error
```

Constant value: **500**

STAT_stop_successful

```
public static final int STAT_stop_successful
```

Constant value: **200**

STAT_stop_client_disconnect

```
public static final int STAT_stop_client_disconnect
```

Constant value: **408**

STAT_general_successful

```
public static final int STAT_general_successful
```

Constant value: **200**

STAT_general_internal_error

```
public static final int STAT_general_internal_error
```

Constant value: **500**

STAT_push_sucesseful

```
public static final int STAT_push_sucesseful
```

Constant value: **200**

PROTO_RTMP

```
public static final java.lang.String PROTO_RTMP
```

Constant value: **rtmp**

PROTO_RTMPs

```
public static final java.lang.String PROTO_RTMPs
```

Constant value: **rtmps**

PROTO_RTMPT

```
public static final java.lang.String PROTO_RTMPT
```

Constant value: **rtmpt (HTTP-1.1)**

PROTO_RTMPTS

```
public static final java.lang.String PROTO_RTMPTS
```

Constant value: **rtmpts (HTTP-1.1)**

PROTO_RTMPE

```
public static final java.lang.String PROTO_RTMPE
```

Constant value: **rtmpe**

PROTO_RTMPTE

```
public static final java.lang.String PROTO_RTMPTE
```

Constant value: **rtmpte (HTTP-1.1)**

PROTO_WOWZ

```
public static final java.lang.String PROTO_WOWZ
```

Constant value: **wowz**

PROTO_WOWZE

```
public static final java.lang.String PROTO_WOWZE
```

Constant value: **wowze**

(continued from last page)

PROTO_WOWZS

```
public static final java.lang.String PROTO_WOWZS
```

Constant value: **wowzs**

PROTO_RTSP

```
public static final java.lang.String PROTO_RTSP
```

Constant value: **rtsp**

PROTO_WEBRTC

```
public static final java.lang.String PROTO_WEBRTC
```

Constant value: **webrtc**

PROTO_HTTP

```
public static final java.lang.String PROTO_HTTP
```

Constant value: **http**

PROTO_HTTPSTREAMER

```
public static final java.lang.String PROTO_HTTPSTREAMER
```

Constant value: **http (streamer)**

PROTO_HTTPCUPERTINO

```
public static final java.lang.String PROTO_HTTPCUPERTINO
```

Constant value: **http (cupertino)**

PROTO_HTTPSMOOTH

```
public static final java.lang.String PROTO_HTTPSMOOTH
```

Constant value: **http (smooth)**

PROTO_HTTPSANJOSE

```
public static final java.lang.String PROTO_HTTPSANJOSE
```

Constant value: **http (sanjose)**

PROTO_HTTPDVRCHUNK

```
public static final java.lang.String PROTO_HTTPDVRCHUNK
```

(continued from last page)

Constant value: **http (dvr)**

PROTO_HTTPMPEGDASH

```
public static final java.lang.String PROTO_HTTPMPEGDASH
```

Constant value: **http (mpegdash)**

PROTO_HTTPS

```
public static final java.lang.String PROTO_HTTPS
```

Constant value: **https**

PROTO_HTTPSSTREAMER

```
public static final java.lang.String PROTO_HTTPSSTREAMER
```

Constant value: **https (streamer)**

PROTO_HTTPSCUPERTINO

```
public static final java.lang.String PROTO_HTTPSCUPERTINO
```

Constant value: **https (cupertino)**

PROTO_HTTPSSMOOTH

```
public static final java.lang.String PROTO_HTTPSSMOOTH
```

Constant value: **https (smooth)**

PROTO_HTTPSSANJOSE

```
public static final java.lang.String PROTO_HTTPSSANJOSE
```

Constant value: **https (sanjose)**

PROTO_HTTPSDVRCHUNK

```
public static final java.lang.String PROTO_HTTPSDVRCHUNK
```

Constant value: **https (dvr)**

PROTO_HTTPSMPEGDASH

```
public static final java.lang.String PROTO_HTTPSMPEGDASH
```

Constant value: **https (mpegdash)**

FD_ALL

```
public static final java.lang.String FD_ALL
```

CAT_ALL

```
public static final java.lang.String CAT_ALL
```

EVT_ALL

```
public static final java.lang.String EVT_ALL
```

Constructors

WMSLoggerIDs

```
public WMSLoggerIDs()
```

Package

com.wowza.wms.manifest.builder

com.wowza.wms.manifest.builder Interface IManifestBuilder

All Known Implementing Classes:

[PlaylistBuilder](#)

public interface **IManifestBuilder**
extends

Method Summary

<code>abstract ManifestModel</code>	<code>addSegment(MediaPlaylist mediaPlaylist, java.util.Map data)</code>
---	--

Methods

addSegment

```
public abstract ManifestModel addSegment(MediaPlaylist mediaPlaylist,  
                                           java.util.Map data)  
    throws java.net.URISyntaxException
```

com.wowza.wms.manifest.builder

Class IManifestServiceConstants

```
java.lang.Object
```

```
└--com.wowza.wms.manifest.builder.IManifestServiceConstants
```

```
public class IManifestServiceConstants
extends Object
```

Field Summary

public static final	MS_KEY_ADD_PARTIAL_SEGMENTS A boolean to tell the manifest service to add partial segments to HLS media playlists Type: Boolean Value: addPartialSegments
public static final	MS_KEY_ADD_PREFETCH_SEGMENT A boolean to tell the manifest service to add prefetch segments to HLS media playlists Type: Boolean Value: addPrefetchSegment
public static final	MS_KEY_APP_INST_NAME Application Instance Name Type: String Value: appInstName
public static final	MS_KEY_APP_NAME Application Name Type: String Value: appName
public static final	MS_KEY_CAN_BLOCK_RELOAD MS_KEY_PART_HOLD_BACK Defines MS_KEY_PART_HOLD_BACK tag value that must be used. Value: canBlockReload
public static final	MS_KEY_CAN_SKIP_UNTIL MS_KEY_CAN_SKIP_UNTIL Defines MS_KEY_CAN_SKIP_UNTIL tag value that must be used. Value: canSkipUntil
public static final	MS_KEY_CODEC Codec Defines the codec ID string of the video contained in the segment Type: String Value: codec
public static final	MS_KEY_CODEC_STR_FORMAT_ID Codec string format id Type: Integer Value: codecStrFormatId
public static final	MS_KEY_CONTENT_TYPE Content Type - "AUDIO" "VIDEO" Defines the content type of the segment. Value: contentType

public static final	MS_KEY_ENABLE_EXT_X_INDEP_SEGS Independent Segments Defines whether the EXT_X_INDEPENDENT_SEGMENTS tag must be provided in playlists. Value: enableExtXIndependentSegments
public static final	MS_KEY_EXT_X_ALLOW_CACHE Allow Cache If provided, defines the #EXT-X-ALLOW-CACHE tag value, else the tag is not required. Value: extXAllowCache
public static final	MS_KEY_EXT_X_VER EXT_X_VERSION Defines EXT_X_VERSION tag value that must be used. Value: extXVersion
public static final	MS_KEY_HOLD_BACK MS_KEY_HOLD_BACK Defines MS_KEY_HOLD_BACK tag value that must be used. Value: holdBack
public static final	MS_KEY_INCOMPLETE_SEGMENT_HAS_KEY_FRAME Signals that the incomplete tag segment has a key frame in it This is to be used when checking to generate the INDEPENDENT attribute for HLS Partial Segments Type: String Value: incompleteSegmentHasKeyFrame
public static final	MS_KEY_INITIALIZATION_SEGMENT_URL Initialization Segment URL Defines the URL for the initialization segment for a stream Type: String Value: headerSegmentUrl
public static final	MS_KEY_IS_FLOATING_POINT_DURATIONS Floating Point Durations Defines whether floating point segment durations should be provided. Value: isFloatingPointDurations
public static final	MS_KEY_MANIFEST_HEADERS Manifest Headers Defines the list of user manifest headers, as specified in the config property Type: String Value: manifestHeaders
public static final	MS_KEY_MANIFEST_TYPE Manifest Type - "HLS" "DASH" Type: String Value: manifestType
public static final	MS_KEY_MEDIA_SEQ_NUM Media Sequence Number Defines the #EXT-X-MEDIA-SEQUENCE tag value to specify in the media playlist. Value: mediaSequenceNumber
public static final	MS_KEY_PART_HOLD_BACK MS_KEY_PART_HOLD_BACK Defines MS_KEY_PART_HOLD_BACK tag value that must be used. Value: partHoldBack
public static final	MS_KEY_PARTIAL_SEGMENT_BYTERANGE Not used Signals that the partial segment can be accessed through byte range addressing, and provides the URI to do so This is mandatory for partial segments that are a subresource of a URI Type: String Value: partialSegmentByterange

public static final	MS_KEY_PARTIAL_SEGMENT_NUMBER Partial Segment Number Defines the partial segment number Type: String Value: partialSegmentNumber
public static final	MS_KEY_PARTIAL_SEGMENT_TARGET_DURATION Partial segment target duration Type: Double Value: partialSegmentINF
public static final	MS_KEY_PARTIAL_SEGMENT_URL Partial Segment URL Defines the URL for a partial segment in a stream Type: String Value: partialSegmentUrl
public static final	MS_KEY_PLAYLIST_COUNT The segment playlist count Type: Integer Value: playlistCount
public static final	MS_KEY_PLAYLIST_TYPE_STR Playlist Type If provided, defines the #EXT-X-PLAYLIST_TYPE tag value, else the tag is not required. Value: playlistTypeStr
public static final	MS_KEY_PROGRAM_DATE_TIME Program Date Time Defines the #EXT-X-PROGRAM-DATE-TIME tag value to specify in the media playlist. Value: programDateTime
public static final	MS_KEY_RESOLUTION Resolution (Only segments containing video) Defines the resolution of the video contained in the segment Type: String Value: resolution
public static final	MS_KEY_SEG_COMPLETE Segment Complete - indicates whether this is a complete segments. Value: segmentComplete
public static final	MS_KEY_SEG_DUR_TARGET Segment Duration Target - the configured target segment duration Type: Integer Value: segmentDurationTarget
public static final	MS_KEY_SEG_DURATION The actual segment duration Type: Integer Value: segmentDuration
public static final	MS_KEY_SEG_FORMAT Segment Format - "CMAF" "TS" Type: String Value: segmentFormat
public static final	MS_KEY_SEGMENT_URL Segment URL Defines the URL for a segment in a stream Type: String Value: segmentUrl
public static final	MS_KEY_STREAM_NAME Stream Name Type: String Value: streamName

public static final	MS_KEY_TARGET_DURATION Target Duration Defines the #EXT-X-TARGETDURATION tag value to specify in the media playlist. Value: targetDuration
public static final	MS_KEY_TITLE Title Type: String Value: title

Constructor Summary

public	IManifestServiceConstants()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MS_KEY_APP_NAME

public static final java.lang.String **MS_KEY_APP_NAME**

Application Name Type: String
Constant value: **appName**

MS_KEY_APP_INST_NAME

public static final java.lang.String **MS_KEY_APP_INST_NAME**

Application Instance Name Type: String
Constant value: **appInstName**

MS_KEY_STREAM_NAME

public static final java.lang.String **MS_KEY_STREAM_NAME**

Stream Name Type: String
Constant value: **streamName**

MS_KEY_PLAYLIST_COUNT

public static final java.lang.String **MS_KEY_PLAYLIST_COUNT**

The segment playlist count Type: Integer
Constant value: **playlistCount**

MS_KEY_SEG_FORMAT

public static final java.lang.String **MS_KEY_SEG_FORMAT**

Segment Format - "CMAF" | "TS" Type: String
Constant value: **segmentFormat**

MS_KEY_SEG_COMPLETE

```
public static final java.lang.String MS_KEY_SEG_COMPLETE
```

Segment Complete - indicates whether this is a complete segments. This can be either a partial segment, or a segment that can be exposed and delivered as it is being encoded Type: Boolean
Constant value: **segmentComplete**

MS_KEY_SEG_DUR_TARGET

```
public static final java.lang.String MS_KEY_SEG_DUR_TARGET
```

Segment Duration Target - the configured target segment duration Type: Integer
Constant value: **segmentDurationTarget**

MS_KEY_SEG_DURATION

```
public static final java.lang.String MS_KEY_SEG_DURATION
```

The actual segment duration Type: Integer
Constant value: **segmentDuration**

MS_KEY_MANIFEST_TYPE

```
public static final java.lang.String MS_KEY_MANIFEST_TYPE
```

Manifest Type - "HLS" | "DASH" Type: String
Constant value: **manifestType**

MS_KEY_TITLE

```
public static final java.lang.String MS_KEY_TITLE
```

Title Type: String
Constant value: **title**

MS_KEY_EXT_X_VER

```
public static final java.lang.String MS_KEY_EXT_X_VER
```

EXT_X_VERSION Defines EXT_X_VERSION tag value that must be used. Type: Integer
Constant value: **extXVersion**

MS_KEY_CAN_BLOCK_RELOAD

```
public static final java.lang.String MS_KEY_CAN_BLOCK_RELOAD
```

MS_KEY_PART_HOLD_BACK Defines MS_KEY_PART_HOLD_BACK tag value that must be used. Type: Float
Constant value: **canBlockReload**

MS_KEY_PART_HOLD_BACK

```
public static final java.lang.String MS_KEY_PART_HOLD_BACK
```

MS_KEY_PART_HOLD_BACK Defines MS_KEY_PART_HOLD_BACK tag value that must be used. Type: Float
Constant value: **partHoldBack**

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MS_KEY_CAN_SKIP_UNTIL

```
public static final java.lang.String MS_KEY_CAN_SKIP_UNTIL
```

MS_KEY_CAN_SKIP_UNTIL Defines MS_KEY_CAN_SKIP_UNTIL tag value that must be used. Type: Float
Constant value: **canSkipUntil**

MS_KEY_HOLD_BACK

```
public static final java.lang.String MS_KEY_HOLD_BACK
```

MS_KEY_HOLD_BACK Defines MS_KEY_HOLD_BACK tag value that must be used. Type: Float
Constant value: **holdBack**

MS_KEY_CODEC_STR_FORMAT_ID

```
public static final java.lang.String MS_KEY_CODEC_STR_FORMAT_ID
```

Codec string format id Type: Integer
Constant value: **codecStrFormatId**

MS_KEY_IS_FLOATING_POINT_DURATIONS

```
public static final java.lang.String MS_KEY_IS_FLOATING_POINT_DURATIONS
```

Floating Point Durations Defines whether floating point segment durations should be provided. Type: Boolean
Constant value: **isFloatingPointDurations**

MS_KEY_PLAYLIST_TYPE_STR

```
public static final java.lang.String MS_KEY_PLAYLIST_TYPE_STR
```

Playlist Type If provided, defines the #EXT-X-PLAYLIST_TYPE tag value, else the tag is not required. Type: String
Constant value: **playlistTypeStr**

MS_KEY_EXT_X_ALLOW_CACHE

```
public static final java.lang.String MS_KEY_EXT_X_ALLOW_CACHE
```

Allow Cache If provided, defines the #EXT-X-ALLOW-CACHE tag value, else the tag is not required. Type: Boolean
Constant value: **extXAllowCache**

MS_KEY_ENABLE_EXT_X_INDEP_SEGS

```
public static final java.lang.String MS_KEY_ENABLE_EXT_X_INDEP_SEGS
```

Independent Segments Defines whether the EXT_X_INDEPENDENT_SEGMENTS tag must be provided in playlists. Type: Boolean
Constant value: **enableExtXIndependentSegments**

MS_KEY_INITIALIZATION_SEGMENT_URL

```
public static final java.lang.String MS_KEY_INITIALIZATION_SEGMENT_URL
```

Initialization Segment URL Defines the URL for the initialization segment for a stream Type: String
Constant value: **headerSegmentUrl**

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MS_KEY_SEGMENT_URL

```
public static final java.lang.String MS_KEY_SEGMENT_URL
```

Segment URL Defines the URL for a segment in a stream Type: String
Constant value: **segmentUrl**

MS_KEY_PARTIAL_SEGMENT_URL

```
public static final java.lang.String MS_KEY_PARTIAL_SEGMENT_URL
```

Partial Segment URL Defines the URL for a partial segment in a stream Type: String
Constant value: **partialSegmentUrl**

MS_KEY_PARTIAL_SEGMENT_NUMBER

```
public static final java.lang.String MS_KEY_PARTIAL_SEGMENT_NUMBER
```

Partial Segment Number Defines the partial segment number Type: String
Constant value: **partialSegmentNumber**

MS_KEY_MANIFEST_HEADERS

```
public static final java.lang.String MS_KEY_MANIFEST_HEADERS
```

Manifest Headers Defines the list of user manifest headers, as specified in the config property Type: String
Constant value: **manifestHeaders**

MS_KEY_CONTENT_TYPE

```
public static final java.lang.String MS_KEY_CONTENT_TYPE
```

Content Type - "AUDIO" | "VIDEO" Defines the content type of the segment. Type: String
Constant value: **contentType**

MS_KEY_TARGET_DURATION

```
public static final java.lang.String MS_KEY_TARGET_DURATION
```

Target Duration Defines the #EXT-X-TARGETDURATION tag value to specify in the media playlist. Type: Integer
Constant value: **targetDuration**

MS_KEY_MEDIA_SEQ_NUM

```
public static final java.lang.String MS_KEY_MEDIA_SEQ_NUM
```

Media Sequence Number Defines the #EXT-X-MEDIA-SEQUENCE tag value to specify in the media playlist. Type: Long
Constant value: **mediaSequenceNumber**

MS_KEY_PROGRAM_DATE_TIME

```
public static final java.lang.String MS_KEY_PROGRAM_DATE_TIME
```

Program Date Time Defines the #EXT-X-PROGRAM-DATE-TIME tag value to specify in the media playlist. Type: String
Constant value: **programDateTime**

MS_KEY_CODEC

```
public static final java.lang.String MS_KEY_CODEC
```

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Codec Defines the codec ID string of the video contained in the segment Type: String
Constant value: **codec**

MS_KEY_RESOLUTION

```
public static final java.lang.String MS_KEY_RESOLUTION
```

Resolution (Only segments containing video) Defines the resolution of the video contained in the segment Type: String
Constant value: **resolution**

MS_KEY_INCOMPLETE_SEGMENT_HAS_KEY_FRAME

```
public static final java.lang.String MS_KEY_INCOMPLETE_SEGMENT_HAS_KEY_FRAME
```

Signals that the incomplete tag segment has a key frame in it This is to be used when checking to generate the INDEPENDENT attribute for HLS Partial Segments Type: String
Constant value: **incompleteSegmentHasKeyFrame**

MS_KEY_PARTIAL_SEGMENT_BYTERANGE

```
public static final java.lang.String MS_KEY_PARTIAL_SEGMENT_BYTERANGE
```

Not used Signals that the partial segment can be accessed through byte range addressing, and provides the URI to do so This is mandatory for partial segments that are a subresource of a URI Type: String
Constant value: **partialSegmentByterange**

MS_KEY_ADD_PARTIAL_SEGMENTS

```
public static final java.lang.String MS_KEY_ADD_PARTIAL_SEGMENTS
```

A boolean to tell the manifest service to add partial segments to HLS media playlists Type: Boolean
Constant value: **addPartialSegments**

MS_KEY_ADD_PREFETCH_SEGMENT

```
public static final java.lang.String MS_KEY_ADD_PREFETCH_SEGMENT
```

A boolean to tell the manifest service to add prefetch segments to HLS media playlists Type: Boolean
Constant value: **addPrefetchSegment**

MS_KEY_PARTIAL_SEGMENT_TARGET_DURATION

```
public static final java.lang.String MS_KEY_PARTIAL_SEGMENT_TARGET_DURATION
```

Partial segment target duration Type: Double
Constant value: **partialSegmentINF**

Constructors

IManifestServiceConstants

```
public IManifestServiceConstants()
```

com.wowza.wms.manifest.builder Class ManifestService

java.lang.Object

└─com.wowza.wms.manifest.builder.ManifestService

All Implemented Interfaces:

Runnable

public class **ManifestService**
extends Object
implements Runnable

Nested Class Summary

class	ManifestService.ManifestRequest ManifestService.ManifestRequest
class	ManifestService.MSG_TYPE ManifestService.MSG_TYPE

Field Summary

public static final	MSG_PARAM_APP Value: APP
public static final	MSG_PARAM_APP_INSTANCE Value: INSTANCE
public static final	MSG_PARAM_SEGMENT Value: SEGMENT
public static final	MSG_PARAM_STREAM_NAME Value: STREAM_NAME
public static final	MSG_PARAM_TYPE Value: TYPE

Constructor Summary

public	ManifestService()
--------	-----------------------------------

Method Summary

static void	addSegment (java.util.Map data)
static String	getKey (java.util.Map data)

static String	getKey (PlaylistKey playlistKey)
static String	getManifest (java.util.Map params, IHTTPStreamerSession httpStreamerSession, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
static SegmentPartId	getManifestLastSegmentPart (java.util.Map params)
static ManifestModel	getManifestModel (java.util.Map params, IHTTPStreamerSession httpStreamerSession, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
static void	registerManifestRequest (PlaylistKey playlistKey, java.util.function.Consumer manifestHandler)
void	run ()
static Thread	shutdown ()
static void	stopStream (java.util.Map data)
static void	unRegisterManifestRequest (PlaylistKey playlistKey, java.util.function.Consumer manifestHandler)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Runnable

run

Fields

MSG_PARAM_TYPE

public static final java.lang.String **MSG_PARAM_TYPE**

Constant value: **TYPE**

MSG_PARAM_APP

public static final java.lang.String **MSG_PARAM_APP**

Constant value: **APP**

MSG_PARAM_APP_INSTANCE

public static final java.lang.String **MSG_PARAM_APP_INSTANCE**

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Constant value: **INSTANCE**

MSG_PARAM_STREAM_NAME

```
public static final java.lang.String MSG_PARAM_STREAM_NAME
```

Constant value: **STREAM_NAME**

MSG_PARAM_SEGMENT

```
public static final java.lang.String MSG_PARAM_SEGMENT
```

Constant value: **SEGMENT**

Constructors

ManifestService

```
public ManifestService()
```

Methods

registerManifestRequest

```
public static void registerManifestRequest(PlaylistKey playlistKey,  
    java.util.function.Consumer manifestHandler)
```

unRegisterManifestRequest

```
public static void unRegisterManifestRequest(PlaylistKey playlistKey,  
    java.util.function.Consumer manifestHandler)
```

stopStream

```
public static void stopStream(java.util.Map data)
```

addSegment

```
public static void addSegment(java.util.Map data)
```

shutdown

```
public static Thread shutdown()
```

(continued from last page)

run

```
public void run()
```

getManifest

```
public static String getManifest(java.util.Map params,  
    IHTTPStreamerSession httpStreamerSession,  
    HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

getManifestModel

```
public static ManifestModel getManifestModel(java.util.Map params,  
    IHTTPStreamerSession httpStreamerSession,  
    HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

getManifestLastSegmentPart

```
public static SegmentPartId getManifestLastSegmentPart(java.util.Map params)
```

getKey

```
public static String getKey(java.util.Map data)
```

getKey

```
public static String getKey(PlaylistKey playlistKey)
```

com.wowza.wms.manifest.builder Class ManifestService.MSG_TYPE

java.lang.Object

└─ java.lang.Enum

└─ com.wowza.wms.manifest.builder.ManifestService.MSG_TYPE

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **ManifestService.MSG_TYPE**
extends Enum

Field Summary

public static final	ADD_SEGMENT
public static final	SHUTDOWN
public static final	STOP_STREAM

Method Summary

static ManifestService.MSG_TYPE	valueOf (String name)
static ManifestService.MSG_TYPE[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

(continued from last page)

SHUTDOWN

```
public static final com.wowza.wms.manifest.builder.ManifestService.MSG_TYPE SHUTDOWN
```

ADD_SEGMENT

```
public static final com.wowza.wms.manifest.builder.ManifestService.MSG_TYPE  
ADD_SEGMENT
```

STOP_STREAM

```
public static final com.wowza.wms.manifest.builder.ManifestService.MSG_TYPE  
STOP_STREAM
```

Methods

values

```
public static ManifestService.MSG\_TYPE\[\] values()
```

valueOf

```
public static ManifestService.MSG\_TYPE valueOf(String name)
```


com.wowza.wms.manifest.builder Class ManifestService.ManifestRequest

java.lang.Object

└─com.wowza.wms.manifest.builder.ManifestService.ManifestRequest

public static class **ManifestService.ManifestRequest**
extends Object

Constructor Summary

public	ManifestRequest (PlaylistKey playlistKey, String manifestKey, java.util.function.Consumer manifestHandler)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ManifestRequest

```
public ManifestRequest(PlaylistKey playlistKey,  
                       String manifestKey,  
                       java.util.function.Consumer manifestHandler)
```

com.wowza.wms.manifest.builder Class ManifestUpdate

java.lang.Object

└─com.wowza.wms.manifest.builder.ManifestUpdate

public class **ManifestUpdate**
extends Object

Constructor Summary

public	ManifestUpdate (PlaylistKey streamContext, ManifestModel manifest)
--------	--

Method Summary

ManifestModel	getManifest()
PlaylistKey	getPlaylistKey()
void	setManifest (ManifestModel manifest)
void	setStreamContext (PlaylistKey playlistKey)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ManifestUpdate

public **ManifestUpdate**(PlaylistKey streamContext,
[ManifestModel](#) manifest)

Parameters:

streamContext
manifest

Methods

getPlaylistKey

public PlaylistKey **getPlaylistKey**()

setStreamContext

```
public void setStreamContext(PlaylistKey playlistKey)
```

getManifest

```
public ManifestModel getManifest()
```

setManifest

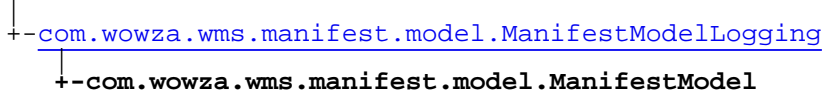
```
public void setManifest(ManifestModel manifest)
```

Package

com.wowza.wms.manifest.model

com.wowza.wms.manifest.model Class ManifestModel

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

Direct Known Subclasses:

[PlaylistModel](#), [MediaSegmentModel](#), [MediaPlaylist](#), [SanJoseManifestModel](#), [MPEGDashManifestModel](#)

public abstract class **ManifestModel**

extends [ManifestModelLogging](#)

implements Cloneable, Cloneable

Abstract Manifest Model base class Provides implementations that are common to all Manifest / Playlist models

Constructor Summary

public	ManifestModel()
--------	---------------------------------

Method Summary

void	doSubs (java.util.Map params, IHTTPStreamerSession httpStreamerSession, IHTTPRequest req, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo) Does variable replacement within the manifest model based on http request coming in
boolean	equals (Object obj)
String	getManifest ()
int	hashCode ()
void	setManifest (String manifest)
String	toString ()
abstract void	write (TagWriter tagWriter)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

ManifestModel

```
public ManifestModel()
```

Methods

getManifest

```
public String getManifest()
```

Returns:

the manifest

setManifest

```
public void setManifest(String manifest)
```

Parameters:

manifest - the manifest to set

doSubs

```
public void doSubs(java.util.Map params,  
    IHTTPStreamerSession httpStreamerSession,  
    IHTTPRequest req,  
    HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

Does variable replacement within the manifest model based on http request coming in

Parameters:

params
httpStreamerSession
req
requestInfo

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

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toString

```
public String toString()
```

write

```
public abstract void write(TagWriter tagWriter)  
    throws java.io.IOException
```

com.wowza.wms.manifest.model Class ManifestModelLogging

java.lang.Object

└─com.wowza.wms.manifest.model.ManifestModelLogging

All Implemented Interfaces:

Cloneable

Direct Known Subclasses:

[ManifestWriter](#), [ManifestValidator](#), [TagModel](#), [Segment](#), [PlaylistBuilder](#), [ManifestModel](#)

public abstract class **ManifestModelLogging**

extends Object

implements Cloneable

This class is the base of all the manifest models providing a standardized mechanism of logging

Constructor Summary

public	ManifestModelLogging() Constructs an empty Manifest Model
--------	--

Method Summary

Object	clone()
abstract String	getContextStr() Get the context string associated with the Model to include with the log statements
boolean	getDebugLog() Get the current debug log setting
void	logDebug (String methodName, String log) log information conditionally based on debug setting using the info level of the logger
void	logError (String methodName, String log) log a string at the error setting
void	logError (String methodName, String log, Throwable e) log a string and a throwable information at the error setting
void	logError (String methodName, Throwable e) log a throwables information at the error setting
void	logInfo (String methodName, String log) Log a string at the info setting
void	logWarn (String methodName, String log) log a string at the warn setting
boolean	setDebugLog (boolean debugLog) Enable/disable debug logging.

void	<code>setUseSystemOut</code> (boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)
boolean	<code>usingSystemOut</code> () Get the current setting of using the system out for debug (vs log4j)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

ManifestModelLogging

```
public ManifestModelLogging()
```

Constructs an empty Manifest Model

Methods

setDebugLog

```
public boolean setDebugLog(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

`debugLog`

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLog

```
public boolean getDebugLog()
```

Get the current debug log setting

Returns:

true if debug logging is enabled

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

`useSystemOut`

usingSystemOut

```
public boolean usingSystemOut()
```

Get the current setting of using the system out for debug (vs log4j)

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Returns:

true if logging is using System.out

logDebug

```
public void logDebug(String methodName,  
                     String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logInfo

```
public void logInfo(String methodName,  
                   String log)
```

Log a string at the info setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logWarn

```
public void logWarn(String methodName,  
                   String log)
```

log a string at the warn setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logError

```
public void logError(String methodName,  
                   String log)
```

log a string at the error setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

logError

```
public void logError(String methodName,  
                   String log,  
                   Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

methodName -- method name to include in the log statement

log -- the string to log

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e - - the throwable exception to log the information about

logError

```
public void logError(String methodName,  
                    Throwable e)
```

log a throwables information at the error setting

Parameters:

methodName - - method name to include in the log statement
e - - the throwable exception to log the information about

getContextStr

```
protected abstract String getContextStr()
```

Get the context string associated with the Model to include with the log statements

Returns:

String

clone

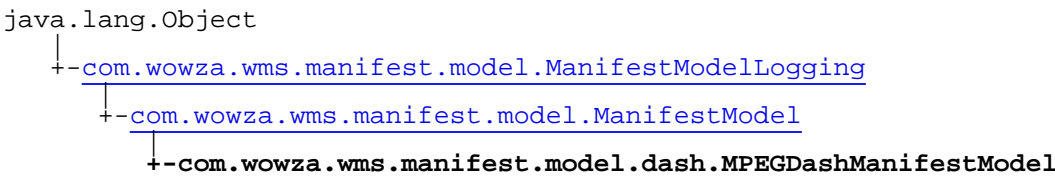
```
public Object clone()  
    throws CloneNotSupportedException
```

Package

com.wowza.wms.manifest.model.dash

com.wowza.wms.manifest.model.dash

Class MPEGDashManifestModel



All Implemented Interfaces:
Cloneable, Cloneable

```
public class MPEGDashManifestModel
extends ManifestModel
```

Constructor Summary

public	MPEGDashManifestModel()
--------	---

Method Summary

Object	clone()
String	getContextStr()
void	write(TagWriter tagWriter)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[doSubs](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

MPEGDashManifestModel

```
public MPEGDashManifestModel()
```

Methods

getContextStr

protected String **getContextStr**()

Get the context string associated with the Model to include with the log statements

clone

public Object **clone**()
throws CloneNotSupportedException

write

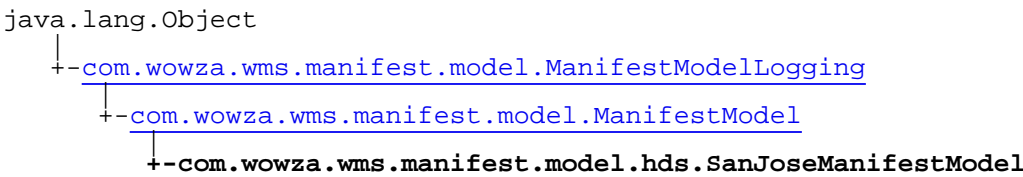
public void **write**([TagWriter](#) tagWriter)
throws java.io.IOException

Package

com.wowza.wms.manifest.model.hds

com.wowza.wms.manifest.model.hds

Class SanJoseManifestModel



All Implemented Interfaces:
Cloneable, Cloneable

```
public class SanJoseManifestModel
extends ManifestModel
```

Constructor Summary

public	SanJoseManifestModel()
--------	--

Method Summary

Object	clone()
String	getContextStr()
void	write(TagWriter tagWriter)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[doSubs](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SanJoseManifestModel

```
public SanJoseManifestModel()
```


Methods

getContextStr

protected String **getContextStr**()

Get the context string associated with the Model to include with the log statements

clone

public Object **clone**()
throws CloneNotSupportedException

write

public void **write**([TagWriter](#) tagWriter)
throws java.io.IOException

Package

com.wowza.wms.manifest.model.m3u8

com.wowza.wms.manifest.model.m3u8

Class Constants

java.lang.Object

└─com.wowza.wms.manifest.model.m3u8.Constants

public final class **Constants**
extends Object

Field Summary

public static final	<u>ASSOCIATED_LANGUAGE</u> Value: ASSOC-LANGUAGE
public static final	<u>AT_CHAR</u> Value: 64
public static final	<u>ATTRIBUTE_LIST_SEPARATOR</u>
public static final	<u>ATTRIBUTE_SEPARATOR</u> Value: =
public static final	<u>AUDIO</u> Value: AUDIO
public static final	<u>AUTO_SELECT</u> Value: AUTOSELECT
public static final	<u>AVERAGE_BANDWIDTH</u> Value: AVERAGE-BANDWIDTH
public static final	<u>BANDWIDTH</u> Value: BANDWIDTH
public static final	<u>CAN_BLOCK_RELOAD</u> Value: CAN-BLOCK-RELOAD
public static final	<u>CAN_SKIP_UNTIL</u> Value: CAN-SKIP-UNTIL
public static final	<u>CHARACTERISTICS</u> Value: CHARACTERISTICS
public static final	<u>CLOSED_CAPTIONS</u> Value: CLOSED-CAPTIONS

public static final	CODECS Value: CODECS
public static final	COMMA
public static final	COMMA_CHAR Value: 44
public static final	COMMENT_PREFIX Value: #
public static final	DATA_ID Value: DATA-ID
public static final	DEFAULT Value: DEFAULT
public static final	DEFAULT_COMPATIBILITY_VERSION Value: 1
public static final	DEFAULT_KEY_FORMAT Value: identity
public static final	DEFAULT_KEY_FORMAT_VERSIONS
public static final	EXT_TAG_END Value: :
public static final	EXT_TAG_PREFIX Value: #EXT
public static final	EXT_X_ALLOW_CACHE_TAG Value: EXT-X-ALLOW-CACHE
public static final	EXT_X_BYTERANGE_PATTERN
public static final	EXT_X_BYTERANGE_TAG Value: EXT-X-BYTERANGE
public static final	EXT_X_DISCONTINUITY_PATTERN
public static final	EXT_X_DISCONTINUITY_SEQUENCE_PATTERN
public static final	EXT_X_DISCONTINUITY_SEQUENCE_TAG Value: EXT-X-DISCONTINUITY-SEQUENCE
public static final	EXT_X_DISCONTINUITY_TAG Value: EXT-X-DISCONTINUITY

public static final	<u>EXT_X_ENDLIST_PATTERN</u>
public static final	<u>EXT_X_ENDLIST_TAG</u> Value: EXT-X-ENDLIST
public static final	<u>EXT_X_I_FRAME_STREAM_INF_TAG</u> Value: EXT-X-I-FRAME-STREAM-INF
public static final	<u>EXT_X_I_FRAMES_ONLY_PATTERN</u>
public static final	<u>EXT_X_I_FRAMES_ONLY_TAG</u> Value: EXT-X-I-FRAMES-ONLY
public static final	<u>EXT_X_INDEPENDENT_SEGMENTS_TAG</u> Value: EXT-X-INDEPENDENT-SEGMENTS
public static final	<u>EXT_X_KEY_TAG</u> Value: EXT-X-KEY
public static final	<u>EXT_X_MAP_TAG</u> Value: EXT-X-MAP
public static final	<u>EXT_X_MEDIA_IN_STREAM_ID_PATTERN</u>
public static final	<u>EXT_X_MEDIA_SEQUENCE_PATTERN</u>
public static final	<u>EXT_X_MEDIA_SEQUENCE_TAG</u> Value: EXT-X-MEDIA-SEQUENCE
public static final	<u>EXT_X_MEDIA_TAG</u> Value: EXT-X-MEDIA
public static final	<u>EXT_X_PART_INF_PATTERN</u>
public static final	<u>EXT_X_PART_PATTERN</u>
public static final	<u>EXT_X_PARTIAL_SEGMENT</u> Value: EXT-X-PART
public static final	<u>EXT_X_PARTIAL_SEGMENT_INF</u> Value: EXT-X-PART-INF
public static final	<u>EXT_X_PLAYLIST_TYPE_PATTERN</u>
public static final	<u>EXT_X_PLAYLIST_TYPE_TAG</u> Value: EXT-X-PLAYLIST-TYPE
public static final	<u>EXT_X_PREFETCH_PATTERN</u>

public static final	EXT_X_PREFETCH_TAG Value: EXT-X-PREFETCH
public static final	EXT_X_PROGRAM_DATE_TIME_TAG Value: EXT-X-PROGRAM-DATE-TIME
public static final	EXT_X_RENDITION_REPORT Value: EXT-X-RENDITION-REPORT
public static final	EXT_X_RENDITION_REPORT_PATTERN
public static final	EXT_X_SERVER_CONTROL Value: EXT-X-SERVER-CONTROL
public static final	EXT_X_SESSION_DATA_TAG Value: EXT-X-SESSION-DATA
public static final	EXT_X_SESSION_KEY_TAG Value: EXT-X-SESSION-KEY
public static final	EXT_X_SKIP Value: EXT-X-SKIP
public static final	EXT_X_START_TAG Value: EXT-X-START
public static final	EXT_X_STREAM_INF_TAG Value: EXT-X-STREAM-INF
public static final	EXT_X_TARGETDURATION_PATTERN
public static final	EXT_X_TARGETDURATION_TAG Value: EXT-X-TARGETDURATION
public static final	EXT_X_VERSION_PATTERN
public static final	EXT_X_VERSION_TAG Value: EXT-X-VERSION
public static final	EXTINF_PATTERN
public static final	EXTINF_TAG Value: EXTINF
public static final	EXTM3U_TAG Value: EXTM3U

public static final	<u>FORCED</u> Value: FORCED
public static final	<u>FRAME_RATE</u> Value: FRAME-RATE
public static final	<u>GROUP_ID</u> Value: GROUP-ID
public static final	<u>HEXADECIMAL_PATTERN</u>
public static final	<u>HOLD_BACK</u> Value: HOLD-BACK
public static final	<u>IN_STREAM_ID</u> Value: INSTREAM-ID
public static final	<u>INSTREAM_ID_SERVICE_PREFIX</u> Value: Service
public static final	<u>IV</u> Value: IV
public static final	<u>IV_SIZE</u> Value: 16
public static final	<u>IV_SIZE_ALTERNATIVE</u> Value: 32
public static final	<u>KEY_FORMAT</u> Value: KEYFORMAT
public static final	<u>KEY_FORMAT_VERSIONS</u> Value: KEYFORMATVERSIONS
public static final	<u>LANGUAGE</u> Value: LANGUAGE
public static final	<u>LIST_SEPARATOR</u> Value: /
public static final	<u>MAP_BYTERANGE</u> Value: BYTERANGE
public static final	<u>MAP_BYTERANGE_PATTERN</u>
public static final	<u>MAX_COMPATIBILITY_VERSION</u> Value: 9

public static final	METHOD Value: METHOD
public static final	MIME_TYPE Value: application/vnd.apple.mpegurl
public static final	MIME_TYPE_COMPATIBILITY Value: audio/mpegurl
public static final	MIN_COMPATIBILITY_VERSION Value: 1
public static final	NAME Value: NAME
public static final	NO Value: NO
public static final	NO_CLOSED_CAPTIONS Value: NONE
public static final	NULL_ATTRIBUTE_NAME Value: NULL-ATTRIBUTE-NAME
public static final	NULL_TAG_NAME Value: NULL-TAG-NAME
public static final	NULL_VALUE Value: NULL-VALUE
public static final	PARSE_NEW_LINE Value: \r?\n
public static final	PART_HOLD_BACK Value: PART-HOLD-BACK
public static final	PRECISE Value: PRECISE
public static final	PROGRAM_ID Value: PROGRAM-ID
public static final	RESOLUTION Value: RESOLUTION
public static final	RESOLUTION_PATTERN

public static final	<u>SKIPPED_SEGMENTS</u> Value: SKIPPED-SEGMENTS
public static final	<u>SUBTITLES</u> Value: SUBTITLES
public static final	<u>TIME_OFFSET</u> Value: TIME-OFFSET
public static final	<u>TYPE</u> Value: TYPE
public static final	<u>UNICODE_BOM</u> Value: 65279
public static final	<u>URI</u> Value: URI
public static final	<u>UTF_8_BOM_BYTES</u>
public static final	<u>VALUE</u> Value: VALUE
public static final	<u>VERSION_1</u> Value: 1
public static final	<u>VERSION_2</u> Value: 2
public static final	<u>VERSION_3</u> Value: 3
public static final	<u>VERSION_4</u> Value: 4
public static final	<u>VERSION_5</u> Value: 5
public static final	<u>VERSION_6</u> Value: 6
public static final	<u>VERSION_7</u> Value: 7
public static final	<u>VERSION_8</u> Value: 8

public static final	VERSION_9 Value: 9
public static final	VIDEO Value: VIDEO
public static final	WRITE_NEW_LINE Value:
public static final	YES Value: YES

Constructor Summary

public	Constants()
--------	-----------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

MIME_TYPE

public static final java.lang.String **MIME_TYPE**

Constant value: **application/vnd.apple.mpegurl**

MIME_TYPE_COMPATIBILITY

public static final java.lang.String **MIME_TYPE_COMPATIBILITY**

Constant value: **audio/mpegurl**

ATTRIBUTE_SEPARATOR

public static final java.lang.String **ATTRIBUTE_SEPARATOR**

Constant value: **=**

COMMA_CHAR

public static final char **COMMA_CHAR**

Constant value: **44**

(continued from last page)

AT_CHAR

```
public static final char AT_CHAR
```

Constant value: **64**

COMMA

```
public static final java.lang.String COMMA
```

ATTRIBUTE_LIST_SEPARATOR

```
public static final java.lang.String ATTRIBUTE_LIST_SEPARATOR
```

LIST_SEPARATOR

```
public static final java.lang.String LIST_SEPARATOR
```

Constant value: **/**

COMMENT_PREFIX

```
public static final java.lang.String COMMENT_PREFIX
```

Constant value: **#**

EXT_TAG_PREFIX

```
public static final java.lang.String EXT_TAG_PREFIX
```

Constant value: **#EXT**

EXT_TAG_END

```
public static final java.lang.String EXT_TAG_END
```

Constant value: **:**

WRITE_NEW_LINE

```
public static final java.lang.String WRITE_NEW_LINE
```

Constant value:

PARSE_NEW_LINE

```
public static final java.lang.String PARSE_NEW_LINE
```

(continued from last page)

Constant value: **\r?\n**

NULL_TAG_NAME

```
public static final java.lang.String NULL_TAG_NAME
```

Constant value: **NULL-TAG-NAME**

NULL_VALUE

```
public static final java.lang.String NULL_VALUE
```

Constant value: **NULL-VALUE**

NULL_ATTRIBUTE_NAME

```
public static final java.lang.String NULL_ATTRIBUTE_NAME
```

Constant value: **NULL-ATTRIBUTE-NAME**

EXTM3U_TAG

```
public static final java.lang.String EXTM3U_TAG
```

Constant value: **EXTM3U**

EXT_X_VERSION_TAG

```
public static final java.lang.String EXT_X_VERSION_TAG
```

Constant value: **EXT-X-VERSION**

URI

```
public static final java.lang.String URI
```

Constant value: **URI**

EXT_X_MEDIA_TAG

```
public static final java.lang.String EXT_X_MEDIA_TAG
```

Constant value: **EXT-X-MEDIA**

TYPE

```
public static final java.lang.String TYPE
```

Constant value: **TYPE**

(continued from last page)

GROUP_ID

```
public static final java.lang.String GROUP_ID
```

Constant value: **GROUP-ID**

LANGUAGE

```
public static final java.lang.String LANGUAGE
```

Constant value: **LANGUAGE**

ASSOCIATED_LANGUAGE

```
public static final java.lang.String ASSOCIATED_LANGUAGE
```

Constant value: **ASSOC-LANGUAGE**

NAME

```
public static final java.lang.String NAME
```

Constant value: **NAME**

DEFAULT

```
public static final java.lang.String DEFAULT
```

Constant value: **DEFAULT**

AUTO_SELECT

```
public static final java.lang.String AUTO_SELECT
```

Constant value: **AUTOSELECT**

FORCED

```
public static final java.lang.String FORCED
```

Constant value: **FORCED**

IN_STREAM_ID

```
public static final java.lang.String IN_STREAM_ID
```

Constant value: **INSTREAM-ID**

CHARACTERISTICS

```
public static final java.lang.String CHARACTERISTICS
```

(continued from last page)

Constant value: **CHARACTERISTICS**

EXT_X_I_FRAME_STREAM_INF_TAG

```
public static final java.lang.String EXT_X_I_FRAME_STREAM_INF_TAG
```

Constant value: **EXT-X-I-FRAME-STREAM-INF**

EXT_X_STREAM_INF_TAG

```
public static final java.lang.String EXT_X_STREAM_INF_TAG
```

Constant value: **EXT-X-STREAM-INF**

BANDWIDTH

```
public static final java.lang.String BANDWIDTH
```

Constant value: **BANDWIDTH**

AVERAGE_BANDWIDTH

```
public static final java.lang.String AVERAGE_BANDWIDTH
```

Constant value: **AVERAGE-BANDWIDTH**

CODECS

```
public static final java.lang.String CODECS
```

Constant value: **CODECS**

RESOLUTION

```
public static final java.lang.String RESOLUTION
```

Constant value: **RESOLUTION**

FRAME_RATE

```
public static final java.lang.String FRAME_RATE
```

Constant value: **FRAME-RATE**

VIDEO

```
public static final java.lang.String VIDEO
```

Constant value: **VIDEO**

PROGRAM_ID

```
public static final java.lang.String PROGRAM_ID
```

Constant value: **PROGRAM-ID**

AUDIO

```
public static final java.lang.String AUDIO
```

Constant value: **AUDIO**

SUBTITLES

```
public static final java.lang.String SUBTITLES
```

Constant value: **SUBTITLES**

CLOSED_CAPTIONS

```
public static final java.lang.String CLOSED_CAPTIONS
```

Constant value: **CLOSED-CAPTIONS**

EXT_X_SESSION_DATA_TAG

```
public static final java.lang.String EXT_X_SESSION_DATA_TAG
```

Constant value: **EXT-X-SESSION-DATA**

DATA_ID

```
public static final java.lang.String DATA_ID
```

Constant value: **DATA-ID**

VALUE

```
public static final java.lang.String VALUE
```

Constant value: **VALUE**

EXT_X_SESSION_KEY_TAG

```
public static final java.lang.String EXT_X_SESSION_KEY_TAG
```

Constant value: **EXT-X-SESSION-KEY**

(continued from last page)

CAN_BLOCK_RELOAD

```
public static final java.lang.String CAN_BLOCK_RELOAD
```

Constant value: **CAN-BLOCK-RELOAD**

PART_HOLD_BACK

```
public static final java.lang.String PART_HOLD_BACK
```

Constant value: **PART-HOLD-BACK**

CAN_SKIP_UNTIL

```
public static final java.lang.String CAN_SKIP_UNTIL
```

Constant value: **CAN-SKIP-UNTIL**

HOLD_BACK

```
public static final java.lang.String HOLD_BACK
```

Constant value: **HOLD-BACK**

SKIPPED_SEGMENTS

```
public static final java.lang.String SKIPPED_SEGMENTS
```

Constant value: **SKIPPED-SEGMENTS**

EXT_X_TARGETDURATION_TAG

```
public static final java.lang.String EXT_X_TARGETDURATION_TAG
```

Constant value: **EXT-X-TARGETDURATION**

EXT_X_MEDIA_SEQUENCE_TAG

```
public static final java.lang.String EXT_X_MEDIA_SEQUENCE_TAG
```

Constant value: **EXT-X-MEDIA-SEQUENCE**

EXT_X_DISCONTINUITY_SEQUENCE_TAG

```
public static final java.lang.String EXT_X_DISCONTINUITY_SEQUENCE_TAG
```

Constant value: **EXT-X-DISCONTINUITY-SEQUENCE**

EXT_X_ENDLIST_TAG

```
public static final java.lang.String EXT_X_ENDLIST_TAG
```


(continued from last page)

Constant value: **EXT-X-ENDLIST**

EXT_X_PLAYLIST_TYPE_TAG

```
public static final java.lang.String EXT_X_PLAYLIST_TYPE_TAG
```

Constant value: **EXT-X-PLAYLIST-TYPE**

EXT_X_I_FRAMES_ONLY_TAG

```
public static final java.lang.String EXT_X_I_FRAMES_ONLY_TAG
```

Constant value: **EXT-X-I-FRAMES-ONLY**

EXT_X_SERVER_CONTROL

```
public static final java.lang.String EXT_X_SERVER_CONTROL
```

Constant value: **EXT-X-SERVER-CONTROL**

EXT_X_ALLOW_CACHE_TAG

```
public static final java.lang.String EXT_X_ALLOW_CACHE_TAG
```

Constant value: **EXT-X-ALLOW-CACHE**

EXT_X_START_TAG

```
public static final java.lang.String EXT_X_START_TAG
```

Constant value: **EXT-X-START**

TIME_OFFSET

```
public static final java.lang.String TIME_OFFSET
```

Constant value: **TIME-OFFSET**

PRECISE

```
public static final java.lang.String PRECISE
```

Constant value: **PRECISE**

EXT_X_INDEPENDENT_SEGMENTS_TAG

```
public static final java.lang.String EXT_X_INDEPENDENT_SEGMENTS_TAG
```

Constant value: **EXT-X-INDEPENDENT-SEGMENTS**

EXTINF_TAG

```
public static final java.lang.String EXTINF_TAG
```

Constant value: **EXTINF**

EXT_X_BYTERANGE_TAG

```
public static final java.lang.String EXT_X_BYTERANGE_TAG
```

Constant value: **EXT-X-BYTERANGE**

EXT_X_DISCONTINUITY_TAG

```
public static final java.lang.String EXT_X_DISCONTINUITY_TAG
```

Constant value: **EXT-X-DISCONTINUITY**

EXT_X_KEY_TAG

```
public static final java.lang.String EXT_X_KEY_TAG
```

Constant value: **EXT-X-KEY**

METHOD

```
public static final java.lang.String METHOD
```

Constant value: **METHOD**

IV

```
public static final java.lang.String IV
```

Constant value: **IV**

KEY_FORMAT

```
public static final java.lang.String KEY_FORMAT
```

Constant value: **KEYFORMAT**

KEY_FORMAT_VERSIONS

```
public static final java.lang.String KEY_FORMAT_VERSIONS
```

Constant value: **KEYFORMATVERSIONS**

(continued from last page)

EXT_X_MAP_TAG

```
public static final java.lang.String EXT_X_MAP_TAG
```

Constant value: **EXT-X-MAP**

MAP_BYTERANGE

```
public static final java.lang.String MAP_BYTERANGE
```

Constant value: **BYTERANGE**

EXT_X_PROGRAM_DATE_TIME_TAG

```
public static final java.lang.String EXT_X_PROGRAM_DATE_TIME_TAG
```

Constant value: **EXT-X-PROGRAM-DATE-TIME**

EXT_X_PREFETCH_TAG

```
public static final java.lang.String EXT_X_PREFETCH_TAG
```

Constant value: **EXT-X-PREFETCH**

EXT_X_PARTIAL_SEGMENT

```
public static final java.lang.String EXT_X_PARTIAL_SEGMENT
```

Constant value: **EXT-X-PART**

EXT_X_PARTIAL_SEGMENT_INF

```
public static final java.lang.String EXT_X_PARTIAL_SEGMENT_INF
```

Constant value: **EXT-X-PART-INF**

EXT_X_SKIP

```
public static final java.lang.String EXT_X_SKIP
```

Constant value: **EXT-X-SKIP**

EXT_X_RENDITION_REPORT

```
public static final java.lang.String EXT_X_RENDITION_REPORT
```

Constant value: **EXT-X-RENDITION-REPORT**

YES

```
public static final java.lang.String YES
```

(continued from last page)

Constant value: **YES**

NO

```
public static final java.lang.String NO
```

Constant value: **NO**

HEXADECIMAL_PATTERN

```
public static final java.util.regex.Pattern HEXADECIMAL_PATTERN
```

RESOLUTION_PATTERN

```
public static final java.util.regex.Pattern RESOLUTION_PATTERN
```

EXT_X_VERSION_PATTERN

```
public static final java.util.regex.Pattern EXT_X_VERSION_PATTERN
```

EXT_X_TARGETDURATION_PATTERN

```
public static final java.util.regex.Pattern EXT_X_TARGETDURATION_PATTERN
```

EXT_X_MEDIA_SEQUENCE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_MEDIA_SEQUENCE_PATTERN
```

EXT_X_PLAYLIST_TYPE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_PLAYLIST_TYPE_PATTERN
```

EXT_X_MEDIA_IN_STREAM_ID_PATTERN

```
public static final java.util.regex.Pattern EXT_X_MEDIA_IN_STREAM_ID_PATTERN
```

EXTINF_PATTERN

```
public static final java.util.regex.Pattern EXTINF_PATTERN
```

EXT_X_ENDLIST_PATTERN

```
public static final java.util.regex.Pattern EXT_X_ENDLIST_PATTERN
```

EXT_X_I_FRAMES_ONLY_PATTERN

```
public static final java.util.regex.Pattern EXT_X_I_FRAMES_ONLY_PATTERN
```

EXT_X_DISCONTINUITY_PATTERN

```
public static final java.util.regex.Pattern EXT_X_DISCONTINUITY_PATTERN
```

EXT_X_BYTERANGE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_BYTERANGE_PATTERN
```

EXT_X_DISCONTINUITY_SEQUENCE_PATTERN

```
public static final java.util.regex.Pattern EXT_X_DISCONTINUITY_SEQUENCE_PATTERN
```

MAP_BYTERANGE_PATTERN

```
public static final java.util.regex.Pattern MAP_BYTERANGE_PATTERN
```

EXT_X_PREFETCH_PATTERN

```
public static final java.util.regex.Pattern EXT_X_PREFETCH_PATTERN
```

EXT_X_PART_PATTERN

```
public static final java.util.regex.Pattern EXT_X_PART_PATTERN
```

EXT_X_PART_INF_PATTERN

```
public static final java.util.regex.Pattern EXT_X_PART_INF_PATTERN
```

EXT_X_RENDITION_REPORT_PATTERN

```
public static final java.util.regex.Pattern EXT_X_RENDITION_REPORT_PATTERN
```

(continued from last page)

UTF_8_BOM_BYTES

```
public static final int UTF_8_BOM_BYTES
```

UNICODE_BOM

```
public static final char UNICODE_BOM
```

Constant value: **65279**

VERSION_1

```
public static final int VERSION_1
```

Constant value: **1**

VERSION_2

```
public static final int VERSION_2
```

Constant value: **2**

VERSION_3

```
public static final int VERSION_3
```

Constant value: **3**

VERSION_4

```
public static final int VERSION_4
```

Constant value: **4**

VERSION_5

```
public static final int VERSION_5
```

Constant value: **5**

VERSION_6

```
public static final int VERSION_6
```

Constant value: **6**

(continued from last page)

VERSION_7

```
public static final int VERSION_7
```

Constant value: **7**

VERSION_8

```
public static final int VERSION_8
```

Constant value: **8**

VERSION_9

```
public static final int VERSION_9
```

Constant value: **9**

MIN_COMPATIBILITY_VERSION

```
public static final int MIN_COMPATIBILITY_VERSION
```

Constant value: **1**

MAX_COMPATIBILITY_VERSION

```
public static final int MAX_COMPATIBILITY_VERSION
```

Constant value: **9**

DEFAULT_COMPATIBILITY_VERSION

```
public static final int DEFAULT_COMPATIBILITY_VERSION
```

Constant value: **1**

IV_SIZE

```
public static final int IV_SIZE
```

Constant value: **16**

IV_SIZE_ALTERNATIVE

```
public static final int IV_SIZE_ALTERNATIVE
```

Constant value: **32**

DEFAULT_KEY_FORMAT

```
public static final java.lang.String DEFAULT_KEY_FORMAT
```

(continued from last page)

Constant value: **identity**

NO_CLOSED_CAPTIONS

```
public static final java.lang.String NO_CLOSED_CAPTIONS
```

Constant value: **NONE**

DEFAULT_KEY_FORMAT_VERSIONS

```
public static final java.util.List DEFAULT_KEY_FORMAT_VERSIONS
```

INSTREAM_ID_SERVICE_PREFIX

```
public static final java.lang.String INSTREAM_ID_SERVICE_PREFIX
```

Constant value: **Service**

Constructors

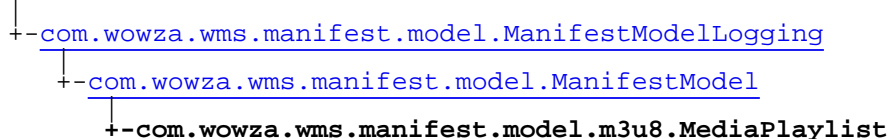
Constants

```
public Constants()
```


com.wowza.wms.manifest.model.m3u8

Class MediaPlaylist

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **MediaPlaylist**
extends [ManifestModel](#)

Provides implementation of HLS media playlists This class is not thread safe.

Constructor Summary

public	MediaPlaylist()
--------	---------------------------------

Method Summary

void	addAllTags (java.util.Collection tags) Add a list of tags to the MediaPlaylist and propagate context and debug settings
void	addRenditionReportTags (java.util.Collection renditionReports) Adds EXT-X-RENDITION-REPORT tags.
void	addSegment (Segment segment, long segmentId) Add a new segment to the end of the segment list.
TagModel	addTag (TagModel tag) Add a tag to the playlist model and propagate context and debug settings
Object	clone ()
void	doSubs (java.util.Map params, IHTTPStreamerSession httpStreamerSession, HTTPRequest req, HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
boolean	equals (Object obj)
TagModel	findTag (Class tagType)
String	getContextStr ()
SegmentPartId	getLastSegmentPart () Retrieves the last segment's media sequence number and its last partial segment number (if any).

String	<u>getManifest()</u>
int	<u>getPlaylistCount()</u>
java.util.TreeMap	<u>getSegments()</u>
java.util.Collection	<u>getTags()</u>
int	<u>hashCode()</u>
void	<u>setContextStr()</u> (String context) Specific to Playlist reader to set the context in which the playlist is reading.
void	<u>setPlaylistCount()</u> (int playlistCount)
void	<u>skipSegments()</u> (Float duration) Trims segments off the beginning of the list to the point that the duration of the remaining segments is @duration or slightly over
String	<u>toString()</u>
void	<u>write()</u> (<u>TagWriter</u> tagWriter)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[doSubs](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaPlaylist

```
public MediaPlaylist()
```

Methods

getManifest

```
public String getManifest()
```

doSubs

```
public void doSubs(java.util.Map params,
    IHTTPStreamerSession httpStreamerSession,
    IHTTPRequest req,
    HTTPStreamerAdapterCupertinoStreamer.RequestInfo requestInfo)
```

Does variable replacement within the manifest model based on http request coming in

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String context)
```

Specific to Playlist reader to set the context in which the playlist is reading. Intent would be this would be the Source stream name to associate the log entries with

Parameters:

context - context of the reader

getPlaylistCount

```
public int getPlaylistCount()
```

Returns:

the playlistCount

setPlaylistCount

```
public void setPlaylistCount(int playlistCount)
```

Parameters:

playlistCount - the playlistCount to set

addTag

```
public TagModel addTag(TagModel tag)
```

Add a tag to the playlist model and propagate context and debug settings

Parameters:

tag - to be added to the playlist model

Returns:

tag

(continued from last page)

addAllTags

```
public void addAllTags(java.util.Collection tags)
```

Add a list of tags to the MediaPlaylist and propagate context and debug settings

Parameters:

tags -- list of tags to be added to the playlist model

Returns:

true if all the tags were added to the playlist model

addSegment

```
public void addSegment(Segment segment,  
                        long segmentId)
```

Add a new segment to the end of the segment list. If the list exceeds the maximum number of segments, the first segment in the list is removed.

Parameters:

segment -- new segment to add. Should be fully setup before calling this method

skipSegments

```
public void skipSegments(Float duration)
```

Trims segments off the beginning of the list to the point that the duration of the remaining segments is @duration or slightly over

Parameters:

duration - the minimum length of remaining segments.

addRenditionReportTags

```
public void addRenditionReportTags(java.util.Collection renditionReports)
```

Adds EXT-X-RENDITION-REPORT tags. This can only be called from a request context where the ABR groupings are known.

Parameters:

renditionReports -- ordered list of the variant rendition report tag models to add.

getLastSegmentPart

```
public SegmentPartId getLastSegmentPart()
```

Retrieves the last segment's media sequence number and its last partial segment number (if any). Null can be returned for either value if they are not available.

Parameters:

segPartId - the SegmentPartId object identifying the last segment/part of the playlist

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

toString

```
public String toString()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

write

```
public void write(TagWriter tagWriter)  
    throws java.io.IOException
```

getTags

```
public java.util.Collection getTags()
```

findTag

```
public TagModel findTag(Class tagType)
```

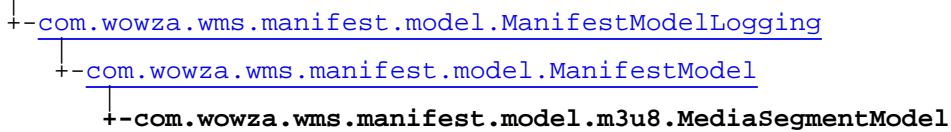
getSegments

```
public java.util.TreeMap getSegments()
```

com.wowza.wms.manifest.model.m3u8

Class MediaSegmentModel

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class MediaSegmentModel
extends ManifestModel
  
```

Field Summary

public	chunkInfoCupertino
public	properties

Constructor Summary

public	MediaSegmentModel()
--------	-------------------------------------

Method Summary

Object	clone()
boolean	equals (Object obj)
Object	getChunkInfoCupertino() Get generic reference to LiveStreamPacketizerCupertinoChunk with chunk details
String	getContextStr()
PacketFragmentList	getFragmentList() Get the fragment list that represents the byte data that makes up the fragment
WMSProperties	getProperties()
java.net.URI	getUri()
int	hashCode()
void	setChunkInfoCupertino (Object chunkInfoCupertino) Set generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

void	<code>setFragmentList</code> (<code>PacketFragmentList</code> fragmentList) Set the fragment list that represents the byte data that makes up the fragment
void	<code>setUri</code> (java.net.URI uri)
String	<code>toString</code> ()
void	<code>write</code> (<code>TagWriter</code> tagWriter)

Methods inherited from class [`com.wowza.wms.manifest.model.ManifestModel`](#)

[`doSubs`](#), [`equals`](#), [`getManifest`](#), [`hashCode`](#), [`setManifest`](#), [`toString`](#), [`write`](#)

Methods inherited from class [`com.wowza.wms.manifest.model.ManifestModelLogging`](#)

[`clone`](#), [`getContextStr`](#), [`getDebugLog`](#), [`logDebug`](#), [`logError`](#), [`logError`](#), [`logError`](#), [`logInfo`](#), [`logWarn`](#), [`setDebugLog`](#), [`setUseSystemOut`](#), [`usingSystemOut`](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

properties

```
public com.wowza.wms.application.WMSProperties properties
```

chunkInfoCupertino

```
public java.lang.Object chunkInfoCupertino
```

Constructors

MediaSegmentModel

```
public MediaSegmentModel()
```

Methods

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

(continued from last page)

getUri

```
public java.net.URI getUri()
```

Returns:

the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:

uri - the uri to set

getFragmentList

```
public PacketFragmentList getFragmentList()
```

Get the fragment list that represents the byte data that makes up the fragment

Returns:

fragment list

setFragmentList

```
public void setFragmentList(PacketFragmentList fragmentList)
```

Set the fragment list that represents the byte data that makes up the fragment

Parameters:

fragmentList - fragment list

toString

```
public String toString()
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

(continued from last page)

getChunkInfoCupertino

public Object **getChunkInfoCupertino**()

Get generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

Returns:

generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

setChunkInfoCupertino

public void **setChunkInfoCupertino**(Object chunkInfoCupertino)

Set generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

Parameters:

chunkInfoCupertino - generic reference to LiveStreamPacketizerCupertinoChunk with chunk details

getProperties

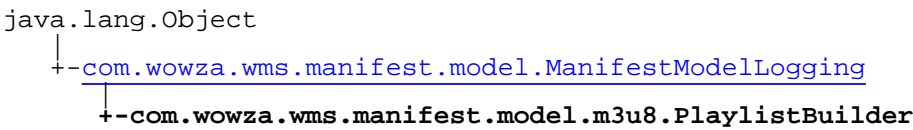
public [WMSPProperties](#) **getProperties**()

write

public void **write**([TagWriter](#) tagWriter)
throws java.io.IOException

com.wowza.wms.manifest.model.m3u8

Class PlaylistBuilder



All Implemented Interfaces:
[IManifestBuilder](#), Cloneable

```
public class PlaylistBuilder
extends ManifestModelLogging
implements Cloneable, IManifestBuilder
```

Constructor Summary

public	PlaylistBuilder()
--------	-----------------------------------

Method Summary

MediaPlaylist	addSegment (MediaPlaylist mediaPlaylist, java.util.Map data)
String	getContextStr ()

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.builder.IManifestBuilder](#)

[addSegment](#)

Constructors

PlaylistBuilder

```
public PlaylistBuilder()
```

Methods

(continued from last page)

addSegment

```
public MediaPlaylist addSegment(MediaPlaylist mediaPlaylist,  
                                java.util.Map data)  
    throws java.net.URISyntaxException
```

getContextStr

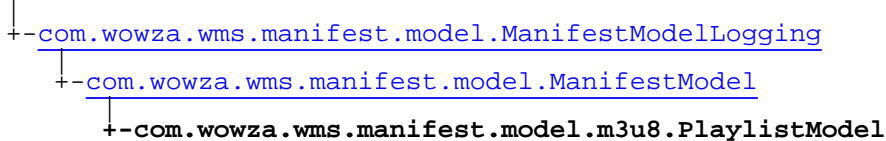
```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

com.wowza.wms.manifest.model.m3u8

Class PlaylistModel

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **PlaylistModel**
 extends [ManifestModel](#)

Provides implementations that are common to all Playlist models

Field Summary

public	mediaSegments
public	playlists
public	properties
public	tags

Constructor Summary

public	PlaylistModel()
--------	---------------------------------

Method Summary

boolean	addAllTags (java.util.Collection tags) Add a list of tags to the playlistmodel and propagate context and debug settings
boolean	addTag (TagModel tag) Add a tag to the playlist model and propagate context and debug settings
Object	clone ()
boolean	equals (Object obj)
String	getContextStr ()
WMSProperties	getProperties ()
java.net.URI	getUri () Get the uri of the playlist

int	<u>getVersion()</u> Get the playlist version
int	<u>hashCode()</u>
boolean	<u>isExtended()</u> Is this an extended M3U8 playlist
boolean	<u>isMasterPlaylist()</u> Is the playlist represented by this class a Master playlist?
boolean	<u>isMediaPlaylist()</u> Is the playlist represent by this class a Media Playlist
void	<u>setContextStr(String context)</u> Specific to Playlist reader to set the context in which the playlist is reading.
void	<u>setMasterPlaylist()</u> Mark the playlist this instance represents as a master playlist.
void	<u>setMediaPlaylist()</u> Mark the playlist this instance represents as a media playlist.
void	<u>setUri(java.net.URI uri)</u> Set the uri of the playlist
String	<u>toString()</u>
void	<u>write(TagWriter tagWriter)</u>

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModel](#)

[doSubs](#), [equals](#), [getManifest](#), [hashCode](#), [setManifest](#), [toString](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

tags

public java.util.List **tags**

playlists

public java.util.List **playlists**

(continued from last page)

mediaSegments

```
public java.util.List mediaSegments
```

properties

```
public com.wowza.wms.application.WMSProperties properties
```

Constructors

PlaylistModel

```
public PlaylistModel()
```

Methods

setMasterPlaylist

```
public void setMasterPlaylist()
```

Mark the playlist this instance represents as a master playlist.

setMediaPlaylist

```
public void setMediaPlaylist()
```

Mark the playlist this instance represents as a media playlist.

isMasterPlaylist

```
public boolean isMasterPlaylist()
```

Is the playlist represented by this class a Master playlist?

Returns:

true if the playlist represented by this model is a master playlist

isMediaPlaylist

```
public boolean isMediaPlaylist()
```

Is the playlist represent by this class a Media Playlist

Returns:

true if the playlist is a media playlist

getUri

```
public java.net.URI getUri()
```

(continued from last page)

Get the uri of the playlist

Returns:

URI the playlist uri

setUri

```
public void setUri(java.net.URI uri)
```

Set the uri of the playlist

Parameters:

uri - of the playlist

getVersion

```
public int getVersion()
```

Get the playlist version

Returns:

integer version number

isExtended

```
public boolean isExtended()
```

Is this an extended M3U8 playlist

Returns:

true if the playlist represented by this model is extended

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String context)
```

Specific to Playlist reader to set the context in which the playlist is reading. Intent would be this would be the Source stream name to associate the log entries with

Parameters:

context - context of the reader

addTag

```
public boolean addTag(TagModel tag)
```

Add a tag to the playlist model and propagate context and debug settings

Parameters:

tag - to be added to the playlist model

Returns:

(continued from last page)

true if the tag was added

addAllTags

```
public boolean addAllTags(java.util.Collection tags)
```

Add a list of tags to the playlistmodel and propagate context and debug settings

Parameters:

tags - - list of tags to be added to the playlist model

Returns:

true if all the tags were added to the playlist model

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

toString

```
public String toString()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

getProperties

```
public WMSProperties getProperties()
```

write

```
public void write(TagWriter tagWriter)  
    throws java.io.IOException
```

com.wowza.wms.manifest.model.m3u8

Class Segment

java.lang.Object

└- [com.wowza.wms.manifest.model.ManifestModelLogging](#)
 └- **com.wowza.wms.manifest.model.m3u8.Segment**

All Implemented Interfaces:
 Cloneable

public class **Segment**
 extends [ManifestModelLogging](#)

Field Summary

protected	partialSegments
protected	tagModelByteRange
protected	tagModelINF
protected	tagModelKey
protected	tagModelMap
protected	tagModelPreFetch
protected	tagModelProgramDateTime
protected	tags

Constructor Summary

public	Segment (String uri, long sequence, String context)
public	Segment ()

Method Summary

boolean	addByteRangeTag (TagModelByteRange tagModelByteRange)
boolean	addINFTag (TagModelINF tagModelINF)
boolean	addKeyTag (TagModelKey tagModelKey)

boolean	addMapTag (TagModelMap tagModelMap)
boolean	addPartialSegmentTag (TagModelPartialSegment partialSegment)
boolean	addPrefetchTag (TagModelPreFetch tagModelPreFetch)
boolean	addProgramDateTimeTag (TagModelProgramDateTime tagModelProgramDateTime)
boolean	addTag (TagModel tag) Add a tag to the Segment model and propagate context and debug settings Do not add the TagModleURI tag, or any tag that has can be added by a public method
Object	clone ()
boolean	equals (Object obj)
String	getContextStr ()
java.util.SortedMap	getPartialSegments ()
Long	getSequence ()
java.util.Collection	getTags ()
String	getUri ()
int	hashCode ()
boolean	isComplete ()
void	removePartialSegments ()
boolean	removePrefetchTag ()
void	setComplete (boolean isComplete)
void	setSequence (Long sequence)
void	setUri (String uri)
String	toString ()
void	write (TagWriter tagWriter)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

tags

protected java.util.HashSet **tags**

tagModelByteRange

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelByteRange **tagModelByteRange**

tagModelINF

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelINF **tagModelINF**

tagModelProgramDateTime

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelProgramDateTime
tagModelProgramDateTime

tagModelMap

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelMap **tagModelMap**

tagModelPreFetch

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelPreFetch **tagModelPreFetch**

tagModelKey

protected com.wowza.wms.manifest.model.m3u8.tag.TagModelKey **tagModelKey**

partialSegments

protected java.util.SortedMap **partialSegments**

Constructors

(continued from last page)

Segment

```
public Segment(String uri,
               long sequence,
               String context)
```

Segment

```
public Segment()
```

Methods

getTags

```
public java.util.Collection getTags()
```

getUri

```
public String getUri()
```

setUri

```
public void setUri(String uri)
```

addTag

```
public boolean addTag(TagModel tag)
```

Add a tag to the Segment model and propagate context and debug settings Do not add the TagModleURI tag, or any tag that has can be added by a public method

Parameters:

tag - to be added to the playlist model

Returns:

whether the tag was successfully added

addByteRangeTag

```
public boolean addByteRangeTag(TagModelByteRange tagModelByteRange)
```

addINFTag

```
public boolean addINFTag(TagModelINF tagModelINF)
```

addProgramDateTimeTag

```
public boolean addProgramDateTimeTag(TagModelProgramDateTime tagModelProgramDateTime)
```

addPartialSegmentTag

```
public boolean addPartialSegmentTag(TagModelPartialSegment partialSegment)
```

addMapTag

```
public boolean addMapTag(TagModelMap tagModelMap)
```

addPrefetchTag

```
public boolean addPrefetchTag(TagModelPreFetch tagModelPreFetch)
```

removePrefetchTag

```
public boolean removePrefetchTag()
```

addKeyTag

```
public boolean addKeyTag(TagModelKey tagModelKey)
```

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

toString

```
public String toString()
```

(continued from last page)

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

write

```
public void write(TagWriter tagWriter)  
    throws java.io.IOException
```

getSequence

```
public Long getSequence()
```

setSequence

```
public void setSequence(Long sequence)
```

removePartialSegments

```
public void removePartialSegments()
```

getPartialSegments

```
public java.util.SortedMap getPartialSegments()
```

isComplete

```
public boolean isComplete()
```

setComplete

```
public void setComplete(boolean isComplete)
```

com.wowza.wms.manifest.model.m3u8 Class SegmentPartId

java.lang.Object

└─com.wowza.wms.manifest.model.m3u8.SegmentPartId

public class **SegmentPartId**
extends Object

Constructor Summary

public	SegmentPartId (Long mediaSegmentNumber, Long partialSegmentNumber)
--------	--

Method Summary

Long	getMediaSegmentNumber ()
Long	getPartialSegmentNumber ()
void	setMediaSegmentNumber (Long mediaSegmentNumber)
void	setPartialSegmentNumber (Long partialSegmentNumber)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SegmentPartId

```
public SegmentPartId(Long mediaSegmentNumber,  
                     Long partialSegmentNumber)
```

Parameters:

mediaSegmentNumber
partialSegmentNumber

Methods

getMediaSegmentNumber

```
public Long getMediaSegmentNumber()
```

(continued from last page)

Returns:the mediaSegmentNumber

setMediaSegmentNumber

```
public void setMediaSegmentNumber(Long mediaSegmentNumber)
```

Parameters:mediaSegmentNumber - the mediaSegmentNumber to set

getPartialSegmentNumber

```
public Long getPartialSegmentNumber()
```

Returns:the partialSegmentNumber

setPartialSegmentNumber

```
public void setPartialSegmentNumber(Long partialSegmentNumber)
```

Parameters:

partialSegmentNumber - the partialSegmentNumber to set

Package

com.wowza.wms.manifest.model.m3u8.tag

com.wowza.wms.manifest.model.m3u8.tag

Class TagModel

java.lang.Object

└- [com.wowza.wms.manifest.model.ManifestModelLogging](#)
 └- [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

All Implemented Interfaces:

Cloneable, Cloneable

Direct Known Subclasses:

[TagModelVersion](#), [TagModelUnknown](#), [TagModelURI](#), [TagModelTargetDuration](#), [TagModelStreamInfCommon](#),
[TagModelStart](#), [TagModelSkip](#), [TagModelSessionKey](#), [TagModelSessionData](#), [TagModelServerControl](#),
[TagModelRenditionReport](#), [TagModelProgramDateTime](#), [TagModelPreFetch](#), [TagModelPlaylistType](#),
[TagModelPartialSegmentINF](#), [TagModelPartialSegment](#), [TagModelMediaSequence](#), [TagModelMedia](#), [TagModelMap](#),
[TagModelM3U](#), [TagModelKey](#), [TagModelIndependentSegments](#), [TagModelINF](#), [TagModelIFramesOnly](#),
[TagModelEndlist](#), [TagModelDiscontinuitySequence](#), [TagModelDiscontinuity](#), [TagModelByteRange](#),
[TagModelAllowCache](#)

public abstract class **TagModel**
 extends [ManifestModelLogging](#)
 implements Cloneable, Cloneable

Field Summary

protected	attributes
protected	tagName

Constructor Summary

protected	TagModel (String tagName)
-----------	---

Method Summary

boolean	addAllAttributes (java.util.Collection c)
boolean	addAttribute (Attribute attribute)
Object	clone ()
boolean	equals (Object obj)
static boolean	equals (TagModel o1, TagModel o2)
static TagModel []	findTags (Class cls, java.util.Collection tags)
void	formatAttributes (StringBuilder sb)

String	<code>formatBoolean</code> (Boolean value) Format a Boolean tag value.
String	<code>formatBooleanAttribute</code> (String name, Boolean value) Format a Boolean tag attribute.
String	<code>formatDoubleAttribute</code> (String name, Double value) Format an Double tag attribute.
String	<code>formatEnumAttribute</code> (String name, Enum value) Format an Enumerated tag attribute.
String	<code>formatFloat</code> (Float value) Format a Float tag value.
String	<code>formatFloatAttribute</code> (String name, Float value) Format an Float tag attribute.
String	<code>formatInteger</code> (Integer value) Format a Integer tag value.
String	<code>formatIntegerAttribute</code> (String name, Integer value) Format a "decimal-integer" tag attribute from an Integer value.
String	<code>formatLong</code> (Long value) Format a Long tag value.
String	<code>formatLongAttribute</code> (String name, Long value) Format a "decimal-integer" tag attribute from a Long value.
String	<code>formatQuotedStringAttribute</code> (String name, String value) Format a quoted-string tag attribute.
String	<code>formatString</code> (String value) Format a String tag value.
String	<code>formatUnquotedStringAttribute</code> (String name, String value) Format an unquoted-string tag attribute.
String	<code>formatValue</code> (Object value) Format a Float, Integer, or String tag value.
String	<code>getContextStr</code> ()
String	<code>getTag</code> ()
String	<code>getTagName</code> ()
java.util.List	<code>getUnknownAttributes</code> ()
int	<code>hashCode</code> ()
abstract boolean	<code>isMediaSegmentTag</code> ()
abstract boolean	<code>isValid</code> (Integer version)

void	setContextStr (String contextStr)
abstract String	toString ()
abstract boolean	validForMasterPlaylist ()
abstract boolean	validForMediaPlaylist ()
abstract void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

attributes

protected java.util.List **attributes**

tagName

protected java.lang.String **tagName**

Constructors

TagModel

protected **TagModel**(String tagName)

Methods

getTag

public String **getTag**()

getTagName

public String **getTagName**()

(continued from last page)

validForMasterPlaylist

```
public abstract boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public abstract boolean validForMediaPlaylist()
```

toString

```
public abstract String toString()
```

write

```
public abstract void write(TagWriter writer)  
    throws java.io.IOException
```

Parameters:

writer

Throws:

IOException

isMediaSegmentTag

```
public abstract boolean isMediaSegmentTag()
```

isValid

```
public abstract boolean isValid(Integer version)
```

addAttribute

```
public boolean addAttribute(Attribute attribute)
```

addAllAttributes

```
public boolean addAllAttributes(java.util.Collection c)
```

(continued from last page)

getUnknownAttributes

```
public java.util.List getUnknownAttributes()
```

formatUnquotedStringAttribute

```
public String formatUnquotedStringAttribute(String name,  
                                             String value)
```

Format an unquoted-string tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the String attribute's value

Returns:

the formatted attribute as '='

formatQuotedStringAttribute

```
public String formatQuotedStringAttribute(String name,  
                                             String value)
```

Format a quoted-string tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the String attribute's value

Returns:

the formatted attribute as '='

formatBooleanAttribute

```
public String formatBooleanAttribute(String name,  
                                       Boolean value)
```

Format a Boolean tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the Boolean attribute's value

Returns:

the formatted Boolean attribute

formatIntegerAttribute

```
public String formatIntegerAttribute(String name,  
                                       Integer value)
```

Format a "decimal-integer" tag attribute from an Integer value. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name
value - is the decimal-integer attribute's value as an Integer

(continued from last page)

Returns:

the formatted Integer attribute

formatLongAttribute

```
public String formatLongAttribute(String name,  
                                   Long value)
```

Format a "decimal-integer" tag attribute from a Long value. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name

value - is the decimal-integer attribute's value as a Long

Returns:

the formatted decimal-integer attribute

formatFloatAttribute

```
public String formatFloatAttribute(String name,  
                                    Float value)
```

Format an Float tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name

value - is the Float attribute's value

Returns:

the formatted Float attribute

formatDoubleAttribute

```
public String formatDoubleAttribute(String name,  
                                     Double value)
```

Format an Double tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name

value - is the Double attribute's value

Returns:

the formatted Double attribute

formatEnumAttribute

```
public String formatEnumAttribute(String name,  
                                   Enum value)
```

Format an Enumerated tag attribute. Bad values and bad attribute names are reported in the output string.

Parameters:

name - is the attribute name

value - is the Enumerated attribute's value

Returns:

(continued from last page)

the formatted Enumerated attribute

formatBoolean

```
public String formatBoolean(Boolean value)
```

Format a Boolean tag value. Bad values are reported in the output string.

Parameters:

value - is the Boolean value

Returns:

the formatted Boolean

formatInteger

```
public String formatInteger(Integer value)
```

Format a Integer tag value. Bad values are reported in the output string.

Parameters:

value - is the Integer value

Returns:

the formatted Integer

formatLong

```
public String formatLong(Long value)
```

Format a Long tag value. Bad values are reported in the output string.

Parameters:

value - is the Long value

Returns:

the formatted Long

formatFloat

```
public String formatFloat(Float value)
```

Format a Float tag value. Bad values are reported in the output string.

Parameters:

value - is the Float value

Returns:

the formatted Float

formatString

```
public String formatString(String value)
```

Format a String tag value. Bad values are reported in the output string.

Parameters:

value - is the String value

(continued from last page)

Returns:

the formatted String

formatValue

```
public String formatValue(Object value)
```

Format a Float, Integer, or String tag value. Bad values are reported in the output string.

Parameters:

value - is the Float, Integer, or String value

Returns:

the formatted value

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String contextStr)
```

Parameters:

contextStr - the contextStr to set

formatAttributes

```
public void formatAttributes(StringBuilder sb)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

(continued from last page)

findTags

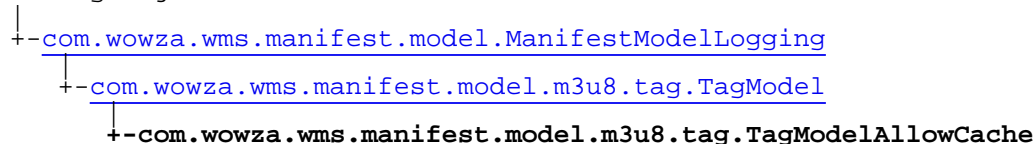
```
public static TagModel[] findTags(Class cls,  
    java.util.Collection tags)
```

equals

```
public static boolean equals(TagModel o1,  
    TagModel o2)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelAllowCache

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelAllowCache**
extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelAllowCache()
public	TagModelAllowCache (boolean allowCaching)

Method Summary

boolean	equals (Object obj)
Boolean	getAllow ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setAllow (Boolean allow)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelAllowCache

```
public TagModelAllowCache()
```

TagModelAllowCache

```
public TagModelAllowCache(boolean allowCaching)
```

Methods

getAllow

```
public Boolean getAllow()
```

Returns:

the allow

setAllow

```
public void setAllow(Boolean allow)
```

Parameters:

allow - the allow to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

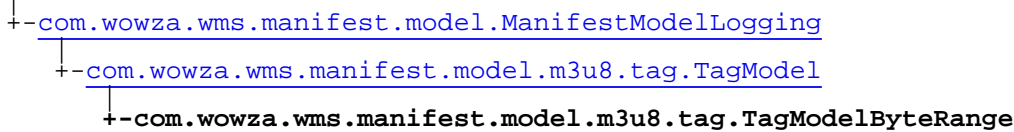
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelByteRange

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelByteRange
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelByteRange()
public	TagModelByteRange (int length, int offset)

Method Summary

boolean	equals (Object obj)
Integer	getLength ()
Integer	getOffset ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setLength (Integer length)
void	setOffset (Integer offset)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	<code>validForMediaPlaylist()</code>
void	<code>write(TagWriter writer)</code>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelByteRange

```
public TagModelByteRange()
```

TagModelByteRange

```
public TagModelByteRange(int length,
                          int offset)
```

Methods

getLength

```
public Integer getLength()
```

Returns:

the length

setLength

```
public void setLength(Integer length)
```

(continued from last page)

Parameters:length - the length to set

getOffset

```
public Integer getOffset()
```

Returns:the offset

setOffset

```
public void setOffset(Integer offset)
```

Parameters:offset - the offset to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

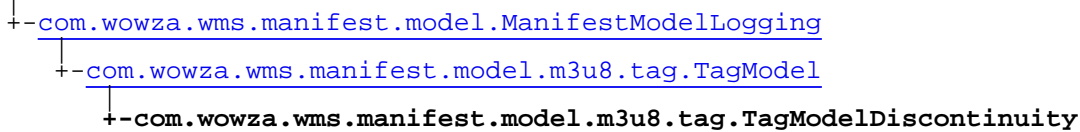
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelDiscontinuity

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelDiscontinuity**
 extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelDiscontinuity()
--------	---

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelDiscontinuity

```
public TagModelDiscontinuity()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

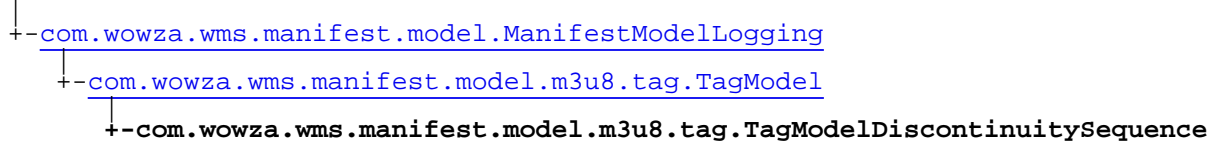
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelDiscontinuitySequence

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelDiscontinuitySequence
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelDiscontinuitySequence ()
public	TagModelDiscontinuitySequence (int discontinuitySequence)

Method Summary

boolean	equals (Object obj)
Integer	getNumber ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setNumber (Integer number)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelDiscontinuitySequence

```
public TagModelDiscontinuitySequence()
```

TagModelDiscontinuitySequence

```
public TagModelDiscontinuitySequence(int discontinuitySequence)
```

Methods

getNumber

```
public Integer getNumber()
```

Returns:

the number

setNumber

```
public void setNumber(Integer number)
```

Parameters:

number - the number to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

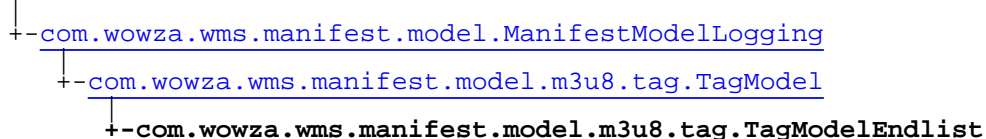
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelEndlist

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```
public class TagModelEndlist
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelEndlist()
--------	-----------------------------------

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelEndlist

```
public TagModelEndlist()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

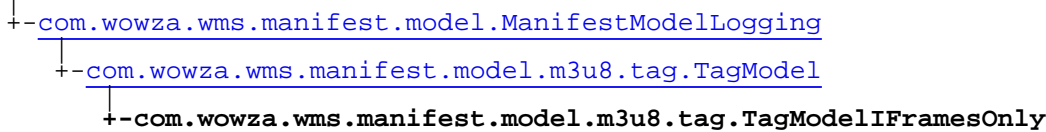
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```


com.wowza.wms.manifest.model.m3u8.tag Class TagModelIFramesOnly

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelIFramesOnly**
extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIFramesOnly()
--------	---------------------------------------

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelIFramesOnly

```
public TagModelIFramesOnly()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

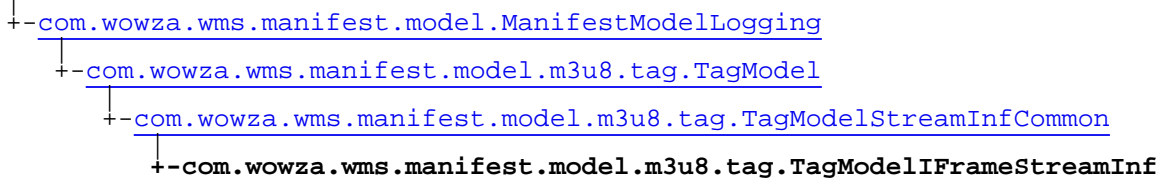
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelIFrameStreamInf

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelIFrameStreamInf**
extends [TagModelStreamInfCommon](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIFrameStreamInf ()
public	TagModelIFrameStreamInf (Integer bandwidth, Integer avgBandwidth, String codecs, String resolution, Float frameRate, String video, Integer programId, String uri)

Method Summary

boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
String	toString ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModelStreamInfCommon](#)

[equals](#), [getAvgBandwidth](#), [getBandwidth](#), [getCodecs](#), [getFrameRate](#), [getProgramId](#), [getResolution](#), [getUri](#), [getUriStr](#), [getVideo](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setAvgBandwidth](#), [setBandwidth](#), [setCodecs](#), [setFrameRate](#), [setProgramId](#), [setResolution](#), [setUri](#), [setUriStr](#), [setVideo](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelIFrameStreamInf

```
public TagModelIFrameStreamInf()
```

TagModelIFrameStreamInf

```
public TagModelIFrameStreamInf(Integer bandwidth,
                                Integer avgBandwidth,
                                String codecs,
                                String resolution,
                                Float frameRate,
                                String video,
                                Integer programId,
                                String uri)
```

Methods

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

(continued from last page)

isMediaSegmentTag

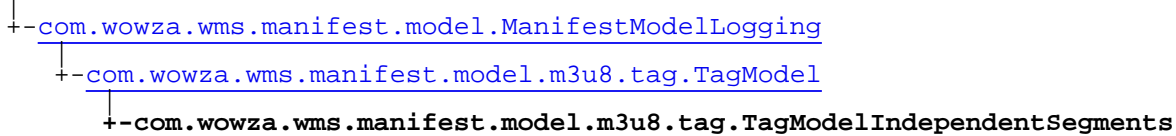
```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelIndependentSegments

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelIndependentSegments
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelIndependentSegments()
--------	---

Method Summary

boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelIndependentSegments

```
public TagModelIndependentSegments()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

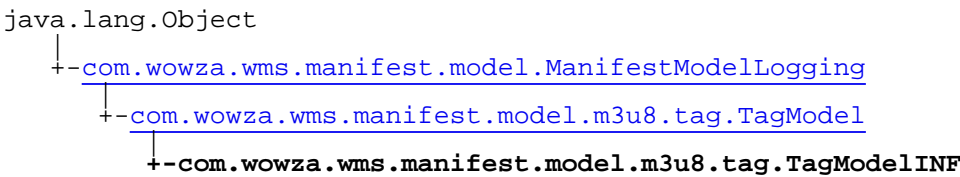
isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag
Class TagModelINF



All Implemented Interfaces:
Cloneable, Cloneable

```
public class TagModelINF
extends TagModel
```

Fields inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel
attributes , tagName

Constructor Summary	
public	TagModelINF()
public	TagModelINF (Object chunkDurationStr, String titleStr)

Method Summary	
boolean	equals (Object obj)
Object	getDuration ()
String	getTitle ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setDuration (Object duration)
void	setTitle (String title)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	<code>validForMediaPlaylist()</code>
void	<code>write(TagWriter writer)</code>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelINF

```
public TagModelINF()
```

TagModelINF

```
public TagModelINF(Object chunkDurationStr,
                   String titleStr)
```

Methods

getDuration

```
public Object getDuration()
```

Returns:

the duration

setDuration

```
public void setDuration(Object duration)
```

(continued from last page)

Parameters:

duration - the duration to set as either a Float or Integer object

getTitle

```
public String getTitle()
```

Returns:

the title

setTitle

```
public void setTitle(String title)
```

Parameters:

title - the title to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

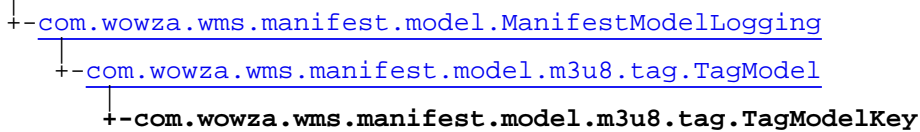
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelKey

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelKey**
 extends [TagModel](#)

Nested Class Summary

class	TagModelKey.Method TagModelKey.Method
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelKey()
public	TagModelKey (String methodStr, String uri, String iv, String keyFormat, String keyFormatVersions)

Method Summary

boolean	equals (Object obj)
String	getIv ()
String	getKeyFormat ()
String	getKeyFormatVersions ()
TagModelKey.Method	getMethod ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()

boolean	<u>isValid</u> (Integer version)
void	<u>setIv</u> (String iv)
void	<u>setKeyFormat</u> (String keyFormat)
void	<u>setKeyFormatVersions</u> (String keyFormatVersions)
void	<u>setMethod</u> (<u>TagModelKey.Method</u> method)
void	<u>setUri</u> (String uri)
String	<u>toString</u> ()
boolean	<u>validForMasterPlaylist</u> ()
boolean	<u>validForMediaPlaylist</u> ()
void	<u>write</u> (<u>TagWriter</u> writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelKey

```
public TagModelKey()
```

(continued from last page)

TagModelKey

```
public TagModelKey(String methodStr,  
                   String uri,  
                   String iv,  
                   String keyFormat,  
                   String keyFormatVersions)
```

Methods

getMethod

```
public TagModelKey.Method getMethod()
```

Returns:

the method

setMethod

```
public void setMethod(TagModelKey.Method method)
```

Parameters:

method - the method to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getIv

```
public String getIv()
```

Returns:

the iv

(continued from last page)

setIv

```
public void setIv(String iv)
```

Parameters:

iv - the iv to set

getKeyFormat

```
public String getKeyFormat()
```

Returns:

the keyFormat

setKeyFormat

```
public void setKeyFormat(String keyFormat)
```

Parameters:

keyFormat - the keyFormat to set

getKeyFormatVersions

```
public String getKeyFormatVersions()
```

Returns:

the keyFormatVersions

setKeyFormatVersions

```
public void setKeyFormatVersions(String keyFormatVersions)
```

Parameters:

keyFormatVersions - the keyFormatVersions to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

(continued from last page)

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelKey.Method

```

java.lang.Object
  |
  +- java.lang.Enum
        |
        +- com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method
  
```

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelKey.Method**
extends Enum

name: method format: enumerated-string status: REQUIRED

Field Summary

public static final	AES_128
public static final	NONE
public static final	SAMPLE_AES

Method Summary

static TagModelKey.Method	fromString (String text)
String	toString ()
static TagModelKey.Method	valueOf (String name)
static TagModelKey.Method[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

(continued from last page)

Fields

NONE

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method NONE
```

AES_128

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method AES_128
```

SAMPLE_AES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelKey.Method  
SAMPLE_AES
```

Methods

values

```
public static TagModelKey.Method\[\] values()
```

valueOf

```
public static TagModelKey.Method valueOf(String name)
```

toString

```
public String toString()
```

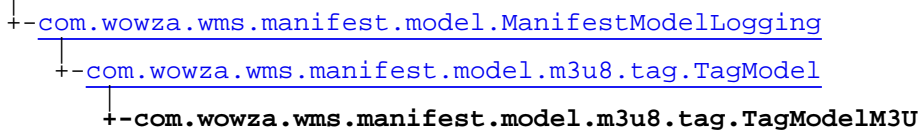
fromString

```
public static TagModelKey.Method fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelM3U

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelM3U**

extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public [TagModelM3U\(\)](#)

Method Summary

boolean [isMediaSegmentTag\(\)](#)

boolean [isValid\(Integer version\)](#)

String [toString\(\)](#)

boolean [validForMasterPlaylist\(\)](#)

boolean [validForMediaPlaylist\(\)](#)

void [write\(TagWriter writer\)](#)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#),
[formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#),
[formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#),
[formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#),
[formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#),
[getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#),
[validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

TagModelM3U

```
public TagModelM3U()
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

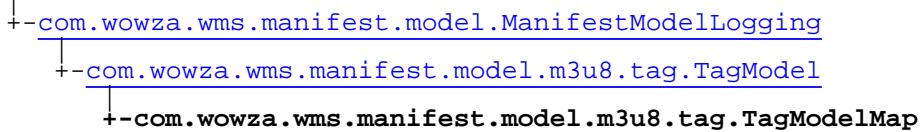
isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelMap

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelMap**
 extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMap()
public	TagModelMap (String uri, Integer length, Integer offset)

Method Summary

boolean	equals (Object obj)
Integer	getByteRangeLength ()
Integer	getByteRangeOffset ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setByteRangeLength (Integer byteRangeLength)
void	setByteRangeOffset (Integer byteRangeOffset)
void	setUri (String uri)

String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMap

```
public TagModelMap()
```

TagModelMap

```
public TagModelMap(String uri,
                    Integer length,
                    Integer offset)
```

Methods

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getByteRangeLength

```
public Integer getByteRangeLength()
```

Returns:

the byteRangeLength

setByteRangeLength

```
public void setByteRangeLength(Integer byteRangeLength)
```

Parameters:

byteRangeLength - the byteRangeLength to set

getByteRangeOffset

```
public Integer getByteRangeOffset()
```

Returns:

the byteRangeOffset

setByteRangeOffset

```
public void setByteRangeOffset(Integer byteRangeOffset)
```

Parameters:

byteRangeOffset - the byteRangeOffset to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

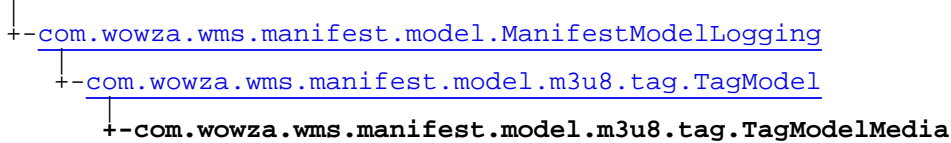
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelMedia

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelMedia**
 extends [TagModel](#)

Nested Class Summary

class	TagModelMedia.Type TagModelMedia.Type
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMedia()
public	TagModelMedia(TagModelMedia.Type type, String groupId, String name, String instreamId, String uri, String language, String associatedLanguage, Boolean defaultRendition, Boolean autoselect, Boolean forced, String characteristics)

Method Summary

boolean	equals (Object obj)
String	getAssociatedLanguage ()
Boolean	getAutoselect ()
String	getCharacteristics ()
Boolean	getDefaultRendition ()
Boolean	getForced ()
String	getGroupId ()

String	<u>getInstreamId()</u>
String	<u>getLanguage()</u>
String	<u>getName()</u>
<u>TagModelMedia.Type</u>	<u>getType()</u>
java.net.URI	<u>getUri()</u>
String	<u>getUriStr()</u>
int	<u>hashCode()</u>
boolean	<u>isMediaSegmentTag()</u>
boolean	<u>isValid()</u> (Integer version)
void	<u>setAssociatedLanguage()</u> (String associatedLanguage)
void	<u>setAutoselect()</u> (Boolean autoselect)
void	<u>setCharacteristics()</u> (String characteristics)
void	<u>setDefaultRendition()</u> (Boolean defaultRendition)
void	<u>setForced()</u> (Boolean forced)
void	<u>setGroupId()</u> (String groupId)
void	<u>setInstreamId()</u> (String instreamId)
void	<u>setLanguage()</u> (String language)
void	<u>setName()</u> (String name)
void	<u>setType()</u> (<u>TagModelMedia.Type</u> type)
void	<u>setUri()</u> (java.net.URI uri)
void	<u>setUriStr()</u> (String uri)
String	<u>toString()</u>
boolean	<u>validForMasterPlaylist()</u>
boolean	<u>validForMediaPlaylist()</u>

void	write (TagWriter writer)
------	---

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMedia

```
public TagModelMedia()
```

TagModelMedia

```
public TagModelMedia(TagModelMedia.Type type,
                    String groupId,
                    String name,
                    String instreamId,
                    String uri,
                    String language,
                    String associatedLanguage,
                    Boolean defaultRendition,
                    Boolean autoselect,
                    Boolean forced,
                    String characteristics)
```

Methods

getType

```
public TagModelMedia.Type getType()
```

Returns:

the type

setType

```
public void setType(TagModelMedia.Type type)
```

Parameters:

type - the type to set

getGroupId

```
public String getGroupId()
```

Returns:

the groupId

setGroupId

```
public void setGroupId(String groupId)
```

Parameters:

groupId - the groupId to set

getName

```
public String getName()
```

Returns:

the name

setName

```
public void setName(String name)
```

Parameters:

name - the name to set

getInstreamId

```
public String getInstreamId()
```

Returns:

the instreamId

setInstreamId

```
public void setInstreamId(String instreamId)
```

(continued from last page)

Parameters:instreamId - the instreamId to set

getUri

```
public java.net.URI getUri()
```

Returns:the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:uri - the uri to set

getUriStr

```
public String getUriStr()
```

Returns:the uri

setUriStr

```
public void setUriStr(String uri)
```

Parameters:uri - the uri to set

getLanguage

```
public String getLanguage()
```

Returns:the language

setLanguage

```
public void setLanguage(String language)
```

Parameters:language - the language to set

getAssociatedLanguage

```
public String getAssociatedLanguage()
```

Returns:

the associatedLanguage

setAssociatedLanguage

```
public void setAssociatedLanguage(String associatedLanguage)
```

Parameters:

associatedLanguage - the associatedLanguage to set

getDefaultRendition

```
public Boolean getDefaultRendition()
```

Returns:

the defaultRendition

setDefaultRendition

```
public void setDefaultRendition(Boolean defaultRendition)
```

Parameters:

defaultRendition - the defaultRendition to set

getAutoselect

```
public Boolean getAutoselect()
```

Returns:

the autoselect

setAutoselect

```
public void setAutoselect(Boolean autoselect)
```

Parameters:

autoselect - the autoselect to set

getForced

```
public Boolean getForced()
```

(continued from last page)

Returns:the forced

setForced

```
public void setForced(Boolean forced)
```

Parameters:forced - the forced to set

getCharacteristics

```
public String getCharacteristics()
```

Returns:the characteristics

setCharacteristics

```
public void setCharacteristics(String characteristics)
```

Parameters:characteristics - the characteristics to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

(continued from last page)

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelMedia.Type

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelMedia.Type**
extends Enum

name: type format: enumerated-string status: REQUIRED

Field Summary

public static final	AUDIO
public static final	CLOSED_CAPTIONS
public static final	SUBTITLES
public static final	VIDEO

Method Summary

static TagModelMedia.Type	fromString (String text)
String	toString ()
static TagModelMedia.Type	valueOf (String name)
static TagModelMedia.Type[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

AUDIO

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type AUDIO
```

VIDEO

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type VIDEO
```

SUBTITLES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type SUBTITLES
```

CLOSED_CAPTIONS

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelMedia.Type  
CLOSED_CAPTIONS
```

Methods

values

```
public static TagModelMedia.Type[] values()
```

valueOf

```
public static TagModelMedia.Type valueOf(String name)
```

toString

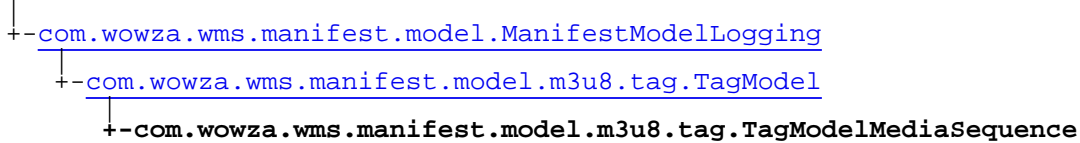
```
public String toString()
```

fromString

```
public static TagModelMedia.Type fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelMediaSequence

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelMediaSequence**
extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelMediaSequence ()
public	TagModelMediaSequence (long chunkIndexForPlaylist)

Method Summary

boolean	equals (Object obj)
Long	getNumber ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setNumber (long number)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelMediaSequence

```
public TagModelMediaSequence()
```

TagModelMediaSequence

```
public TagModelMediaSequence(long chunkIndexForPlaylist)
```

Methods

getNumber

```
public Long getNumber()
```

Returns:

the number

setNumber

```
public void setNumber(long number)
```

Parameters:

number - the number to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

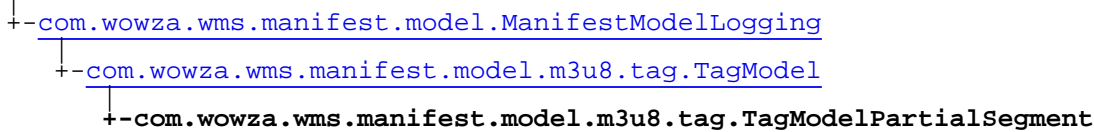
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelPartialSegment

```
java.lang.Object
```



All Implemented Interfaces:

Cloneable, Cloneable

```
public class TagModelPartialSegment
extends TagModel
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelPartialSegment (double duration, String uri, boolean isIndependent, long partNumber)
public	TagModelPartialSegment (double duration, String uRI, boolean isIndependent, String byteRange, boolean hasGapAttribute, long partNumber)

Method Summary

boolean	equals (Object obj)
String	getByteRange ()
double	getDuration ()
long	getPartNumber ()
String	getURI ()
int	hashCode ()
boolean	isHasGapAttribute ()
boolean	isIndependent ()
boolean	isMediaSegmentTag ()

boolean	<u>isValid(Integer version)</u>
String	<u>toString()</u>
boolean	<u>validForMasterPlaylist()</u>
boolean	<u>validForMediaPlaylist()</u>
void	<u>write(TagWriter writer)</u>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelPartialSegment

```
public TagModelPartialSegment(double duration,
                             String uri,
                             boolean isIndependent,
                             long partNumber)
```

TagModelPartialSegment

```
public TagModelPartialSegment(double duration,
                             String uRI,
                             boolean isIndependent,
                             String byteRange,
                             boolean hasGapAttribute,
                             long partNumber)
```

Methods

(continued from last page)

getDuration

```
public double getDuration()
```

Returns:

the duration

getURI

```
public String getURI()
```

Returns:

the uRI

getByteRange

```
public String getByteRange()
```

Returns:

the byteRange

isIndependent

```
public boolean isIndependent()
```

Returns:

the isIndependent

isHasGapAttribute

```
public boolean isHasGapAttribute()
```

Returns:

the hasGapAttribute

getPartNumber

```
public long getPartNumber()
```

Returns:

the part number

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```


(continued from last page)

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

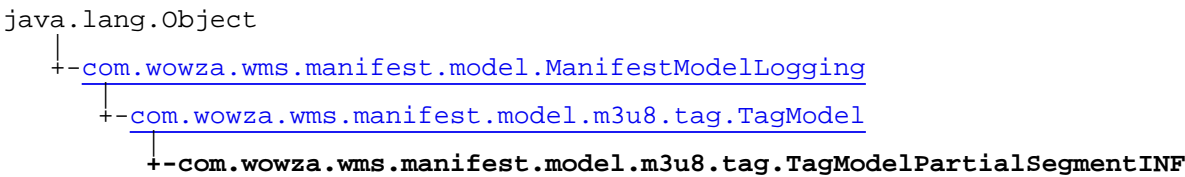
isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag
Class TagModelPartialSegmentINF



All Implemented Interfaces:
Cloneable, Cloneable

```
public class TagModelPartialSegmentINF
extends TagModel
```

Fields inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel
attributes , tagName

Constructor Summary	
public	TagModelPartialSegmentINF (double partialSegmentDurationTarget)

Method Summary	
double	getPartialSegmentTargetDuration()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setPartialSegmentTargetDuration (double partialSegmentTargetDuration)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write (TagWriter writer)

Methods inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelPartialSegmentINF

```
public TagModelPartialSegmentINF(double partialSegmentDurationTarget)
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

getPartialSegmentTargetDuration

```
public double getPartialSegmentTargetDuration()
```

setPartialSegmentTargetDuration

```
public void setPartialSegmentTargetDuration(double partialSegmentTargetDuration)
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

(continued from last page)

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

toString

```
public String toString()
```

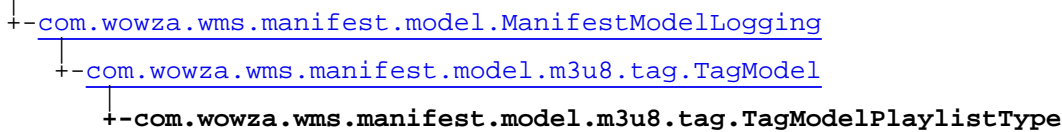
isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelPlaylistType

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelPlaylistType
extends TagModel
  
```

Nested Class Summary

class	TagModelPlaylistType.PlaylistType TagModelPlaylistType.PlaylistType
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelPlaylistType()
public	TagModelPlaylistType(String type)

Method Summary

boolean	equals (Object obj)
TagModelPlaylistType.PlaylistType	getPlaylistType()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setPlaylistType (TagModelPlaylistType.PlaylistType playlistType)
String	toString()
boolean	validForMasterPlaylist()

boolean	<code>validForMediaPlaylist()</code>
void	<code>write(TagWriter writer)</code>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelPlaylistType

```
public TagModelPlaylistType()
```

TagModelPlaylistType

```
public TagModelPlaylistType(String type)
```

Methods

getPlaylistType

```
public TagModelPlaylistType.PlaylistType getPlaylistType()
```

Returns:

the playlistType

setPlaylistType

```
public void setPlaylistType(TagModelPlaylistType.PlaylistType playlistType)
```

(continued from last page)

Parameters:

playlistType - the playlistType to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelPlaylistType.PlaylistType

java.lang.Object

└─ java.lang.Enum

└─ com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelPlaylistType.PlaylistType**
extends Enum

Field Summary

public static final	EVENT
public static final	VOD

Method Summary

static TagModelPlaylistType. PlaylistType	fromString (String text)
String	toString ()
static TagModelPlaylistType. PlaylistType	valueOf (String name)
static TagModelPlaylistType. PlaylistType[]	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

(continued from last page)

VOD

```
public static final
com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType VOD
```

EVENT

```
public static final
com.wowza.wms.manifest.model.m3u8.tag.TagModelPlaylistType.PlaylistType EVENT
```

Methods

values

```
public static TagModelPlaylistType.PlaylistType\[\] values()
```

valueOf

```
public static TagModelPlaylistType.PlaylistType valueOf(String name)
```

toString

```
public String toString()
```

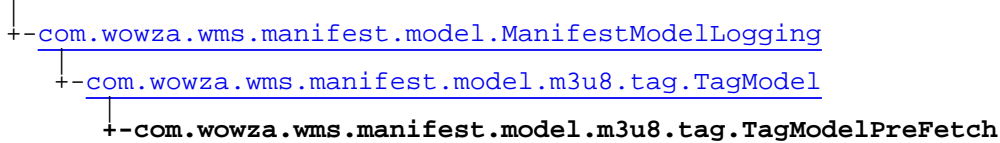
fromString

```
public static TagModelPlaylistType.PlaylistType fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelPreFetch

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelPreFetch
extends TagModel

```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelPreFetch()
public	TagModelPreFetch(String url)

Method Summary

boolean	equals (Object obj)
String	getUrl ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setUrl (String url)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelPreFetch

```
public TagModelPreFetch()
```

TagModelPreFetch

```
public TagModelPreFetch(String url)
```

Methods

getUrl

```
public String getUrl()
```

Returns:

the url

setUrl

```
public void setUrl(String url)
```

Parameters:

Url - the Url to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

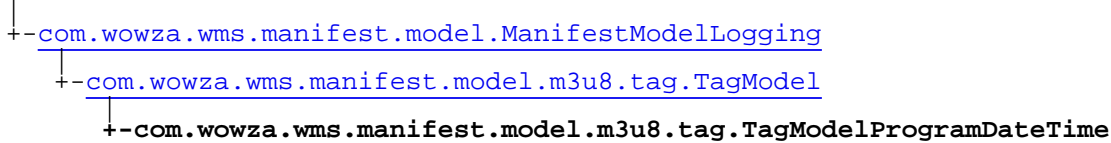
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelProgramDateTime

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelProgramDateTime**

extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelProgramDateTime()
public	TagModelProgramDateTime(String programDateTime)

Method Summary

boolean	equals (Object obj)
String	getDateTime()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid (Integer version)
void	setDateTime (String dateTime)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelProgramDateTime

```
public TagModelProgramDateTime()
```

TagModelProgramDateTime

```
public TagModelProgramDateTime(String programDateTime)
```

Methods

getDateTime

```
public String getDateTime()
```

Returns:

the dateTime

setDateTime

```
public void setDateTime(String dateTime)
```

Parameters:

dateTime - the dateTime to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

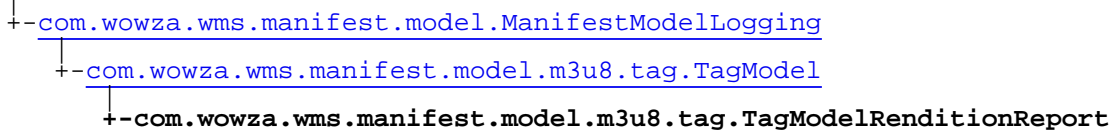
```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelRenditionReport

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelRenditionReport**
extends [TagModel](#)

Field Summary

public static final	LAST_MSN_ATTR Value: LAST-MSN
public static final	LAST_PART_ATTR Value: LAST-PART
public static final	URI_ATTR Value: URI

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelRenditionReport (String uri, Long lastMsn, Long lastPart)
--------	---

Method Summary

boolean	equals (Object obj)
Long	getLastMsn ()
Long	getLastPart ()
String	getUri ()
int	hashCode ()
boolean	isMediaSegmentTag ()

boolean	isValid(Integer version)
String	toString()
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

URI_ATTR

public static final java.lang.String **URI_ATTR**

Constant value: **URI**

LAST_MSN_ATTR

public static final java.lang.String **LAST_MSN_ATTR**

Constant value: **LAST-MSN**

LAST_PART_ATTR

public static final java.lang.String **LAST_PART_ATTR**

Constant value: **LAST-PART**

(continued from last page)

Constructors

TagModelRenditionReport

```
public TagModelRenditionReport(String uri,  
                                Long lastMsn,  
                                Long lastPart)
```

Methods

getUri

```
public String getUri()
```

Returns:

the uri

getLastMsn

```
public Long getLastMsn()
```

Returns:

the lastMsn

getLastPart

```
public Long getLastPart()
```

Returns:

the lastPart

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

(continued from last page)

write

```
public void write(TagWriter writer)
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

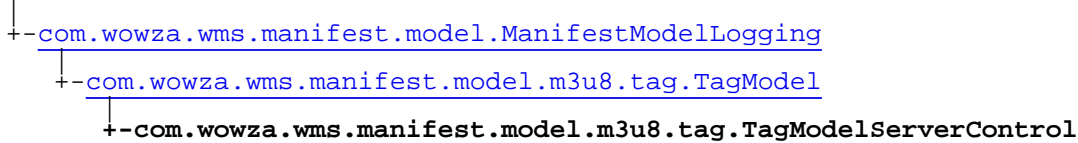
```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelServerControl

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelServerControl
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelServerControl (Boolean canBlockReload, Float partHoldBack, Float canSkipUntil, Float holdBack)
--------	--

Method Summary

boolean	equals (Object obj)
Boolean	getCanBlockReload ()
Float	getcanSkipUntil ()
Float	getholdBack ()
Float	getpartHoldBack ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setPartHoldBack (Float partHoldBack)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	<code>validForMediaPlaylist()</code>
void	<code>write(TagWriter writer)</code>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelServerControl

```
public TagModelServerControl(Boolean canBlockReload,
                             Float partHoldBack,
                             Float canSkipUntil,
                             Float holdBack)
```

Methods

getCanBlockReload

```
public Boolean getCanBlockReload()
```

Returns:

the canBlockReload

getpartHoldBack

```
public Float getpartHoldBack()
```

Returns:

the partHoldBack

setPartHoldBack

```
public void setPartHoldBack(Float partHoldBack)
```

getcanSkipUntil

```
public Float getcanSkipUntil()
```

Returns:

the canSkipUntil

getholdBack

```
public Float getholdBack()
```

Returns:

the holdBack

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

(continued from last page)

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

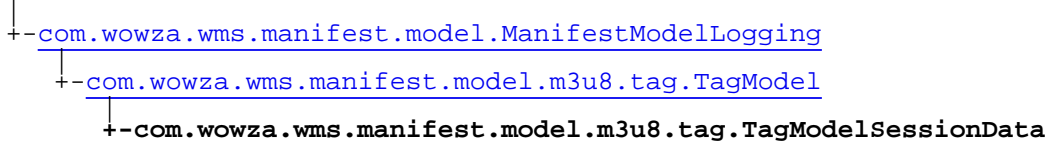
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelSessionData

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelSessionData
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelSessionData()
public	TagModelSessionData (String dataId, String value, String uri, String language)

Method Summary

boolean	equals (Object obj)
String	getDataId ()
String	getLanguage ()
String	getUri ()
String	getValue ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setDataId (String dataId)
void	setLanguage (String language)

void	setUri (String uri)
void	setValue (String value)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelSessionData

```
public TagModelSessionData()
```

TagModelSessionData

```
public TagModelSessionData(String dataId,
                           String value,
                           String uri,
                           String language)
```

Methods

(continued from last page)

getDataId

```
public String getDataId()
```

Returns:

the dataId

setDataId

```
public void setDataId(String dataId)
```

Parameters:

dataId - the dataId to set

getValue

```
public String getValue()
```

Returns:

the value

setValue

```
public void setValue(String value)
```

Parameters:

value - the value to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getLanguage

```
public String getLanguage()
```

(continued from last page)

Returns:

the language

setLanguage

```
public void setLanguage(String language)
```

Parameters:

language - the language to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

(continued from last page)

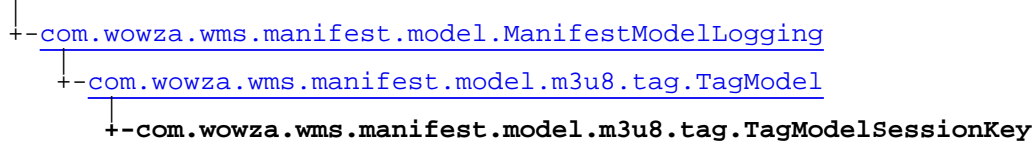
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelSessionKey

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelSessionKey**
 extends [TagModel](#)

Nested Class Summary

class	TagModelSessionKey.Method TagModelSessionKey.Method
-------	--

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelSessionKey()
public	TagModelSessionKey (String method, String uri, String iv, String keyFormat, String keyFormatVersions)

Method Summary

boolean	equals (Object obj)
String	getIv ()
String	getKeyFormat ()
String	getKeyFormatVersions ()
TagModelSessionKey.Method	getMethod ()
String	getUri ()
int	hashCode ()

boolean	<u>isMediaSegmentTag()</u>
boolean	<u>isValid(Integer version)</u>
void	<u>setIv(String iv)</u>
void	<u>setKeyFormat(String keyFormat)</u>
void	<u>setKeyFormatVersions(String keyFormatVersions)</u>
void	<u>setMethod(TagModelSessionKey.Method method)</u>
void	<u>setUri(String uri)</u>
String	<u>toString()</u>
boolean	<u>validForMasterPlaylist()</u>
boolean	<u>validForMediaPlaylist()</u>
void	<u>write(TagWriter writer)</u>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelSessionKey

```
public TagModelSessionKey()
```

(continued from last page)

TagModelSessionKey

```
public TagModelSessionKey(String method,  
                           String uri,  
                           String iv,  
                           String keyFormat,  
                           String keyFormatVersions)
```

Methods

getMethod

```
public TagModelSessionKey.Method getMethod()
```

Returns:

the method

setMethod

```
public void setMethod(TagModelSessionKey.Method method)
```

Parameters:

method - the method to set

getUri

```
public String getUri()
```

Returns:

the uri

setUri

```
public void setUri(String uri)
```

Parameters:

uri - the uri to set

getIv

```
public String getIv()
```

Returns:

the iv

(continued from last page)

setIv

```
public void setIv(String iv)
```

Parameters:

iv - the iv to set

getKeyFormat

```
public String getKeyFormat()
```

Returns:

the keyFormat

setKeyFormat

```
public void setKeyFormat(String keyFormat)
```

Parameters:

keyFormat - the keyFormat to set

getKeyFormatVersions

```
public String getKeyFormatVersions()
```

Returns:

the keyFormatVersions

setKeyFormatVersions

```
public void setKeyFormatVersions(String keyFormatVersions)
```

Parameters:

keyFormatVersions - the keyFormatVersions to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

(continued from last page)

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelSessionKey.Method

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **TagModelSessionKey.Method**
extends Enum

name: method format: enumerated-string status: REQUIRED

Field Summary

public static final	AES_128
public static final	SAMPLE_AES

Method Summary

static TagModelSessionKey.Method	fromString (String text)
String	toString ()
static TagModelSessionKey.Method	valueOf (String name)
static TagModelSessionKey.Method	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

(continued from last page)

Fields

AES_128

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method  
AES_128
```

SAMPLE_AES

```
public static final com.wowza.wms.manifest.model.m3u8.tag.TagModelSessionKey.Method  
SAMPLE_AES
```

Methods

values

```
public static TagModelSessionKey.Method\[\] values()
```

valueOf

```
public static TagModelSessionKey.Method valueOf(String name)
```

toString

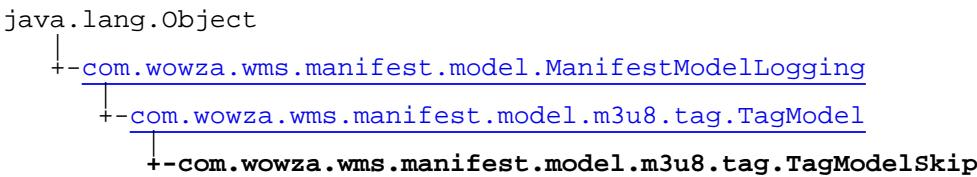
```
public String toString()
```

fromString

```
public static TagModelSessionKey.Method fromString(String text)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelSkip



All Implemented Interfaces:
Cloneable, Cloneable

```
public class TagModelSkip
extends TagModel
```

Fields inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel
attributes , tagName

Constructor Summary	
public	TagModelSkip (int skippedSegments)

Method Summary	
int	getskippedSegments ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setskippedSegments (int skippedSegments)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelSkip

```
public TagModelSkip(int skippedSegments)
```

Methods

getskippedSegments

```
public int getskippedSegments()
```

setskippedSegments

```
public void setskippedSegments(int skippedSegments)
```

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

(continued from last page)

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

toString

```
public String toString()
```

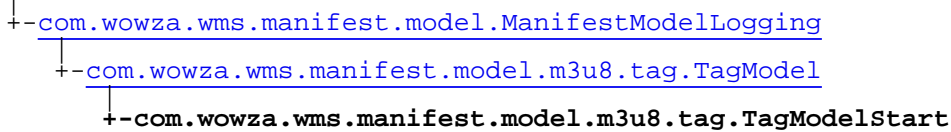
isValid

```
public boolean isValid(Integer version)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelStart

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

```

public class TagModelStart
extends TagModel
  
```

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelStart()
public	TagModelStart (Float timeOffset, Boolean precise)

Method Summary

boolean	equals (Object obj)
Boolean	getPrecise ()
Float	getTimeOffset ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setPrecise (Boolean precise)
void	setTimeOffset (Float timeOffset)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	<code>validForMediaPlaylist()</code>
void	<code>write(TagWriter writer)</code>

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelStart

```
public TagModelStart()
```

TagModelStart

```
public TagModelStart(Float timeOffset,
                    Boolean precise)
```

Methods

getTimeOffset

```
public Float getTimeOffset()
```

Returns:

the timeOffset

setTimeOffset

```
public void setTimeOffset(Float timeOffset)
```

(continued from last page)

Parameters:

timeOffset - the timeOffset to set

getPrecise

```
public Boolean getPrecise()
```

Returns:

the precise

setPrecise

```
public void setPrecise(Boolean precise)
```

Parameters:

precise - the precise to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

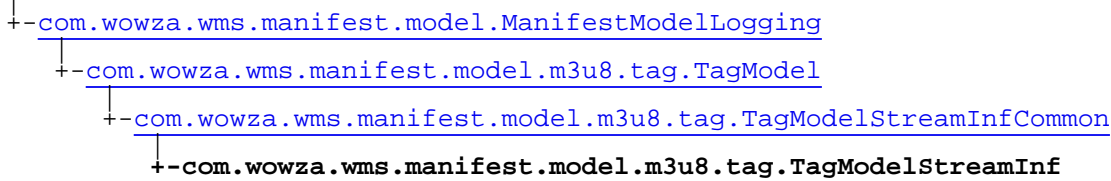
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelStreamInf

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelStreamInf**
 extends [TagModelStreamInfCommon](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelStreamInf()
public	TagModelStreamInf (String audio, String subtitles, String closedCaptions, Integer bandwidth, Integer avgBandwidth, String codecs, String resolution, Float frameRate, String video, Integer programId, String uri)

Method Summary

boolean	equals (Object obj)
String	getAudio ()
String	getClosedCaptions ()
String	getSubtitles ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setAudio (String audio)
void	setClosedCaptions (String closedCaptions)

void	setSubtitles (String subtitles)
String	toString ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModelStreamInfCommon](#)

[equals](#), [getAvgBandwidth](#), [getBandwidth](#), [getCodecs](#), [getFrameRate](#), [getProgramId](#), [getResolution](#), [getUri](#), [getUriStr](#), [getVideo](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setAvgBandwidth](#), [setBandwidth](#), [setCodecs](#), [setFrameRate](#), [setProgramId](#), [setResolution](#), [setUri](#), [setUriStr](#), [setVideo](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelStreamInf

```
public TagModelStreamInf()
```

TagModelStreamInf

```
public TagModelStreamInf(String audio,
                        String subtitles,
                        String closedCaptions,
                        Integer bandwidth,
                        Integer avgBandwidth,
                        String codecs,
                        String resolution,
                        Float frameRate,
                        String video,
                        Integer programId,
                        String uri)
```

(continued from last page)

Methods

getAudio

```
public String getAudio()
```

Returns:

the audio

setAudio

```
public void setAudio(String audio)
```

Parameters:

audio - the audio to set

getSubtitles

```
public String getSubtitles()
```

Returns:

the subtitles

setSubtitles

```
public void setSubtitles(String subtitles)
```

Parameters:

subtitles - the subtitles to set

getClosedCaptions

```
public String getClosedCaptions()
```

Returns:

the closedCaptions

setClosedCaptions

```
public void setClosedCaptions(String closedCaptions)
```

Parameters:

closedCaptions - the closedCaptions to set

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

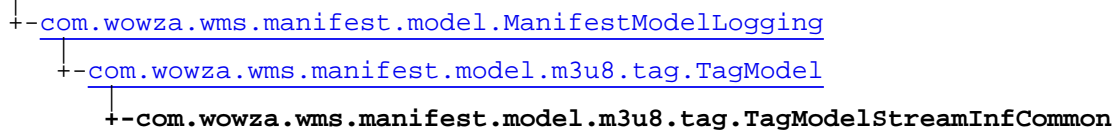
```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag Class TagModelStreamInfCommon

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

Direct Known Subclasses:

[TagModelStreamInf](#), [TagModelIFrameStreamInf](#)

public abstract class **TagModelStreamInfCommon**
extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelStreamInfCommon (String tagName, Integer bandwidth, Integer avgBandwidth, String codecs, String resolution, Float frameRate, String video, Integer programId, String uri)
protected	TagModelStreamInfCommon (String tagName)

Method Summary

boolean	equals (Object obj)
Integer	getAvgBandwidth ()
Integer	getBandwidth ()
String	getCodecs ()
Float	getFrameRate ()
Integer	getProgramId ()
String	getResolution ()
java.net.URI	getUri ()

String	getUriStr()
String	getVideo()
int	hashCode()
boolean	isMediaSegmentTag()
boolean	isValid(Integer version)
void	setAvgBandwidth(Integer avgBandwidth)
void	setBandwidth(Integer bandwidth)
void	setCodecs(String codecs)
void	setFrameRate(Float frameRate)
void	setProgramId(Integer programId)
void	setResolution(String resolution)
void	setUri(java.net.URI uri)
void	setUriStr(String uri)
void	setVideo(String video)
void	toString(StringBuilder sb)
boolean	validForMasterPlaylist()
boolean	validForMediaPlaylist()
void	write(TagWriter writer, StringBuffer buf)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

TagModelStreamInfCommon

```
public TagModelStreamInfCommon(String tagName,
                                Integer bandwidth,
                                Integer avgBandwidth,
                                String codecs,
                                String resolution,
                                Float frameRate,
                                String video,
                                Integer programId,
                                String uri)
```

TagModelStreamInfCommon

```
protected TagModelStreamInfCommon(String tagName)
```

Methods

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

getBandwidth

```
public Integer getBandwidth()
```

Returns:

the bandwidth

setBandwidth

```
public void setBandwidth(Integer bandwidth)
```

Parameters:

(continued from last page)

bandwidth - the bandwidth to set

getAvgBandwidth

```
public Integer getAvgBandwidth()
```

Returns:

the avgBandwidth

setAvgBandwidth

```
public void setAvgBandwidth(Integer avgBandwidth)
```

Parameters:

avgBandwidth - the avgBandwidth to set

getCodecs

```
public String getCodecs()
```

Returns:

the codecs

setCodecs

```
public void setCodecs(String codecs)
```

Parameters:

codecs - the codecs to set

getResolution

```
public String getResolution()
```

Returns:

the resolution

setResolution

```
public void setResolution(String resolution)
```

Parameters:

resolution - the resolution to set

(continued from last page)

getFrameRate

```
public Float getFrameRate()
```

Returns:

the frameRate

setFrameRate

```
public void setFrameRate(Float frameRate)
```

Parameters:

frameRate - the frameRate to set

getVideo

```
public String getVideo()
```

Returns:

the video

setVideo

```
public void setVideo(String video)
```

Parameters:

video - the video to set

getProgramId

```
public Integer getProgramId()
```

Returns:

the programId

setProgramId

```
public void setProgramId(Integer programId)
```

Parameters:

programId - the programId to set

getUri

```
public java.net.URI getUri()
```

(continued from last page)

Returns:the uri

setUri

```
public void setUri(java.net.URI uri)
```

Parameters:uri - the uri to set

getUriStr

```
public String getUriStr()
```

Returns:the uri

setUriStr

```
public void setUriStr(String uri)
```

Parameters:uri - the uri to set

toString

```
protected void toString(StringBuilder sb)
```

write

```
public void write(TagWriter writer,  
                 StringBuffer buf)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

(continued from last page)

hashCode

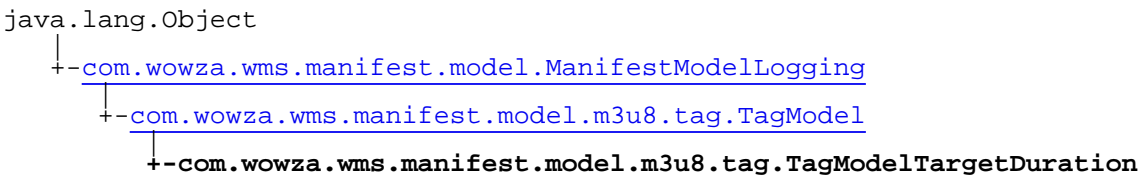
```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelTargetDuration



All Implemented Interfaces:
Cloneable, Cloneable

```
public class TagModelTargetDuration
extends TagModel
```

Fields inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel
attributes , tagName

Constructor Summary	
public	TagModelTargetDuration()
public	TagModelTargetDuration (int duration)

Method Summary	
boolean	equals (Object obj)
Integer	getTargetDuration ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setTargetDuration (Integer targetDuration)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelTargetDuration

```
public TagModelTargetDuration()
```

TagModelTargetDuration

```
public TagModelTargetDuration(int duration)
```

Methods

getTargetDuration

```
public Integer getTargetDuration()
```

Returns:

the targetDuration

setTargetDuration

```
public void setTargetDuration(Integer targetDuration)
```

Parameters:

targetDuration - the targetDuration to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

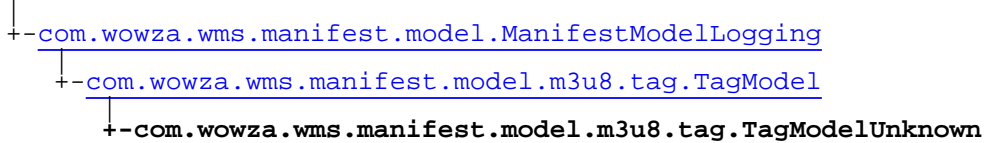
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelUnknown

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelUnknown**
 extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelUnknown()
public	TagModelUnknown (String item, String value)

Method Summary

boolean	equals (Object obj)
String	getValue ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setTag (String tag)
void	setValue (String value)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()

void	write (TagWriter writer)
------	---

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelUnknown

```
public TagModelUnknown()
```

TagModelUnknown

```
public TagModelUnknown(String item,  
                        String value)
```

Methods

setTag

```
public void setTag(String tag)
```

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

(continued from last page)

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

setValue

```
public void setValue(String value)
```

getValue

```
public String getValue()
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

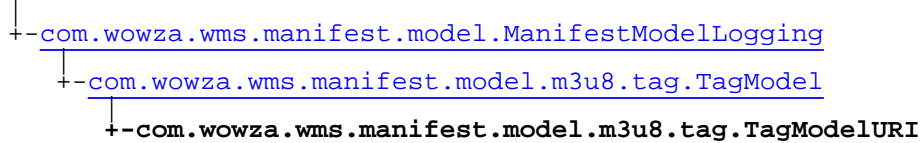
equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelURI

java.lang.Object



All Implemented Interfaces:

Cloneable, Cloneable

public class **TagModelURI**
 extends [TagModel](#)

Fields inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[attributes](#), [tagName](#)

Constructor Summary

public	TagModelURI()
public	TagModelURI(String uri)

Method Summary

boolean	equals (Object obj)
java.net.URI	getUri ()
String	getUriStr ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setUri (java.net.URI uri)
void	setUriStr (String uri)
String	toString ()
boolean	validForMasterPlaylist ()

boolean	validForMediaPlaylist()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelURI

```
public TagModelURI()
```

TagModelURI

```
public TagModelURI(String uri)
```

Methods

getUri

```
public java.net.URI getUri()
```

Returns:

the uri

setUri

```
public void setUri(java.net.URI uri)
```

(continued from last page)

Parameters:

uri - the uri to set

getUriStr

```
public String getUriStr()
```

Returns:

the uri

setUriStr

```
public void setUriStr(String uri)
```

Parameters:

uri - the uri to set

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

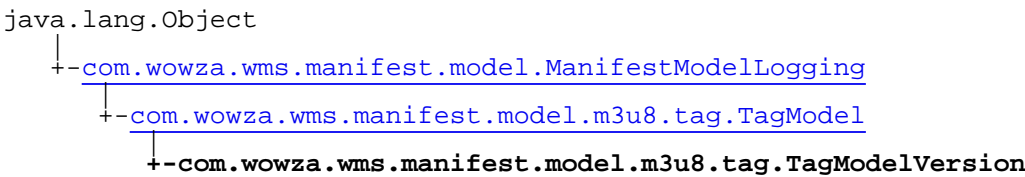
```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```

com.wowza.wms.manifest.model.m3u8.tag

Class TagModelVersion



All Implemented Interfaces:
Cloneable, Cloneable

```
public class TagModelVersion
extends TagModel
```

Fields inherited from class com.wowza.wms.manifest.model.m3u8.tag.TagModel
attributes , tagName

Constructor Summary	
public	TagModelVersion()
public	TagModelVersion (Integer ver)

Method Summary	
boolean	equals (Object obj)
Integer	getVersion ()
int	hashCode ()
boolean	isMediaSegmentTag ()
boolean	isValid (Integer version)
void	setVersion (Integer version)
String	toString ()
boolean	validForMasterPlaylist ()
boolean	validForMediaPlaylist ()
void	write (TagWriter writer)

Methods inherited from class [com.wowza.wms.manifest.model.m3u8.tag.TagModel](#)

[addAllAttributes](#), [addAttribute](#), [clone](#), [equals](#), [equals](#), [findTags](#), [formatAttributes](#), [formatBoolean](#), [formatBooleanAttribute](#), [formatDoubleAttribute](#), [formatEnumAttribute](#), [formatFloat](#), [formatFloatAttribute](#), [formatInteger](#), [formatIntegerAttribute](#), [formatLong](#), [formatLongAttribute](#), [formatQuotedStringAttribute](#), [formatString](#), [formatUnquotedStringAttribute](#), [formatValue](#), [getContextStr](#), [getTag](#), [getTagName](#), [getUnknownAttributes](#), [hashCode](#), [isMediaSegmentTag](#), [isValid](#), [setContextStr](#), [toString](#), [validForMasterPlaylist](#), [validForMediaPlaylist](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

TagModelVersion

```
public TagModelVersion()
```

TagModelVersion

```
public TagModelVersion(Integer ver)
```

Methods

getVersion

```
public Integer getVersion()
```

Returns:

the version

setVersion

```
public void setVersion(Integer version)
```

Parameters:

version - the version to set

(continued from last page)

validForMasterPlaylist

```
public boolean validForMasterPlaylist()
```

validForMediaPlaylist

```
public boolean validForMediaPlaylist()
```

toString

```
public String toString()
```

write

```
public void write(TagWriter writer)  
    throws java.io.IOException
```

isMediaSegmentTag

```
public boolean isMediaSegmentTag()
```

isValid

```
public boolean isValid(Integer version)
```

hashCode

```
public int hashCode()
```

equals

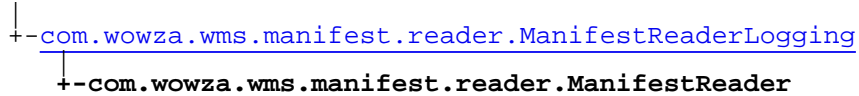
```
public boolean equals(Object obj)
```

Package

com.wowza.wms.manifest.reader

com.wowza.wms.manifest.reader Class ManifestReader

java.lang.Object



Direct Known Subclasses:

[PlaylistReader](#)

public abstract class **ManifestReader**
extends [ManifestReaderLogging](#)

Abstract Manifest Reader base class Provides implementations that are common to all Manifest readers

Constructor Summary

public	ManifestReader()
--------	----------------------------------

Methods inherited from class [com.wowza.wms.manifest.reader.ManifestReaderLogging](#)

[getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#),
[setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Constructors

ManifestReader

public **ManifestReader**()

com.wowza.wms.manifest.reader Class ManifestReaderLogging

java.lang.Object

└--com.wowza.wms.manifest.reader.ManifestReaderLogging

Direct Known Subclasses:

[ManifestReader](#)

public abstract class **ManifestReaderLogging**
extends Object

This class is the base of all the manifest readers providing a standardized mechanism of logging

Constructor Summary

public	ManifestReaderLogging() Constructs an empty Manifest Reader
--------	--

Method Summary

abstract String	getContextStr() Get the context string associated with the Model to include with the log statements
boolean	getDebugLog() Get the current setting for debug logging
void	logDebug (String methodName, String log) log information conditionally based on debug setting using the info level of the logger
void	logError (String methodName, String log) log a string at the error setting
void	logError (String methodName, String log, Throwable e) log a string and a throwable information at the error setting
void	logError (String methodName, Throwable e) log a throwables information at the error setting
void	logInfo (String methodName, String log) Log a string at the info setting
void	logWarn (String methodName, String log) log a string at the warn setting
boolean	setDebugLog (boolean debugLog) Enable/disable debug logging.
void	setUseSystemOut (boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)
boolean	usingSystemOut() Get the setting controlling the debug output to System.out (vs log4j)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

ManifestReaderLogging

```
public ManifestReaderLogging()
```

Constructs an empty Manifest Reader

Methods

setDebugLog

```
public boolean setDebugLog(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

debugLog

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLog

```
public boolean getDebugLog()
```

Get the current setting for debug logging

Returns:

true debug logging is enabled

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

useSystemOut

usingSystemOut

```
public boolean usingSystemOut()
```

Get the setting controlling the debug output to System.out (vs log4j)

Returns:

true if using System.out for logging

(continued from last page)

logDebug

```
public void logDebug(String methodName,  
    String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logInfo

```
public void logInfo(String methodName,  
    String log)
```

Log a string at the info setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logWarn

```
public void logWarn(String methodName,  
    String log)
```

log a string at the warn setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logError

```
public void logError(String methodName,  
    String log)
```

log a string at the error setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log

logError

```
public void logError(String methodName,  
    String log,  
    Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

methodName -- method name to include in the log statement
log -- the string to log
e -- the throwable exception to log the information about

(continued from last page)

logError

```
public void logError(String methodName,  
                    Throwable e)
```

log a throwables information at the error setting

Parameters:

methodName -- method name to include in the log statement

e -- the throwable exception to log the information about

getContextStr

```
protected abstract String getContextStr()
```

Get the context string associated with the Model to include with the log statements

Returns:

String

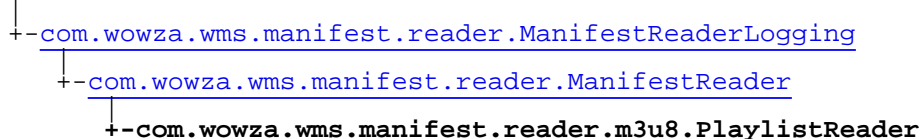
Package

com.wowza.wms.manifest.reader.m3u8

com.wowza.wms.manifest.reader.m3u8

Class PlaylistReader

java.lang.Object



public class **PlaylistReader**
 extends [ManifestReader](#)

Provides implementations that are common to all Playlist readers

Constructor Summary

public	PlaylistReader()
--------	----------------------------------

Method Summary

void	addTagReader (ITagReader reader)
String	getContextStr ()
boolean	getDebugTagReaders ()
void	init () Initialize any internals before use
PlaylistModel	parsePlaylist (java.io.BufferedReader reader)
PlaylistModel	parsePlaylist (java.io.InputStream in)
void	setContextStr (String context) Specific to Playlist reader to set the context in which the playlist is reading.
boolean	setDebugTagReaders (boolean enabled)

Methods inherited from class [com.wowza.wms.manifest.reader.ManifestReaderLogging](#)

[getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

(continued from last page)

Constructors

PlaylistReader

```
public PlaylistReader()
```

Methods

init

```
public void init()
```

Initialize any internals before use

getContextStr

```
public String getContextStr()
```

Get the context string associated with the Model to include with the log statements

setContextStr

```
public void setContextStr(String context)
```

Specific to Playlist reader to set the context in which the playlist is reading. Intent would be this would be the Source stream name to associate the log entries with

Parameters:

context - of the reader

parsePlaylist

```
public PlaylistModel parsePlaylist(java.io.InputStream in)
```

parsePlaylist

```
public PlaylistModel parsePlaylist(java.io.BufferedReader reader)  
    throws java.io.IOException
```

addTagReader

```
public void addTagReader(ITagReader reader)
```

setDebugTagReaders

```
public boolean setDebugTagReaders(boolean enabled)
```

(continued from last page)

getDebugTagReaders

```
public boolean getDebugTagReaders()
```

Package

com.wowza.wms.manifest.reader.m3u8.tag

com.wowza.wms.manifest.reader.m3u8.tag Class Attribute

java.lang.Object

└─com.wowza.wms.manifest.reader.m3u8.tag.Attribute

All Implemented Interfaces:

Cloneable

public class **Attribute**
extends Object
implements Cloneable

Field Summary

public final	name
public final	value

Constructor Summary

public	Attribute (String name, String value)
--------	---

Method Summary

Object	clone ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

name

public final java.lang.String **name**

value

public final java.lang.String **value**

Constructors

Attribute

```
public Attribute(String name,  
                 String value)
```

Methods

toString

```
public String toString()
```

clone

```
public Object clone()  
    throws CloneNotSupportedException
```

com.wowza.wms.manifest.reader.m3u8.tag Interface ITagReader

All Known Implementing Classes:

[TagReaderVersion](#), [TagReaderUnknown](#), [TagReaderTargetDuration](#), [TagReaderStreamInf](#), [TagReaderStart](#), [TagReaderSkip](#), [TagReaderSessionKey](#), [TagReaderSessionData](#), [TagReaderServerControl](#), [TagReaderRenditionReport](#), [TagReaderProgramDateTime](#), [TagReaderPreFetch](#), [TagReaderPlaylistType](#), [TagReaderPartialSegmentINF](#), [TagReaderPartialSegment](#), [TagReaderMediaSequence](#), [TagReaderMedia](#), [TagReaderMap](#), [TagReaderM3U](#), [TagReaderKey](#), [TagReaderIndependentSegments](#), [TagReaderINF](#), [TagReaderIFramesOnly](#), [TagReaderIFrameStreamInf](#), [TagReaderEndList](#), [TagReaderDiscontinuitySequence](#), [TagReaderDiscontinuity](#), [TagReaderByteRange](#), [TagReaderAllowCache](#)

public interface **ITagReader**
extends

Method Summary

abstract String	getContextStr()
abstract boolean	getDebugLogEnabled()
abstract String	getTag()
abstract boolean	getUseSystemOut()
abstract boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
abstract void	setContextStr (String contextStr)
abstract boolean	setDebugLogEnabled (boolean enabled)
abstract void	setUseSystemOut (boolean useSystemOut)

Methods

getTag

```
public abstract String getTag()
```

parseTag

```
public abstract boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

setDebugLogEnabled

public abstract boolean **setDebugLogEnabled**(boolean enabled)

getDebugLogEnabled

public abstract boolean **getDebugLogEnabled**()

setUseSystemOut

public abstract void **setUseSystemOut**(boolean useSystemOut)

getUseSystemOut

public abstract boolean **getUseSystemOut**()

setContextStr

public abstract void **setContextStr**(String contextStr)

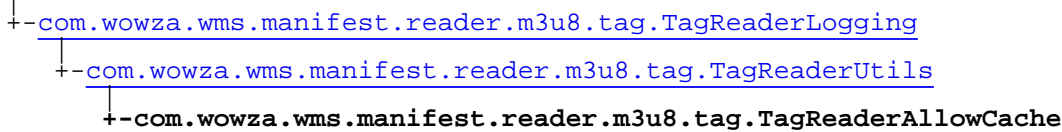
getContextStr

public abstract String **getContextStr**()

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderAllowCache

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderAllowCache**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderAllowCache()
--------	---------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderAllowCache

```
public TagReaderAllowCache()
```

Methods

getTag

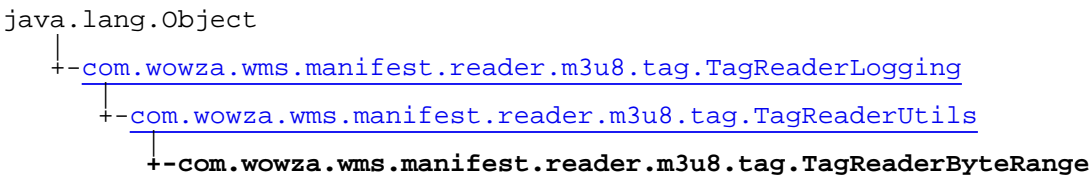
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderByteRange



All Implemented Interfaces:
[ITagReader](#)

public class **TagReaderByteRange**
extends [TagReaderUtils](#)
implements [ITagReader](#)

Constructor Summary

public	TagReaderByteRange()
--------	--------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderByteRange

```
public TagReaderByteRange()
```

Methods

getTag

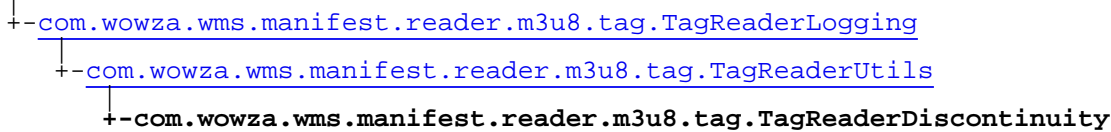
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderDiscontinuity

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderDiscontinuity**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderDiscontinuity()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderDiscontinuity

```
public TagReaderDiscontinuity()
```

Methods

getTag

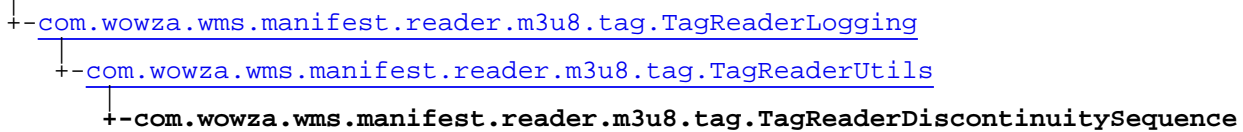
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderDiscontinuitySequence

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderDiscontinuitySequence**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderDiscontinuitySequence()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderDiscontinuitySequence

```
public TagReaderDiscontinuitySequence()
```

Methods

getTag

```
public String getTag()
```

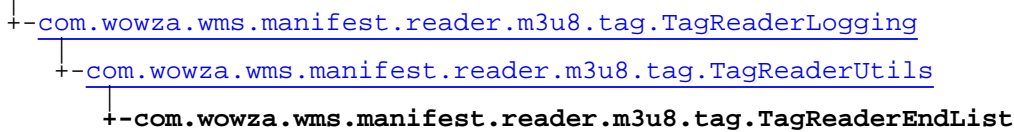
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderEndList

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderEndList**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderEndList()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderEndList

```
public TagReaderEndList()
```

Methods

getTag

```
public String getTag()
```

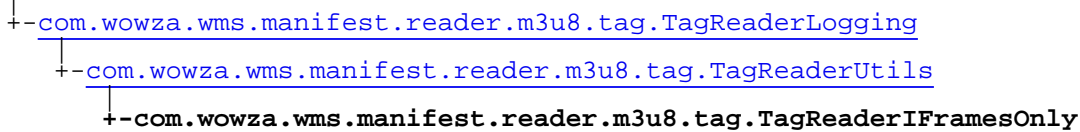
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderIFramesOnly

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderIFramesOnly**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderIFramesOnly()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderIFramesOnly

```
public TagReaderIFramesOnly()
```

Methods

getTag

```
public String getTag()
```

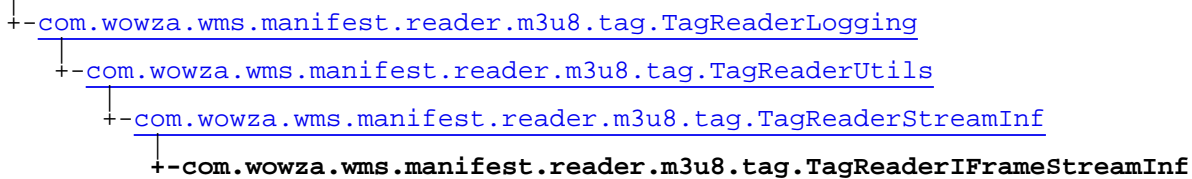
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderIFrameStreamInf

java.lang.Object



All Implemented Interfaces:

[ITagReader](#), [ITagReader](#)

public class **TagReaderIFrameStreamInf**

extends [TagReaderStreamInf](#)

implements [ITagReader](#), [ITagReader](#)

Fields inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderStreamInf](#)

[skippedAttributes](#)

Constructor Summary

public	TagReaderIFrameStreamInf()
--------	--

Method Summary

String	getTag()
--------	--------------------------

boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
---------	---

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderStreamInf](#)

[getTag](#), [parseTag](#), [processCommonAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

TagReaderIFrameStreamInf

```
public TagReaderIFrameStreamInf()
```

Methods

getTag

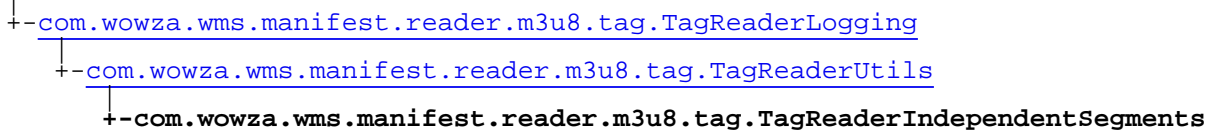
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderIndependentSegments

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderIndependentSegments**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderIndependentSegments()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderIndependentSegments

```
public TagReaderIndependentSegments()
```

Methods

getTag

```
public String getTag()
```

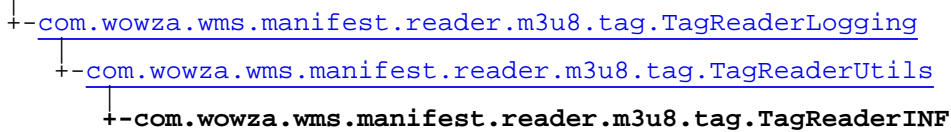
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderINF

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderINF**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderINF ()
--------	----------------------------------

Method Summary

String	getTag ()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderINF

```
public TagReaderINF()
```

Methods

getTag

```
public String getTag()
```

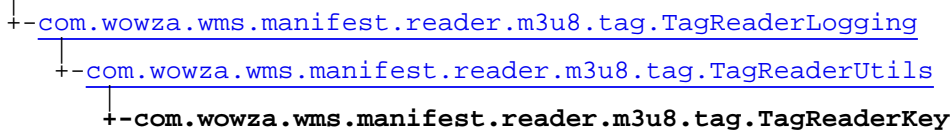
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderKey

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderKey**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderKey()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderKey

```
public TagReaderKey()
```

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderLogging

java.lang.Object

└─com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging

Direct Known Subclasses:

[TagReaderUtils](#)

public abstract class **TagReaderLogging**
extends Object

Constructor Summary

public	TagReaderLogging() Constructs an empty tag parsing logger
--------	--

Method Summary

boolean	getDebugLogEnabled()
boolean	getUseSystemOut() Get the setting controlling the debug output to System.out (vs log4j)
void	logDebug (String context, String tag, String log) log information conditionally based on debug setting using the info level of the logger
void	logError (String context, String tag, String log) log a string at the error setting
void	logError (String context, String tag, String log, Throwable e) log a string and a throwable information at the error setting
void	logError (String context, String tag, Throwable e) log a throwables information at the error setting
void	logInfo (String context, String tag, String log) Log a string at the info setting
void	logWarn (String context, String tag, String log) log a string at the warn setting
boolean	setDebugLogEnabled (boolean debugLog) Enable/disable debug logging.
void	setUseSystemOut (boolean useSystemOut) specify whether to log using System.out rather than the default (log4j)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TagReaderLogging

```
public TagReaderLogging()
```

Constructs an empty tag parsing logger

Methods

setDebugLogEnabled

```
public boolean setDebugLogEnabled(boolean debugLog)
```

Enable/disable debug logging.

Parameters:

debugLog

Returns:

boolean value of the debug log setting before applying the new setting

getDebugLogEnabled

```
public boolean getDebugLogEnabled()
```

setUseSystemOut

```
public void setUseSystemOut(boolean useSystemOut)
```

specify whether to log using System.out rather than the default (log4j)

Parameters:

useSystemOut

getUseSystemOut

```
public boolean getUseSystemOut()
```

Get the setting controlling the debug output to System.out (vs log4j)

Returns:

true if using System.out for logging

logDebug

```
public void logDebug(String context,
                    String tag,
                    String log)
```

log information conditionally based on debug setting using the info level of the logger

Parameters:

log - - the string to log

logInfo

```
public void logInfo(String context,  
                    String tag,  
                    String log)
```

Log a string at the info setting

Parameters:

log - - the string to log

logWarn

```
public void logWarn(String context,  
                    String tag,  
                    String log)
```

log a string at the warn setting

Parameters:

log - - the string to log

logError

```
public void logError(String context,  
                     String tag,  
                     String log)
```

log a string at the error setting

Parameters:

log - - the string to log

logError

```
public void logError(String context,  
                     String tag,  
                     String log,  
                     Throwable e)
```

log a string and a throwable information at the error setting

Parameters:

log - - the string to log

e - - the throwable exception to log the information about

logError

```
public void logError(String context,  
                     String tag,  
                     Throwable e)
```

log a throwables information at the error setting

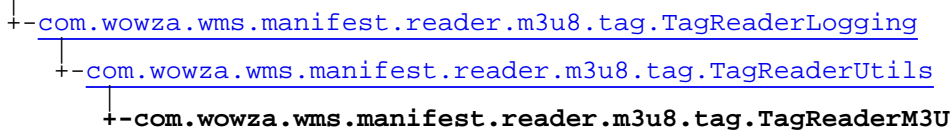
Parameters:

e - - the throwable exception to log the information about

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderM3U

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderM3U**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderM3U()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderM3U

```
public TagReaderM3U()
```

Methods

getTag

```
public String getTag()
```

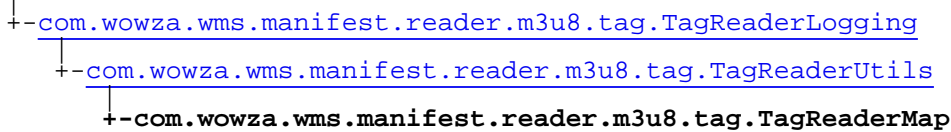
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderMap

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderMap**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderMap()
--------	--------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMap

```
public TagReaderMap()
```

Methods

getTag

```
public String getTag()
```

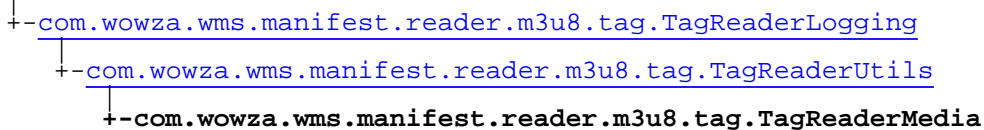
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderMedia

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderMedia**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderMedia()
--------	----------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMedia

```
public TagReaderMedia()
```

Methods

getTag

```
public String getTag()
```

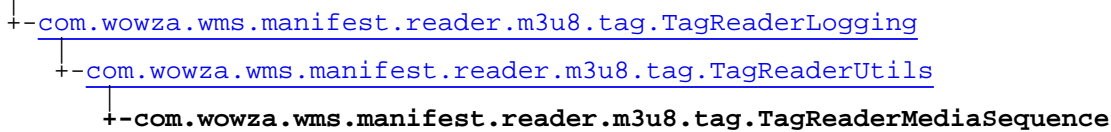
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderMediaSequence

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderMediaSequence**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderMediaSequence ()
--------	--

Method Summary

String	getTag ()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderMediaSequence

```
public TagReaderMediaSequence()
```

Methods

getTag

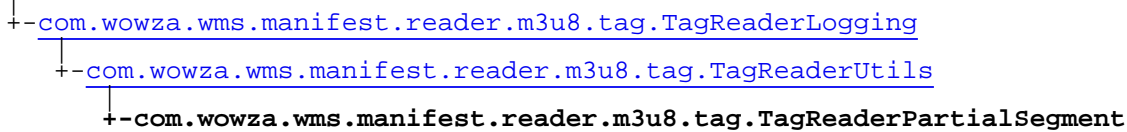
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderPartialSegment

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderPartialSegment**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderPartialSegment ()
--------	--

Method Summary

String	getTag ()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
TagModelPartialSegment	parseTag (String line, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

TagReaderPartialSegment

```
public TagReaderPartialSegment()
```

Methods

getTag

```
public String getTag()
```

parseTag

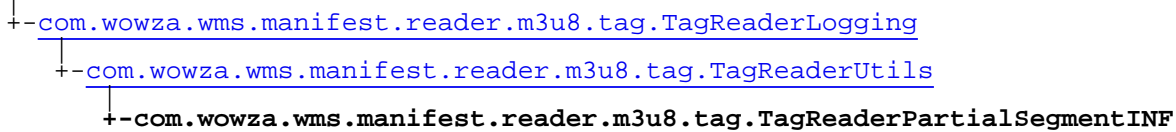
```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

parseTag

```
public TagModelPartialSegment parseTag(String line,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderPartialSegmentINF

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderPartialSegmentINF**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderPartialSegmentINF()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
TagModelPartialSegmentINF	parseTag (String line, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

TagReaderPartialSegmentINF

```
public TagReaderPartialSegmentINF()
```

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

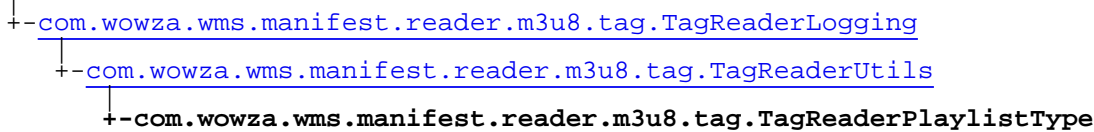
parseTag

```
public TagModelPartialSegmentINF parseTag(String line,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderPlaylistType

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderPlaylistType**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderPlaylistType()
--------	---

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderPlaylistType

```
public TagReaderPlaylistType()
```

Methods

getTag

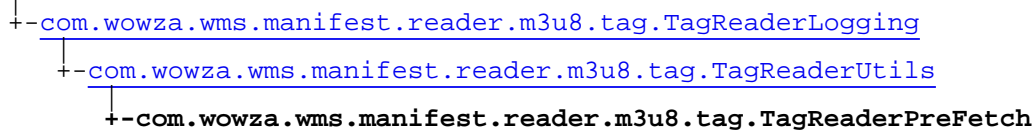
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderPreFetch

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderPreFetch**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderPreFetch()
--------	-------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderPreFetch

```
public TagReaderPreFetch()
```

Methods

getTag

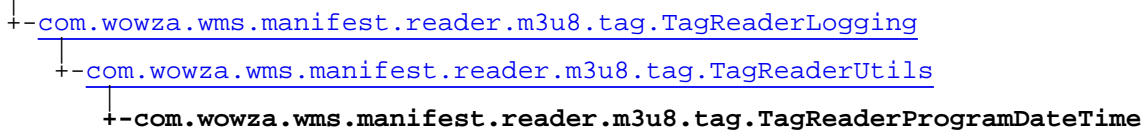
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderProgramDateTime

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderProgramDateTime**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderProgramDateTime()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderProgramDateTime

```
public TagReaderProgramDateTime()
```

Methods

getTag

```
public String getTag()
```

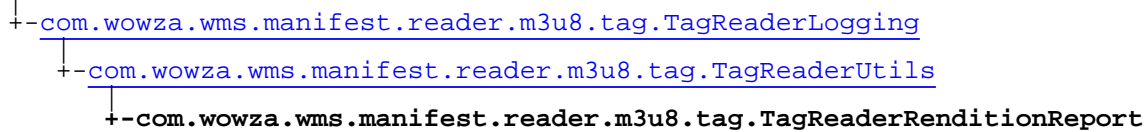
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderRenditionReport

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderRenditionReport**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderRenditionReport()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
TagModelRenditionReport	parseTag (String line, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

TagReaderRenditionReport

```
public TagReaderRenditionReport()
```

Methods

getTag

```
public String getTag()
```

parseTag

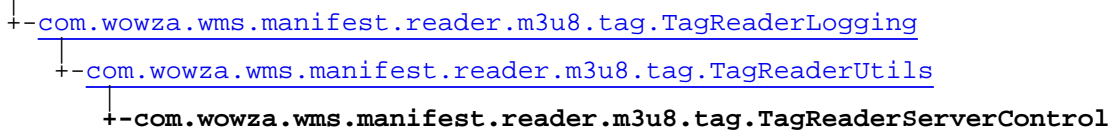
```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

parseTag

```
public TagModelRenditionReport parseTag(String line,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderServerControl

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderServerControl**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderServerControl()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderServerControl

```
public TagReaderServerControl()
```

Methods

getTag

```
public String getTag()
```

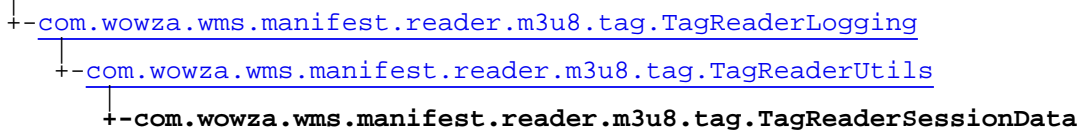
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderSessionData

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderSessionData**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderSessionData()
--------	--

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderSessionData

```
public TagReaderSessionData()
```

Methods

getTag

```
public String getTag()
```

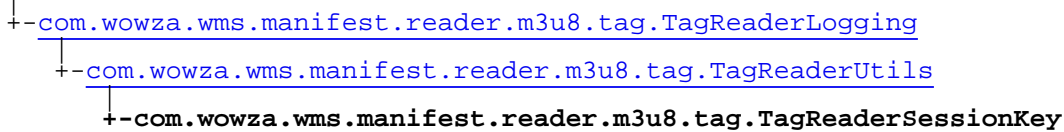
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderSessionKey

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderSessionKey**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderSessionKey()
--------	---------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderSessionKey

```
public TagReaderSessionKey()
```

Methods

getTag

```
public String getTag()
```

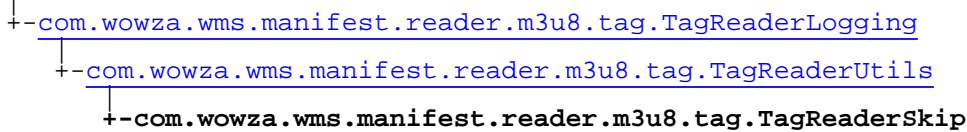
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderSkip

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderSkip**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderSkip()
--------	---------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderSkip

```
public TagReaderSkip()
```

Methods

getTag

```
public String getTag()
```

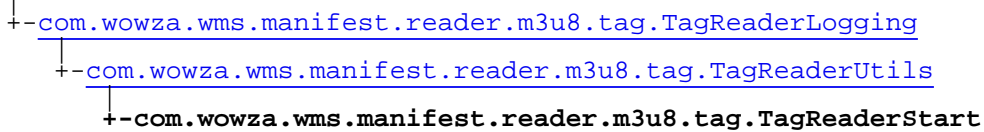
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderStart

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderStart**
 extends [TagReaderUtils](#)
 implements [ITagReader](#)

Constructor Summary

public	TagReaderStart()
--------	----------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderStart

```
public TagReaderStart()
```

Methods

getTag

```
public String getTag()
```

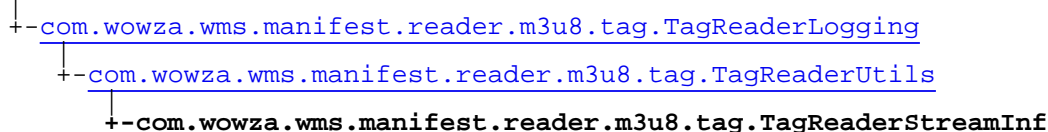
parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderStreamInf

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

Direct Known Subclasses:

[TagReaderIFrameStreamInf](#)

public class **TagReaderStreamInf**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Field Summary

protected	skippedAttributes
-----------	-----------------------------------

Constructor Summary

public	TagReaderStreamInf()
--------	--------------------------------------

Method Summary

String	getTag()
--------	--------------------------

boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)
---------	---

boolean	processCommonAttributes (java.util.List attributes, TagModelStreamInfCommon model, PlaylistModel playlist)
---------	--

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Fields

skippedAttributes

protected java.util.List **skippedAttributes**

Constructors

TagReaderStreamInf

public **TagReaderStreamInf**()

Methods

getTag

public String **getTag**()

parseTag

```
public boolean parseTag(String line,
    java.io.BufferedReader reader,
    PlaylistModel playlist)
```

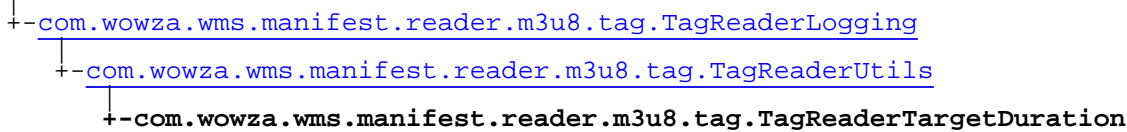
processCommonAttributes

```
protected boolean processCommonAttributes(java.util.List attributes,
    TagModelStreamInfCommon model,
    PlaylistModel playlist)
```


com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderTargetDuration

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderTargetDuration**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderTargetDuration()
--------	---

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderTargetDuration

```
public TagReaderTargetDuration()
```

Methods

getTag

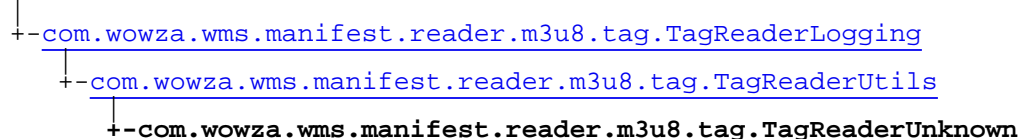
```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag Class TagReaderUnknown

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderUnknown**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderUnknown()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderUnknown

```
public TagReaderUnknown()
```

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderUtils

java.lang.Object

└─ [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)
 └─ **com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils**

Direct Known Subclasses:

[TagReaderVersion](#), [TagReaderUnknown](#), [TagReaderTargetDuration](#), [TagReaderStreamInf](#), [TagReaderStart](#), [TagReaderSkip](#), [TagReaderSessionKey](#), [TagReaderSessionData](#), [TagReaderServerControl](#), [TagReaderRenditionReport](#), [TagReaderProgramDateTime](#), [TagReaderPreFetch](#), [TagReaderPlaylistType](#), [TagReaderPartialSegmentINF](#), [TagReaderPartialSegment](#), [TagReaderMediaSequence](#), [TagReaderMedia](#), [TagReaderMap](#), [TagReaderM3U](#), [TagReaderKey](#), [TagReaderIndependentSegments](#), [TagReaderINF](#), [TagReaderIFramesOnly](#), [TagReaderEndList](#), [TagReaderDiscontinuitySequence](#), [TagReaderDiscontinuity](#), [TagReaderByteRange](#), [TagReaderAllowCache](#)

public abstract class **TagReaderUtils**

extends [TagReaderLogging](#)

Constructor Summary

public	TagReaderUtils ()
--------	-----------------------------------

Method Summary

String	getContextStr ()
static String	getTagKey (String line)
static boolean	isComment (String line)
static boolean	isTag (String line)
java.util.List	parseAttributes (String line, String tag, PlaylistModel playlist)
void	propagateDebug (TagModel model, PlaylistModel playlist)
void	setContextStr (String contextStr)
java.util.List	splitAttributes (String line, String tag, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TagReaderUtils

```
public TagReaderUtils()
```

Methods

setContextStr

```
public void setContextStr(String contextStr)
```

getContextStr

```
public String getContextStr()
```

parseAttributes

```
public java.util.List parseAttributes(String line,
    String tag,
    PlaylistModel playlist)
```

splitAttributes

```
public java.util.List splitAttributes(String line,
    String tag,
    PlaylistModel playlist)
```

propagateDebug

```
protected void propagateDebug(TagModel model,
    PlaylistModel playlist)
```

isTag

```
public static boolean isTag(String line)
```

isComment

```
public static boolean isComment(String line)
```

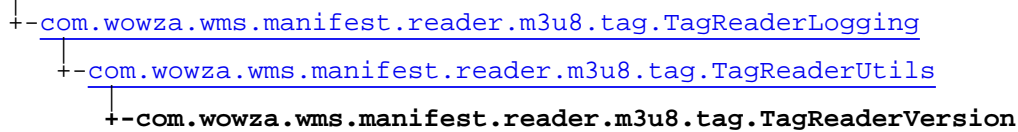
getTagKey

```
public static String getTagKey(String line)
```

com.wowza.wms.manifest.reader.m3u8.tag

Class TagReaderVersion

java.lang.Object



All Implemented Interfaces:

[ITagReader](#)

public class **TagReaderVersion**

extends [TagReaderUtils](#)

implements [ITagReader](#)

Constructor Summary

public	TagReaderVersion()
--------	------------------------------------

Method Summary

String	getTag()
boolean	parseTag (String line, java.io.BufferedReader reader, PlaylistModel playlist)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderUtils](#)

[getContextStr](#), [getTagKey](#), [isComment](#), [isTag](#), [parseAttributes](#), [propagateDebug](#), [setContextStr](#), [splitAttributes](#)

Methods inherited from class [com.wowza.wms.manifest.reader.m3u8.tag.TagReaderLogging](#)

[getDebugLogEnabled](#), [getUseSystemOut](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.manifest.reader.m3u8.tag.ITagReader](#)

[getContextStr](#), [getDebugLogEnabled](#), [getTag](#), [getUseSystemOut](#), [parseTag](#), [setContextStr](#), [setDebugLogEnabled](#), [setUseSystemOut](#)

Constructors

(continued from last page)

TagReaderVersion

```
public TagReaderVersion()
```

Methods

getTag

```
public String getTag()
```

parseTag

```
public boolean parseTag(String line,  
    java.io.BufferedReader reader,  
    PlaylistModel playlist)
```

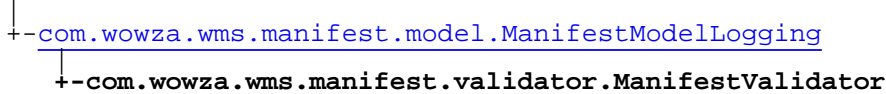
Package

com.wowza.wms.manifest.validator

com.wowza.wms.manifest.validator

Class ManifestValidator

java.lang.Object



All Implemented Interfaces:

Cloneable

Direct Known Subclasses:

[PlaylistValidator](#), [MediaPlaylistValidator](#)

public abstract class **ManifestValidator**

extends [ManifestModelLogging](#)

Abstract Manifest Validator Model base class Provides implementations that are common to all Manifest / Playlist validator models

Constructor Summary

public [ManifestValidator](#)()

Method Summary

abstract boolean [validate](#)([ManifestModel](#) playlist)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

ManifestValidator

public **ManifestValidator**()

Methods

validate

protected abstract boolean **validate**([ManifestModel](#) playlist)

(continued from last page)

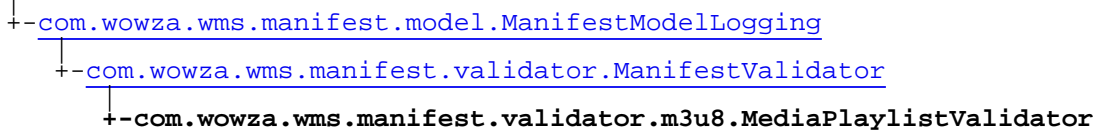
Package

com.wowza.wms.manifest.validator.m3u8

com.wowza.wms.manifest.validator.m3u8

Class MediaPlaylistValidator

java.lang.Object



All Implemented Interfaces:

Cloneable

public class **MediaPlaylistValidator**
 extends [ManifestValidator](#)

Constructor Summary

public	MediaPlaylistValidator (String contextStr)
--------	--

Method Summary

String	getContextStr ()
boolean	validate (ManifestModel manifest)

Methods inherited from class [com.wowza.wms.manifest.validator.ManifestValidator](#)

[validate](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaPlaylistValidator

public **MediaPlaylistValidator**(String contextStr)

Methods

(continued from last page)

validate

```
public boolean validate(ManifestModel manifest)
```

getContextStr

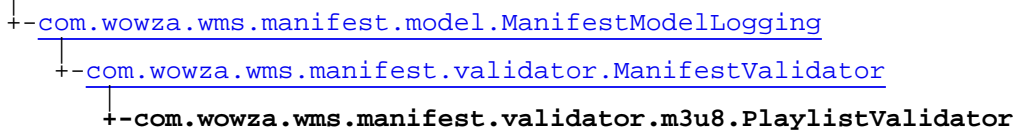
```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

com.wowza.wms.manifest.validator.m3u8

Class PlaylistValidator

java.lang.Object



All Implemented Interfaces:

Cloneable

```

public class PlaylistValidator
extends ManifestValidator
  
```

Constructor Summary

public	PlaylistValidator (String contextStr)
--------	---

Method Summary

String	getContextStr ()
boolean	validate (ManifestModel manifest)

Methods inherited from class [com.wowza.wms.manifest.validator.ManifestValidator](#)

[validate](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

PlaylistValidator

```
public PlaylistValidator(String contextStr)
```

Methods

(continued from last page)

validate

```
public boolean validate(ManifestModel manifest)
```

getContextStr

```
protected String getContextStr()
```

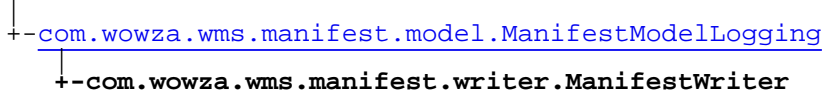
Get the context string associated with the Model to include with the log statements

Package

com.wowza.wms.manifest.writer

com.wowza.wms.manifest.writer Class ManifestWriter

java.lang.Object



All Implemented Interfaces:

Cloneable

Direct Known Subclasses:

[PlaylistWriter](#), [MediaPlaylistWriter](#)

public abstract class **ManifestWriter**

extends [ManifestModelLogging](#)

Abstract Manifest Writer Model base class Provides implementations that are common to all Manifest / Playlist writer models

Field Summary

protected	contextStr
protected final	tagWriter
protected	validatePlaylists

Constructor Summary

public	ManifestWriter (java.io.OutputStream outputStream, String contextStr)
--------	---

Method Summary

String	getContextStr ()
boolean	isValidatePlaylists ()
void	setValidatePlaylists (boolean validatePlaylists)
abstract boolean	write (ManifestModel manifest)
boolean	write (PlaylistModel playlist) Deprecated. Use the more generic write (ManifestModel manifest) instead

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

tagWriter

```
protected final com.wowza.wms.manifest.writer.m3u8.TagWriter tagWriter
```

validatePlaylists

```
protected boolean validatePlaylists
```

contextStr

```
protected java.lang.String contextStr
```

Constructors

ManifestWriter

```
public ManifestWriter(java.io.OutputStream outputStream,  
                      String contextStr)
```

Methods

isValidatePlaylists

```
public boolean isValidatePlaylists()
```

setValidatePlaylists

```
public void setValidatePlaylists(boolean validatePlaylists)
```

getContextStr

```
protected String getContextStr()
```

Get the context string associated with the Model to include with the log statements

(continued from last page)

write

```
public boolean write(PlaylistModel playlist)
    throws java.io.IOException
```

Deprecated. Use the more generic `write(ManifestModel manifest)` instead

Parameters:

playlist - Playlist model to write to the outputStream

Returns:

true if write did not encounter errors

Throws:

IOException

write

```
public abstract boolean write(ManifestModel manifest)
    throws java.io.IOException
```

Parameters:

manifest - Manifest model to write to the outputStream

Returns:

true if write did not encounter errors

Throws:

IOException

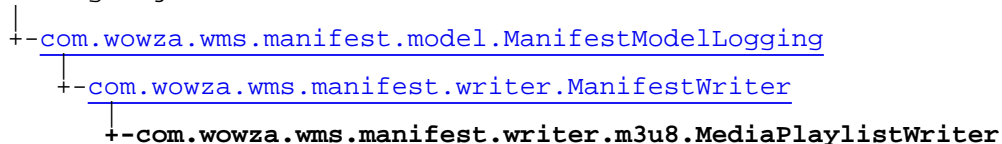
Package

com.wowza.wms.manifest.writer.m3u8

com.wowza.wms.manifest.writer.m3u8

Class MediaPlaylistWriter

java.lang.Object



All Implemented Interfaces:

Cloneable

public class **MediaPlaylistWriter**

extends [ManifestWriter](#)

Fields inherited from class [com.wowza.wms.manifest.writer.ManifestWriter](#)

[contextStr](#), [tagWriter](#), [validatePlaylists](#)

Constructor Summary

public	MediaPlaylistWriter (java.io.OutputStream outputStream, String contextStr)
--------	--

Method Summary

boolean	write (ManifestModel manifest)
---------	---

Methods inherited from class [com.wowza.wms.manifest.writer.ManifestWriter](#)

[getContextStr](#), [isValidatePlaylists](#), [setValidatePlaylists](#), [write](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

MediaPlaylistWriter

```
public MediaPlaylistWriter(java.io.OutputStream outputStream,
                          String contextStr)
```

Methods

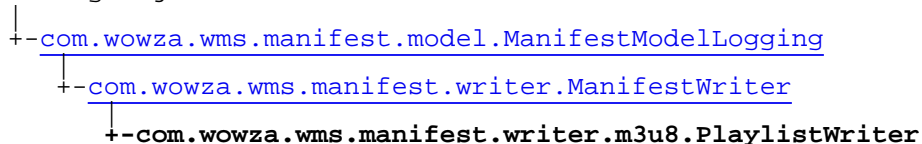
write

```
public final boolean write(ManifestModel manifest)
    throws java.io.IOException
```


com.wowza.wms.manifest.writer.m3u8

Class PlaylistWriter

java.lang.Object



All Implemented Interfaces:

Cloneable

```

public class PlaylistWriter
extends ManifestWriter
  
```

Fields inherited from class [com.wowza.wms.manifest.writer.ManifestWriter](#)

[contextStr](#), [tagWriter](#), [validatePlaylists](#)

Constructor Summary

public	PlaylistWriter (java.io.OutputStream outputStream, String contextStr)
--------	---

Method Summary

boolean	write (ManifestModel manifest)
---------	---

Methods inherited from class [com.wowza.wms.manifest.writer.ManifestWriter](#)

[getContextStr](#), [isValidatePlaylists](#), [setValidatePlaylists](#), [write](#), [write](#)

Methods inherited from class [com.wowza.wms.manifest.model.ManifestModelLogging](#)

[clone](#), [getContextStr](#), [getDebugLog](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setDebugLog](#), [setUseSystemOut](#), [usingSystemOut](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PlaylistWriter

```

public PlaylistWriter(java.io.OutputStream outputStream,
                      String contextStr)
  
```

Methods

write

```
public final boolean write(ManifestModel manifest)  
    throws java.io.IOException
```

com.wowza.wms.manifest.writer.m3u8 Class TagWriter

java.lang.Object

└--com.wowza.wms.manifest.writer.m3u8.TagWriter

public class **TagWriter**
extends Object

Constructor Summary

public	TagWriter (java.io.OutputStreamWriter outputStreamWriter)
--------	---

Method Summary

void	flush ()
void	write (String str)
void	writeLine (String line)
void	writeTag (String tag)
void	writeTag (String tag, String value)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

TagWriter

public **TagWriter**(java.io.OutputStreamWriter outputStreamWriter)

Methods

write

public void **write**(String str)
throws java.io.IOException

(continued from last page)

writeLine

```
public void writeLine(String line)
    throws java.io.IOException
```

writeTag

```
public void writeTag(String tag)
    throws java.io.IOException
```

writeTag

```
public void writeTag(String tag,
    String value)
    throws java.io.IOException
```

flush

```
public void flush()
    throws java.io.IOException
```

Package

com.wowza.wms.media.mp3.model.idtags

com.wowza.wms.media.mp3.model.idtags Class ID3DeserializeFrameResult

java.lang.Object

└─com.wowza.wms.media.mp3.model.idtags.ID3DeserializeFrameResult

public class **ID3DeserializeFrameResult**
extends Object

Field Summary

protected	frame
protected	len

Constructor Summary

public	ID3DeserializeFrameResult()
--------	---

Method Summary

IID3V2Frame	getFrame()
int	getLen()
void	setFrame(IID3V2Frame frame)
void	setLen(int len)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

frame

protected com.wowza.wms.media.mp3.model.idtags.IID3V2Frame **frame**

len

protected int **len**

Constructors

ID3DeserializeFrameResult

```
public ID3DeserializeFrameResult()
```

Methods

getFrame

```
public IID3V2Frame getFrame()
```

setFrame

```
public void setFrame(IID3V2Frame frame)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3DeserializeFramesResult

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3DeserializeFramesResult

public class **ID3DeserializeFramesResult**
extends Object

Field Summary

protected	frames
protected	len

Constructor Summary

public	ID3DeserializeFramesResult()
--------	--

Method Summary

ID3Frames	getFrames()
int	getLen()
void	setFrames(ID3Frames frames)
void	setLen(int len)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

frames

protected com.wowza.wms.media.mp3.model.idtags.ID3Frames **frames**

len

protected int **len**

Constructors

ID3DeserializeFramesResult

```
public ID3DeserializeFramesResult()
```

Methods

getFrames

```
public ID3Frames getFrames()
```

setFrames

```
public void setFrames(ID3Frames frames)
```

getLen

```
public int getLen()
```

setLen

```
public void setLen(int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3Frames

java.lang.Object

└--com.wowza.wms.media.mp3.model.idtags.ID3Frames

public class **ID3Frames**
extends Object

Field Summary

public static final	<u>ID3FOOTER_SIZE</u> Value: 10
public static final	<u>ID3HEADER_SIZE</u> Value: 10
public static final	<u>ID3HEADER_VERSION</u> Value: 1024
public static final	<u>ID3HEADERFLAGS_DEFAULT</u> Value: 0
public static final	<u>ID3HEADERFLAGS_EXPERIMENTAL</u> Value: 32
public static final	<u>ID3HEADERFLAGS_EXTENDED</u> Value: 64
public static final	<u>ID3HEADERFLAGS_FOOTERPRESENT</u> Value: 16
public static final	<u>ID3HEADERFLAGS_UNSYNC</u> Value: 128
public static final	<u>STARTCODE_3DI</u>
public static final	<u>STARTCODE_ID3</u>

Constructor Summary

public	<u>ID3Frames</u> ()
--------	--------------------------------------

Method Summary

void	<u>clear()</u>
static <u>ID3DeserializeFramesResult</u>	<u>deserialize</u> (byte[] buffer, int offset, int len)
static int	<u>deserializeGetSize</u> (byte[] buffer, int offset, int len)
java.util.List	<u>getFrameMapIds</u> ()
java.util.List	<u>getFrames</u> ()
java.util.List	<u>getFramesById</u> (String idStr)
Object	<u>getLock</u> ()
int	<u>getSize</u> ()
boolean	<u>isEmpty</u> ()
static boolean	<u>isID3Footer</u> (byte[] buffer, int offset, int len)
static boolean	<u>isID3Header</u> (byte[] buffer, int offset, int len)
void	<u>putFrame</u> (<u>IID3V2Frame</u> frame)
<u>IID3V2Frame</u>	<u>removeFrame</u> (<u>IID3V2Frame</u> frame)
byte[]	<u>serialize</u> ()
byte[]	<u>serialize</u> (boolean includeHeader, boolean includeFooter, int flags)
static int	<u>serializeFooter</u> (byte[] buffer, int offset, int flags, int size)
static int	<u>serializeHeader</u> (byte[] buffer, int offset, int flags, int size)
int	<u>serializeTags</u> (byte[] buffer, int offset)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

STARTCODE_ID3

public static final byte **STARTCODE_ID3**

(continued from last page)

STARTCODE_3DI

```
public static final byte STARTCODE_3DI
```

ID3HEADER_VERSION

```
public static final int ID3HEADER_VERSION
```

Constant value: **1024**

ID3HEADER_SIZE

```
public static final int ID3HEADER_SIZE
```

Constant value: **10**

ID3FOOTER_SIZE

```
public static final int ID3FOOTER_SIZE
```

Constant value: **10**

ID3HEADERFLAGS_DEFAULT

```
public static final int ID3HEADERFLAGS_DEFAULT
```

Constant value: **0**

ID3HEADERFLAGS_UNSYNC

```
public static final int ID3HEADERFLAGS_UNSYNC
```

Constant value: **128**

ID3HEADERFLAGS_EXTENDED

```
public static final int ID3HEADERFLAGS_EXTENDED
```

Constant value: **64**

ID3HEADERFLAGS_EXPERIMENTAL

```
public static final int ID3HEADERFLAGS_EXPERIMENTAL
```

Constant value: **32**

(continued from last page)

ID3HEADERFLAGS_FOOTERPRESENT

```
public static final int ID3HEADERFLAGS_FOOTERPRESENT
```

Constant value: **16**

Constructors

ID3Frames

```
public ID3Frames()
```

Methods

getLock

```
public Object getLock()
```

clear

```
public void clear()
```

isEmpty

```
public boolean isEmpty()
```

putFrame

```
public void putFrame(IID3V2Frame frame)
```

removeFrame

```
public IID3V2Frame removeFrame(IID3V2Frame frame)
```

getFrames

```
public java.util.List getFrames()
```

getFrameMapIds

```
public java.util.List getFrameMapIds()
```

getFramesById

```
public java.util.List getFramesById(String idStr)
```

getSize

```
public int getSize()
```

serializeTags

```
public int serializeTags(byte[] buffer,  
    int offset)
```

serializeHeader

```
public static int serializeHeader(byte[] buffer,  
    int offset,  
    int flags,  
    int size)
```

serializeFooter

```
public static int serializeFooter(byte[] buffer,  
    int offset,  
    int flags,  
    int size)
```

serialize

```
public byte[] serialize()
```

serialize

```
public byte[] serialize(boolean includeHeader,  
    boolean includeFooter,  
    int flags)
```

isID3Header

```
public static boolean isID3Header(byte[] buffer,  
    int offset,  
    int len)
```

isID3Footer

```
public static boolean isID3Footer(byte[] buffer,  
    int offset,  
    int len)
```

deserializeGetSize

```
public static int deserializeGetSize(byte[] buffer,  
    int offset,  
    int len)
```

deserialize

```
public static ID3DeserializeFramesResult deserialize(byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameAttachedPicture

java.lang.Object

└- [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)
└- [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameAttachedPicture](#)

All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameAttachedPicture**
extends [ID3V2FrameBase](#)

Field Summary

public static final	MIMETYPES_JPEG Value: image/jpeg
public static final	MIMETYPES_PNG Value: image/png
public static final	MIMETYPES_URL Value: -->
public static	PICTUREMAXFILESIZE
public static final	PICTURETYPE_ARTISTLOGO Value: 19
public static final	PICTURETYPE_COVERBACK Value: 4
public static final	PICTURETYPE_COVERFRONT Value: 3
public static final	PICTURETYPE_FILEICON Value: 1
public static final	PICTURETYPE_ILLUSTRATION Value: 18
public static final	PICTURETYPE_MOVIESCREENCAPTURE Value: 16
public static final	PICTURETYPE_OTHER Value: 0

public static final	PICTURETYPE_OTHERFILEICON Value: 2
public static final	PICTURETYPE_PUBLISHERLOGO Value: 20

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameAttachedPicture (String idStr, int flags)
public	ID3V2FrameAttachedPicture ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
String	getMapIdStr ()
String	getMimeType ()
byte[]	getPictureData ()
int	getPictureType ()
int	getTextEncoding ()
boolean	loadFile (java.io.File file)
int	serializeBody (byte[] buffer, int offset)
void	setDescription (String description)
void	setMimeType (String mimeType)

void	setPictureData (byte[] pictureData)
void	setPictureDataAsURL (String urlStr)
void	setPictureType (int pictureType)
void	setTextEncoding (int textEncoding)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

PICTURETYPE_OTHER

```
public static final int PICTURETYPE_OTHER
```

Constant value: **0**

PICTURETYPE_FILEICON

```
public static final int PICTURETYPE_FILEICON
```

Constant value: **1**

PICTURETYPE_OTHERFILEICON

```
public static final int PICTURETYPE_OTHERFILEICON
```

Constant value: **2**

PICTURETYPE_COVERFRONT

```
public static final int PICTURETYPE_COVERFRONT
```

Constant value: **3**

PICTURETYPE_COVERBACK

```
public static final int PICTURETYPE_COVERBACK
```

Constant value: **4**

PICTURETYPE_MOVIESCREENCAPTURE

```
public static final int PICTURETYPE_MOVIESCREENCAPTURE
```

Constant value: **16**

PICTURETYPE_ILLUSTRATION

```
public static final int PICTURETYPE_ILLUSTRATION
```

Constant value: **18**

PICTURETYPE_ARTISTLOGO

```
public static final int PICTURETYPE_ARTISTLOGO
```

Constant value: **19**

PICTURETYPE_PUBLISHERLOGO

```
public static final int PICTURETYPE_PUBLISHERLOGO
```

Constant value: **20**

MIMETYPES_JPEG

```
public static final java.lang.String MIMETYPES_JPEG
```

Constant value: **image/jpeg**

MIMETYPES_PNG

```
public static final java.lang.String MIMETYPES_PNG
```

Constant value: **image/png**

MIMETYPES_URL

```
public static final java.lang.String MIMETYPES_URL
```

Constant value: **-->**

(continued from last page)

PICTUREMAXFILESIZE

```
public static long PICTUREMAXFILESIZE
```

Constructors

ID3V2FrameAttachedPicture

```
public ID3V2FrameAttachedPicture(String idStr,  
                                int flags)
```

ID3V2FrameAttachedPicture

```
public ID3V2FrameAttachedPicture()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                          int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                             int offset,  
                             int len)
```

getMapIdStr

```
public String getMapIdStr()
```

getBodySize

```
public int getBodySize()
```

getTextEncoding

```
public int getTextEncoding()
```

(continued from last page)

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getMimeType

```
public String getMimeType()
```

setMimeType

```
public void setMimeType(String mimeType)
```

getPictureType

```
public int getPictureType()
```

setPictureType

```
public void setPictureType(int pictureType)
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

getPictureData

```
public byte[] getPictureData()
```

setPictureData

```
public void setPictureData(byte[] pictureData)
```

setPictureDataAsURL

```
public void setPictureDataAsURL(String urlStr)
```

(continued from last page)

loadFile

```
public boolean loadFile(java.io.File file)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameBase

java.lang.Object

└─com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase

All Implemented Interfaces:

[IID3V2Frame](#)

Direct Known Subclasses:

[ID3V2FrameURLLinkUserDefined](#), [ID3V2FrameURLLink](#), [ID3V2FrameTextInformationUserDefined](#),
[ID3V2FrameTextInformation](#), [ID3V2FrameSynchronizedText](#), [ID3V2FrameRecommendedBufferSize](#),
[ID3V2FrameRawBytes](#), [ID3V2FramePrivate](#), [ID3V2FrameLinkedInformation](#), [ID3V2FrameComment](#),
[ID3V2FrameAttachedPicture](#)

public abstract class **ID3V2FrameBase**

extends Object

implements [IID3V2Frame](#)

Nested Class Summary

class	ID3V2FrameBase.DeserializeResult ID3V2FrameBase.DeserializeResult
-------	--

Field Summary

public static final	DEFAULT_LANGUAGE Value: eng
public static final	FLAGS_DEFAULT Value: 0
public static final	HEADERSIZE Value: 10
public static final	TAG_APIC Value: APIC
public static final	TAG_COMM Value: COMM
public static final	TAG_LINK Value: LINK
public static final	TAG_PRIV Value: PRIV

public static final	TAG_RBUF Value: RBUF
public static final	TAG_SYLT Value: SYLT
public static final	TAG_TALB Value: TALB
public static final	TAG_TBPM Value: TBPM
public static final	TAG_TCOM Value: TCOM
public static final	TAG_TCON Value: TCON
public static final	TAG_TCOP Value: TCOP
public static final	TAG_TDEN Value: TDEN
public static final	TAG_TDLY Value: TDLY
public static final	TAG_TDOR Value: TDOR
public static final	TAG_TDRC Value: TDRC
public static final	TAG_TDRL Value: TDRL
public static final	TAG_TDTG Value: TDTG
public static final	TAG_TENC Value: TENC
public static final	TAG_TEXT Value: TEXT
public static final	TAG_TFLT Value: TFLT

public static final	TAG_TIPL Value: TIPL
public static final	TAG_TIT1 Value: TIT1
public static final	TAG_TIT2 Value: TIT2
public static final	TAG_TIT3 Value: TIT3
public static final	TAG_TKEY Value: TKEY
public static final	TAG_TLAN Value: TLAN
public static final	TAG_TLEN Value: TLEN
public static final	TAG_TMCL Value: TMCL
public static final	TAG_TMED Value: TMED
public static final	TAG_TMOO Value: TMOO
public static final	TAG_TOAL Value: TOAL
public static final	TAG_TOFN Value: TOFN
public static final	TAG_TOLY Value: TOLY
public static final	TAG_TOPE Value: TOPE
public static final	TAG_TOWN Value: TOWN
public static final	TAG_TPE1 Value: TPE1

public static final	TAG_TPE2 Value: TPE2
public static final	TAG_TPE3 Value: TPE3
public static final	TAG_TPE4 Value: TPE4
public static final	TAG_TPOS Value: TPOS
public static final	TAG_TPRO Value: TPRO
public static final	TAG_TPUB Value: TPUB
public static final	TAG_TRCK Value: TRCK
public static final	TAG_TRSN Value: TRSN
public static final	TAG_TRSO Value: TRSO
public static final	TAG_TSOA Value: TSOA
public static final	TAG_TSOP Value: TSOP
public static final	TAG_TSOT Value: TSOT
public static final	TAG_TSRC Value: TSRC
public static final	TAG_TSSE Value: TSSE
public static final	TAG_TSST Value: TSST
public static final	TAG_TXXX Value: TXXX

public static final	TAG_UNKN Value: UNKN
public static final	TAG_WCOM Value: WCOM
public static final	TAG_WCOP Value: WCOP
public static final	TAG_WOAF Value: WOAF
public static final	TAG_WOAR Value: WOAR
public static final	TAG_WOAS Value: WOAS
public static final	TAG_WORS Value: WORS
public static final	TAG_WPAY Value: WPAY
public static final	TAG_WPUB Value: WPUB
public static final	TAG_WXXX Value: WXXX
public static final	TAGS_TEXTINFORMATION
public static final	TEXTENCODING_DEFAULT Value: UTF-8
public static final	TEXTENCODING_ISO_8859_1 Value: 0
public static final	TEXTENCODING_URL Value: ISO-8859-1
public static final	TEXTENCODING_UTF16 Value: 1
public static final	TEXTENCODING_UTF16BE Value: 2

public static final	TEXTENCODING_UTF8 Value: 3
---------------------	--

Constructor Summary

public	ID3V2FrameBase (String idStr, int flags)
--------	--

Method Summary

static int	byteStringLen (String value, int textEncoding)
static int	byteStringLen (String value, String encodingStr)
static ID3DeserializeFrameResult	deserializeFrame (byte[] buffer, int offset, int len)
static ID3V2FrameBase.DeserializeResult	deserializeString (byte[] buffer, int offset, int len, int textEncoding)
static ID3V2FrameBase.DeserializeResult	deserializeString (byte[] buffer, int offset, int len, String charsetName)
int	getFlags ()
String	getIdStr ()
String	getMapIdStr ()
int	getSize ()
int	serialize (byte[] buffer, int offset)
static int	serializeString (String value, byte[] buffer, int offset, int textEncoding, boolean addZero)
static int	serializeString (String value, byte[] buffer, int offset, String charsetName, boolean addZero)
static int	serializeStringLen (String value, int textEncoding, boolean addZero)
static int	serializeStringLen (String value, String encodingStr, boolean addZero)
void	setFlags (int flags)
void	setIdStr (String idStr)
static String	textEncodingToCharsetName (int textEncoding)
static String	trimTrailingZero (String value)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [`com.wowza.wms.media.mp3.model.idtags.ID3V2Frame`](#)

[`deserializeBody`](#), [`getBodySize`](#), [`getFlags`](#), [`getIdStr`](#), [`getMapIdStr`](#), [`getSize`](#), [`serialize`](#), [`serializeBody`](#), [`setFlags`](#), [`setIdStr`](#)

Fields

HEADERSIZE

```
public static final int HEADERSIZE
```

Constant value: **10**

TEXTENCODING_ISO_8859_1

```
public static final int TEXTENCODING_ISO_8859_1
```

Constant value: **0**

TEXTENCODING_UTF16

```
public static final int TEXTENCODING_UTF16
```

Constant value: **1**

TEXTENCODING_UTF16BE

```
public static final int TEXTENCODING_UTF16BE
```

Constant value: **2**

TEXTENCODING_UTF8

```
public static final int TEXTENCODING_UTF8
```

Constant value: **3**

TEXTENCODING_URL

```
public static final java.lang.String TEXTENCODING_URL
```

Constant value: **ISO-8859-1**

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TEXTENCODING_DEFAULT

```
public static final java.lang.String TEXTENCODING_DEFAULT
```

Constant value: **UTF-8**

DEFAULT_LANGUAGE

```
public static final java.lang.String DEFAULT_LANGUAGE
```

Constant value: **eng**

TAG_UNKN

```
public static final java.lang.String TAG_UNKN
```

Constant value: **UNKN**

TAG_PRIV

```
public static final java.lang.String TAG_PRIV
```

Constant value: **PRIV**

TAG_APIC

```
public static final java.lang.String TAG_APIC
```

Constant value: **APIC**

TAG_LINK

```
public static final java.lang.String TAG_LINK
```

Constant value: **LINK**

TAG_SYLT

```
public static final java.lang.String TAG_SYLT
```

Constant value: **SYLT**

TAG_RBUF

```
public static final java.lang.String TAG_RBUF
```

Constant value: **RBUF**

TAG_TALB

```
public static final java.lang.String TAG_TALB
```

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Constant value: **TALB**

TAG_TBPM

```
public static final java.lang.String TAG_TBPM
```

Constant value: **TBPM**

TAG_TCOM

```
public static final java.lang.String TAG_TCOM
```

Constant value: **TCOM**

TAG_TCON

```
public static final java.lang.String TAG_TCON
```

Constant value: **TCON**

TAG_TCOP

```
public static final java.lang.String TAG_TCOP
```

Constant value: **TCOP**

TAG_TDEN

```
public static final java.lang.String TAG_TDEN
```

Constant value: **TDEN**

TAG_TDLY

```
public static final java.lang.String TAG_TDLY
```

Constant value: **TDLY**

TAG_TDOR

```
public static final java.lang.String TAG_TDOR
```

Constant value: **TDOR**

TAG_TDRC

```
public static final java.lang.String TAG_TDRC
```

Constant value: **TDRC**

TAG_TDRL

```
public static final java.lang.String TAG_TDRL
```

Constant value: **TDRL**

TAG_TDTG

```
public static final java.lang.String TAG_TDTG
```

Constant value: **TDTG**

TAG_TENC

```
public static final java.lang.String TAG_TENC
```

Constant value: **TENC**

TAG_TEXT

```
public static final java.lang.String TAG_TEXT
```

Constant value: **TEXT**

TAG_TFLT

```
public static final java.lang.String TAG_TFLT
```

Constant value: **TFLT**

TAG_TIPL

```
public static final java.lang.String TAG_TIPL
```

Constant value: **TIPL**

TAG_TIT1

```
public static final java.lang.String TAG_TIT1
```

Constant value: **TIT1**

TAG_TIT2

```
public static final java.lang.String TAG_TIT2
```

Constant value: **TIT2**

(continued from last page)

TAG_TIT3

```
public static final java.lang.String TAG_TIT3
```

Constant value: **TIT3**

TAG_TKEY

```
public static final java.lang.String TAG_TKEY
```

Constant value: **TKEY**

TAG_TLAN

```
public static final java.lang.String TAG_TLAN
```

Constant value: **TLAN**

TAG_TLEN

```
public static final java.lang.String TAG_TLEN
```

Constant value: **TLEN**

TAG_TMCL

```
public static final java.lang.String TAG_TMCL
```

Constant value: **TMCL**

TAG_TMED

```
public static final java.lang.String TAG_TMED
```

Constant value: **TMED**

TAG_TMOO

```
public static final java.lang.String TAG_TMOO
```

Constant value: **TMOO**

TAG_TOAL

```
public static final java.lang.String TAG_TOAL
```

Constant value: **TOAL**

TAG_TOFN

```
public static final java.lang.String TAG_TOFN
```

(continued from last page)

Constant value: **TOFN**

TAG_TOLY

```
public static final java.lang.String TAG_TOLY
```

Constant value: **TOLY**

TAG_TOPE

```
public static final java.lang.String TAG_TOPE
```

Constant value: **TOPE**

TAG_TOWN

```
public static final java.lang.String TAG_TOWN
```

Constant value: **TOWN**

TAG_TPE1

```
public static final java.lang.String TAG_TPE1
```

Constant value: **TPE1**

TAG_TPE2

```
public static final java.lang.String TAG_TPE2
```

Constant value: **TPE2**

TAG_TPE3

```
public static final java.lang.String TAG_TPE3
```

Constant value: **TPE3**

TAG_TPE4

```
public static final java.lang.String TAG_TPE4
```

Constant value: **TPE4**

TAG_TPOS

```
public static final java.lang.String TAG_TPOS
```

Constant value: **TPOS**

TAG_TPRO

```
public static final java.lang.String TAG_TPRO
```

Constant value: **TPRO**

TAG_TPUB

```
public static final java.lang.String TAG_TPUB
```

Constant value: **TPUB**

TAG_TRCK

```
public static final java.lang.String TAG_TRCK
```

Constant value: **TRCK**

TAG_TRSN

```
public static final java.lang.String TAG_TRSN
```

Constant value: **TRSN**

TAG_TRSO

```
public static final java.lang.String TAG_TRSO
```

Constant value: **TRSO**

TAG_TSOA

```
public static final java.lang.String TAG_TSOA
```

Constant value: **TSOA**

TAG_TSOP

```
public static final java.lang.String TAG_TSOP
```

Constant value: **TSOP**

TAG_TSOT

```
public static final java.lang.String TAG_TSOT
```

Constant value: **TSOT**

(continued from last page)

TAG_TSRC

```
public static final java.lang.String TAG_TSRC
```

Constant value: **TSRC**

TAG_TSSE

```
public static final java.lang.String TAG_TSSE
```

Constant value: **TSSE**

TAG_TSST

```
public static final java.lang.String TAG_TSST
```

Constant value: **TSST**

TAGS_TEXTINFORMATION

```
public static final java.lang.String TAGS_TEXTINFORMATION
```

TAG_WCOM

```
public static final java.lang.String TAG_WCOM
```

Constant value: **WCOM**

TAG_WCOP

```
public static final java.lang.String TAG_WCOP
```

Constant value: **WCOP**

TAG_WOAF

```
public static final java.lang.String TAG_WOAF
```

Constant value: **WOAF**

TAG_WOAR

```
public static final java.lang.String TAG_WOAR
```

Constant value: **WOAR**

TAG_WOAS

```
public static final java.lang.String TAG_WOAS
```

(continued from last page)

Constant value: **WOAS**

TAG_WORS

```
public static final java.lang.String TAG_WORS
```

Constant value: **WORS**

TAG_WPAY

```
public static final java.lang.String TAG_WPAY
```

Constant value: **WPAY**

TAG_WPUB

```
public static final java.lang.String TAG_WPUB
```

Constant value: **WPUB**

TAG_TXXX

```
public static final java.lang.String TAG_TXXX
```

Constant value: **TXXX**

TAG_COMM

```
public static final java.lang.String TAG_COMM
```

Constant value: **COMM**

TAG_WXXX

```
public static final java.lang.String TAG_WXXX
```

Constant value: **WXXX**

FLAGS_DEFAULT

```
public static final int FLAGS_DEFAULT
```

Constant value: **0**

Constructors

ID3V2FrameBase

```
public ID3V2FrameBase(String idStr,  
                       int flags)
```

Methods

textEncodingToCharsetName

```
public static String textEncodingToCharsetName(int textEncoding)
```

byteStringLen

```
public static int byteStringLen(String value,  
    int textEncoding)
```

byteStringLen

```
public static int byteStringLen(String value,  
    String encodingStr)
```

serializeStringLen

```
public static int serializeStringLen(String value,  
    int textEncoding,  
    boolean addZero)
```

serializeStringLen

```
public static int serializeStringLen(String value,  
    String encodingStr,  
    boolean addZero)
```

trimTrailingZero

```
public static String trimTrailingZero(String value)
```

serializeString

```
public static int serializeString(String value,  
    byte[] buffer,  
    int offset,  
    int textEncoding,  
    boolean addZero)
```

(continued from last page)

serializeString

```
public static int serializeString(String value,  
    byte[] buffer,  
    int offset,  
    String charsetName,  
    boolean addZero)
```

deserializeString

```
public static ID3V2FrameBase.DeserializeResult deserializeString(byte[] buffer,  
    int offset,  
    int len,  
    int textEncoding)
```

deserializeString

```
public static ID3V2FrameBase.DeserializeResult deserializeString(byte[] buffer,  
    int offset,  
    int len,  
    String charsetName)
```

serialize

```
public int serialize(byte[] buffer,  
    int offset)
```

getIdStr

```
public String getIdStr()
```

setIdStr

```
public void setIdStr(String idStr)
```

getFlags

```
public int getFlags()
```

setFlags

```
public void setFlags(int flags)
```

(continued from last page)

getSize

```
public int getSize()
```

getMapIdStr

```
public String getMapIdStr()
```

deserializeFrame

```
public static ID3DeserializeFrameResult deserializeFrame(byte[] buffer,  
    int offset,  
    int len)
```


com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameBase.DeserializeResult

java.lang.Object

└-com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase.DeserializeResult

public static class **ID3V2FrameBase.DeserializeResult**
extends Object

Constructor Summary

public	DeserializeResult()
--------	-------------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

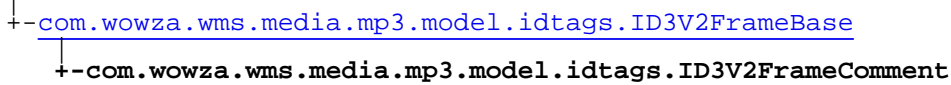
DeserializeResult

public **DeserializeResult()**

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameComment

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameComment**
 extends [ID3V2FrameBase](#)

Field Summary

protected	language
protected	shortDescription
protected	text
protected	textEncoding

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameComment (String idStr, int flags)
public	ID3V2FrameComment (String idStr)
public	ID3V2FrameComment ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
------	--

int	getBodySize()
String	getLanguage()
String	getShortDescription()
String	getText()
int	getTextEncoding()
int	serializeBody (byte[] buffer, int offset)
void	setLanguage (String language)
void	setShortDescription (String shortDescription)
void	setText (String text)
void	setTextEncoding (int textEncoding)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

textEncoding

protected int **textEncoding**

language

protected java.lang.String **language**

shortDescription

protected java.lang.String **shortDescription**

text

protected java.lang.String **text**

Constructors

ID3V2FrameComment

```
public ID3V2FrameComment(String idStr,  
                           int flags)
```

ID3V2FrameComment

```
public ID3V2FrameComment(String idStr)
```

ID3V2FrameComment

```
public ID3V2FrameComment()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                           int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                             int offset,  
                             int len)
```

getBodySize

```
public int getBodySize()
```

(continued from last page)

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getLanguage

```
public String getLanguage()
```

setLanguage

```
public void setLanguage(String language)
```

getShortDescription

```
public String getShortDescription()
```

setShortDescription

```
public void setShortDescription(String shortDescription)
```

getText

```
public String getText()
```

setText

```
public void setText(String text)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameLinkedInformation

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameLinkedInformation**

extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameLinkedInformation (String idStr, int flags)
public	ID3V2FrameLinkedInformation ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
byte[]	getData ()
String	getDescription ()
long	getFrameIdentifier ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)

void	<u>setData</u> (byte[] data)
void	<u>setDescription</u> (String description)
void	<u>setFrameIdentifier</u> (long frameIdentifier)
void	<u>setURL</u> (String url)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameLinkedInformation

```
public ID3V2FrameLinkedInformation(String idStr,
                                   int flags)
```

ID3V2FrameLinkedInformation

```
public ID3V2FrameLinkedInformation()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                          int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                              int offset,
                              int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

getFrameIdentifier

```
public long getFrameIdentifier()
```

setFrameIdentifier

```
public void setFrameIdentifier(long frameIdentifier)
```

getURL

```
public String getURL()
```

setURL

```
public void setURL(String url)
```

getData

```
public byte[] getData()
```

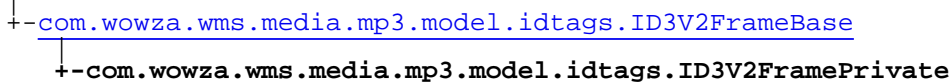
setData

```
public void setData(byte[] data)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FramePrivate

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FramePrivate**
 extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#),
[TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#),
[TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#),
[TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#),
[TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#),
[TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#),
[TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#),
[TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#),
[TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#),
[TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FramePrivate (String idStr, int flags)
public	ID3V2FramePrivate ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
byte[]	getData ()
String	getOwnerIdentifier ()
int	serializeBody (byte[] buffer, int offset)
void	setData (byte[] data)
void	setOwnerIdentifier (String ownerIdentifier)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FramePrivate

```
public ID3V2FramePrivate(String idStr,  
                          int flags)
```

ID3V2FramePrivate

```
public ID3V2FramePrivate()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                           int offset,  
                           int len)
```

getBodySize

```
public int getBodySize()
```

(continued from last page)

getOwnerIdentifier

```
public String getOwnerIdentifier()
```

setOwnerIdentifier

```
public void setOwnerIdentifier(String ownerIdentifier)
```

getData

```
public byte[] getData()
```

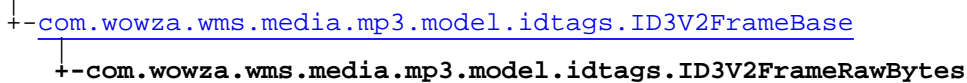
setData

```
public void setData(byte[] data)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameRawBytes

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameRawBytes**

extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameRawBytes (String idStr, int flags)
public	ID3V2FrameRawBytes (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	serializeBody (byte[] buffer, int offset)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameRawBytes

```
public ID3V2FrameRawBytes(String idStr,
                           int flags)
```

ID3V2FrameRawBytes

```
public ID3V2FrameRawBytes(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                          int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                             int offset,
                             int len)
```

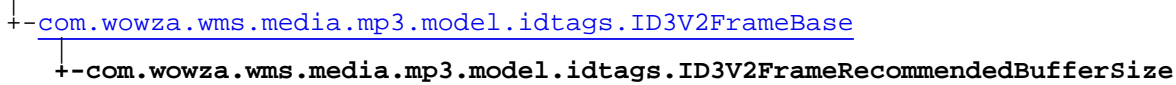
getBodySize

```
public int getBodySize()
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameRecommendedBufferSize

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameRecommendedBufferSize**

extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameRecommendedBufferSize (String idStr, int flags)
public	ID3V2FrameRecommendedBufferSize ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	getBufferSize ()
byte	getEmbeddedFlag ()
long	getOffsetToNextTag ()
int	serializeBody (byte[] buffer, int offset)
void	setBufferSize (int bufferSize)

void	<u>setEmbeddedFlag</u> (byte embeddedFlag)
void	<u>setOffsetToNextTag</u> (long offsetToNextTag)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameRecommendedBufferSize

```
public ID3V2FrameRecommendedBufferSize(String idStr,
                                       int flags)
```

ID3V2FrameRecommendedBufferSize

```
public ID3V2FrameRecommendedBufferSize()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                          int offset,
                          int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getBufferSize

```
public int getBufferSize()
```

setBufferSize

```
public void setBufferSize(int bufferSize)
```

getEmbeddedFlag

```
public byte getEmbeddedFlag()
```

setEmbeddedFlag

```
public void setEmbeddedFlag(byte embeddedFlag)
```

getOffsetToNextTag

```
public long getOffsetToNextTag()
```

setOffsetToNextTag

```
public void setOffsetToNextTag(long offsetToNextTag)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameSynchronizedText

java.lang.Object

└- [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)
└- [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameSynchronizedText](#)

All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameSynchronizedText**
extends [ID3V2FrameBase](#)

Field Summary

public static final	CONTENTTYPE_CHORD Value: 5
public static final	CONTENTTYPE_EVENTS Value: 4
public static final	CONTENTTYPE_LYRICS Value: 1
public static final	CONTENTTYPE_MOVEMENT Value: 3
public static final	CONTENTTYPE_OTHER Value: 0
public static final	CONTENTTYPE_TRANSCRIPTION Value: 2
public static final	CONTENTTYPE_TRIVIA Value: 6
public static final	CONTENTTYPE_URLIMAGES Value: 8
public static final	CONTENTTYPE_URLWEBPAGES Value: 7
public static final	TIMESTAMPFORMAT_MILLISECONDS Value: 2

public static final	<u>TIMESTAMPFORMAT_MPEG</u> Value: 1
---------------------	--

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	<u>ID3V2FrameSynchronizedText</u> (String idStr, int flags)
public	<u>ID3V2FrameSynchronizedText</u> ()

Method Summary

void	<u>addContentDescriptor</u> (<u>ID3V2FrameSynchronizedTextDescriptor</u> contentDescriptor)
void	<u>addContentDescriptor</u> (long timecode, String value)
void	<u>deserializeBody</u> (byte[] buffer, int offset, int len)
int	<u>getBodySize</u> ()
java.util.List	<u>getContentDescriptors</u> ()
byte	<u>getContentType</u> ()
String	<u>getLanguage</u> ()
int	<u>getTextEncoding</u> ()
byte	<u>getTimeStampFormat</u> ()
int	<u>serializeBody</u> (byte[] buffer, int offset)
void	<u>setContentType</u> (byte contentType)
void	<u>setLanguage</u> (String language)
void	<u>setTextEncoding</u> (int textEncoding)

void	<u>setTimeStampFormat</u> (byte timeStampFormat)
------	--

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Fields

CONTENTTYPE_OTHER

```
public static final int CONTENTTYPE_OTHER
```

Constant value: **0**

CONTENTTYPE_LYRICS

```
public static final int CONTENTTYPE_LYRICS
```

Constant value: **1**

CONTENTTYPE_TRANSCRIPTION

```
public static final int CONTENTTYPE_TRANSCRIPTION
```

Constant value: **2**

CONTENTTYPE_MOVEMENT

```
public static final int CONTENTTYPE_MOVEMENT
```

Constant value: **3**

CONTENTTYPE_EVENTS

```
public static final int CONTENTTYPE_EVENTS
```

Constant value: **4**

CONTENTTYPE_CHORD

```
public static final int CONTENTTYPE_CHORD
```

Constant value: **5**

CONTENTTYPE_TRIVIA

```
public static final int CONTENTTYPE_TRIVIA
```

Constant value: **6**

CONTENTTYPE_URLWEBPAGES

```
public static final int CONTENTTYPE_URLWEBPAGES
```

Constant value: **7**

CONTENTTYPE_URLIMAGES

```
public static final int CONTENTTYPE_URLIMAGES
```

Constant value: **8**

TIMESTAMPFORMAT_MPEG

```
public static final int TIMESTAMPFORMAT_MPEG
```

Constant value: **1**

TIMESTAMPFORMAT_MILLISECONDS

```
public static final int TIMESTAMPFORMAT_MILLISECONDS
```

Constant value: **2**

Constructors

ID3V2FrameSynchronizedText

```
public ID3V2FrameSynchronizedText(String idStr,  
                                   int flags)
```

ID3V2FrameSynchronizedText

```
public ID3V2FrameSynchronizedText()
```

Methods

(continued from last page)

serializeBody

```
public int serializeBody(byte[] buffer,  
    int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
    int offset,  
    int len)
```

getBodySize

```
public int getBodySize()
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getLanguage

```
public String getLanguage()
```

setLanguage

```
public void setLanguage(String language)
```

getTimeStampFormat

```
public byte getTimeStampFormat()
```

setTimeStampFormat

```
public void setTimeStampFormat(byte timeStampFormat)
```

(continued from last page)

getContentType

```
public byte getContentType()
```

setContentType

```
public void setContentType(byte contentType)
```

getContentDescriptors

```
public java.util.List getContentDescriptors()
```

addContentDescriptor

```
public void addContentDescriptor(ID3V2FrameSynchronizedTextDescriptor  
contentDescriptor)
```

addContentDescriptor

```
public void addContentDescriptor(long timecode,  
                                String value)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2FrameSynchronizedTextDescriptor

java.lang.Object

└─com.wowza.wms.media.mp3.model.idtags.ID3V2FrameSynchronizedTextDescriptor

public class **ID3V2FrameSynchronizedTextDescriptor**
extends Object

Constructor Summary

public	ID3V2FrameSynchronizedTextDescriptor()
public	ID3V2FrameSynchronizedTextDescriptor (long timecode, String value)

Method Summary

long	getTimecode()
String	getValue()
void	setTimecode (long timecode)
void	setValue (String value)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ID3V2FrameSynchronizedTextDescriptor

public **ID3V2FrameSynchronizedTextDescriptor**()

ID3V2FrameSynchronizedTextDescriptor

public **ID3V2FrameSynchronizedTextDescriptor**(long timecode,
String value)

Methods

(continued from last page)

getTimecode

```
public long getTimecode()
```

setTimecode

```
public void setTimecode(long timecode)
```

getValue

```
public String getValue()
```

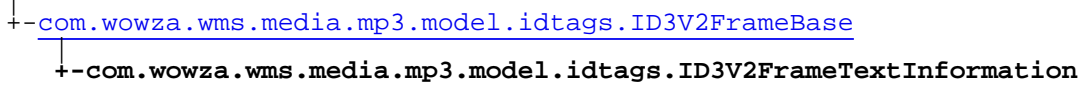
setValue

```
public void setValue(String value)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameTextInformation

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameTextInformation**
 extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#),
[TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#),
[TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#),
[TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#),
[TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#),
[TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#),
[TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#),
[TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#),
[TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#),
[TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameTextInformation (String idStr, int flags)
public	ID3V2FrameTextInformation (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
int	getTextEncoding ()
String	getValue ()
int	serializeBody (byte[] buffer, int offset)
void	setTextEncoding (int textEncoding)
void	setValue (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameTextInformation

```
public ID3V2FrameTextInformation(String idStr,  
                                int flags)
```

ID3V2FrameTextInformation

```
public ID3V2FrameTextInformation(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                          int offset,  
                          int len)
```

getBodySize

```
public int getBodySize()
```

(continued from last page)

getValue

```
public String getValue()
```

setValue

```
public void setValue(String value)
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameTextInformationUserDefined

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameTextInformationUserDefined**
 extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#),
[TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#),
[TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#),
[TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#),
[TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#),
[TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#),
[TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#),
[TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#),
[TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#),
[TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameTextInformationUserDefined (String idStr, int flags)
public	ID3V2FrameTextInformationUserDefined (String idStr)
public	ID3V2FrameTextInformationUserDefined ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
int	getTextEncoding ()
String	getValue ()
int	serializeBody (byte[] buffer, int offset)

void	setDescription (String description)
void	setTextEncoding (int textEncoding)
void	setValue (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined(String idStr,
                                             int flags)
```

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined(String idStr)
```

ID3V2FrameTextInformationUserDefined

```
public ID3V2FrameTextInformationUserDefined()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                          int offset)
```

(continued from last page)

deserializeBody

```
public void deserializeBody(byte[] buffer,  
    int offset,  
    int len)
```

getBodySize

```
public int getBodySize()
```

getValue

```
public String getValue()
```

setValue

```
public void setValue(String value)
```

getTextEncoding

```
public int getTextEncoding()
```

setTextEncoding

```
public void setTextEncoding(int textEncoding)
```

getDescription

```
public String getDescription()
```

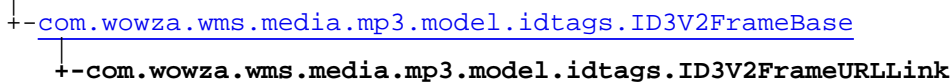
setDescription

```
public void setDescription(String description)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameURLLink

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameURLLink**

extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOP](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameURLLink (String idStr, int flags)
public	ID3V2FrameURLLink (String idStr)

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)
void	setURL (String value)

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameURLLink

```
public ID3V2FrameURLLink(String idStr,  
                           int flags)
```

ID3V2FrameURLLink

```
public ID3V2FrameURLLink(String idStr)
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,  
                           int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,  
                              int offset,  
                              int len)
```

getBodySize

```
public int getBodySize()
```


(continued from last page)

getURL

```
public String getURL()
```

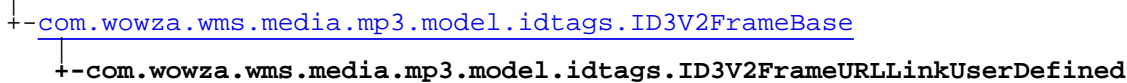
setURL

```
public void setURL(String value)
```

com.wowza.wms.media.mp3.model.idtags

Class ID3V2FrameURLLinkUserDefined

java.lang.Object



All Implemented Interfaces:

[IID3V2Frame](#)

public class **ID3V2FrameURLLinkUserDefined**

extends [ID3V2FrameBase](#)

Fields inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[DEFAULT_LANGUAGE](#), [FLAGS_DEFAULT](#), [HEADERSIZE](#), [TAG_APIC](#), [TAG_COMM](#), [TAG_LINK](#), [TAG_PRIV](#), [TAG_RBUF](#), [TAG_SYLT](#), [TAG_TALB](#), [TAG_TBPM](#), [TAG_TCOM](#), [TAG_TCON](#), [TAG_TCOPI](#), [TAG_TDEN](#), [TAG_TDLY](#), [TAG_TDOR](#), [TAG_TDRC](#), [TAG_TDRL](#), [TAG_TDTG](#), [TAG_TENC](#), [TAG_TEXT](#), [TAG_TFLT](#), [TAG_TIPL](#), [TAG_TIT1](#), [TAG_TIT2](#), [TAG_TIT3](#), [TAG_TKEY](#), [TAG_TLAN](#), [TAG_TLEN](#), [TAG_TMCL](#), [TAG_TMED](#), [TAG_TMOO](#), [TAG_TOAL](#), [TAG_TOFN](#), [TAG_TOLY](#), [TAG_TOPE](#), [TAG_TOWN](#), [TAG_TPE1](#), [TAG_TPE2](#), [TAG_TPE3](#), [TAG_TPE4](#), [TAG_TPOS](#), [TAG_TPRO](#), [TAG_TPUB](#), [TAG_TRCK](#), [TAG_TRSN](#), [TAG_TRSO](#), [TAG_TSOA](#), [TAG_TSOP](#), [TAG_TSOT](#), [TAG_TSRC](#), [TAG_TSSE](#), [TAG_TSST](#), [TAG_TXXX](#), [TAG_UNKN](#), [TAG_WCOM](#), [TAG_WCOP](#), [TAG_WOAF](#), [TAG_WOAR](#), [TAG_WOAS](#), [TAG_WORS](#), [TAG_WPAY](#), [TAG_WPUB](#), [TAG_WXXX](#), [TAGS_TEXTINFORMATION](#), [TEXTENCODING_DEFAULT](#), [TEXTENCODING_ISO_8859_1](#), [TEXTENCODING_URL](#), [TEXTENCODING_UTF16](#), [TEXTENCODING_UTF16BE](#), [TEXTENCODING_UTF8](#)

Constructor Summary

public	ID3V2FrameURLLinkUserDefined (String idStr, int flags)
public	ID3V2FrameURLLinkUserDefined (String idStr)
public	ID3V2FrameURLLinkUserDefined ()

Method Summary

void	deserializeBody (byte[] buffer, int offset, int len)
int	getBodySize ()
String	getDescription ()
String	getURL ()
int	serializeBody (byte[] buffer, int offset)
void	setDescription (String description)

void	setURL (String value)
------	---------------------------------------

Methods inherited from class [com.wowza.wms.media.mp3.model.idtags.ID3V2FrameBase](#)

[byteStringLen](#), [byteStringLen](#), [deserializeFrame](#), [deserializeString](#), [deserializeString](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeString](#), [serializeString](#), [serializeStringLen](#), [serializeStringLen](#), [setFlags](#), [setIdStr](#), [textEncodingToCharsetName](#), [trimTrailingZero](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.media.mp3.model.idtags.IID3V2Frame](#)

[deserializeBody](#), [getBodySize](#), [getFlags](#), [getIdStr](#), [getMapIdStr](#), [getSize](#), [serialize](#), [serializeBody](#), [setFlags](#), [setIdStr](#)

Constructors

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined(String idStr,
                                     int flags)
```

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined(String idStr)
```

ID3V2FrameURLLinkUserDefined

```
public ID3V2FrameURLLinkUserDefined()
```

Methods

serializeBody

```
public int serializeBody(byte[] buffer,
                        int offset)
```

deserializeBody

```
public void deserializeBody(byte[] buffer,
                          int offset,
                          int len)
```

(continued from last page)

getBodySize

```
public int getBodySize()
```

getURL

```
public String getURL()
```

setURL

```
public void setURL(String value)
```

getDescription

```
public String getDescription()
```

setDescription

```
public void setDescription(String description)
```

com.wowza.wms.media.mp3.model.idtags Class ID3V2Utils

java.lang.Object

└─com.wowza.wms.media.mp3.model.idtags.ID3V2Utils

public class **ID3V2Utils**
extends Object

Constructor Summary

public	ID3V2Utils()
--------	------------------------------

Method Summary

static int	byteArrayToIntSafeSync (byte[] b, int offset, int count)
static long	byteArrayToLongSafeSync (byte[] b, int offset, int count)
static void	intToByteArraySafeSync (int value, byte[] buffer, int offset, int size)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ID3V2Utils

public **ID3V2Utils**()

Methods

byteArrayToLongSafeSync

public static long **byteArrayToLongSafeSync**(byte[] b,
int offset,
int count)

(continued from last page)

byteArrayToIntSafeSync

```
public static int byteArrayToIntSafeSync(byte[] b,  
    int offset,  
    int count)
```

intToByteArraySafeSync

```
public static void intToByteArraySafeSync(int value,  
    byte[] buffer,  
    int offset,  
    int size)
```

com.wowza.wms.media.mp3.model.idtags Interface IID3V2Frame

All Known Implementing Classes:
[IID3V2FrameBase](#)

public interface **IID3V2Frame**
extends

Method Summary

abstract void	deserializeBody (byte[] buffer, int offset, int len)
abstract int	getBodySize ()
abstract int	getFlags ()
abstract String	getIdStr ()
abstract String	getMapIdStr ()
abstract int	getSize ()
abstract int	serialize (byte[] buffer, int offset)
abstract int	serializeBody (byte[] buffer, int offset)
abstract void	setFlags (int flags)
abstract void	setIdStr (String idStr)

Methods

getIdStr

public abstract String **getIdStr**()

setIdStr

public abstract void **setIdStr**(String idStr)

(continued from last page)

getMapIdStr

```
public abstract String getMapIdStr()
```

getFlags

```
public abstract int getFlags()
```

setFlags

```
public abstract void setFlags(int flags)
```

getSize

```
public abstract int getSize()
```

getBodySize

```
public abstract int getBodySize()
```

deserializeBody

```
public abstract void deserializeBody(byte[] buffer,  
    int offset,  
    int len)
```

serializeBody

```
public abstract int serializeBody(byte[] buffer,  
    int offset)
```

serialize

```
public abstract int serialize(byte[] buffer,  
    int offset)
```

Package

com.wowza.wms.mediacache.impl

com.wowza.wms.mediache.impl Interface IMediaCacheHTTPByteReader

public interface **IMediaCacheHTTPByteReader**
extends

Interface for HTTP byte reader implementations

This should be used in conjunction with IMediaCacheItemHTTPReaderFactory and any implementation has to return head and read results.

Method Summary

abstract void	<u>close()</u> Close any open connection.
abstract MediaCacheHTTPByteReaderResult	<u>head</u> (String path)
abstract void	<u>init</u> () Initialize the byte reader.
abstract MediaCacheHTTPByteReaderResult	<u>read</u> (String path, long pos, int flen)
abstract void	<u>setConnectionTimeout</u> (int connectionTimeout) Set the connection timeout, milliseconds.
abstract void	<u>setDestinationAddress</u> (String host, int port) Set the destination host and port where to retrieve data.
abstract void	<u>setMaxRetries</u> (int maxRetries) Set the maximum number retries.
abstract void	<u>setProxyAddress</u> (String host, int port) Set the proxy host and port.
abstract void	<u>setReadTimeout</u> (int readTimeout) Set the read timeout for data, milliseconds.
abstract void	<u>setReceiveBufferSize</u> (int receiveBufferSize) Set the receive buffer size, byte size.
abstract void	<u>setRequestFullURL</u> (boolean requestFullURL) Flag to set if a full URL is required as part of the head/read request.

abstract void

[setSendBufferSize](#)(int sendBufferSize)

Set the send buffer size, byte size.

Methods

init

```
public abstract void init()
```

Initialize the byte reader.

head

```
public abstract MediaCacheHTTPByteReaderResult head(String path)
```

Retrieve asset information via a HEAD request. Parameters are the path of the object.

This of course does not need to be an actual head command to the remote side, but something that returns the asset length and preferably last modified time.

Assume `contentLength` and `lastModified` were populated from any code implemented you can then create a return object with.

```
long startTime = System.nanoTime();  
ret = new MediaCacheHTTPByteReaderResult();  
ret.status = 200;  
ret.contentLength = contentLength;  
ret.lastModified = lastModified;  
ret.elapsedTime = (System.nanoTime()-startTime)/1000000L;
```

A return status other than 200 may cause failure within MediaCache and consequently cause any client requests to be rejected.

Parameters:

path

Returns:

MediaCacheHTTPByteReaderResult

(continued from last page)

read

```
public abstract MediaCacheHTTPByteReaderResult read(String path,  
    long pos,  
    int flen)
```

Retrieve data from the remote service/server. Parameters are the path of the object, the current position into the object and the amount of data to get (flen).

The remote source should support HTTP/1.1 so partial requests can be made.

The data size returned in the MediaCacheHTTPByteReadResult must match the flen requested otherwise the data will be considered invalid.

Consider you have an input and out byteStream object

```
long startTime = System.nanoTime();  
InputStream input = myConnectionToSomeWhere.getInputStream();  
ByteArrayOutputStream byteStream = new ByteArrayOutputStream();  
byte[] buffer = new byte[this.receiveBufferSize];  
int n = - 1;  
while ( (n = input.read(buffer)) != -1)  
{  
    byteStream.write(buffer, 0, n);  
}
```

```
ret = new MediaCacheHTTPByteReaderResult();  
ret.buffer = byteStream.toByteArray();  
ret.status = 206;  
ret.headerLength = 0;  
ret.contentLength = byteStream.size();  
ret.roffset = requestStart;  
ret.rlen = requestLength;  
ret.lastModified = this.mediaCacheConnection.getLastModified();  
ret.elapsedTime = (System.nanoTime()-startTime)/1000000L;
```

A return status other than ≥ 200 or ≤ 300 may cause failure within MediaCache and consequently cause any client requests to be rejected.

Parameters:

- path
- pos
- flen

Returns:

(continued from last page)

MediaCacheHTTPByteReaderResult

close

```
public abstract void close()
```

Close any open connection.

setDestinationAddress

```
public abstract void setDestinationAddress(String host,  
int port)
```

Set the destination host and port where to retrieve data.

Parameters:

host
port

setProxyAddress

```
public abstract void setProxyAddress(String host,  
int port)
```

Set the proxy host and port. It is up to the specific byte reader implementation to implement support for proxy connections.

Parameters:

host
port

setRequestFullURL

```
public abstract void setRequestFullURL(boolean requestFullURL)
```

Flag to set if a full URL is required as part of the head/read request. It is up to the specific byte reader implementation to use this flag.

Parameters:

requestFullURL

setReadTimeout

```
public abstract void setReadTimeout(int readTimeout)
```

Set the read timeout for data, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

readTimeout

setMaxRetries

```
public abstract void setMaxRetries(int maxRetries)
```

Set the maximum number retries. It is up to the specific byte reader implementation to use this setting.

Parameters:

maxRetries

(continued from last page)

setConnectionTimeout

```
public abstract void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

connectionTimeout

setSendBufferSize

```
public abstract void setSendBufferSize(int sendBufferSize)
```

Set the send buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

sendBufferSize

setReceiveBufferSize

```
public abstract void setReceiveBufferSize(int receiveBufferSize)
```

Set the receive buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

receiveBufferSize

com.wowza.wms.mediacache.impl Interface IMediaCacheItemHTTPReaderFactory

public interface **IMediaCacheItemHTTPReaderFactory**
extends **IGenericPoolFactory**

Interface for HTTP byte reader factory implementations

You need to have a **IMediaCacheItemHTTPByteReader** implementation available to use with your factory implementation.

In order to make implementation simpler and safer you should extend the factory base with

MediaCacheItemHTTPCustomFactory extends **MediaCacheItemHTTPReaderFactoryBase**

To use your own implementation you should add the following property to the HTTP media cache source entry

```
<Property>
<Name>httpReaderFactoryClass</Name>
<Value>com.wowza.streamschool.mediacache.ExampleHTTPReaderFactory</Value>
<Type>String</Type>
</Property>
```

The value points to the class name of your implementation.

Method Summary

abstract void	addProperties (WMSProperties properties) Add properties to this specific factory, these could be passed from
abstract IMediaCacheItemHTTPByteReader	createInstance () Create a HTTP byte reader suited to this factory.
abstract void	destroyInstance (IMediaCacheItemHTTPByteReader instance) Destroy the HTTP Byte reader associated with this factory implementation
abstract int	getConnectionTimeout () Get the current connection timeout set.
abstract IMediaCacheItem	getMediaCacheItem () Get the Media Cache item associated with this instance.
abstract int	getPort () Get the port to be used for connecting to the remote source.

abstract int	<u>getReadRetries()</u> Get the retries set for this instance
abstract int	<u>getReadTimeout()</u> Get the current read time out set.
abstract int	<u>getReceiveBufferSize()</u> Get the receive buffer size set.
abstract int	<u>getSendBufferSize()</u> Get the send buffer size set.
abstract void	<u>init()</u> Initialize the HTTP Reader Factory.
abstract boolean	<u>isRequestFullURL()</u> Set if the request should contain the full URL.
abstract void	<u>setConnectionTimeout(int connectionTimeout)</u> Set the connection timeout, milliseconds.
abstract void	<u>setDestinationAddress(String host, int port)</u> Set the destination host and port where to retrieve data.
abstract void	<u>setMediaCacheItem(IMediaCacheItem mediaCacheItem)</u> Set the Media Cache item associated to this instance.
abstract void	<u>setPort(int port)</u> Set the port to be used for connecting to the remote source.
abstract void	<u>setProxyAddress(String host, int port)</u> Set the proxy host and port.
abstract void	<u>setReadRetries(int readRetries)</u> Set the maximum number retries.
abstract void	<u>setReadTimeout(int readTimeout)</u> Set the read timeout for data, milliseconds.
abstract void	<u>setReceiveBufferSize(int receiveBufferSize)</u> Set the receive buffer size, byte size.
abstract void	<u>setRequestFullURL(boolean requestFullURL)</u> Flag to set if a full URL is required as part of the head/read request.
abstract void	<u>setSendBufferSize(int sendBufferSize)</u> Set the send buffer size, byte size.

Methods inherited from interface com.wowza.util.IGenericPoolFactory

createInstance, destroyInstance

Methods

init

```
public abstract void init()
```


(continued from last page)

Initialize the HTTP Reader Factory.

addProperties

```
public abstract void addProperties(WMSProperties properties)
```

Add properties to this specific factory, these could be passed from

Parameters:

[WMSProperties](#) - properties

createInstance

```
public abstract IMediaCacheHTTPByteReader createInstance()
```

Create a HTTP byte reader suited to this factory.

Returns:

[IMediaCacheHTTPByteReader](#)

destroyInstance

```
public abstract void destroyInstance(IMediaCacheHTTPByteReader instance)
```

Destroy the HTTP Byte reader associated with this factory implementation

Parameters:

[IMediaCacheHTTPByteReader](#) - instance

setMediaCacheItem

```
public abstract void setMediaCacheItem(IMediaCacheItem mediaCacheItem)
```

Set the Media Cache item associated to this instance.

Parameters:

[IMediaCacheItem](#) - mediaCacheItem

getMediaCacheItem

```
public abstract IMediaCacheItem getMediaCacheItem()
```

Get the Media Cache item associated with this instance.

Returns:

[IMediaCacheItem](#)

setDestinationAddress

```
public abstract void setDestinationAddress(String host,  
int port)
```

Set the destination host and port where to retrieve data. It is up to the specific implementation to use these or not.

Parameters:

String - host

int - port

setProxyAddress

```
public abstract void setProxyAddress(String host,  
                                     int port)
```

Set the proxy host and port. It is up to the specific byte reader implementation to implement support for proxy connections.

Parameters:

String - host
int - port

isRequestFullURL

```
public abstract boolean isRequestFullURL()
```

Set if the request should contain the full URL. It is up to the specific implementation to use this.

Returns:

boolean

setRequestFullURL

```
public abstract void setRequestFullURL(boolean requestFullURL)
```

Flag to set if a full URL is required as part of the head/read request.

Parameters:

boolean - requestFullURL

getReadTimeout

```
public abstract int getReadTimeout()
```

Get the current read time out set.

Returns:

int

setReadTimeout

```
public abstract void setReadTimeout(int readTimeout)
```

Set the read timeout for data, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - readTimeout

getConnectionTimeout

```
public abstract int getConnectionTimeout()
```

Get the current connection timeout set.

Returns:

int

(continued from last page)

setConnectionTimeout

```
public abstract void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout, milliseconds. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - connectionTimeout

getPort

```
public abstract int getPort()
```

Get the port to be used for connecting to the remote source.

Returns:

int

setPort

```
public abstract void setPort(int port)
```

Set the port to be used for connecting to the remote source. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - port

getReadRetries

```
public abstract int getReadRetries()
```

Get the retries set for this instance

Returns:

int

setReadRetries

```
public abstract void setReadRetries(int readRetries)
```

Set the maximum number retries. It is up to the specific byte reader implementation to use this setting.

Parameters:

int - maxRetries

getSendBufferSize

```
public abstract int getSendBufferSize()
```

Get the send buffer size set.

Returns:

int

setSendBufferSize

```
public abstract void setSendBufferSize(int sendBufferSize)
```

(continued from last page)

Set the send buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

`sendBufferSize`

getReceiveBufferSize

```
public abstract int getReceiveBufferSize()
```

Get the receive buffer size set.

Returns:

`int`

setReceiveBufferSize

```
public abstract void setReceiveBufferSize(int receiveBufferSize)
```

Set the receive buffer size, byte size. It is up to the specific byte reader implementation to use this setting.

Parameters:

`receiveBufferSize`

com.wowza.wms.mediacache.impl

Interface IMediaCacheNameHandler

public interface **IMediaCacheNameHandler**
extends

Internal - No longer used.

com.wowza.wms.mediacache.impl Interface IMediaCacheSourceBasicPerSourceInfo

public interface **IMediaCacheSourceBasicPerSourceInfo**
extends

Internal - Do not use.

Method Summary

abstract String	getName()
abstract void	setName(String name)

Methods

setName

public abstract void **setName**(String name)

getName

public abstract String **getName**()

com.wowza.wms.mediacache.impl Interface IMediaCacheSourceBasicPerSourceInfoListener

public interface **IMediaCacheSourceBasicPerSourceInfoListener**
extends

Internal - Do not use.

Method Summary

abstract void	onPerSourceInfoAdd (IMediaCacheSourceBasicPerSourceInfo perSourceInfo)
abstract void	onPerSourceInfoRemove (IMediaCacheSourceBasicPerSourceInfo perSourceInfo)

Methods

onPerSourceInfoAdd

public abstract void **onPerSourceInfoAdd**([IMediaCacheSourceBasicPerSourceInfo](#) perSourceInfo)

onPerSourceInfoRemove

public abstract void **onPerSourceInfoRemove**([IMediaCacheSourceBasicPerSourceInfo](#) perSourceInfo)

Package

com.wowza.wms.mediacache.model

com.wowza.wms.mediacache.model Interface IMediaCacheContextMapper

public interface **IMediaCacheContextMapper**
extends

Interface for ContextMapper implementations

This interface is invoked via the ContextMapperClass configuration item in the main MediaCache configuration section.

When the context mapper class implementation is in use the configuration parameters

`URLEscapeStreamNameSpaces`

`URLEscapeStreamNameAll`

are no longer implemented and it is up to the context mapper to implement these if needed.

Method Summary

abstract String	getMediaNameFromContext (IApplicationInstance appInstance, IMediaStream stream, String basePath, String mediaName, String mediaExtension)
abstract void	init (MediaCache mediaCache) Initialize the context mapper.

Methods

init

public abstract void **init**(MediaCache mediaCache)

Initialize the context mapper. This provides the context for the instance of media cache being used.

Parameters:

MediaCache - mediaCache

getMediaNameFromContext

```
public abstract String getMediaNameFromContext(IApplicationInstance appInstance,
IMediaStream stream,
String basePath,
String mediaName,
String mediaExtension)
```

(continued from last page)

This is called each time a request is made into the MediaCache system for retrieval.

The input parameters provide a context of the request

appInstance - Application instance related to the client making the request

stream - IMediaStream object directly attached to the client

basePath - The current source base path the request will be services by. If this is empty then

no source was found for the request

mediaName - The asset name with the source prefixed, such as http/mp4:sample.mp4. This would indicate

the source with a prefix of http/ was being used.

mediaExtension - This is the extension of the asset, so commonly mp4.

The return parameter should be the mediaName needed to satisfy the Media Cache request.

At this stage you can change/manipulate the mediaName to point to a different source, or even serve completely different content if required.

If you do not want to do anything you can pass the mediaName directly to the output parameter.

Parameters:

appInstance
stream
basePath
mediaName
mediaExtension

Returns:

String

com.wowza.wms.mediacache.model Interface IMediaCacheItem

public interface **IMediaCacheItem**
extends

IMediaCacheItem

Field Summary

public static final	<u>PROPS_ITEM_LASTMODIFIED</u> Value: mediaCacheItem.lastModified
public static final	<u>PROPS_ITEM_LENGTH</u> Value: mediaCacheItem.length
public static final	<u>PROPS_ITEM_MEDIANAME</u> Value: mediaCacheItem.mediaName
public static final	<u>PROPS_SOURCE_BLOCKSIZE</u> Value: mediaCacheSource.blockSize
public static final	<u>PROPS_SOURCE_NAME</u> Value: mediaCacheSource.name

Method Summary

abstract void	<u>addPendingWrites</u> (MediaCacheBlockPtr blockPtr) Add the block to the list of pending writes
abstract long	<u>blockSize</u> () Get the block size configured for this item
abstract void	<u>close</u> () Close the item
abstract void	<u>decPendingWriteCount</u> () Decrement the pending write count
abstract boolean	<u>exists</u> () Return if the item exists
abstract long	<u>getBlockCount</u> () Get the block count
abstract MediaCacheBlockPtr	<u>getBlockPtr</u> (long offset, long length) Get a block pointer for the offset and length given
abstract long	<u>getBlockSize</u> () Get the block size for the item

abstract MediaCacheItemInfo	<u>getInfo()</u> Get the MediaCacheItemInfo object for this item
abstract String	<u>getLocalPath()</u> Get the local path for the item
abstract int	<u>getLockCount()</u> Get the current lock count
abstract long	<u>getMaxTimeToLive()</u> Get the maximum time to live for the item
abstract <u>IMediaCacheSource</u>	<u>getMediaCacheSource()</u> Gets the MediaCache source for the item
abstract java.io.File	<u>getMediaFile()</u> Get the file pointed to for this CacheItem
abstract String	<u>getMediaName()</u> Get the MediaName for this item
abstract long	<u>getMinTimeToLive()</u> Get the minimum time to live for the item
abstract long	<u>getPendingWriteCount()</u> Get the pending write count
abstract MediaCacheBlockPtr	<u>getPendingWrites()</u> (long blockId) Get the block from the list of pending writes
abstract <u>IMediaCacheStoreItem</u>	<u>getStoreItem()</u> Get the store item object for this item
abstract <u>IMediaCacheStoreItem</u>	<u>getStoreItem()</u> (boolean doLoad) Get the item from the store.
abstract edu.emory.mathcs.back port.java.util.concur rent.locks.WMSReadWri teLock	<u>getSyncLock()</u> Get the WMSReadWriteLock object
abstract void	<u>incPendingWriteCount()</u> Increment the pending write count
abstract boolean	<u>init()</u> (String mediaName, <u>IMediaCacheStoreItem</u> storeItem) Initialize the item
abstract boolean	<u>isBlockInCache()</u> (long block) Check if the block needed is already cached
abstract boolean	<u>isLocal()</u> Return if the item is local
abstract boolean	<u>isReadAheadTrigger()</u> (long pos, int threshold) Determine if the read ahead should occur
abstract long	<u>lastModified()</u> Get the last modified time of the item

abstract long	<u>length()</u> Get the length of the item
abstract int	<u>lock()</u> Add to lock count for item
abstract long	<u>posToBlock(long pos)</u> Convert the position given into a block number
abstract void	<u>preload()</u> Start the readahead system
abstract long	<u>read(MediaCacheReadContext readContext, long foffset, byte[] buffer, long boffset, long length)</u> Reads data using the read context and returns the byte count read
abstract MediaCacheReadResult	<u>read(MediaCacheReadContext readContext, long foffset, long length)</u> Reads data using the read context and returns a MediaCacheReadResult object
abstract void	<u>readAhead()</u> Read ahead for all pending read ahead objects
abstract MediaCacheBlockPtr	<u>removePendingWrites(long blockId)</u> Remove the block from list of pending writes
abstract void	<u>saveBlock(MediaCacheBlockPtr blockPtr)</u> Save the block provided by the block pointer object
abstract void	<u>setLastModified(long lastModified)</u> Set the last modified time of the item
abstract void	<u>setLastRelease(long lastRelease)</u> Set the last release time of the item
abstract void	<u>setLength(long length)</u> Set the length of the item
abstract void	<u>setLocal(boolean isLocal)</u> Set if the item is local
abstract void	<u>setLocalPath(String localPath)</u> Set the local path for the item
abstract void	<u>setMaxTimeToLive(long maxTimeToLive)</u> Set the maximum time to live for the item
abstract void	<u>setMediaCacheSource(IMediaCacheSource mediaCacheSource)</u> Sets the MediaCache source for the item
abstract void	<u>setMediaName(String name)</u> Set the MediaName for this item
abstract void	<u>setMinTimeToLive(long minTimeToLive)</u> Set the minimum time to live for the item
abstract void	<u>tiggerReadAhead(long pos)</u> Cause a read ahead
abstract int	<u>unlock()</u> Remove from lock count from item

abstract boolean	validate() Validate this item
abstract boolean	validate() (java.util.Properties props) Validate this item with your own properties

Fields

PROPS_ITEM_LENGTH

```
public static final java.lang.String PROPS_ITEM_LENGTH
```

Constant value: **mediaCacheItem.length**

PROPS_ITEM_LASTMODIFIED

```
public static final java.lang.String PROPS_ITEM_LASTMODIFIED
```

Constant value: **mediaCacheItem.lastModified**

PROPS_ITEM_MEDIANAME

```
public static final java.lang.String PROPS_ITEM_MEDIANAME
```

Constant value: **mediaCacheItem.mediaName**

PROPS_SOURCE_NAME

```
public static final java.lang.String PROPS_SOURCE_NAME
```

Constant value: **mediaCacheSource.name**

PROPS_SOURCE_BLOCKSIZE

```
public static final java.lang.String PROPS_SOURCE_BLOCKSIZE
```

Constant value: **mediaCacheSource.blockSize**

Methods

getMediaCacheSource

```
public abstract IMediaCacheSource getMediaCacheSource()
```

Gets the MediaCache source for the item

Returns:

IMediaCacheSource

(continued from last page)

setMediaCacheSource

```
public abstract void setMediaCacheSource(IMediaCacheSource mediaCacheSource)
```

Sets the MediaCache source for the item

Parameters:

mediaCacheSource

lock

```
public abstract int lock()
```

Add to lock count for item

Returns:

int

unlock

```
public abstract int unlock()
```

Remove from lock count from item

Returns:

int

getLockCount

```
public abstract int getLockCount()
```

Get the current lock count

Returns:

int

getSyncLock

```
public abstract edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getSyncLock()
```

Get the WMSReadWriteLock object

Returns:

WMSReadWriteLock

init

```
public abstract boolean init(String mediaName,  
    IMediaCacheStoreItem storeItem)
```

Initialize the item

Parameters:

mediaName

storeItem

Returns:

boolean - false failed to init, true success

close

```
public abstract void close()
```

Close the item

getBlockPtr

```
public abstract MediaCacheBlockPtr getBlockPtr(long offset,  
long length)
```

Get a block pointer for the offset and length given

Parameters:

offset
length

Returns:

MediaCacheBlockPtr

saveBlock

```
public abstract void saveBlock(MediaCacheBlockPtr blockPtr)
```

Save the block provided by the block pointer object

Parameters:

blockPtr

readAhead

```
public abstract void readAhead()
```

Read ahead for all pending read ahead objects

getMediaFile

```
public abstract java.io.File getMediaFile()
```

Get the file pointed to for this CacheItem

Returns:

File

isBlockInCache

```
public abstract boolean isBlockInCache(long block)
```

Check if the block needed is already cached

Parameters:

block

Returns:

boolean - cached is true, not cached false

(continued from last page)

blockSize

```
public abstract long blockSize()
```

Get the block size configured for this item

Returns:

long

validate

```
public abstract boolean validate()
```

Validate this item

Returns:

boolean - valid is true, not valid is false

validate

```
public abstract boolean validate(java.util.Properties props)
```

Validate this item with your own properties

Parameters:

props

Returns:

boolean - valid is true, not valid is false

getInfo

```
public abstract MediaCacheItemInfo getInfo()
```

Get the MediaCacheItemInfo object for this item

Returns:

MediaCacheItemInfo

getMediaName

```
public abstract String getMediaName()
```

Get the MediaName for this item

Returns:

String

setMediaName

```
public abstract void setMediaName(String name)
```

Set the MediaName for this item

Parameters:

name

(continued from last page)

getStoreItem

```
public abstract IMediaCacheStoreItem getStoreItem( )
```

Get the store item object for this item

Returns:

[IMediaCacheStoreItem](#)

getStoreItem

```
public abstract IMediaCacheStoreItem getStoreItem(boolean doLoad)
```

Get the item from the store. If doLoad is set to true or the item is already loaded then the item is returned, otherwise a new store item is returned

Parameters:

doLoad

Returns:

[IMediaCacheStoreItem](#)

addPendingWrites

```
public abstract void addPendingWrites(MediaCacheBlockPtr blockPtr)
```

Add the block to the list of pending writes

Parameters:

blockPtr

removePendingWrites

```
public abstract MediaCacheBlockPtr removePendingWrites(long blockId)
```

Remove the block from list of pending writes

Parameters:

blockId

Returns:

[MediaCacheBlockPtr](#)

getPendingWrites

```
public abstract MediaCacheBlockPtr getPendingWrites(long blockId)
```

Get the block from the list of pending writes

Parameters:

blockId

Returns:

[MediaCacheBlockPtr](#)

incPendingWriteCount

```
public abstract void incPendingWriteCount( )
```

(continued from last page)

Increment the pending write count

decPendingWriteCount

```
public abstract void decPendingWriteCount()
```

Decrement the pending write count

getPendingWriteCount

```
public abstract long getPendingWriteCount()
```

Get the pending write count

Returns:

long

getMinTimeToLive

```
public abstract long getMinTimeToLive()
```

Get the minimum time to live for the item

Returns:

long

setMinTimeToLive

```
public abstract void setMinTimeToLive(long minTimeToLive)
```

Set the minimum time to live for the item

Parameters:

minTimeToLive

getMaxTimeToLive

```
public abstract long getMaxTimeToLive()
```

Get the maximum time to live for the item

Returns:

long

setMaxTimeToLive

```
public abstract void setMaxTimeToLive(long maxTimeToLive)
```

Set the maximum time to live for the item

Parameters:

maxTimeToLive

getBlockSize

```
public abstract long getBlockSize()
```

Get the block size for the item

(continued from last page)

Returns:
long

getBlockCount

```
public abstract long getBlockCount()
```

Get the block count

Returns:
long

isReadAheadTrigger

```
public abstract boolean isReadAheadTrigger(long pos,  
int threshold)
```

Determine if the read ahead should occur

Parameters:
pos
threshold

Returns:
boolean - readahead true, no readahead false

tiggerReadAhead

```
public abstract void tiggerReadAhead(long pos)
```

Cause a read ahead

Parameters:
pos

posToBlock

```
public abstract long posToBlock(long pos)
```

Convert the position given into a block number

Parameters:
pos

Returns:
long

preload

```
public abstract void preload()
```

Start the readahead system

getLocalPath

```
public abstract String getLocalPath()
```

Get the local path for the item

(continued from last page)

Returns:

String

setLocalPath

```
public abstract void setLocalPath(String localPath)
```

Set the local path for the item

Parameters:

localPath

isLocal

```
public abstract boolean isLocal()
```

Return if the item is local

Returns:

boolean - local is true, not local is false

setLocal

```
public abstract void setLocal(boolean isLocal)
```

Set if the item is local

Parameters:

isLocal

exists

```
public abstract boolean exists()
```

Return if the item exists

Returns:

boolean - exists is true, does not exist is false

length

```
public abstract long length()
```

Get the length of the item

Returns:

long

setLength

```
public abstract void setLength(long length)
```

Set the length of the item

Parameters:

length

lastModified

```
public abstract long lastModified()
```

Get the last modified time of the item

Returns:

long

setLastModified

```
public abstract void setLastModified(long lastModified)
```

Set the last modified time of the item

Parameters:

lastModified

setLastRelease

```
public abstract void setLastRelease(long lastRelease)
```

Set the last release time of the item

Parameters:

lastRelease

read

```
public abstract long read(MediaCacheReadContext readContext,  
    long foffset,  
    byte[] buffer,  
    long boffset,  
    long length)
```

Reads data using the read context and returns the byte count read

Parameters:

readContext

foffset

buffer

boffset

length

Returns:

long

read

```
public abstract MediaCacheReadResult read(MediaCacheReadContext readContext,  
    long foffset,  
    long length)
```

Reads data using the read context and returns a MediaCacheReadResult object

Parameters:

readContext

foffset

(continued from last page)

length

Returns:
MediaCacheReadResult

com.wowza.wms.mediacache.model Interface IMediaCacheReader

public interface **IMediaCacheReader**
extends

IMediaCacheReader

Method Summary

abstract void	<u>close()</u> Close the reader
abstract long	<u>getFilePointer()</u> Get the file pointer for this reader
abstract <u>IMediaCacheItem</u>	<u>getMediaCacheItem()</u> Get the MediaCache item associated with this reader
abstract Object	<u>getOpaqueObject()</u> Get the opaque object
abstract long	<u>lastModified()</u> Get the last modified time
abstract long	<u>length()</u> Get the length
abstract void	<u>open()</u> Open the reader
abstract int	<u>read</u> (byte[] buffer, int offset, int len) Read bytes for this reader
abstract void	<u>seek</u> (long pos) Seek to the position provided
abstract void	<u>setMediaCacheItem</u> (<u>IMediaCacheItem</u> mediaCacheItem) Set the MediaCache item associated with this reader
abstract void	<u>setOpaqueObject</u> (Object object) Set the opaque object

Methods

seek

public abstract void **seek**(long pos)

Seek to the position provided

Parameters:

pos

getFilePointer

```
public abstract long getFilePointer()
```

Get the file pointer for this reader

Returns:

long

read

```
public abstract int read(byte[] buffer,  
    int offset,  
    int len)
```

Read bytes for this reader

Parameters:

buffer
offset
len

Returns:

int - number of bytes read

setMediaCacheItem

```
public abstract void setMediaCacheItem(IMediaCacheItem mediaCacheItem)
```

Set the MediaCache item associated with this reader

Parameters:

mediaCacheItem

getMediaCacheItem

```
public abstract IMediaCacheItem getMediaCacheItem()
```

Get the MediaCache item associated with this reader

Returns:

IMediaCacheItem

open

```
public abstract void open()
```

Open the reader

close

```
public abstract void close()
```

Close the reader

(continued from last page)

length

```
public abstract long length()
```

Get the length

Returns:
long

lastModified

```
public abstract long lastModified()
```

Get the last modified time

Returns:
long

getOpaqueObject

```
public abstract Object getOpaqueObject()
```

Get the opaque object

Returns:
Object

setOpaqueObject

```
public abstract void setOpaqueObject(Object object)
```

Set the opaque object

Parameters:
object

com.wowza.wms.mediacache.model Interface IMediaCacheSource

public interface **IMediaCacheSource**
extends

Internal use do not use. Please see descriptions in IMediaCacheItemHTTPReaderFactory and IMediaCacheHTTPByteReader

Method Summary

abstract boolean	<u>canHandle</u> (String mediaName)
abstract String	<u>getBaseClass</u> ()
abstract int	<u>getDefaultBlockSize</u> ()
abstract String	<u>getDescription</u> ()
abstract long	<u>getMaxTimeToLive</u> ()
abstract MediaCache	<u>getMediaCache</u> ()
abstract long	<u>getMinTimeToLive</u> ()
abstract String	<u>getName</u> ()
abstract MediaCachePerformance Counter	<u>getPerformanceCount</u> ()
abstract String	<u>getPrefix</u> ()
abstract <u>WMSProperties</u>	<u>getProperties</u> ()
abstract int	<u>getReadAheadThreshold</u> ()
abstract String	<u>getReaderClass</u> ()
abstract String	<u>getSourcePath</u> ()
abstract boolean	<u>isPassThru</u> ()
abstract boolean	<u>isReadAhead</u> ()
abstract <u>IMediaCacheItem</u>	<u>loadCacheItem</u> (String mediaName, <u>IMediaCacheStoreItem</u> storeItem)
abstract <u>IMediaCacheItem</u>	<u>loadCacheItem</u> (String mediaName, <u>IMediaCacheStoreItem</u> storeItem, long length, long lastModified)

abstract IMediaCacheItem	newCacheItem (String mediaName)
abstract void	setBaseClass (String baseClass)
abstract void	setDefaultBlockSize (int defaultBlockSize)
abstract void	setDescription (String description)
abstract void	setMaxTimeToLive (long maxTimeToLive)
abstract void	setMediaCache (MediaCache mediaCache)
abstract void	setMinTimeToLive (long minTimeToLive)
abstract void	setName (String name)
abstract void	setPassThru (boolean isPassThru)
abstract void	setPrefix (String prefix)
abstract void	setProperties (WMSProperties properties)
abstract void	setReadAhead (boolean readAhead)
abstract void	setReadAheadThreshold (int readAheadThreshold)
abstract void	setReaderClass (String readerClass)
abstract void	setSourcePath (String sourcePath)

Methods

canHandle

public abstract boolean **canHandle**(String mediaName)

newCacheItem

public abstract [IMediaCacheItem](#) **newCacheItem**(String mediaName)

loadCacheItem

public abstract [IMediaCacheItem](#) **loadCacheItem**(String mediaName,
[IMediaCacheStoreItem](#) storeItem)

loadCacheItem

```
public abstract IMediaCacheItem loadCacheItem(String mediaName,  
        IMediaCacheStoreItem storeItem,  
        long length,  
        long lastModified)
```

getName

```
public abstract String getName()
```

setName

```
public abstract void setName(String name)
```

setPrefix

```
public abstract void setPrefix(String prefix)
```

getPrefix

```
public abstract String getPrefix()
```

getDescription

```
public abstract String getDescription()
```

setDescription

```
public abstract void setDescription(String description)
```

getBaseClass

```
public abstract String getBaseClass()
```

setBaseClass

```
public abstract void setBaseClass(String baseClass)
```

getSourcePath

public abstract String **getSourcePath**()

setSourcePath

public abstract void **setSourcePath**(String sourcePath)

getDefaultBlockSize

public abstract int **getDefaultBlockSize**()

setDefaultBlockSize

public abstract void **setDefaultBlockSize**(int defaultBlockSize)

getProperties

public abstract [WMSProperties](#) **getProperties**()

setProperties

public abstract void **setProperties**([WMSProperties](#) properties)

getReaderClass

public abstract String **getReaderClass**()

setReaderClass

public abstract void **setReaderClass**(String readerClass)

getMediaCache

public abstract MediaCache **getMediaCache**()

setMediaCache

public abstract void **setMediaCache**(MediaCache mediaCache)

(continued from last page)

getPerformanceCount

```
public abstract MediaCachePerformanceCounter getPerformanceCount()
```

getMinTimeToLive

```
public abstract long getMinTimeToLive()
```

setMinTimeToLive

```
public abstract void setMinTimeToLive(long minTimeToLive)
```

getMaxTimeToLive

```
public abstract long getMaxTimeToLive()
```

setMaxTimeToLive

```
public abstract void setMaxTimeToLive(long maxTimeToLive)
```

isReadAhead

```
public abstract boolean isReadAhead()
```

setReadAhead

```
public abstract void setReadAhead(boolean readAhead)
```

getReadAheadThreshold

```
public abstract int getReadAheadThreshold()
```

setReadAheadThreshold

```
public abstract void setReadAheadThreshold(int readAheadThreshold)
```

(continued from last page)

isPassThru

```
public abstract boolean isPassThru()
```

setPassThru

```
public abstract void setPassThru(boolean isPassThru)
```


com.wowza.wms.mediache.model Interface IMediaCacheSourceNotify

public interface **IMediaCacheSourceNotify**
extends

MediaCache Interface for source creation and destroy notifications

This interface can be configured via the CacheSourceListenerClassList configuration item in the main MediaCache configuration section.

```
<CacheSourceListenerClassList>com.wowza.mediache.example.sourcelistener</CacheSourceListenerClassList>
```

It is triggered when a source is added/removed from the running MediaCache configuration. This is done either as MediaCache starts up or dynamically via the API.

Method Summary

abstract void	onMediaCacheSourceCreate (IMediaCacheSource mediaCacheSource) When a source is added this is called with the current source as a parameter.
abstract void	onMediaCacheSourceDestroy (IMediaCacheSource mediaCacheSource) When a source is removed successfully this is called with the source that has been removed as a parameter.

Methods

onMediaCacheSourceCreate

public abstract void **onMediaCacheSourceCreate**([IMediaCacheSource](#) mediaCacheSource)

When a source is added this is called with the current source as a parameter.

Parameters:

mediaCacheSource

onMediaCacheSourceDestroy

public abstract void **onMediaCacheSourceDestroy**([IMediaCacheSource](#) mediaCacheSource)

When a source is removed successfully this is called with the source that has been removed as a parameter.

Parameters:

mediaCacheSource

com.wowza.wms.mediacache.model Interface IMediaCacheStoreItem

public interface **IMediaCacheStoreItem**
extends

Interface that describes items within a Media Cache store.

Method Summary

abstract byte[]	<u>getBlockMask()</u> Internal
abstract String	<u>getBlockPath()</u> Get the path of the block associated with this item.
abstract String	<u>getMediaPath()</u> Get the path of the media associated with this item.
abstract java.util.Properties	<u>getProperties()</u> Get the properties for this item
abstract String	<u>getPropertiesPath()</u> Get the full path of the properties
abstract MediaCacheStore	<u>getStore()</u> Get the store associated to this item.
abstract void	<u>initMedia()</u> (long length) Initialise the media entry with the length of the asset.
abstract long	<u>length()</u> Get the length of the asset.
abstract void	<u>setBlockMask()</u> (byte[] blockMask) Internal
abstract void	<u>setLength()</u> (long length) Set the length of the asset.
abstract void	<u>setProperties()</u> (java.util.Properties props) Set the properties for this item.
abstract String	<u>toString()</u>
abstract void	<u>updateBlockMask()</u> (byte[] blockMask, long offset, long len) Internal

Methods

getStore

public abstract MediaCacheStore **getStore()**

(continued from last page)

Get the store associated to this item.

Returns:

MediaCacheStore

setProperty

```
public abstract void setProperty(java.util.Properties props)
```

Set the properties for this item.

Parameters:

Properties - props

getProperty

```
public abstract java.util.Properties getProperty()
```

Get the properties for this item

Returns:

Properties

getPropertyPath

```
public abstract String getPropertyPath()
```

Get the full path of the properties

Returns:

initMedia

```
public abstract void initMedia(long length)
```

Initialise the media entry with the length of the asset.

Parameters:

length

getMediaPath

```
public abstract String getMediaPath()
```

Get the path of the media associated with this item.

Returns:

String

getBlockPath

```
public abstract String getBlockPath()
```

Get the path of the block associated with this item.

Returns:

String

setBlockMask

```
public abstract void setBlockMask(byte[] blockMask)
```

Internal

Parameters:

blockMask

getBlockMask

```
public abstract byte[] getBlockMask()
```

Internal

Returns:

byte[]

updateBlockMask

```
public abstract void updateBlockMask(byte[] blockMask,  
                                       long offset,  
                                       long len)
```

Internal

Parameters:

blockMask

offset

len

toString

```
public abstract String toString()
```

length

```
public abstract long length()
```

Get the length of the asset.

Returns:

long

setLength

```
public abstract void setLength(long length)
```

Set the length of the asset. Should be identical size when initMedia is called.

Parameters:

length

com.wowza.wms.mediacache.model Interface IMediaCacheStoreItemEvent

public interface **IMediaCacheStoreItemEvent**
extends

Interface for Store Item GC events

When an item within a store is about to be processed for removal this provides the detailed information of the item.

It gives the opportunity to alter the timing parameters of the item so to delay when it is next processed or allow it to be removed.

The default is for the item to be removed unless this is changed with

```
item.setItemRemove(false);
```

Method Summary

abstract boolean	<u>getBadItemTime()</u> Gets the current bad item state
abstract long	<u>getFreedSpaceTotal()</u> Get the total space to be made available
abstract String	<u>getItemName()</u> Get the item name
abstract int	<u>getItemNumber()</u> Get this item number
abstract boolean	<u>getItemRemove()</u> Get the item remove flag
abstract long	<u>getItemSize()</u> Gets the item size in bytes
abstract String	<u>getItemStorePath()</u> Get the item store path
abstract int	<u>getItemTotalCount()</u> Get the total number of items to be processed
abstract boolean	<u>getMaxTTLReached()</u> Gets the MaxTTL reached state
abstract boolean	<u>getMinTTLReached()</u> Gets the MinTTL reached state

abstract long	<u>getReleaseItemTime</u> () Gets release time in milliseconds
abstract void	<u>setBadItemTime</u> (boolean state) Sets the state for bad item time
abstract void	<u>setFreedSpaceTotal</u> (long size) Set the total space to be made available
abstract void	<u>setItemName</u> (String name) Set the item name
abstract void	<u>setItemNumber</u> (int number) Set this item number
abstract void	<u>setItemReleaseTime</u> (long releaseTime) Sets the item current release time
abstract void	<u>setItemRemove</u> (boolean state) Set the item remove flag
abstract void	<u>setItemSize</u> (long size) Sets the item size in bytes
abstract void	<u>setItemStorePath</u> (String path) Set the item store path
abstract void	<u>setItemTotalCount</u> (int count) Set the total number of items to be processed
abstract void	<u>setMaxTTLReached</u> (boolean state) Sets the MaxTTL reached state
abstract void	<u>setMinTTLReached</u> (boolean state) Sets the MinTTL reached state

Methods

setItemName

public abstract void **setItemName**(String name)

Set the item name

Parameters:
name

getItemName

public abstract String **getItemName**()

Get the item name

Returns:
item name

(continued from last page)

setItemStorePath

```
public abstract void setItemStorePath(String path)
```

Set the item store path

Parameters:
path

getItemStorePath

```
public abstract String getItemStorePath()
```

Get the item store path

Returns:
storage path

setItemReleaseTime

```
public abstract void setItemReleaseTime(long releaseTime)
```

Sets the item current release time

Parameters:
releaseTime - time in milliseconds

getReleaseItemTime

```
public abstract long getReleaseItemTime()
```

Gets release time in milliseconds

Returns:
time in milliseconds

setBadItemTime

```
public abstract void setBadItemTime(boolean state)
```

Sets the state for bad item time

Parameters:
state

getBadItemTime

```
public abstract boolean getBadItemTime()
```

Gets the current bad item state

Returns:
state

setMaxTTLReached

```
public abstract void setMaxTTLReached(boolean state)
```

(continued from last page)

Sets the MaxTTL reached state

Parameters:
state

getMaxTTLReached

```
public abstract boolean getMaxTTLReached()
```

Gets the MaxTTL reached state

Returns:
maxTTL reached state

setMinTTLReached

```
public abstract void setMinTTLReached(boolean state)
```

Sets the MinTTL reached state

Parameters:
state

getMinTTLReached

```
public abstract boolean getMinTTLReached()
```

Gets the MinTTL reached state

Returns:
MinTTL reached state

setItemSize

```
public abstract void setItemSize(long size)
```

Sets the item size in bytes

Parameters:
size

getItemSize

```
public abstract long getItemSize()
```

Gets the item size in bytes

Returns:
item size in bytes

setFreedSpaceTotal

```
public abstract void setFreedSpaceTotal(long size)
```

Set the total space to be made available

Parameters:
size

getFreedSpaceTotal

```
public abstract long getFreedSpaceTotal()
```

Get the total space to be made available

Returns:

total space to be made available

setItemTotalCount

```
public abstract void setItemTotalCount(int count)
```

Set the total number of items to be processed

Parameters:

count

getItemTotalCount

```
public abstract int getItemTotalCount()
```

Get the total number of items to be processed

Returns:

total number of items to be processed

setItemNumber

```
public abstract void setItemNumber(int number)
```

Set this item number

Parameters:

number

getItemNumber

```
public abstract int getItemNumber()
```

Get this item number

Returns:

item number

setItemRemove

```
public abstract void setItemRemove(boolean state)
```

Set the item remove flag

Parameters:

state

getItemRemove

```
public abstract boolean getItemRemove()
```

(continued from last page)

Get the item remove flag

Returns:

item remove flag

com.wowza.wms.mediacache.model Interface IMediaCacheStoreItemListener

public interface **IMediaCacheStoreItemListener**
extends

Interface for Store Item GC events

When an item within a store is about to be processed for removal this interface can be called and provide information on the item and the ability to change/update the decision being made.

The interface `IMediaCacheStoreItemEvent` provides the context of the item being removed.

Method Summary

abstract void	<code>init()</code> Initialise the CacheStoreItemListener
abstract void	<code>processMediaCacheItemEvent(IMediaCacheStoreItemEvent itemEvent)</code> Process the itemEvent presented at GC time

Methods

init

public abstract void **init()**

Initialise the CacheStoreItemListener

processMediaCacheItemEvent

public abstract void **processMediaCacheItemEvent**([`IMediaCacheStoreItemEvent`](#) itemEvent)

Process the itemEvent presented at GC time

Parameters:

itemEvent

com.wowza.wms.mediacache.model Interface IMediaCacheStoreNotify

public interface **IMediaCacheStoreNotify**
extends

MediaCache Interface for store creation and destroy notifications

This interface can be configured via the CacheStoreListenerClassList configuration item in the main MediaCache configuration section.

```
<CacheStoreListenerClassList>com.wowza.mediacache.example.storelistener</CacheStoreListenerClassList>
```

It is triggered when a store is added/removed from the running MediaCache configuration. This is done either as MediaCache starts up or dynamically via the API.

Method Summary

abstract void	onMediaCacheStoreCreate (MediaCacheStore mediaCacheStore) When a store is added this is called with the current store as a parameter.
abstract void	onMediaCacheStoreDestroy (MediaCacheStore mediaCacheStore) When a store is removed successfully this is called with the store removed as a parameter.

Methods

onMediaCacheStoreCreate

public abstract void **onMediaCacheStoreCreate**(MediaCacheStore mediaCacheStore)

When a store is added this is called with the current store as a parameter. You can not at this point alter a store configuration, any changes made are ignored.

Parameters:
mediaCacheStore

onMediaCacheStoreDestroy

public abstract void **onMediaCacheStoreDestroy**(MediaCacheStore mediaCacheStore)

When a store is removed successfully this is called with the store removed as a parameter.

Parameters:
mediaCacheStore

com.wowza.wms.mediacache.model Interface IMediaCacheStoreTraverseFile

public interface **IMediaCacheStoreTraverseFile**
extends

Interface to provide per file access when traversing a file tree

This interface is used as part of the cache reload functionality and can not be changed out from the internal implementation.

Method Summary

abstract void	onFile (java.io.File item) Called when an item is selected.
---------------	--

Methods

onFile

public abstract void **onFile**(java.io.File item)

Called when an item is selected.

Parameters:

item

com.wowza.wms.mediacache.model

Interface IMediaCacheStoreTraverseItem

public interface **IMediaCacheStoreTraverseItem**
extends

Interface to provide per MediaCache store item access when traversing the item tree

This interface is used as part of the cache reload functionality and can not be changed out from the internal implementation.

Method Summary

abstract void	onItem(IMediaCacheStoreItem item) Called when an item is selected.
---------------	---

Methods

onItem

public abstract void **onItem**([IMediaCacheStoreItem](#) item)

Called when an item is selected.

Parameters:

item

Package

com.wowza.wms.mediacaster

com.wowza.wms.mediacaster

Interface IMediaCaster

public interface **IMediaCaster**
extends

Field Summary

public static final	<u>MEDIACASTERTYPE_CUPERTINO</u> Value: 4
public static final	<u>MEDIACASTERTYPE_LIVEREPEATER</u> Value: 1
public static final	<u>MEDIACASTERTYPE_MPEGTSTCP</u> Value: 5
public static final	<u>MEDIACASTERTYPE_RTPLIVE</u> Value: 3
public static final	<u>MEDIACASTERTYPE_SHOUTCAST</u> Value: 2
public static final	<u>MEDIACASTERTYPE_SRTRECEIVER</u> Value: 6
public static final	<u>MEDIACASTERTYPE_UNKNOWN</u> Value: 0
public static final	<u>STREAMTIMEOUTREASON_GOOD</u> Value: 100
public static final	<u>STREAMTIMEOUTREASON_MISSING</u> Value: 101
public static final	<u>STREAMTIMEOUTREASON_NORTSPSESSION</u> Value: 6
public static final	<u>STREAMTIMEOUTREASON_NOSESSION</u> Value: 2
public static final	<u>STREAMTIMEOUTREASON_NOSTREAM</u> Value: 4
public static final	<u>STREAMTIMEOUTREASON_NOTIMEOUT</u> Value: 1

public static final	<u>STREAMTIMEOUTREASON_NOURL</u> Value: 3
public static final	<u>STREAMTIMEOUTREASON_RECONNECTRUNNING</u> Value: 5
public static final	<u>STREAMTIMEOUTREASON_UNKNOWN</u> Value: 0

Method Summary

abstract boolean	<u>doWatchdog()</u> Idle processor
abstract void	<u>forceReset()</u> Force a reset/reconnect of this media caster
abstract <u>IApplicationInstance</u>	<u>getAppInstance()</u> Get the application instance this media caster is associated with
abstract long	<u>getConnectLastAttempt()</u> Get system time in milliseconds of last connection attempt
abstract long	<u>getConnectLastForceReset()</u> Get system time in milliseconds of last time forceReset was called
abstract long	<u>getConnectLastSuccess()</u> Get system time in milliseconds of last connection success
abstract int	<u>getIdleTimeout()</u> Get the idle timeout for this media caster (milliseconds)
abstract Object	<u>getLock()</u> Get the MediaCaster lock for an individual MediaCaster item.
abstract <u>MediaCasterItem</u>	<u>getMediaCasterDef()</u> Get the media caster definition
abstract String	<u>getMediaCasterId()</u> Get the media caster id
abstract <u>MediaCasterStreamItem</u>	<u>getMediaCasterStreamItem()</u> Get the media caster item associated with this media caster
abstract int	<u>getMediaCasterType()</u> Get the media caster type.
abstract int	<u>getReconnectWaitTime()</u> Get the minimum time between reconnect attempts (milliseconds)
abstract <u>IMediaStream</u>	<u>getStream()</u> Get the underlying stream being used by this media caster
abstract long	<u>getStreamLastSeq()</u> Get the AMFPacket sequence number of last watchdog processed packet

abstract long	<u>getStreamMissingTime()</u> Get the time in milliseconds the stream has been missing
abstract long	<u>getStreamRunningIndex()</u> Each time a MediaCaster stream switches from not running to running this value is incremented
abstract int	<u>getStreamTimeout()</u> Get the watchdog stream timeout (milliseconds)
abstract long	<u>getStreamTimeoutLastReset()</u> Get system time in milliseconds of last time stream was reset due to stream timeout (debug)
abstract long	<u>getStreamTimeoutLastTime()</u> Get system time in milliseconds of last time stream was considered in missing state (debug)
abstract int	<u>getStreamTimeoutReason()</u> Get the reason the stream is in timeout condition (debug)
abstract <u>IVHost</u>	<u>getVHost()</u> Get the virtual host associated with this media caster
abstract void	<u>init(MediaCasterStreamItem mediaCasterStreamItem, MediaCasterItem mediaCasterDef, IApplicationInstance appInstance, String mediaCasterId, String streamExt)</u> Initialize the media caster
abstract boolean	<u>isSession()</u> Is there current a session attached to this MediaCaster
abstract boolean	<u>isStream()</u> Is there a stream associated with this MediaCaster
abstract boolean	<u>isStreamIsRunning()</u> Return true if stream is currently running
abstract void	<u>registerPlayer(IMediaStreamPlay player)</u> Register a player with this media caster
abstract void	<u>sessionClosed(org.apache.mina.common.io.Session session)</u> sessionClosed callback
abstract void	<u>sessionOpened(org.apache.mina.common.io.Session session)</u> sessionOpened callback
abstract void	<u>setAppInstance(IApplicationInstance appInstance)</u> Set the application instance this media caster is associated with
abstract void	<u>setMediaCasterDef(MediaCasterItem mediaCasterDef)</u> Set the media caster definition
abstract void	<u>setMediaCasterId(String mediaCasterId)</u> Get the media caster id
abstract void	<u>setMediaCasterType(int mediaCasterType)</u> Set the media caster type.
abstract void	<u>setReconnectWaitTime(int reconnectWaitTime)</u> Set the minimum time between reconnect attempts (milliseconds)

abstract void	setStream (IMediaStream stream) Set the underlying stream being used by this media caster
abstract void	setStreamRunning (boolean streamRunning) Called internally to track when streams are running or are stopped.
abstract void	setStreamTimeout (int streamTimeout) Set the watchdog stream timeout (milliseconds)
abstract void	shutdown (boolean isAppInstanceShutdown) Shutdown media caster
abstract void	unregisterPlayer (IMediaStreamPlay player) Unregister a player with this media caster

Fields

STREAMTIMEOUTREASON_UNKNOWN

```
public static final int STREAMTIMEOUTREASON_UNKNOWN
```

Constant value: **0**

STREAMTIMEOUTREASON_NOTIMEOUT

```
public static final int STREAMTIMEOUTREASON_NOTIMEOUT
```

Constant value: **1**

STREAMTIMEOUTREASON_NOSESSION

```
public static final int STREAMTIMEOUTREASON_NOSESSION
```

Constant value: **2**

STREAMTIMEOUTREASON_NOURL

```
public static final int STREAMTIMEOUTREASON_NOURL
```

Constant value: **3**

STREAMTIMEOUTREASON_NOSTREAM

```
public static final int STREAMTIMEOUTREASON_NOSTREAM
```

Constant value: **4**

STREAMTIMEOUTREASON_RECONNECTRUNNING

```
public static final int STREAMTIMEOUTREASON_RECONNECTRUNNING
```

(continued from last page)

Constant value: **5**

STREAMTIMEOUTREASON_NORTSPSESSION

```
public static final int STREAMTIMEOUTREASON_NORTSPSESSION
```

Constant value: **6**

STREAMTIMEOUTREASON_GOOD

```
public static final int STREAMTIMEOUTREASON_GOOD
```

Constant value: **100**

STREAMTIMEOUTREASON_MISSING

```
public static final int STREAMTIMEOUTREASON_MISSING
```

Constant value: **101**

MEDIACASTERTYPE_UNKNOWN

```
public static final int MEDIACASTERTYPE_UNKNOWN
```

Constant value: **0**

MEDIACASTERTYPE_LIVEREPEATER

```
public static final int MEDIACASTERTYPE_LIVEREPEATER
```

Constant value: **1**

MEDIACASTERTYPE_SHOUTCAST

```
public static final int MEDIACASTERTYPE_SHOUTCAST
```

Constant value: **2**

MEDIACASTERTYPE_RTPLIVE

```
public static final int MEDIACASTERTYPE_RTPLIVE
```

Constant value: **3**

MEDIACASTERTYPE_CUPERTINO

```
public static final int MEDIACASTERTYPE_CUPERTINO
```

Constant value: **4**

(continued from last page)

MEDIACASTERTYPE_MPEGTSTCP

```
public static final int MEDIACASTERTYPE_MPEGTSTCP
```

Constant value: **5**

MEDIACASTERTYPE_SRTRECEIVER

```
public static final int MEDIACASTERTYPE_SRTRECEIVER
```

Constant value: **6**

Methods

init

```
public abstract void init(MediaCasterStreamItem mediaCasterStreamItem,  
    MediaCasterItem mediaCasterDef,  
    IApplicationInstance appInstance,  
    String mediaCasterId,  
    String streamExt)
```

Initialize the media caster

Parameters:

`mediaCasterStreamItem` - media caster item
`mediaCasterDef` - media caster definition
`appInstance` - application instance
`mediaCasterId` - media caster id
`streamExt` - stream ext or prefix

getVHost

```
public abstract IVHost getVHost()
```

Get the virtual host associated with this media caster

Returns:

virtual host associated with this media caster

getMediaCasterId

```
public abstract String getMediaCasterId()
```

Get the media caster id

Returns:

media caster id

setMediaCasterId

```
public abstract void setMediaCasterId(String mediaCasterId)
```

Get the media caster id

Parameters:

`mediaCasterId` - media caster id

getStream

```
public abstract IMediaStream getStream()
```

Get the underlying stream being used by this media caster

Returns:

underlying stream being used by this media caster

setStream

```
public abstract void setStream(IMediaStream stream)
```

Set the underlying stream being used by this media caster

Parameters:

stream - underlying stream being used by this media caster

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get the application instance this media caster is associated with

Returns:

application instance this media caster is associated with

setAppInstance

```
public abstract void setAppInstance(IApplicationInstance appInstance)
```

Set the application instance this media caster is associated with

Parameters:

appInstance - application instance this media caster is associated with

getMediaCasterDef

```
public abstract MediaCasterItem getMediaCasterDef()
```

Get the media caster definition

Returns:

media caster definition

setMediaCasterDef

```
public abstract void setMediaCasterDef(MediaCasterItem mediaCasterDef)
```

Set the media caster definition

Parameters:

mediaCasterDef - media caster definition

shutdown

```
public abstract void shutdown(boolean isAppInstanceShutdown)
```

(continued from last page)

Shutdown media caster

Parameters:

isAppInstanceShutdown - is server shutdown

registerPlayer

```
public abstract void registerPlayer(IMediaStreamPlay player)
```

Register a player with this media caster

Parameters:

player - player to register

unregisterPlayer

```
public abstract void unregisterPlayer(IMediaStreamPlay player)
```

Unregister a player with this media caster

Parameters:

player - player to unregister

getIdleTimeout

```
public abstract int getIdleTimeout()
```

Get the idle timeout for this media caster (milliseconds)

Returns:

idle timeout for this media caster (milliseconds)

sessionOpened

```
public abstract void sessionOpened(org.apache.mina.common.Session session)
```

sessionOpened callback

Parameters:

session - IO Session

sessionClosed

```
public abstract void sessionClosed(org.apache.mina.common.Session session)
```

sessionClosed callback

Parameters:

session - IO Session

getMediaCasterStreamItem

```
public abstract MediaCasterStreamItem getMediaCasterStreamItem()
```

Get the media caster item associated with this media caster

Returns:

media caster item associated with this media caster

forceReset

```
public abstract void forceReset()
```

Force a reset/reconnect of this media caster

doWatchdog

```
public abstract boolean doWatchdog()
```

Idle processor

Returns:

return true if media caster unloaded due to idle event

getStreamTimeout

```
public abstract int getStreamTimeout()
```

Get the watchdog stream timeout (milliseconds)

Returns:

stream timeout

setStreamTimeout

```
public abstract void setStreamTimeout(int streamTimeout)
```

Set the watchdog stream timeout (milliseconds)

Parameters:

streamTimeout - stream timeout

getStreamMissingTime

```
public abstract long getStreamMissingTime()
```

Get the time in milliseconds the stream has been missing

Returns:

time in milliseconds the stream has been missing

getStreamLastSeq

```
public abstract long getStreamLastSeq()
```

Get the AMFPacket sequence number of last watchdog processed packet

Returns:

AMFPacket sequence number

getStreamTimeoutReason

```
public abstract int getStreamTimeoutReason()
```

Get the reason the stream is in timeout condition (debug)

(continued from last page)

Returns:

reason the stream is in timeout condition (debug)

getStreamTimeoutLastTime

```
public abstract long getStreamTimeoutLastTime()
```

Get system time in milliseconds of last time stream was considered in missing state (debug)

Returns:

time in milliseconds of last time stream was considered in missing

getStreamTimeoutLastReset

```
public abstract long getStreamTimeoutLastReset()
```

Get system time in milliseconds of last time stream was reset due to stream timeout (debug)

Returns:

time in milliseconds of last time stream was reset

isSession

```
public abstract boolean isSession()
```

Is there current a session attached to this MediaCaster

Returns:

true is MediaCaster has session

isStream

```
public abstract boolean isStream()
```

Is there a stream associated with this MediaCaster

Returns:

true if stream associated with this MediaCaster

getConnectLastAttempt

```
public abstract long getConnectLastAttempt()
```

Get system time in milliseconds of last connection attempt

Returns:

system time in milliseconds of last connection attempt

getConnectLastSuccess

```
public abstract long getConnectLastSuccess()
```

Get system time in milliseconds of last connection success

Returns:

system time in milliseconds of last connection success

(continued from last page)

getConnectLastForceReset

```
public abstract long getConnectLastForceReset()
```

Get system time in milliseconds of last time forceReset was called

Returns:

system time in milliseconds of last time forceReset was called

isStreamIsRunning

```
public abstract boolean isStreamIsRunning()
```

Return true if stream is currently running

Returns:

true if stream is currently running

getReconnectWaitTime

```
public abstract int getReconnectWaitTime()
```

Get the minimum time between reconnect attempts (milliseconds)

Returns:

minimum time between reconnect attempts (milliseconds)

setReconnectWaitTime

```
public abstract void setReconnectWaitTime(int reconnectWaitTime)
```

Set the minimum time between reconnect attempts (milliseconds)

Parameters:

reconnectWaitTime - minimum time between reconnect attempts (milliseconds)

getMediaCasterType

```
public abstract int getMediaCasterType()
```

Get the media caster type. See IMediaCaster.MEDIACASTERTYPE_*

Returns:

media caster type

setMediaCasterType

```
public abstract void setMediaCasterType(int mediaCasterType)
```

Set the media caster type. See IMediaCaster.MEDIACASTERTYPE_*

Parameters:

mediaCasterType - media caster type

getLock

```
public abstract Object getLock()
```

(continued from last page)

Get the MediaCaster lock for an individual MediaCaster item.

setStreamRunning

```
public abstract void setStreamRunning(boolean streamRunning)
```

Called internally to track when streams are running or are stopped.

Parameters:

streamRunning - set to true if stream is running

getStreamRunningIndex

```
public abstract long getStreamRunningIndex()
```

Each time a MediaCaster stream switches from not running to running this value is incremented

Returns:

stream running index

com.wowza.wms.mediacaster Interface IMediaCasterDataReceiver

public interface **IMediaCasterDataReceiver**
extends

IMediaCasterDataReceiver: For internal use only.

Method Summary

abstract void	onData (org.apache.mina.common.ByteBuffer data) Data callback
---------------	--

Methods

onData

public abstract void **onData**(org.apache.mina.common.ByteBuffer data)

Data callback

Parameters:

data - data

com.wowza.wms.mediacaster
Interface IMediaCasterNetConnection

public interface IMediaCasterNetConnection
extends

IMediaCasterNetConnection: Internal use only

Method Summary	
<div>abstract NetConnection</div>	<div>getNetConnection() Receives the INetConnection interface for a live repeater connection</div>

Methods

getNetConnection
public abstract NetConnection **getNetConnection()**
Receives the INetConnection interface for a live repeater connection
Returns:
INetConnection interface

com.wowza.wms.mediacaster Interface IMediaCasterNotify

All Subinterfaces:

[IMediaCasterNotify2](#)

public interface **IMediaCasterNotify**
extends

IMediaCasterNotify: listener interface to MediaCaster system. See IApplicationInstance.addMediaCasterListener().

Method Summary

abstract void	onMediaCasterCreate (IMediaCaster mediaCaster) Invoked when mediaCaster created
abstract void	onMediaCasterDestroy (IMediaCaster mediaCaster) Invoked when MediaCaster destroyed
abstract void	onRegisterPlayer (IMediaCaster mediaCaster, IMediaStreamPlay player) Invoked when a player is added to this mediaCaster
abstract void	onSetSourceStream (IMediaCaster mediaCaster, IMediaStream stream) Invoked when soure stream is set (can be called with stream of null)
abstract void	onUnRegisterPlayer (IMediaCaster mediaCaster, IMediaStreamPlay player) Invoked when a player is removed from this mediaCaster

Methods

onMediaCasterCreate

public abstract void **onMediaCasterCreate**([IMediaCaster](#) mediaCaster)

Invoked when mediaCaster created

Parameters:

mediaCaster

onMediaCasterDestroy

public abstract void **onMediaCasterDestroy**([IMediaCaster](#) mediaCaster)

Invoked when MediaCaster destroyed

Parameters:

mediaCaster

onRegisterPlayer

public abstract void **onRegisterPlayer**([IMediaCaster](#) mediaCaster, [IMediaStreamPlay](#) player)

(continued from last page)

Invoked when a player is added to this mediaCaster

Parameters:

mediaCaster
player

onUnRegisterPlayer

```
public abstract void onUnRegisterPlayer(IMediaCaster mediaCaster,  
IMediaStreamPlay player)
```

Invoked when a player is removed from this mediaCaster

Parameters:

mediaCaster
player

onSetSourceStream

```
public abstract void onSetSourceStream(IMediaCaster mediaCaster,  
IMediaStream stream)
```

Invoked when source stream is set (can be called with stream of null)

Parameters:

mediaCaster
stream

com.wowza.wms.mediacaster Interface IMediaCasterNotify2

All Superinterfaces:

[IMediaCasterNotify](#)

public interface **IMediaCasterNotify2**

extends [IMediaCasterNotify](#)

Method Summary

abstract void	onConnectFailure (IMediaCaster mediaCaster) Invoked when a connection or reconnection attempt fails
abstract void	onConnectStart (IMediaCaster mediaCaster) Invoked when a connection or reconnection attempt is invoked
abstract void	onConnectSuccess (IMediaCaster mediaCaster) Invoked when a connection or reconnection attempt is successful
abstract void	onStreamStart (IMediaCaster mediaCaster) Invoked when the stream starts receiving media data from the media source.
abstract void	onStreamStop (IMediaCaster mediaCaster) Invoked when the stream stops receiving media data from the media source after the streamTimeout value has passed.

Methods inherited from interface [com.wowza.wms.mediacaster.IMediaCasterNotify](#)

[onMediaCasterCreate](#), [onMediaCasterDestroy](#), [onRegisterPlayer](#), [onSetSourceStream](#), [onUnRegisterPlayer](#)

Methods

onConnectStart

public abstract void **onConnectStart**([IMediaCaster](#) mediaCaster)

Invoked when a connection or reconnection attempt is invoked

Parameters:

mediaCaster

onConnectSuccess

public abstract void **onConnectSuccess**([IMediaCaster](#) mediaCaster)

Invoked when a connection or reconnection attempt is successful

Parameters:

mediaCaster

onConnectFailure

```
public abstract void onConnectFailure(IMediaCaster mediaCaster)
```

Invoked when a connection or reconnection attempt fails

Parameters:

mediaCaster

onStreamStart

```
public abstract void onStreamStart(IMediaCaster mediaCaster)
```

Invoked when the stream starts receiving media data from the media source. This event will only be thrown if the MediaCaster property streamTimeout is set to a non-zero value.

Parameters:

mediaCaster

onStreamStop

```
public abstract void onStreamStop(IMediaCaster mediaCaster)
```

Invoked when the stream stops receiving media data from the media source after the streamTimeout value has passed. This event will only be thrown if the MediaCaster property streamTimeout is set to a non-zero value.

Parameters:

mediaCaster

com.wowza.wms.mediacaster

Interface IMediaCasterValidateMediaCaster

public interface **IMediaCasterValidateMediaCaster**
extends

IMediaCasterValidateMediaCaster: interface for implementing stream validators. See [IApplicationInstance.setMediaCasterValidator\(IMediaCasterValidateMediaCaster mediaCasterValidator\)](#)

Method Summary

abstract boolean	onResetMediaCaster (IApplicationInstance appInstance, IMediaCaster mediaCaster) Called when media caster is reset
abstract boolean	onValidateMediaCaster (IApplicationInstance appInstance, IMediaCaster mediaCaster) Called for each media caster to validate the media caster.
abstract void	onValidateMediaCastersStart (IApplicationInstance appInstance) Called when validation for all streams of an application instance is starting
abstract void	onValidateMediaCastersStop (IApplicationInstance appInstance) Called when validation for all streams of an application instance is done

Methods

onValidateMediaCastersStart

public abstract void **onValidateMediaCastersStart**([IApplicationInstance](#) appInstance)

Called when validation for all streams of an application instance is starting

Parameters:

appInstance - application instance

onValidateMediaCastersStop

public abstract void **onValidateMediaCastersStop**([IApplicationInstance](#) appInstance)

Called when validation for all streams of an application instance is done

Parameters:

appInstance

onValidateMediaCaster

public abstract boolean **onValidateMediaCaster**([IApplicationInstance](#) appInstance, [IMediaCaster](#) mediaCaster)

Called for each media caster to validate the media caster. Return true if valid.

Parameters:

(continued from last page)

appInstance - application instance
mediaCaster - media caster

Returns:

true, if valid

onResetMediaCaster

```
public abstract boolean onResetMediaCaster(IApplicationInstance appInstance,  
    IMediaCaster mediaCaster)
```

Called when media caster is reset

Parameters:

appInstance - application instance
mediaCaster - media caster

Returns:

return true

com.wowza.wms.mediacaster

Class MediaCasterItem

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterItem

public class **MediaCasterItem**
extends Object

Constructor Summary

public	<u>MediaCasterItem</u> (String name, String streamType, String baseClass) Media caster item constructor
--------	--

Method Summary

void	<u>clearProperty</u> (String name) Clear property
String	<u>getBaseClass</u> () Get base class
int	<u>getConnectionTimeout</u> () Get connection timeout (milliseconds)
String	<u>getDescription</u> () Get description
static String	<u>getIdString</u> (String name, String liveStreamPacketizer, String liveStreamRepeater) Get id string for this media caster item (not used - returns name unchanged)
int	<u>getKeepAliveTime</u> () Get keep alive time (milliseconds)
String	<u>getName</u> () Get name
<u>WMSProperties</u>	<u>getProperties</u> () Get properties collection
String	<u>getProperty</u> (String name) Get property value
String	<u>getStreamType</u> () Get the stream type
String	<u>idStringToName</u> (String idString) Convert name to id string (not used - returns id string unchanged)
static MediaCasterStreamId	<u>parseIdString</u> (String idString)

void	<code>setBaseClass</code> (String baseClass) Set base class
void	<code>setConnectionTimeout</code> (int connectionTimeout) Set connection timeout (milliseconds)
void	<code>setDescription</code> (String description) Set description
void	<code>setKeepAliveTime</code> (int keepAliveTime) Set keep alive time (milliseconds)
void	<code>setName</code> (String name) Set name
void	<code>setProperty</code> (String name, String value) Set a property
void	<code>setStreamType</code> (String streamType) Set stream type
String	<code>toString</code> () toString

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

MediaCasterItem

```
public MediaCasterItem(String name,
                       String streamType,
                       String baseClass)
```

Media caster item constructor

Parameters:

name - media caster name
streamType - stream type
baseClass - base class

Methods

getStreamType

```
public String getStreamType()
```

Get the stream type

Returns:

stream type

(continued from last page)

setStreamType

```
public void setStreamType(String streamType)
```

Set stream type

Parameters:

streamType - stream type

getName

```
public String getName()
```

Get name

Returns:

name

setName

```
public void setName(String name)
```

Set name

Parameters:

name - name

setProperty

```
public void setProperty(String name,  
                        String value)
```

Set a property

Parameters:

name - name

value - value

clearProperty

```
public void clearProperty(String name)
```

Clear property

Parameters:

name - name

getProperty

```
public String getProperty(String name)
```

Get property value

Parameters:

name - name

Returns:

property value

getProperties

```
public WMSProperties getProperties()
```

Get properties collection

Returns:
properties collection

getDescription

```
public String getDescription()
```

Get description

Returns:
description

setDescription

```
public void setDescription(String description)
```

Set description

Parameters:
description - description

getBaseClass

```
public String getBaseClass()
```

Get base class

Returns:
base class

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set base class

Parameters:
baseClass - base class

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get connection timeout (milliseconds)

Returns:
connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

(continued from last page)

Set connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

getKeepAliveTime

```
public int getKeepAliveTime()
```

Get keep alive time (milliseconds)

Returns:

keep alive time (milliseconds)

setKeepAliveTime

```
public void setKeepAliveTime(int keepAliveTime)
```

Set keep alive time (milliseconds)

Parameters:

keepAliveTime - keep alive time (milliseconds)

getIdString

```
public static String getIdString(String name,  
    String liveStreamPacketizer,  
    String liveStreamRepeater)
```

Get id string for this media caster item (not used - returns name unchanged)

Parameters:

name - name

Returns:

id string for this media caster item

parseIdString

```
public static MediaCasterStreamId parseIdString(String idString)
```

idStringToName

```
public String idStringToName(String idString)
```

Convert name to id string (not used - returns id string unchanged)

Parameters:

idString - id string

Returns:

name

toString

```
public String toString()
```

(continued from last page)

toString

com.wowza.wms.mediacaster Class MediaCasterList

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterList

public class **MediaCasterList**
extends Object

Constructor Summary

public	MediaCasterList() Constructor
--------	--

Method Summary

MediaCasterItem	getMediaCasterDef (String name) Get media caster definition by name
java.util.Map	getMediaCasterDefs () Get map of media caster items
java.util.List	getMediaCasterNames () Get list of media caster names

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterList

public **MediaCasterList**()

Constructor

Methods

getMediaCasterDefs

public java.util.Map **getMediaCasterDefs**()

Get map of media caster items

Returns:

map of media caster items

(continued from last page)

getMediaCasterNames

```
public java.util.List getMediaCasterNames()
```

Get list of media caster names

Returns:

list of media caster names

getMediaCasterDef

```
public MediaCasterItem getMediaCasterDef(String name)
```

Get media caster definition by name

Parameters:

name - name

Returns:

media caster definition

com.wowza.wms.mediacaster Class MediaCasterSettings

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterSettings

public class **MediaCasterSettings**
extends Object

Constructor Summary

public	MediaCasterSettings()
--------	---------------------------------------

Method Summary

HostPortConfig	getMediaCasterHostPortConfig() Get media caster host port config
int	getMediaCasterProcessorCount() Get the thread count use for this host port
void	setMediaCasterHostPortConfig(HostPortConfig mediaCasterHostPortConfig) Set media caster host port config
void	setMediaCasterProcessorCount(int mediaCasterProcessorCount) Set the thread count for this processor

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterSettings

public **MediaCasterSettings()**

Methods

getMediaCasterHostPortConfig

public [HostPortConfig](#) **getMediaCasterHostPortConfig()**

Get media caster host port config

Returns:

host port config

setMediaCasterHostPortConfig

```
public void setMediaCasterHostPortConfig(HostPortConfig mediaCasterHostPortConfig)
```

Set media caster host port config

Parameters:

mediaCasterHostPortConfig

getMediaCasterProcessorCount

```
public int getMediaCasterProcessorCount()
```

Get the thread count use for this host port

Returns:

thread count use for this host port

setMediaCasterProcessorCount

```
public void setMediaCasterProcessorCount(int mediaCasterProcessorCount)
```

Set the thread count for this processor

Parameters:

mediaCasterProcessorCount - thread count use for this host port

com.wowza.wms.mediacaster Class MediaCasterStreamItem

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterStreamItem

public class **MediaCasterStreamItem**
extends Object

Constructor Summary

public	MediaCasterStreamItem (long uniqueId) Media caster item constructor
--------	--

Method Summary

void	acquire () Increment acquire lock count for this media caster item
void	acquireAndRelease () Increment then decrement acquire lock count for this media caster item
boolean	doWatchdog () Do idle processing
String	getLiveStreamPacketizer () Get the live stream packetizer for this media caster stream item
String	getLiveStreamRepeater () Get the live stream repeater for this media caster stream item
Object	getLock ()
int	getLockCount () Get the current number of acquire locks on this media caster item
IMediaCaster	getMediaCaster () Get the underlying IMediaCaster interface for this MediaCaster
String	getMediaCasterId () Get this media caster item id
int	getPlayerCount () Get the current number of players associated with this media caster item
String	getStreamExt ()
long	getUniqueId ()

void	<code>init</code> (String mediaCasterId, String streamExt, <code>MediaCasterItem</code> mediaCasterDef, <code>MediaCasterStreamMap</code> parent, String liveStreamPacketizer, String liveStreamRepeater) Initialize the media caster item (internal use)
boolean	<code>isShutdownOnRelease</code> () On last release shutdown the stream even if clients are connected
boolean	<code>isValid</code> ()
void	<code>registerPlayer</code> (<code>IMediaStreamPlay</code> player) Register a player with a media caster item (internal use)
void	<code>release</code> () Decrement acquire lock count for this media caster item
void	<code>reset</code> () Force a reconnect or reset for this media caster item
void	<code>setLiveStreamPacketizer</code> (String liveStreamPacketizer) Set the live stream packetizer for this media caster stream item
void	<code>setLiveStreamRepeater</code> (String liveStreamRepeater) Set the live stream repeater for this media caster stream item
void	<code>setShutdownOnRelease</code> (boolean shutdownOnRelease) On last release shutdown the stream even if clients are connected
void	<code>setStreamExt</code> (String streamExt)
void	<code>setValid</code> (boolean isValid)
void	<code>shutdown</code> (boolean isAppInstanceShutdown) Shutdown this media caster item
void	<code>unregisterPlayer</code> (<code>IMediaStreamPlay</code> player) Unregister a player with a media caster item (internal use)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

MediaCasterStreamItem

```
public MediaCasterStreamItem(long uniqueId)
```

Media caster item constructor

Methods

(continued from last page)

getLock

```
public Object getLock()
```

getUniqueId

```
public long getUniqueId()
```

isValid

```
public boolean isValid()
```

setValid

```
public void setValid(boolean isValid)
```

init

```
public void init(String mediaCasterId,  
                String streamExt,  
                MediaCasterItem mediaCasterDef,  
                MediaCasterStreamMap parent,  
                String liveStreamPacketizer,  
                String liveStreamRepeater)
```

Initialize the media caster item (internal use)

Parameters:

mediaCasterId - media caster id
streamExt - stream extension or prefix
mediaCasterDef - media caster definition
parent - parent map

getMediaCasterId

```
public String getMediaCasterId()
```

Get this media caster item id

Returns:

media caster item id

getMediaCaster

```
public IMediaCaster getMediaCaster()
```

Get the underlying IMediaCaster interface for this MediaCaster

Returns:

underlying IMediaCaster interface

registerPlayer

```
public void registerPlayer(IMediaStreamPlay player)
```

Register a player with a media caster item (internal use)

Parameters:

player - player to register

unregisterPlayer

```
public void unregisterPlayer(IMediaStreamPlay player)
```

Unregister a player with a media caster item (internal use)

Parameters:

player - player to unregister

doWatchdog

```
public boolean doWatchdog()
```

Do idle processing

Returns:

return true if caused shutdown of item

reset

```
public void reset()
```

Force a reconnect or reset for this media caster item

shutdown

```
public void shutdown(boolean isAppInstanceShutdown)
```

Shutdown this media caster item

Parameters:

isAppInstanceShutdown - is this due to application shutdown

getPlayerCount

```
public int getPlayerCount()
```

Get the current number of players associated with this media caster item

Returns:

current number of players associated with this media caster item

getLockCount

```
public int getLockCount()
```

Get the current number of acquire locks on this media caster item

(continued from last page)

Returns:

current number of acquire locks on this media caster item

acquireAndRelease

```
public void acquireAndRelease( )
```

Increment then decrement acquire lock count for this media caster item

acquire

```
public void acquire( )
```

Increment acquire lock count for this media caster item

release

```
public void release( )
```

Decrement acquire lock count for this media caster item

getStreamExt

```
public String getStreamExt( )
```

setStreamExt

```
public void setStreamExt(String streamExt)
```

isShutdownOnRelease

```
public boolean isShutdownOnRelease( )
```

On last release shutdown the stream even if clients are connected

Returns:

true if shutting down on release

setShutdownOnRelease

```
public void setShutdownOnRelease(boolean shutdownOnRelease)
```

On last release shutdown the stream even if clients are connected

Parameters:

shutdownOnRelease - true if shutting down on release

getLiveStreamPacketizer

```
public String getLiveStreamPacketizer( )
```

Get the live stream packetizer for this media caster stream item

Returns:

(continued from last page)

live stream packetizer

setLiveStreamPacketizer

```
public void setLiveStreamPacketizer(String liveStreamPacketizer)
```

Set the live stream packetizer for this media caster stream item

Parameters:

liveStreamPacketizer - live stream packetizer

getLiveStreamRepeater

```
public String getLiveStreamRepeater()
```

Get the live stream repeater for this media caster stream item

Returns:

live stream repeater

setLiveStreamRepeater

```
public void setLiveStreamRepeater(String liveStreamRepeater)
```

Set the live stream repeater for this media caster stream item

Parameters:

liveStreamRepeater - live stream repeater

com.wowza.wms.mediacaster Class MediaCasterStreamManager

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterStreamManager

public class **MediaCasterStreamManager**
extends Object

Constructor Summary

public	MediaCasterStreamManager (MediaCasterStreamMap mediaCasterStreamMap)
--------	---

Method Summary

String[]	getStreamArray () Get a list of active streams
java.util.List	getStreamList () Get a list of active streams
boolean	startStream (String streamName, String mediaCasterType) Start a stream by name
boolean	stopStream (String streamName) Stop a stream by name
boolean	streamExists (String streamName) Returns true if stream exists

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterStreamManager

public **MediaCasterStreamManager**([MediaCasterStreamMap](#) mediaCasterStreamMap)

Methods

getStreamArray

public String[] **getStreamArray**()

Get a list of active streams

(continued from last page)

Returns:

list of active streams

getStreamList

```
public java.util.List getStreamList()
```

Get a list of active streams

Returns:

list of active streams

streamExists

```
public boolean streamExists(String streamName)
```

Returns true if stream exists

Parameters:

streamName - stream name

Returns:

true if stream exists

stopStream

```
public boolean stopStream(String streamName)
```

Stop a stream by name

Parameters:

streamName - stream name

Returns:

true is successful

startStream

```
public boolean startStream(String streamName,  
                           String mediaCasterType)
```

Start a stream by name

Parameters:

streamName - stream name

mediaCasterType - MediaCaster type as defined in the name field of conf/MediaCasters.xml

Returns:

true is successful

com.wowza.wms.mediacaster

Class MediaCasterStreamMap

java.lang.Object

└─com.wowza.wms.mediacaster.MediaCasterStreamMap

public class **MediaCasterStreamMap**
extends Object

Constructor Summary

public	MediaCasterStreamMap (IApplicationInstance appInstance) Create a new mediacaster map
--------	--

Method Summary

MediaCasterStreamItem	acquire (String streamName) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, MediaCasterItem mediaCasterDef) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String streamType) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String streamName, String liveStreamPacketizer, String liveStreamRepeater) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, MediaCasterItem mediaCasterDef) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquire (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, String streamType) Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away).
MediaCasterStreamItem	acquireAndRelease (String inStreamName, String liveStreamPacketizer, String liveStreamRepeater, MediaCasterItem mediaCasterDef) Increment and then decrement the lock count for a media caster item (so that it is loaded and will stay loaded for at least the KeepAliveTime).
void	addStreamSrcToMediaCaster (long streamSrc, String mediaCasterId)
void	clearStreamSrcToMediaCaster (long streamSrc)
void	doWatchdog () Do periodic idle time processing

<u>IApplicationInstance</u>	<u>getApplicationInstance()</u> Get the parent application instance for this map
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	<u>getLock()</u> Get the read/write lock for this interface
<u>MediaCasterStreamItem</u>	<u>getMediaCaster(String streamName)</u> Get media caster item based on given stream name
<u>MediaCasterStreamItem</u>	<u>getMediaCaster(String streamName, String liveStreamPacketizer, String liveStreamRepeater)</u> Get media caster item based on given stream name
int	<u>getMediaCasterCount()</u> Get the number of mediacasters current running
java.util.List	<u>getMediaCasterNames()</u> Get a list of all the currently running media caster names
java.util.List	<u>getMediaCasterStreamItems()</u>
<u>MediaCasterStreamManager</u>	<u>getStreamManager()</u> Get the stream manager interface for managing the starting and stopping of streams
void	<u>registerPlayer(IMediaStreamPlay player, MediaCasterItem mediaCasterDef)</u> Register a player to a media caster item (internal use)
void	<u>release(MediaCasterStreamItem mediaCasterStreamItem)</u> Decrement lock count on media caster item
void	<u>release(MediaCasterStreamItem mediaCasterStreamItem, boolean removeIfZero)</u>
void	<u>remove(MediaCasterStreamItem mediaCasterStreamItem)</u>
void	<u>shutdown(boolean isAppInstanceShutdown)</u> Shutdown this media caster and close all running media casters
String	<u>streamSrcToMediaCaster(long streamSrc)</u>
void	<u>unregisterPlayer(IMediaStreamPlay player, MediaCasterItem mediaCasterDef)</u> Unregister a player to a media caster item (internal use)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MediaCasterStreamMap

```
public MediaCasterStreamMap(IApplicationInstance appInstance)
```

(continued from last page)

Create a new mediacaster map

Parameters:

appInstance - application instance

Methods

getLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock getLock()
```

Get the read/write lock for this interface

Returns:

read/write lock

getStreamManager

```
public MediaCasterStreamManager getStreamManager()
```

Get the stream manager interface for managing the starting and stopping of streams

Returns:

stream manager interface

getApplicationInstance

```
public IApplicationInstance getApplicationInstance()
```

Get the parent application instance for this map

Returns:

parent application instance for this map

getMediaCasterCount

```
public int getMediaCasterCount()
```

Get the number of mediacasters current running

Returns:

number of mediacasters current running

getMediaCasterStreamItems

```
public java.util.List getMediaCasterStreamItems()
```

doWatchdog

```
public void doWatchdog()
```

Do periodic idle time processing

(continued from last page)

shutdown

```
public void shutdown(boolean isAppInstanceShutdown)
```

Shutdown this media caster and close all running media casters

Parameters:

isAppInstanceShutdown - is this due to application shutdown

getMediaCasterNames

```
public java.util.List getMediaCasterNames()
```

Get a list of all the currently running media caster names

Returns:

list of all the currently running media caster names

getMediaCaster

```
public MediaCasterStreamItem getMediaCaster(String streamName)
```

Get media caster item based on given stream name

Parameters:

streamName - stream name

Returns:

media caster item

getMediaCaster

```
public MediaCasterStreamItem getMediaCaster(String streamName,  
String liveStreamPacketizer,  
String liveStreamRepeater)
```

Get media caster item based on given stream name

Parameters:

streamName - stream name

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live stream repeater name

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String streamName,  
String liveStreamPacketizer,  
String liveStreamRepeater)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. Uses default application instance stream type.

Parameters:

streamName - stream name

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live stream repeater name

(continued from last page)

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String streamName)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. Uses default application instance stream type.

Parameters:

streamName - stream name

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    MediaCasterItem mediaCasterDef)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. This API allow loading of a MediaCaster into a non-MediaCaster stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:

inStreamName - stream name

mediaCasterDef - MediaCaster definition

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    MediaCasterItem mediaCasterDef)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded. This API allow loading of a MediaCaster into a non-MediaCaster stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:

inStreamName - stream name

liveStreamPacketizer - live stream packetizer name

liveStreamRepeater - live stream repeater name

mediaCasterDef - MediaCaster definition

Returns:

media caster item

acquireAndRelease

```
public MediaCasterStreamItem acquireAndRelease(String inStreamName,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    MediaCasterItem mediaCasterDef)
```

(continued from last page)

Increment and then decrement the lock count for a media caster item (so that it is loaded and will stay loaded for at least the KeepAliveTime). Will load the media caster if not already loaded. This API allow loading of a MediaCaster into a non-MediaCaster stream type such as the "live" or "liverepeater-origin" stream type.

Parameters:

inStreamName - stream name
 liveStreamPacketizer - live stream packetizer name
 liveStreamRepeater - live stream repeater name
 mediaCasterDef - MediaCaster definition

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    String streamType)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded.

Parameters:

inStreamName - stream name
 streamType - stream type to use (null will use default application streamType)

Returns:

media caster item

acquire

```
public MediaCasterStreamItem acquire(String inStreamName,  
    String liveStreamPacketizer,  
    String liveStreamRepeater,  
    String streamType)
```

Increment the lock count for a media caster item (so that it remains loaded even if all listeners go away). Will load the media caster if not already loaded.

Parameters:

inStreamName - stream name
 liveStreamPacketizer - live stream packetizer name
 liveStreamRepeater - live stream repeater name
 streamType - stream type to use (null will use default application streamType)

Returns:

media caster item

release

```
public void release(MediaCasterStreamItem mediaCasterStreamItem)
```

Decrement lock count on media caster item

Parameters:

mediaCasterStreamItem - media caster item to decrement

release

```
public void release(MediaCasterStreamItem mediaCasterStreamItem,  
    boolean removeIfZero)
```

(continued from last page)

remove

```
public void remove(MediaCasterStreamItem mediaCasterStreamItem)
```

streamSrcToMediaCaster

```
public String streamSrcToMediaCaster(long streamSrc)
```

addStreamSrcToMediaCaster

```
public void addStreamSrcToMediaCaster(long streamSrc,  
    String mediaCasterId)
```

clearStreamSrcToMediaCaster

```
public void clearStreamSrcToMediaCaster(long streamSrc)
```

registerPlayer

```
public void registerPlayer(IMediaStreamPlay player,  
    MediaCasterItem mediaCasterDef)
```

Register a player to a media caster item (internal use)

Parameters:

player - player to register
mediaCasterDef - media caster definition

unregisterPlayer

```
public void unregisterPlayer(IMediaStreamPlay player,  
    MediaCasterItem mediaCasterDef)
```

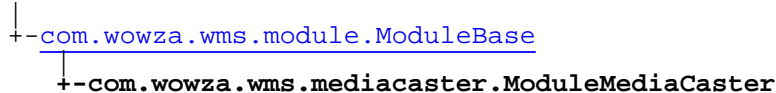
Unregister a player to a media caster item (internal use)

Parameters:

player - player to unregister
mediaCasterDef - media caster definition

com.wowza.wms.mediacaster Class ModuleMediaCaster

java.lang.Object



All Implemented Interfaces:

[IModuleOnApp](#)

public class **ModuleMediaCaster**
 extends [ModuleBase](#)
 implements [IModuleOnApp](#)

ModuleMediaCaster: Module for manipulating media casters through a Flash UI.

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#),
[CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#),
[PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#),
[PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#),
[PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#),
[PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#),
[PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#),
[PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleMediaCaster ()
--------	--------------------------------------

Method Summary

void	acquireMediaCaster (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Increment the lock count of a media caster stream.
void	getLockCount (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the current lock count for a stream
void	getPlayerCount (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the numbers of players associated with a particular media caster
void	getStreamNames (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get an array of stream names that are media casters associate with this application instance (returned as AMFDataArray)
void	onAppStart (IApplicationInstance appInstance) onAppStart

void	onAppStop (IApplicationInstance appInstance) onAppStop
void	releaseMediaCaster (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Decrement the lock count of a media caster stream
void	resetStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Reset a media caster stream
void	shutdownStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Force shutdown a media caster stream

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#), [getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#), [getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#), [getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#), [getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#), [sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendStreamOnStatusError](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.module.IModuleOnApp](#)

[onAppStart](#), [onAppStop](#)

Constructors

ModuleMediaCaster

```
public ModuleMediaCaster()
```

Methods

onAppStart

```
public void onAppStart(IApplicationInstance appInstance)
```

onAppStart

onAppStop

```
public void onAppStop(IApplicationInstance appInstance)
```

onAppStop

getLockCount

```
public void getLockCount(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the current lock count for a stream

Parameters:

client - client
function - function
params - {streamName}

getPlayerCount

```
public void getPlayerCount(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the numbers of players associated with a particular media caster

Parameters:

client - client
function - function
params - {streamName}

getStreamNames

```
public void getStreamNames(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get an array of stream names that are media casters associate with this application instance (returned as AMFDataArray)

Parameters:

client - client
function - function
params - (no params)

resetStream

```
public void resetStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Reset a media caster stream

Parameters:

client - client
function - function
params - {streamName}

shutdownStream

```
public void shutdownStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Force shutdown a media caster stream

(continued from last page)

Parameters:

client - client
function - function
params - {streamName}

acquireMediaCaster

```
public void acquireMediaCaster(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Increment the lock count of a media caster stream. If the media caster does not exist create it and connect.

Parameters:

client - client
function - function
params - {streamName, streamType [optional]}

releaseMediaCaster

```
public void releaseMediaCaster(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Decrement the lock count of a media caster stream

Parameters:

client - client
function - function
params - {streamName}

Package

com.wowza.wms.mediacaster.cupertino

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterChunkFetch

public interface **ICupertinoMediaCasterChunkFetch**
extends

Interface to fetch Apple HLS chunks for processing This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoChunkFetchClass Value: Full Class Path Type: String

Method Summary

abstract CupertinoMediaCasterFetchedResult	fetchBlock (String path, int timeOut, int retries) Called when a manifest is to be fetched
abstract CupertinoMediaCasterFetchedResult	fetchManifest (String path, int timeOut, int retries) Called when a manifest is to be fetched
abstract void	init (IApplicationInstance appins, CupertinoMediaCasterContext context) Called when the class is initiated.

Methods

init

```
public abstract void init(IApplicationInstance appins,  
    CupertinoMediaCasterContext context)
```

Called when the class is initiated.

Parameters:

appins - Application instance

context - MediaCaster context object containing configuration settings

fetchManifest

```
public abstract CupertinoMediaCasterFetchedResult fetchManifest(String path,  
    int timeOut,  
    int retries)
```

Called when a manifest is to be fetched

Parameters:

path - - The path to the manifest to be fetched. It is up to the class to handle the path

timeOut - - The time in milliseconds to wait for a timeout

retries - - The number of retries to perform when attempt to get the data requested

Returns:

CupertinoMediaCasterFetchedResult - The data type should be set to CupertinoMediaCasterFetchedResult.textType

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fetchBlock

```
public abstract CupertinoMediaCasterFetchResult fetchBlock(String path,  
    int timeout,  
    int retries)
```

Called when a manifest is to be fetched

Parameters:

path - - The path to the asset to be fetched. It is up to the class to handle the path

timeout - - The time in milliseconds to wait for a timeout

retries - - The number of retries to perform when attempt to get the data requested

Returns:

CupertinoMediaCasterFetchResult - The data type should be set to CupertinoMediaCasterFetchResult.dataType

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterHolder

public interface **ICupertinoMediaCasterHolder**
extends

Interface to define parameters potentially retrievable when a stream is found within a manifest along with maintaining a list of elements that are made available within a chunklist It is up to the ICupertinoMediaCasterPlaylistParser implementation to set these parameters. The ICupertinoMediaCasterHolder object is made available to the ICupertinoMediaCasterManageStreamName implementation so to provide context when determining stream names to use.

Method Summary

abstract void	<u>addIndexElement</u> (String ElementValue, long duration) Add an Index element to the list
abstract boolean	<u>checkIndexAvailable</u> (String url) Check if the URL provided is in this holder
abstract String	<u>getAudioCodec</u> () Get the audio codec
abstract long	<u>getCurrentDuration</u> () Get the current duration
abstract int	<u>getIndexAudioTag</u> () Get the audio tag
abstract int	<u>getIndexBitrate</u> () Get the bitrate
abstract int	<u>getIndexBitsPerSample</u> () Get the bits per sample
abstract int	<u>getIndexChannel</u> () Get the channel count
abstract int	<u>getIndexChunkCount</u> () Get the chunk count
abstract String	<u>getIndexCodecPrivateData</u> () Get the index codec private data
abstract int	<u>getIndexDisplayHeight</u> () Get the display height
abstract int	<u>getIndexDisplayWidth</u> () Get the index display width
abstract int	<u>getIndexElementCount</u> () Get the element count
abstract String	<u>getIndexFourCC</u> () Get the FourCC parameter

abstract String	<u>getIndexGroupID()</u> Get the group ID
abstract int	<u>getIndexId()</u> Get the index ID
abstract String	<u>getIndexLanguage()</u> Get the language
abstract int	<u>getIndexMaxHeight()</u> Get the max height
abstract int	<u>getIndexMaxWidth()</u> Get the max width
abstract String	<u>getIndexMediaLine()</u> Get the media line
abstract String	<u>getIndexName()</u> Get the index name
abstract int	<u>getIndexPacketSize()</u> Get the index packet size
abstract String	<u>getIndexProgramID()</u> Get the program ID
abstract String	<u>getIndexResolution()</u> Get the resolution
abstract int	<u>getIndexSampleRate()</u> Get the sample rate
abstract String	<u>getIndexType()</u> Get the index type
abstract String	<u>getIndexURL()</u> Get the URL
abstract boolean	<u>getisLive()</u> Get this isLive flag
abstract String	<u>getNextIndexElement()</u> Get the next index element
abstract String	<u>getVideoCodec()</u> Get the video codec
abstract void	<u>setAudioCodec()</u> (String audiocodec) Set the audio codec
abstract void	<u>setIndexAudioLocation()</u> (String audioLocation) Set the audio location
abstract void	<u>setIndexAudioTag()</u> (int audiotag) Set the audio tag
abstract void	<u>setIndexBitrate()</u> (String bitrate) Set the bitrate

abstract void	<u>setIndexBitsPerSample</u> (int bitpersample) Set the bits per sample
abstract void	<u>setIndexChannel</u> (int channel) Set the channel count
abstract void	<u>setIndexChunkCount</u> (int index) Set the chunk count
abstract void	<u>setIndexCodecPrivateData</u> (String codecprivatedata) Set the index codec private data
abstract void	<u>setIndexCODECS</u> (String completeCodecs) Set the codec string
abstract void	<u>setIndexDefault</u> (String defaultSetting) Set the default setting
abstract void	<u>setIndexDisplayHeight</u> (int displayheight) Set the display height
abstract void	<u>setIndexDisplayWidth</u> (int displaywidth) Set the index display width
abstract void	<u>setIndexFourCC</u> (String fourcc) Set the FourCC parameter
abstract void	<u>setIndexGroupID</u> (String groupid) Set the group ID
abstract void	<u>setIndexId</u> (int index) Set the index ID
abstract void	<u>setIndexLanguage</u> (String lang) Set the language
abstract void	<u>setIndexMaxHeight</u> (int maxheight) Set the max height
abstract void	<u>setIndexMaxWidth</u> (int maxwidth) Set the max width
abstract void	<u>setIndexMediaLine</u> (String medialine) Set the media line
abstract void	<u>setIndexName</u> (String name) Set the index name
abstract void	<u>setIndexPacketSize</u> (int packetsize) Set the index packet size
abstract void	<u>setIndexProgramID</u> (String id) Set the program ID
abstract void	<u>setIndexResolution</u> (String resolution) Set the resolution
abstract void	<u>setIndexSampleRate</u> (int samplerate) Set the sample rate

abstract void	<code>setIndexType</code> (String type) Set the index type
abstract void	<code>setIndexURL</code> (String url) Set the URL
abstract void	<code>setisLive</code> (boolean live) Set the isLive flag
abstract void	<code>setVideoCodec</code> (String videocodec) Set the video codec

Methods

`getisLive`

```
public abstract boolean getisLive()
```

Get this isLive flag

Returns:

`setisLive`

```
public abstract void setisLive(boolean live)
```

Set the isLive flag

Parameters:

live

`getNextIndexElement`

```
public abstract String getNextIndexElement()
```

Get the next index element

Returns:

String

`addIndexElement`

```
public abstract void addIndexElement(String ElementValue,  
    long duration)
```

Add an Index element to the list

Parameters:

ElementValue

duration

`getCurrentDuration`

```
public abstract long getCurrentDuration()
```

(continued from last page)

Get the current duration

Returns:

long

setIndexCodecPrivateData

```
public abstract void setIndexCodecPrivateData(String codecprivatedata)
```

Set the index codec private data

Parameters:

codecprivatedata

getIndexCodecPrivateData

```
public abstract String getIndexCodecPrivateData()
```

Get the index codec private data

Returns:

String

setIndexDisplayWidth

```
public abstract void setIndexDisplayWidth(int displaywidth)
```

Set the index display width

Parameters:

displaywidth

getIndexDisplayWidth

```
public abstract int getIndexDisplayWidth()
```

Get the index display width

Returns:

int

setIndexDisplayHeight

```
public abstract void setIndexDisplayHeight(int displayheight)
```

Set the display height

Parameters:

displayheight

getIndexDisplayHeight

```
public abstract int getIndexDisplayHeight()
```

Get the display height

Returns:

int

setIndexMaxHeight

```
public abstract void setIndexMaxHeight(int maxHeight)
```

Set the max height

Parameters:

maxheight

getIndexMaxHeight

```
public abstract int getIndexMaxHeight()
```

Get the max height

Returns:

int

setIndexMaxWidth

```
public abstract void setIndexMaxWidth(int maxwidth)
```

Set the max width

Parameters:

maxwidth

getIndexMaxWidth

```
public abstract int getIndexMaxWidth()
```

Get the max width

Returns:

int

setIndexAudioTag

```
public abstract void setIndexAudioTag(int audiotag)
```

Set the audio tag

Parameters:

audiotag

getIndexAudioTag

```
public abstract int getIndexAudioTag()
```

Get the audio tag

Returns:

int

setIndexPacketSize

```
public abstract void setIndexPacketSize(int packetsize)
```

(continued from last page)

Set the index packet size

Parameters:

packetSize

getIndexPacketSize

```
public abstract int getIndexPacketSize()
```

Get the index packet size

Returns:

setIndexBitsPerSample

```
public abstract void setIndexBitsPerSample(int bitspersample)
```

Set the bits per sample

Parameters:

bitspersample

getIndexBitsPerSample

```
public abstract int getIndexBitsPerSample()
```

Get the bits per sample

Returns:

int

setIndexBitrate

```
public abstract void setIndexBitrate(String bitrate)
```

Set the bitrate

Parameters:

bitrate

getIndexBitrate

```
public abstract int getIndexBitrate()
```

Get the bitrate

Returns:

int

setIndexChannel

```
public abstract void setIndexChannel(int channel)
```

Set the channel count

Parameters:

channel

getIndexChannel

```
public abstract int getIndexChannel()
```

Get the channel count

Returns:
int

setIndexSampleRate

```
public abstract void setIndexSampleRate(int samplerate)
```

Set the sample rate

Parameters:
samplerate

getIndexSampleRate

```
public abstract int getIndexSampleRate()
```

Get the sample rate

Returns:
int

setIndexFourCC

```
public abstract void setIndexFourCC(String fourcc)
```

Set the FourCC parameter

Parameters:
fourcc

getIndexFourCC

```
public abstract String getIndexFourCC()
```

Get the FourCC parameter

Returns:

setIndexChunkCount

```
public abstract void setIndexChunkCount(int index)
```

Set the chunk count

Parameters:
index

getIndexChunkCount

```
public abstract int getIndexChunkCount()
```

(continued from last page)

Get the chunk count

Returns:
int

setIndexCODECS

```
public abstract void setIndexCODECS(String completeCodecs)
```

Set the codec string

Parameters:
completeCodecs

setIndexId

```
public abstract void setIndexId(int index)
```

Set the index ID

Parameters:
index

getIndexId

```
public abstract int getIndexId()
```

Get the index ID

Returns:
int

setAudioCodec

```
public abstract void setAudioCodec(String audiocodec)
```

Set the audio codec

Parameters:
audiocodec

getAudioCodec

```
public abstract String getAudioCodec()
```

Get the audio codec

Returns:
String

setVideoCodec

```
public abstract void setVideoCodec(String videocodec)
```

Set the video codec

Parameters:
videocodec

getVideoCodec

```
public abstract String getVideoCodec()
```

Get the video codec

Returns:
String

setIndexMediaLine

```
public abstract void setIndexMediaLine(String medialine)
```

Set the media line

Parameters:
medialine

getIndexMediaLine

```
public abstract String getIndexMediaLine()
```

Get the media line

Returns:
String

setIndexType

```
public abstract void setIndexType(String type)
```

Set the index type

Parameters:
type

getIndexType

```
public abstract String getIndexType()
```

Get the index type

Returns:
String

setIndexGroupID

```
public abstract void setIndexGroupID(String groupid)
```

Set the group ID

Parameters:
groupid

getIndexGroupID

```
public abstract String getIndexGroupID()
```

(continued from last page)

Get the group ID

Returns:

String

setIndexLanguage

```
public abstract void setIndexLanguage(String lang)
```

Set the language

Parameters:

lang

getIndexLanguage

```
public abstract String getIndexLanguage()
```

Get the language

Returns:

String

setIndexName

```
public abstract void setIndexName(String name)
```

Set the index name

Parameters:

name

getIndexName

```
public abstract String getIndexName()
```

Get the index name

Returns:

String

getIndexElementCount

```
public abstract int getIndexElementCount()
```

Get the element count

Returns:

int

setIndexURL

```
public abstract void setIndexURL(String url)
```

Set the URL

Parameters:

url

getIndexURL

```
public abstract String getIndexURL()
```

Get the URL

Returns:
String

setIndexProgramID

```
public abstract void setIndexProgramID(String id)
```

Set the program ID

Parameters:
id

getIndexProgramID

```
public abstract String getIndexProgramID()
```

Get the program ID

Returns:
String

setIndexResolution

```
public abstract void setIndexResolution(String resolution)
```

Set the resolution

Parameters:
resolution

getIndexResolution

```
public abstract String getIndexResolution()
```

Get the resolution

Returns:
String

checkIndexAvailable

```
public abstract boolean checkIndexAvailable(String url)
```

Check if the URL provided is in this holder

Parameters:
url

Returns:
boolean - available is true, not available false

setIndexDefault

```
public abstract void setIndexDefault(String defaultSetting)
```

Set the default setting

Parameters:

defaultSetting

setIndexAudioLocation

```
public abstract void setIndexAudioLocation(String audioLocation)
```

Set the audio location

Parameters:

audioLocation

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterHolders

public interface **ICupertinoMediaCasterHolders**
extends

ICupertinoMediaCasterHolders

Method Summary

abstract void	<code>addAudioIndex(ICupertinoMediaCasterHolder thisHolder)</code> Add a CupertinoCasterHolder to the audio index
abstract void	<code>addVideoIndex(ICupertinoMediaCasterHolder thisHolder)</code> Add a CupertinoCasterHolder to the video index
abstract void	<code>clearCupertinoHolder()</code> Clear this holder
abstract java.util.ArrayList	<code>getAudioBitrates()</code> Get the audio bitrates for the object
abstract int	<code>getAudioCount()</code> Get the audio count
abstract int	<code>getAudioSegmentID()</code> Get the AudioSegmentID for this object
abstract <code>ICupertinoMediaCasterHolder</code>	<code>getCupertinoAudioIndex(int indexposition)</code> Get the CupertinoCaster holder from audio index by position
abstract <code>ICupertinoMediaCasterHolder</code>	<code>getCupertinoVideoIndex(int indexposition)</code> Get the CupertinoCaster holder from video index by position
abstract boolean	<code>getisLive()</code> Get this isLive flag
abstract String	<code>getManifestURL()</code> Get the manifest URL
abstract String	<code>getSessionID()</code> Get the session ID for this object
abstract java.util.ArrayList	<code>getVideoBitrates()</code> Get the video bitrates for the object
abstract int	<code>getVideoCount()</code> Get the video count
abstract int	<code>getVideoSegmentID()</code> Get the VideoSegmentID for this object
abstract void	<code>init(WMSProperties props)</code> Initialize this object

abstract void	<code>setAudioSegmentID</code> (int segment) Set the AudioSegmentID for this object
abstract void	<code>setExtVersion</code> (int extversion) Set the EXT version for this object
abstract void	<code>setisLive</code> (boolean live) Set the isLive flag
abstract void	<code>setManifestURL</code> (String url) Set the manifest URL
abstract void	<code>setSessionID</code> (String session) Set the session ID for this object
abstract void	<code>setVideoSegmentID</code> (int segment) Set the VideoSegmentID for this object

Methods

init

public abstract void **init**([`WMSProperties`](#) props)

Initialize this object

Parameters:
props

setSessionID

public abstract void **setSessionID**(String session)

Set the session ID for this object

Parameters:
session

getSessionID

public abstract String **getSessionID**()

Get the session ID for this object

Returns:
String

getisLive

public abstract boolean **getisLive**()

Get this isLive flag

Returns:
boolean

setisLive

```
public abstract void setisLive(boolean live)
```

Set the isLive flag

Parameters:

live

setExtVersion

```
public abstract void setExtVersion(int extversion)
```

Set the EXT version for this object

Parameters:

extversion

setAudioSegmentID

```
public abstract void setAudioSegmentID(int segment)
```

Set the AudioSegmentID for this object

Parameters:

segment

getAudioSegmentID

```
public abstract int getAudioSegmentID()
```

Get the AudioSegmentID for this object

Returns:

int

setVideoSegmentID

```
public abstract void setVideoSegmentID(int segment)
```

Set the VideoSegmentID for this object

Parameters:

segment

getVideoSegmentID

```
public abstract int getVideoSegmentID()
```

Get the VideoSegmentID for this object

Returns:

int

getManifestURL

```
public abstract String getManifestURL()
```

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Get the manifest URL

Returns:

String

setManifestURL

```
public abstract void setManifestURL(String url)
```

Set the manifest URL

Parameters:

url

clearCupertinoHolder

```
public abstract void clearCupertinoHolder()
```

Clear this holder

addAudioIndex

```
public abstract void addAudioIndex(ICupertinoMediaCasterHolder thisHolder)
```

Add a CupertinoCasterHolder to the audio index

Parameters:

thisHolder

addVideoIndex

```
public abstract void addVideoIndex(ICupertinoMediaCasterHolder thisHolder)
```

Add a CupertinoCasterHolder to the video index

Parameters:

thisHolder

getVideoCount

```
public abstract int getVideoCount()
```

Get the video count

Returns:

int

getAudioCount

```
public abstract int getAudioCount()
```

Get the audio count

Returns:

int

(continued from last page)

getCupertinoAudioIndex

```
public abstract ICupertinoMediaCasterHolder getCupertinoAudioIndex(int indexposition)
```

Get the CupertinoCaster holder from audio index by position

Parameters:

indexposition

Returns:

ICupertinoMediaCasterHolder

getCupertinoVideoIndex

```
public abstract ICupertinoMediaCasterHolder getCupertinoVideoIndex(int indexposition)
```

Get the CupertinoCaster holder from video index by position

Parameters:

indexposition

Returns:

ICupertinoMediaCasterHolder

getVideoBitrates

```
public abstract java.util.ArrayList getVideoBitrates()
```

Get the video bitrates for the object

Returns:

ArrayList

getAudioBitrates

```
public abstract java.util.ArrayList getAudioBitrates()
```

Get the audio bitrates for the object

Returns:

ArrayList

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterID3Processor

public interface **ICupertinoMediaCasterID3Processor**
extends

Method Summary

abstract void	clearID3()
abstract boolean	getDebug()
abstract java.util.HashMap	getID3()
abstract void	init() (IApplicationInstance appins, CupertinoMediaCasterContext context)
abstract boolean	isID3Available()
abstract int	processBuffer (byte[] buffer, int offset, int len)
abstract void	processMetaData()
abstract void	setDebug (boolean debug)

Methods

init

public abstract void **init**([IApplicationInstance](#) appins,
CupertinoMediaCasterContext context)

setDebug

public abstract void **setDebug**(boolean debug)

getDebug

public abstract boolean **getDebug**()

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clearID3

```
public abstract void clearID3()
```

processBuffer

```
public abstract int processBuffer(byte[] buffer,  
    int offset,  
    int len)
```

processMetaData

```
public abstract void processMetaData()
```

isID3Available

```
public abstract boolean isID3Available()
```

getID3

```
public abstract java.util.HashMap getID3()
```

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterManageStreamName

public interface **ICupertinoMediaCasterManageStreamName**
extends

Interface to control the naming scheme used for Apple HLS ingest This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoManageStreamNameClass Value: Full Class Path Type: String

Method Summary

abstract String	getStreamName (String inputName, int streamsSize, int count, ICupertinoMediaCasterHolder inboundStreamInformation) Called when a new stream is being created by the Apple HLS ingestion code
abstract void	init (IApplicationInstance appins, IMediaCaster mediacaster, CupertinoMediaCasterContext context) Called when the called is initiated

Methods

init

```
public abstract void init(IApplicationInstance appins,  
    IMediaCaster mediacaster,  
    CupertinoMediaCasterContext context)
```

Called when the called is initiated

Parameters:

appins - - Application instance
mediacaster - - The mediacaster making the call
context - - MediaCaster context object containing configuration settings

getStreamName

```
public abstract String getStreamName(String inputName,  
    int streamsSize,  
    int count,  
    ICupertinoMediaCasterHolder inboundStreamInformation)
```

Called when a new stream is being created by the Apple HLS ingestion code

Parameters:

inputName - - The basename of the stream being created. This should be the name of the .stream name
streamsSize - - The number of streams found when the base manifest was parsed
count - - The number of this stream in relation to the main count
inboundStreamInformation - - The context information when the manifest was parsed

Returns:

String - The stream name to be used for this stream creation The default for this code is if (streamsSize == 1 || count == 0) return inputName; else return inputName+"_"+String.valueOf(count); If the size

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterPlaylistParser

public interface **ICupertinoMediaCasterPlaylistParser**
extends

Interface to parse manifests for processing This can be replaced by a custom implementation from the default using the property in MediaCaster -> Properties Name: cupertinoPlaylistParserClass Value: Full Class Path Type: String

Method Summary

abstract int	<code>getCurrentIndex()</code> Returns the current manifest number
abstract void	<code>init(ICupertinoMediaCasterHolders myholders, WMSProperties props)</code> Called when the class is initiated.
abstract int	<code>parseCupertinoChunklist(String baseurl, String chunklist, ICupertinoMediaCasterHolder holder, int indexpos)</code> Parses a specific chunklist found in the main manifest via the chunklist string provided In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.
abstract void	<code>parseCupertinoPlaylist(String baseurl, String mainplaylist)</code> Parses the main manifest string provided in mainplaylist.
abstract void	<code>setContext(CupertinoMediaCasterContext context)</code> Called when the class is initiated.
abstract void	<code>setCurrentIndex(int index)</code> Sets the current manifest number

Methods

init

public abstract void **init**([`ICupertinoMediaCasterHolders`](#) myholders, [`WMSProperties`](#) props)

Called when the class is initiated.

Parameters:

myholders - Management framework object for manifest entries
props - MediaCaster properties object

setContext

public abstract void **setContext**(CupertinoMediaCasterContext context)

Called when the class is initiated.

Parameters:

context - MediaCaster context object containing configuration settings

getCurrentIndex

```
public abstract int getCurrentIndex()
```

Returns the current manifest number

Returns:

int Current manifest index number

setCurrentIndex

```
public abstract void setCurrentIndex(int index)
```

Sets the current manifest number

Parameters:

index

parseCupertinoPlaylist

```
public abstract void parseCupertinoPlaylist(String baseurl,  
String mainplaylist)
```

Parses the main manifest string provided in mainplaylist. In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.

Parameters:

baseurl -- baseurl used to retrieve the chunklist

mainplaylist -- string containing the playlist For each new entry found a new ICupertinoMediaCasterHolder is added to ICupertinoMediaCasterHolders

parseCupertinoChunklist

```
public abstract int parseCupertinoChunklist(String baseurl,  
String chunklist,  
ICupertinoMediaCasterHolder holder,  
int indexpos)
```

Parses a specific chunklist found in the main manifest via the chunklist string provided In order to support absolute URIs the baseurl used to retrieve the manifest is also made available.

Parameters:

baseurl -- baseurl used to retrieve the chunklist

chunklist -- string containing the chunklist

holder -- pointer to the holder of this chunklist information to be updated

indexpos -- index of this chunk list against the main playlist

Returns:

int - Should contain the index number of the last chunk processed

com.wowza.wms.mediacaster.cupertino Interface ICupertinoMediaCasterSegments

public interface **ICupertinoMediaCasterSegments**
extends

ICupertinoMediaCasterSegments

Method Summary

abstract void	<code>addMPEGTSSegment</code> (CupertinoMediaCasterMPEGTSSegment segment) Add a CupertinoMediaCasterMPEGTSSegment to the process list
abstract int	<code>getBufferMaxBlockCount</code> () Get the buffer max block count
abstract CupertinoMediaCasterContext	<code>getContext</code> () Get the CupertinoMediaCasterContext for this object
abstract CupertinoMediaCasterConnection	<code>getMediaCasterConnection</code> () Get the CupertinoMediaCasterConnection for this object
abstract CupertinoMediaCaster	<code>getMediaCasterObject</code> () Get the CupertinoMediaCaster object
abstract int	<code>getMPEGTSSegmentCount</code> () Get the number of segments available
abstract CupertinoMediaCasterMPEGTSSegment	<code>getNextMPEGTSSegment</code> () Get the next CupertinoMediaCasterMPEGTSSegment to be processed
abstract String	<code>getStreamName</code> () Get the stream name
abstract void	<code>init</code> (CupertinoMediaCasterConnection connection, <code>IApplicationInstance</code> appins, CupertinoMediaCasterContext context) Initialise this segments handler
abstract boolean	<code>isRunning</code> () Get the running state of the segments handler
abstract void	<code>quit</code> () Quit the segments handler
abstract void	<code>setBufferBlockCount</code> (int blockcount) Set the buffer block count
abstract void	<code>setBufferMaxBlockCount</code> (int maxblockcount) Set the buffer max block count
abstract void	<code>setMediaCasterObject</code> (CupertinoMediaCaster caster) Set the CupertinoMediaCaster object

abstract void	setRunning (boolean state) Set the running state of the segments handler
abstract void	setStreamName (String name) Set the stream name

Methods

init

```
public abstract void init(CupertinoMediaCasterConnection connection,
    IApplicationInstance appins,
    CupertinoMediaCasterContext context)
```

Initialise this segments handler

Parameters:

connection
appins
context

getContext

```
public abstract CupertinoMediaCasterContext getContext()
```

Get the CupertinoMediaCasterContext for this object

Returns:

CupertinoMediaCasterContext

getMediaCasterConnection

```
public abstract CupertinoMediaCasterConnection getMediaCasterConnection()
```

Get the CupertinoMediaCasterConnection for this object

Returns:

CupertinoMediaCasterConnection

setBufferBlockCount

```
public abstract void setBufferBlockCount(int blockcount)
```

Set the buffer block count

Parameters:

blockcount

setBufferMaxBlockCount

```
public abstract void setBufferMaxBlockCount(int maxblockcount)
```

Set the buffer max block count

Parameters:

maxblockcount

getBufferMaxBlockCount

```
public abstract int getBufferMaxBlockCount()
```

Get the buffer max block count

Returns:

int

setStreamName

```
public abstract void setStreamName(String name)
```

Set the stream name

Parameters:

name

getStreamName

```
public abstract String getStreamName()
```

Get the stream name

Returns:

setMediaCasterObject

```
public abstract void setMediaCasterObject(CupertinoMediaCaster caster)
```

Set the CupertinoMediaCaster object

Parameters:

caster

getMediaCasterObject

```
public abstract CupertinoMediaCaster getMediaCasterObject()
```

Get the CupertinoMediaCaster object

Returns:

CupertinoMediaCaster

addMPEGTSegment

```
public abstract void addMPEGTSegment(CupertinoMediaCasterMPEGTSegment segment)
```

Add a CupertinoMediaCasterMPEGTSegment to the process list

Parameters:

segment

getNextMPEGTSegment

```
public abstract CupertinoMediaCasterMPEGTSegment getNextMPEGTSegment()
```

(continued from last page)

Get the next CupertinoMediaCasterMPEGTSegment to be processed

Returns:

CupertinoMediaCasterMPEGTSegment

getMPEGTSegmentCount

```
public abstract int getMPEGTSegmentCount()
```

Get the number of segments available

Returns:

int

isRunning

```
public abstract boolean isRunning()
```

Get the running state of the segments handler

Returns:**setRunning**

```
public abstract void setRunning(boolean state)
```

Set the running state of the segments handler

Parameters:

state

quit

```
public abstract void quit()
```

Quit the segments handler

Package

com.wowza.wms.mediacaster.rtp

com.wowza.wms.mediacaster.rtp Interface IRTPSessionDescriptionDataProvider

public interface **IRTPSessionDescriptionDataProvider**
extends

IRTPSessionDescriptionDataProvider: Internal use.

Method Summary

abstract boolean	doIdle (MediaCaster mediaCaster)
abstract RTPSessionDescription Data	getSessionDescriptionData (IApplicationInstance appInstance, String streamName, int retryCount, IRTPSessionDescriptionSessionHandler handler, IMediaCaster mediaCaster)
abstract void	init (MediaCaster mediaCaster)
abstract void	sessionStart (RTPSession rtpSession)
abstract void	sessionStop (RTPSession rtpSession)

Methods

init

public abstract void **init**(MediaCaster mediaCaster)

getSessionDescriptionData

public abstract RTPSessionDescriptionData
getSessionDescriptionData([IApplicationInstance](#) appInstance,
String streamName,
int retryCount,
[IRTPSessionDescriptionSessionHandler](#) handler,
[IMediaCaster](#) mediaCaster)

sessionStart

public abstract void **sessionStart**([RTPSession](#) rtpSession)

sessionStop

public abstract void **sessionStop**([RTPSession](#) rtpSession)

(continued from last page)

doIdle

```
public abstract boolean doIdle(MediaCaster mediaCaster)
```

com.wowza.wms.mediacaster.rtp Interface IRTPSessionDescriptionSessionHandler

public interface **IRTPSessionDescriptionSessionHandler**
extends

IRTPSessionDescriptionSessionHandler: Internal use.

Method Summary

abstract void	onDisconnect()
---------------	--------------------------------

Methods

onDisconnect

public abstract void **onDisconnect()**

Package

com.wowza.wms.mediacaster.shoutcast

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastFrameReceiver

public interface **IShoutCastFrameReceiver**
extends

IShoutCastFrameReceiver: Internal use.

Method Summary

abstract void	onCodecConfigAAC (com.wowza.wms.media.aac.AACFrame frame, byte[] buffer, long offset)
abstract void	onCodecConfigOpus (byte[] codecinfo, byte[] commentData, long timecode)
abstract void	onCodecConfigVorbis (byte[] codecinfo, byte[] commentData, byte[] firstAudioInfo, long timecode)
abstract void	onFrameAAC (com.wowza.wms.media.aac.AACFrame frame, byte[] buffer, long offset)
abstract void	onFrameMP3 (int frequency, int samplesPerFrame, int channels, byte[] syncHeader, byte[] packetHeader, byte[] frameData)
abstract void	onFrameOgg (com.wowza.wms.media.ogg.OggHeader oggData)
abstract void	onHeaderData (java.util.Map headerMap)
abstract void	onMetaData (java.util.Map metaMap)
abstract void	onTrim ()

Methods

onFrameMP3

```
public abstract void onFrameMP3(int frequency,
    int samplesPerFrame,
    int channels,
    byte[] syncHeader,
    byte[] packetHeader,
    byte[] frameData)
```

(continued from last page)

onCodecConfigAAC

```
public abstract void onCodecConfigAAC(com.wowza.wms.media.aac.AACFrame frame,  
    byte[] buffer,  
    long offset)
```

onFrameAAC

```
public abstract void onFrameAAC(com.wowza.wms.media.aac.AACFrame frame,  
    byte[] buffer,  
    long offset)
```

onFrameOgg

```
public abstract void onFrameOgg(com.wowza.wms.media.ogg.OggHeader oggData)
```

onCodecConfigVorbis

```
public abstract void onCodecConfigVorbis(byte[] codecinfo,  
    byte[] commentData,  
    byte[] firstAudioInfo,  
    long timecode)
```

onCodecConfigOpus

```
public abstract void onCodecConfigOpus(byte[] codecinfo,  
    byte[] commentData,  
    long timecode)
```

onTrim

```
public abstract void onTrim()
```

onHeaderData

```
public abstract void onHeaderData(java.util.Map headerMap)
```

onMetaData

```
public abstract void onMetaData(java.util.Map metaMap)
```

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastHeaderDecoder

public interface **IShoutCastHeaderDecoder**
extends

Method Summary

abstract void	addHeader (String name, String value)
abstract java.util.Map	decodeHeader (byte[] headerBytes)
abstract void	setAppInstance (IApplicationInstance appins)

Methods

setAppInstance

public abstract void **setAppInstance**([IApplicationInstance](#) appins)

decodeHeader

public abstract java.util.Map **decodeHeader**(byte[] headerBytes)

addHeader

public abstract void **addHeader**(String name,
String value)

com.wowza.wms.mediacaster.shoutcast

Interface IShoutCastMetaDataListener

public interface **IShoutCastMetaDataListener**
extends

IShoutCastMetaDataListener: Internal use.

Method Summary	
abstract void	addMetaDataListener (IShoutCastMetaDataNotify listener)
abstract boolean	removeMetaDataListener (IShoutCastMetaDataNotify listener)

Methods

addMetaDataListener

public abstract void **addMetaDataListener**([IShoutCastMetaDataNotify](#) listener)

removeMetaDataListener

public abstract boolean **removeMetaDataListener**([IShoutCastMetaDataNotify](#) listener)

com.wowza.wms.mediacaster.shoutcast Interface IShoutCastMetaDataNotify

public interface **IShoutCastMetaDataNotify**
extends

IShoutCastMetaDataNotify: Internal use.

Method Summary

abstract void	onAACEncodeInfo (IMediaCaster mediaCaster, int frequency, int channels, int samplesPerFrame)
abstract void	onHeaderData (IMediaCaster mediaCaster, java.util.Map headerMap)
abstract void	onMetaData (IMediaCaster mediaCaster, java.util.Map metaMap)
abstract void	onMP3EncodeInfo (IMediaCaster mediaCaster, int frequency, int channels, int samplesPerFrame)

Methods

onHeaderData

```
public abstract void onHeaderData(IMediaCaster mediaCaster,  
    java.util.Map headerMap)
```

onMetaData

```
public abstract void onMetaData(IMediaCaster mediaCaster,  
    java.util.Map metaMap)
```

onAACEncodeInfo

```
public abstract void onAACEncodeInfo(IMediaCaster mediaCaster,  
    int frequency,  
    int channels,  
    int samplesPerFrame)
```

onMP3EncodeInfo

```
public abstract void onMP3EncodeInfo(IMediaCaster mediaCaster,  
    int frequency,  
    int channels,  
    int samplesPerFrame)
```


(continued from last page)

Package

com.wowza.wms.medialist

com.wowza.wms.medialist Class MediaList

java.lang.Object

└─com.wowza.wms.medialist.MediaList

public class **MediaList**
extends Object

Field Summary

protected	lock
protected	name
protected	properties
protected	segments
protected	title

Constructor Summary

public	MediaList()
--------	-----------------------------

Method Summary

void	addSegment (int index, MediaListSegment mediaListSegment)
void	addSegment (MediaListSegment mediaListSegment)
void	clearSegments ()
MediaListSegment	getFirstSegment ()
Object	getLock ()
String	getName ()
WMSProperties	getProperties ()
WMSProperties	getProperties (boolean write)
MediaListSegment	getSegment (int index)

java.util.List	getSegments()
String	getTitle()
MediaListSegment	removeSegment (int index)
void	removeSegment (MediaListSegment mediaListSegment)
void	reset()
void	setName (String name)
void	setTitle (String title)
String	toSMILString()
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

name

protected java.lang.String **name**

title

protected java.lang.String **title**

segments

protected java.util.List **segments**

properties

protected com.wowza.wms.application.WMSProperties **properties**

(continued from last page)

lock

protected java.lang.Object **lock**

Constructors

MediaList

public **MediaList**()

Methods

toString

public String **toString**()

toSMILString

public String **toSMILString**()

reset

public void **reset**()

getSegments

public java.util.List **getSegments**()

addSegment

public void **addSegment**([MediaListSegment](#) mediaListSegment)

addSegment

public void **addSegment**(int index,
[MediaListSegment](#) mediaListSegment)

removeSegment

public void **removeSegment**([MediaListSegment](#) mediaListSegment)

removeSegment

```
public MediaListSegment removeSegment(int index)
```

clearSegments

```
public void clearSegments()
```

getFirstSegment

```
public MediaListSegment getFirstSegment()
```

getSegment

```
public MediaListSegment getSegment(int index)
```

getLock

```
public Object getLock()
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

getTitle

```
public String getTitle()
```

(continued from last page)

setTitle

```
public void setTitle(String title)
```

com.wowza.wms.medialist

Class MediaListRendition

java.lang.Object

└-com.wowza.wms.medialist.MediaListRendition

public class **MediaListRendition**

extends Object

Field Summary	
protected	aspectRatio
protected	audioCodecId
protected	audioLanguage
protected	audioRole
protected	bitrateAudio
protected	bitrateTotal
protected	bitrateVideo
protected	bitrateVideoPeak
protected	essentialPropertySet
protected	height
protected	language
protected	lock
protected	mediaListSegment
protected	name
protected	playDuration
protected	playSeek
protected	playStart

protected	properties
protected	role
protected	supplementalPropertySet
protected	title
protected	type
protected	videoCodecId
protected	videoLanguage
protected	videoRole
protected	vodTranscodeNGRP
protected	width
protected	wowzaAudioOnly
protected	wowzaKeyFrameOnly
protected	wowzaVideoOnly

Constructor Summary

public	MediaListRendition()
--------	--------------------------------------

Method Summary

void	buildProperties (java.util.Map params)
String	getAspectRatio()
String	getAudioCodecId()
String	getAudioLanguage()
String	getAudioRole()
int	getBitrateAudio()
int	getBitrateTotal()
int	getBitrateTotalPeak()

int	getBitrateVideo()
int	getBitrateVideoPeak()
String	getCodecId()
java.util.HashSet	getEssentialPropertySet()
int	getHeight()
String	getLanguage()
Object	getLock()
MediaListSegment	getMediaListSegment()
String	getName()
long	getPlayDuration()
long	getPlaySeek()
long	getPlayStart()
WMSProperties	getProperties()
WMSProperties	getProperties(boolean write)
String	getRole()
int[]	getSize()
java.util.HashSet	getSupplementalPropertySet()
String	getTitle()
int	getType()
String	getTypeAsString()
String	getVideoCodecId()
String	getVideoLanguage()
String	getVideoRole()
String	getVODTranscodeNGRP()

int	<u>getWidth()</u>
boolean	<u>isWowzaAudioOnly()</u>
boolean	<u>isWowzaKeyFrameOnly()</u>
boolean	<u>isWowzaVideoOnly()</u>
static java.util.ArrayList	<u>parseCommaSeparatedLanguages</u> (String langStr)
void	<u>setAspectRatio</u> (String aspectRatio)
void	<u>setAudioCodecId</u> (String audioCodecId)
void	<u>setAudioLanguage</u> (String audioLanguage)
void	<u>setAudioRole</u> (String audioRole)
void	<u>setBitrateAudio</u> (int bitrateAudio)
void	<u>setBitrateTotal</u> (int bitrateTotal)
void	<u>setBitrateVideo</u> (int bitrateVideo)
void	<u>setBitrateVideoPeak</u> (int bitrateVideoPeak)
void	<u>setEssentialPropertySet</u> (java.util.HashSet essentialPropertySet)
void	<u>setHeight</u> (int height)
void	<u>setLanguage</u> (String language)
void	<u>setLock</u> (Object lock)
void	<u>setMediaListSegment</u> (<u>MediaListSegment</u> mediaListSegment)
void	<u>setName</u> (String name)
void	<u>setPlayDuration</u> (long playDuration)
void	<u>setPlaySeek</u> (long playSeek)
void	<u>setPlayStart</u> (long playStart)
void	<u>setRole</u> (String role)
void	<u>setSize</u> (int width, int height)

void	<code>setSupplementalPropertySet</code> (java.util.HashSet supplementalPropertySet)
void	<code>setTitle</code> (String title)
void	<code>setType</code> (int type)
void	<code>setVideoCodecId</code> (String videoCodecId)
void	<code>setVideoLanguage</code> (String videoLanguage)
void	<code>setVideoRole</code> (String videoRole)
void	<code>setVODTranscodeNGRP</code> (String vodTranscodeNGRP)
void	<code>setWidth</code> (int width)
void	<code>setWowzaAudioOnly</code> (boolean wowzaAudioOnly)
void	<code>setWowzaKeyFrameOnly</code> (boolean wowzaKeyFrameOnly)
void	<code>setWowzaVideoOnly</code> (boolean wowzaVideoOnly)
String	<code>toSMILString</code> ()
String	<code>toString</code> ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

mediaListSegment

protected com.wowza.wms.medialist.MediaListSegment **mediaListSegment**

properties

protected com.wowza.wms.application.WMSProperties **properties**

name

protected java.lang.String **name**

type

protected int **type**

bitrateTotal

protected int **bitrateTotal**

bitrateAudio

protected int **bitrateAudio**

bitrateVideo

protected int **bitrateVideo**

bitrateVideoPeak

protected int **bitrateVideoPeak**

videoCodecId

protected java.lang.String **videoCodecId**

audioCodecId

protected java.lang.String **audioCodecId**

wowzaAudioOnly

protected boolean **wowzaAudioOnly**

wowzaVideoOnly

protected boolean **wowzaVideoOnly**

(continued from last page)

wowzaKeyFrameOnly

protected boolean **wowzaKeyFrameOnly**

width

protected int **width**

height

protected int **height**

playStart

protected long **playStart**

playDuration

protected long **playDuration**

playSeek

protected long **playSeek**

vodTranscodeNGRP

protected java.lang.String **vodTranscodeNGRP**

language

protected java.lang.String **language**

audioLanguage

protected java.lang.String **audioLanguage**

(continued from last page)

videoLanguage

protected java.lang.String **videoLanguage**

title

protected java.lang.String **title**

aspectRatio

protected java.lang.String **aspectRatio**

role

protected java.lang.String **role**

audioRole

protected java.lang.String **audioRole**

videoRole

protected java.lang.String **videoRole**

essentialPropertySet

protected java.util.HashSet **essentialPropertySet**

supplementalPropertySet

protected java.util.HashSet **supplementalPropertySet**

Constructors

MediaListRendition

public **MediaListRendition**()

Methods

(continued from last page)

toString

```
public String toString()
```

toSMILString

```
public String toSMILString()
```

getTypeAsString

```
public String getTypeAsString()
```

getLock

```
public Object getLock()
```

setLock

```
public void setLock(Object lock)
```

getMediaListSegment

```
public MediaListSegment getMediaListSegment()
```

setMediaListSegment

```
public void setMediaListSegment(MediaListSegment mediaListSegment)
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

getBitrateTotal

```
public int getBitrateTotal()
```

(continued from last page)

getBitrateTotalPeak

```
public int getBitrateTotalPeak()
```

setBitrateTotal

```
public void setBitrateTotal(int bitrateTotal)
```

getBitrateAudio

```
public int getBitrateAudio()
```

setBitrateAudio

```
public void setBitrateAudio(int bitrateAudio)
```

getBitrateVideo

```
public int getBitrateVideo()
```

setBitrateVideo

```
public void setBitrateVideo(int bitrateVideo)
```

getBitrateVideoPeak

```
public int getBitrateVideoPeak()
```

setBitrateVideoPeak

```
public void setBitrateVideoPeak(int bitrateVideoPeak)
```

getVideoCodecId

```
public String getVideoCodecId()
```

(continued from last page)

setVideoCodecId

```
public void setVideoCodecId(String videoCodecId)
```

getCodecId

```
public String getCodecId()
```

getAudioCodecId

```
public String getAudioCodecId()
```

setAudioCodecId

```
public void setAudioCodecId(String audioCodecId)
```

isWowzaAudioOnly

```
public boolean isWowzaAudioOnly()
```

setWowzaAudioOnly

```
public void setWowzaAudioOnly(boolean wowzaAudioOnly)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

getType

```
public int getType()
```

setType

```
public void setType(int type)
```

(continued from last page)

getWidth

```
public int getWidth()
```

setWidth

```
public void setWidth(int width)
```

getHeight

```
public int getHeight()
```

setHeight

```
public void setHeight(int height)
```

setSize

```
public void setSize(int width,  
                    int height)
```

getSize

```
public int[] getSize()
```

getPlayStart

```
public long getPlayStart()
```

setPlayStart

```
public void setPlayStart(long playStart)
```

getPlayDuration

```
public long getPlayDuration()
```

(continued from last page)

setPlayDuration

```
public void setPlayDuration(long playDuration)
```

getPlaySeek

```
public long getPlaySeek()
```

setPlaySeek

```
public void setPlaySeek(long playSeek)
```

getVODTranscodeNGRP

```
public String getVODTranscodeNGRP()
```

setVODTranscodeNGRP

```
public void setVODTranscodeNGRP(String vodTranscodeNGRP)
```

setLanguage

```
public void setLanguage(String language)
```

getLanguage

```
public String getLanguage()
```

getAudioLanguage

```
public String getAudioLanguage()
```

setAudioLanguage

```
public void setAudioLanguage(String audioLanguage)
```

getVideoLanguage

```
public String getVideoLanguage()
```

(continued from last page)

setVideoLanguage

```
public void setVideoLanguage(String videoLanguage)
```

parseCommaSeparatedLanguages

```
public static java.util.ArrayList parseCommaSeparatedLanguages(String langStr)
```

isWowzaVideoOnly

```
public boolean isWowzaVideoOnly()
```

setWowzaVideoOnly

```
public void setWowzaVideoOnly(boolean wowzaVideoOnly)
```

isWowzaKeyFrameOnly

```
public boolean isWowzaKeyFrameOnly()
```

setWowzaKeyFrameOnly

```
public void setWowzaKeyFrameOnly(boolean wowzaKeyFrameOnly)
```

getTitle

```
public String getTitle()
```

setTitle

```
public void setTitle(String title)
```

getAspectRatio

```
public String getAspectRatio()
```

(continued from last page)

setAspectRatio

```
public void setAspectRatio(String aspectRatio)
```

getRole

```
public String getRole()
```

setRole

```
public void setRole(String role)
```

getAudioRole

```
public String getAudioRole()
```

setAudioRole

```
public void setAudioRole(String audioRole)
```

getVideoRole

```
public String getVideoRole()
```

setVideoRole

```
public void setVideoRole(String videoRole)
```

getEssentialPropertySet

```
public java.util.HashSet getEssentialPropertySet()
```

setEssentialPropertySet

```
public void setEssentialPropertySet(java.util.HashSet essentialPropertySet)
```

getSupplementalPropertySet

```
public java.util.HashSet getSupplementalPropertySet()
```

(continued from last page)

setSupplementalPropertySet

```
public void setSupplementalPropertySet(java.util.HashSet supplementalPropertySet)
```

buildProperties

```
public void buildProperties(java.util.Map params)
```

com.wowza.wms.medialist

Class MediaListSegment

java.lang.Object

└─com.wowza.wms.medialist.MediaListSegment

public class **MediaListSegment**
extends Object

Field Summary

protected	lock
protected	mediaList
protected	properties
protected	renditions

Constructor Summary

public	MediaListSegment()
--------	------------------------------------

Method Summary

void	addRendition (int index, MediaListRendition mediaListRendition)
void	addRendition (MediaListRendition mediaListRendition)
void	clearSegments ()
MediaListRendition	getFirstRendition ()
Object	getLock ()
MediaList	getMediaList ()
WMSProperties	getProperties ()
WMSProperties	getProperties (boolean write)
MediaListRendition	getRendition (int index)
java.util.List	getRenditions ()

MediaListRendition	removeRendition (int index)
void	removeRendition (MediaListRendition mediaListRendition)
void	setLock (Object lock)
void	setMediaList (MediaList mediaList)
String	toSMILString ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

mediaList

protected com.wowza.wms.medialist.MediaList **mediaList**

renditions

protected java.util.List **renditions**

properties

protected com.wowza.wms.application.WMSProperties **properties**

Constructors

MediaListSegment

public **MediaListSegment**()

Methods

(continued from last page)

toString

```
public String toString()
```

toSMILString

```
public String toSMILString()
```

getRenditions

```
public java.util.List getRenditions()
```

addRendition

```
public void addRendition(MediaListRendition mediaListRendition)
```

addRendition

```
public void addRendition(int index,  
    MediaListRendition mediaListRendition)
```

removeRendition

```
public void removeRendition(MediaListRendition mediaListRendition)
```

removeRendition

```
public MediaListRendition removeRendition(int index)
```

clearSegments

```
public void clearSegments()
```

getFirstRendition

```
public MediaListRendition getFirstRendition()
```

(continued from last page)

getRendition

```
public MediaListRendition getRendition(int index)
```

getLock

```
public Object getLock()
```

setLock

```
public void setLock(Object lock)
```

getMediaList

```
public MediaList getMediaList()
```

setMediaList

```
public void setMediaList(MediaList mediaList)
```

getProperties

```
public WMSProperties getProperties()
```

getProperties

```
public WMSProperties getProperties(boolean write)
```

Package

com.wowza.wms.module

com.wowza.wms.module Interface IModuleCallResult

public interface **IModuleCallResult**
extends

IModuleCallResult: callback interface used by IClient call.

Method Summary

abstract void	onResult (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Triggered on client side result from call to IClient.call
---------------	---

Methods

onResult

```
public abstract void onResult(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Triggered on client side result from call to IClient.call

Parameters:

client - client
function - function object
params - result parameters

com.wowza.wms.module Interface IModuleNotify

public interface **IModuleNotify**
extends

IModuleNotify: listener interface for listening to module loading and unloading. See
IApplicationInstance.addModuleListener(IModuleNotify moduleListener)

Method Summary

abstract void	onModuleLoad (ModuleItem item) Called when module loaded
abstract void	onModuleUnload (ModuleItem item) Called when module unloaded

Methods

onModuleLoad

public abstract void **onModuleLoad**(ModuleItem item)

Called when module loaded

Parameters:

item - module

onModuleUnload

public abstract void **onModuleUnload**(ModuleItem item)

Called when module unloaded

Parameters:

item - module

com.wowza.wms.module Interface IModuleOnApp

All Subinterfaces:

[IModuleOnApp2](#)

All Known Implementing Classes:

[ModuleMediaCaster](#)

public interface **IModuleOnApp**
extends

IModuleCallResult: method interface examples for application level methods in a module.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method names and call signature needed to implement these application methods.

Method Summary

abstract void	onAppStart (IApplicationInstance appInstance) Invoked when an application instance is started.
abstract void	onAppStop (IApplicationInstance appInstance) Invoked when an application instance is stopped (destroyed).

Methods

onAppStart

public abstract void **onAppStart**([IApplicationInstance](#) appInstance)

Invoked when an application instance is started.

Parameters:

appInstance - application instance

onAppStop

public abstract void **onAppStop**([IApplicationInstance](#) appInstance)

Invoked when an application instance is stopped (destroyed).

Parameters:

appInstance - application instance

com.wowza.wms.module Interface IModuleOnApp2

All Superinterfaces:

[IModuleOnApp](#)

public interface **IModuleOnApp2**

extends [IModuleOnApp](#)

Method Summary

abstract void	onAppCreate (IApplicationInstance appInstance) Invoked when an application instance is created.
abstract void	onAppDestroy (IApplicationInstance appInstance) Invoked when an application instance is destroyed

Methods inherited from interface [com.wowza.wms.module.IModuleOnApp](#)

[onAppStart](#), [onAppStop](#)

Methods

onAppCreate

public abstract void **onAppCreate**([IApplicationInstance](#) appInstance)

Invoked when an application instance is created.

Parameters:

appInstance - application instance

onAppDestroy

public abstract void **onAppDestroy**([IApplicationInstance](#) appInstance)

Invoked when an application instance is destroyed

Parameters:

appInstance - application instance

com.wowza.wms.module Interface IModuleOnCall

public interface **IModuleOnCall**
extends

IModuleOnCall: method interface example for the catch-all method handler onCall.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method name and call signature needed to implement this method. The onCall method, when defined in a module, is invoked for all handlers that are undefined in a given module. The onCall handler can also be used to catch calls to server side component calls.

Method Summary

abstract void

[onCall](#)(String handlerName, [IClient](#) client,
com.wowza.wms.request.RequestFunction function, [AMFDataList](#) params)
Catch-all method handler.

Methods

onCall

```
public abstract void onCall(String handlerName,  
    IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Catch-all method handler. The onCall method, when defined in a module, is invoked for all handlers that are undefined in a given module.

Parameters:

handlerName - handler name
client - client
function - function object
params - function parameters

com.wowza.wms.module Interface IModuleOnConnect

public interface **IModuleOnConnect**
extends

IModuleOnConnect: method interface examples for client level methods in a module.

Since module method must be implemented as static method a module cannot directly implements this interface. This interface only serves as an example of the method names and call signature needed to implement these client methods.

Method Summary

abstract void	onConnect (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Invoked when a client connection is initiated.
abstract void	onConnectAccept (IClient client) Invoked when a client connection is accepted.
abstract void	onConnectReject (IClient client) Invoked when a client connection is rejected.
abstract void	onDisconnect (IClient client) Invoked when a client disconnects.

Methods

onConnect

```
public abstract void onConnect(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Invoked when a client connection is initiated. It is within this method that module can call to client.acceptConnection or client.rejectConnection.

Parameters:

client - client
function - function object
params - function parameters

onDisconnect

```
public abstract void onDisconnect(IClient client)
```

Invoked when a client disconnects.

Parameters:

client - client

(continued from last page)

onConnectAccept

```
public abstract void onConnectAccept(IClient client)
```

Invoked when a client connection is accepted.

Parameters:

client - client

onConnectReject

```
public abstract void onConnectReject(IClient client)
```

Invoked when a client connection is rejected.

Parameters:

client - client

com.wowza.wms.module Interface IModuleOnHTTPCmafEncryption

public interface **IModuleOnHTTPCmafEncryption**
extends

IModuleOnHTTPCmafEncryption: listener interface for listening to CMAF encryption events.

Method Summary

abstract void	onHTTPCmafEncryptionKeyLiveSegment (ILiveStreamPacketizer liveStreamPacketizer, String streamName, CencInfo cencInfo, long segmentId, int contentType) Called when live stream key is requested (per-published stream)
abstract void	onHTTPCmafEncryptionKeyVODSegment (IHTTPStreamerSession httpSession, CencInfo cencInfo, long segmentId, int contentType) Called when video on demand key is requested (per-session).

Methods

onHTTPCmafEncryptionKeyVODSegment

```
public abstract void onHTTPCmafEncryptionKeyVODSegment(IHTTPStreamerSession
httpSession,
CencInfo cencInfo,
long segmentId,
int contentType)
```

Called when video on demand key is requested (per-session). Allows setting of encryption key and URL.

Parameters:

httpSession - HTTP session
cencInfo - Common Encryption information
segmentId - segment identifier
contentType - segment content type (currently unsupported and always set to IVHost.CONTENTTYPE_UNKNOWN)

onHTTPCmafEncryptionKeyLiveSegment

```
public abstract void onHTTPCmafEncryptionKeyLiveSegment(ILiveStreamPacketizer
liveStreamPacketizer,
String streamName,
CencInfo cencInfo,
long segmentId,
int contentType)
```

Called when live stream key is requested (per-published stream)

Parameters:

liveStreamPacketizer - live stream packetizer
streamName - stream name
cencInfo - Common Encryption information
segmentId - segment identifier
contentType - segment content type (currently unsupported and always set to IVHost.CONTENTTYPE_UNKNOWN)

com.wowza.wms.module Interface IModuleOnHTTPCupertinoEncryption

public interface **IModuleOnHTTPCupertinoEncryption**
extends

IModuleOnHTTPCupertinoEncryption: listener interface for listening to AES-128 encryption events.

Field Summary

public static final	<u>KEYDATA_MODE_ENCRYPT</u> Value: 3
public static final	<u>KEYDATA_MODE_INIT</u> Value: 1
public static final	<u>KEYDATA_MODE_KEYFRAME_ENCRYPT</u> Value: 6
public static final	<u>KEYDATA_MODE_KEYFRAME_INIT</u> Value: 4
public static final	<u>KEYDATA_MODE_KEYFRAME_PLAYLIST</u> Value: 5
public static final	<u>KEYDATA_MODE_PLAYLIST</u> Value: 2

Method Summary

abstract void	<u>onHTTPCupertinoEncryptionKeyCreateLive</u> (<u>IApplicationInstance</u> appInstance, <u>String</u> streamName, <u>byte[]</u> encKey) Called when live stream key is requested (per-published stream)
abstract void	<u>onHTTPCupertinoEncryptionKeyCreateVOD</u> (<u>HTTPStreamerSessionCupertino</u> httpSession, <u>byte[]</u> encKey) Called when video on demand key is requested (per-session)
abstract void	<u>onHTTPCupertinoEncryptionKeyData</u> (<u>HTTPStreamerSessionCupertino</u> httpSession, <u>IHTTPRequest</u> req, <u>IHTTPResponse</u> resp, <u>byte[]</u> encKeyData) Called when a key data is requested.
abstract void	<u>onHTTPCupertinoEncryptionKeyLiveChunk</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer, <u>String</u> streamName, <u>CupertinoEncInfo</u> encInfo, long chunkId, int mode) Called when live stream key is requested (per-published stream, per-chunk - for rotating keys)
abstract void	<u>onHTTPCupertinoEncryptionKeyRequest</u> (<u>HTTPStreamerSessionCupertino</u> httpSession, <u>IHTTPRequest</u> req, <u>IHTTPResponse</u> resp) Called when a key is requested.

abstract void

[onHTTPCupertinoEncryptionKeyVODChunk](#)([HTTPStreamerSessionCupertino](#) httpSession, [IHTTPStreamerCupertinoIndex](#) index, CupertinoEncInfo encInfo, long chunkId, int mode)

Called when video on demand key is requested (per-session).

Fields

KEYDATA_MODE_INIT

```
public static final int KEYDATA_MODE_INIT
```

Constant value: **1**

KEYDATA_MODE_PLAYLIST

```
public static final int KEYDATA_MODE_PLAYLIST
```

Constant value: **2**

KEYDATA_MODE_ENCRYPT

```
public static final int KEYDATA_MODE_ENCRYPT
```

Constant value: **3**

KEYDATA_MODE_KEYFRAME_INIT

```
public static final int KEYDATA_MODE_KEYFRAME_INIT
```

Constant value: **4**

KEYDATA_MODE_KEYFRAME_PLAYLIST

```
public static final int KEYDATA_MODE_KEYFRAME_PLAYLIST
```

Constant value: **5**

KEYDATA_MODE_KEYFRAME_ENCRYPT

```
public static final int KEYDATA_MODE_KEYFRAME_ENCRYPT
```

Constant value: **6**

Methods

onHTTPCupertinoEncryptionKeyRequest

```
public abstract void onHTTPCupertinoEncryptionKeyRequest(HTTPStreamerSessionCupertino httpSession,  
    IHTTPRequest req,  
    IHTTPResponse resp)
```

(continued from last page)

Called when a key is requested. Call `httpSession.rejectSession` to reject the streaming session and stop delivery of the encryption key.

Parameters:

`httpSession` - HTTP session
`req` - HTTP request
`resp` - HTTP response

onHTTPCupertinoEncryptionKeyData

```
public abstract void onHTTPCupertinoEncryptionKeyData(HTTPStreamerSessionCupertino
httpSession,
IHTTPRequest req,
IHTTPResponse resp,
byte[] encKeyData)
```

Called when a key data is requested. Set `encKeyData` to the key data to be sent to the client.

Parameters:

`httpSession` - HTTP session
`req` - request
`resp` - response
`encKeyData` - key data

onHTTPCupertinoEncryptionKeyCreateVOD

```
public abstract void
onHTTPCupertinoEncryptionKeyCreateVOD(HTTPStreamerSessionCupertino httpSession,
byte[] encKey)
```

Called when video on demand key is requested (per-session)

Parameters:

`httpSession` - HTTP session
`encKey` - encryption key

onHTTPCupertinoEncryptionKeyVODChunk

```
public abstract void onHTTPCupertinoEncryptionKeyVODChunk(HTTPStreamerSessionCupertino
httpSession,
IHTTPStreamerCupertinoIndex index,
CupertinoEncInfo encInfo,
long chunkId,
int mode)
```

Called when video on demand key is requested (per-session). Allows setting of encryption key and URL.

Parameters:

`httpSession` - HTTP session
`index` - file index
`encInfo` - encryption key
`mode` - KEYDATA_MODE_*

onHTTPCupertinoEncryptionKeyCreateLive

```
public abstract void onHTTPCupertinoEncryptionKeyCreateLive(IApplicationInstance
appInstance,
String streamName,
byte[] encKey)
```

Called when live stream key is requested (per-published stream)

(continued from last page)

Parameters:

appInstance - application instance
streamName - stream name
encKey - encryption key

onHTTPCupertinoEncryptionKeyLiveChunk

```
public abstract void onHTTPCupertinoEncryptionKeyLiveChunk(ILiveStreamPacketizer  
liveStreamPacketizer,  
    String streamName,  
    CupertinoEncInfo encInfo,  
    long chunkId,  
    int mode)
```

Called when live stream key is requested (per-published stream, per-chunk - for rotating keys)

Parameters:

liveStreamPacketizer - live stream packetizer
streamName - stream name
encInfo - encryption info
chunkId - chunk ID, -1 for stream creation
mode - KEYDATA_MODE_*

com.wowza.wms.module Interface IModuleOnHTTPCupertinoStreamingSession

public interface **IModuleOnHTTPCupertinoStreamingSession**
extends

IModuleOnHTTPSession: method interface for HTTP Cupertino Streaming session create/destroy.

Method Summary

abstract void	onHTTPCupertinoStreamingSessionCreate (HTTPStreamerSessionCupertino httpCupertinoStreamingSession) Invoked when an HTTP Cupertino Streaming session is created.
abstract void	onHTTPCupertinoStreamingSessionDestroy (HTTPStreamerSessionCupertino httpCupertinoStreamingSession) Invoked when an HTTP Cupertino Streaming session is destroyed.

Methods

onHTTPCupertinoStreamingSessionCreate

public abstract void
onHTTPCupertinoStreamingSessionCreate([HTTPStreamerSessionCupertino](#) [httpCupertinoStreamingSession](#))

Invoked when an HTTP Cupertino Streaming session is created.

Parameters:

[httpCupertinoStreamingSession](#) - [httpCupertinoStreamingSession](#)

onHTTPCupertinoStreamingSessionDestroy

public abstract void
onHTTPCupertinoStreamingSessionDestroy([HTTPStreamerSessionCupertino](#) [httpCupertinoStreamingSession](#))

Invoked when an HTTP Cupertino Streaming session is destroyed.

Parameters:

[httpCupertinoStreamingSession](#) - [httpCupertinoStreamingSession](#)

com.wowza.wms.module Interface IModuleOnHTTPMPEGDashEncryption

public interface **IModuleOnHTTPMPEGDashEncryption**
extends

IModuleOnHTTPMPEGDashEncryption: listener interface for listening to MPEG-DASH encryption events.

Method Summary

abstract void	onHTTPMPEGDashEncryptionKeyLiveChunk (ILiveStreamPacketizer liveStreamPacketizer, String streamName, CencInfo cencInfo, long chunkId) Called when live stream key is requested (per-published stream)
abstract void	onHTTPMPEGDashEncryptionKeyVODChunk (HTTPStreamerSessionMPEGDash httpSession, IHTTPStreamerMPEGDashIndex index, CencInfo cencInfo, long chunkId) Called when video on demand key is requested (per-session).

Methods

onHTTPMPEGDashEncryptionKeyVODChunk

```
public abstract void onHTTPMPEGDashEncryptionKeyVODChunk(HTTPStreamerSessionMPEGDash
httpSession,
IHTTPStreamerMPEGDashIndex index,
CencInfo cencInfo,
long chunkId)
```

Called when video on demand key is requested (per-session). Allows setting of encryption key and URL.

Parameters:

httpSession - HTTP session
index - file index
cencInfo - Common Encryption information
chunkId - chunk identifier

onHTTPMPEGDashEncryptionKeyLiveChunk

```
public abstract void onHTTPMPEGDashEncryptionKeyLiveChunk(ILiveStreamPacketizer
liveStreamPacketizer,
String streamName,
CencInfo cencInfo,
long chunkId)
```

Called when live stream key is requested (per-published stream)

Parameters:

liveStreamPacketizer - live stream packetizer
streamName - stream name
cencInfo - Common Encryption information
chunkId - chunk identifier

com.wowza.wms.module Interface IModuleOnHTTPMPEGDashStreamingSession

public interface **IModuleOnHTTPMPEGDashStreamingSession**
extends

IModuleOnHTTPMPEGDashStreamingSession: method interface for HTTP MPEGDash Streaming session create/destroy.

Method Summary

abstract void	onHTTPMPEGDashStreamingSessionCreate (HTTPStreamerSessionMPEGDash httpMPEGDashStreamingSession) Invoked when an HTTP MPEGDash Streaming session is created.
abstract void	onHTTPMPEGDashStreamingSessionDestroy (HTTPStreamerSessionMPEGDash httpMPEGDashStreamingSession) Invoked when an HTTP MPEGDash Streaming session is destroyed.

Methods

onHTTPMPEGDashStreamingSessionCreate

public abstract void **onHTTPMPEGDashStreamingSessionCreate**([HTTPStreamerSessionMPEGDash](#)
[httpMPEGDashStreamingSession](#))

Invoked when an HTTP MPEGDash Streaming session is created.

Parameters:

[httpMPEGDashStreamingSession](#) - [httpMPEGDashStreamingSession](#)

onHTTPMPEGDashStreamingSessionDestroy

public abstract void **onHTTPMPEGDashStreamingSessionDestroy**([HTTPStreamerSessionMPEGDash](#)
[httpMPEGDashStreamingSession](#))

Invoked when an HTTP MPEGDash Streaming session is destroyed.

Parameters:

[httpMPEGDashStreamingSession](#) - [httpMPEGDashStreamingSession](#)

com.wowza.wms.module

Interface IModuleOnHTTPSanJoseStreamingSession

public interface IModuleOnHTTPSanJoseStreamingSession
extends

IModuleOnHTTPSanJoseStreamingSession: method interface for HTTP SanJose Streaming session create/destroy.

Method Summary	
abstract void	onHTTPSanJoseStreamingSessionCreate (HTTPStreamerSessionSanJose httpSanJoseStreamingSession) Invoked when an HTTP SanJose Streaming session is created.
abstract void	onHTTPSanJoseStreamingSessionDestroy (HTTPStreamerSessionSanJose httpSanJoseStreamingSession) Invoked when an HTTP SanJose Streaming session is destroyed.

Methods

onHTTPSanJoseStreamingSessionCreate

public abstract void **onHTTPSanJoseStreamingSessionCreate**([HTTPStreamerSessionSanJose](#)
[httpSanJoseStreamingSession](#))

Invoked when an HTTP SanJose Streaming session is created.

Parameters:
 [httpSanJoseStreamingSession](#) - [httpSanJoseStreamingSession](#)

onHTTPSanJoseStreamingSessionDestroy

public abstract void **onHTTPSanJoseStreamingSessionDestroy**([HTTPStreamerSessionSanJose](#)
[httpSanJoseStreamingSession](#))

Invoked when an HTTP SanJose Streaming session is destroyed.

Parameters:
 [httpSanJoseStreamingSession](#) - [httpSanJoseStreamingSession](#)

com.wowza.wms.module Interface IModuleOnHTTPSession

public interface **IModuleOnHTTPSession**
extends

IModuleOnHTTPSession: method interface for HTTP Streaming session create/destroy.

Method Summary

abstract void	onHTTPSessionCreate (IHTTPStreamerSession httpSession) Invoked when an HTTP Session is created (both Smooth and Cupertino sessions).
abstract void	onHTTPSessionDestroy (IHTTPStreamerSession httpSession) Invoked when an HTTP Session is destroyed (both Smooth and Cupertino sessions).

Methods

onHTTPSessionCreate

public abstract void **onHTTPSessionCreate**([IHTTPStreamerSession](#) httpSession)

Invoked when an HTTP Session is created (both Smooth and Cupertino sessions).

Parameters:

httpSession - httpSession

onHTTPSessionDestroy

public abstract void **onHTTPSessionDestroy**([IHTTPStreamerSession](#) httpSession)

Invoked when an HTTP Session is destroyed (both Smooth and Cupertino sessions).

Parameters:

httpSession - httpSession

com.wowza.wms.module

Interface IModuleOnHTTPSmoothStreamingPlayReady

public interface **IModuleOnHTTPSmoothStreamingPlayReady**
extends

IModuleOnHTTPSmoothStreamingPlayReady: Still working on this...

Method Summary

abstract void	onHTTPSmoothStreamingPlayReadyCreateLive (IApplicationInstance appInstance, String streamName, com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
abstract void	onHTTPSmoothStreamingPlayReadyCreateVOD (HTTPStreamerSessionSmoothStreamer httpSession, com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)

Methods

onHTTPSmoothStreamingPlayReadyCreateVOD

```
public abstract void
onHTTPSmoothStreamingPlayReadyCreateVOD(HTTPStreamerSessionSmoothStreamer httpSession,
    com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
```

onHTTPSmoothStreamingPlayReadyCreateLive

```
public abstract void onHTTPSmoothStreamingPlayReadyCreateLive(IApplicationInstance
    appInstance,
    String streamName,
    com.wowza.wms.drm.playready.PlayReadyKeyInfo playReadyKeyInfo)
```

com.wowza.wms.module

Interface IModuleOnHTTPSmoothStreamingSession

public interface IModuleOnHTTPSmoothStreamingSession
extends

IModuleOnHTTPSession: method interface for HTTP Smooth Streaming session create/destroy.

Method Summary	
abstract void	onHTTPSmoothStreamingSessionCreate(HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession) Invoked when an HTTP Smooth Streaming session is created.
abstract void	onHTTPSmoothStreamingSessionDestroy(HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession) Invoked when an HTTP Smooth Streaming session is destroyed.

Methods

onHTTPSmoothStreamingSessionCreate

public abstract void
onHTTPSmoothStreamingSessionCreate([HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession](#))

Invoked when an HTTP Smooth Streaming session is created.

Parameters:
httpSmoothStreamingSession - httpSmoothStreamingSession

onHTTPSmoothStreamingSessionDestroy

public abstract void
onHTTPSmoothStreamingSessionDestroy([HTTPStreamerSessionSmoothStreamer httpSmoothStreamingSession](#))

Invoked when an HTTP Smooth Streaming session is destroyed.

Parameters:
httpSmoothStreamingSession - httpSmoothStreamingSession

com.wowza.wms.module Interface IModuleOnPushPublish

public interface **IModuleOnPushPublish**
extends

Method Summary

abstract void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is created
abstract void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is destroyed

Methods

onPushPublishSessionCreate

```
public abstract void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is created

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

onPushPublishSessionDestroy

```
public abstract void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is destroyed

Parameters:

streamName - stream name
stream - stream
pushPublishSession - push publish session

com.wowza.wms.module Interface IModuleOnRTPSession

public interface **IModuleOnRTPSession**
extends

IModuleOnRTPSession: method interface for RTP session create/destroy.

Method Summary

abstract void	onRTPSessionCreate(RTPSession rtpSession) Invoked when an RTP Session is created.
abstract void	onRTPSessionDestroy(RTPSession rtpSession) Invoked when an RTP Session is destroyed.

Methods

onRTPSessionCreate

public abstract void **onRTPSessionCreate**([RTPSession](#) rtpSession)

Invoked when an RTP Session is created.

Parameters:

rtpSession - rtpSession

onRTPSessionDestroy

public abstract void **onRTPSessionDestroy**([RTPSession](#) rtpSession)

Invoked when an RTP Session is destroyed.

Parameters:

rtpSession - rtpSession

com.wowza.wms.module Interface IModuleOnStream

public interface **IModuleOnStream**
extends

IModuleOnStream: method interface examples for stream level methods in a module.

Method Summary

abstract void	onStreamCreate (IMediaStream stream) Invoked when a stream is created.
abstract void	onStreamDestroy (IMediaStream stream) Invoked when a stream is destroyed.

Methods

onStreamCreate

public abstract void **onStreamCreate**([IMediaStream](#) stream)

Invoked when a stream is created.

Parameters:

stream - stream object

onStreamDestroy

public abstract void **onStreamDestroy**([IMediaStream](#) stream)

Invoked when a stream is destroyed.

Parameters:

stream - stream object

com.wowza.wms.module Interface IModulePingResult

public interface **IModulePingResult**
extends

IModulePingResult: callback interface used by IClient ping.

Method Summary

abstract void	<code>onResult</code> (<code>IClient</code> client, long pingTime, int pingId, boolean result) Triggered on client side result from call to IClient.ping.
---------------	---

Methods

onResult

```
public abstract void onResult(IClient client,  
    long pingTime,  
    int pingId,  
    boolean result)
```

Triggered on client side result from call to IClient.ping. This method will be called on a success or failure (ping timeout) of a ping.

Parameters:

client - client
pingTime - time in server time (milliseconds) when the ping was initiated
pingId - internal server id for the ping request
result - true is ping was successful false if failure (timeout)

com.wowza.wms.module Class ModuleBase

java.lang.Object

└-com.wowza.wms.module.ModuleBase

Direct Known Subclasses:

[ModuleCore](#), [ModuleClientLogging](#), [ModuleMediaCaster](#)

public abstract class **ModuleBase**
extends Object

ModuleBase: Base class that all server side modules should extend. Provides basic utility functionality for handling function parameters and return data. Also provides a simplified API for logging.

Field Summary

public static final	CALLBACK_PARAM1 Callback param: param1 Value: 1
public static final	CALLBACK_PARAM10 Callback param: param10 Value: 10
public static final	CALLBACK_PARAM2 Callback param: param2 Value: 2
public static final	CALLBACK_PARAM3 Callback param: param3 Value: 3
public static final	CALLBACK_PARAM4 Callback param: param4 Value: 4
public static final	CALLBACK_PARAM5 Callback param: param5 Value: 5
public static final	CALLBACK_PARAM6 Callback param: param6 Value: 6
public static final	CALLBACK_PARAM7 Callback param: param7 Value: 7
public static final	CALLBACK_PARAM8 Callback param: param8 Value: 8

public static final	CALLBACK_PARAM9 Callback param: param9 Value: 9
public static final	PARAM1 Method param: param1 Value: 3
public static final	PARAM10 Method param: param10 Value: 12
public static final	PARAM2 Method param: param2 Value: 4
public static final	PARAM3 Method param: param3 Value: 5
public static final	PARAM4 Method param: param4 Value: 6
public static final	PARAM5 Method param: param5 Value: 7
public static final	PARAM6 Method param: param6 Value: 8
public static final	PARAM7 Method param: param7 Value: 9
public static final	PARAM8 Method param: param8 Value: 10
public static final	PARAM9 Method param: param9 Value: 11
public static final	PARAMMETHODNAME Method: method name Value: 0
public static final	PLAYTRANSITION_APPEND Value: 0
public static final	PLAYTRANSITION_APPEND_IMMEDIATE Value: 2

public static final	<u>PLAYTRANSITION_RESET</u> Value: 1
public static final	<u>PLAYTRANSITION_RESET_IMMEDIATE</u> Value: 3
public static final	<u>PLAYTRANSITION_STOP</u> Value: 10
public static final	<u>PLAYTRANSITION_SWAP</u> Value: 12
public static final	<u>PLAYTRANSITION_SWITCH</u> Value: 13
public static final	<u>PLAYTRANSITION_UNKNOWN</u> Value: 14
public static final	<u>PLAYTRANSITIONSTR_APPEND</u> Play2 transition: APPEND Value: append
public static final	<u>PLAYTRANSITIONSTR_RESET</u> Play2 transition: RESET Value: reset
public static final	<u>PLAYTRANSITIONSTR_STOP</u> Play2 transition: STOP Value: stop
public static final	<u>PLAYTRANSITIONSTR_SWAP</u> Play2 transition: SWAP Value: swap
public static final	<u>PLAYTRANSITIONSTR_SWITCH</u> Play2 transition: SWITCH Value: switch
public static final	<u>PLAYTRANSITIONSTR_UNKNOWN</u> Play2 transition: UNKNOWN Value: unknown

Constructor Summary

public	<u>ModuleBase</u> ()
--------	---------------------------------------

Method Summary

static <u>IApplicationInstance</u>	<u>getAppInstance</u> (<u>IClient</u> client) Get applicationInstance of a client.
---	--

static IApplication	getApplication (IClient client) Get application of a client.
static int	getCallbackParamCount (AMFDataList params) Get the total number of parameters passed to callback.
static WMSLogger	getLogger () Get the logging interface.
static AMFData	getParam (AMFDataList params, int index) Get parameter by index.
static boolean	getParamBoolean (AMFDataList params, int index) Get parameter by index, Return as boolean.
static boolean	getParamBoolean (AMFDataList params, int index, boolean defaultVal) Get parameter by index, Return as boolean.
static int	getParamCount (AMFDataList params) Get the total number of parameters passed to method.
static java.util.Date	getParamDate (AMFDataList params, int index) Get parameter by index, Return as Date.
static double	getParamDouble (AMFDataList params, int index) Get parameter by index, Return as double.
static double	getParamDouble (AMFDataList params, int index, double defaultVal) Get parameter by index, Return as double.
static int	getParamInt (AMFDataList params, int index) Get parameter by index, Return as int.
static int	getParamInt (AMFDataList params, int index, int defaultVal) Get parameter by index, Return as int.
static long	getParamLong (AMFDataList params, int index) Get parameter by index, Return as long.
static long	getParamLong (AMFDataList params, int index, long defaultVal) Get parameter by index, Return as long.
static AMFDataMixedArray	getParamMixedArray (AMFDataList params, int index) Get parameter by index, Return as AMFDataMixedArray.
static AMFDataObj	getParamObj (AMFDataList params, int index) Get parameter by index, Return as Object.
static String	getParamString (AMFDataList params, int index) Get parameter by index, Return as String.
static String	getParamString (AMFDataList params, int index, String defaultVal) Get parameter by index, Return as String.
static int	getParamType (AMFDataList params, int index) Get parameter type.

static IMediaStream	getStream (IClient client, com.wowza.wms.request.RequestFunction function) For methods called from the client side object NetStream (publish, play, deleteStream) get the IMediaStream object associated with the call.
static IVHost	getVHost (IClient client) Get vHost of a client.
void	invokePrevious (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Wowza Pro will determine command priority based on the order of the modules in the module list.
static void	invokePrevious (Object instance, IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Wowza Pro will determine command priority based on the order of the modules in the module list.
static boolean	isSendResult (AMFDataList params) Is this method call expecting sendResult to be called.
static void	sendClientOnStatusError (IClient client, String code, String description) Send an error message to the client-side client.onStatus handler
static boolean	sendResult (IClient client, AMFDataList params, AMFData data) Send a result to client method call as a AMFData object.
static boolean	sendResult (IClient client, AMFDataList params, boolean value) Send a result to client method call as a single boolean value.
static boolean	sendResult (IClient client, AMFDataList params, double value) Send a result to client method call as a single double value.
static boolean	sendResult (IClient client, AMFDataList params, int value) Send a result to client method call as a single int value.
static boolean	sendResult (IClient client, AMFDataList params, String value) Send a result to client method call as a single String value.
static void	sendStreamOnStatusError (IMediaStream stream, String code, String description) Send an error to the client-side NetStream.onStatus handler

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

PARAMMETHODNAME

public static final int **PARAMMETHODNAME**

Method: method name
Constant value: 0

(continued from last page)

PARAM1

```
public static final int PARAM1
```

Method param: param1
Constant value: **3**

PARAM2

```
public static final int PARAM2
```

Method param: param2
Constant value: **4**

PARAM3

```
public static final int PARAM3
```

Method param: param3
Constant value: **5**

PARAM4

```
public static final int PARAM4
```

Method param: param4
Constant value: **6**

PARAM5

```
public static final int PARAM5
```

Method param: param5
Constant value: **7**

PARAM6

```
public static final int PARAM6
```

Method param: param6
Constant value: **8**

PARAM7

```
public static final int PARAM7
```

Method param: param7
Constant value: **9**

PARAM8

```
public static final int PARAM8
```

Method param: param8
Constant value: **10**

PARAM9

```
public static final int PARAM9
```

(continued from last page)

Method param: param9
Constant value: **11**

PARAM10

public static final int **PARAM10**

Method param: param10
Constant value: **12**

CALLBACK_PARAM1

public static final int **CALLBACK_PARAM1**

Callback param: param1
Constant value: **1**

CALLBACK_PARAM2

public static final int **CALLBACK_PARAM2**

Callback param: param2
Constant value: **2**

CALLBACK_PARAM3

public static final int **CALLBACK_PARAM3**

Callback param: param3
Constant value: **3**

CALLBACK_PARAM4

public static final int **CALLBACK_PARAM4**

Callback param: param4
Constant value: **4**

CALLBACK_PARAM5

public static final int **CALLBACK_PARAM5**

Callback param: param5
Constant value: **5**

CALLBACK_PARAM6

public static final int **CALLBACK_PARAM6**

Callback param: param6
Constant value: **6**

CALLBACK_PARAM7

public static final int **CALLBACK_PARAM7**

Callback param: param7
Constant value: **7**

CALLBACK_PARAM8

```
public static final int CALLBACK_PARAM8
```

Callback param: param8
Constant value: **8**

CALLBACK_PARAM9

```
public static final int CALLBACK_PARAM9
```

Callback param: param9
Constant value: **9**

CALLBACK_PARAM10

```
public static final int CALLBACK_PARAM10
```

Callback param: param10
Constant value: **10**

PLAYTRANSITIONSTR_APPEND

```
public static final java.lang.String PLAYTRANSITIONSTR_APPEND
```

Play2 transition: APPEND
Constant value: **append**

PLAYTRANSITIONSTR_RESET

```
public static final java.lang.String PLAYTRANSITIONSTR_RESET
```

Play2 transition: RESET
Constant value: **reset**

PLAYTRANSITIONSTR_STOP

```
public static final java.lang.String PLAYTRANSITIONSTR_STOP
```

Play2 transition: STOP
Constant value: **stop**

PLAYTRANSITIONSTR_SWAP

```
public static final java.lang.String PLAYTRANSITIONSTR_SWAP
```

Play2 transition: SWAP
Constant value: **swap**

PLAYTRANSITIONSTR_SWITCH

```
public static final java.lang.String PLAYTRANSITIONSTR_SWITCH
```

Play2 transition: SWITCH
Constant value: **switch**

(continued from last page)

PLAYTRANSITIONSTR_UNKNOWN

```
public static final java.lang.String PLAYTRANSITIONSTR_UNKNOWN
```

Play2 transition: UNKNOWN
Constant value: **unknown**

PLAYTRANSITION_APPEND

```
public static final int PLAYTRANSITION_APPEND
```

Constant value: **0**

PLAYTRANSITION_RESET

```
public static final int PLAYTRANSITION_RESET
```

Constant value: **1**

PLAYTRANSITION_APPEND_IMMEDIATE

```
public static final int PLAYTRANSITION_APPEND_IMMEDIATE
```

Constant value: **2**

PLAYTRANSITION_RESET_IMMEDIATE

```
public static final int PLAYTRANSITION_RESET_IMMEDIATE
```

Constant value: **3**

PLAYTRANSITION_STOP

```
public static final int PLAYTRANSITION_STOP
```

Constant value: **10**

PLAYTRANSITION_SWAP

```
public static final int PLAYTRANSITION_SWAP
```

Constant value: **12**

PLAYTRANSITION_SWITCH

```
public static final int PLAYTRANSITION_SWITCH
```

Constant value: **13**

PLAYTRANSITION_UNKNOWN

```
public static final int PLAYTRANSITION_UNKNOWN
```

(continued from last page)

Constant value: **14**

Constructors

ModuleBase

```
public ModuleBase( )
```

Methods

getParamCount

```
protected static int getParamCount(AMFDataList params)
```

Get the total number of parameters passed to method.

Parameters:

params - parameters

Returns:

total number of parameters

getCallbackParamCount

```
protected static int getCallbackParamCount(AMFDataList params)
```

Get the total number of parameters passed to callback.

Parameters:

params - parameters

Returns:

total number of parameters

getParamType

```
protected static int getParamType(AMFDataList params,  
int index)
```

Get parameter type.

Parameters:

params - parameters

index - parameter index

Returns:

parameter type (AMFData.DATA_TYPE_*)

getParam

```
protected static AMFData getParam(AMFDataList params,  
int index)
```

Get parameter by index. Return as AMFData object.

(continued from last page)

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as AMFData object, null if out of bounds

getParamMixedArray

```
protected static AMFDataMixedArray getParamMixedArray(AMFDataList params,  
int index)
```

Get parameter by index, Return as AMFDataMixedArray.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as AMFDataMixedArray object, null if out of bounds

getParamObj

```
protected static AMFDataObj getParamObj(AMFDataList params,  
int index)
```

Get parameter by index, Return as Object.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as Object object, null if out of bounds

getParamString

```
protected static String getParamString(AMFDataList params,  
int index)
```

Get parameter by index, Return as String.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as String object, null if out of bounds

getParamString

```
protected static String getParamString(AMFDataList params,  
int index,  
String defaultVal)
```

Get parameter by index, Return as String.

Parameters:

params - parameters

(continued from last page)

index - parameter index
defaultVal - default value

Returns:

parameter value as String object, defaultVal if out of bounds

getParamDate

```
protected static java.util.Date getParamDate(AMFDataList params,  
int index)
```

Get parameter by index, Return as Date.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as Date object, null if out of bounds

getParamInt

```
protected static int getParamInt(AMFDataList params,  
int index)
```

Get parameter by index, Return as int.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as int, 0 if out of bounds

getParamInt

```
protected static int getParamInt(AMFDataList params,  
int index,  
int defaultVal)
```

Get parameter by index, Return as int.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as int, defaultVal if out of bounds

getParamDouble

```
protected static double getParamDouble(AMFDataList params,  
int index)
```

Get parameter by index, Return as double.

Parameters:

params - parameters

(continued from last page)

index - parameter index

Returns:

parameter value as double, 0 if out of bounds

getParamDouble

```
protected static double getParamDouble(AMFDataList params,  
    int index,  
    double defaultVal)
```

Get parameter by index, Return as double.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as double, 0 if out of bounds

getParamLong

```
protected static long getParamLong(AMFDataList params,  
    int index)
```

Get parameter by index, Return as long.

Parameters:

params - parameters
index - parameter index

Returns:

parameter value as long, 0 if out of bounds

getParamLong

```
protected static long getParamLong(AMFDataList params,  
    int index,  
    long defaultVal)
```

Get parameter by index, Return as long.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as long, defaultVal if out of bounds

getParamBoolean

```
protected static boolean getParamBoolean(AMFDataList params,  
    int index)
```

Get parameter by index, Return as boolean.

Parameters:

params - parameters

(continued from last page)

index - parameter index

Returns:

parameter value as boolean, false if out of bounds

getParamBoolean

```
protected static boolean getParamBoolean(AMFDataList params,  
int index,  
boolean defaultVal)
```

Get parameter by index, Return as boolean.

Parameters:

params - parameters
index - parameter index
defaultVal - default value

Returns:

parameter value as boolean, defaultVal if out of bounds

getAppInstance

```
protected static IApplicationInstance getAppInstance(IClient client)
```

Get applicationInstance of a client.

Parameters:

client - client

Returns:

applicationInstance

getApplication

```
protected static IApplication getApplication(IClient client)
```

Get application of a client.

Parameters:

client - client

Returns:

application

isSendResult

```
protected static boolean isSendResult(AMFDataList params)
```

Is this method call expecting sendResult to be called. If on the client side the call to `NetConnection.call("handlerName", resultObj, param1...)` had a value for resultObj (non-null), then the method is expecting some type of result or return data. Calling a variant of sendResult will provide this callback.

Parameters:

params - parameters

Returns:

true if client side call is expecting call to sendResult

getVHost

protected static [IVHost](#) **getVHost**([IClient](#) client)

Get vHost of a client.

Parameters:

client - client

Returns:

vHost

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
String value)

Send a result to client method call as a single String value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
boolean value)

Send a result to client method call as a single boolean value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

protected static boolean **sendResult**([IClient](#) client,
[AMFDataList](#) params,
int value)

Send a result to client method call as a single int value.

Parameters:

client - client

params - parameters

value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

```
protected static boolean sendResult(IClient client,  
    AMFDataList params,  
    double value)
```

Send a result to client method call as a single double value.

Parameters:

client - client
params - parameters
value - return value

Returns:

true if client side call is expecting call to sendResult

sendResult

```
protected static boolean sendResult(IClient client,  
    AMFDataList params,  
    AMFData data)
```

Send a result to client method call as a AMFData object. This can be a single AMFData value like new AMFDataItem((double)1.234) or a complex type like AMFDataMixedArray, AMFDataArray or AMFDataObj.

Parameters:

client - client
params - parameters
data - return value

Returns:

true if client side call is expecting call to sendResult

getLogger

```
protected static WMSLogger getLogger()
```

Get the logging interface.

See Also:

[WMSLogger](#)

getStream

```
protected static IMediaStream getStream(IClient client,  
    com.wowza.wms.request.RequestFunction function)
```

For methods called from the client side object NetStream (publish, play, deleteStream) get the IMediaStream object associated with the call.

Parameters:

client - client
function - functions

Returns:

media stream

(continued from last page)

invokePrevious

```
protected static void invokePrevious(Object instance,
    IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Wowza Pro will determine command priority based on the order of the modules in the module list. Wowza Pro by default will only invoke the last module that defines a given command. This method enables you to call the method by the same name in the previous module that defines that command. For example if you have three modules defined in the module list; ModuleCore, ModuleSecureURLParams and ModuleMyModule and all three modules implement the "play" command. When "play" is invoked it will invoke the "play" command in ModuleMyModule. If in ModuleMyModule you would like to call the "play" command in ModuleSecureURLParams, you can call: invokePrevious(this, client, function, params); and it will invoke the "play" command defined in ModuleSecureURLParams.

Parameters:

instance - instance of the current module
 client - client object passed into command
 function - function passed into command
 params - parameters passed into command

invokePrevious

```
protected void invokePrevious(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Wowza Pro will determine command priority based on the order of the modules in the module list. Wowza Pro by default will only invoke the last module that defines a given command. This method enables you to call the method by the same name in the previous module that defines that command. For example if you have three modules defined in the module list; ModuleCore, ModuleSecureURLParams and ModuleMyModule and all three modules implement the "play" command. When "play" is invoked it will invoke the "play" command in ModuleMyModule. If in ModuleMyModule you would like to call the "play" command in ModuleSecureURLParams, you can call: this.invokePrevious(client, function, params); and it will invoke the "play" command defined in ModuleSecureURLParams.

Parameters:

client - client object passed into command
 function - function passed into command
 params - parameters passed into command

sendClientOnStatusError

```
protected static void sendClientOnStatusError(IClient client,
    String code,
    String description)
```

Send an error message to the client-side client.onStatus handler

Parameters:

client - destination client
 code - code
 description - description

sendStreamOnStatusError

```
protected static void sendStreamOnStatusError(IMediaStream stream,
    String code,
    String description)
```

Send an error to the client-side NetStream.onStatus handler

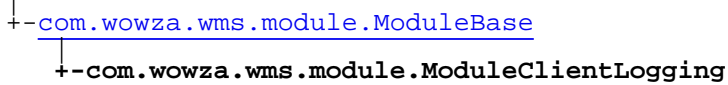
Parameters:

(continued from last page)

stream - destination stream
code - code
description - description

com.wowza.wms.module Class ModuleClientLogging

java.lang.Object



public class **ModuleClientLogging**
extends [ModuleBase](#)

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#),
[CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#),
[PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#),
[PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#),
[PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#),
[PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#),
[PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#),
[PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleClientLogging()
--------	---------------------------------------

Method Summary

static void	logDebug (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a debug message to the logging system NetConnection.call("logDebug", null, message);
static void	logError (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a error message to the logging system NetConnection.call("logError", null, message);
static void	logInfo (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a info message to the logging system NetConnection.call("logInfo", null, message);
static void	logWarn (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Send a warning message to the logging system NetConnection.call("logWarn", null, message);

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#),
[getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#),
[getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#),
[getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#),
[getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#),
[sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#),
[sendStreamOnStatusError](#)

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Constructors

ModuleClientLogging

```
public ModuleClientLogging()
```

Methods

logDebug

```
public static void logDebug(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Send a debug message to the logging system `NetConnection.call("logDebug", null, message);`

Parameters:

`client` - client
`function` - function
`params` - params (message)

logInfo

```
public static void logInfo(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Send a info message to the logging system `NetConnection.call("logInfo", null, message);`

Parameters:

`client` - client
`function` - function
`params` - params (message)

logWarn

```
public static void logWarn(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Send a warning message to the logging system `NetConnection.call("logWarn", null, message);`

Parameters:

`client` - client
`function` - function
`params` - params (message)

(continued from last page)

logError

```
public static void logError(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Send a error message to the logging system `NetConnection.call("logError", null, message);`

Parameters:

client - client

function - function

params - params (message)

com.wowza.wms.module Class ModuleCore

```
java.lang.Object
|
+-com.wowza.wms.module.ModuleBase
|
+-com.wowza.wms.module.ModuleCore
```

```
public class ModuleCore
extends ModuleBase
```

ModuleCore includes all the basic commands support by the NetStream and NetConnection client side objects. Any of these methods can be overwritten in a custom module. Below is an example of custom module that overrides the play method to modify the name of the file to be played:

```
package com.wowza.wms.plugin.overrideexample;

import com.wowza.wms.amf.*;
import com.wowza.wms.client.*;
import com.wowza.wms.module.*;
import com.wowza.wms.request.*;

public class ModuleOverrideExample extends ModuleBase
{
    public void play(IClient client, RequestFunction function, AMFDataList params)
    {
        if (params.get(PARAM1).getType() == AMFData.DATA_TYPE_STRING)
        {
            String playName = params.getString(PARAM1);
            params.set(PARAM1, new AMFDataItem(playName+"_newname"));
        }
        this.invokePrevious(client, function, params);
    }
}
```

Fields inherited from class [com.wowza.wms.module.ModuleBase](#)

[CALLBACK_PARAM1](#), [CALLBACK_PARAM10](#), [CALLBACK_PARAM2](#), [CALLBACK_PARAM3](#), [CALLBACK_PARAM4](#), [CALLBACK_PARAM5](#), [CALLBACK_PARAM6](#), [CALLBACK_PARAM7](#), [CALLBACK_PARAM8](#), [CALLBACK_PARAM9](#), [PARAM1](#), [PARAM10](#), [PARAM2](#), [PARAM3](#), [PARAM4](#), [PARAM5](#), [PARAM6](#), [PARAM7](#), [PARAM8](#), [PARAM9](#), [PARAMMETHODNAME](#), [PLAYTRANSITION_APPEND](#), [PLAYTRANSITION_APPEND_IMMEDIATE](#), [PLAYTRANSITION_RESET](#), [PLAYTRANSITION_RESET_IMMEDIATE](#), [PLAYTRANSITION_STOP](#), [PLAYTRANSITION_SWAP](#), [PLAYTRANSITION_SWITCH](#), [PLAYTRANSITION_UNKNOWN](#), [PLAYTRANSITIONSTR_APPEND](#), [PLAYTRANSITIONSTR_RESET](#), [PLAYTRANSITIONSTR_STOP](#), [PLAYTRANSITIONSTR_SWAP](#), [PLAYTRANSITIONSTR_SWITCH](#), [PLAYTRANSITIONSTR_UNKNOWN](#)

Constructor Summary

public	ModuleCore()
--------	------------------------------

Method Summary

static void	closeStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.close();
static void	createStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Create new server side NetStream object (internal to Flash workings).
static void	deleteStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Delete server side stream object (internal to Flash workings).
static void	FCPublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCPublish method called by FME 2.5
static void	FCSubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCSubscribe subscribes to a live stream (if origin edge will start the stream from the origin to the edge)
static void	FCUnpublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	FCUnPublish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCUnpublish method called by FME 2.5
static void	FCUnsubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) FCUnSubscribe to a live stream
static void	FCUnSubscribe(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	getClientID(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the clientId for a client connection NetConnection.call("getClientID", resultObj);
static void	getLastStreamId(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the id for the last created stream NetConnection.call("getLastStreamId", resultObj);
static void	getLiveStreamPacketizer(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the live stream packetizer list for a client connection NetConnection.call("getLiveStreamPacketizer", resultObj);
static void	getMediaList(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	getPageUrl(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) getPageUrl returns the pageUrl from the onConnect metadata

static void	getReferrer(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) getReferrer returns the referrer from the onConnect metadata
static void	getRepeaterOriginUrl(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the Repeater Origin URL for this client
void	getStreamBitrate(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get stream bitrate in bits-per-second for a video on demand stream (will not work for live).
static void	getStreamLength(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get stream length in seconds NetConnection.call("getStreamLength", resultObj, streamName); If you pass in an array of streamNames it will return an array of durations.
static void	getStreamType(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the default stream type for a client connection NetConnection.call("getStreamType", resultObj);
static void	getVersion(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Get the Wowza Pro server version and build number NetConnection.call("getVersion", resultObj);
static void	initLiveStreamRepeating(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Initialize a stream for live stream repeating
static void	initStream(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Create new server side NetStream object (internal to Flash workings).
static void	pause(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.pause([flag : Boolean]);
static void	pauseRaw(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) pauseRaw method introduced in Flash player 10
static void	play(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.play(name : Object [,start : Number[, len : Number[, reset : Object]]]);
static void	play2(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.play(playOptions : NetStreamPlayOptions);
static void	publish(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.publish(name : String [, howToPublish : String]);
static void	receiveAudio(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.receiveAudio(receive : Boolean);
static void	receiveVideo(IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.receiveVideo(receive : Boolean FPS : Number); FPS does not work the same as FMS.

static void	releaseStream (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	seek (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.seek(offset : Number);
static void	setBandwidthLimit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	setBufferTime (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Server side implementation of NetStream.setBufferTime(bufferTime : Number);
static void	setLiveStreamPacketizer (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the live stream packetizer for a stream
static void	setRepeaterOriginUrl (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the Repeater Origin URL for this client
static void	setStreamType (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params) Set the default stream type for a client connection NetConnection.call("setStreamType", null, streamType);
static void	startTransmit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)
static void	stopTransmit (IClient client, com.wowza.wms.request.RequestFunction function, AMFDataList params)

Methods inherited from class [com.wowza.wms.module.ModuleBase](#)

[getAppInstance](#), [getApplication](#), [getCallbackParamCount](#), [getLogger](#), [getParam](#), [getParamBoolean](#), [getParamBoolean](#), [getParamCount](#), [getParamDate](#), [getParamDouble](#), [getParamDouble](#), [getParamInt](#), [getParamInt](#), [getParamLong](#), [getParamLong](#), [getParamMixedArray](#), [getParamObj](#), [getParamString](#), [getParamString](#), [getParamType](#), [getStream](#), [getVHost](#), [invokePrevious](#), [invokePrevious](#), [isSendResult](#), [sendClientOnStatusError](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendResult](#), [sendStreamOnStatusError](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

ModuleCore

```
public ModuleCore()
```

Methods

(continued from last page)

createStream

```
public static void createStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Create new server side NetStream object (internal to Flash workings).

Parameters:

client - client
function - function
params - parameters (no params)

initStream

```
public static void initStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Create new server side NetStream object (internal to Flash workings).

Parameters:

client - client
function - function
params - parameters (streamIndex, boolean)

releaseStream

```
public static void releaseStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getLastStreamId

```
public static void getLastStreamId(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the id for the last created stream `NetConnection.call("getLastStreamId", resultObj);`

Parameters:

client - client
function - client
params - params (no params)

deleteStream

```
public static void deleteStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Delete server side stream object (internal to Flash workings).

Parameters:

client - client
function - function
params - params

publish

```
public static void publish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.publish(name : String [, howToPublish : String]);

Parameters:

client - client

function - function

params - params (name [if name = "false" or "null" stop publishing], howToPublish ["record", "live", "append"])

setBandwidthLimit

```
public static void setBandwidthLimit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

play2

```
public static void play2(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.play(playOptions : NetStreamPlayOptions);

Parameters:

client

function

params

play

```
public static void play(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.play(name : Object [,start : Number[, len : Number[, reset : Object]]]);

Parameters:

client - client

function - function

params - params (name, start, len, reset)

closeStream

```
public static void closeStream(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.close();

Parameters:

client - client

function - function

params - params (no params)

seek

```
public static void seek(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.seek(offset : Number);

Parameters:

client - client
function - function
params - params (offset)

pause

```
public static void pause(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.pause([flag : Boolean]);

Parameters:

client - client
function - function
params - params (flag)

setBufferTime

```
public static void setBufferTime(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of NetStream.setBufferTime(bufferTime : Number);

Parameters:

client - client
function - function
params - params (bufferTime)

getClientID

```
public static void getClientID(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the clientId for a client connection NetConnection.call("getClientID", resultObj);

Parameters:

client - client
function - function
params - params (no params)

getVersion

```
public static void getVersion(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the Wowza Pro server version and build number NetConnection.call("getVersion", resultObj);

(continued from last page)

Parameters:

client - client
function - function
params - params (no params)

setLiveStreamPacketizer

```
public static void setLiveStreamPacketizer(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Set the live stream packetizer for a stream

Parameters:

client - client
function - function
params - params (liveStreamPacketizer)

initLiveStreamRepeating

```
public static void initLiveStreamRepeating(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Initialize a stream for live stream repeating

Parameters:

client - client
function - function
params - params (liveStreamPacketizer, liveStreamRepeater)

getLiveStreamPacketizer

```
public static void getLiveStreamPacketizer(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Get the live stream packetizer list for a client connection `NetConnection.call("getLiveStreamPacketizer", resultObj);`

Parameters:

client - client
function - function
params - params (no params)

setStreamType

```
public static void setStreamType(IClient client,  
com.wowza.wms.request.RequestFunction function,  
AMFDataList params)
```

Set the default stream type for a client connection `NetConnection.call("setStreamType", null, streamType);`

Parameters:

client - client
function - function
params - params (streamType)

(continued from last page)

getStreamType

```
public static void getStreamType(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get the default stream type for a client connection `NetConnection.call("getStreamType", resultObj);`

Parameters:

client - client
function - function
params - params (no params)

receiveAudio

```
public static void receiveAudio(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of `NetStream.receiveAudio(receive : Boolean);`

Parameters:

client - client
function - function
params - params (receive)

receiveVideo

```
public static void receiveVideo(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Server side implementation of `NetStream.receiveVideo(receive : Boolean | FPS : Number);` FPS does not work the same as FMS. Wowza Pro accepts the following values:

- true: Send all video frames
- false: Send no video
- -1: Send all video frames
- -2: Send half the frames (remove B frames) (Note: only works with Sorenson Spark video with B-frames)
- -3: Send only key frames

Parameters:

client - client
function - function
params - params (receive | FPS)

getStreamBitrate

```
public void getStreamBitrate(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Get stream bitrate in bits-per-second for a video on demand stream (will not work for live). To call, `NetConnection.call("getStreamBitrate", resultObj, streamName);`

Parameters:

client - client
function - function
params - params (streamName:String)

getStreamLength

```
public static void getStreamLength(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Get stream length in seconds NetConnection.call("getStreamLength", resultObj, streamName); If you pass in an array of streamNames it will return an array of durations.

Parameters:

client - client
function - function
params - params (streamName:String or streamNames:Array)

getRepeaterOriginUrl

```
public static void getRepeaterOriginUrl(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Get the Repeater Origin URL for this client

Parameters:

client - client
function - function
params - params

setRepeaterOriginUrl

```
public static void setRepeaterOriginUrl(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Set the Repeater Origin URL for this client

Parameters:

client - client
function - function
params - params (repeaterOriginUrl)

FCPublish

```
public static void FCPublish(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

FCPublish method called by FME 2.5

Parameters:

client - client
function - function
params - params

FCUnPublish

```
public static void FCUnPublish(IClient client,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

(continued from last page)

FCUnpublish method called by FME 2.5

Parameters:

client - client
function - function
params - params

FCUnpublish

```
public static void FCUnpublish(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

pauseRaw

```
public static void pauseRaw(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

pauseRaw method introduced in Flash player 10

Parameters:

client - client
function - function
params - params

getReferrer

```
public static void getReferrer(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getReferrer returns the referrer from the onConnect metadata

Parameters:

client - client
function - function
params - params

getPageUrl

```
public static void getPageUrl(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getPageUrl returns the pageUrl from the onConnect metadata

Parameters:

client - client
function - function
params - params

FCSubscribe

```
public static void FCSubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

(continued from last page)

FCSubscribe subscribes to a live stream (if origin edge will start the stream from the origin to the edge)

Parameters:

client - client
function - function
params - params (streamName:String, [mediaCasterType:String])

FCUnsubscribe

```
public static void FCUnsubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

FCUnSubscribe to a live stream

Parameters:

client - client
function - function
params - params (streamName:String)

FCUnSubscribe

```
public static void FCUnSubscribe(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

startTransmit

```
public static void startTransmit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

stopTransmit

```
public static void stopTransmit(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getMediaList

```
public static void getMediaList(IClient client,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.module Class ServerListenerStreamDemoPublisher

java.lang.Object

└─com.wowza.wms.module.ServerListenerStreamDemoPublisher

All Implemented Interfaces:

[IApplicationInstanceNotify](#), [IApplicationNotify](#), [IVHostNotify](#), [IServerNotify2](#)

public class **ServerListenerStreamDemoPublisher**

extends Object

implements [IServerNotify2](#), [IVHostNotify](#), [IApplicationNotify](#), [IApplicationInstanceNotify](#)

Nested Class Summary

class	ServerListenerStreamDemoPublisher.DemoPublisher ServerListenerStreamDemoPublisher.DemoPublisher
class	ServerListenerStreamDemoPublisher.DemoPublisherConfig ServerListenerStreamDemoPublisher.DemoPublisherConfig
class	ServerListenerStreamDemoPublisher.ServerPublisherMap ServerListenerStreamDemoPublisher.ServerPublisherMap
class	ServerListenerStreamDemoPublisher.VHostPublishersMap ServerListenerStreamDemoPublisher.VHostPublishersMap

Field Summary

public static final	EVENTTYPE_APPLICATION_START Value: 3
public static final	EVENTTYPE_STREAM_START Value: 2
public static final	EVENTTYPE_STREAM_STOP Value: 1

Constructor Summary

public	ServerListenerStreamDemoPublisher ()
--------	---

Method Summary

IApplicationInstance	getAppInstance (IVHost vhost, ServerListenerStreamDemoPublisher.DemoPublisherConfig config)
IApplicationInstance	getAppInstance (IVHost vhost, String appName, String appInstName)

ServerListenerStreamDemoPublisher.ServerPublisherMap	getServerPublisherMap()
void	onApplicationCreate (IApplication application)
void	onApplicationDestroy (IApplication application)
void	onApplicationInstanceCreate (IApplicationInstance applicationInstance)
void	onApplicationInstanceDestroy (IApplicationInstance applicationInstance)
void	onServerConfigLoaded (IServer server)
void	onServerCreate (IServer server)
void	onServerInit (IServer server)
void	onServerShutdownComplete (IServer server)
void	onServerShutdownStart (IServer server)
void	onVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onVHostCreate (IVHost vhost)
void	onVHostInit (IVHost vhost)
void	onVHostShutdownComplete (IVHost vhost)
void	onVHostShutdownStart (IVHost vhost)
void	shutdownPublisher (ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
void	startupPublisher (IApplicationInstance applicationInstance, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.server.IServerNotify2](#)

[onServerConfigLoaded](#)

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods inherited from interface [com.wowza.wms.vhost.IVHostNotify](#)

[onVHostClientConnect](#), [onVHostCreate](#), [onVHostInit](#), [onVHostShutdownComplete](#),
[onVHostShutdownStart](#)

Methods inherited from interface [com.wowza.wms.application.IApplicationNotify](#)

[onApplicationCreate](#), [onApplicationDestroy](#)

Methods inherited from interface [com.wowza.wms.application.IApplicationInstanceNotify](#)

[onApplicationInstanceCreate](#), [onApplicationInstanceDestroy](#)

Fields

EVENTTYPE_STREAM_STOP

```
public static final int EVENTTYPE_STREAM_STOP
```

Constant value: **1**

EVENTTYPE_STREAM_START

```
public static final int EVENTTYPE_STREAM_START
```

Constant value: **2**

EVENTTYPE_APPLICATION_START

```
public static final int EVENTTYPE_APPLICATION_START
```

Constant value: **3**

Constructors

ServerListenerStreamDemoPublisher

```
public ServerListenerStreamDemoPublisher()
```

Methods

onServerCreate

```
public void onServerCreate(IServer server)
```

onServerConfigLoaded

```
public void onServerConfigLoaded(IServer server)
```

(continued from last page)

onServerInit

```
public void onServerInit(IServer server)
```

onServerShutdownStart

```
public void onServerShutdownStart(IServer server)
```

onServerShutdownComplete

```
public void onServerShutdownComplete(IServer server)
```

onVHostCreate

```
public void onVHostCreate(IVHost vhost)
```

getServerPublisherMap

```
public ServerListenerStreamDemoPublisher.ServerPublisherMap getServerPublisherMap()
```

onVHostInit

```
public void onVHostInit(IVHost vhost)
```

onVHostShutdownStart

```
public void onVHostShutdownStart(IVHost vhost)
```

onVHostShutdownComplete

```
public void onVHostShutdownComplete(IVHost vhost)
```

onVHostClientConnect

```
public void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```


onApplicationInstanceCreate

```
public void onApplicationInstanceCreate(IApplicationInstance applicationInstance)
```

onApplicationInstanceDestroy

```
public void onApplicationInstanceDestroy(IApplicationInstance applicationInstance)
```

onApplicationCreate

```
public void onApplicationCreate(IApplication application)
```

onApplicationDestroy

```
public void onApplicationDestroy(IApplication application)
```

getAppInstance

```
public IApplicationInstance getAppInstance(IVHost vhost,  
    ServerListenerStreamDemoPublisher.DemoPublisherConfig config)
```

getAppInstance

```
public IApplicationInstance getAppInstance(IVHost vhost,  
    String appName,  
    String appInstName)
```

startupPublisher

```
public void startupPublisher(IApplicationInstance applicationInstance,  
    ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
```

shutdownPublisher

```
public void shutdownPublisher(ServerListenerStreamDemoPublisher.DemoPublisher  
demoPublisher)
```

com.wowza.wms.module

Class ServerListenerStreamDemoPublisher.DemoPublisher

java.lang.Object

└─com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisher

public class **ServerListenerStreamDemoPublisher.DemoPublisher**
extends Object

Field Summary

public	config
--------	------------------------

Constructor Summary

public	DemoPublisher()
--------	---------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

config

public com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisherConfig
config

Constructors

DemoPublisher

public **DemoPublisher()**

com.wowza.wms.module

Class ServerListenerStreamDemoPublisher.VHostPublishersMap

java.lang.Object

└─com.wowza.wms.module.ServerListenerStreamDemoPublisher.VHostPublishersMap

public class **ServerListenerStreamDemoPublisher.VHostPublishersMap**
 extends Object

Constructor Summary

public	VHostPublishersMap (Object lock)
--------	--

Method Summary

void	addDemoPublishers (String appKey, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
void	addEvent (ServerListenerStreamDemoPublisher.CycleEvent event)
void	clearDemoPublishers ()
java.util.List	getDemoPublishers (String appKey)
java.util.List	getPublishers (String key)
java.util.Set	keySet ()
void	processEvents (long currTime)
java.util.List	remove (String appKey)
java.util.List	removeTriggeredEvents (long currTime)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VHostPublishersMap

public **VHostPublishersMap**(Object lock)

Methods

getDemoPublishers

```
public java.util.List getDemoPublishers(String appKey)
```

addDemoPublishers

```
public void addDemoPublishers(String appKey,  
    ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher)
```

clearDemoPublishers

```
public void clearDemoPublishers()
```

remove

```
public java.util.List remove(String appKey)
```

keySet

```
public java.util.Set keySet()
```

getPublishers

```
public java.util.List getPublishers(String key)
```

addEvent

```
public void addEvent(ServerListenerStreamDemoPublisher.CycleEvent event)
```

removeTriggeredEvents

```
public java.util.List removeTriggeredEvents(long currTime)
```

processEvents

```
public void processEvents(long currTime)
```

com.wowza.wms.module

Class ServerListenerStreamDemoPublisher.ServerPublisherMap

java.lang.Object

└-com.wowza.wms.module.ServerListenerStreamDemoPublisher.ServerPublisherMap

public class ServerListenerStreamDemoPublisher.ServerPublisherMap

extends Object

Constructor Summary

public	ServerPublisherMap()
--------	--------------------------------------

Method Summary

void	addEntry (String vhostName, String mapKey, ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher, ServerListenerStreamDemoPublisher.CycleEvent event)
ServerListenerStreamDemoPublisher.VHostPublishersMap	get (String key)
java.util.Set	keySet ()
void	processEvents (long currTime)
void	put (String key, ServerListenerStreamDemoPublisher.VHostPublishersMap entry)
ServerListenerStreamDemoPublisher.VHostPublishersMap	remove (String key)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ServerPublisherMap

public ServerPublisherMap()

Methods

(continued from last page)

get

```
public ServerListenerStreamDemoPublisher.VHostPublishersMap get(String key)
```

remove

```
public ServerListenerStreamDemoPublisher.VHostPublishersMap remove(String key)
```

put

```
public void put(String key,  
    ServerListenerStreamDemoPublisher.VHostPublishersMap entry)
```

keySet

```
public java.util.Set keySet()
```

addEntry

```
public void addEntry(String vhostName,  
    String mapKey,  
    ServerListenerStreamDemoPublisher.DemoPublisher demoPublisher,  
    ServerListenerStreamDemoPublisher.CycleEvent event)
```

processEvents

```
public void processEvents(long currTime)
```

com.wowza.wms.module**Class ServerListenerStreamDemoPublisher.DemoPublisherConfig**

java.lang.Object

└─com.wowza.wms.module.ServerListenerStreamDemoPublisher.DemoPublisherConfig

```
public class ServerListenerStreamDemoPublisher.DemoPublisherConfig
extends Object
```

Field Summary

public	appInstName
public	appName
public	dstStream
public	playlistRepeat
public	publishDuration
public	publishPauseTime
public	publishRepeat
public	random
public	sendOnMetadata
public	speed
public	srcExt
public	srcStream
public	timeBetweenItems
public	vhostName

Constructor Summary

public	DemoPublisherConfig()
--------	---------------------------------------

Method Summary

String	toString()
--------	----------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

vhostName

```
public java.lang.String vhostName
```

appName

```
public java.lang.String appName
```

appInstName

```
public java.lang.String appInstName
```

dstStream

```
public java.lang.String dstStream
```

srcStream

```
public java.lang.String srcStream
```

srcExt

```
public java.lang.String srcExt
```

random

```
public boolean random
```

timeBetweenItems

```
public int timeBetweenItems
```


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sendOnMetadata

```
public boolean sendOnMetadata
```

playlistRepeat

```
public boolean playlistRepeat
```

speed

```
public double speed
```

publishDuration

```
public long publishDuration
```

publishPauseTime

```
public long publishPauseTime
```

publishRepeat

```
public boolean publishRepeat
```

Constructors

DemoPublisherConfig

```
public DemoPublisherConfig()
```

Methods

toString

```
public String toString()
```

Package

com.wowza.wms.netconnection

com.wowza.wms.netconnection Interface INetConnection

public interface **INetConnection**
extends

Method Summary

abstract void	addPartialFunction (Integer amfNumber, com.wowza.wms.request.RequestFunction funct)
abstract void	addPublishStreams (IMediaStream stream)
abstract void	call (String handlerName, IMediaStream stream, INetConnectionCallResult resultObj, Object[] params)
abstract void	call (String handlerName, INetConnectionCallResult resultObj, Object[] params)
abstract void	callConnect (INetConnectionCallResult resultObj, AMFDataObj metaData, Object[] params)
abstract void	checkLastIdlePing ()
abstract void	checkPingTimeout ()
abstract void	clearLeftOverData ()
abstract void	clearPartialFunctions ()
abstract void	close ()
abstract void	connect (String hostname, int port, int timeout, INetConnectionCallResult handshakeResult)
abstract void	doIdle ()
abstract IApplicationInstance	getAppInstance ()
abstract NetConnectionCallResults	getCallResults ()
abstract int	getClientId ()
abstract int	getHandshake ()

abstract INetConnectionCallResult	getHandshakeResult()
abstract int	getIdleFrequency()
abstract INetConnectionIdle	getIdleHandler()
abstract long	getLastIdlePingTime()
abstract long	getLastValidateTime()
abstract int	getLeftOverCID()
abstract byte[]	getLeftOverData()
abstract int	getLiveRepeaterCapabilities()
abstract IOPerformanceCounter	getMediaIOPerformanceCounter()
abstract int	getNetConnectionId()
abstract long	getNextConfirmBytesReceived()
abstract int	getObjectEncoding()
abstract java.util.Map	getPartialFunctions()
abstract int	getProtocol()
abstract INetConnectionPublisher	getPublishHandler()
abstract java.util.List	getPublishStreams()
abstract int	getReceiveChunkSize()
abstract java.util.List	getReqAMFObjs()
abstract int	getRespAFMIndex(IMediaStream stream)
abstract AMFObj	getRespAMFAudioObj(IMediaStream stream)
abstract AMFObj	getRespAMFDataObj(IMediaStream stream)
abstract AMFObj	getRespAMFVideoObj(IMediaStream stream)
abstract ResponseFunctions	getRespFunctions()

abstract AMFObj	getResponseAMFObj (int index)
abstract int	getSendChunkSize ()
abstract MediaStreamMap	getStreams ()
abstract String	getStreamType ()
abstract long	getTotalInBytes ()
abstract IOPerformanceCounter	getTotalIOPerformanceCounter ()
abstract com.wowza.wms.protoco l.wowz.WOWZSession	getWowzSession ()
abstract void	handleCallback (com.wowza.wms.request.RequestFunction function)
abstract void	handlePingResult (int pingId, boolean result)
abstract long	incrementNextConfirmBytesReceived ()
abstract boolean	isLeftOverData ()
abstract boolean	isObjectEncodingAMF0 ()
abstract boolean	isObjectEncodingAMF3 ()
abstract boolean	isSSL ()
abstract boolean	isValidatingConnection ()
abstract void	packetComplete ()
abstract int	ping (INetConnectionPingResult pingResult)
abstract int	ping (INetConnectionPingResult pingResult, int payloadSize)
abstract void	registerCallback (String handlerName, INetConnectionCallback callback)
abstract void	registerStream (IMediaStream stream)
abstract void	removePublishStreams (IMediaStream stream)
abstract void	sendMediaStreamBufferTime (IMediaStream stream, int bufferTime)
abstract void	setClientId (int clientId)

abstract void	<u>setHandshake</u> (int handshake)
abstract void	<u>setHandshakeResult</u> (<u>INetConnectionCallResult</u> handshakeResult)
abstract void	<u>setIdleFrequency</u> (int idleFrequency)
abstract void	<u>setIdleHandler</u> (<u>INetConnectionIdle</u> idleHandler)
abstract void	<u>setLastIdlePingTime</u> (long lastIdlePingTime)
abstract void	<u>setLastValidateTime</u> (long lastValidateTime)
abstract void	<u>setLeftOverData</u> (byte[] data, int offset, int size)
abstract void	<u>setLeftOverData</u> (byte[] data, int offset, int size, int cid)
abstract void	<u>setLiveRepeaterCapabilities</u> (int liveRepeaterCapabilities)
abstract void	<u>setNextConfirmBytesReceived</u> (long nextConfirmBytesReceived)
abstract void	<u>setObjectEncoding</u> (int objectEncoding)
abstract void	<u>setPartialFunctions</u> (java.util.Map partialFunctions)
abstract void	<u>setProtocol</u> (int protocol)
abstract void	<u>setPublishHandler</u> (<u>INetConnectionPublisher</u> publishHandler)
abstract void	<u>setReceiveChunkSize</u> (int baseChunkSize)
abstract void	<u>setSendChunkSize</u> (int baseChunkSize)
abstract void	<u>setSSL</u> (boolean isSSL)
abstract void	<u>setStreams</u> (<u>MediaStreamMap</u> streams)
abstract void	<u>setStreamType</u> (String streamType)
abstract void	<u>setValidatingConnection</u> (boolean isValidatingConnection)
abstract void	<u>setWowzSession</u> (com.wowza.wms.protocol.wowz.WOWZSession wowzSession)
abstract void	<u>unregisterCallback</u> (String handlerName)
abstract void	<u>unregisterStream</u> (<u>IMediaStream</u> stream)

(continued from last page)

Methods

getRespFunctions

```
public abstract ResponseFunctions getRespFunctions()
```

connect

```
public abstract void connect(String hostname,  
    int port,  
    int timeout,  
    INetConnectionCallResult handshakeResult)
```

callConnect

```
public abstract void callConnect(INetConnectionCallResult resultObj,  
    AMFDataObj metaData,  
    Object[] params)
```

call

```
public abstract void call(String handlerName,  
    INetConnectionCallResult resultObj,  
    Object[] params)
```

call

```
public abstract void call(String handlerName,  
    IMediaStream stream,  
    INetConnectionCallResult resultObj,  
    Object[] params)
```

getStreams

```
public abstract MediaStreamMap getStreams()
```

setStreams

```
public abstract void setStreams(MediaStreamMap streams)
```

getHandshake

```
public abstract int getHandshake()
```

setHandshake

```
public abstract void setHandshake(int handshake)
```

getHandshakeResult

```
public abstract INetConnectionCallResult getHandshakeResult()
```

setHandshakeResult

```
public abstract void setHandshakeResult(INetConnectionCallResult handshakeResult)
```

getLeftOverData

```
public abstract byte[] getLeftOverData()
```

getLeftOverCID

```
public abstract int getLeftOverCID()
```

setLeftOverData

```
public abstract void setLeftOverData(byte[] data,  
    int offset,  
    int size,  
    int cid)
```

setLeftOverData

```
public abstract void setLeftOverData(byte[] data,  
    int offset,  
    int size)
```

clearLeftOverData

```
public abstract void clearLeftOverData()
```

isLeftOverData

```
public abstract boolean isLeftOverData()
```

getPartialFunctions

```
public abstract java.util.Map getPartialFunctions()
```

setPartialFunctions

```
public abstract void setPartialFunctions(java.util.Map partialFunctions)
```

clearPartialFunctions

```
public abstract void clearPartialFunctions()
```

addPartialFunction

```
public abstract void addPartialFunction(Integer amfNumber,  
    com.wowza.wms.request.RequestFunction funct)
```

getReqAMFObjs

```
public abstract java.util.List getReqAMFObjs()
```

getReceiveChunkSize

```
public abstract int getReceiveChunkSize()
```

setReceiveChunkSize

```
public abstract void setReceiveChunkSize(int baseChunkSize)
```

getSendChunkSize

```
public abstract int getSendChunkSize()
```

setSendChunkSize

```
public abstract void setSendChunkSize(int baseChunkSize)
```

(continued from last page)

getStreamType

```
public abstract String getStreamType()
```

setStreamType

```
public abstract void setStreamType(String streamType)
```

registerStream

```
public abstract void registerStream(IMediaStream stream)
```

unregisterStream

```
public abstract void unregisterStream(IMediaStream stream)
```

getCallResults

```
public abstract NetConnectionCallResults getCallResults()
```

handleCallback

```
public abstract void handleCallback(com.wowza.wms.request.RequestFunction function)
```

unregisterCallback

```
public abstract void unregisterCallback(String handlerName)
```

registerCallback

```
public abstract void registerCallback(String handlerName,  
    INetConnectionCallback callback)
```

close

```
public abstract void close()
```

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

(continued from last page)

getNetConnectionId

```
public abstract int getNetConnectionId()
```

getClientId

```
public abstract int getClientId()
```

setClientId

```
public abstract void setClientId(int clientId)
```

packetComplete

```
public abstract void packetComplete()
```

getResponseAMFObj

```
public abstract AMFObj getResponseAMFObj(int index)
```

getIdleHandler

```
public abstract INetConnectionIdle getIdleHandler()
```

setIdleHandler

```
public abstract void setIdleHandler(INetConnectionIdle idleHandler)
```

getIdleFrequency

```
public abstract int getIdleFrequency()
```

setIdleFrequency

```
public abstract void setIdleFrequency(int idleFrequency)
```

(continued from last page)

ping

```
public abstract int ping(INetConnectionPingResult pingResult)
```

ping

```
public abstract int ping(INetConnectionPingResult pingResult,  
    int payloadSize)
```

handlePingResult

```
public abstract void handlePingResult(int pingId,  
    boolean result)
```

checkPingTimeout

```
public abstract void checkPingTimeout()
```

doIdle

```
public abstract void doIdle()
```

getLastIdlePingTime

```
public abstract long getLastIdlePingTime()
```

setLastIdlePingTime

```
public abstract void setLastIdlePingTime(long lastIdlePingTime)
```

checkLastIdlePing

```
public abstract void checkLastIdlePing()
```

getTotalInBytes

```
public abstract long getTotalInBytes()
```

(continued from last page)

getNextConfirmBytesReceived

```
public abstract long getNextConfirmBytesReceived()
```

setNextConfirmBytesReceived

```
public abstract void setNextConfirmBytesReceived(long nextConfirmBytesReceived)
```

incrementNextConfirmBytesReceived

```
public abstract long incrementNextConfirmBytesReceived()
```

isObjectEncodingAMF3

```
public abstract boolean isObjectEncodingAMF3()
```

isObjectEncodingAMF0

```
public abstract boolean isObjectEncodingAMF0()
```

setObjectEncoding

```
public abstract void setObjectEncoding(int objectEncoding)
```

getObjectEncoding

```
public abstract int getObjectEncoding()
```

getRespAFMIndex

```
public abstract int getRespAFMIndex(IMediaStream stream)
```

getRespAMFAudioObj

```
public abstract AMFObj getRespAMFAudioObj(IMediaStream stream)
```

getRespAMFVideoObj

```
public abstract AMFObj getRespAMFVideoObj(IMediaStream stream)
```

(continued from last page)

getRespAMFDataObj

```
public abstract AMFObj getRespAMFDataObj(IMediaStream stream)
```

removePublishStreams

```
public abstract void removePublishStreams(IMediaStream stream)
```

getPublishStreams

```
public abstract java.util.List getPublishStreams()
```

addPublishStreams

```
public abstract void addPublishStreams(IMediaStream stream)
```

getPublishHandler

```
public abstract INetConnectionPublisher getPublishHandler()
```

setPublishHandler

```
public abstract void setPublishHandler(INetConnectionPublisher publishHandler)
```

getLastValidateTime

```
public abstract long getLastValidateTime()
```

setLastValidateTime

```
public abstract void setLastValidateTime(long lastValidateTime)
```

isValidatingConnection

```
public abstract boolean isValidatingConnection()
```

(continued from last page)

setValidatingConnection

```
public abstract void setValidatingConnection(boolean isValidatingConnection)
```

getTotalIOPerformanceCounter

```
public abstract IOPerformanceCounter getTotalIOPerformanceCounter()
```

getMediaIOPerformanceCounter

```
public abstract IOPerformanceCounter getMediaIOPerformanceCounter()
```

sendMediaStreamBufferTime

```
public abstract void sendMediaStreamBufferTime(IMediaStream stream,  
int bufferTime)
```

getLiveRepeaterCapabilities

```
public abstract int getLiveRepeaterCapabilities()
```

setLiveRepeaterCapabilities

```
public abstract void setLiveRepeaterCapabilities(int liveRepeaterCapabilities)
```

getProtocol

```
public abstract int getProtocol()
```

setProtocol

```
public abstract void setProtocol(int protocol)
```

getWowzSession

```
public abstract com.wowza.wms.protocol.wowz.WOWZSession getWowzSession()
```

(continued from last page)

setWowzSession

```
public abstract void setWowzSession(com.wowza.wms.protocol.wowz.WOWZSession  
wowzSession)
```

isSSL

```
public abstract boolean isSSL()
```

setSSL

```
public abstract void setSSL(boolean isSSL)
```

com.wowza.wms.netconnection Interface INetConnectionCallback

public interface **INetConnectionCallback**
extends

Method Summary

abstract void	onCallback (INetConnection netconnection, com.wowza.wms.request.RequestFunction function, AMFDataList params)
---------------	---

Methods

onCallback

public abstract void **onCallback**([INetConnection](#) netconnection,
com.wowza.wms.request.RequestFunction function,
[AMFDataList](#) params)

com.wowza.wms.netconnection Interface INetConnectionCallResult

public interface **INetConnectionCallResult**
extends

Method Summary

abstract void	onResult (INetConnection netconnection, com.wowza.wms.request.RequestFunction function, AMFDataList params)
---------------	---

Methods

onResult

```
public abstract void onResult(INetConnection netconnection,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.netconnection Interface INetConnectionIdle

public interface **INetConnectionIdle**
extends

Method Summary

abstract void	onIdle (INetConnection netconnection, org.apache.mina.common.Session session)
abstract void	onSessionClosed (INetConnection netconnection, org.apache.mina.common.Session session)
abstract void	onSessionOpened (INetConnection netconnection, org.apache.mina.common.Session session)

Methods

onIdle

```
public abstract void onIdle(INetConnection netconnection,  
    org.apache.mina.common.Session session)
```

onSessionOpened

```
public abstract void onSessionOpened(INetConnection netconnection,  
    org.apache.mina.common.Session session)
```

onSessionClosed

```
public abstract void onSessionClosed(INetConnection netconnection,  
    org.apache.mina.common.Session session)
```

com.wowza.wms.netconnection Interface INetConnectionPingResult

public interface **INetConnectionPingResult**
extends

INetConnectionPingResult: callback interface used by INetConnection ping.

Method Summary

abstract void	onResult (INetConnection netConnection, long pingTime, int pingId, boolean result) Triggered on server to server result from call to INetConnection.ping.
---------------	---

Methods

onResult

```
public abstract void onResult(INetConnection netConnection,  
    long pingTime,  
    int pingId,  
    boolean result)
```

Triggered on server to server result from call to INetConnection.ping. This method will be called on a success or failure (ping timeout) of a ping.

Parameters:

`netConnection` - net connection
`pingTime` - time in server time (milliseconds) when the ping was initiated
`pingId` - internal server id for the ping request
`result` - true is ping was successful false if failure (timeout)

com.wowza.wms.netconnection Interface INetConnectionPublisher

All Known Implementing Classes:

[PushPublishRTMPNetConnectionPublisher](#)

public interface **INetConnectionPublisher**
extends

Method Summary

abstract int	play (INetConnection netConnection, java.io.OutputStream out, long[] playSizes)
--------------	--

Methods

play

```
public abstract int play(INetConnection netConnection,  
    java.io.OutputStream out,  
    long[] playSizes)
```

Package

com.wowza.wms.pushpublish.model

com.wowza.wms.pushpublish.model Interface IPushPublish

All Known Implementing Classes:
[PushPublishBase](#)

public interface **IPushPublish**
extends

The Interface IPushPublish.

Field Summary

public static final	CONNECTED_STATE_CONNECTED Value: 3
public static final	CONNECTED_STATE_CONNECTING Value: 2
public static final	CONNECTED_STATE_NOT_CONNECTED Value: 0
public static final	CONNECTED_STATE_WAITING Value: 1
public static final	PUSHPUBLISH_TYPE_CUPERTINO Value: 3
public static final	PUSHPUBLISH_TYPE_MPEGDASH Value: 5
public static final	PUSHPUBLISH_TYPE_NOTIFY_PACKET Value: 8
public static final	PUSHPUBLISH_TYPE_RTMP Value: 1
public static final	PUSHPUBLISH_TYPE_RTP Value: 2
public static final	PUSHPUBLISH_TYPE_RTP_BUFFERED Value: 7
public static final	PUSHPUBLISH_TYPE_SANJOSE Value: 4

public static final	<u>PUSHPUBLISH_TYPE_SRT</u> Value: 6
public static final	<u>PUSHPUBLISH_TYPE_UNKNOWN</u> Value: 0

Method Summary

abstract void	<u>connect()</u>
abstract <u>IPushPublishSession</u>	<u>createPushPublishSession()</u>
abstract void	<u>disconnect</u> (boolean hard)
abstract int	<u>getConnectedState</u> ()
abstract String	<u>getContextStr</u> ()
abstract int	<u>getDestinationID</u> ()
abstract String	<u>getDestinationName</u> ()
abstract String	<u>getDstStreamName</u> ()
abstract String	<u>getEntryName</u> ()
abstract String	<u>getHostname</u> ()
abstract java.util.Map	<u>getMap</u> ()
abstract long	<u>getMessagesAttemptedCount</u> ()
abstract long	<u>getMessagesFailedCount</u> ()
abstract long	<u>getMessagesRetriedCount</u> ()
abstract int	<u>getPort</u> ()
abstract String	<u>getProfile</u> ()
abstract <u>WMSProperties</u>	<u>getProperties</u> ()
abstract int	<u>getPushPublishType</u> ()
abstract int	<u>getReconnectWaitTime</u> ()
abstract <u>IMediaStream</u>	<u>getSrcStream</u> ()

abstract String	<u>getSrcStreamName()</u>
abstract void	<u>init(IApplicationInstance</u> appInstance2, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
abstract boolean	<u>isDebugLog()</u>
abstract void	<u>resetConnection()</u>
abstract void	<u>setDebugLog</u> (boolean debugLog)
abstract void	<u>setDestinationName</u> (String destinationName)
abstract void	<u>setDstStreamName</u> (String dstStreamNameIn)
abstract void	<u>setEntryName</u> (String entryName)
abstract void	<u>setHost</u> (String hostname)
abstract void	<u>setHostname</u> (String hostname)
abstract void	<u>setPort</u> (int port)
abstract void	<u>setPort</u> (String port)
abstract void	<u>setProfile</u> (String profile)
abstract void	<u>setReconnectWaitTime</u> (int reconnectWaitTime)
abstract void	<u>setSrcStream</u> (<u>IMediaStream</u> srcStream)
abstract void	<u>setSrcStreamName</u> (String srcStreamName)
abstract void	<u>setStreamName</u> (String streamName)
abstract void	<u>updateUsageTracker</u> ()

Fields

PUSHPUBLISH_TYPE_UNKNOWN

```
public static final int PUSHPUBLISH_TYPE_UNKNOWN
```

Constant value: 0

(continued from last page)

PUSHPUBLISH_TYPE_RTMP

```
public static final int PUSHPUBLISH_TYPE_RTMP
```

Constant value: **1**

PUSHPUBLISH_TYPE_RTP

```
public static final int PUSHPUBLISH_TYPE_RTP
```

Constant value: **2**

PUSHPUBLISH_TYPE_CUPERTINO

```
public static final int PUSHPUBLISH_TYPE_CUPERTINO
```

Constant value: **3**

PUSHPUBLISH_TYPE_SANJOSE

```
public static final int PUSHPUBLISH_TYPE_SANJOSE
```

Constant value: **4**

PUSHPUBLISH_TYPE_MPEGDASH

```
public static final int PUSHPUBLISH_TYPE_MPEGDASH
```

Constant value: **5**

PUSHPUBLISH_TYPE_SRT

```
public static final int PUSHPUBLISH_TYPE_SRT
```

Constant value: **6**

PUSHPUBLISH_TYPE_RTP_BUFFERED

```
public static final int PUSHPUBLISH_TYPE_RTP_BUFFERED
```

Constant value: **7**

PUSHPUBLISH_TYPE_NOTIFY_PACKET

```
public static final int PUSHPUBLISH_TYPE_NOTIFY_PACKET
```

Constant value: **8**

CONNECTED_STATE_NOT_CONNECTED

```
public static final int CONNECTED_STATE_NOT_CONNECTED
```

(continued from last page)

Constant value: **0**

CONNECTED_STATE_WAITING

```
public static final int CONNECTED_STATE_WAITING
```

Constant value: **1**

CONNECTED_STATE_CONNECTING

```
public static final int CONNECTED_STATE_CONNECTING
```

Constant value: **2**

CONNECTED_STATE_CONNECTED

```
public static final int CONNECTED_STATE_CONNECTED
```

Constant value: **3**

Methods

connect

```
public abstract void connect()
```

disconnect

```
public abstract void disconnect(boolean hard)
```

resetConnection

```
public abstract void resetConnection()
```

getProperties

```
public abstract WMSProperties getProperties()
```

getEntryName

```
public abstract String getEntryName()
```

(continued from last page)

setEntryName

```
public abstract void setEntryName(String entryName)
```

getSrcStreamName

```
public abstract String getSrcStreamName()
```

setSrcStreamName

```
public abstract void setSrcStreamName(String srcStreamName)
```

getProfile

```
public abstract String getProfile()
```

setProfile

```
public abstract void setProfile(String profile)
```

getDestinationName

```
public abstract String getDestinationName()
```

setDestinationName

```
public abstract void setDestinationName(String destinationName)
```

getDstStreamName

```
public abstract String getDstStreamName()
```

setDstStreamName

```
public abstract void setDstStreamName(String dstStreamNameIn)
```

setStreamName

```
public abstract void setStreamName(String streamName)
```

(continued from last page)

getHostname

```
public abstract String getHostname()
```

setHost

```
public abstract void setHost(String hostname)
```

setHostname

```
public abstract void setHostname(String hostname)
```

setDebugLog

```
public abstract void setDebugLog(boolean debugLog)
```

getPort

```
public abstract int getPort()
```

setPort

```
public abstract void setPort(int port)
```

setPort

```
public abstract void setPort(String port)
```

getReconnectWaitTime

```
public abstract int getReconnectWaitTime()
```

setReconnectWaitTime

```
public abstract void setReconnectWaitTime(int reconnectWaitTime)
```

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init

```
public abstract void init(IApplicationInstance appInstance2,  
    String streamName,  
    IMediaStream stream,  
    java.util.Map profileData,  
    java.util.Map maps,  
    com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
    boolean debug)
```

getPushPublishType

```
public abstract int getPushPublishType()
```

createPushPublishSession

```
public abstract IPushPublishSession createPushPublishSession()
```

getSrcStream

```
public abstract IMediaStream getSrcStream()
```

setSrcStream

```
public abstract void setSrcStream(IMediaStream srcStream)
```

getMap

```
public abstract java.util.Map getMap()
```

getContextStr

```
public abstract String getContextStr()
```

getConnectedState

```
public abstract int getConnectedState()
```

getMessagesAttemptedCount

```
public abstract long getMessagesAttemptedCount()
```

getMessagesRetriedCount

public abstract long **getMessagesRetriedCount()**

getMessagesFailedCount

public abstract long **getMessagesFailedCount()**

getDestinationID

public abstract int **getDestinationID()**

updateUsageTracker

public abstract void **updateUsageTracker()**

isDebugLog

public abstract boolean **isDebugLog()**

com.wowza.wms.pushpublish.model Interface IPushPublishCrossSession

All Known Implementing Classes:

[PushPublishHTTPPlaylistMap](#)

public interface **IPushPublishCrossSession**
extends

Method Summary

abstract boolean	isSessionValid()
------------------	----------------------------------

Methods

isSessionValid

public abstract boolean **isSessionValid()**

com.wowza.wms.pushpublish.model Interface IPushPublishHTTPGroupMember

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertino](#)

public interface **IPushPublishHTTPGroupMember**
extends

Method Summary

abstract Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
abstract ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties) Creates a group playlist.
abstract String	getAdaptiveGroupName ()
abstract String	getGroupPlaylistRenditionDescription (boolean forABRPlaylist) Generates a description or playlist-element String which can be used to differentiate this rendition from other renditions in a group.
abstract WMSProperties	getPlaylistProperties ()
abstract Boolean	isGroupReady (java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
abstract boolean	isInAdaptiveGroup ()
abstract boolean	isInRedundancyPair ()
abstract boolean	isLogDebugManifest ()
abstract boolean	isSendToBackupServer ()
abstract void	sendGroupPlaylist (String groupName, ManifestModel manifest) Sends a group playlist to the destination.

Methods

(continued from last page)

createGroupPlaylist

```
public abstract ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

Creates a group playlist.

Parameters:

id - the id
groupingsByRedundantPairs - the renditions grouped by redundant pairs
groupingsByAbrGroups - the renditions grouped by redundant ABR group
properties - the properties

Returns:

the manifest model

sendGroupPlaylist

```
public abstract void sendGroupPlaylist(String groupName,  
    ManifestModel manifest)
```

Sends a group playlist to the destination.

Parameters:

groupName - the group name
manifest - the playlist/manifest to send

getGroupPlaylistRenditionDescription

```
public abstract String getGroupPlaylistRenditionDescription(boolean forABRPlaylist)
```

Generates a description or playlist-element String which can be used to differentiate this rendition from other renditions in a group. The group playlist could either for a single stream being pushed redundantly to a primary & backup destination, or for an ABR group of streams being pushed to a single destination or being pushed redundantly to multiple destinations.

Parameters:

forABRPlaylist - flag to indicate whether the description is for an adaptive bitrate group playlist.

isInAdaptiveGroup

```
public abstract boolean isInAdaptiveGroup()
```

adaptiveGroupPlaylistNeedsUpdating

```
public abstract Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

(continued from last page)

isGroupReady

```
public abstract Boolean isGroupReady(java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

getAdaptiveGroupName

```
public abstract String getAdaptiveGroupName()
```

getPlaylistProperties

```
public abstract WMSProperties getPlaylistProperties()
```

isInRedundancyPair

```
public abstract boolean isInRedundancyPair()
```

isSendToBackupServer

```
public abstract boolean isSendToBackupServer()
```

isLogDebugManifest

```
public abstract boolean isLogDebugManifest()
```

com.wowza.wms.pushpublish.model

Interface IPushPublishHTTPOutputBuilder

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertino](#)

public interface **IPushPublishHTTPOutputBuilder**
extends

Field Summary

public static final	PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED Value: 1
public static final	PUSHER_ERROR_RENDITIONS_MISCONFIGURED Value: 2

Method Summary

abstract PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
abstract void	error (int errorCode)
abstract IApplicationInstance	getAppInstance ()
abstract int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
abstract String	getDstStreamName ()
abstract int	getLastChunkId (ILiveStreamPacketizer liveStreamPacketizer)
abstract String	getLiveStreamPacketizerName ()
abstract Object	getPacketizerLock (ILiveStreamPacketizer liveStreamPacketizer)
abstract String	getSrcStreamName ()
abstract boolean	isDebugLog ()
abstract boolean	outputClose ()
abstract boolean	outputOpen ()
abstract void	outputSend (PushPublishHTTPOutputItem outputItem)

abstract void	resetNewPacketizer (ILiveStreamPacketizer liveStreamPacketizer)
---------------	--

Fields

PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED

public static final int **PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED**

Constant value: **1**

PUSHER_ERROR_RENDITIONS_MISCONFIGURED

public static final int **PUSHER_ERROR_RENDITIONS_MISCONFIGURED**

Constant value: **2**

Methods

getAppInstance

public abstract [IApplicationInstance](#) **getAppInstance**()

isDebugLog

public abstract boolean **isDebugLog**()

getSrcStreamName

public abstract String **getSrcStreamName**()

getDstStreamName

public abstract String **getDstStreamName**()

getLiveStreamPacketizerName

public abstract String **getLiveStreamPacketizerName**()

getPacketizerLock

public abstract Object **getPacketizerLock**([ILiveStreamPacketizer](#) liveStreamPacketizer)

getLastChunkId

```
public abstract int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public abstract int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

resetNewPacketizer

```
public abstract void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

createOutputItem

```
public abstract PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer  
liveStreamPacketizer,  
int lastChunkIndex)
```

outputOpen

```
public abstract boolean outputOpen()
```

outputClose

```
public abstract boolean outputClose()
```

outputSend

```
public abstract void outputSend(PushPublishHTTPOutputItem outputItem)
```

error

```
public abstract void error(int errorCode)
```

com.wowza.wms.pushpublish.model Interface IPushPublishProfileUtil

All Known Implementing Classes:

[PushPublishHTTPSanJoseAkamaiHandler](#), [PushPublishHTTPCupertinoUtil](#)

public interface **IPushPublishProfileUtil**
extends

The Interface IPushPublishProfileUtil

Field Summary

public static final	PROPERTY_LOG_DEBUG_MANIFEST Value: logDebugManifest
---------------------	---

Method Summary

abstract ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties) This method is deprecated.
abstract boolean	isParent (java.util.Map entry) Is this a parent profile?
abstract void	onDeleteEntry (java.util.Map entry) Allows processing of a map file entry prior to being deleted.
abstract void	onReadEntry (java.util.Map entry) Allows modification of a map file entry after prior to being returned through a Push Publishing api.
abstract void	onWriteEntry (java.util.Map oldEntry, java.util.Map newEntry) Allows modification of a map file entry prior to being written to the map file.
abstract void	setApplicationInstance (IApplicationInstance appInstance) Set the application instance associated with this Util class
abstract void	setApplicationName (String appName) Set the application name associated with this Util class
abstract void	setVHost (IVHost vhost) Set the VHost associated with this Util class
abstract boolean	validateEntry (java.util.Map entry) Allows validation of a map file entry.

Fields

(continued from last page)

PROPERTY_LOG_DEBUG_MANIFEST

```
public static final java.lang.String PROPERTY_LOG_DEBUG_MANIFEST
```

Constant value: **logDebugManifest**

Methods

setVHost

```
public abstract void setVHost(IVHost vhost)
```

Set the VHost associated with this Util class

Parameters:

vhost

setApplicationName

```
public abstract void setApplicationName(String appName)
```

Set the application name associated with this Util class

Parameters:

appName

setApplicationInstance

```
public abstract void setApplicationInstance(IApplicationInstance appInstance)
```

Set the application instance associated with this Util class

Parameters:

appInstance

onWriteEntry

```
public abstract void onWriteEntry(java.util.Map oldEntry,  
    java.util.Map newEntry)
```

Allows modification of a map file entry prior to being written to the map file.

Parameters:

oldEntry - the old version of the entry (null for new entries)

newEntry - the new version of the entry to be written

onReadEntry

```
public abstract void onReadEntry(java.util.Map entry)
```

Allows modification of a map file entry after prior to being returned through a Push Publishing api.

Parameters:

entry - the map file entry as read from disk

(continued from last page)

onDeleteEntry

```
public abstract void onDeleteEntry(java.util.Map entry)
```

Allows processing of a map file entry prior to being deleted.

Parameters:

entry - the map file entry as read from disk

validateEntry

```
public abstract boolean validateEntry(java.util.Map entry)
```

Allows validation of a map file entry.

Parameters:

entry - the map file entry as read from disk

Returns:

true if entry is valid

isParent

```
public abstract boolean isParent(java.util.Map entry)
```

Is this a parent profile?

Parameters:

entry - the map file entry as read from disk

Returns:

true if entry is a parent profile, false if child profile or standalone

createGroupPlaylist

```
public abstract ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

This method is deprecated. Please use `createGroupPlaylist(String, List<, List<, IApplicationInstance, String, WMSProperties)` Allows creation of a group playlist. (This is a placeholder for future features)

Parameters:

id - the id

groupingsByRedundantPairs - the renditions grouped by redundant pairs

groupingsByAbrGroups - the renditions grouped by redundant ABR group

properties - the properties

Returns:

the manifest model

com.wowza.wms.pushpublish.model Interface IPushPublishSession

All Known Implementing Classes:
[PushPublishSessionBase](#)

public interface **IPushPublishSession**
extends

The Interface IPushPublishSession.

Field Summary

public static final	PUSHPUBLISHSESSION_TYPE_RTMP Value: 1
public static final	PUSHPUBLISHSESSION_TYPE_RTP Value: 2
public static final	PUSHPUBLISHSESSION_TYPE_UNKNOWN Value: 0

Method Summary

abstract String	getContextStr()
abstract int	getDestinationID()
abstract String	getProfile()
abstract IPushPublish	getPushPublishImpl()
abstract IMediaStream	getStream()
abstract int	getType()
abstract void	setProfile (String profile)
abstract void	setPushPublishImpl (IPushPublish pushPublishImpl)
abstract void	setStream (IMediaStream stream)

Fields

(continued from last page)

PUSHPUBLISHSESSION_TYPE_UNKNOWN

```
public static final int PUSHPUBLISHSESSION_TYPE_UNKNOWN
```

Constant value: **0**

PUSHPUBLISHSESSION_TYPE_RTMP

```
public static final int PUSHPUBLISHSESSION_TYPE_RTMP
```

Constant value: **1**

PUSHPUBLISHSESSION_TYPE_RTP

```
public static final int PUSHPUBLISHSESSION_TYPE_RTP
```

Constant value: **2**

Methods

getType

```
public abstract int getType()
```

getPushPublishImpl

```
public abstract IPushPublish getPushPublishImpl()
```

setPushPublishImpl

```
public abstract void setPushPublishImpl(IPushPublish pushPublishImpl)
```

getStream

```
public abstract IMediaStream getStream()
```

setStream

```
public abstract void setStream(IMediaStream stream)
```

getProfile

```
public abstract String getProfile()
```

setProfile

```
public abstract void setProfile(String profile)
```

getContextStr

```
public abstract String getContextStr()
```

getDestinationID

```
public abstract int getDestinationID()
```

com.wowza.wms.pushpublish.model Interface IPushPublishSessionNotify

All Known Implementing Classes:

[PushPublishSessionNotifyBase](#)

public interface **IPushPublishSessionNotify**
extends

Method Summary

abstract void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is created
abstract void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession) Invoked when push publish session is destroyed

Methods

onPushPublishSessionCreate

```
public abstract void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is created

Parameters:

streamName - stream name

stream - stream

pushPublishSession - push publish session

onPushPublishSessionDestroy

```
public abstract void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

Invoked when push publish session is destroyed

Parameters:

streamName - stream name

stream - stream

pushPublishSession - push publish session

com.wowza.wms.pushpublish.model Class PushPublishBase

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishBase

All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishShoutcast](#), [PushPublishRTP](#), [PushPublishRTMP](#), [PushPublishHTTPBase](#)

public abstract class **PushPublishBase**

extends Object

implements [IPushPublish](#)

The Class PushPublishBase.

Field Summary

protected	appInstance The app instance within-which the module is running.
protected	className
public static final	DESTINATION_BAK Value: 1
public static final	DESTINATION_PRI Value: 0
public static final	DESTINATION_RED Value: 2
protected	destinationName Name of the target destination; e.g.
protected	destinationServer Destination server for Stream Target destinations; can be primary, backup, or redundant.
protected	dstStreamName The destination stream name.
protected	entryName The map file entry name.
protected	hostname The destination host.
protected	inetAddr The destination inet address.

protected	<u>isAdaptiveStreaming</u> The is adaptive streaming.
protected	<u>isExternalRedundancy</u> Stream Target has a redundant stream being pushed by another WSE instance
protected	<u>logger</u>
protected	<u>mImplementation</u> The profile implementation.
protected	<u>myMap</u>
protected	<u>password</u> The password.
protected	<u>playbackHostname</u> The destination host.
protected	<u>port</u> The destination port.
protected	<u>profile</u> The map file entry profile.
protected	<u>properties</u> The properties.
protected	<u>pushPublishSession</u>
protected	<u>pushPublishStreamDebug</u> Enables stream debug.
protected	<u>pushPublishType</u> The type of stream to be published.
protected	<u>reconnectWaitTime</u> The time between reconnect attempts (only applies to some profiles).
protected	<u>sendingPerformance</u>
protected	<u>srcStream</u>
protected	<u>srcStreamName</u> The src stream name.
protected	<u>totalIOPerformance2Last</u>
protected	<u>totalIOPerformanceLast</u>
protected	<u>userName</u> The user name.

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishBase () Instantiates a new push publisher base.
--------	--

Method Summary

void	add (IOPerformanceCounter totalValue)
void	addIOPerformance2 (IOPerformanceCounter totalIOPerformanceResult)
void	clearLoggingValues () Clear global logging values previously set by updateLoggingValues.
IPushPublishSession	createPushPublishSession ()
IApplicationInstance	getAppInstance () Get appInstance interface.
double	getBandwidth ()
java.util.Map	getBaseParams ()
abstract String	getContextStr ()
int	getDestinationID () Get destination ID.
String	getDestinationName () Get destination name.
int	getDestinationServer () Get destination server.
String	getDstStreamName () Get destination stream name.
String	getEntryName () Get map file entry name.
String	getHostname () Get destination server host name.
String	getImplementation () Gets the implementation.
java.net.InetAddress	getInetAddr ()

java.util.Map	getMap()
long	getMessagesOutBytes()
long	getMessagesOutCount()
String	getPassword() Get password.
String	getPlaybackHostname() Get playback server host name.
int	getPort() Get destination server port.
String	getProfile() Get entry profile.
WMSProperties	getProperties() Get properties.
int	getPushPublishType()
static String	getPushPublishVersionStr() Deprecated. Gets the push publish version str.
int	getReconnectWaitTime() Get the reconnect wait time (milliseconds).
IMediaStream	getSrcStream() Get source IMediaStream.
String	getSrcStreamName() Get source stream name.
String	getUserName() Gets the user name.
static String	getWowzaStreamingEngineVersionStr() Gets the server version str.
void	incrementMessagesOut() (long bytes)
void	init() (IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug) Inits the instance.
boolean	isAdaptiveStreaming() Checks if is adaptive streaming.
boolean	isDebugLog()
boolean	isExternalRedundancy() Is there an redundant stream being pushed by an external WSE instance? return true or false

void	<u>load</u> (java.util.HashMap dataMap) Loads map and profile parameters
void	<u>logDebug</u> (String methodName, String log)
void	<u>logError</u> (String methodName, String log)
void	<u>logError</u> (String methodName, String log, Throwable e)
void	<u>logError</u> (String methodName, Throwable e)
void	<u>logInfo</u> (String methodName, String log)
void	<u>logWarn</u> (String methodName, String log)
void	<u>setAdaptiveStreaming</u> (boolean isAdaptiveStreaming) Sets the adaptive streaming.
void	<u>setAdaptiveStreaming</u> (String adaptiveStreamingStr)
void	<u>setAppInstance</u> (<u>IApplicationInstance</u> appInstance) Set appInstance interface.
void	<u>setDebugLog</u> (boolean debugLog) Set debug logging.
void	<u>setDestinationName</u> (String destinationName) Set destination name.
void	<u>setDestinationServer</u> (int destinationServer) Set destination server.
void	<u>setDestinationServer</u> (String destinationServer) Set destination server.
void	<u>setDstStreamName</u> (String dstStreamName) Set destination stream name.
void	<u>setEntryName</u> (String entryName) Set map file entry name.
void	<u>setExternalRedundancy</u> (boolean isExternalRedundancy) Set whether there is an external redundant stream.
void	<u>setExternalRedundancy</u> (String externalRedundancy)
void	<u>setHost</u> (String hostname) Set destination server host name.
void	<u>setHostname</u> (String hostname)
void	<u>setImplementation</u> (String implementation) Sets the implementation.
void	<u>setInetAddr</u> (java.net.InetAddress inetAddr)

void	<u>setPassword</u> (String password) Set password.
void	<u>setPlaybackHostname</u> (String playbackHostname) Set playback server host name.
void	<u>setPort</u> (int port) Set destination server port.
void	<u>setPort</u> (String port) Set destination server port.
void	<u>setProfile</u> (String profile) Set map file entry profile.
void	<u>setReconnectWaitTime</u> (int reconnectWaitTime) Set the reconnect wait time (milliseconds).
void	<u>setSrcStream</u> (<u>IMediaStream</u> srcStream) Sets the source IMediaStream.
void	<u>setSrcStreamName</u> (String srcStreamName) Set source stream name.
void	<u>setStreamName</u> (String streamName) Sets the stream name.
void	<u>setUserName</u> (String userName) Set user name.
void	<u>updateLoggingValues</u> (String protocol) Update global logging values: protocol (logger ID: WMSLoggerIDs.PROTO_XXX) application name application instance name vhost name source stream name IOPerformanceCounter message out bytes This call is inherently threadsafe as it sets values in the log4j MDC, which is managed on a per thread basis.
void	<u>updateUsageTracker</u> ()

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#),
[getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#),
[getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#),
[getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#),
[getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#),
[setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#),
[setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#),
[setStreamName](#), [updateUsageTracker](#)

Fields

(continued from last page)

logger

protected com.wowza.wms.logging.WMSLogger **logger**

className

protected java.lang.String **className**

pushPublishType

protected int **pushPublishType**

The type of stream to be published.

pushPublishStreamDebug

protected boolean **pushPublishStreamDebug**

Enables stream debug.

reconnectWaitTime

protected int **reconnectWaitTime**

The time between reconnect attempts (only applies to some profiles).

sendingPerformance

protected com.wowza.util.IOPerformanceCounter **sendingPerformance**

totalIOPerformanceLast

protected com.wowza.util.IOPerformanceCounter **totalIOPerformanceLast**

totalIOPerformance2Last

protected com.wowza.util.IOPerformanceCounter **totalIOPerformance2Last**

properties

protected com.wowza.wms.application.WMSProperties **properties**

The properties.

profile

protected java.lang.String **profile**

(continued from last page)

The map file entry profile.

entryName

protected java.lang.String **entryName**

The map file entry name.

isAdaptiveStreaming

protected boolean **isAdaptiveStreaming**

The is adaptive streaming.

userName

protected java.lang.String **userName**

The user name.

password

protected java.lang.String **password**

The password.

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

The app instance within-which the module is running.

srcStreamName

protected java.lang.String **srcStreamName**

The src stream name.

srcStream

protected com.wowza.wms.stream.IMediaStream **srcStream**

dstStreamName

protected java.lang.String **dstStreamName**

The destination stream name.

hostname

protected java.lang.String **hostname**

The destination host.

(continued from last page)

playbackHostname

protected java.lang.String **playbackHostname**

The destination host.

inetAddr

protected java.net.InetAddress **inetAddr**

The destination inet address.

port

protected int **port**

The destination port.

mImplementation

protected java.lang.String **mImplementation**

The profile implementation.

DESTINATION_PRI

public static final int **DESTINATION_PRI**

Constant value: **0**

DESTINATION_BAK

public static final int **DESTINATION_BAK**

Constant value: **1**

DESTINATION_RED

public static final int **DESTINATION_RED**

Constant value: **2**

destinationServer

protected int **destinationServer**

Destination server for Stream Target destinations; can be primary, backup, or redundant.

isExternalRedundancy

protected boolean **isExternalRedundancy**

Stream Target has a redundant stream being pushed by another WSE instance

(continued from last page)

destinationName

protected java.lang.String **destinationName**

Name of the target destination; e.g. "wowzastreamingcloud", "akamai", "rtmp" (generic).

pushPublishSession

protected com.wowza.wms.pushpublish.model.IPushPublishSession **pushPublishSession**

myMap

protected java.util.Map **myMap**

Constructors

PushPublishBase

public **PushPublishBase**()

Instantiates a new push publisher base.

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Inits the instance.

Parameters:

appInstance - the app instance
streamName - the source stream name
maps - the map entry params
profileData - the profile params
streamDebug - stream debug flag

updateUsageTracker

```
public void updateUsageTracker()
```

getImplementation

```
public String getImplementation()
```

Gets the implementation.

(continued from last page)

Returns:
the implementation

setImplementation

```
public void setImplementation(String implementation)
```

Sets the implementation.

Parameters:
implementation - the new implementation

getProperties

```
public WMSProperties getProperties()
```

Get properties.

Returns:
properties

getProfile

```
public String getProfile()
```

Get entry profile.

Returns:
map entry profile

setProfile

```
public void setProfile(String profile)
```

Set map file entry profile.

Parameters:
profile - map entry profile

getEntryName

```
public String getEntryName()
```

Get map file entry name.

Returns:
map file entry name

setEntryName

```
public void setEntryName(String entryName)
```

Set map file entry name.

Parameters:
entryName - map file entry name

(continued from last page)

isAdaptiveStreaming

```
public boolean isAdaptiveStreaming()
```

Checks if is adaptive streaming.

Returns:

true, if is adaptive streaming

setAdaptiveStreaming

```
public void setAdaptiveStreaming(boolean isAdaptiveStreaming)
```

Sets the adaptive streaming.

Parameters:

isAdaptiveStreaming - the new adaptive streaming

setAdaptiveStreaming

```
public void setAdaptiveStreaming(String adaptiveStreamingStr)
```

getUserName

```
public String getUserName()
```

Gets the user name.

Returns:

the user name

setUserName

```
public void setUserName(String userName)
```

Set user name.

Parameters:

userName - user name

getPassword

```
public String getPassword()
```

Get password.

Returns:

password

setPassword

```
public void setPassword(String password)
```

Set password.

Parameters:

(continued from last page)

password - password

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get appInstance interface.

Returns:

appInstance interface

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set appInstance interface.

Parameters:

appInstance - appInstance interface

getSrcStreamName

```
public String getSrcStreamName()
```

Get source stream name.

Returns:

source stream name

setSrcStreamName

```
public void setSrcStreamName(String srcStreamName)
```

Set source stream name.

Parameters:

srcStreamName - source stream name

getDstStreamName

```
public String getDstStreamName()
```

Get destination stream name.

Returns:

destination stream name

setDstStreamName

```
public void setDstStreamName(String dstStreamName)
```

Set destination stream name.

Parameters:

dstStreamName - destination stream name

(continued from last page)

setStreamName

```
public void setStreamName(String streamName)
```

Sets the stream name.

Parameters:

streamName - the new stream name

getHostname

```
public String getHostname()
```

Get destination server host name.

Returns:

destination server host name

setHost

```
public void setHost(String hostname)
```

Set destination server host name.

Parameters:

hostname - destination server host name

setHostname

```
public void setHostname(String hostname)
```

getPlaybackHostname

```
public String getPlaybackHostname()
```

Get playback server host name.

Returns:

playback server host name

setPlaybackHostname

```
public void setPlaybackHostname(String playbackHostname)
```

Set playback server host name.

Parameters:

playbackHostname - playback server host name

getPort

```
public int getPort()
```

Get destination server port.

Returns:

(continued from last page)

destination server port

setPort

```
public void setPort(int port)
```

Set destination server port.

Parameters:

port - destination server port

setPort

```
public void setPort(String port)
```

Set destination server port.

Parameters:

port - destination server port

setDestinationServer

```
public void setDestinationServer(String destinationServer)
```

Set destination server.

Parameters:

destinationServer - destination server

getDestinationServer

```
public int getDestinationServer()
```

Get destination server. return destination server

setDestinationServer

```
public void setDestinationServer(int destinationServer)
```

Set destination server.

Parameters:

destinationServer - destination server

isExternalRedundancy

```
public boolean isExternalRedundancy()
```

Is there an redundant stream being pushed by an external WSE instance? return true or false

setExternalRedundancy

```
public void setExternalRedundancy(boolean isExternalRedundancy)
```

Set whether there is an external redundant stream.

Parameters:

isExternalRedundancy

setExternalRedundancy

```
public void setExternalRedundancy(String externalRedundancy)
```

getDestinationName

```
public String getDestinationName()
```

Get destination name.

Returns:

destination name

setDestinationName

```
public void setDestinationName(String destinationName)
```

Set destination name.

Parameters:

destinationName - destination name

getPushPublishVersionStr

```
public static String getPushPublishVersionStr()
```

Deprecated. *Gets the push publish version str.*

Returns:

the push publish version str

getWowzaStreamingEngineVersionStr

```
public static String getWowzaStreamingEngineVersionStr()
```

Gets the server version str.

Returns:

the server version str

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

Parameters:

dataMap - the data map

getReconnectWaitTime

```
public int getReconnectWaitTime()
```

(continued from last page)

Get the reconnect wait time (milliseconds). Shortest time between connection attempts.

Returns:

reconnect wait time (milliseconds)

setReconnectWaitTime

```
public void setReconnectWaitTime(int reconnectWaitTime)
```

Set the reconnect wait time (milliseconds). Shortest time between connection attempts.

Parameters:

reconnectWaitTime - reconnect wait time (milliseconds)

getBandwidth

```
public double getBandwidth()
```

getInetAddr

```
public java.net.InetAddress getInetAddr()
```

Returns:

the inetAddr

setInetAddr

```
public void setInetAddr(java.net.InetAddress inetAddr)
```

Parameters:

inetAddr - the inetAddr to set

getPushPublishType

```
public int getPushPublishType()
```

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getSrcStream

```
public IMediaStream getSrcStream()
```

Get source IMediaStream.

Returns:

source IMediaStream

setSrcStream

```
public void setSrcStream(IMediaStream srcStream)
```

Sets the source IMediaStream.

Parameters:

srcStream - the source IMediaStream

getMap

```
public java.util.Map getMap()
```

getBaseParams

```
public java.util.Map getBaseParams()
```

incrementMessagesOut

```
public void incrementMessagesOut(long bytes)
```

getMessagesOutBytes

```
public long getMessagesOutBytes()
```

getMessagesOutCount

```
public long getMessagesOutCount()
```

add

```
public void add(IOPerformanceCounter totalValue)
```

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

getDestinationID

```
public int getDestinationID()
```

Get destination ID. A return value of 0 means the destination ID cannot be determined.

(continued from last page)

Returns:

destination ID

getContextStr

```
public abstract String getContextStr()
```

updateLoggingValues

```
protected void updateLoggingValues(String protocol)
```

Update global logging values: protocol (logger ID: WMSLoggerIDs.PROTO_XXX) application name application instance name vhost name source stream name IOPerformanceCounter message out bytes This call is inherently threadsafe as it sets values in the log4j MDC, which is managed on a per thread basis.

Parameters:

c_proto - protocol

clearLoggingValues

```
protected void clearLoggingValues()
```

Clear global logging values previously set by updateLoggingValues. This call is inherently threadsafe as it clears values in the log4j MDC, which is managed on a per thread basis.

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging.

Parameters:

debugLog - debug logging

logDebug

```
public void logDebug(String methodName,  
String log)
```

logInfo

```
public void logInfo(String methodName,  
String log)
```

(continued from last page)

logWarn

```
public void logWarn(String methodName,  
                    String log)
```

logError

```
public void logError(String methodName,  
                    String log)
```

logError

```
public void logError(String methodName,  
                    String log,  
                    Throwable e)
```

logError

```
public void logError(String methodName,  
                    Throwable e)
```

com.wowza.wms.pushpublish.model Class PushPublishCloudStorageProvider

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishCloudStorageProvider

```
public class PushPublishCloudStorageProvider
extends Object
```

Constructor Summary

public	PushPublishCloudStorageProvider (String name, String controllerClass)
--------	---

Method Summary

String	getControllerClass ()
String	getName ()
void	setControllerClass (String controllerClass)
void	setName (String name)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishCloudStorageProvider

```
public PushPublishCloudStorageProvider(String name,
                                       String controllerClass)
```

Methods

getName

```
public String getName()
```

(continued from last page)

setName

```
public void setName(String name)
```

getControllerClass

```
public String getControllerClass()
```

setControllerClass

```
public void setControllerClass(String controllerClass)
```

com.wowza.wms.pushpublish.model Class PushPublishContext

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishContext

public class **PushPublishContext**
extends Object

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishContext

Constructor Summary

public	PushPublishContext (IVHost vhost)
--------	--

Method Summary

boolean	containsProfileData (String profileName)
void	doWatchdog ()
java.util.HashMap	getAuthorizationMap ()
IPushPublishCrossSession	getCrossSession (String contextStr)
Object	getCrossSessionLock ()
java.util.Map	getProfileCloudStorageProviders (String profileName)
java.util.HashMap	getProfileData (String profileName)
void	putCrossSession (String contextStr, IPushPublishCrossSession crossSession)
void	putProfileData (String profileName, java.util.HashMap profileData)
IPushPublishCrossSession	removeCrossSession (String contextStr)
void	setProfileCloudStorageProviders (String profileName, java.util.Map cloudStorageProviders)

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields**CLASS**

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishContext**

Constructors**PushPublishContext**

```
public PushPublishContext(IVHost vhost)
```

Methods**getProfileData**

```
public java.util.HashMap getProfileData(String profileName)
```

putProfileData

```
public void putProfileData(String profileName,  
    java.util.HashMap profileData)
```

containsProfileData

```
public boolean containsProfileData(String profileName)
```

putCrossSession

```
public void putCrossSession(String contextStr,  
    IPushPublishCrossSession crossSession)
```

getCrossSession

```
public IPushPublishCrossSession getCrossSession(String contextStr)
```

removeCrossSession

```
public IPushPublishCrossSession removeCrossSession(String contextStr)
```

getProfileCloudStorageProviders

```
public java.util.Map getProfileCloudStorageProviders(String profileName)
```

setProfileCloudStorageProviders

```
public void setProfileCloudStorageProviders(String profileName,  
                                             java.util.Map cloudStorageProviders)
```

doWatchdog

```
public void doWatchdog()
```

getCrossSessionLock

```
public Object getCrossSessionLock()
```

getAuthorizationMap

```
public java.util.HashMap getAuthorizationMap()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPBase

java.lang.Object

```

+--com.wowza.wms.pushpublish.model.PushPublishBase
    +--com.wowza.wms.pushpublish.model.PushPublishHTTPBase
  
```

All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishHTTPCupertino](#), [PushPublishHTTPYouTubeBase](#)

public abstract class **PushPublishHTTPBase**

extends [PushPublishBase](#)

Field Summary

public static final	CACHE_CONTROL_FACTOR
public static final	CACHE_CONTROL_HEADER Value: Cache-Control
public static final	CACHE_CONTROL_HEADER_KEY Value: http.cachecontrol
public static final	CACHE_CONTROL_HEADER_NONE Value: no-cache
public static final	CACHE_CONTROL_MEDIA_DEFAULT Cache Control header constants, used in push publish file cache control .e.g Cloud Storage (S3, Azure, GCS)
protected	httpLogManifests Enables logging of the manifest itself.
protected	httpManifestDebug Enables manifest playlist debug logging.
protected static final	INDETERMINATE_PLAYLIST_COUNT Value: -1
protected static final	MIN_PLAYLIST_COUNT The minimum allowable playlist size. Value: 3
protected	playlistAcrossSessions Indicates whether instance-specific playlists should be maintained across source stream interruptions and app restarts.

protected	playlistCountFromMap The playlist size from the map entry.
protected	playlistCountFromPacketizer The playlist size used by the associated live stream packetizer.
protected	playlistCrossName The instance-specific name for the playlist, allowing the playlist to be maintained across session restarts.
protected	playlistDurationFromMap The playlist duration from the map entry.
protected	playlistMap The playlist map.
protected	playlistName The actual name of playlist file that is to be pushed to the destination (e.g.
protected	playlistTimeout The timeout value used to delete orphaned playlists from the vhost.
protected	relativePlaylists use only relative URL references in the playlist/manifest

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishHTTPBase()
--------	---------------------------------------

Method Summary

String	getAdaptiveGroupName()
String	getCachecontrol()
int	getPlaylistCount() Get the playlist count.

<u>PushPublishHTTPPlaylistMap</u>	<u>getPlaylistMap()</u> Get the playlist map.
int	<u>getPlaylistTimeout()</u> Get the playlist timeout value.
void	<u>init(IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug) Inits the instance.
boolean	<u>isInAdaptiveGroup()</u> Is the entry in an adaptive group.
boolean	<u>isLogDebugManifest()</u> Get the current setting of the HTTP Manifest debug logging This is controlled by the pushPublishHTTPPlaylistDebug boolean property in the application.xml and by the http.manifestDebug setting in the pushpublish map file
boolean	<u>isPlaylistAcrossSessions()</u> Is the playlist maintained across recurring pushpublish sessions.
boolean	<u>isRelativePlaylists()</u>
void	<u>load</u> (java.util.HashMap dataMap) Loads map and profile parameters
void	<u>logDebugManifest</u> (String methodName, String log) Log the provided log str if the HTTP Manifest logging is enabled
void	<u>setAdaptiveGroupName</u> (String adaptiveGroup)
void	<u>setCachecontrol</u> (String cachecontrol)
void	<u>setLiveStreamPacketizer</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)
void	<u>setPlaylistAcrossSessions</u> (boolean playlistAcrossSessions) Set whether the playlist is maintained across recurring pushpublish sessions.
void	<u>setPlaylistCountFromMap</u> (int playlistCountFromMap) Set the playlist count value from the map file.
void	<u>setPlaylistCountFromPacketizer</u> (int playlistCountFromPacketizer) Set the playlist count value from the live stream packetizer.
void	<u>setPlaylistTimeout</u> (int playlistTimeout) Set the playlist timeout value.
void	<u>setRelativePlaylists</u> (boolean relativePlaylists)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

MIN_PLAYLIST_COUNT

protected static final int **MIN_PLAYLIST_COUNT**

The minimum allowable playlist size.
Constant value: **3**

playlistCountFromPacketizer

protected int **playlistCountFromPacketizer**

The playlist size used by the associated live stream packetizer.

playlistMap

protected `com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistMap` **playlistMap**

The playlist map.

(continued from last page)

playlistCrossName

protected java.lang.String **playlistCrossName**

The instance-specific name for the playlist, allowing the playlist to be maintained across session restarts.

playlistName

protected java.lang.String **playlistName**

The actual name of playlist file that is to be pushed to the destination (e.g. "playlist.m3u8").

relativePlaylists

protected boolean **relativePlaylists**

use only relative URL references in the playlist/manifest

httpManifestDebug

protected boolean **httpManifestDebug**

Enables manifest playlist debug logging.

httpLogManifests

protected boolean **httpLogManifests**

Enables logging of the manifest itself.

INDETERMINATE_PLAYLIST_COUNT

protected static final int **INDETERMINATE_PLAYLIST_COUNT**

Constant value: **-1**

playlistCountFromMap

protected int **playlistCountFromMap**

The playlist size from the map entry.

playlistDurationFromMap

protected long **playlistDurationFromMap**

The playlist duration from the map entry. This value is in seconds. http.playlistDuration

playlistTimeout

protected int **playlistTimeout**

The timeout value used to delete orphaned playlists from the vhost.

playlistAcrossSessions

protected boolean **playlistAcrossSessions**

(continued from last page)

Indicates whether instance-specific playlists should be maintained across source stream interruptions and app restarts.

CACHE_CONTROL_MEDIA_DEFAULT

```
public static final java.lang.Integer CACHE_CONTROL_MEDIA_DEFAULT
```

Cache Control header constants, used in push publish file cache control .e.g Cloud Storage (S3, Azure, GCS)

CACHE_CONTROL_FACTOR

```
public static final java.lang.Float CACHE_CONTROL_FACTOR
```

CACHE_CONTROL_HEADER_KEY

```
public static final java.lang.String CACHE_CONTROL_HEADER_KEY
```

Constant value: **http.cachecontrol**

CACHE_CONTROL_HEADER

```
public static final java.lang.String CACHE_CONTROL_HEADER
```

Constant value: **Cache-Control**

CACHE_CONTROL_HEADER_NONE

```
public static final java.lang.String CACHE_CONTROL_HEADER_NONE
```

Constant value: **no-cache**

Constructors

PushPublishHTTPBase

```
public PushPublishHTTPBase()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Init's the instance.

Parameters:

appInstance - the app instance

(continued from last page)

streamName - the source stream name
maps - the map entry params
profileData - the profile params
streamDebug - stream debug flag

setPlaylistCountFromMap

```
public void setPlaylistCountFromMap(int playlistCountFromMap)
```

Set the playlist count value from the map file.

Parameters:

playlistCountFromMap - the playlist count

setPlaylistCountFromPacketizer

```
public void setPlaylistCountFromPacketizer(int playlistCountFromPacketizer)
```

Set the playlist count value from the live stream packetizer.

Parameters:

playlistCountFromPacketizer - the playlist count

getPlaylistCount

```
public int getPlaylistCount()
```

Get the playlist count. The value from the map file is returned if defined, else the packetizer value is returned return the playlist count

getPlaylistTimeout

```
public int getPlaylistTimeout()
```

Get the playlist timeout value. return the playlist timeout value

setPlaylistTimeout

```
public void setPlaylistTimeout(int playlistTimeout)
```

Set the playlist timeout value.

Parameters:

playlistTimeout - the playlist timeout

isPlaylistAcrossSessions

```
public boolean isPlaylistAcrossSessions()
```

Is the playlist maintained across recurring pushpublish sessions. return true if the playlist is maintained across recurring pushpublish sessions

setPlaylistAcrossSessions

```
public void setPlaylistAcrossSessions(boolean playlistAcrossSessions)
```

Set whether the playlist is maintained across recurring pushpublish sessions.

Parameters:

(continued from last page)

playlistAcrossSessions - is the playlist maintained across recurring pushpublish sessions

getPlaylistMap

```
public PushPublishHTTPPlaylistMap getPlaylistMap()
```

Get the playlist map. return the playlist map

isRelativePlaylists

```
public boolean isRelativePlaylists()
```

setRelativePlaylists

```
public void setRelativePlaylists(boolean relativePlaylists)
```

getAdaptiveGroupName

```
public String getAdaptiveGroupName()
```

setAdaptiveGroupName

```
public void setAdaptiveGroupName(String adaptiveGroup)
```

getCachecontrol

```
public String getCachecontrol()
```

setCachecontrol

```
public void setCachecontrol(String cachecontrol)
```

isInAdaptiveGroup

```
public boolean isInAdaptiveGroup()
```

Is the entry in an adaptive group. return true if the entry is in an adaptive group

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

Parameters:

dataMap - the data map

isLogDebugManifest

```
public boolean isLogDebugManifest()
```

Get the current setting of the HTTP Manifest debug logging This is controlled by the pushPublishHTTPPlaylistDebug boolean property in the application.xml and by the http.manifestDebug setting in the pushpublish map file

Returns:

true if HTTP Manifest debug logging is enabled

logDebugManifest

```
public void logDebugManifest(String methodName,  
                             String log)
```

Log the provided log str if the HTTP Manifest logging is enabled

Parameters:

methodName - name of the class method using the log

log - string to log if enabled

setLiveStreamPacketizer

```
protected void setLiveStreamPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPOutputItem

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItem

Direct Known Subclasses:

[PushPublishHTTPCupertinoOutputItem](#)

```
public class PushPublishHTTPOutputItem
extends Object
```

Field Summary

public	chunkLists
public	chunks
public	liveStreamPacketizer
public	playlistStrA
public	playlistStrB

Constructor Summary

public	PushPublishHTTPOutputItem (String[] chunkLists)
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

playlistStrA

```
public java.lang.String playlistStrA
```

playlistStrB

```
public java.lang.String playlistStrB
```


(continued from last page)

chunkLists

```
public java.lang.String chunkLists
```

liveStreamPacketizer

```
public com.wowza.wms.stream.livepacketizer.ILiveStreamPacketizer liveStreamPacketizer
```

chunks

```
public java.util.List chunks
```

Constructors

PushPublishHTTPOutputItem

```
public PushPublishHTTPOutputItem(String[] chunkLists)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPOutputItemChunk

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk

Direct Known Subclasses:

[PushPublishHTTPSanJoseOutputItemChunk](#), [PushPublishHTTPCupertinoOutputItemChunk](#)

```
public class PushPublishHTTPOutputItemChunk
extends Object
```

Field Summary

public	chunk
public	isCustomChunkId
public	playlistEntry
public	renditionIndex

Constructor Summary

public	PushPublishHTTPOutputItemChunk (int renditionIndex, PushPublishHTTPPlaylistEntry playlistEntry)
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

renditionIndex

```
public int renditionIndex
```

chunk

```
public java.lang.Object chunk
```

(continued from last page)

isCustomChunkId

```
public boolean isCustomChunkId
```

playlistEntry

```
public com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry playlistEntry
```

Constructors

PushPublishHTTPOutputItemChunk

```
public PushPublishHTTPOutputItemChunk(int renditionIndex,  
                                       PushPublishHTTPPlaylistEntry playlistEntry)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistEntry

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry

Direct Known Subclasses:

[PushPublishHTTPSanJosePlaylistEntry](#), [PushPublishHTTPCupertinoPlaylistEntry](#)

public abstract class **PushPublishHTTPPlaylistEntry**
extends Object

Field Summary

public	delete
--------	------------------------

Constructor Summary

public	PushPublishHTTPPlaylistEntry()
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

delete

public boolean **delete**

Constructors

PushPublishHTTPPlaylistEntry

public **PushPublishHTTPPlaylistEntry()**

com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistList

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistList

public class **PushPublishHTTPPlaylistList**
extends Object

Field Summary

public	bitrate
public static final	CHUNKIDDATEOFFSET Value: 1404253012
public	entries
public static final	INITIALCHUNKID Value: 1
public	markEntryAsDiscontinuity
public	nextChunkId

Constructor Summary

public	PushPublishHTTPPlaylistList()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CHUNKIDDATEOFFSET

public static final long **CHUNKIDDATEOFFSET**

Constant value: **1404253012**

INITIALCHUNKID

public static final long **INITIALCHUNKID**

(continued from last page)

Constant value: **1**

entries

```
public java.util.List entries
```

nextChunkId

```
public long nextChunkId
```

markEntryAsDiscontinuity

```
public boolean markEntryAsDiscontinuity
```

bitrate

```
public long bitrate
```

Constructors

PushPublishHTTPPlaylistList

```
public PushPublishHTTPPlaylistList()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPPlaylistMap

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistMap

All Implemented Interfaces:

[IPushPublishCrossSession](#)

public class **PushPublishHTTPPlaylistMap**

extends Object

implements [IPushPublishCrossSession](#)

Field Summary

public	lastUpdate
public	manifest
public	manifestOld
public	map
public	playlistTimeout

Constructor Summary

public	PushPublishHTTPPlaylistMap (PushPublishHTTPBase builder)
--------	---

Method Summary

PushPublishHTTPBase	getBuilder ()
boolean	isSessionValid ()
void	markAllAsDiscontinuity ()
void	setBuilder (PushPublishHTTPBase builder)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishCrossSession](#)

[isSessionValid](#)

Fields

map

```
public java.util.Map map
```

manifest

```
public com.wowza.wms.manifest.model.ManifestModel manifest
```

manifestOld

```
public com.wowza.wms.manifest.model.ManifestModel manifestOld
```

lastUpdate

```
public long lastUpdate
```

playlistTimeout

```
public long playlistTimeout
```

Constructors

PushPublishHTTPPlaylistMap

```
public PushPublishHTTPPlaylistMap(PushPublishHTTPBase builder)
```

Methods

isSessionValid

```
public boolean isSessionValid()
```

getBuilder

```
public PushPublishHTTPBase getBuilder()
```

(continued from last page)

setBuilder

```
public void setBuilder(PushPublishHTTPBase builder)
```

markAllAsDiscontinuity

```
public void markAllAsDiscontinuity()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPPusher

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishHTTPPusher

public class **PushPublishHTTPPusher**
extends Object

Nested Class Summary

class	PushPublishHTTPPusher.HTTPPoller PushPublishHTTPPusher.HTTPPoller
-------	--

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPPusher

Constructor Summary

public	PushPublishHTTPPusher (IPushPublishHTTPOutputBuilder builder, String name)
public	PushPublishHTTPPusher (IPushPublishHTTPOutputBuilder builder, String name, int maxQueueSize)

Method Summary

void	addOutput (PushPublishHTTPOutputItem outputItem)
void	clearOutput ()
void	disconnect ()
String	getContextStr ()
ILiveStreamPacketizer	getLastPacketizer ()
void	resetNewPacketizer (IPushPublishHTTPOutputBuilder builder, ILiveStreamPacketizer liveStreamPacketizer)
void	startOutputRunner ()

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPPusher**

Constructors

PushPublishHTTPPusher

```
public PushPublishHTTPPusher(IPushPublishHTTPOutputBuilder builder,  
                             String name)
```

PushPublishHTTPPusher

```
public PushPublishHTTPPusher(IPushPublishHTTPOutputBuilder builder,  
                             String name,  
                             int maxQueueSize)
```

Methods

getContextStr

```
public String getContextStr()
```

disconnect

```
public void disconnect()
```

getLastPacketizer

```
public ILiveStreamPacketizer getLastPacketizer()
```

resetNewPacketizer

```
public void resetNewPacketizer(IPushPublishHTTPOutputBuilder builder,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

startOutputRunner

```
public void startOutputRunner()
```

clearOutput

```
public void clearOutput()
```

addOutput

```
public void addOutput(PushPublishHTTPOutputItem outputItem)
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPPusher.HTTPPoller

java.lang.Object

└- java.lang.Thread

└- com.wowza.wms.pushpublish.model.PushPublishHTTPPusher.HTTPPoller

All Implemented Interfaces:

Runnable

```
public class PushPublishHTTPPusher.HTTPPoller
extends Thread
```

Field Summary

protected	didIt
protected	lastPacketizerLogTime
protected	lastUpdateTime
protected	packetizerLogInterval
protected	pollInterval
protected	sendPacketizerWarning

Fields inherited from class java.lang.Thread

MAX_PRIORITY, MIN_PRIORITY, NORM_PRIORITY

Constructor Summary

public	HTTPPoller()
--------	------------------------------

Method Summary

void	run()
------	-----------------------

Methods inherited from class java.lang.Thread

```
activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack,
enumerate, getAllStackTraces, getContextClassLoader,
getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace,
getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt,
interrupted, isAlive, isDaemon, isInterrupted, join, join, join, onSpinWait, resume,
run, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName,
setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend,
toString, yield
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Methods inherited from interface `java.lang.Runnable`

```
run
```

Fields

`lastUpdateTime`

protected long **lastUpdateTime**

`lastPacketizerLogTime`

protected long **lastPacketizerLogTime**

`didIt`

protected boolean **didIt**

`pollInterval`

protected int **pollInterval**

`packetizerLogInterval`

protected int **packetizerLogInterval**

`sendPacketizerWarning`

protected int **sendPacketizerWarning**

Constructors

HTTPPoller

```
public HTTPPoller()
```

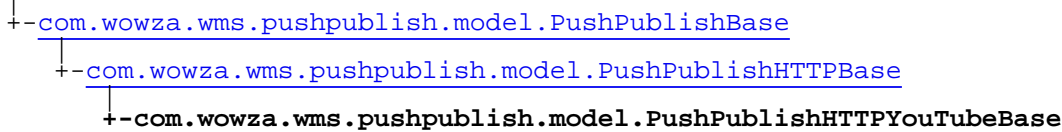
Methods

run

```
public void run()
```

com.wowza.wms.pushpublish.model Class PushPublishHTTPYouTubeBase

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

public abstract class **PushPublishHTTPYouTubeBase**

extends [PushPublishHTTPBase](#)

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPYouTubeBase
protected	connectionTimeout
protected	fakePosts
protected	httpIngressDomainOverride
protected	httpIngressDomainSuffix
protected	httpPlaybackDomainOverride
protected	httpPlaybackDomainSuffix
protected	httpWriterLogOptions
protected	maxRetries
protected	protocol
protected	readWriteTimeout
protected	reuseSockets
protected	sendToBackupServer

protected	userAgent
public static final	YOUTUBE_DEFAULT_HOSTID Value: upload.youtube.com
protected	youtubeEventName
protected	youtubeHostId
protected	youtubePlaybackURLPrefix
protected	youtubeProtocolName
protected	youtubeStreamId

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishHTTPYouTubeBase()
--------	--

Method Summary

int	getConnectionTimeout()
String	getDestinationAdaptiveGroupPath(String groupName)
String	getDestinationAdaptiveGroupURL(String groupName)

String	<u>getDestinationDomain()</u>
String	<u>getDestinationPath()</u>
int	<u>getDestinationPort()</u>
String	<u>getDestinationURL()</u>
int	<u>getMaxRetries()</u>
int	<u>getReadWriteTimeout()</u>
String	<u>getResolvedYouTubeStreamId()</u>
String	<u>getUserAgent()</u>
String	<u>getYouTubeEventName()</u>
String	<u>getYouTubeHostId()</u>
String	<u>getYouTubePlaybackAdaptiveGroupURL()</u> (String groupName)
String	<u>getYouTubePlaybackDomain()</u>
String	<u>getYouTubePlaybackURL()</u>
String	<u>getYouTubePlaybackURLPrefix()</u>
String	<u>getYouTubeStreamId()</u>
void	<u>init()</u> (<u>IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	<u>isDeleteSentChunks()</u>
boolean	<u>isDestinationSecure()</u>
boolean	<u>isFakePosts()</u>
boolean	<u>isInRedundancyPair()</u>
boolean	<u>isReuseSockets()</u>
boolean	<u>isSendToBackupServer()</u>
void	<u>load()</u> (java.util.HashMap dataMap)

void	<u>resetConnection()</u>
void	<u>setConnectionTimeout</u> (int connectionTimeout)
void	<u>setDeleteSentChunks</u> (boolean deleteSentChunks)
void	<u>setFakePosts</u> (boolean fakePosts)
void	<u>setMaxRetries</u> (int maxRetries)
void	<u>setReadWriteTimeout</u> (int readTimeout)
void	<u>setReuseSockets</u> (boolean reuseSockets)
void	<u>setSendToBackupServer</u> (boolean sendToBackupServer)
void	<u>setUserAgent</u> (String userAgent)
void	<u>setYouTubeEventName</u> (String youtubeEventName)
void	<u>setYouTubeHostId</u> (String youtubeHostId)
void	<u>setYouTubePlaybackURLPrefix</u> (String youtubePlaybackURLPrefix)
void	<u>setYouTubeStreamId</u> (String youtubeStreamId)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

`public static final java.lang.Class` **CLASS**

CLASSNAME

`public static final java.lang.String` **CLASSNAME**

Constant value: **PushPublishHTTPYouTubeBase**

YOUTUBE_DEFAULT_HOSTID

`public static final java.lang.String` **YOUTUBE_DEFAULT_HOSTID**

Constant value: **upload.youtube.com**

httpIngressDomainSuffix

`protected java.lang.String` **httpIngressDomainSuffix**

httpPlaybackDomainSuffix

`protected java.lang.String` **httpPlaybackDomainSuffix**

youtubePlaybackURLPrefix

`protected java.lang.String` **youtubePlaybackURLPrefix**

youtubeProtocolName

protected java.lang.String **youtubeProtocolName**

httpIngressDomainOverride

protected java.lang.String **httpIngressDomainOverride**

httpPlaybackDomainOverride

protected java.lang.String **httpPlaybackDomainOverride**

maxRetries

protected int **maxRetries**

connectionTimeout

protected int **connectionTimeout**

readWriteTimeout

protected int **readWriteTimeout**

httpWriterLogOptions

protected int **httpWriterLogOptions**

protocol

protected java.lang.String **protocol**

youtubeStreamId

protected java.lang.String **youtubeStreamId**

youtubeEventName

protected java.lang.String **youtubeEventName**

(continued from last page)

sendToBackupServer

protected boolean **sendToBackupServer**

fakePosts

protected boolean **fakePosts**

reuseSockets

protected boolean **reuseSockets**

youtubeHostId

protected java.lang.String **youtubeHostId**

userAgent

protected java.lang.String **userAgent**

Constructors

PushPublishHTTPYouTubeBase

public **PushPublishHTTPYouTubeBase**()

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

 Inits the instance.

getResolvedYouTubeStreamId

protected String **getResolvedYouTubeStreamId**()

(continued from last page)

getDestinationDomain

```
public String getDestinationDomain()
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean sendToBackupServer)
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

getYouTubeStreamId

```
public String getYouTubeStreamId()
```

setYouTubeStreamId

```
public void setYouTubeStreamId(String youtubeStreamId)
```

getYouTubePlaybackDomain

```
public String getYouTubePlaybackDomain()
```

getDestinationPath

```
public String getDestinationPath()
```

getDestinationURL

```
public String getDestinationURL()
```

(continued from last page)

getDestinationAdaptiveGroupPath

```
public String getDestinationAdaptiveGroupPath(String groupName)
```

getDestinationAdaptiveGroupURL

```
public String getDestinationAdaptiveGroupURL(String groupName)
```

getYouTubePlaybackAdaptiveGroupURL

```
public String getYouTubePlaybackAdaptiveGroupURL(String groupName)
```

getYouTubePlaybackURL

```
public String getYouTubePlaybackURL()
```

resetConnection

```
public void resetConnection()
```

getYouTubeHostId

```
public String getYouTubeHostId()
```

setYouTubeHostId

```
public void setYouTubeHostId(String youtubeHostId)
```

getYouTubeEventName

```
public String getYouTubeEventName()
```

setYouTubeEventName

```
public void setYouTubeEventName(String youtubeEventName)
```

isDeleteSentChunks

```
public boolean isDeleteSentChunks()
```

(continued from last page)

setDeleteSentChunks

```
public void setDeleteSentChunks(boolean deleteSentChunks)
```

getYouTubePlaybackURLPrefix

```
public String getYouTubePlaybackURLPrefix()
```

setYouTubePlaybackURLPrefix

```
public void setYouTubePlaybackURLPrefix(String youtubePlaybackURLPrefix)
```

isFakePosts

```
public boolean isFakePosts()
```

setFakePosts

```
public void setFakePosts(boolean fakePosts)
```

isReuseSockets

```
public boolean isReuseSockets()
```

setReuseSockets

```
public void setReuseSockets(boolean reuseSockets)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

(continued from last page)

getReadWriteTimeout

```
public int getReadWriteTimeout()
```

setReadWriteTimeout

```
public void setReadWriteTimeout(int readTimeout)
```

getMaxRetries

```
public int getMaxRetries()
```

setMaxRetries

```
public void setMaxRetries(int maxRetries)
```

getUserAgent

```
public String getUserAgent()
```

setUserAgent

```
public void setUserAgent(String userAgent)
```

getDestinationPort

```
public int getDestinationPort()
```

isDestinationSecure

```
public boolean isDestinationSecure()
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

com.wowza.wms.pushpublish.model Class PushPublishSessionBase

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishSessionBase

All Implemented Interfaces:

[IPushPublishSession](#)

Direct Known Subclasses:

[PushPublishSessionRTP](#), [PushPublishSessionRTMP](#), [PushPublishSessionHTTPBase](#)

public class **PushPublishSessionBase**

extends Object

implements [IPushPublishSession](#)

Field Summary

protected	profile
protected	pushPublishImpl
protected	stream
protected	type

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionBase()
--------	--

Method Summary

String	getContextStr()
int	getDestinationID()
String	getProfile()
IPushPublish	getPushPublishImpl()
IMediaStream	getStream()

int	getType()
void	setProfile (String profile)
void	setPushPublishImpl (IPushPublish pushPublishImpl)
void	setStream (IMediaStream stream)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#), [setProfile](#), [setPushPublishImpl](#), [setStream](#)

Fields

type

protected int **type**

pushPublishImpl

protected `com.wowza.wms.pushpublish.model.IPushPublish` **pushPublishImpl**

stream

protected `com.wowza.wms.stream.IMediaStream` **stream**

profile

protected `java.lang.String` **profile**

Constructors

PushPublishSessionBase

public **PushPublishSessionBase**()

Methods

(continued from last page)

getType

```
public int getType()
```

getPushPublishImpl

```
public IPushPublish getPushPublishImpl()
```

setPushPublishImpl

```
public void setPushPublishImpl(IPushPublish pushPublishImpl)
```

getStream

```
public IMediaStream getStream()
```

setStream

```
public void setStream(IMediaStream stream)
```

getProfile

```
public String getProfile()
```

setProfile

```
public void setProfile(String profile)
```

getContextStr

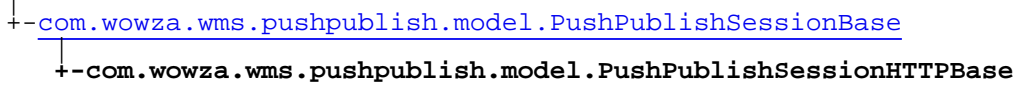
```
public String getContextStr()
```

getDestinationID

```
public int getDestinationID()
```

com.wowza.wms.pushpublish.model Class PushPublishSessionHTTPBase

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public abstract class **PushPublishSessionHTTPBase**
extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionHTTPBase()
--------	--

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionHTTPBase

public **PushPublishSessionHTTPBase()**

com.wowza.wms.pushpublish.model Class PushPublishSessionNotifyBase

java.lang.Object

└─com.wowza.wms.pushpublish.model.PushPublishSessionNotifyBase

All Implemented Interfaces:

[IPushPublishSessionNotify](#)

public abstract class **PushPublishSessionNotifyBase**

extends Object

implements [IPushPublishSessionNotify](#)

Abstract base class for [IPushPublishSessionNotify](#) interface

See Also:

[IApplicationInstance.addPushPublishSessionListener\(IPushPublishSessionNotify\)](#)

Constructor Summary

public	PushPublishSessionNotifyBase()
--------	--

Method Summary

void	onPushPublishSessionCreate (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession)
void	onPushPublishSessionDestroy (String streamName, IMediaStream stream, IPushPublishSession pushPublishSession)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSessionNotify](#)

[onPushPublishSessionCreate](#), [onPushPublishSessionDestroy](#)

Constructors

PushPublishSessionNotifyBase

public **PushPublishSessionNotifyBase**()

Methods

(continued from last page)

onPushPublishSessionCreate

```
public void onPushPublishSessionCreate(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```

onPushPublishSessionDestroy

```
public void onPushPublishSessionDestroy(String streamName,  
    IMediaStream stream,  
    IPushPublishSession pushPublishSession)
```


com.wowza.wms.pushpublish.model Class PushPublishUsageTracker

java.lang.Object

└-com.wowza.wms.pushpublish.model.PushPublishUsageTracker

public class **PushPublishUsageTracker**
extends Object

Constructor Summary

public	PushPublishUsageTracker()
--------	---

Method Summary

long	getAndClearDestinationIDCount()
------	---

void	incDestinationIDCount(int destinationID)
------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishUsageTracker

public **PushPublishUsageTracker()**

Methods

incDestinationIDCount

public void **incDestinationIDCount**(int destinationID)

getAndClearDestinationIDCount

public long **getAndClearDestinationIDCount()**

Package

com.wowza.wms.pushpublish.protocol.cupertino

com.wowza.wms.pushpublish.protocol.cupertino

Interface IPushPublishHTTPCupertino

All Known Implementing Classes:

[PushPublishHTTPCupertino](#)

public interface **IPushPublishHTTPCupertino**
extends

Method Summary

abstract int	deleteMediaSegment (MediaSegmentModel mediaSegment) Deletes the media (chunk) at the destination URI.
abstract String	getDestinationLogData () JSON formatted string containing information unique to the instance.
abstract boolean	isSendToBackupServer () Is this implementation sending to a backup server
abstract boolean	outputClose () Close the destination (if needed).
abstract boolean	outputOpen () Open the destination (if needed) in preparation of having one or more items (playlists/media segments) pushed to it
abstract int	sendGroupMasterPlaylist (String groupName, PlaylistModel playlist) Sends a group master playlist to the destination.
abstract int	sendMasterPlaylist (PlaylistModel playlist) Sends the master playlist to the destination.
abstract int	sendMediaPlaylist (PlaylistModel playlist) Sends the media playlist to the destination.
abstract int	sendMediaSegment (MediaSegmentModel mediaSegment) Sends the media (chunk) to the destination; media provided as a fragment list.
abstract void	setSendToBackupServer (boolean backup) Setup to send to a backup destination
abstract boolean	updateGroupMasterPlaylistPlaybackURI (String groupName, PlaylistModel masterPlaylist) Get the group master playlist URI for the given group master playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myGroup/playlist.m3u8"
abstract boolean	updateMasterPlaylistPlaybackURI (PlaylistModel playlist) update the master playlist URI for the provided playlist model that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/playlist.m3u8" where "playlist.m3u8" is the value given for masterPlaylistFilename

abstract boolean	updateMediaPlaylistPlaybackURI (PlaylistModel playlist) update/set the media playlist (chunklist) URI for the provided media playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/chunklist.m3u8" where "chunklist.m3u8" is the value given for mediaPlaylistFilename
abstract boolean	updateMediaSegmentPlaybackURI (MediaSegmentModel mediaSegment) set the media URI for the given media (chunk) file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/media_1.ts" where "media_1.ts" is the value given for mediaFilename

Methods

updateMasterPlaylistPlaybackURI

```
public abstract boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

update the master playlist URI for the provided playlist model that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/playlist.m3u8" where "playlist.m3u8" is the value given for masterPlaylistFilename

Parameters:

playlist - the master playlist model to update the URI in

Returns:

true if the URI was updated

sendMasterPlaylist

```
public abstract int sendMasterPlaylist(PlaylistModel playlist)
```

Sends the master playlist to the destination.

Parameters:

playlist - the master playlist model

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateMediaPlaylistPlaybackURI

```
public abstract boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

update/set the media playlist (chunklist) URI for the provided media playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/chunklist.m3u8" where "chunklist.m3u8" is the value given for mediaPlaylistFilename

Parameters:

playlist - to update the uri in

Returns:

true if the playlist uri was updated

sendMediaPlaylist

```
public abstract int sendMediaPlaylist(PlaylistModel playlist)
```

(continued from last page)

Sends the media playlist to the destination.

Parameters:

`playlist` - the media playlist model

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateMediaSegmentPlaybackURI

```
public abstract boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

set the media URI for the given media (chunk) file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myStream/media_1.ts" where "media_1.ts" is the value given for `mediaFilename`

Parameters:

`mediaSegment` - to update the uri of

Returns:

true if the uri was updated

sendMediaSegment

```
public abstract int sendMediaSegment(MediaSegmentModel mediaSegment)
```

Sends the media (chunk) to the destination; media provided as a fragment list.

Parameters:

`mediaSegment` - the media file in fragment list form

Returns:

number of bytes sent to output (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

deleteMediaSegment

```
public abstract int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

Deletes the media (chunk) at the destination URI. Default implementation assumes the URI uses the HTTP schema and deletes the media using the WSE HTTPByteWriter. Implementations not using the HTTP schema or not wanting to use the default HTTPByteWriter should override the default method.

Parameters:

`mediaSegment` - the media destination URI

Returns:

number of bytes sent if successful (less than zero implies the implementation does not support, 0 is a failure, > 0 is success)

updateGroupMasterPlaylistPlaybackURI

```
public abstract boolean updateGroupMasterPlaylistPlaybackURI(String groupName,
PlaylistModel masterPlaylist)
```

Get the group master playlist URI for the given group master playlist file that a player would use to consume the content from the CDN Example: "http://myHost.com/myPath/myGroup/playlist.m3u8"

Parameters:

`groupName` - group name

`masterPlaylist` - master group playlist

(continued from last page)

Returns:true if the uri was updated

sendGroupMasterPlaylist

```
public abstract int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel playlist)
```

Sends a group master playlist to the destination.

Parameters:

groupName - the group name

playlist - the group master playlist model

Returns:

number of bytes sent to output

setSendToBackupServer

```
public abstract void setSendToBackupServer(boolean backup)
```

Setup to send to a backup destination

isSendToBackupServer

```
public abstract boolean isSendToBackupServer()
```

Is this implementation sending to a backup server

Returns:

true if sending to a backup server

outputOpen

```
public abstract boolean outputOpen()
```

Open the destination (if needed) in preparation of having one or more items (playlists/media segments) pushed to it

Returns:

true if the destination was opened

outputClose

```
public abstract boolean outputClose()
```

Close the destination (if needed). All items (playlist/media segments) have been pushed to bring the destination up to date with the current state

Returns:

true if the destination was closed

getDestinationLogData

```
public abstract String getDestinationLogData()
```

JSON formatted string containing information unique to the instance. This information is added to the log entry when starting and stopping the push publish session.

Returns:

(continued from last page)

string in JSON format (including outer braces)

com.wowza.wms.pushpublish.protocol.cupertino Class MediaSegmentModelTracker

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.cupertino.MediaSegmentModelTracker

public class **MediaSegmentModelTracker**
extends Object

Field Summary

protected	<u>delete</u>
protected	<u>lock</u>
protected	<u>programDateTime</u>
protected	<u>segmentIndex</u>
protected	<u>segmentSize</u>
protected	<u>sent</u>

Constructor Summary

public	<u>MediaSegmentModelTracker()</u>
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

lock

protected java.lang.Object **lock**

delete

protected boolean **delete**

(continued from last page)

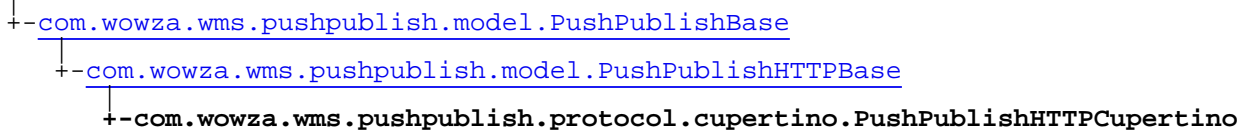
sentprotected boolean **sent****segmentIndex**protected long **segmentIndex****segmentSize**protected long **segmentSize****programDateTime**protected java.lang.String **programDateTime**

Constructors

MediaSegmentModelTrackerpublic **MediaSegmentModelTracker**()

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertino

java.lang.Object



All Implemented Interfaces:

[IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#), [IPushPublish](#)

Direct Known Subclasses:

[PushPublishHTTPCupertinoGoogleHandler](#), [PushPublishHTTPCupertinoCloudStorageHandler](#),
[PushPublishHTTPCupertinoAkamaiHandler](#)

public abstract class **PushPublishHTTPCupertino**

extends [PushPublishHTTPBase](#)

implements [IPushPublish](#), [IPushPublishHTTPCupertino](#), [IPushPublishHTTPGroupMember](#),
[IPushPublishHTTPOutputBuilder](#)

Field Summary

protected	addEndListOnDisconnect
protected	chunkDurationTarget
public static final	CHUNKLISTNAME_AUDIOONLY Value: chunklist_ao.m3u8
public static final	CHUNKLISTNAME_AUDIOVIDEO Value: chunklist.m3u8
public static final	CHUNKLISTNAME_KEYFRAMEONLY Value: chunklist_ko.m3u8
public static final	CHUNKLISTNAME_VIDEOONLY Value: chunklist_vo.m3u8
public static final	CHUNKLISTNAMES
protected	keepMediaSegmentDataAfterSending
protected	liveStreamPacketizerCupertino
public static final	PLAYLISTNAME Value: playlist.m3u8

protected	pusher
public static final	RENDITION_AUDIOONLY Value: 2
public static final	RENDITION_AUDIOVIDEO Value: 1
public static final	RENDITION_KEYFRAMEONLY Value: 8
public static final	RENDITION_VIDEOONLY Value: 4
public static final	RENDITIONINDEX_AUDIOONLY Value: 1
public static final	RENDITIONINDEX_AUDIOVIDEO Value: 0
public static final	RENDITIONINDEX_COUNT Value: 4
public static final	RENDITIONINDEX_KEYFRAMEONLY Value: 3
public static final	RENDITIONINDEX_VIDEOONLY Value: 2

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#), [PUSHER_ERROR_RENDITIONS_MISCONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertino()
--------	--

Method Summary

Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
void	addTagToPlaylist (PlaylistModel playlist, int idx, TagModel tag) Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model
void	addTagToPlaylist (PlaylistModel playlist, TagModel tag) Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model
void	connect ()
ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties)
PlaylistModel	createMasterPlaylist () Creates a master playlist and propagates the context string from this implemenation to the returned playlist model
PlaylistModel	createMediaPlaylist (int renditionIdx) Creates a empty media playlist and propagates the context from this implemenation to the returned playlist
MediaSegmentModel	createMediaSegmentModel () Creates an empty media segment model and propagates the context from the implementation to the returned media segment model
PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
TagModel	createTag (Class clazz) Create a TagModel of the provided TagModel
void	disconnect ()
void	disconnect (boolean hard)

void	<u>error</u> (int errorCode)
int	<u>getChunkDurationTarget</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)
int	<u>getConnectedState</u> ()
String	<u>getContextStr</u> ()
abstract String	<u>getDestinationLogData</u> () Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging
String	<u>getGroupPlaylistRenditionDescription</u> (boolean forABRPlaylist)
int	<u>getLastChunkId</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)
String	<u>getLiveStreamPacketizerName</u> ()
String	<u>getMediaPlaylistPlaybackURL</u> (int rendition)
long	<u>getMessagesAttemptedCount</u> ()
long	<u>getMessagesFailedCount</u> ()
long	<u>getMessagesRetriedCount</u> ()
Object	<u>getPacketizerLock</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)
int	<u>getPlaylistCount</u> ()
<u>WMSProperties</u>	<u>getPlaylistProperties</u> ()
String	<u>getRandomSessionStr</u> () Gets a random session string that lives for the life time of the currently published stream.
String	<u>getRenditionsStr</u> ()
void	<u>init</u> (<u>IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
Boolean	<u>isGroupReady</u> (java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
boolean	<u>isInRedundancyPair</u> ()
void	<u>load</u> (java.util.HashMap dataMap)
void	<u>outputSend</u> (<u>PushPublishHTTPOutputItem</u> outputItem)

String	<code>printPlaylist(PlaylistModel playlist)</code> Will print the provided playlist to a String.
void	<code>resetConnection()</code>
void	<code>resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)</code>
void	<code>sendGroupPlaylist(String groupName, ManifestModel manifest)</code>
void	<code>setLiveStreamPacketizer(ILiveStreamPacketizer liveStreamPacketizer)</code>
void	<code>setRenditionsStr(String renditionsStr)</code>
String	<code>writeTagToString(TagModel tag)</code> Writes the tag contents out to a string in UTF-8 encoding to a String

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugEnabled](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface

[com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [createGroupPlaylist](#), [getAdaptiveGroupName](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugEnabled](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Fields

PLAYLISTNAME

public static final java.lang.String **PLAYLISTNAME**

Constant value: **playlist.m3u8**

liveStreamPacketizerCupertino

protected

com.wowza.wms.httpstreamer.cupertinostreaming.livestreampacketizer.LiveStreamPacketizerCupertino **liveStreamPacketizerCupertino**

CHUNKLISTNAME_AUDIOVIDEO

public static final java.lang.String **CHUNKLISTNAME_AUDIOVIDEO**

Constant value: **chunklist.m3u8**

(continued from last page)

CHUNKLISTNAME_AUDIOONLY

```
public static final java.lang.String CHUNKLISTNAME_AUDIOONLY
```

Constant value: **chunklist_ao.m3u8**

CHUNKLISTNAME_VIDEOONLY

```
public static final java.lang.String CHUNKLISTNAME_VIDEOONLY
```

Constant value: **chunklist_vo.m3u8**

CHUNKLISTNAME_KEYFRAMEONLY

```
public static final java.lang.String CHUNKLISTNAME_KEYFRAMEONLY
```

Constant value: **chunklist_ko.m3u8**

CHUNKLISTNAMES

```
public static final java.lang.String CHUNKLISTNAMES
```

RENDITIONINDEX_AUDIOVIDEO

```
public static final int RENDITIONINDEX_AUDIOVIDEO
```

Constant value: **0**

RENDITIONINDEX_AUDIOONLY

```
public static final int RENDITIONINDEX_AUDIOONLY
```

Constant value: **1**

RENDITIONINDEX_VIDEOONLY

```
public static final int RENDITIONINDEX_VIDEOONLY
```

Constant value: **2**

RENDITIONINDEX_KEYFRAMEONLY

```
public static final int RENDITIONINDEX_KEYFRAMEONLY
```

Constant value: **3**

RENDITIONINDEX_COUNT

```
public static final int RENDITIONINDEX_COUNT
```

(continued from last page)

Constant value: **4**

RENDITION_AUDIOVIDEO

```
public static final int RENDITION_AUDIOVIDEO
```

Constant value: **1**

RENDITION_AUDIOONLY

```
public static final int RENDITION_AUDIOONLY
```

Constant value: **2**

RENDITION_VIDEOONLY

```
public static final int RENDITION_VIDEOONLY
```

Constant value: **4**

RENDITION_KEYFRAMEONLY

```
public static final int RENDITION_KEYFRAMEONLY
```

Constant value: **8**

chunkDurationTarget

```
protected int chunkDurationTarget
```

addEndListOnDisconnect

```
protected boolean addEndListOnDisconnect
```

keepMediaSegmentDataAfterSending

```
protected boolean keepMediaSegmentDataAfterSending
```

pusher

```
protected com.wowza.wms.pushpublish.model.PushPublishHTTTPusher pusher
```

Constructors

(continued from last page)

PushPublishHTTPCupertino

```
public PushPublishHTTPCupertino()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initiates the instance.

getPlaylistCount

```
public int getPlaylistCount()
```

Get the playlist count. The value from the map file is returned if defined, else the packetizer value is returned return the playlist count

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

createOutputItem

```
public final PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer  
liveStreamPacketizer,  
int lastChunkIndex)
```

outputSend

```
public final void outputSend(PushPublishHTTPOutputItem outputItem)
```

getContextStr

```
public String getContextStr()
```

resetNewPacketizer

```
public void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

error

```
public void error(int errorCode)
```

isInRedundancyPair

```
public boolean isInRedundancyPair()
```

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

sendGroupPlaylist

```
public void sendGroupPlaylist(String groupName,  
    ManifestModel manifest)
```

getGroupPlaylistRenditionDescription

```
public String getGroupPlaylistRenditionDescription(boolean forABRPlaylist)
```

isGroupReady

```
public Boolean isGroupReady(java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

adaptiveGroupPlaylistNeedsUpdating

```
public Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

(continued from last page)

getRenditionsStr

```
public String getRenditionsStr()
```

setRenditionsStr

```
public void setRenditionsStr(String renditionsStr)
```

getLiveStreamPacketizerName

```
public String getLiveStreamPacketizerName()
```

getPacketizerLock

```
public Object getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
```

getLastChunkId

```
public int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

(continued from last page)

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

resetConnection

```
public void resetConnection()
```

getConnectedState

```
public int getConnectedState()
```

getRandomSessionStr

```
public String getRandomSessionStr()
```

Gets a random session string that lives for the life time of the currently published stream. If the stream times out or drops for one reason or another, this will return a new session string.

Returns:

String containing a unique string to the incoming stream

getDestinationLogData

```
public abstract String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

Returns:

JSON formatted string representation

printPlaylist

```
public String printPlaylist(PlaylistModel playlist)
```

Will print the provided playlist to a String. Intended as a debug tool

Parameters:

playlist - to print to a String

Returns:

String containing the text based representation of the playlist (not UTF-8 encoded)

(continued from last page)

createTag

```
protected TagModel createTag(Class clazz)
```

Create a TagModel of the provided TagModel

Parameters:

clazz - Class of the TagModel to create

Returns:

a new instance of the TagModel requested

addTagToPlaylist

```
protected void addTagToPlaylist(PlaylistModel playlist,  
                                TagModel tag)
```

Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

tag - to add to the playlist

addTagToPlaylist

```
protected void addTagToPlaylist(PlaylistModel playlist,  
                                int idx,  
                                TagModel tag)
```

Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model

Parameters:

playlist - to add the TagModel to

idx - index where to insert the TagModel at

tag - Model to insert into the list of TagModels

createMasterPlaylist

```
protected PlaylistModel createMasterPlaylist()
```

Creates a master playlist and propagates the context string from this implementation to the returned playlist model

Returns:

a new master playlist

createMediaPlaylist

```
protected PlaylistModel createMediaPlaylist(int renditionIdx)
```

Creates a empty media playlist and propagates the context from this implementation to the returned playlist

Returns:

a new media playlist

createMediaSegmentModel

```
protected MediaSegmentModel createMediaSegmentModel()
```

(continued from last page)

Creates an empty media segment model and propagates the context from the implementation to the returned media segment model

Returns:

media segment model

writeTagToString

protected String **writeTagToString**([TagModel](#) tag)

Writes the tag contents out to a string in UTF-8 encoding to a String

Parameters:

tag - to be encoded

Returns:

String containing the tag contents for use in a playlist

getMediaPlaylistPlaybackURL

public String **getMediaPlaylistPlaybackURL**(int rendition)

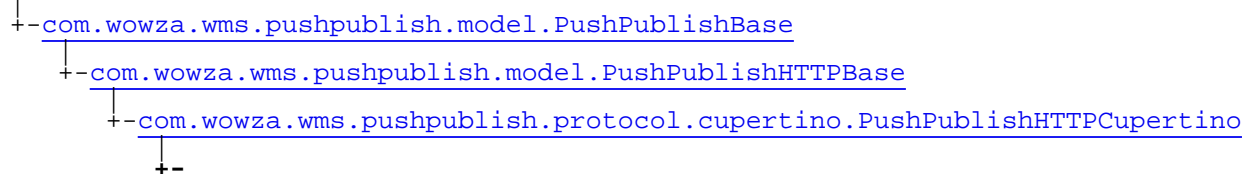
setLiveStreamPacketizer

protected void **setLiveStreamPacketizer**([ILiveStreamPacketizer](#) liveStreamPacketizer)

com.wowza.wms.pushpublish.protocol.cupertino

Class PushPublishHTTPCupertinoAkamaiHandler

java.lang.Object



com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoAkamaiHandler

All Implemented Interfaces:

com.wowza.wms.pushpublish.akamai.IPushPublishAkamai, [IPushPublish](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#)

public class **PushPublishHTTPCupertinoAkamaiHandler**

extends [PushPublishHTTPCupertino](#)

implements [IPushPublishHTTPCupertino](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublish](#), com.wowza.wms.pushpublish.akamai.IPushPublishAkamai

Fields inherited from class [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[addEndListOnDisconnect](#), [chunkDurationTarget](#), [CHUNKLISTNAME_AUDIOONLY](#), [CHUNKLISTNAME_AUDIOVIDEO](#), [CHUNKLISTNAME_KEYFRAMEONLY](#), [CHUNKLISTNAME_VIDEOONLY](#), [CHUNKLISTNAMES](#), [keepMediaSegmentDataAfterSending](#), [liveStreamPacketizerCupertino](#), [PLAYLISTNAME](#), [pusher](#), [RENDITION_AUDIOONLY](#), [RENDITION_AUDIOVIDEO](#), [RENDITION_KEYFRAMEONLY](#), [RENDITION_VIDEOONLY](#), [RENDITIONINDEX_AUDIOONLY](#), [RENDITIONINDEX_AUDIOVIDEO](#), [RENDITIONINDEX_COUNT](#), [RENDITIONINDEX_KEYFRAMEONLY](#), [RENDITIONINDEX_VIDEOONLY](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#), [PUSHER_ERROR_RENDITIONS_MISCONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertinoAkamaiHandler()
--------	---

Method Summary

void	connect()
HTTPByteWriter	createByteWriter(java.net.URI uri, int port)
int	deleteMediaSegment(MediaSegmentModel mediaSegment)
boolean	destroyByteWriter()
String	getAkamaiEventName()
String	getAkamaiHostId()
String	getAkamaiStreamId()
int	getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
String	getDestinationLogData()
WMSProperties	getPlaylistProperties()
String	getUserAgent()
void	init(IApplicationInstance appInstance, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	isAkamaiIngestAcceleration()
boolean	isSendToBackupServer()
void	load(java.util.HashMap dataMap)
boolean	outputClose()

boolean	outputOpen()
void	resetConnection()
int	sendGroupMasterPlaylist (String groupName, PlaylistModel playlist)
int	sendMasterPlaylist (PlaylistModel playlist)
int	sendMediaPlaylist (PlaylistModel playlist)
int	sendMediaSegment (MediaSegmentModel mediaSegment)
void	setAkamaiEventName (String akamaiEventName)
void	setAkamaiHostId (String akamaiHostId)
void	setAkamaiIngestAcceleration (boolean akamaiIngestAcceleration)
void	setAkamaiStreamId (String akamaiStreamId)
void	setSendToBackupServer (boolean backup)
void	setUserAgent (String userAgent)
boolean	updateGroupMasterPlaylistPlaybackURI (String groupName, PlaylistModel masterPlaylist)
boolean	updateMasterPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaPlaylistPlaybackURI (PlaylistModel playlist)
boolean	updateMediaSegmentPlaybackURI (MediaSegmentModel mediaSegment)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addTagToPlaylist](#), [addTagToPlaylist](#), [connect](#),
[createGroupPlaylist](#), [createMasterPlaylist](#), [createMediaPlaylist](#),
[createMediaSegmentModel](#), [createOutputItem](#), [createTag](#), [disconnect](#), [disconnect](#), [error](#),
[getChunkDurationTarget](#), [getConnectedState](#), [getContextStr](#), [getDestinationLogData](#),
[getGroupPlaylistRenditionDescription](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#),
[getMediaPlaylistPlaybackURL](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#),
[getMessagesRetriedCount](#), [getPacketizerLock](#), [getPlaylistCount](#), [getPlaylistProperties](#),
[getRandomSessionStr](#), [getRenditionsStr](#), [init](#), [isGroupReady](#), [isInRedundancyPair](#), [load](#),
[outputSend](#), [printPlaylist](#), [resetConnection](#), [resetNewPacketizer](#), [sendGroupPlaylist](#),
[setLiveStreamPacketizer](#), [setRenditionsStr](#), [writeTagToString](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [createGroupPlaylist](#), [getAdaptiveGroupName](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Methods inherited from interface [com.wowza.wms.pushpublish.akamai.IPushPublishAkamai](#)

[getAkamaiEventName](#), [getAkamaiHostId](#), [getAkamaiStreamId](#), [getContextStr](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getPlaybackHostname](#), [getSrcStreamName](#), [getUserAgent](#), [isAkamaiIngestAcceleration](#), [isDebugLog](#), [isSendToBackupServer](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAkamaiEventName](#), [setAkamaiHostId](#), [setAkamaiIngestAcceleration](#), [setAkamaiStreamId](#), [setDebugLog](#), [setDstStreamName](#), [setEntryName](#), [setHostname](#), [setPlaybackHostname](#), [setSendToBackupServer](#), [setSrcStreamName](#), [setUserAgent](#)

Constructors

PushPublishHTTPCupertinoAkamaiHandler

```
public PushPublishHTTPCupertinoAkamaiHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance,
                String streamName,
                IMediaStream stream,
                java.util.Map profileData,
                java.util.Map maps,
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,
                boolean streamDebug)
```

Init's the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

(continued from last page)

connect

```
public void connect()
```

resetConnection

```
public void resetConnection()
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
    PlaylistModel masterPlaylist)
```

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

(continued from last page)

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel playlist)
```

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

getDestinationLogData

```
public String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

getAkamaiEventName

```
public String getAkamaiEventName()
```

setAkamaiEventName

```
public void setAkamaiEventName(String akamaiEventName)
```

getAkamaiStreamId

```
public String getAkamaiStreamId()
```

(continued from last page)

setAkamaiStreamId

```
public void setAkamaiStreamId(String akamaiStreamId)
```

getAkamaiHostId

```
public String getAkamaiHostId()
```

setAkamaiHostId

```
public void setAkamaiHostId(String akamaiHostId)
```

isAkamaiIngestAcceleration

```
public boolean isAkamaiIngestAcceleration()
```

setAkamaiIngestAcceleration

```
public void setAkamaiIngestAcceleration(boolean akamaiIngestAcceleration)
```

getUserAgent

```
public String getUserAgent()
```

setUserAgent

```
public void setUserAgent(String userAgent)
```

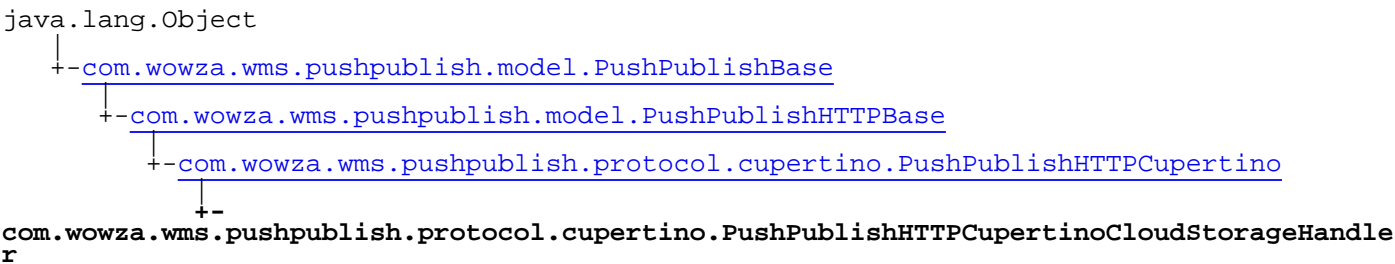
createByteWriter

```
public HTTPByteWriter createByteWriter(java.net.URI uri,  
int port)
```

destroyByteWriter

```
public boolean destroyByteWriter()
```

com.wowza.wms.pushpublish.protocol.cupertino
Class PushPublishHTTPCupertinoCloudStorageHandler



All Implemented Interfaces:
[IPushPublish](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#)

```
public class PushPublishHTTPCupertinoCloudStorageHandler
extends PushPublishHTTPCupertino
```

Field Summary

protected	backup
protected	cloudStorageCleanBucket
protected	cloudStorageController
protected	cloudStorageControllerProps
protected	cloudStorageProviderName
protected	cloudStorageTransportDebug
protected	playlistDuration The playlist duration from the map entry.
protected	useRandomSession

Fields inherited from class [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[addEndListOnDisconnect](#), [chunkDurationTarget](#), [CHUNKLISTNAME_AUDIOONLY](#), [CHUNKLISTNAME_AUDIOVIDEO](#), [CHUNKLISTNAME_KEYFRAMEONLY](#), [CHUNKLISTNAME_VIDEOONLY](#), [CHUNKLISTNAMES](#), [keepMediaSegmentDataAfterSending](#), [liveStreamPacketizerCupertino](#), [PLAYLISTNAME](#), [pusher](#), [RENDITION_AUDIOONLY](#), [RENDITION_AUDIOVIDEO](#), [RENDITION_KEYFRAMEONLY](#), [RENDITION_VIDEOONLY](#), [RENDITIONINDEX_AUDIOONLY](#), [RENDITIONINDEX_AUDIOVIDEO](#), [RENDITIONINDEX_COUNT](#), [RENDITIONINDEX_KEYFRAMEONLY](#), [RENDITIONINDEX_VIDEOONLY](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#), [PUSHER_ERROR_RENDITIONS_MISCONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertinoCloudStorageHandler()
--------	---

Method Summary

void	connect()
int	deleteMediaSegment(MediaSegmentModel mediaSegment)
String	getDestinationStreamName()
String	getDestinationStreamPath(MediaSegmentModel mediaSegment)
String	getDestinationStreamPath(PlaylistModel playlist)
String	getDestinationLogData()
java.net.URI	getMasterPlaylistURI(String streamOrGroupName)
String	getMediaPlaylistPlayBackPath()

void	<u>init</u> (<u>IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	<u>isSendToBackupServer</u> ()
void	<u>load</u> (java.util.HashMap dataMap)
boolean	<u>outputClose</u> ()
boolean	<u>outputOpen</u> ()
int	<u>sendGroupMasterPlaylist</u> (String groupName, <u>PlaylistModel</u> playlist)
int	<u>sendMasterPlaylist</u> (<u>PlaylistModel</u> playlist)
int	<u>sendMediaPlaylist</u> (<u>PlaylistModel</u> playlist)
int	<u>sendMediaSegment</u> (<u>MediaSegmentModel</u> mediaSegment)
int	<u>sendPlaylist</u> (String parentMethod, java.net.URI uri, <u>PlaylistModel</u> playlist)
void	<u>setChunkDurationTarget</u> ()
void	<u>setSendToBackupServer</u> (boolean backup)
boolean	<u>updateGroupMasterPlaylistPlaybackURI</u> (String groupName, <u>PlaylistModel</u> masterPlaylist)
boolean	<u>updateMasterPlaylistPlaybackURI</u> (<u>PlaylistModel</u> playlist)
boolean	<u>updateMediaPlaylistPlaybackURI</u> (<u>PlaylistModel</u> playlist)
boolean	<u>updateMediaSegmentPlaybackURI</u> (<u>MediaSegmentModel</u> mediaSegment)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addTagToPlaylist](#), [addTagToPlaylist](#), [connect](#),
[createGroupPlaylist](#), [createMasterPlaylist](#), [createMediaPlaylist](#),
[createMediaSegmentModel](#), [createOutputItem](#), [createTag](#), [disconnect](#), [disconnect](#), [error](#),
[getChunkDurationTarget](#), [getConnectedState](#), [getContextStr](#), [getDestinationLogData](#),
[getGroupPlaylistRenditionDescription](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#),
[getMediaPlaylistPlaybackURL](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#),
[getMessagesRetriedCount](#), [getPacketizerLock](#), [getPlaylistCount](#), [getPlaylistProperties](#),
[getRandomSessionStr](#), [getRenditionsStr](#), [init](#), [isGroupReady](#), [isInRedundancyPair](#), [load](#),
[outputSend](#), [printPlaylist](#), [resetConnection](#), [resetNewPacketizer](#), [sendGroupPlaylist](#),
[setLiveStreamPacketizer](#), [setRenditionsStr](#), [writeTagToString](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [createGroupPlaylist](#), [getAdaptiveGroupName](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Fields

cloudStorageTransportDebug

protected java.lang.Boolean **cloudStorageTransportDebug**

cloudStorageProviderName

protected java.lang.String **cloudStorageProviderName**

cloudStorageController

protected com.wowza.wms.pushpublish.cloudstorage.IPushPublishCloudStorageController
cloudStorageController

cloudStorageControllerProps

protected com.wowza.wms.application.WMSProperties **cloudStorageControllerProps**

cloudStorageCleanBucket

protected boolean **cloudStorageCleanBucket**

playlistDuration

protected long **playlistDuration**

The playlist duration from the map entry. This value is in seconds. http.playlistDuration REMOVE when migrated to WSE

backup

protected boolean **backup**

useRandomSession

protected boolean **useRandomSession**

Constructors

PushPublishHTTPCupertinoCloudStorageHandler

```
public PushPublishHTTPCupertinoCloudStorageHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initiates the instance.

connect

```
public void connect()
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
                                                    PlaylistModel masterPlaylist)
```

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel playlist)
```

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

(continued from last page)

getDestinationLogData

```
public String getDestinationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

getMasterPlaylistURI

```
protected java.net.URI getMasterPlaylistURI(String streamOrGroupName)  
    throws java.net.URISyntaxException
```

getMediaPlaylistPlayBackPath

```
protected String getMediaPlaylistPlayBackPath()
```

getDestinationStreamName

```
protected String getDestinationStreamName()
```

getDestinationStreamPath

```
protected String getDestinationStreamPath(MediaSegmentModel mediaSegment)
```

getDestinationStreamPath

```
protected String getDestinationStreamPath(PlaylistModel playlist)
```

sendPlaylist

```
protected int sendPlaylist(String parentMethod,  
    java.net.URI uri,  
    PlaylistModel playlist)
```

setChunkDurationTarget

```
public void setChunkDurationTarget()
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoGoogleHandler

java.lang.Object

+ [com.wowza.wms.pushpublish.model.PushPublishBase](#)

+ [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

+ [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoGoogleHandler

All Implemented Interfaces:

[IPushPublish](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPCupertino](#)

public class **PushPublishHTTPCupertinoGoogleHandler**
extends [PushPublishHTTPCupertino](#)

Field Summary

protected	bucketName
public static final	BUCKETVAR Value: {BUCKET}
public static final	COMMANDPATHDEL Value: /storage/v1/b/{BUCKET}/o
public static final	COMMANDPATHPOST Value: /upload/storage/v1/b/{BUCKET}/o
protected	connectionTimeout
public static final	DEFAULTGCEHOST Value: www.googleapis.com
public static final	DEFAULTGCEPORT Value: 443
protected	deleteSentChunks
protected static final	destinationPath Value: storageDir
protected static final	destinationURLPrefix Value: https://
protected	fakePosts

public static final	FILENAMEVAR Value: {FILENAME}
protected	httpWriterDebug
protected	isPlaybackSSL
protected	isSendSSL
protected static final	LINE_FEED Value:
protected static final	playbackDomain Value: storage.googleapis.com
protected static final	playbackURLPrefix Value: http://
protected	project
public static final	PROJECTQP Value: &project={PROJECT}
public static final	PROJECTQPVAR Value: {PROJECTQP}
public static final	PROJECTVAR Value: {PROJECT}
public static final	QUERYPARAMS Value: ?uploadType=multipart&name={FILENAME}{PROJECTQP}
protected	readWriteTimeout
protected	sendToBackupServer

Fields inherited from class [com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[addEndListOnDisconnect](#), [chunkDurationTarget](#), [CHUNKLISTNAME_AUDIOONLY](#), [CHUNKLISTNAME_AUDIOVIDEO](#), [CHUNKLISTNAME_KEYFRAMEONLY](#), [CHUNKLISTNAME_VIDEOONLY](#), [CHUNKLISTNAMES](#), [keepMediaSegmentDataAfterSending](#), [liveStreamPacketizerCupertino](#), [PLAYLISTNAME](#), [pusher](#), [RENDITION_AUDIOONLY](#), [RENDITION_AUDIOVIDEO](#), [RENDITION_KEYFRAMEONLY](#), [RENDITION_VIDEOONLY](#), [RENDITIONINDEX_AUDIOONLY](#), [RENDITIONINDEX_AUDIOVIDEO](#), [RENDITIONINDEX_COUNT](#), [RENDITIONINDEX_KEYFRAMEONLY](#), [RENDITIONINDEX_VIDEOONLY](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#), [PUSHER_ERROR_RENDITIONS_MISCONFIGURED](#)

Constructor Summary

public	PushPublishHTTPCupertinoGoogleHandler()
--------	---

Method Summary

void	connect()
int	deleteMediaSegment(MediaSegmentModel mediaSegment)
int	getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
String	getContextStr()
String	getDestinationDomain()
String	getDestinationPath()
String	getDestinationLogData()
String	getIngressURL()
String	getPlaybackDomain()

String	<u>getPlaybackPath()</u>
String	<u>getPlaybackURL()</u>
void	<u>init(IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	<u>isSendToBackupServer()</u>
void	<u>load</u> (java.util.HashMap dataMap)
boolean	<u>outputClose()</u>
boolean	<u>outputOpen()</u>
void	<u>resetConnection()</u>
int	<u>sendGroupMasterPlaylist</u> (String groupName, <u>PlaylistModel</u> masterPlaylist)
int	<u>sendMasterPlaylist</u> (<u>PlaylistModel</u> playlist)
int	<u>sendMediaPlaylist</u> (<u>PlaylistModel</u> playlist)
int	<u>sendMediaSegment</u> (<u>MediaSegmentModel</u> mediaSegment)
void	<u>setSendToBackupServer</u> (boolean backup)
boolean	<u>updateGroupMasterPlaylistPlaybackURI</u> (String groupName, <u>PlaylistModel</u> masterPlaylist)
boolean	<u>updateMasterPlaylistPlaybackURI</u> (<u>PlaylistModel</u> playlist)
boolean	<u>updateMediaPlaylistPlaybackURI</u> (<u>PlaylistModel</u> playlist)
boolean	<u>updateMediaSegmentPlaybackURI</u> (<u>MediaSegmentModel</u> mediaSegment)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertino](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [addTagToPlaylist](#), [addTagToPlaylist](#), [connect](#),
[createGroupPlaylist](#), [createMasterPlaylist](#), [createMediaPlaylist](#),
[createMediaSegmentModel](#), [createOutputItem](#), [createTag](#), [disconnect](#), [disconnect](#), [error](#),
[getChunkDurationTarget](#), [getConnectedState](#), [getContextStr](#), [getDestinationLogData](#),
[getGroupPlaylistRenditionDescription](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#),
[getMediaPlaylistPlaybackURL](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#),
[getMessagesRetriedCount](#), [getPacketizerLock](#), [getPlaylistCount](#), [getPlaylistProperties](#),
[getRandomSessionStr](#), [getRenditionsStr](#), [init](#), [isGroupReady](#), [isInRedundancyPair](#), [load](#),
[outputSend](#), [printPlaylist](#), [resetConnection](#), [resetNewPacketizer](#), [sendGroupPlaylist](#),
[setLiveStreamPacketizer](#), [setRenditionsStr](#), [writeTagToString](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.cupertino.IPushPublishHTTPCupertino](#)

[deleteMediaSegment](#), [getDestinationLogData](#), [isSendToBackupServer](#), [outputClose](#), [outputOpen](#), [sendGroupMasterPlaylist](#), [sendMasterPlaylist](#), [sendMediaPlaylist](#), [sendMediaSegment](#), [setSendToBackupServer](#), [updateGroupMasterPlaylistPlaybackURI](#), [updateMasterPlaylistPlaybackURI](#), [updateMediaPlaylistPlaybackURI](#), [updateMediaSegmentPlaybackURI](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [createGroupPlaylist](#), [getAdaptiveGroupName](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugLog](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Fields

destinationURLPrefix

protected static final java.lang.String **destinationURLPrefix**

Constant value: **https://**

playbackURLPrefix

protected static final java.lang.String **playbackURLPrefix**

Constant value: **http://**

playbackDomain

protected static final java.lang.String **playbackDomain**

Constant value: **storage.googleapis.com**

destinationPath

protected static final java.lang.String **destinationPath**

Constant value: **storageDir**

DEFAULTGCEHOST

public static final java.lang.String **DEFAULTGCEHOST**

Constant value: **www.googleapis.com**

DEFAULTGCEPORT

public static final int **DEFAULTGCEPORT**

Constant value: **443**

BUCKETVAR

public static final java.lang.String **BUCKETVAR**

Constant value: **{BUCKET}**

COMMANDPATHPOST

```
public static final java.lang.String COMMANDPATHPOST
```

Constant value: `/upload/storage/v1/b/{BUCKET}/o`

COMMANDPATHDEL

```
public static final java.lang.String COMMANDPATHDEL
```

Constant value: `/storage/v1/b/{BUCKET}/o`

FILENAMEVAR

```
public static final java.lang.String FILENAMEVAR
```

Constant value: `{FILENAME}`

PROJECTVAR

```
public static final java.lang.String PROJECTVAR
```

Constant value: `{PROJECT}`

PROJECTQPVAR

```
public static final java.lang.String PROJECTQPVAR
```

Constant value: `{PROJECTQP}`

PROJECTQP

```
public static final java.lang.String PROJECTQP
```

Constant value: `&project={PROJECT}`

QUERYPARAMS

```
public static final java.lang.String QUERYPARAMS
```

Constant value: `?uploadType=multipart&name={FILENAME}{PROJECTQP}`

project

```
protected java.lang.String project
```

bucketName

```
protected java.lang.String bucketName
```

(continued from last page)

LINE_FEED

protected static final java.lang.String **LINE_FEED**

Constant value:

sendToBackupServer

protected boolean **sendToBackupServer**

httpWriterDebug

protected boolean **httpWriterDebug**

deleteSentChunks

protected boolean **deleteSentChunks**

fakePosts

protected boolean **fakePosts**

isSendSSL

protected boolean **isSendSSL**

isPlaybackSSL

protected boolean **isPlaybackSSL**

connectionTimeout

protected int **connectionTimeout**

readWriteTimeout

protected int **readWriteTimeout**

(continued from last page)

Constructors

PushPublishHTTPCupertinoGoogleHandler

```
public PushPublishHTTPCupertinoGoogleHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Initiates the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

connect

```
public void connect()
```

resetConnection

```
public void resetConnection()
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

isSendToBackupServer

```
public boolean isSendToBackupServer()
```

setSendToBackupServer

```
public void setSendToBackupServer(boolean backup)
```

updateGroupMasterPlaylistPlaybackURI

```
public boolean updateGroupMasterPlaylistPlaybackURI(String groupName,  
    PlaylistModel masterPlaylist)
```

updateMasterPlaylistPlaybackURI

```
public boolean updateMasterPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaPlaylistPlaybackURI

```
public boolean updateMediaPlaylistPlaybackURI(PlaylistModel playlist)
```

updateMediaSegmentPlaybackURI

```
public boolean updateMediaSegmentPlaybackURI(MediaSegmentModel mediaSegment)
```

sendGroupMasterPlaylist

```
public int sendGroupMasterPlaylist(String groupName,  
    PlaylistModel masterPlaylist)
```

sendMasterPlaylist

```
public int sendMasterPlaylist(PlaylistModel playlist)
```

sendMediaPlaylist

```
public int sendMediaPlaylist(PlaylistModel playlist)
```

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sendMediaSegment

```
public int sendMediaSegment(MediaSegmentModel mediaSegment)
```

deleteMediaSegment

```
public int deleteMediaSegment(MediaSegmentModel mediaSegment)
```

getDestiationLogData

```
public String getDestiationLogData()
```

Get a JSON formatted string of data that represents the destination to include with the connect/disconnect logging

getDestinationDomain

```
public String getDestinationDomain()
```

getDestinationPath

```
public String getDestinationPath()
```

getContextStr

```
public String getContextStr()
```

getIngressURL

```
public String getIngressURL()
```

getPlaybackURL

```
public String getPlaybackURL()
```

getPlaybackDomain

```
public String getPlaybackDomain()
```

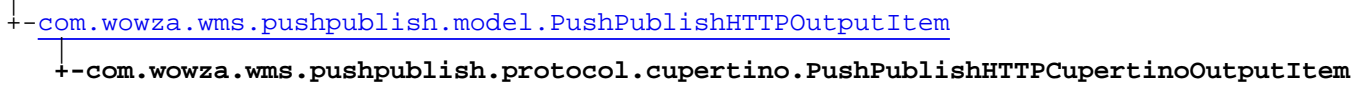
getPlaybackPath

```
public String getPlaybackPath()
```

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com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoOutputItem

java.lang.Object



public class **PushPublishHTTPCupertinoOutputItem**
extends [PushPublishHTTPOutputItem](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItem](#)

[chunkLists](#), [chunks](#), [liveStreamPacketizer](#), [playlistStrA](#), [playlistStrB](#)

Constructor Summary

public	PushPublishHTTPCupertinoOutputItem (String[] chunkLists)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishHTTPCupertinoOutputItem

public **PushPublishHTTPCupertinoOutputItem**(String[] chunkLists)

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoOutputItemChunk

java.lang.Object

└─ [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

└─

com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoOutputItemChunk

```
public class PushPublishHTTPCupertinoOutputItemChunk
    extends PushPublishHTTPOutputItemChunk
```

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk](#)

[chunk](#), [isCustomChunkId](#), [playlistEntry](#), [renditionIndex](#)

Constructor Summary

public	PushPublishHTTPCupertinoOutputItemChunk (int renditionIndex)
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PushPublishHTTPCupertinoOutputItemChunk

```
public PushPublishHTTPCupertinoOutputItemChunk(int renditionIndex)
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoPlaylistEntry

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

└-

com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoPlaylistEntry

```
public class PushPublishHTTPCupertinoPlaylistEntry
extends PushPublishHTTPPlaylistEntry
```

Field Summary

public	chunkListId
public	isCustomChunkId
public	playlistChunkByteRange
public	playlistChunkDescription
public	playlistChunkDiscontinuity
public	playlistChunkKey
public	playlistChunkMap
public	playlistChunkMediaName
public	playlistDuration
public	playlistHeader

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

[delete](#)

Constructor Summary

public	PushPublishHTTPCupertinoPlaylistEntry()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

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Fields

playlistHeader

```
public java.lang.String playlistHeader
```

playlistChunkKey

```
public java.lang.String playlistChunkKey
```

playlistChunkDiscontinuity

```
public java.lang.String playlistChunkDiscontinuity
```

playlistChunkDescription

```
public java.lang.String playlistChunkDescription
```

playlistChunkMap

```
public java.lang.String playlistChunkMap
```

playlistChunkByteRange

```
public java.lang.String playlistChunkByteRange
```

playlistDuration

```
public double playlistDuration
```

playlistChunkMediaName

```
public java.lang.String playlistChunkMediaName
```

chunkListId

```
public long chunkListId
```

(continued from last page)

isCustomChunkId

```
public boolean isCustomChunkId
```

Constructors

PushPublishHTTPCupertinoPlaylistEntry

```
public PushPublishHTTPCupertinoPlaylistEntry()
```


com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishHTTPCupertinoUtil

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.cupertino.PushPublishHTTPCupertinoUtil

All Implemented Interfaces:

[IPushPublishProfileUtil](#)

public class **PushPublishHTTPCupertinoUtil**
extends Object
implements [IPushPublishProfileUtil](#)

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishHTTPCupertinoUtil
public static final	HTTPADAPTER_NAME Value: cupertinostreaming
public static final	PROPERTYNAME_TRACKER Value: PushPublishHTTPCupertinoTracker

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[PROPERTY_LOG_DEBUG_MANIFEST](#)

Constructor Summary

public	PushPublishHTTPCupertinoUtil()
--------	--

Method Summary

void	addTagToPlaylist (PlaylistModel playlist, int idx, TagModel tag) Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model
void	addTagToPlaylist (PlaylistModel playlist, TagModel tag) Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model
ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties)

PlaylistModel	createMasterPlaylist (String context, boolean logDebugManifest) Creates a master playlist and propagates the context string from this implementation to the returned playlist model
PlaylistModel	createMediaPlaylist (int renditionIdx, PushPublishHTTPCupertinoHisEntry , String context, boolean logDebugManifest) Creates a empty media playlist and propagates the context from this implementation to the returned playlist
MediaSegmentModel	createMediaSegmentModel (boolean debugLog) Creates an empty media segment model and propagates the context from the implementation to the returned media segment model
TagModel	createTag (Class clazz, String context) Create a TagModel of the provided TagModel
PlaylistModel	getMediaPlaylistForRendition (PlaylistModel masterPlaylist, int renditionIndex)
int	getMediaPlaylistRenditionIndex (PlaylistModel mediaPlaylist)
String	getMediaSegmentProgramDateTime (MediaSegmentModel mediaSegment)
long	getMediaSegmentSize (MediaSegmentModel mediaSegment)
long	getMediaSegmentIndex (MediaSegmentModel mediaSegment)
boolean	isMediaSegmentDelete (MediaSegmentModel mediaSegment)
boolean	isMediaSegmentSent (MediaSegmentModel mediaSegment)
boolean	isParent (java.util.Map entry)
void	onDeleteEntry (java.util.Map entry)
void	onReadEntry (java.util.Map entry)
void	onWriteEntry (java.util.Map oldEntry, java.util.Map newEntry)
void	setApplicationInstance (IApplicationInstance appInstance)
void	setApplicationName (String appName)
void	setMediaPlaylistRenditionIndex (PlaylistModel mediaPlaylist, int index)
void	setMediaSegmentProgramDateTime (MediaSegmentModel mediaSegment, String progDateTime)
void	setMediaSegmentSize (MediaSegmentModel mediaSegment)
void	setMediaSegmentDelete (MediaSegmentModel mediaSegment, boolean delete)

void	<u>setMediaSegmentIndex</u> (<u>MediaSegmentModel</u> mediaSegment, long index)
void	<u>setMediaSegmentSent</u> (<u>MediaSegmentModel</u> mediaSegment, boolean sent)
void	<u>setVHost</u> (<u>IVHost</u> vhost)
boolean	<u>validateEntry</u> (java.util.Map entry)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[createGroupPlaylist](#), [isParent](#), [onDeleteEntry](#), [onReadEntry](#), [onWriteEntry](#), [setApplicationInstance](#), [setApplicationName](#), [setVHost](#), [validateEntry](#)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPCupertinoUtil**

PROPERTYNAME_TRACKER

```
public static final java.lang.String PROPERTYNAME_TRACKER
```

Constant value: **PushPublishHTTPCupertinoTracker**

HTTPADAPTER_NAME

```
public static final java.lang.String HTTPADAPTER_NAME
```

Constant value: **cupertinostreaming**

Constructors

PushPublishHTTPCupertinoUtil

```
public PushPublishHTTPCupertinoUtil()
```

Methods

onWriteEntry

```
public void onWriteEntry(java.util.Map oldEntry,  
    java.util.Map newEntry)
```

onReadEntry

```
public void onReadEntry(java.util.Map entry)
```

onDeleteEntry

```
public void onDeleteEntry(java.util.Map entry)
```

validateEntry

```
public boolean validateEntry(java.util.Map entry)
```

isParent

```
public boolean isParent(java.util.Map entry)
```

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

createTag

```
public TagModel createTag(Class clazz,  
    String context)
```

Create a TagModel of the provided TagModel

Parameters:

clazz - Class of the TagModel to create

Returns:

a new instance of the TagModel requested

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addTagToPlaylist

```
public void addTagToPlaylist(PlaylistModel playlist,  
    TagModel tag)
```

Adds the provided TagModel to the end of the list of TagModels for the provided Playlist Model

Parameters:

playlist - to add the TagModel to
tag - to add to the playlist

addTagToPlaylist

```
public void addTagToPlaylist(PlaylistModel playlist,  
    int idx,  
    TagModel tag)
```

Adds the provided TagModel to the list of TagModels at the idx for the provided Playlist Model

Parameters:

playlist - to add the TagModel to
idx - index where to insert the TagModel at
tag - Model to insert into the list of TagModels

createMasterPlaylist

```
public PlaylistModel createMasterPlaylist(String context,  
    boolean logDebugManifest)
```

Creates a master playlist and propagates the context string from this implemenation to the returned playlist model

Returns:

a new master playlist

createMediaPlaylist

```
public PlaylistModel createMediaPlaylist(int renditionIdx,  
    PushPublishHTTPCupertino hlsEntry,  
    String context,  
    boolean logDebugManifest)
```

Creates a empty media playlist and propagates the context from this implemenation to the returned playlist

Returns:

a new media playlist

createMediaSegmentModel

```
public MediaSegmentModel createMediaSegmentModel(boolean debugLog)
```

Creates an empty media segment model and propagates the context from the implementation to the returnd media segment model

Returns:

media segment model

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setMediaPlaylistRenditionIndex

```
public void setMediaPlaylistRenditionIndex(PlaylistModel mediaPlaylist,  
int index)
```

getMediaPlaylistRenditionIndex

```
public int getMediaPlaylistRenditionIndex(PlaylistModel mediaPlaylist)
```

getMediaPlaylistForRendtion

```
public PlaylistModel getMediaPlaylistForRendtion(PlaylistModel masterPlaylist,  
int renditionIndex)
```

setMediaSegmentIndex

```
public void setMediaSegmentIndex(MediaSegmentModel mediaSegment,  
long index)
```

getMediaSegmentIndex

```
public long getMediaSegmentIndex(MediaSegmentModel mediaSegment)
```

setMediaSegmentDelete

```
public void setMediaSegmentDelete(MediaSegmentModel mediaSegment,  
boolean delete)
```

isMediaSegmentDelete

```
public boolean isMediaSegmentDelete(MediaSegmentModel mediaSegment)
```

setMediaSegmentSent

```
public void setMediaSegmentSent(MediaSegmentModel mediaSegment,  
boolean sent)
```

isMediaSegmentSent

```
public boolean isMediaSegmentSent(MediaSegmentModel mediaSegment)
```

setMediaSegementSize

```
public void setMediaSegementSize(MediaSegmentModel mediaSegment)
```

getMediaSegementSize

```
public long getMediaSegementSize(MediaSegmentModel mediaSegment)
```

setMediaSegementProgramDateTime

```
public void setMediaSegementProgramDateTime(MediaSegmentModel mediaSegment,  
String progDateTime)
```

getMediaSegementProgramDateTime

```
public String getMediaSegementProgramDateTime(MediaSegmentModel mediaSegment)
```

setVHost

```
public void setVHost(IVHost vhost)
```

setApplicationName

```
public void setApplicationName(String appName)
```

setApplicationInstance

```
public void setApplicationInstance(IApplicationInstance appInstance)
```

com.wowza.wms.pushpublish.protocol.cupertino Class PushPublishUtilsWSC

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.cupertino.PushPublishUtilsWSC

public final class **PushPublishUtilsWSC**
extends Object

Field Summary

public static final	CLASSNAME
	Value: PushPublishWSCUtils

Constructor Summary

public	PushPublishUtilsWSC()
--------	---------------------------------------

Method Summary

static java.util.Map	getCloudStorageProviders()
static int	getIntFromString(String in) Decodes a String into an integer value.
static long	getLongFromString(String in) Decodes a String into an long integer value.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **PushPublishWSCUtils**

Constructors

PushPublishUtilsWSC

public **PushPublishUtilsWSC()**

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Methods

getCloudStorageProviders

```
public static java.util.Map getCloudStorageProviders()
```

getIntFromString

```
public static int getIntFromString(String in)
```

Decodes a String into an integer value. Invalid strings return 0.

Parameters:

in - string representation of integer

Returns:

integer value

getLongFromString

```
public static long getLongFromString(String in)
```

Decodes a String into a long integer value. Invalid strings return 0.

Parameters:

in - string representation of long integer

Returns:

long integer value

Package

com.wowza.wms.pushpublish.protocol.rtmp

com.wowza.wms.pushpublish.protocol.rtmp Interface IPushPublishRTMPAuthProvider

All Known Implementing Classes:

[PushPublishRTMPAuthProviderBase](#)

public interface **IPushPublishRTMPAuthProvider**
extends

Method Summary

abstract String	addAuthQueryString (String queryString)
abstract String	getPassword ()
abstract PushPublishRTMP	getPublisher ()
abstract String	getUserName ()
abstract void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	init (PushPublishRTMP publisher)
abstract void	setPassword (String password)
abstract void	setUserName (String userName)

Methods

init

public abstract void **init**([PushPublishRTMP](#) publisher)

addAuthQueryString

public abstract String **addAuthQueryString**(String queryString)

handleConnectResponse

public abstract void **handleConnectResponse**(com.wowza.wms.request.RequestFunction function, [AMFDataList](#) params)

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getUserName

```
public abstract String getUserName()
```

setUserName

```
public abstract void setUserName(String userName)
```

getPassword

```
public abstract String getPassword()
```

setPassword

```
public abstract void setPassword(String password)
```

getPublisher

```
public abstract PushPublishRTMP getPublisher()
```

com.wowza.wms.pushpublish.protocol.rtmp Interface IPushPublishRTMPNotify

All Known Implementing Classes:

[PushPublishRTMPNotifyBase](#)

public interface **IPushPublishRTMPNotify**
extends

Method Summary

abstract void	onAkamaiClientLogin (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onAkamaiSetChallenge (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onAkamaiSetOriginConnectionInfo (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onConnect (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onConnectFailure (PushPublishRTMPNetConnectionSession pushPublisherSession)
abstract void	onConnectStart (PushPublishRTMPNetConnectionSession pushPublisherSession)
abstract void	onConnectSuccess (PushPublishRTMPNetConnectionSession pushPublisherSession)
abstract void	onFCAnnounce (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onFCPublish (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
abstract void	onPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes)
abstract void	onPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession)

abstract void	<u>onPushPublisherSessionDestroy</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession)
abstract void	<u>onReleaseStream</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession, com.wowza.wms.request.RequestFunction function, <u>AMFDataList</u> params)
abstract void	<u>onSessionClosed</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession)
abstract void	<u>onSessionIdle</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession)
abstract void	<u>onSessionOpened</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession)
abstract void	<u>onStreamCreate</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession, com.wowza.wms.request.RequestFunction function, <u>AMFDataList</u> params)
abstract void	<u>onStreamOnPlayStatus</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession, com.wowza.wms.request.RequestFunction function, <u>AMFDataList</u> params)
abstract void	<u>onStreamOnStatus</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession, com.wowza.wms.request.RequestFunction function, <u>AMFDataList</u> params)
abstract void	<u>onValidateSession</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession)
abstract void	<u>onValidateSessionResult</u> (<u>PushPublishRTMPNetConnectionSession</u> pushPublisherSession, boolean result)

Methods

onConnectStart

```
public abstract void onConnectStart(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onConnectSuccess

```
public abstract void onConnectSuccess(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onConnectFailure

```
public abstract void onConnectFailure(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onHandshakeResult

```
public abstract void onHandshakeResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetChallenge

```
public abstract void onAkamaiSetChallenge(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetOriginConnectionInfo

```
public abstract void
onAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiClientLogin

```
public abstract void onAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCPublish

```
public abstract void onFCPublish(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCAnnounce

```
public abstract void onFCAnnounce(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

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onReleaseStream

```
public abstract void onReleaseStream(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onConnect

```
public abstract void onConnect(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamCreate

```
public abstract void onStreamCreate(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamOnPlayStatus

```
public abstract void onStreamOnPlayStatus(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamOnStatus

```
public abstract void onStreamOnStatus(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onPublishHandlerPlay

```
public abstract void onPublishHandlerPlay(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    java.io.OutputStream out,
    long[] playSizes)
```

onSessionIdle

```
public abstract void onSessionIdle(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onSessionOpened

```
public abstract void onSessionOpened(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onSessionClosed

```
public abstract void onSessionClosed(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onValidateSession

```
public abstract void onValidateSession(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onValidateSessionResult

```
public abstract void onValidateSessionResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
        boolean result)
```

onPushPublisherSessionCreate

```
public abstract void onPushPublisherSessionCreate(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

onPushPublisherSessionDestroy

```
public abstract void onPushPublisherSessionDestroy(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMP

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishBase](#)

└- com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP

All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishRTMPProfileHandler](#)

```
public class PushPublishRTMP  
extends PushPublishBase
```

PushPublish

Sample Code to push to Wowza Server or Adobe Media Server (no authentication)

This method should work with **Level 3** as well as long as the publishing application on not authenticated.

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("localhost");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");

    // Uncomment if pushing to Adobe Media Server
    //publisher.setSendOriginalTimecodes(true);
    //publisher.setOriginalTimecodeThreshold(0x100000);

    // SecureToken shared secret
    //publisher.setSecureTokenSharedSecret("#ed%h0#w@1");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to Wowza Server or Adobe Media Server (RTMP username/password authentication)

This method should work with **Level 3** as well if the publishing application is protected using RTMP authentication.

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("localhost");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");
    publisher.setConnectionFlashVersion(PushPublishRTMP.CURRENTFMLEVERSION);

    // Uncomment if pushing to Adobe Media Server
    //publisher.setSendOriginalTimecodes(true);
    //publisher.setOriginalTimecodeThreshold(0x100000);

    // SecureToken shared secret
    //publisher.setSecureTokenSharedSecret("#ed%h0#w@1");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    PushPublishRTMPAuthProviderAdobe adobeRTMPAuthProvider = new
PushPublishRTMPAuthProviderAdobe();

    adobeRTMPAuthProvider.init(publisher);
    adobeRTMPAuthProvider.setUserName("username");
    adobeRTMPAuthProvider.setPassword("password");
    publisher.setRTMPAuthProvider(adobeRTMPAuthProvider);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to Akamai

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    String streamId = "12345";
    String akamaiUsername = "56789";
    String akamaiPassword = "changeme";
    boolean isPrimary = true;
    String hostname = (isPrimary?"p":"b")+".ep"+streamId+".i.akamaientrypoint.net";
    String dstApplicationName = "EntryPoint";
    String dstStreamName = "myStream"+"@"+streamId;

    publisher.setHostname(hostname);
    publisher.setPort(1935);
    publisher.setDstApplicationName(dstApplicationName);
    publisher.setDstStreamName(dstStreamName);
    publisher.setDebugLog(true);

    publisher.setConnectionFlashVersion(PushPublishRTMP.getPushPublishVersionStr());

    if (PushPublishRTMP.isFlashVersionFMLE(publisher.getConnectionFlashVersion()))
    {
        PushPublishRTMPAuthProviderAdobe adobeRTMPAuthProvider = new
PushPublishRTMPAuthProviderAdobe();

        adobeRTMPAuthProvider.init(publisher);
        adobeRTMPAuthProvider.setUserName(akamaiUsername);
        adobeRTMPAuthProvider.setPassword(akamaiPassword);

        publisher.setRTMPAuthProvider(adobeRTMPAuthProvider);
    }
    else
    {
        publisher.setAkamaiUserName(akamaiUsername);
        publisher.setAkamaiPassword(akamaiPassword);
    }

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setSendStreamCloseCommands(true);

    publisher.setSendOriginalTimecodes(true);
    publisher.setOriginalTimecodeThreshold(0x100000);

    publisher.connect();
}
```

```
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to **Limelight**

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(appInstance);
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("fmspush.lax.llnw.net");
    publisher.setPort(1935);
    publisher.setDstApplicationName("live");
    publisher.setDstStreamName("myStream");

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.setSendOriginalTimecodes(true);
    publisher.setOriginalTimecodeThreshold(0x100000);

    PushPublishRTMPAuthProviderLimelight limelightRTMPAuthProvider = new
PushPublishRTMPAuthProviderLimelight();

    limelightRTMPAuthProvider.init(publisher);
    limelightRTMPAuthProvider.setUserName("username");
    limelightRTMPAuthProvider.setPassword("password");
    publisher.setRTMPAuthProvider(limelightRTMPAuthProvider);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Sample Code to push to **BitGravity** (streaming needs to be setup per instructions in **BG Live 3rd Party Encoder Configuration** guide.)

```
try
{
    PushPublishRTMP publisher = new PushPublishRTMP();

    // Source stream
    publisher.setAppInstance(client.getAppInstance());
    publisher.setSrcStreamName("myStream");

    // Destination stream
    publisher.setHostname("rtpdev1.iad1.bitgravity.com");
    publisher.setPort(1935);
    publisher.setDstApplicationName("rtmp");
    publisher.setDstAppInstanceName("push");

    publisher.setDstStreamName("test@test.com/71d73d4cfd1e2f2fed77238021a2cbbe/test/live/feed01")
;

    publisher.setSendFCPublish(true);
    publisher.setSendReleaseStream(true);
    publisher.setDebugLog(true);

    publisher.connect();
}
catch(Exception e)
{
    WMSLoggerFactory.getLogger(null).info(CLASSNAME+"RTMP: ", e);
}
```

Nested Class Summary

class	PushPublishRTMP.STATE PushPublishRTMP.STATE
-------	--

Field Summary

protected	akamaiOriginIp
protected	akamaiOriginPort
protected	akamaiPassword
protected	akamaiUserName

protected	bindAddress
public	bytesAvg
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMP
protected	connectAttemptCount
protected	connectionFlashVersion
protected	connectionPageURL
protected	connectionQueryStr
protected	connectionResetCount
protected	connectionState
protected	connectionSwfURL
protected	connectionTimeout
protected	connectLastAttempt
protected	connectLastSuccess
protected	connectMetaData
public static final	CURRENTFLASHVERSION Value: WIN 10,0,12,36
public static final	CURRENTFMLEVERSION Value: FMLE/3.0 (compatible; FMSc/1.0)
protected	debugLogLastPacketCount
protected	debugPackets
protected	doSendOnMetaData
protected	dstAppInstanceName
protected	dstApplicationName
protected	howToPublish

protected	<u>ioSessionToSessionHolder</u>
protected	<u>isReconnectorRunning</u>
protected	<u>isSSL</u>
protected	<u>lastAudioTC</u>
protected	<u>lastDataTC</u>
protected	<u>lastIdleReadTime</u>
protected	<u>lastIdleWriteTime</u>
protected	<u>lastVideoKeyFrameTC</u>
protected	<u>lastVideoTC</u>
protected	<u>listeners</u>
protected	<u>lock</u>
protected	<u>netconnectToSessionHolder</u>
public	<u>offlineTime</u>
public	<u>onlineTime</u>
protected	<u>onMetadataFilter</u>
protected	<u>onMetadataItemsToAdd</u>
protected	<u>onMetadataItemsToRemove</u>
protected	<u>onMetadataToSetDataFrame</u>
protected	<u>originalTimecodeOffset</u>
protected	<u>originalTimecodeThreshold</u>
public	<u>outprint</u>
protected	<u>packetsSentAudio</u>
protected	<u>packetsSentData</u>
protected	<u>packetsSentVideo</u>

protected	<u>packetsSentVideoKeyFrame</u>
protected	<u>pingPongListenerRegistered</u>
protected	<u>queryString</u>
protected	<u>removeDefaultAppInstance</u>
protected	<u>resetOnTimecodeOutOfOrder</u>
protected	<u>rtmpAuthProvider</u>
protected	<u>rtmpDebugLog</u>
protected	<u>secureTokenSharedSecret</u>
protected	<u>sendFCAnnounce</u>
protected	<u>sendFCPublish</u>
protected	<u>sendOnMetadata</u>
protected	<u>sendOriginalTimecodes</u>
protected	<u>sendReleaseStream</u>
protected	<u>sendStreamCloseCommands</u>
protected	<u>sendStreamCloseCommandsSendTime</u>
protected	<u>sessionOrder</u>
protected	<u>srcStreamBufferSize</u>
protected	<u>streamCloseWaitTime</u>
protected	<u>syncPacketType</u>
protected	<u>syncTimecode</u>
protected	<u>timecodesOutOfOrderThreshold</u>
protected	<u>totalPacketsSent</u>
protected	<u>tryConnect</u>
protected	<u>usePingPong</u>

protected	validationFrequency
protected	waitOnMetadataAudio
protected	waitOnMetadataAudioDataRate
protected	waitOnMetadataAvailable
protected	waitOnMetadataReady
protected	waitOnMetadataStarttime
protected	waitOnMetadataTimeout
protected	waitOnMetadataVideo
protected	waitOnMetadataVideoDataRate

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMP()
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Method Summary

void	addConnectMetaData (String key, AMFData value) Added metadata values to the connect metadata object
void	addListener (IPushPublishRTMPNotify listener) Add IPushPublishRTMPNotify listener
void	addOnMetadataItemToRemove (String name)
void	addSession (PushPublishRTMPNetConnectionSession sessionHolder) Add session

void	<u>bumpReconnectWaitTime()</u> Bump the reconnect wait time
void	<u>callConnect(PushPublishRTMPNetConnectionSession pushPublisherSession, String addQueryStr)</u> Internal connect
void	<u>connect()</u> Connect to server
<u>AMFDataList</u>	<u>convertDataEvenToAMFData(AMFPacket packet)</u>
<u>AMFPacket</u>	<u>convertOnMetadadataToSetDataFrame(AMFPacket packet)</u>
<u>PushPublishRTMPNetConnectionPublisher</u>	<u>createNetConnectionPublisher(PushPublishRTMPNetConnectionSession pushPublisherSession)</u>
<u>IPushPublishSession</u>	<u>createPushPublishSession()</u>
void	<u>disconnect()</u> Disconnect from server
void	<u>disconnect(boolean hard)</u>
<u>AMFPacket</u>	<u>filterOnMetadadataEvent(AMFPacket packet, long flags, java.util.List itemsToRemove, java.util.Map itemsToAdd)</u>
String	<u>getAkamaiOriginIp()</u> Get Akamai Origin IP
int	<u>getAkamaiOriginPort()</u> Get Akamai Origin Port
String	<u>getAkamaiPassword()</u> Get Akamai password
String	<u>getAkamaiSessionKey(String sessionId)</u> Get Akamai session key
String	<u>getAkamaiUserName()</u> Get Akamai user name
<u>IApplicationInstance</u>	<u>getAppInstance()</u> Get appInstance interface
String	<u>getBindAddress()</u>
long	<u>getConnectAttemptCount()</u>
int	<u>getConnectedState()</u>
String	<u>getConnectionFlashVerion()</u> Get Flash version used in connection metadata
String	<u>getConnectionFlashVersion()</u> Get Flash version used in connection metadata

String	<u>getConnectionPageURL()</u> Get Page URL used in connection metadata
String	<u>getConnectionQueryStr()</u> Get the connection query string
String	<u>getConnectionSwfURL()</u> Get SWF URL used in connection metadata
int	<u>getConnectionTimeout()</u> Get the connection timeout (milliseconds)
long	<u>getConnectLastAttempt()</u> Get timestamp of last connection attempt
long	<u>getConnectLastSuccess()</u> Get timestamp of last successful connection
String	<u>getContextStr()</u> Get the connection details
String	<u>getDstAppInstanceName()</u> Get destination appInstance name
String	<u>getDstApplicationName()</u> Get destination application name
String	<u>getDstStreamName()</u> Get destination stream name
String	<u>getHowToPublish()</u> Get the howToPublish string (valid values are "live", "record" and "append")
long	<u>getLastAudioTC()</u> Get the absolute timecode of the last sent audio packet (milliseconds)
long	<u>getLastDataTC()</u> Get the absolute timecode of the last sent data packet (milliseconds)
<u>PushPublishRTMPNetConnectionSession</u>	<u>getLastSession()</u> Get the last session interface
long	<u>getLastVideoKeyFrameTC()</u> Get the absolute timecode of the last sent video keyframe packet (milliseconds)
long	<u>getLastVideoTC()</u> Get the absolute timecode of the last sent video packet (milliseconds)
java.util.List	<u>getLocalListeners()</u> Get a list of IPushPublishRTMPNotify listeners
Object	<u>getLock()</u> Get the synchronization lock
long	<u>getMessagesAttemptedCount()</u>
long	<u>getMessagesFailedCount()</u>

long	<u>getMessagesRetriedCount</u> ()
<u>INetConnection</u>	<u>getNetConnection</u> () Get the underlying INetConnection interface for this session
long	<u>getOnMetadataFilter</u> ()
long	<u>getOriginalTimecodeOffset</u> ()
long	<u>getOriginalTimecodeThreshold</u> () Get the original timecode threshold.
long	<u>getPacketsSentAudio</u> ()
long	<u>getPacketsSentData</u> ()
long	<u>getPacketsSentVideo</u> ()
long	<u>getPacketsSentVideoKeyFrame</u> ()
int	<u>getPort</u> () Get destination server port
String	<u>getQueryString</u> () Get the queryString
int	<u>getReconnectDelay</u> (long currTime) Get the reconnect delay
java.net.SocketAddresses	<u>getRemoteIpAddress</u> ()
<u>IPushPublishRTMPAuthProvider</u>	<u>getRTMPAuthProvider</u> () Get RTMP authentication provider
String	<u>getSecureTokenSharedSecret</u> () Get SecureToken shared secret
<u>PushPublishRTMPNetConnectionSession</u>	<u>getSessionHolderByNetConnection</u> (<u>INetConnection</u> netConnection) Get the session holder by INetConnection interface
<u>PushPublishRTMPNetConnectionSession</u>	<u>getSessionHolderBySession</u> (org.apache.mina.common.IoSession session) Get session holder by IoSession
String	<u>getSessionListDebug</u> () Get the list of active IoSession ids for this publishing session
long	<u>getSrcStreamBufferSize</u> () The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will begin.
String	<u>getSrcStreamName</u> () Get source stream name
int	<u>getStreamCloseWaitTime</u> () Get stream close timeout (milliseconds)

int	<u>getSyncPacketType()</u>
long	<u>getSyncTimecode()</u>
int	<u>getTimecodesOutOfOrderThreshold()</u>
long	<u>getTotalPacketsSent()</u> Get total number of packets sent during push publishing session
long	<u>getValidationFrequency()</u> Get connection validation frequency (millisecond).
long	<u>getWaitOnMetadataTimeout()</u> Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
org.apache.mina.common. IoSession	<u>internalConnect(PushPublishRTMPNetConnectionSession pushPublisherSession)</u> Internal connect method
boolean	<u>isCurrentSession()</u> (org.apache.mina.common.IoSession session) Test to see if passed in session is current session
boolean	<u>isDebugLog()</u> Is debug logging turned on
boolean	<u>isDebugPackets()</u> Set to true to log every packet being sent
static boolean	<u>isFlashVerionFMLE()</u> (String flashVersion) Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)
static boolean	<u>isFlashVersionFMLE()</u> (String flashVersion) Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)
boolean	<u>isOnMetadataReady()</u> (IMediaStream stream, AMFPacket packet)
boolean	<u>isOnMetadataToSetDataFrame()</u> If true all onMetadata events are converted to @setDataFrame calls
boolean	<u>isRemoveDefaultAppInstance()</u> If true and destination application instance is _definst_ then the application instance name will not be sent to the remove server as part of the connection information.
boolean	<u>isResetOnTimecodeOutOfOrder()</u> Set to true if you wish push to reset if timecodes jump out of order.
boolean	<u>isSendFCAnnounce()</u> If true call FCAnnounce(streamName) after connecting to server
boolean	<u>isSendFCPublish()</u> If true call FCPublish(streamName) after connecting to server
boolean	<u>isSendOnMetadata()</u> True if sending onMetadata event at start of stream

boolean	<u>isSendOriginalTimecodes()</u> true if sending the original timecodes of source stream.
boolean	<u>isSendReleaseStream()</u> If true call releaseStream(streamName) after connecting to server
boolean	<u>isSendStreamCloseCommands()</u> If true will send FCUnpublish, closeStream, deleteStream on disconnect
boolean	<u>isSSL()</u>
boolean	<u>isWaitOnMetadataAudio()</u> If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.
boolean	<u>isWaitOnMetadataAudioDatarate()</u>
boolean	<u>isWaitOnMetadataAvailable()</u> Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream.
boolean	<u>isWaitOnMetadataVideo()</u> If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.
boolean	<u>isWaitOnMetadataVideoDatarate()</u>
void	<u>notifyAkamaiClientLogin(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)</u> Notify Akamai ClientLogin
void	<u>notifyAkamaiSetChallenge(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)</u> Notify Akamai SetChallenge
void	<u>notifyAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)</u> Notify Akamai SetOriginConnectionInfo
void	<u>notifyConnect(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)</u> Notify connect
void	<u>notifyConnectFailure(PushPublishRTMPNetConnectionSession pushPublisherSession)</u> Notify connect failure
void	<u>notifyConnectStart(PushPublishRTMPNetConnectionSession pushPublisherSession)</u> Notify connect start
void	<u>notifyConnectSuccess(PushPublishRTMPNetConnectionSession pushPublisherSession)</u> Notify connect success

void	notifyFCAnnounce (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify FCAnnounce
void	notifyFCPublish (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify FCPublish
void	notifyHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify handshake result
void	notifyPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes) Notify publish handler play
void	notifyPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session create
void	notifyPushPublisherSessionDestroy (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session destroy
void	notifySessionClosed (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session closed
void	notifySessionIdle (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session idle event
void	notifySessionOpened (PushPublishRTMPNetConnectionSession pushPublisherSession) Notify session opened
void	notifyStreamCreate (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify stream create
void	notifyStreamOnPlayStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify OnPlayStatus
void	notifyStreamOnStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify StreamOnStatus
void	notifyValidateSession (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	notifyValidateSessionResult (PushPublishRTMPNetConnectionSession pushPublisherSession, boolean result)
void	putOnMetadataItemToAdd (String name, AMFData value)

boolean	<u>removeListener</u> (<u>IPushPublishRTMPNotify</u> listener) Remove IPushPublishRTMPNotify listener
void	<u>removeSession</u> (<u>PushPublishRTMPNetConnectionSession</u> sessionHolder) Remove session
void	<u>resetConnection</u> () Reset server connection
void	<u>resetConnection</u> (boolean noDelay) Reset server connection
String	<u>resolveHostName</u> () Resolve host name to connect to
void	<u>sessionClosed</u> (org.apache.mina.common.IoSession session) Internal callback
void	<u>sessionOpened</u> (org.apache.mina.common.IoSession session) Internal callback
void	<u>setAkamaiOriginIp</u> (String akamaiOriginIp) Set Akamai Origin IP
void	<u>setAkamaiOriginPort</u> (int akamaiOriginPort) Set Akamai Origin Port
void	<u>setAkamaiPassword</u> (String akamaiPassword) Set Akamai password
void	<u>setAkamaiUserName</u> (String akamaiUserName) Set Akamai user name
void	<u>setAppInstance</u> (<u>IApplicationInstance</u> appInstance) Set appInstance interface
void	<u>setBindAddress</u> (String bindAddress)
void	<u>setConnectionFlashVersion</u> (String connectionFlashVersion) Set Flash version used in connection metadata
void	<u>setConnectionFlashVersion</u> (String connectionFlashVersion) Set Flash version used in connection metadata
void	<u>setConnectionPageURL</u> (String connectionPageURL) Set Page URL used in connection metadata
void	<u>setConnectionQueryStr</u> (String connectionQueryStr) Set the connection query string
void	<u>setConnectionSwfURL</u> (String connectionSwfURL) Set SWF URL used in connection metadata
void	<u>setConnectionTimeout</u> (int connectionTimeout) Set the connection timeout (milliseconds)
void	<u>setConnectLastAttempt</u> (long connectLastAttempt) Set timestamp of last connection attempt

void	<u>setConnectLastSuccess</u> (long connectLastSuccess) Set timestamp of last successful connection
void	<u>setDebugLog</u> (boolean debugLog) Set debug logging
void	<u>setDebugPackets</u> (boolean debugPackets) Set to true to log every packet being sent
void	<u>setDstAppInstanceName</u> (String dstAppInstanceName) Set destination appInstance name
void	<u>setDstApplicationName</u> (String dstApplicationName) Set destination application name
void	<u>setDstStreamName</u> (String dstStreamName) Set destination stream name
void	<u>setHowToPublish</u> (String howToPublish) Set the howToPublish string (valid values are "live", "record" and "append")
void	<u>setOnMetadataFilter</u> (long onMetadataFilter)
void	<u>setOnMetadataToSetDataFrame</u> (boolean onMetadataToSetDataFrame) If true all onMetadata events are converted to @setDataFrame calls
void	<u>setOriginalTimecodeOffset</u> (long originalTimecodeOffset)
void	<u>setOriginalTimecodeThreshold</u> (long originalTimecodeThreshold) Set the original timecode threshold.
void	<u>setOriginalTimecodeThreshold</u> (String i)
void	<u>setPort</u> (int port) Set destination server port
void	<u>setQueryString</u> (String queryString) Set the queryString, as set in the map file
void	<u>setRemoveDefaultAppInstance</u> (boolean removeDefaultAppInstance) If true and destination application instance is _definst_ then the application instance name will not be sent to the remove server as part of the connection information.
void	<u>setResetOnTimecodeOutOfOrder</u> (boolean resetOnTimecodeOutOfOrder) Set to true if you wish push to reset if timecodes jump out of order.
void	<u>setRTMPAuthProvider</u> (<u>IPushPublishRTMPAuthProvider</u> rtmpAuthProvider) Set RTMP authentication provider
void	<u>setSecureTokenSharedSecret</u> (String secureTokenSharedSecret) Set SecureToken shared secret
void	<u>setSendFCAnnounce</u> (boolean sendFCAnnounce) If true call FCAnnounce(streamName) after connecting to server
void	<u>setSendFCPublish</u> (boolean sendFCPublish) If true call FCPublish(streamName) after connecting to server

void	<u>setSendOnMetadata</u> (boolean sendOnMetadata) True if sending onMetadata event at start of stream
void	<u>setSendOriginalTimecodes</u> (boolean sendOriginalTimecodes) true if sending the original timecodes of source stream.
void	<u>setSendReleaseStream</u> (boolean sendReleaseStream) If true call releaseStream(streamName) after connecting to server
void	<u>setSendStreamCloseCommands</u> (boolean sendStreamCloseCommands) If true will send FCUnpublish, closeStream, deleteStream on disconnect
void	<u>setSrcStreamBufferSize</u> (long srcStreamBufferSize) The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will begin.
void	<u>setSrcStreamName</u> (String srcStreamName) Set source stream name
void	<u>setSSL</u> (boolean isSSL)
void	<u>setStreamCloseWaitTime</u> (int streamCloseWaitTime) Set stream close timeout (milliseconds)
void	<u>setStreamDebugLog</u> (boolean debugLog)
void	<u>setSyncPacketType</u> (int syncPacketType)
void	<u>setSyncTimecode</u> (long syncTimecode)
void	<u>setTimecodesOutOfOrderThreshold</u> (int timecodesOutOfOrderThreshold)
void	<u>setValidationFrequency</u> (long validationFrequency) Set connection validation frequency (millisecond).
void	<u>setWaitOnMetadataAudio</u> (boolean waitOnMetadataAudio) If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.
void	<u>setWaitOnMetadataAudioDatarate</u> (boolean waitOnMetadataAudioDatarate)
void	<u>setWaitOnMetadataAvailable</u> (boolean waitOnMetadataAvailable) Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream.
void	<u>setWaitOnMetadataTimeout</u> (long waitOnMetadataTimeout) Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
void	<u>setWaitOnMetadataVideo</u> (boolean waitOnMetadataVideo) If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.
void	<u>setWaitOnMetadataVideoDatarate</u> (boolean waitOnMetadataVideoDatarate)
void	<u>tryToConnect</u> (<u>PushPublishRTMP.STATE</u> connectionState) Try to connect to server

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugEnabled](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

public static final [java.lang.Class](#) **CLASS**

CLASSNAME

public static final [java.lang.String](#) **CLASSNAME**

Constant value: **PushPublishRTMP**

CURRENTFMLEVERSION

public static final [java.lang.String](#) **CURRENTFMLEVERSION**

Constant value: **FMLE/3.0 (compatible; FMSc/1.0)**

CURRENTFLASHVERSION

public static final java.lang.String **CURRENTFLASHVERSION**

Constant value: **WIN 10,0,12,36**

rtmpDebugLog

protected boolean **rtmpDebugLog**

debugLogLastPacketCount

protected long **debugLogLastPacketCount**

debugPackets

protected boolean **debugPackets**

netconnectToSessionHolder

protected java.util.Map **netconnectToSessionHolder**

ioSessionToSessionHolder

protected java.util.Map **ioSessionToSessionHolder**

sessionOrder

protected java.util.List **sessionOrder**

listeners

protected java.util.List **listeners**

dstApplicationName

protected java.lang.String **dstApplicationName**

(continued from last page)

dstAppInstanceName

protected java.lang.String **dstAppInstanceName**

lock

protected java.lang.Object **lock**

howToPublish

protected java.lang.String **howToPublish**

sendFCPublish

protected boolean **sendFCPublish**

sendFCAnnounce

protected boolean **sendFCAnnounce**

sendReleaseStream

protected boolean **sendReleaseStream**

sendStreamCloseCommands

protected boolean **sendStreamCloseCommands**

sendOnMetadata

protected boolean **sendOnMetadata**

onMetadataToSetDataFrame

protected boolean **onMetadataToSetDataFrame**

onMetadataFilter

protected long **onMetadataFilter**

(continued from last page)

onMetadataItemsToRemove

protected java.util.List **onMetadataItemsToRemove**

onMetadataItemsToAdd

protected java.util.Map **onMetadataItemsToAdd**

timecodesOutOfOrderThreshold

protected int **timecodesOutOfOrderThreshold**

tryConnect

protected boolean **tryConnect**

isReconnectorRunning

protected boolean **isReconnectorRunning**

connectionQueryStr

protected java.lang.String **connectionQueryStr**

queryString

protected java.lang.String **queryString**

connectionFlashVersion

protected java.lang.String **connectionFlashVersion**

connectionSwfURL

protected java.lang.String **connectionSwfURL**

(continued from last page)

connectionPageURL

protected java.lang.String **connectionPageURL**

secureTokenSharedSecret

protected java.lang.String **secureTokenSharedSecret**

akamaiUserName

protected java.lang.String **akamaiUserName**

akamaiPassword

protected java.lang.String **akamaiPassword**

akamaiOriginIp

protected java.lang.String **akamaiOriginIp**

akamaiOriginPort

protected java.lang.Integer **akamaiOriginPort**

validationFrequency

protected long **validationFrequency**

sendOriginalTimecodes

protected boolean **sendOriginalTimecodes**

originalTimecodeThreshold

protected long **originalTimecodeThreshold**

originalTimecodeOffset

protected long **originalTimecodeOffset**

(continued from last page)

connectionTimeout

protected int **connectionTimeout**

connectLastAttempt

protected long **connectLastAttempt**

connectLastSuccess

protected long **connectLastSuccess**

connectionResetCount

protected long **connectionResetCount**

connectAttemptCount

protected long **connectAttemptCount**

connectionState

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE
connectionState

doSendOnMetaData

protected boolean **doSendOnMetaData**

removeDefaultAppInstance

protected boolean **removeDefaultAppInstance**

resetOnTimecodeOutOfOrder

protected boolean **resetOnTimecodeOutOfOrder**

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sendStreamCloseCommandsSendTime

protected long **sendStreamCloseCommandsSendTime**

streamCloseWaitTime

protected int **streamCloseWaitTime**

lastIdleReadTime

protected long **lastIdleReadTime**

lastIdleWriteTime

protected long **lastIdleWriteTime**

totalPacketsSent

protected long **totalPacketsSent**

lastVideoTC

protected long **lastVideoTC**

lastVideoKeyFrameTC

protected long **lastVideoKeyFrameTC**

lastAudioTC

protected long **lastAudioTC**

lastDataTC

protected long **lastDataTC**

packetsSentAudio

protected long **packetsSentAudio**

(continued from last page)

packetsSentVideo

protected long **packetsSentVideo**

packetsSentVideoKeyFrame

protected long **packetsSentVideoKeyFrame**

packetsSentData

protected long **packetsSentData**

waitOnMetadataAvailable

protected boolean **waitOnMetadataAvailable**

waitOnMetadataVideo

protected boolean **waitOnMetadataVideo**

waitOnMetadataVideoDatarate

protected boolean **waitOnMetadataVideoDatarate**

waitOnMetadataAudio

protected boolean **waitOnMetadataAudio**

waitOnMetadataAudioDatarate

protected boolean **waitOnMetadataAudioDatarate**

waitOnMetadataTimeout

protected long **waitOnMetadataTimeout**

(continued from last page)

waitOnMetadataReady

protected boolean **waitOnMetadataReady**

waitOnMetadataStartime

protected long **waitOnMetadataStartime**

srcStreamBufferSize

protected long **srcStreamBufferSize**

bindAddress

protected java.lang.String **bindAddress**

rtmpAuthProvider

protected com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider
rtmpAuthProvider

connectMetaData

protected java.util.Map **connectMetaData**

offlineTime

public long **offlineTime**

onlineTime

public long **onlineTime**

outprint

public int **outprint**

bytesAvg

public float **bytesAvg**

(continued from last page)

isSSL

protected boolean **isSSL**

usePingPong

protected boolean **usePingPong**

pingPongListenerRegistered

protected boolean **pingPongListenerRegistered**

syncTimecode

protected long **syncTimecode**

syncPacketType

protected int **syncPacketType**

Constructors

PushPublishRTMP

public **PushPublishRTMP**()

Methods

createNetConnectionPublisher

protected [PushPublishRTMPNetConnectionPublisher](#)
createNetConnectionPublisher([PushPublishRTMPNetConnectionSession](#) pushPublisherSession)

getNetConnection

public [INetConnection](#) **getNetConnection**()

Get the underlying INetConnection interface for this session

Returns:

INetConnection interface for this session

getLock

```
public Object getLock()
```

Get the synchronization lock

Returns:

synchronization lock

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get the connection timeout (milliseconds)

Returns:

connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

getHowToPublish

```
public String getHowToPublish()
```

Get the howToPublish string (valid values are "live", "record" and "append")

Returns:

howToPublish string

setHowToPublish

```
public void setHowToPublish(String howToPublish)
```

Set the howToPublish string (valid values are "live", "record" and "append")

Parameters:

howToPublish - howToPublish string

isSendFCPublish

```
public boolean isSendFCPublish()
```

If true call FCPublish(streamName) after connecting to server

Returns:

true if calling FCPublish(streamName) after connecting to server

setSendFCPublish

```
public void setSendFCPublish(boolean sendFCPublish)
```

(continued from last page)

If true call FCPublish(streamName) after connecting to server

Parameters:

sendFCPublish - true if calling FCPublish(streamName) after connecting to server

isSendReleaseStream

```
public boolean isSendReleaseStream( )
```

If true call releaseStream(streamName) after connecting to server

Returns:

true if calling releaseStream(streamName) after connecting to server

setSendReleaseStream

```
public void setSendReleaseStream(boolean sendReleaseStream)
```

If true call releaseStream(streamName) after connecting to server

Parameters:

sendReleaseStream - true if calling releaseStream(streamName) after connecting to server

getSessionListDebug

```
public String getSessionListDebug( )
```

Get the list of active IoSession ids for this publishing session

Returns:

list of active IoSession ids for this publishing session

isCurrentSession

```
public boolean isCurrentSession(org.apache.mina.common.IoSession session)
```

Test to see if passed in session is current session

Parameters:

session - IoSession interface

Returns:

true if current session

getLastSession

```
public PushPublishRTMPNetConnectionSession getLastSession( )
```

Get the last session interface

Returns:

last session interface

addSession

```
public void addSession(PushPublishRTMPNetConnectionSession sessionHolder)
```

Add session

(continued from last page)

Parameters:

sessionHolder - session holder

removeSession

```
public void removeSession(PushPublishRTMPNetConnectionSession sessionHolder)
```

Remove session

Parameters:

sessionHolder - session holder

getSessionHolderBySession

```
public PushPublishRTMPNetConnectionSession  
getSessionHolderBySession(org.apache.mina.common.Session session)
```

Get session holder by IoSession

Parameters:

session - IoSession

Returns:

session holder

getSessionHolderByNetConnection

```
public PushPublishRTMPNetConnectionSession  
getSessionHolderByNetConnection(INetConnection netConnection)
```

Get the session holder by INetConnection interface

Parameters:

netConnection - INetConnection interface

Returns:

session holder

sessionOpened

```
public void sessionOpened(org.apache.mina.common.Session session)
```

Internal callback

Parameters:

session - IoSession

sessionClosed

```
public void sessionClosed(org.apache.mina.common.Session session)
```

Internal callback

Parameters:

session - IoSession

(continued from last page)

tryToConnect

```
protected void tryToConnect(PushPublishRTMP.STATE connectionState)
```

Try to connect to server

resetConnection

```
public void resetConnection()
```

Reset server connection

resetConnection

```
public void resetConnection(boolean noDelay)
```

Reset server connection

Parameters:

noDelay - if true reset immediately

getContextStr

```
public String getContextStr()
```

Get the connection details

Returns:

connection details

resolveHostName

```
protected String resolveHostName()
```

Resolve host name to connect to

Returns:

hostname

internalConnect

```
protected org.apache.mina.common.IoSession  
internalConnect(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

Internal connect method

Parameters:

pushPublisherSession - session holder

Returns:

Io session

getRemoteIpAddress

```
public java.net.SocketAddress getRemoteIpAddress()
```

getConnectionQueryStr

```
public String getConnectionQueryStr()
```

Get the connection query string

Returns:

connection query string

setConnectionQueryStr

```
public void setConnectionQueryStr(String connectionQueryStr)
```

Set the connection query string

Parameters:

connectionQueryStr - connection query string

getQueryString

```
public String getQueryString()
```

Get the queryString

Parameters:

queryString

setQueryString

```
public void setQueryString(String queryString)
```

Set the queryString, as set in the map file

Parameters:

queryString

connect

```
public void connect()
```

Connect to server

callConnect

```
protected void callConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,  
String addQueryStr)
```

Internal connect

Parameters:

pushPublisherSession - session holder

addQueryStr - additional query params

getAkamaiSessionKey

```
public String getAkamaiSessionKey(String sessionId)
```

(continued from last page)

Get Akamai session key

Parameters:

sessionId - session Id

Returns:

Akamai session key

getConnectionFlashVerion

```
public String getConnectionFlashVerion()
```

Get Flash version used in connection metadata

Returns:

Flash version used in connection metadata

getConnectionFlashVersion

```
public String getConnectionFlashVersion()
```

Get Flash version used in connection metadata

Returns:

Flash version used in connection metadata

setConnectionFlashVersion

```
public void setConnectionFlashVersion(String connectionFlashVersion)
```

Set Flash version used in connection metadata

Parameters:

connectionFlashVersion - Flash version used in connection metadata

setConnectionFlashVerion

```
public void setConnectionFlashVerion(String connectionFlashVersion)
```

Set Flash version used in connection metadata

Parameters:

connectionFlashVersion - Flash version used in connection metadata

getConnectionSwfURL

```
public String getConnectionSwfURL()
```

Get SWF URL used in connection metadata

Returns:

SWF URL used in connection metadata

setConnectionSwfURL

```
public void setConnectionSwfURL(String connectionSwfURL)
```

Set SWF URL used in connection metadata

(continued from last page)

Parameters:

connectionSwfURL - SWF URL used in connection metadata

getConnectionPageURL

```
public String getConnectionPageURL()
```

Get Page URL used in connection metadata

Returns:

Page URL used in connection metadata

setConnectionPageURL

```
public void setConnectionPageURL(String connectionPageURL)
```

Set Page URL used in connection metadata

Parameters:

connectionPageURL - Page URL used in connection metadata

getSecureTokenSharedSecret

```
public String getSecureTokenSharedSecret()
```

Get SecureToken shared secret

Returns:

SecureToken shared secret

setSecureTokenSharedSecret

```
public void setSecureTokenSharedSecret(String secureTokenSharedSecret)
```

Set SecureToken shared secret

Parameters:

secureTokenSharedSecret - SecureToken shared secret

getAkamaiUserName

```
public String getAkamaiUserName()
```

Get Akamai user name

Returns:

Akamai user name

setAkamaiUserName

```
public void setAkamaiUserName(String akamaiUserName)
```

Set Akamai user name

Parameters:

akamaiUserName - Akamai user name

(continued from last page)

getAkamaiPassword

```
public String getAkamaiPassword()
```

Get Akamai password

Returns:

Akamai password

setAkamaiPassword

```
public void setAkamaiPassword(String akamaiPassword)
```

Set Akamai password

Parameters:

akamaiPassword - Akamai password

getAkamaiOriginIp

```
public String getAkamaiOriginIp()
```

Get Akamai Origin IP

Returns:

Akamai Origin IP

setAkamaiOriginIp

```
public void setAkamaiOriginIp(String akamaiOriginIp)
```

Set Akamai Origin IP

Parameters:

akamaiOriginIp - Akamai Origin IP

getAkamaiOriginPort

```
public int getAkamaiOriginPort()
```

Get Akamai Origin Port

Returns:

Akamai Origin Port

setAkamaiOriginPort

```
public void setAkamaiOriginPort(int akamaiOriginPort)
```

Set Akamai Origin Port

Parameters:

akamaiOriginPort - Akamai Origin Port

isSendFCAnnounce

```
public boolean isSendFCAnnounce()
```

(continued from last page)

If true call FCAnnounce(streamName) after connecting to server

Returns:

true if calling FCAnnounce(streamName) after connecting to server

setSendFCAnnounce

```
public void setSendFCAnnounce(boolean sendFCAnnounce)
```

If true call FCAnnounce(streamName) after connecting to server

Parameters:

sendFCAnnounce - true if calling FCAnnounce(streamName) after connecting to server

getValidationFrequency

```
public long getValidationFrequency()
```

Get connection validation frequency (millisecond). Zero to turn off validation.

Returns:

connection validation frequency (millisecond)

setValidationFrequency

```
public void setValidationFrequency(long validationFrequency)
```

Set connection validation frequency (millisecond). Zero to turn off validation.

Parameters:

validationFrequency - connection validation frequency (millisecond)

addListener

```
public void addListener(IPushPublishRTMPNotify listener)
```

Add IPushPublishRTMPNotify listener

Parameters:

listener - IPushPublishRTMPNotify listener

removeListener

```
public boolean removeListener(IPushPublishRTMPNotify listener)
```

remove IPushPublishRTMPNotify listener

Parameters:

listener - IPushPublishRTMPNotify listener

Returns:

true if removed

getLocalListeners

```
protected java.util.List getLocalListeners()
```

Get a list of IPushPublishRTMPNotify listeners

(continued from last page)

Returns:

list of IPushPublishRTMPNotify listeners

notifyConnectStart

```
protected void notifyConnectStart(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

Notify connect start

Parameters:

pushPublisherSession - session holder

notifyConnectSuccess

```
protected void notifyConnectSuccess(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

Notify connect success

Parameters:

pushPublisherSession - session holder

notifyConnectFailure

```
protected void notifyConnectFailure(PushPublishRTMPNetConnectionSession
pushPublisherSession)
```

Notify connect failure

Parameters:

pushPublisherSession - session holder

notifyHandshakeResult

```
protected void notifyHandshakeResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify handshake result

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyAkamaiSetChallenge

```
protected void notifyAkamaiSetChallenge(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify Akamai SetChallenge

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyAkamaiSetOriginConnectionInfo

```
protected void notifyAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify Akamai SetOriginConnectionInfo

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyAkamaiClientLogin

```
protected void notifyAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify Akamai ClientLogin

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyFCPublish

```
protected void notifyFCPublish(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify FCPublish

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyFCAnnounce

```
protected void notifyFCAnnounce(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

Notify FCAnnounce

Parameters:

pushPublisherSession - session holder
function - function
params - params

(continued from last page)

notifyConnect

```
protected void notifyConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify connect

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyStreamCreate

```
protected void notifyStreamCreate(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify stream create

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyStreamOnPlayStatus

```
protected void notifyStreamOnPlayStatus(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify OnPlayStatus

Parameters:

pushPublisherSession - session holder
function - function
params - params

notifyStreamOnStatus

```
protected void notifyStreamOnStatus(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Notify StreamOnStatus

Parameters:

pushPublisherSession - session holder
function - function
params - params

(continued from last page)

notifyPublishHandlerPlay

```
protected void notifyPublishHandlerPlay(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    java.io.OutputStream out,  
    long[] playSizes)
```

Notify publish handler play

Parameters:

pushPublisherSession - session holder
out - output stream
playSizes - play sizes

notifySessionIdle

```
protected void notifySessionIdle(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify session idle event

Parameters:

pushPublisherSession - session holder

notifySessionOpened

```
protected void notifySessionOpened(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify session opened

Parameters:

pushPublisherSession - session holder

notifySessionClosed

```
protected void notifySessionClosed(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify session closed

Parameters:

pushPublisherSession - session holder

notifyValidateSession

```
protected void notifyValidateSession(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

notifyValidateSessionResult

```
protected void notifyValidateSessionResult(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    boolean result)
```

(continued from last page)

notifyPushPublisherSessionCreate

```
protected void notifyPushPublisherSessionCreate(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify session create

Parameters:

pushPublisherSession - session holder

notifyPushPublisherSessionDestroy

```
protected void notifyPushPublisherSessionDestroy(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

Notify session destroy

Parameters:

pushPublisherSession - session holder

getConnectLastAttempt

```
public long getConnectLastAttempt()
```

Get timestamp of last connection attempt

Returns:

timestamp of last connection attempt

getConnectAttemptCount

```
public long getConnectAttemptCount()
```

setConnectLastAttempt

```
public void setConnectLastAttempt(long connectLastAttempt)
```

Set timestamp of last connection attempt

Parameters:

connectLastAttempt - timestamp of last connection attempt

bumpReconnectWaitTime

```
protected void bumpReconnectWaitTime()
```

Bump the reconnect wait time

getReconnectDelay

```
protected int getReconnectDelay(long currTime)
```

Get the reconnect delay

Parameters:

currTime - current timestamp

(continued from last page)

Returns:

delay in milliseconds

getConnectLastSuccess

```
public long getConnectLastSuccess()
```

Get timestamp of last successful connection

Returns:

timestamp of last successful connection

setConnectLastSuccess

```
public void setConnectLastSuccess(long connectLastSuccess)
```

Set timestamp of last successful connection

Parameters:

connectLastSuccess - timestamp of last successful connection

isSendOriginalTimecodes

```
public boolean isSendOriginalTimecodes()
```

true if sending the original timecodes of source stream. false if starting at zero.

Returns:

true if sending the original timecodes of source stream

setSendOriginalTimecodes

```
public void setSendOriginalTimecodes(boolean sendOriginalTimecodes)
```

true if sending the original timecodes of source stream. false if starting at zero.

Parameters:

sendOriginalTimecodes - true if sending the original timecodes of source stream

getOriginalTimecodeThreshold

```
public long getOriginalTimecodeThreshold()
```

Get the original timecode threshold. This value will attempt to reduce the magnitude of absolute timecodes while keeping multiple-bitrate alignment. It is probably best to set this value quite high to a value such as 0x100000. The value is in milliseconds. The following formula is used to calculate a timecode offset $\text{timecodeOffset} = \text{timecode} - (\text{timecode} \% \text{originalTimecodeThreshold})$;

Returns:

original timecode threshold

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(long originalTimecodeThreshold)
```

Set the original timecode threshold. This value will attempt to reduce the magnitude of absolute timecodes while keeping multiple-bitrate alignment. It is probably best to set this value quite high to a value such as 0x100000. The value is in milliseconds. The following formula is used to calculate a timecode offset $\text{timecodeOffset} = \text{timecode} - (\text{timecode} \% \text{originalTimecodeThreshold})$;

(continued from last page)

Parameters:

originalTimecodeThreshold - original timecode threshold

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(String i)
```

isDebugLog

```
public boolean isDebugLog()
```

Is debug logging turned on

Returns:

true if debug logging is turned on

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging

Parameters:

debugLog - debug logging

setStreamDebugLog

```
public void setStreamDebugLog(boolean debugLog)
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get appInstance interface

Returns:

appInstance interface

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set appInstance interface

Parameters:

appInstance - appInstance interface

getSrcStreamName

```
public String getSrcStreamName()
```

Get source stream name

(continued from last page)

Returns:

source stream name

setSrcStreamName

```
public void setSrcStreamName(String srcStreamName)
```

Set source stream name

Parameters:

srcStreamName - source stream name

getDstStreamName

```
public String getDstStreamName()
```

Get destination stream name

Returns:

destination stream name

setDstStreamName

```
public void setDstStreamName(String dstStreamName)
```

Set destination stream name

Parameters:

dstStreamName - destination stream name

getPort

```
public int getPort()
```

Get destination server port

Returns:

destination server port

setPort

```
public void setPort(int port)
```

Set destination server port

Parameters:

port - destination server port

getDstApplicationName

```
public String getDstApplicationName()
```

Get destination application name

Returns:

destination application name

(continued from last page)

setDstApplicationName

```
public void setDstApplicationName(String dstApplicationName)
```

Set destination application name

Parameters:

dstApplicationName - destination application name

getDstAppInstanceName

```
public String getDstAppInstanceName()
```

Get destination appInstance name

Returns:

destination appInstance name

setDstAppInstanceName

```
public void setDstAppInstanceName(String dstAppInstanceName)
```

Set destination appInstance name

Parameters:

dstAppInstanceName - destination appInstance name

getRTMPAuthProvider

```
public IPushPublishRTMPAuthProvider getRTMPAuthProvider()
```

Get RTMP authentication provider

Returns:

RTMP authentication provider

setRTMPAuthProvider

```
public void setRTMPAuthProvider(IPushPublishRTMPAuthProvider rtmpAuthProvider)
```

Set RTMP authentication provider

Parameters:

rtmpAuthProvider - RTMP authentication provider

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

True if sending onMetadata event at start of stream

Returns:

True if sending onMetadata event at start of stream

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

(continued from last page)

True if sending onMetadata event at start of stream

Parameters:

sendOnMetadata - True if sending onMetadata event at start of stream

isRemoveDefaultAppInstance

```
public boolean isRemoveDefaultAppInstance( )
```

If true and destination application instance is `_definst_` then the application instance name will not be sent to the remove server as part of the connection information.

Returns:

true if omitting `_definst_`

setRemoveDefaultAppInstance

```
public void setRemoveDefaultAppInstance(boolean removeDefaultAppInstance)
```

If true and destination application instance is `_definst_` then the application instance name will not be sent to the remove server as part of the connection information.

Parameters:

removeDefaultAppInstance - true if omitting `_definst_`

isOnMetadataToSetDataFrame

```
public boolean isOnMetadataToSetDataFrame( )
```

If true all onMetadata events are converted to `@setDataFrame` calls

Returns:

true all onMetadata events are converted to `@setDataFrame` calls

setOnMetadataToSetDataFrame

```
public void setOnMetadataToSetDataFrame(boolean onMetadataToSetDataFrame)
```

If true all onMetadata events are converted to `@setDataFrame` calls

Parameters:

onMetadataToSetDataFrame - true all onMetadata events are converted to `@setDataFrame` calls

isSendStreamCloseCommands

```
public boolean isSendStreamCloseCommands( )
```

If true will send `FCUnpublish`, `closeStream`, `deleteStream` on disconnect

Returns:

true will send close commands

setSendStreamCloseCommands

```
public void setSendStreamCloseCommands(boolean sendStreamCloseCommands)
```

If true will send `FCUnpublish`, `closeStream`, `deleteStream` on disconnect

Parameters:

(continued from last page)

sendStreamCloseCommands - true will send close commands

convertDataEventToAMFData

```
public AMFDataList convertDataEventToAMFData(AMFPacket packet)
```

convertOnMetadataToSetDataFrame

```
public AMFPacket convertOnMetadataToSetDataFrame(AMFPacket packet)
```

filterOnMetadataEvent

```
public AMFPacket filterOnMetadataEvent(AMFPacket packet,  
    long flags,  
    java.util.List itemsToRemove,  
    java.util.Map itemsToAdd)
```

getStreamCloseWaitTime

```
public int getStreamCloseWaitTime()
```

Get stream close timeout (milliseconds)

Returns:

stream close timeout (milliseconds)

setStreamCloseWaitTime

```
public void setStreamCloseWaitTime(int streamCloseWaitTime)
```

Set stream close timeout (milliseconds)

Parameters:

streamCloseWaitTime - stream close timeout (milliseconds)

disconnect

```
public void disconnect()
```

Disconnect from server

disconnect

```
public void disconnect(boolean hard)
```

isFlashVerionFMLE

```
public static boolean isFlashVerionFMLE(String flashVersion)
```

Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)

(continued from last page)

Parameters:

flashVersion - true if Flash Media Live Encoder version

Returns:

true if flash

isFlashVersionFMLE

```
public static boolean isFlashVersionFMLE(String flashVersion)
```

Returns true if the Flash player version string is a Flash Media Live Encoder version (start with FMLE/ or FME/)

Parameters:

flashVersion - true if Flash Media Live Encoder version

Returns:

true if flash

isDebugPackets

```
public boolean isDebugPackets()
```

Set to true to log every packet being sent

Returns:

true to log every packet being sent

setDebugPackets

```
public void setDebugPackets(boolean debugPackets)
```

Set to true to log every packet being sent

Parameters:

debugPackets - true to log every packet being sent

getTotalPacketsSent

```
public long getTotalPacketsSent()
```

Get total number of packets sent during push publishing session

Returns:

total number of packets sent during push publishing session

isResetOnTimecodeOutOfOrder

```
public boolean isResetOnTimecodeOutOfOrder()
```

Set to true if you wish push to reset if timecodes jump out of order.

Returns:

true if you wish push to reset if timecodes jump out of order

setResetOnTimecodeOutOfOrder

```
public void setResetOnTimecodeOutOfOrder(boolean resetOnTimecodeOutOfOrder)
```

(continued from last page)

Set to true if you wish push to reset if timecodes jump out of order.

Parameters:

resetOnTimecodeOutOfOrder - true if you wish push to reset if timecodes jump out of order

getTimecodesOutOfOrderThreshold

```
public int getTimecodesOutOfOrderThreshold()
```

setTimecodesOutOfOrderThreshold

```
public void setTimecodesOutOfOrderThreshold(int timecodesOutOfOrderThreshold)
```

getLastVideoTC

```
public long getLastVideoTC()
```

Get the absolute timecode of the last sent video packet (milliseconds)

Returns:

absolute timecode of the last sent video packet (milliseconds)

getLastVideoKeyFrameTC

```
public long getLastVideoKeyFrameTC()
```

Get the absolute timecode of the last sent video keyframe packet (milliseconds)

Returns:

absolute timecode of the last sent video keyframe packet (milliseconds)

getLastAudioTC

```
public long getLastAudioTC()
```

Get the absolute timecode of the last sent audio packet (milliseconds)

Returns:

absolute timecode of the last sent audio packet (milliseconds)

getLastDataTC

```
public long getLastDataTC()
```

Get the absolute timecode of the last sent data packet (milliseconds)

Returns:

absolute timecode of the last sent data packet (milliseconds)

isOnMetadataReady

```
protected boolean isOnMetadataReady(IMediaStream stream,  
    AMFPacket packet)
```

isWaitOnMetadataAvailable

```
public boolean isWaitOnMetadataAvailable()
```

Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream. Default is true. If stream is audio or video only, be sure to use setWaitOnMetadataVideo and setWaitOnMetadataAudio to properly turn off the channel you are not using or the system will always timeout.

Returns:

true to turn on system that will monitor onMetadata packet

setWaitOnMetadataAvailable

```
public void setWaitOnMetadataAvailable(boolean waitOnMetadataAvailable)
```

Set to true to turn on system that will monitor onMetadata packet and wait for it to be populated before it starts sending the stream. Default is true. If stream is audio or video only, be sure to use setWaitOnMetadataVideo and setWaitOnMetadataAudio to properly turn off the channel you are not using or the system will always timeout.

Parameters:

waitOnMetadataAvailable - true to turn on system that will monitor onMetadata packet

isWaitOnMetadataVideo

```
public boolean isWaitOnMetadataVideo()
```

If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.

Returns:

publishing will not start until onMetadata packet is populated with video data

setWaitOnMetadataVideo

```
public void setWaitOnMetadataVideo(boolean waitOnMetadataVideo)
```

If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with video data.

Parameters:

waitOnMetadataVideo - publishing will not start until onMetadata packet is populated with video data

isWaitOnMetadataAudio

```
public boolean isWaitOnMetadataAudio()
```

If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.

Returns:

publishing will not start until onMetadata packet is populated with audio data

setWaitOnMetadataAudio

```
public void setWaitOnMetadataAudio(boolean waitOnMetadataAudio)
```

If true and waitOnMetadataAvailable, publishing will not start until onMetadata packet is populated with audio data.

Parameters:

waitOnMetadataAudio - publishing will not start until onMetadata packet is populated with audio data

getWaitOnMetadataTimeout

```
public long getWaitOnMetadataTimeout()
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Returns:

timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated

setWaitOnMetadataTimeout

```
public void setWaitOnMetadataTimeout(long waitOnMetadataTimeout)
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Parameters:

waitOnMetadataTimeout - timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated

isWaitOnMetadataVideoDatarate

```
public boolean isWaitOnMetadataVideoDatarate()
```

setWaitOnMetadataVideoDatarate

```
public void setWaitOnMetadataVideoDatarate(boolean waitOnMetadataVideoDatarate)
```

isWaitOnMetadataAudioDatarate

```
public boolean isWaitOnMetadataAudioDatarate()
```

setWaitOnMetadataAudioDatarate

```
public void setWaitOnMetadataAudioDatarate(boolean waitOnMetadataAudioDatarate)
```

getSrcStreamBufferSize

```
public long getSrcStreamBufferSize()
```

The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will being.

Returns:

amount of audio/video in milliseconds that must be available

setSrcStreamBufferSize

```
public void setSrcStreamBufferSize(long srcStreamBufferSize)
```

(continued from last page)

The amount of audio/video in milliseconds that must be available in the source streams buffer before push publishing will being.

Parameters:

`srcStreamBufferSize` - amount of audio/video in milliseconds that must be available

addConnectMetaData

```
public void addConnectMetaData(String key,  
    AMFData value)
```

Added metadata values to the connect metadata object

Parameters:

`key` - key

`value` - [AMFDataObj](#) value

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getPacketsSentAudio

```
public long getPacketsSentAudio()
```

getPacketsSentVideo

```
public long getPacketsSentVideo()
```

getPacketsSentVideoKeyFrame

```
public long getPacketsSentVideoKeyFrame()
```

getPacketsSentData

```
public long getPacketsSentData()
```

isSSL

```
public boolean isSSL()
```

setSSL

```
public void setSSL(boolean isSSL)
```

getBindAddress

```
public String getBindAddress()
```

setBindAddress

```
public void setBindAddress(String bindAddress)
```

getConnectedState

```
public int getConnectedState()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

getSyncTimecode

```
public long getSyncTimecode()
```

setSyncTimecode

```
public void setSyncTimecode(long syncTimecode)
```

getSyncPacketType

```
public int getSyncPacketType()
```

setSyncPacketType

```
public void setSyncPacketType(int syncPacketType)
```

(continued from last page)

getOnMetadataFilter

```
public long getOnMetadataFilter()
```

setOnMetadataFilter

```
public void setOnMetadataFilter(long onMetadataFilter)
```

addOnMetadataItemToRemove

```
public void addOnMetadataItemToRemove(String name)
```

putOnMetadataItemToAdd

```
public void putOnMetadataItemToAdd(String name,  
    AMFData value)
```

getOriginalTimecodeOffset

```
public long getOriginalTimecodeOffset()
```

setOriginalTimecodeOffset

```
public void setOriginalTimecodeOffset(long originalTimecodeOffset)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMP.STATE

java.lang.Object

└- java.lang.Enum

└- com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE

All Implemented Interfaces:

java.io.Serializable, Comparable

public static final class **PushPublishRTMP.STATE**
extends Enum

Field Summary

public static final	CONNECTED
public static final	CONNECTING
public static final	DISCONNECTED
public static final	ERROR_CONNECTING

Method Summary

static PushPublishRTMP.STATE	valueOf (String name)
static PushPublishRTMP.STATE []	values ()

Methods inherited from class java.lang.Enum

clone, compareTo, equals, finalize, getDeclaringClass, hashCode, name, ordinal, toString, valueOf

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Comparable

compareTo

Fields

(continued from last page)

DISCONNECTED

```
public static final com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE  
DISCONNECTED
```

CONNECTING

```
public static final com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE  
CONNECTING
```

ERROR_CONNECTING

```
public static final com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE  
ERROR_CONNECTING
```

CONNECTED

```
public static final com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP.STATE  
CONNECTED
```

Methods

values

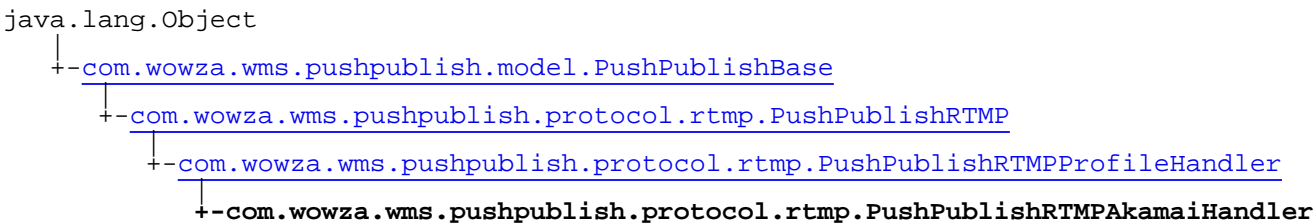
```
public static PushPublishRTMP.STATE\[\] values()
```

valueOf

```
public static PushPublishRTMP.STATE valueOf(String name)
```

com.wowza.wms.pushpublish.protocol.rtmp

Class PushPublishRTMPAkamaiHandler



All Implemented Interfaces:
[IPushPublish](#)

public class **PushPublishRTMPAkamaiHandler**
extends [PushPublishRTMPProfileHandler](#)

Field Summary	
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAkamaiHandler
protected	SendToBackupServer The is backup.
Fields inherited from class com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPProfileHandler	
CLASS , CLASSNAME , streamId	
Fields inherited from class com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP	

[akamaiOriginIp](#), [akamaiOriginPort](#), [akamaiPassword](#), [akamaiUserName](#), [bindAddress](#), [bytesAvg](#),
[CLASS](#), [CLASSNAME](#), [connectAttemptCount](#), [connectionFlashVersion](#), [connectionPageURL](#),
[connectionQueryStr](#), [connectionResetCount](#), [connectionState](#), [connectionSwfURL](#),
[connectionTimeout](#), [connectLastAttempt](#), [connectLastSuccess](#), [connectMetaData](#),
[CURRENTFLASHVERSION](#), [CURRENTFMLEVERSION](#), [debugLogLastPacketCount](#), [debugPackets](#),
[doSendOnMetaData](#), [dstAppInstanceName](#), [dstApplicationName](#), [howToPublish](#),
[ioSessionToSessionHolder](#), [isReconnectorRunning](#), [isSSL](#), [lastAudioTC](#), [lastDataTC](#),
[lastIdleReadTime](#), [lastIdleWriteTime](#), [lastVideoKeyFrameTC](#), [lastVideoTC](#), [listeners](#), [lock](#),
[netconnectToSessionHolder](#), [offlineTime](#), [onlineTime](#), [onMetadataFilter](#), [onMetadataItemsToAdd](#),
[onMetadataItemsToRemove](#), [onMetadataToSetDataFrame](#), [originalTimecodeOffset](#),
[originalTimecodeThreshold](#), [outprint](#), [packetsSentAudio](#), [packetsSentData](#), [packetsSentVideo](#),
[packetsSentVideoKeyFrame](#), [pingPongListenerRegistered](#), [queryString](#),
[removeDefaultAppInstance](#), [resetOnTimecodeOutOfOrder](#), [rtmpAuthProvider](#), [rtmpDebugLog](#),
[secureTokenSharedSecret](#), [sendFCAnnounce](#), [sendFCPublish](#), [sendOnMetaData](#),
[sendOriginalTimecodes](#), [sendReleaseStream](#), [sendStreamCloseCommands](#),
[sendStreamCloseCommandsSendTime](#), [sessionOrder](#), [srcStreamBufferSize](#), [streamCloseWaitTime](#),
[syncPacketType](#), [syncTimecode](#), [timecodesOutOfOrderThreshold](#), [totalPacketsSent](#), [tryConnect](#),
[usePingPong](#), [validationFrequency](#), [waitOnMetadataAudio](#), [waitOnMetadataAudioDatarate](#),
[waitOnMetadataAvailable](#), [waitOnMetadataReady](#), [waitOnMetadataStartime](#),
[waitOnMetadataTimeout](#), [waitOnMetadataVideo](#), [waitOnMetadataVideoDatarate](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#),
[destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#),
[isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#),
[profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#),
[reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#),
[totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#),
[CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#),
[PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#),
[PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#),
[PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMPAkamaiHandler()
--------	--

Method Summary

String	createAkamaiStreamName (String dstStreamName, IMediaStream stream)
String	getStreamAngle ()
String	getStreamBandWidth ()
void	init (IApplicationInstance appInstance2, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)

void	<u>load</u> (java.util.HashMap dataMap)
void	<u>setAkamaiOriginIp</u> (String akamaiOriginIp) Set Akamai Origin IP.
void	<u>setAkamaiOriginPort</u> (String akamaiOriginPort)
void	<u>setAkamaiPassword</u> (String string)
void	<u>setAkamaiStreamId</u> (String id) Sets the akamai stream id.
void	<u>setAkamaiUserName</u> (String string)
void	<u>setPassword</u> (String password)
void	<u>setStreamAngle</u> (String streamAngleIn)
void	<u>setStreamBandWidth</u> (String streamBandWidth)
void	<u>setStreamId</u> (String id)
void	<u>setUserName</u> (String userName)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPProfileHandler](#)

[getDstAppInstanceName](#), [getDstApplicationName](#), [getLocalBindAddress](#), [init](#), [isDebugLog](#),
[isDebugPackets](#), [isUsePingPong](#), [load](#), [setApplication](#), [setConnectionFlashVersion](#),
[setConnectionInfoPageURL](#), [setConnectionInfoQueryString](#), [setConnectionInfoSwfURL](#),
[setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugPackets](#),
[setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#),
[setHowToPublish](#), [setlocalBindAddress](#), [setOnMetadataToSetDataFrame](#),
[setOriginalTimecodeThreshold](#), [setQueryString](#), [setReconnectWaitTime](#),
[setRemoveDefaultAppInstance](#), [setResetOnTimecodeOutOfOrder](#),
[setSecureTokenSharedSecret](#), [setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#),
[setSendOriginalTimecodes](#), [setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSSL](#),
[setStreamCloseWaitTime](#), [setTimecodesOutOfOrderThreshold](#), [setUsePingPong](#),
[setUsePingPong](#), [setValidationFrequency](#), [setWaitOnMetadataAudio](#),
[setWaitOnMetadataAudioDatarate](#), [setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#),
[setWaitOnMetadataVideo](#), [setWaitOnMetadataVideoDatarate](#)

Methods inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[addConnectMetaData](#), [addListener](#), [addOnMetadataItemToRemove](#), [addSession](#),
[bumpReconnectWaitTime](#), [callConnect](#), [connect](#), [convertDataEventToAMFData](#),
[convertOnMetadataToSetDataFrame](#), [createNetConnectionPublisher](#),
[createPushPublishSession](#), [disconnect](#), [disconnect](#), [filterOnMetadataEvent](#),
[getAkamaiOriginIp](#), [getAkamaiOriginPort](#), [getAkamaiPassword](#), [getAkamaiSessionKey](#),
[getAkamaiUserName](#), [getAppInstance](#), [getBindAddress](#), [getConnectAttemptCount](#),
[getConnectedState](#), [getConnectionFlashVerion](#), [getConnectionFlashVersion](#),
[getConnectionPageURL](#), [getConnectionQueryStr](#), [getConnectionSwfURL](#),
[getConnectionTimeout](#), [getConnectLastAttempt](#), [getConnectLastSuccess](#), [getContextStr](#),
[getDstAppInstanceName](#), [getDstApplicationName](#), [getDstStreamName](#), [getHowToPublish](#),
[getLastAudioTC](#), [getLastDataTC](#), [getLastSession](#), [getLastVideoKeyFrameTC](#),
[getLastVideoTC](#), [getLocalListeners](#), [getLock](#), [getMessagesAttemptedCount](#),
[getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getNetConnection](#),
[getOnMetadataFilter](#), [getOriginalTimecodeOffset](#), [getOriginalTimecodeThreshold](#),
[getPacketsSentAudio](#), [getPacketsSentData](#), [getPacketsSentVideo](#),
[getPacketsSentVideoKeyFrame](#), [getPort](#), [getQueryString](#), [getReconnectDelay](#),
[getRemoteIpAddress](#), [getRTMPAuthProvider](#), [getSecureTokenSharedSecret](#),
[getSessionHolderByNetConnection](#), [getSessionHolderBySession](#), [getSessionListDebug](#),
[getSrcStreamBufferSize](#), [getSrcStreamName](#), [getStreamCloseWaitTime](#), [getSyncPacketType](#),
[getSyncTimecode](#), [getTimecodesOutOfOrderThreshold](#), [getTotalPacketsSent](#),
[getValidationFrequency](#), [getWaitOnMetadataTimeout](#), [internalConnect](#), [isCurrentSession](#),
[isDebugLog](#), [isDebugPackets](#), [isFlashVerionFMLE](#), [isFlashVersionFMLE](#), [isOnMetadataReady](#),
[isOnMetadataToSetDataFrame](#), [isRemoveDefaultAppInstance](#), [isResetOnTimecodeOutOfOrder](#),
[isSendFCAnnounce](#), [isSendFCPublish](#), [isSendOnMetadata](#), [isSendOriginalTimecodes](#),
[isSendReleaseStream](#), [isSendStreamCloseCommands](#), [isSSL](#), [isWaitOnMetadataAudio](#),
[isWaitOnMetadataAudioDatarate](#), [isWaitOnMetadataAvailable](#), [isWaitOnMetadataVideo](#),
[isWaitOnMetadataVideoDatarate](#), [notifyAkamaiClientLogin](#), [notifyAkamaiSetChallenge](#),
[notifyAkamaiSetOriginConnectionInfo](#), [notifyConnect](#), [notifyConnectFailure](#),
[notifyConnectStart](#), [notifyConnectSuccess](#), [notifyFCAnnounce](#), [notifyFCPublish](#),
[notifyHandshakeResult](#), [notifyPublishHandlerPlay](#), [notifyPushPublisherSessionCreate](#),
[notifyPushPublisherSessionDestroy](#), [notifySessionClosed](#), [notifySessionIdle](#),
[notifySessionOpened](#), [notifyStreamCreate](#), [notifyStreamOnPlayStatus](#),
[notifyStreamOnStatus](#), [notifyValidateSession](#), [notifyValidateSessionResult](#),
[putOnMetadataItemToAdd](#), [removeListener](#), [removeSession](#), [resetConnection](#),
[resetConnection](#), [resolveHostName](#), [sessionClosed](#), [sessionOpened](#), [setAkamaiOriginIp](#),
[setAkamaiOriginPort](#), [setAkamaiPassword](#), [setAkamaiUserName](#), [setAppInstance](#),
[setBindAddress](#), [setConnectionFlashVerion](#), [setConnectionFlashVersion](#),
[setConnectionPageURL](#), [setConnectionQueryStr](#), [setConnectionSwfURL](#),
[setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugLog](#),
[setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#),
[setHowToPublish](#), [setOnMetadataFilter](#), [setOnMetadataToSetDataFrame](#),
[setOriginalTimecodeOffset](#), [setOriginalTimecodeThreshold](#),
[setOriginalTimecodeThreshold](#), [setPort](#), [setQueryString](#), [setRemoveDefaultAppInstance](#),
[setResetOnTimecodeOutOfOrder](#), [setRTMPAuthProvider](#), [setSecureTokenSharedSecret](#),
[setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#), [setSendOriginalTimecodes](#),
[setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSrcStreamBufferSize](#),
[setSrcStreamName](#), [setSSL](#), [setStreamCloseWaitTime](#), [setStreamDebugLog](#),
[setSyncPacketType](#), [setSyncTimecode](#), [setTimecodesOutOfOrderThreshold](#),
[setValidationFrequency](#), [setWaitOnMetadataAudio](#), [setWaitOnMetadataAudioDatarate](#),
[setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#), [setWaitOnMetadataVideo](#),
[setWaitOnMetadataVideoDatarate](#), [tryToConnect](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugEnabled](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTMPAkamaiHandler**

SendToBackupServer

```
protected boolean SendToBackupServer
```

The is backup.

Constructors

(continued from last page)

PushPublishRTMPAkamaiHandler

```
public PushPublishRTMPAkamaiHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance2,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Initiates the instance.

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

setUserName

```
public void setUsername(String userName)
```

Set user name.

setPassword

```
public void setPassword(String password)
```

Set password.

setAkamaiOriginIp

```
public void setAkamaiOriginIp(String akamaiOriginIp)
```

Set Akamai Origin IP.

Parameters:

akamaiOriginIp - Akamai Origin IP

setAkamaiOriginPort

```
public void setAkamaiOriginPort(String akamaiOriginPort)
```

setAkamaiStreamId

```
public void setAkamaiStreamId(String id)
```

Sets the akamai stream id.

(continued from last page)

Parameters:

id - the new akamai stream id

setStreamId

```
public void setStreamId(String id)
```

setAkamaiUserName

```
public void setAkamaiUserName(String string)
```

Set Akamai user name

setAkamaiPassword

```
public void setAkamaiPassword(String string)
```

Set Akamai password

getStreamAngle

```
public String getStreamAngle()
```

setStreamAngle

```
public void setStreamAngle(String streamAngleIn)
```

getStreamBandWidth

```
public String getStreamBandWidth()
```

setStreamBandWidth

```
public void setStreamBandWidth(String streamBandWidth)
```

createAkamaiStreamName

```
public String createAkamaiStreamName(String dstStreamName,  
    IMediaStream stream)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderAdobe

java.lang.Object

```

+--com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase
    +--com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderAdobe
  
```

All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

public class **PushPublishRTMPAuthProviderAdobe**
extends [PushPublishRTMPAuthProviderBase](#)

Field Summary

protected	authMode
protected	challenge
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAuthProviderAdobe
protected	md5Digest
protected	opaque
protected	salt

Fields inherited from class

[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)

[lock](#), [PARAM1](#), [password](#), [publisher](#), [userName](#)

Constructor Summary

public	PushPublishRTMPAuthProviderAdobe()
--------	--

Method Summary

String	addAuthQueryString (String queryString)
void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	init (PushPublishRTMP publisher)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)[getParamObj](#), [getPassword](#), [getPublisher](#), [getUserName](#), [init](#), [setPassword](#), [setUserName](#), [splitQueryStr](#)**Methods inherited from class** `java.lang.Object``clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`**Methods inherited from interface**[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)[addAuthQueryString](#), [getPassword](#), [getPublisher](#), [getUserName](#), [handleConnectResponse](#), [init](#), [setPassword](#), [setUserName](#)

Fields

CLASS

`public static final java.lang.Class CLASS`

CLASSNAME

`public static final java.lang.String CLASSNAME`Constant value: **PushPublishRTMPAuthProviderAdobe**

authMode

`protected java.lang.String authMode`

salt

`protected java.lang.String salt`

challenge

`protected java.lang.String challenge`

opaque

`protected java.lang.String opaque`

md5Digest

protected java.security.MessageDigest **md5Digest**

Constructors

PushPublishRTMPAuthProviderAdobe

```
public PushPublishRTMPAuthProviderAdobe()
```

Methods

init

```
public void init(PushPublishRTMP publisher)
```

addAuthQueryString

```
public String addAuthQueryString(String queryString)
```

handleConnectResponse

```
public void handleConnectResponse(com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderBase

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase

All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

Direct Known Subclasses:

[PushPublishRTMPAuthProviderLimelight](#), [PushPublishRTMPAuthProviderAdobe](#)

public abstract class **PushPublishRTMPAuthProviderBase**

extends Object

implements [IPushPublishRTMPAuthProvider](#)

Field Summary

protected	lock
public static final	PARAM1 Value: 3
protected	password
protected	publisher
protected	userName

Constructor Summary

public	PushPublishRTMPAuthProviderBase()
--------	---

Method Summary

AMFDataObj	getParamObj() (AMFDataList params, int index)
String	getPassword()
PushPublishRTMP	getPublisher()
String	getUserName()
void	init() (PushPublishRTMP publisher)
void	setPassword() (String password)

void	setUserName (String userName)
java.util.Map	splitQueryStr (String queryStr)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)

[addAuthQueryString](#), [getPassword](#), [getPublisher](#), [getUserName](#), [handleConnectResponse](#), [init](#), [setPassword](#), [setUserName](#)

Fields

PARAM1

public static final int **PARAM1**

Constant value: **3**

publisher

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP **publisher**

userName

protected java.lang.String **userName**

password

protected java.lang.String **password**

lock

protected java.lang.Object **lock**

Constructors

PushPublishRTMPAuthProviderBase

public **PushPublishRTMPAuthProviderBase**()

Methods

init

```
public void init(PushPublishRTMP publisher)
```

getParamObj

```
protected AMFDataObj getParamObj(AMFDataList params,  
    int index)
```

getUserName

```
public String getUserName()
```

setUserName

```
public void setUserName(String userName)
```

getPassword

```
public String getPassword()
```

setPassword

```
public void setPassword(String password)
```

getPublisher

```
public PushPublishRTMP getPublisher()
```

splitQueryStr

```
public java.util.Map splitQueryStr(String queryStr)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPAuthProviderLimelight

java.lang.Object

```

+--com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase
    |
    +--com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderLimelight
  
```

All Implemented Interfaces:

[IPushPublishRTMPAuthProvider](#)

public class **PushPublishRTMPAuthProviderLimelight**
extends [PushPublishRTMPAuthProviderBase](#)

Field Summary

protected	authMode
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPAuthProviderLimelight
protected	conce
protected	methodValue
protected	ncCounter
protected	nonce
protected	qopValue
protected	realm

Fields inherited from class

[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)

[lock](#), [PARAM1](#), [password](#), [publisher](#), [userName](#)

Constructor Summary

public	PushPublishRTMPAuthProviderLimelight()
--------	--

Method Summary

String	addAuthQueryString (String queryString)
--------	---

String	getAuthMode()
String	getConce()
String	getMethodValue()
int	getNCCounter()
String	getNonce()
PushPublishRTMP	getPublisher()
String	getQOPValue()
String	getRealm()
void	handleConnectResponse (com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	init (PushPublishRTMP publisher)
void	initConce()
void	setAuthMode (String authMode)
void	setConce (String conce)
void	setMethodValue (String methodValue)
void	setNCCounter (int ncCounter)
void	setNonce (String nonce)
void	setQOPValue (String qopValue)
void	setRealm (String realm)

Methods inherited from class[com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPAuthProviderBase](#)

[getParamObj](#), [getPassword](#), [getPublisher](#), [getUserName](#), [init](#), [setPassword](#), [setUserName](#), [splitQueryStr](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface[com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPAuthProvider](#)

```
addAuthQueryString, getPassword, getPublisher, getUserName, handleConnectResponse,  
init, setPassword, setUserName
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTMPAuthProviderLimelight**

realm

```
protected java.lang.String realm
```

methodValue

```
protected java.lang.String methodValue
```

qopValue

```
protected java.lang.String qopValue
```

authMode

```
protected java.lang.String authMode
```

nonce

```
protected java.lang.String nonce
```

conce

```
protected java.lang.String conce
```

(continued from last page)

ncCounter

```
protected int ncCounter
```

Constructors

PushPublishRTMPAuthProviderLimelight

```
public PushPublishRTMPAuthProviderLimelight()
```

Methods

init

```
public void init(PushPublishRTMP publisher)
```

initOnce

```
protected void initOnce()
```

addAuthQueryString

```
public String addAuthQueryString(String queryString)
```

handleConnectResponse

```
public void handleConnectResponse(com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

getPublisher

```
public PushPublishRTMP getPublisher()
```

getRealm

```
public String getRealm()
```

setRealm

```
public void setRealm(String realm)
```

getMethodValue

```
public String getMethodValue()
```

setMethodValue

```
public void setMethodValue(String methodValue)
```

getQOPValue

```
public String getQOPValue()
```

setQOPValue

```
public void setQOPValue(String qopValue)
```

getAuthMode

```
public String getAuthMode()
```

setAuthMode

```
public void setAuthMode(String authMode)
```

getNonce

```
public String getNonce()
```

setNonce

```
public void setNonce(String nonce)
```

getConce

```
public String getConce()
```

setConce

```
public void setConce(String conce)
```

(continued from last page)

getNCCounter

```
public int getNCCounter()
```

setNCCounter

```
public void setNCCounter(int ncCounter)
```

com.wowza.wms.pushpublish.protocol.rtmp

Class PushPublishRTMPNetConnectionPublisher

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNetConnectionPublisher

All Implemented Interfaces:

[INetConnectionPublisher](#)

public class **PushPublishRTMPNetConnectionPublisher**
 extends Object
 implements [INetConnectionPublisher](#)

Field Summary

protected	chunkSize
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPNetConnectionPublisher
protected	isFirstAudioSend
protected	isFirstVideoSend
public	lastOnGoLiveSend
protected	lastSeq
protected	pushPublisherSession
protected	pushPublishRTMP
protected	sendDataStart
protected	timecodeOffset
protected	totalPacketsZeroTimecode
protected	waitForKeyFrame
protected	workBuffer

Constructor Summary

public	PushPublishRTMPNetConnectionPublisher (PushPublishRTMP pushPublishRTMP, PushPublishRTMPNetConnectionSession pushPublisherSession)
--------	--

Method Summary

void	checkWorkBuffer (int chunkSize)
ResponseFunction	getDataStart (IMediaStream stream, long timecode)
long	getPlayPacketDuration (java.util.List packets)
int	play (INetConnection netConnection, java.io.OutputStream out, long[] playSizes)
int	sendPacket (java.io.OutputStream out, long adjTimecode, AMFPacket packet, AMFObj amfObj, IMediaStream publishStream)
int	sendPackets (INetConnection netConnection, java.io.OutputStream out, IMediaStream publishStream, long[] playSizes)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.netconnection.INetConnectionPublisher](#)

[play](#)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **PushPublishRTMPNetConnectionPublisher**

pushPublishRTMP

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP **pushPublishRTMP**

(continued from last page)

pushPublisherSession

protected com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNetConnectionSession
pushPublisherSession

timecodeOffset

protected long **timecodeOffset**

waitForKeyFrame

protected boolean **waitForKeyFrame**

lastSeq

protected long **lastSeq**

isFirstVideoSend

protected boolean **isFirstVideoSend**

isFirstAudioSend

protected boolean **isFirstAudioSend**

workBuffer

protected byte **workBuffer**

chunkSize

protected int **chunkSize**

sendDataStart

protected boolean **sendDataStart**

totalPacketsZeroTimecode

protected int **totalPacketsZeroTimecode**

(continued from last page)

lastOnGoLiveSend

```
public long lastOnGoLiveSend
```

Constructors

PushPublishRTMPNetConnectionPublisher

```
public PushPublishRTMPNetConnectionPublisher(PushPublishRTMP pushPublishRTMP,  
                                              PushPublishRTMPNetConnectionSession  
                                              pushPublisherSession)
```

Methods

checkWorkBuffer

```
protected void checkWorkBuffer(int chunkSize)
```

sendPacket

```
protected int sendPacket(java.io.OutputStream out,  
                          long adjTimecode,  
                          AMFPacket packet,  
                          AMFObj amfObj,  
                          IMediaStream publishStream)
```

getPlayPacketDuration

```
protected long getPlayPacketDuration(java.util.List packets)
```

sendPackets

```
protected int sendPackets(INetConnection netConnection,  
                          java.io.OutputStream out,  
                          IMediaStream publishStream,  
                          long[] playSizes)
```

getDataStart

```
public ResponseFunction getDataStart(IMediaStream stream,  
                                     long timecode)
```

(continued from last page)

play

```
public int play(INetConnection netConnection,  
               java.io.OutputStream out,  
               long[] playSizes)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPNetConnectionSession

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNetConnectionSession

public class **PushPublishRTMPNetConnectionSession**
extends Object

Field Summary

protected	netConnection
protected	publishStream
protected	session
protected	streamsToPublish

Constructor Summary

public	PushPublishRTMPNetConnectionSession (INetConnection netConnection, org.apache.mina.common.Session session)
--------	---

Method Summary

INetConnection	getNetConnection ()
IMediaStream	getPublishStream ()
org.apache.mina.common.Session	getSession ()
java.util.List	getStreamsToPublish ()
void	setNetConnection (INetConnection netConnection)
void	setPublishStream (IMediaStream publishStream)
void	setSession (org.apache.mina.common.Session session)
void	setStreamsToPublish (java.util.List streamsToPublish)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

session

protected org.apache.mina.common.Session **session**

netConnection

protected com.wowza.wms.netconnection.INetConnection **netConnection**

streamsToPublish

protected java.util.List **streamsToPublish**

publishStream

protected com.wowza.wms.stream.IMediaStream **publishStream**

Constructors

PushPublishRTMPNetConnectionSession

```
public PushPublishRTMPNetConnectionSession(INetConnection netConnection,  
                                             org.apache.mina.common.Session session)
```

Methods

getSession

```
public org.apache.mina.common.Session getSession()
```

setSession

```
public void setSession(org.apache.mina.common.Session session)
```

getNetConnection

```
public INetConnection getNetConnection()
```

setNetConnection

```
public void setNetConnection(INetConnection netConnection)
```

getStreamsToPublish

```
public java.util.List getStreamsToPublish()
```

setStreamsToPublish

```
public void setStreamsToPublish(java.util.List streamsToPublish)
```

getPublishStream

```
public IMediaStream getPublishStream()
```

setPublishStream

```
public void setPublishStream(IMediaStream publishStream)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPNotifyBase

java.lang.Object

└─com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMPNotifyBase

All Implemented Interfaces:

[IPushPublishRTMPNotify](#)

public abstract class **PushPublishRTMPNotifyBase**

extends Object

implements [IPushPublishRTMPNotify](#)

Abstract base class for [IPushPublishRTMPNotify](#) interface

See Also:

[PushPublishRTMP.addListener\(IPushPublishRTMPNotify\)](#)

Constructor Summary

public	PushPublishRTMPNotifyBase()
--------	---

Method Summary

void	onAkamaiClientLogin(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetChallenge(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnect(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onConnectFailure(PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectStart(PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onConnectSuccess(PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onFCAnnounce(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onFCPublish(PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)

void	onHandshakeResult (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onPublishHandlerPlay (PushPublishRTMPNetConnectionSession pushPublisherSession, java.io.OutputStream out, long[] playSizes)
void	onPushPublisherSessionCreate (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onPushPublisherSessionDestroy (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onReleaseStream (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onSessionClosed (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionIdle (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onSessionOpened (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onStreamCreate (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnPlayStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onStreamOnStatus (PushPublishRTMPNetConnectionSession pushPublisherSession, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onValidateSession (PushPublishRTMPNetConnectionSession pushPublisherSession)
void	onValidateSessionResult (PushPublishRTMPNetConnectionSession pushPublisherSession, boolean result)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.pushpublish.protocol.rtmp.IPushPublishRTMPNotify](#)

[onAkamaiClientLogin](#), [onAkamaiSetChallenge](#), [onAkamaiSetOriginConnectionInfo](#), [onConnect](#), [onConnectFailure](#), [onConnectStart](#), [onConnectSuccess](#), [onFCAnnounce](#), [onFCPublish](#), [onHandshakeResult](#), [onPublishHandlerPlay](#), [onPushPublisherSessionCreate](#), [onPushPublisherSessionDestroy](#), [onReleaseStream](#), [onSessionClosed](#), [onSessionIdle](#), [onSessionOpened](#), [onStreamCreate](#), [onStreamOnPlayStatus](#), [onStreamOnStatus](#), [onValidateSession](#), [onValidateSessionResult](#)

Constructors

PushPublishRTMPNotifyBase

```
public PushPublishRTMPNotifyBase()
```

Methods

onConnectStart

```
public void onConnectStart(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectSuccess

```
public void onConnectSuccess(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onConnectFailure

```
public void onConnectFailure(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onHandshakeResult

```
public void onHandshakeResult(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetChallenge

```
public void onAkamaiSetChallenge(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onAkamaiSetOriginConnectionInfo

```
public void onAkamaiSetOriginConnectionInfo(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

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onAkamaiClientLogin

```
public void onAkamaiClientLogin(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCPublish

```
public void onFCPublish(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onFCAnnounce

```
public void onFCAnnounce(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onReleaseStream

```
public void onReleaseStream(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onConnect

```
public void onConnect(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamCreate

```
public void onStreamCreate(PushPublishRTMPNetConnectionSession pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

onStreamOnPlayStatus

```
public void onStreamOnPlayStatus(PushPublishRTMPNetConnectionSession
pushPublisherSession,
    com.wowza.wms.request.RequestFunction function,
    AMFDataList params)
```

(continued from last page)

onStreamOnStatus

```
public void onStreamOnStatus(PushPublishRTMPNetConnectionSession pushPublisherSession,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

onPublishHandlerPlay

```
public void onPublishHandlerPlay(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    java.io.OutputStream out,  
    long[] playSizes)
```

onSessionIdle

```
public void onSessionIdle(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionOpened

```
public void onSessionOpened(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onSessionClosed

```
public void onSessionClosed(PushPublishRTMPNetConnectionSession pushPublisherSession)
```

onValidateSession

```
public void onValidateSession(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

onValidateSessionResult

```
public void onValidateSessionResult(PushPublishRTMPNetConnectionSession  
pushPublisherSession,  
    boolean result)
```

onPushPublisherSessionCreate

```
public void onPushPublisherSessionCreate(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

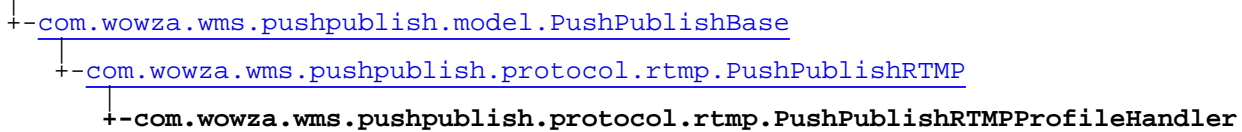
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onPushPublisherSessionDestroy

```
public void onPushPublisherSessionDestroy(PushPublishRTMPNetConnectionSession  
pushPublisherSession)
```

com.wowza.wms.pushpublish.protocol.rtmp Class PushPublishRTMPProfileHandler

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

Direct Known Subclasses:

[PushPublishRTMPAkamaiHandler](#)

public class **PushPublishRTMPProfileHandler**
extends [PushPublishRTMP](#)

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTMPProfileHandler
protected	streamId The stream id.

Fields inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[akamaiOriginIp](#), [akamaiOriginPort](#), [akamaiPassword](#), [akamaiUserName](#), [bindAddress](#), [bytesAvg](#), [CLASS](#), [CLASSNAME](#), [connectAttemptCount](#), [connectionFlashVersion](#), [connectionPageURL](#), [connectionQueryStr](#), [connectionResetCount](#), [connectionState](#), [connectionSwfURL](#), [connectionTimeout](#), [connectLastAttempt](#), [connectLastSuccess](#), [connectMetaData](#), [CURRENTFLASHVERSION](#), [CURRENTFMLEVERSION](#), [debugLogLastPacketCount](#), [debugPackets](#), [doSendOnMetaData](#), [dstAppInstanceName](#), [dstApplicationName](#), [howToPublish](#), [ioSessionToSessionHolder](#), [isReconnectorRunning](#), [isSSL](#), [lastAudioTC](#), [lastDataTC](#), [lastIdleReadTime](#), [lastIdleWriteTime](#), [lastVideoKeyFrameTC](#), [lastVideoTC](#), [listeners](#), [lock](#), [netconnectToSessionHolder](#), [offlineTime](#), [onlineTime](#), [onMetadataFilter](#), [onMetadataItemsToAdd](#), [onMetadataItemsToRemove](#), [onMetadataToSetDataFrame](#), [originalTimecodeOffset](#), [originalTimecodeThreshold](#), [outprint](#), [packetsSentAudio](#), [packetsSentData](#), [packetsSentVideo](#), [packetsSentVideoKeyFrame](#), [pingPongListenerRegistered](#), [queryString](#), [removeDefaultAppInstance](#), [resetOnTimecodeOutOfOrder](#), [rtmpAuthProvider](#), [rtmpDebugLog](#), [secureTokenSharedSecret](#), [sendFCAnnounce](#), [sendFCPublish](#), [sendOnMetaData](#), [sendOriginalTimecodes](#), [sendReleaseStream](#), [sendStreamCloseCommands](#), [sendStreamCloseCommandsSendTime](#), [sessionOrder](#), [srcStreamBufferSize](#), [streamCloseWaitTime](#), [syncPacketType](#), [syncTimecode](#), [timecodesOutOfOrderThreshold](#), [totalPacketsSent](#), [tryConnect](#), [usePingPong](#), [validationFrequency](#), [waitOnMetadataAudio](#), [waitOnMetadataAudioDatarate](#), [waitOnMetadataAvailable](#), [waitOnMetadataReady](#), [waitOnMetadataStartime](#), [waitOnMetadataTimeout](#), [waitOnMetadataVideo](#), [waitOnMetadataVideoDatarate](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTMPPProfileHandler() Instantiates a new push publisher rtmp.
--------	---

Method Summary

String	getDstAppInstanceName() Get destination appInstance name.
String	getDstApplicationName() Get destination application name.
String	getLocalBindAddress() Get local bind address for the connection.
void	init() (IApplicationInstance appInstance2, String streamName, IMediaStream stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
boolean	isDebugLog() Is debug logging turned on.
boolean	isDebugPackets() Checks if is debug packets.
boolean	isUsePingPong() Is RTMP ping pong support enabled.
void	load() (java.util.HashMap dataMap)
void	setApplication() (String dstApplicationNameIN) Set destination application name.
void	setConnectionFlashVersion() (String connectionFlashVersion) Set Flash version used in connection metadata.
void	setConnectionInfoPageURL() (String connectionPageURL) Set Page URL used in connection metadata.

void	<u>setConnectionInfoQueryString</u> (String connectionQueryString) Set the connection query string.
void	<u>setConnectionInfoSwfURL</u> (String connectionSwfURL) Set SWF URL used in connection metadata.
void	<u>setConnectionTimeout</u> (String connectionTimeout)
void	<u>setConnectLastAttempt</u> (String connectLastAttempt)
void	<u>setConnectLastSuccess</u> (String connectLastSuccess)
void	<u>setDebugPackets</u> (boolean debugPackets) Sets the debug packets.
void	<u>setDebugPackets</u> (String debugPacketsIn) Sets the debug packets.
void	<u>setDstAppInstanceName</u> (String dstAppInstanceName)
void	<u>setDstApplicationName</u> (String string) Sets the dst application name.
void	<u>setDstStreamName</u> (String dstStreamNameIn)
void	<u>setHowToPublish</u> (String howToPublish)
void	<u>setLocalBindAddress</u> (String bindAddress) Sets the local bind address for the connection.
void	<u>setOnMetadataToSetDataFrame</u> (String onMetadataToSetDataFrame)
void	<u>setOriginalTimecodeThreshold</u> (String originalTimecodeThreshold) Sets the original timecode threshold.
void	<u>setQueryString</u> (String queryString)
void	<u>setReconnectWaitTime</u> (String reconnectWaitTime)
void	<u>setRemoveDefaultAppInstance</u> (String removeDefaultAppInstance) Sets the removes the default app instance.
void	<u>setResetOnTimecodeOutOfOrder</u> (String resetOnTimecodeOutOfOrder) Set to true if you wish push to reset if timecodes jump out of order.
void	<u>setSecureTokenSharedSecret</u> (String secureTokenSharedSecret) Set SecureToken shared secret.
void	<u>setSendFCAnnounce</u> (String sendFCAnnounce)
void	<u>setSendFCPublish</u> (String sendFCPublish) Sets the send fc publish.
void	<u>setSendOnMetadata</u> (String sendOnMetadata)

void	<u>setSendOriginalTimecodes</u> (String sendOriginalTimecodes) Sets the send original timecodes.
void	<u>setSendReleaseStream</u> (String sendReleaseStream) Sets the send release stream.
void	<u>setSendStreamCloseCommands</u> (String sendStreamCloseCommands) Sets the send stream close commands.
void	<u>setSSL</u> (String sslStr)
void	<u>setStreamCloseWaitTime</u> (String streamCloseWaitTime)
void	<u>setTimecodesOutOfOrderThreshold</u> (String timecodesOutOfOrderThreshold)
void	<u>setUsePingPong</u> (boolean usePingPong) Sets the RTMP ping pong support parameter.
void	<u>setUsePingPong</u> (String usePingPong) Sets the RTMP ping pong support parameter.
void	<u>setValidationFrequency</u> (String validationFrequency)
void	<u>setWaitOnMetadataAudio</u> (String waitOnMetadataAudio)
void	<u>setWaitOnMetadataAudioDatarate</u> (String waitOnMetadataAudioDatarate)
void	<u>setWaitOnMetadataAvailable</u> (String waitOnMetadataAvailable)
void	<u>setWaitOnMetadataTimeout</u> (String waitOnMetadataTimeout) Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.
void	<u>setWaitOnMetadataVideo</u> (String waitOnMetadataVideo)
void	<u>setWaitOnMetadataVideoDatarate</u> (String waitOnMetadataVideoDatarate)

Methods inherited from class [com.wowza.wms.pushpublish.protocol.rtmp.PushPublishRTMP](#)

[addConnectMetaData](#), [addListener](#), [addOnMetadataItemToRemove](#), [addSession](#),
[bumpReconnectWaitTime](#), [callConnect](#), [connect](#), [convertDataEventToAMFData](#),
[convertOnMetadataToSetDataFrame](#), [createNetConnectionPublisher](#),
[createPushPublishSession](#), [disconnect](#), [disconnect](#), [filterOnMetadataEvent](#),
[getAkamaiOriginIp](#), [getAkamaiOriginPort](#), [getAkamaiPassword](#), [getAkamaiSessionKey](#),
[getAkamaiUserName](#), [getAppInstance](#), [getBindAddress](#), [getConnectAttemptCount](#),
[getConnectedState](#), [getConnectionFlashVerion](#), [getConnectionFlashVersion](#),
[getConnectionPageURL](#), [getConnectionQueryStr](#), [getConnectionSwfURL](#),
[getConnectionTimeout](#), [getConnectLastAttempt](#), [getConnectLastSuccess](#), [getContextStr](#),
[getDstAppInstanceName](#), [getDstApplicationName](#), [getDstStreamName](#), [getHowToPublish](#),
[getLastAudioTC](#), [getLastDataTC](#), [getLastSession](#), [getLastVideoKeyFrameTC](#),
[getLastVideoTC](#), [getLocalListeners](#), [getLock](#), [getMessagesAttemptedCount](#),
[getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getNetConnection](#),
[getOnMetadataFilter](#), [getOriginalTimecodeOffset](#), [getOriginalTimecodeThreshold](#),
[getPacketsSentAudio](#), [getPacketsSentData](#), [getPacketsSentVideo](#),
[getPacketsSentVideoKeyFrame](#), [getPort](#), [getQueryString](#), [getReconnectDelay](#),
[getRemoteIpAddress](#), [getRTMPAuthProvider](#), [getSecureTokenSharedSecret](#),
[getSessionHolderByNetConnection](#), [getSessionHolderBySession](#), [getSessionListDebug](#),
[getSrcStreamBufferSize](#), [getSrcStreamName](#), [getStreamCloseWaitTime](#), [getSyncPacketType](#),
[getSyncTimecode](#), [getTimecodesOutOfOrderThreshold](#), [getTotalPacketsSent](#),
[getValidationFrequency](#), [getWaitOnMetadataTimeout](#), [internalConnect](#), [isCurrentSession](#),
[isDebugLog](#), [isDebugPackets](#), [isFlashVerionFMLE](#), [isFlashVersionFMLE](#), [isOnMetadataReady](#),
[isOnMetadataToSetDataFrame](#), [isRemoveDefaultAppInstance](#), [isResetOnTimecodeOutOfOrder](#),
[isSendFCAnnounce](#), [isSendFCPublish](#), [isSendOnMetadata](#), [isSendOriginalTimecodes](#),
[isSendReleaseStream](#), [isSendStreamCloseCommands](#), [isSSL](#), [isWaitOnMetadataAudio](#),
[isWaitOnMetadataAudioDatarate](#), [isWaitOnMetadataAvailable](#), [isWaitOnMetadataVideo](#),
[isWaitOnMetadataVideoDatarate](#), [notifyAkamaiClientLogin](#), [notifyAkamaiSetChallenge](#),
[notifyAkamaiSetOriginConnectionInfo](#), [notifyConnect](#), [notifyConnectFailure](#),
[notifyConnectStart](#), [notifyConnectSuccess](#), [notifyFCAnnounce](#), [notifyFCPublish](#),
[notifyHandshakeResult](#), [notifyPublishHandlerPlay](#), [notifyPushPublisherSessionCreate](#),
[notifyPushPublisherSessionDestroy](#), [notifySessionClosed](#), [notifySessionIdle](#),
[notifySessionOpened](#), [notifyStreamCreate](#), [notifyStreamOnPlayStatus](#),
[notifyStreamOnStatus](#), [notifyValidateSession](#), [notifyValidateSessionResult](#),
[putOnMetadataItemToAdd](#), [removeListener](#), [removeSession](#), [resetConnection](#),
[resetConnection](#), [resolveHostName](#), [sessionClosed](#), [sessionOpened](#), [setAkamaiOriginIp](#),
[setAkamaiOriginPort](#), [setAkamaiPassword](#), [setAkamaiUserName](#), [setAppInstance](#),
[setBindAddress](#), [setConnectionFlashVerion](#), [setConnectionFlashVersion](#),
[setConnectionPageURL](#), [setConnectionQueryStr](#), [setConnectionSwfURL](#),
[setConnectionTimeout](#), [setConnectLastAttempt](#), [setConnectLastSuccess](#), [setDebugLog](#),
[setDebugPackets](#), [setDstAppInstanceName](#), [setDstApplicationName](#), [setDstStreamName](#),
[setHowToPublish](#), [setOnMetadataFilter](#), [setOnMetadataToSetDataFrame](#),
[setOriginalTimecodeOffset](#), [setOriginalTimecodeThreshold](#),
[setOriginalTimecodeThreshold](#), [setPort](#), [setQueryString](#), [setRemoveDefaultAppInstance](#),
[setResetOnTimecodeOutOfOrder](#), [setRTMPAuthProvider](#), [setSecureTokenSharedSecret](#),
[setSendFCAnnounce](#), [setSendFCPublish](#), [setSendOnMetadata](#), [setSendOriginalTimecodes](#),
[setSendReleaseStream](#), [setSendStreamCloseCommands](#), [setSrcStreamBufferSize](#),
[setSrcStreamName](#), [setSSL](#), [setStreamCloseWaitTime](#), [setStreamDebugLog](#),
[setSyncPacketType](#), [setSyncTimecode](#), [setTimecodesOutOfOrderThreshold](#),
[setValidationFrequency](#), [setWaitOnMetadataAudio](#), [setWaitOnMetadataAudioDatarate](#),
[setWaitOnMetadataAvailable](#), [setWaitOnMetadataTimeout](#), [setWaitOnMetadataVideo](#),
[setWaitOnMetadataVideoDatarate](#), [tryToConnect](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#),
[getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#),
[getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#),
[getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#),
[getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#),
[getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#),
[getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#),
[isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#),
[logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#),
[setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#),
[setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#),
[setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#),
[setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#),
[setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#),
[updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#),
[wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#),
[getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#),
[getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#),
[getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#),
[getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#),
[setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#),
[setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#),
[setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

public static final `java.lang.Class` **CLASS**

CLASSNAME

public static final `java.lang.String` **CLASSNAME**

Constant value: **PushPublishRTMPPProfileHandler**

streamId

protected `java.lang.String` **streamId**

The stream id.

Constructors

(continued from last page)

PushPublishRTMPProfileHandler

```
public PushPublishRTMPProfileHandler()
```

Instantiates a new push publisher rtmp.

Throws:

LicensingException - the licensing exception

Methods

setConnectionTimeout

```
public void setConnectionTimeout(String connectionTimeout)
```

setSendFCPublish

```
public void setSendFCPublish(String sendFCPublish)
```

Sets the send fc publish.

Parameters:

sendFCPublish - the new send fc publish

setSendReleaseStream

```
public void setSendReleaseStream(String sendReleaseStream)
```

Sets the send release stream.

Parameters:

sendReleaseStream - the new send release stream

setConnectionInfoQueryString

```
public void setConnectionInfoQueryString(String connectionQueryStr)
```

Set the connection query string.

Parameters:

connectionQueryStr - connection query string

setConnectionFlashVersion

```
public void setConnectionFlashVersion(String connectionFlashVersion)
```

Set Flash version used in connection metadata.

Parameters:

connectionFlashVersion - Flash version used in connection metadata

setConnectionInfoSwfURL

```
public void setConnectionInfoSwfURL(String connectionSwfURL)
```

(continued from last page)

Set SWF URL used in connection metadata.

Parameters:

connectionSwfURL - SWF URL used in connection metadata

setConnectionInfoPageURL

```
public void setConnectionInfoPageURL(String connectionPageURL)
```

Set Page URL used in connection metadata.

Parameters:

connectionPageURL - Page URL used in connection metadata

setSecureTokenSharedSecret

```
public void setSecureTokenSharedSecret(String secureTokenSharedSecret)
```

Set SecureToken shared secret.

Parameters:

secureTokenSharedSecret - SecureToken shared secret

setSendFCAnnounce

```
public void setSendFCAnnounce(String sendFCAnnounce)
```

setValidationFrequency

```
public void setValidationFrequency(String validationFrequency)
```

setConnectLastAttempt

```
public void setConnectLastAttempt(String connectLastAttempt)
```

setReconnectWaitTime

```
public void setReconnectWaitTime(String reconnectWaitTime)
```

setConnectLastSuccess

```
public void setConnectLastSuccess(String connectLastSuccess)
```

setSendOriginalTimecodes

```
public void setSendOriginalTimecodes(String sendOriginalTimecodes)
```

Sets the send original timecodes.

(continued from last page)

Parameters:

sendOriginalTimecodes - the new send original timecodes

setSendOnMetadata

```
public void setSendOnMetadata(String sendOnMetadata)
```

setRemoveDefaultAppInstance

```
public void setRemoveDefaultAppInstance(String removeDefaultAppInstance)
```

Sets the removes the default app instance.

Parameters:

removeDefaultAppInstance - the new removes the default app instance

setHowToPublish

```
public void setHowToPublish(String howToPublish)
```

Set the howToPublish string (valid values are "live", "record" and "append")

setOnMetadataToSetDataFrame

```
public void setOnMetadataToSetDataFrame(String onMetadataToSetDataFrame)
```

setSendStreamCloseCommands

```
public void setSendStreamCloseCommands(String sendStreamCloseCommands)
```

Sets the send stream close commands.

Parameters:

sendStreamCloseCommands - the new send stream close commands

setStreamCloseWaitTime

```
public void setStreamCloseWaitTime(String streamCloseWaitTime)
```

setOriginalTimecodeThreshold

```
public void setOriginalTimecodeThreshold(String originalTimecodeThreshold)
```

Sets the original timecode threshold.

Parameters:

originalTimecodeThreshold - the new original timecode threshold

setQueryString

```
public void setQueryString(String queryString)
```

(continued from last page)

Set the queryString, as set in the map file

setResetOnTimecodeOutOfOrder

```
public void setResetOnTimecodeOutOfOrder(String resetOnTimecodeOutOfOrder)
```

Set to true if you wish push to reset if timecodes jump out of order.

Parameters:

resetOnTimecodeOutOfOrder - true if you wish push to reset if timecodes jump out of order

setTimecodesOutOfOrderThreshold

```
public void setTimecodesOutOfOrderThreshold(String timecodesOutOfOrderThreshold)
```

setWaitOnMetadataTimeout

```
public void setWaitOnMetadataTimeout(String waitOnMetadataTimeout)
```

Timeout (milliseconds) that the wait on onMetadata system will wait looking for video and audio data to be populated.

Parameters:

waitOnMetadataTimeout - the new timeout value (milliseconds-string)

setWaitOnMetadataAvailable

```
public void setWaitOnMetadataAvailable(String waitOnMetadataAvailable)
```

setWaitOnMetadataVideo

```
public void setWaitOnMetadataVideo(String waitOnMetadataVideo)
```

setWaitOnMetadataAudio

```
public void setWaitOnMetadataAudio(String waitOnMetadataAudio)
```

setWaitOnMetadataVideoDatarate

```
public void setWaitOnMetadataVideoDatarate(String waitOnMetadataVideoDatarate)
```

setWaitOnMetadataAudioDatarate

```
public void setWaitOnMetadataAudioDatarate(String waitOnMetadataAudioDatarate)
```

(continued from last page)

setSSL

```
public void setSSL(String sslStr)
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

isDebugPackets

```
public boolean isDebugPackets()
```

Checks if is debug packets.

Returns:

true, if is debug packets

setDebugPackets

```
public void setDebugPackets(boolean debugPackets)
```

Sets the debug packets.

Parameters:

debugPackets - the new debug packets

setDebugPackets

```
public void setDebugPackets(String debugPacketsIn)
```

Sets the debug packets.

Parameters:

debugPacketsIn - the new debug packets

isUsePingPong

```
public boolean isUsePingPong()
```

Is RTMP ping pong support enabled.

Returns:

true if ping pong support is enabled

setUsePingPong

```
public void setUsePingPong(boolean usePingPong)
```

Sets the RTMP ping pong support parameter.

Parameters:

usePingPong - true to enable RTMP ping pong support

(continued from last page)

setUsePingPong

```
public void setUsePingPong(String usePingPong)
```

Sets the RTMP ping pong support parameter.

Parameters:

usePingPong - "true" to enable RTMP ping pong support

isDebugLog

```
public boolean isDebugLog()
```

Is debug logging turned on.

Returns:

true if debug logging is turned on

getDstApplicationName

```
public String getDstApplicationName()
```

Get destination application name.

Returns:

destination application name

setApplication

```
public void setApplication(String dstApplicationNameIN)
```

Set destination application name.

Parameters:

dstApplicationNameIN - destination application name

setDstApplicationName

```
public void setDstApplicationName(String string)
```

Sets the dst application name.

Parameters:

string - the new dst application name

getDstAppInstanceName

```
public String getDstAppInstanceName()
```

Get destination appInstance name.

Returns:

destination appInstance name

setlocalBindAddress

```
public void setlocalBindAddress(String bindAddress)
```

(continued from last page)

Sets the local bind address for the connection.

Parameters:

bindAddress - the local bind address for the connection

getLocalBindAddress

```
public String getLocalBindAddress()
```

Get local bind address for the connection.

Returns:

local bind address for the connection

init

```
public void init(IApplicationInstance appInstance2,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Init's the instance.

setDstStreamName

```
public void setDstStreamName(String dstStreamNameIn)
```

Set destination stream name

setDstAppInstanceName

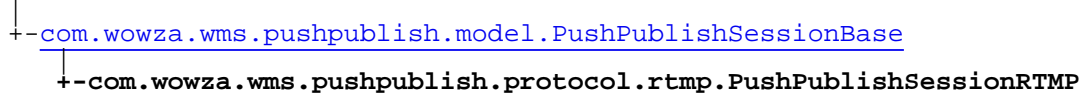
```
public void setDstAppInstanceName(String dstAppInstanceName)
```

Set destination appInstance name

com.wowza.wms.pushpublish.protocol.rtmp

Class PushPublishSessionRTMP

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public class **PushPublishSessionRTMP**
 extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionRTMP()
--------	--

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
 wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionRTMP

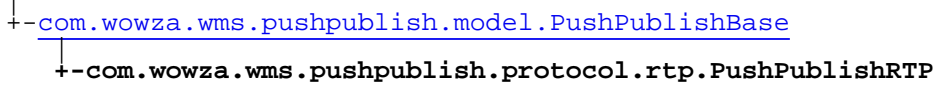
public **PushPublishSessionRTMP()**

Package

com.wowza.wms.pushpublish.protocol.rtp

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTP

java.lang.Object



All Implemented Interfaces:

[IPushPublish](#)

public class **PushPublishRTP**
extends [PushPublishBase](#)

The Class PushPublishRTP.

Field Summary

protected	audioHost The audio host.
protected	audioPort The audio port.
public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTP
protected	isRTPWrapped The is rtp wrapped.
protected	lock
protected	mRtpDestination The m rtp destination.
protected	multicastInterfaceAddress
protected	removeSDPFiles The remove sdp files
protected	rtpPushPublishSession The rtp push publish session.
public static final	SDPFILEEXTENSION The Constant SDPFILEEXTENSION. Value: .sdp
protected	singleStreamAV The stream packetizer.

protected	videoHost The video host.
protected	videoPort The video port.
protected	writeSDPFiles The write sdp files.

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishRTP()
--------	----------------------------------

Method Summary

void	add(IOPerformanceCounter totalValue)
void	addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
void	connect()
IPushPublishSession	createPushPublishSession()
void	disconnect()
void	disconnect(boolean hard)
IApplicationInstance	getAppInstance()
String	getAudioHost() Gets the audio host.
int	getAudioPort() Gets the audio port.
int	getConnectedState()

String	<u>getContextStr()</u>
String	<u>getHostname()</u>
String	<u>getHostType()</u> Gets the host type.
long	<u>getMessagesAttemptedCount()</u>
long	<u>getMessagesFailedCount()</u>
long	<u>getMessagesRetriedCount()</u>
<u>RTPDestination</u>	<u>getmRtpDestination()</u>
String	<u>getMulticastInterfaceAddress()</u>
<u>RTPPushPublishSession</u>	<u>getRTPPushPublishSession()</u> Gets the rTP push publish session.
long	<u>getRtpStreamWaitTimeout()</u>
int	<u>getTimeToLive()</u> Gets the time to live.
String	<u>getVideoHost()</u> Gets the video host.
int	<u>getVideoPort()</u> Gets the video port.
void	<u>init()</u> (<u>IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean debug)
boolean	<u>isRemoveSDPFiles()</u>
boolean	<u>isRTPWrapped()</u> Checks if is rTP wrapped.
boolean	<u>isSingleStreamAV()</u> Checks if is stream is packetized.
boolean	<u>isWriteSDPFiles()</u>
void	<u>load()</u> (java.util.HashMap dataMap)
void	<u>resetConnection()</u>
void	<u>resetConnection()</u> (int delay)
void	<u>setAppInstance()</u> (<u>IApplicationInstance</u> appInstance)

void	<u>setAudioHost</u> (String audioHost) Sets the audio host.
void	<u>setAudioPort</u> (int audioPort) Sets the audio port.
void	<u>setAudioPort</u> (String audioPort) Sets the audio port.
void	<u>setConnectionStatus</u> (Boolean connected)
void	<u>setHostname</u> (String hostname)
void	<u>setHostType</u> (String hostType) Sets the host type.
void	<u>setMulticastInterfaceAddress</u> (String multicastInterfaceAddress)
void	<u>setPort</u> (int port) Set destination server port.
void	<u>setPort</u> (String portIn)
void	<u>setRemoveSDPFiles</u> (boolean removeSDPFiles)
void	<u>setRTPPushPublishSession</u> (<u>RTPPushPublishSession</u> rtpPushPublishSession) Sets the rTP push publish session.
void	<u>setRtpStreamWaitTimeout</u> (long rtpStreamWaitTimeout)
void	<u>setRtpStreamWaitTimeout</u> (String rtpStreamWaitTimeout)
void	<u>setRTPWrapped</u> (boolean isRTPWrapped)
void	<u>setRTPWrapped</u> (String string) Sets the rTP wrapped.
void	<u>setSingleStreamAV</u> (boolean inSingleStreamAV) Sets the stream packetizer.
void	<u>setSingleStreamAV</u> (String inSingleStreamAV)
void	<u>setTimeToLive</u> (String ttl) Sets the time to live.
void	<u>setVideoHost</u> (String videoHost) Sets the video host.
void	<u>setVideoPort</u> (int videoPort)
void	<u>setVideoPort</u> (String videoPort) Sets the video port.
void	<u>setWriteSDPFiles</u> (boolean writeSDPFiles)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugEnabled](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **PushPublishRTP**

SDPFILEEXTENSION

public static final java.lang.String **SDPFILEEXTENSION**

The Constant SDPFILEEXTENSION.

Constant value: **.sdp**

rtpPushPublishSession

protected com.wowza.wms.rtp.model.RTPPushPublishSession **rtpPushPublishSession**

The rtp push publish session.

singleStreamAV

protected boolean **singleStreamAV**

The stream packetizer.

audioPort

protected int **audioPort**

The audio port.

videoPort

protected int **videoPort**

The video port.

audioHost

protected java.lang.String **audioHost**

The audio host.

videoHost

protected java.lang.String **videoHost**

The video host.

isRTPWrapped

protected boolean **isRTPWrapped**

The is rtp wrapped.

writeSDPFiles

protected boolean **writeSDPFiles**

The write sdp files.

removeSDPFiles

protected boolean **removeSDPFiles**

The remove sdp files

multicastInterfaceAddress

protected java.lang.String **multicastInterfaceAddress**

(continued from last page)

mRtpDestination

protected com.wowza.wms.rtp.model.RTPDestination **mRtpDestination**

The m rtp destination.

lock

protected java.lang.Object **lock**

Constructors

PushPublishRTP

public **PushPublishRTP**()

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean debug)
```

Inits the instance.

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

resetConnection

```
public void resetConnection()
```

(continued from last page)

resetConnection

```
public void resetConnection(int delay)
```

getRTTPushPublishSession

```
public RTTPushPublishSession getRTTPushPublishSession()
```

Gets the rTP push publish session.

Returns:

the rTP push publish session

setRTTPushPublishSession

```
public void setRTTPushPublishSession(RTTPushPublishSession rtpPushPublishSession)
```

Sets the rTP push publish session.

Parameters:

rtpPushPublishSession - the new rTP push publish session

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get appInstance interface.

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set appInstance interface.

isSingleStreamAV

```
public boolean isSingleStreamAV()
```

Checks if is stream is packetized.

Returns:

true, if is stream packetizer

setSingleStreamAV

```
public void setSingleStreamAV(boolean inSingleStreamAV)
```

Sets the stream packetizer.

Parameters:

inSingleStreamAV - whether stream is packetized

(continued from last page)

setSingleStreamAV

```
public void setSingleStreamAV(String inSingleStreamAV)
```

getHostname

```
public String getHostname()
```

Get destination server host name.

setHostname

```
public void setHostname(String hostname)
```

setPort

```
public void setPort(int port)
```

Set destination server port.

Parameters:

port - destination server port

setPort

```
public void setPort(String portIn)
```

Set destination server port.

getAudioPort

```
public int getAudioPort()
```

Gets the audio port.

Returns:

the audio port

setAudioPort

```
public void setAudioPort(int audioPort)
```

Sets the audio port.

Parameters:

audioPort - the new audio port

setVideoPort

```
public void setVideoPort(int videoPort)
```

(continued from last page)

getAudioHost

```
public String getAudioHost()
```

Gets the audio host.

Returns:

the audio host

setAudioHost

```
public void setAudioHost(String audioHost)
```

Sets the audio host.

Parameters:

audioHost - the new audio host

getVideoHost

```
public String getVideoHost()
```

Gets the video host.

Returns:

the video host

setVideoHost

```
public void setVideoHost(String videoHost)
```

Sets the video host.

Parameters:

videoHost - the new video host

setAudioPort

```
public void setAudioPort(String audioPort)
```

Sets the audio port.

Parameters:

audioPort - the new audio port

getVideoPort

```
public int getVideoPort()
```

Gets the video port.

Returns:

the video port

setVideoPort

```
public void setVideoPort(String videoPort)
```

(continued from last page)

Sets the video port.

Parameters:

videoPort - the new video port

isRTPWrapped

```
public boolean isRTPWrapped()
```

Checks if is rTP wrapped.

Returns:

true, if is rTP wrapped

setRTPWrapped

```
public void setRTPWrapped(String string)
```

Sets the rTP wrapped.

Parameters:

string - the new rTP wrapped

getHostType

```
public String getHostType()
```

Gets the host type.

Returns:

the host type

setHostType

```
public void setHostType(String hostType)
```

Sets the host type.

Parameters:

hostType - the new host type

setTimeToLive

```
public void setTimeToLive(String ttl)
```

Sets the time to live.

Parameters:

ttl - the new time to live

getTimeToLive

```
public int getTimeToLive()
```

Gets the time to live.

Returns:

the time to live

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

getRtpStreamWaitTimeout

```
public long getRtpStreamWaitTimeout()
```

setRtpStreamWaitTimeout

```
public void setRtpStreamWaitTimeout(String rtpStreamWaitTimeout)
```

setRtpStreamWaitTimeout

```
public void setRtpStreamWaitTimeout(long rtpStreamWaitTimeout)
```

createPushPublishSession

```
public IPushPublishSession createPushPublishSession()
```

getContextStr

```
public String getContextStr()
```

getmRtpDestination

```
public RTPDestination getmRtpDestination()
```

getConnectedState

```
public int getConnectedState()
```

setConnectionStatus

```
public void setConnectionStatus(Boolean connected)
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

(continued from last page)

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

add

```
public void add(IOPerformanceCounter totalValue)
```

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

isWriteSDPFiles

```
public boolean isWriteSDPFiles()
```

setWriteSDPFiles

```
public void setWriteSDPFiles(boolean writeSDPFiles)
```

isRemoveSDPFiles

```
public boolean isRemoveSDPFiles()
```

setRemoveSDPFiles

```
public void setRemoveSDPFiles(boolean removeSDPFiles)
```

setRTPWrapped

```
public void setRTPWrapped(boolean isRTPWrapped)
```

(continued from last page)

getMulticastInterfaceAddress

```
public String getMulticastInterfaceAddress()
```

setMulticastInterfaceAddress

```
public void setMulticastInterfaceAddress(String multicastInterfaceAddress)
```

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTPRunner

```

java.lang.Object
  |
  +- java.lang.Thread
        |
        +- com.wowza.wms.pushpublish.protocol.rtp.PushPublishRTPRunner
  
```

All Implemented Interfaces:
Runnable

```

public class PushPublishRTPRunner
extends Thread
  
```

The Class RTPStarter. Utility class to starts an RTP session for push publishing

Field Summary

public static final	CLASS
public static final	CLASSNAME Value: PushPublishRTPRunner

Fields inherited from class java.lang.Thread

MAX_PRIORITY, MIN_PRIORITY, NORM_PRIORITY

Constructor Summary

public	PushPublishRTPRunner (PushPublishRTP pushPublisherRTP, RTPDestination rtpDestination) Instantiates a new rTP PushPublishRTPRunner.
--------	--

Method Summary

void	disconnect ()
void	run ()

Methods inherited from class java.lang.Thread

activeCount, checkAccess, clone, countStackFrames, currentThread, destroy, dumpStack, enumerate, getAllStackTraces, getContextClassLoader, getDefaultUncaughtExceptionHandler, getId, getName, getPriority, getStackTrace, getState, getThreadGroup, getUncaughtExceptionHandler, holdsLock, interrupt, interrupted, isAlive, isDaemon, isInterrupted, join, join, join, onSpinWait, resume, run, setContextClassLoader, setDaemon, setDefaultUncaughtExceptionHandler, setName, setPriority, setUncaughtExceptionHandler, sleep, sleep, start, stop, stop, suspend, toString, yield

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `java.lang.Runnable`

```
run
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishRTPRunner**

Constructors

PushPublishRTPRunner

```
public PushPublishRTPRunner(PushPublishRTP pushPublisherRTP,  
                             RTPDestination rtpDestination)
```

Instantiates a new rTP PushPublishRTPRunner.

Parameters:

`pushPublisherRTP` - the push publisher rtp
`rtpDestination` - the rtp destination

Methods

disconnect

```
public void disconnect()
```

run

```
public void run()
```

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishRTSPActionNotify

java.lang.Object

└-com.wowza.wms.pushpublish.protocol.rtp.PushPublishRTSPActionNotify

All Implemented Interfaces:

[IRTSPActionNotify](#)

```
public class PushPublishRTSPActionNotify
extends Object
implements IRTSPActionNotify
```

The Class PushPublishRTSPActionNotify.

Constructor Summary

public	PushPublishRTSPActionNotify (com.wowza.wms.pushpublish.module.ModulePushPublish modulePushPublish) Instantiates a new push publish rtsp action notify.
--------	---

Method Summary

void	onAnnounce (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onDescribe (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onGetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onOptions (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onPause (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onPlay (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onRecord (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onRedirect (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)

void	onSetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onSetup (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)
void	onTeardown (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.rtp.model.IRTSPActionNotify](#)

[onAnnounce](#), [onDescribe](#), [onGetParameter](#), [onOptions](#), [onPause](#), [onPlay](#), [onRecord](#), [onRedirect](#), [onSetParameter](#), [onSetup](#), [onTeardown](#)

Constructors

PushPublishRTSPActionNotify

```
public PushPublishRTSPActionNotify(com.wowza.wms.pushpublish.module.ModulePushPublish modulePushPublish)
```

Instantiates a new push publish rtsp action notify.

Parameters:

`modulePushPublish` - the module push publish

Methods

onDescribe

```
public void onDescribe(RTPSession rtspSession,
    com.wowza.wms.rtsp.RTSPRequestMessage req,
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onAnnounce

```
public void onAnnounce(RTPSession rtspSession,
    com.wowza.wms.rtsp.RTSPRequestMessage req,
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onGetParameter

```
public void onGetParameter(RTPSession rtspSession,
    com.wowza.wms.rtsp.RTSPRequestMessage req,
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

(continued from last page)

onSetParameter

```
public void onSetParameter(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onOptions

```
public void onOptions(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onPause

```
public void onPause(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onPlay

```
public void onPlay(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onRecord

```
public void onRecord(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onRedirect

```
public void onRedirect(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

onSetup

```
public void onSetup(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

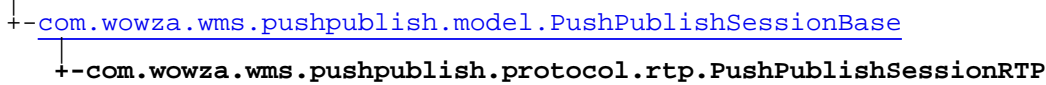
(continued from last page)

onTeardown

```
public void onTeardown(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

com.wowza.wms.pushpublish.protocol.rtp Class PushPublishSessionRTP

java.lang.Object



All Implemented Interfaces:
[IPushPublishSession](#)

public class **PushPublishSessionRTP**
extends [PushPublishSessionBase](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[profile](#), [pushPublishImpl](#), [stream](#), [type](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[PUSHPUBLISHSESSION_TYPE_RTMP](#), [PUSHPUBLISHSESSION_TYPE_RTP](#),
[PUSHPUBLISHSESSION_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishSessionRTP()
--------	---

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishSessionBase](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishSession](#)

[getContextStr](#), [getDestinationID](#), [getProfile](#), [getPushPublishImpl](#), [getStream](#), [getType](#),
[setProfile](#), [setPushPublishImpl](#), [setStream](#)

Constructors

PushPublishSessionRTP

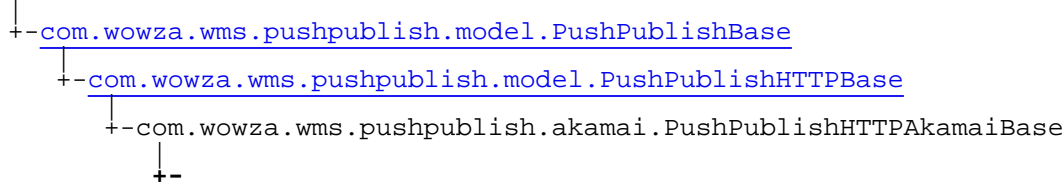
public **PushPublishSessionRTP**()

Package

**com.wowza.wms.pushpublish.protocol.sanjo
se**

com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJoseAkamaiHandler

java.lang.Object



com.wowza.wms.pushpublish.protocol.sanjose.PushPublishHTTPSanJoseAkamaiHandler

All Implemented Interfaces:

com.wowza.wms.pushpublish.akamai.IPushPublishAkamai, [IPushPublishProfileUtil](#), [IPushPublishHTTPOutputBuilder](#), [IPushPublishHTTPGroupMember](#), [IPushPublish](#)

public class **PushPublishHTTPSanJoseAkamaiHandler**
 extends com.wowza.wms.pushpublish.akamai.PushPublishHTTPAkamaiBase
 implements [IPushPublish](#), [IPushPublishHTTPGroupMember](#), [IPushPublishHTTPOutputBuilder](#),
[IPushPublishProfileUtil](#), com.wowza.wms.pushpublish.akamai.IPushPublishAkamai

Field Summary

public static final	AKAMAI SANJOSE CHUNK DURATION Value: 6000
public static final	BITRATE KBPS PLACEHOLDER Value: {bitrateKbps}
public static final	BOOTSTRAP INFO ID Value: bootstrap{bitrateKbps}kbps
public static final	BOOTSTRAP URL Value: {bitrateKbps}kbps.bootstrap
public static final	CHUNK ID PLACEHOLDER Value: {chunkId}
public static final	CHUNK LIST NAME Value: playlist.abst
public static final	CHUNK MEDIUM NAME Value: {bitrateKbps}kbpsSeg1-Frag{chunkId}
public static final	CLASS
public static final	CLASS NAME Value: PushPublishHTTPSanJoseAkamai

public static final	HTTPADAPTER_NAME Value: sanjosestreaming
public static final	LIVESTREAMPACKETIZER_NAME Value: sanjosestreamingpacketizer
public static final	MEDIAURLFILENAME Value: {bitrateKbps}kbps
public static final	REPRESENTATIONID Value: {bitrateKbps}kbps
public static final	SETLEVELPLAYLISTNAME Value: setlevelmanifest.f4m
public static final	STREAMLEVELPLAYLISTNAME Value: {bitrateKbps}kbps.f4m
public static final	STREAMNAMEPLACHOLDER Value: {streamName}
public static final	TAB1 Value:
public static final	TAB2 Value:

Fields inherited from class [com.wowza.wms.pushpublish.akamai.PushPublishHTTPAkamaiBase](#)

AKAMAI_DEFAULT_HOSTID, akamaiEventName, akamaiHostId, akamaiIngestAcceleration, akamaiProtocolName, akamaiStreamId, CLASS, CLASSNAME, connectionTimeout, deleteSentChunks, fakePosts, httpIngressDomainSuffix, httpPlaybackDomainOverride, httpWriterLogOptions, isPlaybackSSL, isSendSSL, maxRetries, protocol, queryParams, readWriteTimeout, reuseSockets, sendToBackupServer, userAgent

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[CACHE_CONTROL_FACTOR](#), [CACHE_CONTROL_HEADER](#), [CACHE_CONTROL_HEADER_KEY](#), [CACHE_CONTROL_HEADER_NONE](#), [CACHE_CONTROL_MEDIA_DEFAULT](#), [httpLogManifests](#), [httpManifestDebug](#), [INDETERMINATE_PLAYLIST_COUNT](#), [MIN_PLAYLIST_COUNT](#), [playlistAcrossSessions](#), [playlistCountFromMap](#), [playlistCountFromPacketizer](#), [playlistCrossName](#), [playlistDurationFromMap](#), [playlistMap](#), [playlistName](#), [playlistTimeout](#), [relativePlaylists](#)

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[PUSHER_ERROR_LIVEPACKETIZER_NOT_CONFIGURED](#), [PUSHER_ERROR_RENDITIONS_MISCONFIGURED](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[PROPERTY_LOG_DEBUG_MANIFEST](#)

Constructor Summary

public	PushPublishHTTPSanJoseAkamaiHandler()
--------	---

Method Summary

Boolean	adaptiveGroupPlaylistNeedsUpdating (long lastUpdateTime, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
void	connect ()
ManifestModel	createGroupPlaylist (String id, java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups, IApplicationInstance appInstance, String context, WMSProperties properties)
PushPublishHTTPOutputItem	createOutputItem (ILiveStreamPacketizer liveStreamPacketizer, int lastChunkIndex)
void	disconnect ()
void	disconnect (boolean hard)
void	error (int errorCode)
int	getChunkDurationTarget (ILiveStreamPacketizer liveStreamPacketizer)
int	getConnectedState ()
String	getContextStr ()
String	getGroupPlaylistRenditionDescription (boolean forABRPlaylist)
int	getLastChunkId (ILiveStreamPacketizer liveStreamPacketizer)
String	getLiveStreamPacketizerName ()

long	<u>getMessagesAttemptedCount()</u>
long	<u>getMessagesFailedCount()</u>
long	<u>getMessagesRetriedCount()</u>
Object	<u>getPacketizerLock()</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)
String	<u>getPlaybackChunklistURL()</u> (String filename, boolean forABRPlaylist)
String	<u>getPlaylistF4M()</u> (<u>LiveStreamPacketizerSanJose</u> packetizer, boolean setLevel)
<u>WMSProperties</u>	<u>getPlaylistProperties()</u>
String	<u>getSetLevelMediaElements()</u> (boolean forABRPlaylist)
String	<u>getStreamLevelMediaElements()</u> (<u>LiveStreamPacketizerSanJose</u> packetizer)
void	<u>init()</u> (<u>IApplicationInstance</u> appInstance, String streamName, <u>IMediaStream</u> stream, java.util.Map profileData, java.util.Map maps, com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher, boolean streamDebug)
boolean	<u>isDebugLog()</u>
boolean	<u>isDeleteSentChunks()</u>
Boolean	<u>isGroupReady()</u> (java.util.List groupingsByRedundantPairs, java.util.List groupingsByAbrGroups)
boolean	<u>isParent()</u> (java.util.Map entry)
void	<u>load()</u> (java.util.HashMap dataMap)
void	<u>onDeleteEntry()</u> (java.util.Map entry)
void	<u>onReadEntry()</u> (java.util.Map entry)
void	<u>onWriteEntry()</u> (java.util.Map oldEntry, java.util.Map newEntry)
boolean	<u>outputClose()</u>
boolean	<u>outputOpen()</u>
void	<u>outputSend()</u> (<u>PushPublishHTTPOutputItem</u> outputItem)
String	<u>padInt()</u> (int value, int len)
void	<u>resetNewPacketizer()</u> (<u>ILiveStreamPacketizer</u> liveStreamPacketizer)

void	<u>sendGroupPlaylist</u> (String groupName, <u>ManifestModel</u> manifest)
void	<u>setApplicationInstance</u> (<u>IApplicationInstance</u> appInstance)
void	<u>setApplicationName</u> (String appName)
void	<u>setDebugLog</u> (boolean debugLog)
void	<u>setDeleteSentChunks</u> (boolean deleteSentChunks)
void	<u>setRepresentationId</u> (String representationId)
void	<u>setVHost</u> (<u>IVHost</u> vhost)
boolean	<u>validateEntry</u> (java.util.Map entry)

Methods inherited from class [com.wowza.wms.pushpublish.akamai.PushPublishHTTPAkamaiBase](#)

getAkamaiEventName, getAkamaiHostId, getAkamaiStreamId, getConnectionTimeout, getDestinationDomain, getDestinationGroupPath, getDestinationGroupURL, getDestinationPath, getDestinationPort, getDestinationURL, getMaxRetries, getPlaybackDomain, getPlaybackURL, getReadWriteTimeout, getResolvedAkamaiStreamId, getSubPath, getUserAgent, init, isAkamaiIngestAcceleration, isDeleteSentChunks, isFakePosts, isInRedundancyPair, isReuseSockets, isSendToBackupServer, load, resetConnection, resolveAkamaiStreamId, setAkamaiEventName, setAkamaiHostId, setAkamaiIngestAcceleration, setAkamaiStreamId, setConnectionTimeout, setDeleteSentChunks, setFakePosts, setMaxRetries, setReadWriteTimeout, setReuseSockets, setSendToBackupServer, setUserAgent

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPBase](#)

[getAdaptiveGroupName](#), [getCachecontrol](#), [getPlaylistCount](#), [getPlaylistMap](#), [getPlaylistTimeout](#), [init](#), [isInAdaptiveGroup](#), [isLogDebugManifest](#), [isPlaylistAcrossSessions](#), [isRelativePlaylists](#), [load](#), [logDebugManifest](#), [setAdaptiveGroupName](#), [setCachecontrol](#), [setLiveStreamPacketizer](#), [setPlaylistAcrossSessions](#), [setPlaylistCountFromMap](#), [setPlaylistCountFromPacketizer](#), [setPlaylistTimeout](#), [setRelativePlaylists](#)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugEnabled](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugEnabled](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugEnabled](#), [resetConnection](#), [setDebugEnabled](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPGroupMember](#)

[adaptiveGroupPlaylistNeedsUpdating](#), [createGroupPlaylist](#), [getAdaptiveGroupName](#), [getGroupPlaylistRenditionDescription](#), [getPlaylistProperties](#), [isGroupReady](#), [isInAdaptiveGroup](#), [isInRedundancyPair](#), [isLogDebugManifest](#), [isSendToBackupServer](#), [sendGroupPlaylist](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishHTTPOutputBuilder](#)

[createOutputItem](#), [error](#), [getAppInstance](#), [getChunkDurationTarget](#), [getDstStreamName](#), [getLastChunkId](#), [getLiveStreamPacketizerName](#), [getPacketizerLock](#), [getSrcStreamName](#), [isDebugEnabled](#), [outputClose](#), [outputOpen](#), [outputSend](#), [resetNewPacketizer](#)

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublishProfileUtil](#)

[createGroupPlaylist](#), [isParent](#), [onDeleteEntry](#), [onReadEntry](#), [onWriteEntry](#), [setApplicationInstance](#), [setApplicationName](#), [setVHost](#), [validateEntry](#)

Methods inherited from interface [com.wowza.wms.pushpublish.akamai.IPushPublishAkamai](#)

```
getAkamaiEventName, getAkamaiHostId, getAkamaiStreamId, getContextStr,  
getDstStreamName, getEntryName, getHostname, getPlaybackHostname, getSrcStreamName,  
getUserAgent, isAkamaiIngestAcceleration, isDebugEnabled, isSendToBackupServer, logDebug,  
logError, logError, logError, logInfo, logWarn, setAkamaiEventName, setAkamaiHostId,  
setAkamaiIngestAcceleration, setAkamaiStreamId, setDebugEnabled, setDstStreamName,  
setEntryName, setHostname, setPlaybackHostname, setSendToBackupServer,  
setSrcStreamName, setUserAgent
```

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishHTTPSanJoseAkamai**

LIVESTREAMPACKETIZER_NAME

```
public static final java.lang.String LIVESTREAMPACKETIZER_NAME
```

Constant value: **sanjosestreamingpacketizer**

HTTPADAPTER_NAME

```
public static final java.lang.String HTTPADAPTER_NAME
```

Constant value: **sanjosestreaming**

BITRATEKBPSPLACHOLDER

```
public static final java.lang.String BITRATEKBPSPLACHOLDER
```

Constant value: **{bitrateKbps}**

STREAMNAMEPLACHOLDER

```
public static final java.lang.String STREAMNAMEPLACHOLDER
```

Constant value: **{streamName}**

SETLEVELPLAYLISTNAME

```
public static final java.lang.String SETLEVELPLAYLISTNAME
```


(continued from last page)

Constant value: **setlevelmanifest.f4m**

REPRESENTATIONID

```
public static final java.lang.String REPRESENTATIONID
```

Constant value: **{bitrateKbps}kbps**

STREAMLEVELPLAYLISTNAME

```
public static final java.lang.String STREAMLEVELPLAYLISTNAME
```

Constant value: **{bitrateKbps}kbps.f4m**

BOOTSTRAPURL

```
public static final java.lang.String BOOTSTRAPURL
```

Constant value: **{bitrateKbps}kbps.bootstrap**

BOOTSTRAPINFROID

```
public static final java.lang.String BOOTSTRAPINFROID
```

Constant value: **bootstrap{bitrateKbps}kbps**

MEDIAURLFILENAME

```
public static final java.lang.String MEDIAURLFILENAME
```

Constant value: **{bitrateKbps}kbps**

CHUNKLISTNAME

```
public static final java.lang.String CHUNKLISTNAME
```

Constant value: **playlist.abst**

CHUNKIDPLACEHOLDER

```
public static final java.lang.String CHUNKIDPLACEHOLDER
```

Constant value: **{chunkId}**

CHUNKMEDIANAME

```
public static final java.lang.String CHUNKMEDIANAME
```

Constant value: **{bitrateKbps}kbpsSeg1-Frag{chunkId}**

(continued from last page)

TAB1

```
public static final java.lang.String TAB1
```

Constant value:

TAB2

```
public static final java.lang.String TAB2
```

Constant value:

AKAMAISANJOSECHUNKDURATION

```
public static final int AKAMAISANJOSECHUNKDURATION
```

Constant value: **6000**

Constructors

PushPublishHTTPSanJoseAkamaiHandler

```
public PushPublishHTTPSanJoseAkamaiHandler()
```

Methods

init

```
public void init(IApplicationInstance appInstance,  
                String streamName,  
                IMediaStream stream,  
                java.util.Map profileData,  
                java.util.Map maps,  
                com.wowza.wms.pushpublish.manager.IPushPublisher pushPublisher,  
                boolean streamDebug)
```

Inits the instance.

getSetLevelMediaElements

```
public String getSetLevelMediaElements(boolean forABRPlaylist)
```

getStreamLevelMediaElements

```
public String getStreamLevelMediaElements(LiveStreamPacketizerSanJose packetizer)
```

getPlaylistF4M

```
public String getPlaylistF4M(LiveStreamPacketizerSanJose packetizer,  
                             boolean setLevel)
```

(continued from last page)

createOutputItem

```
public PushPublishHTTPOutputItem createOutputItem(ILiveStreamPacketizer
liveStreamPacketizer,
    int lastChunkIndex)
```

outputSend

```
public void outputSend(PushPublishHTTPOutputItem outputItem)
```

getContextStr

```
public String getContextStr()
```

getPlaybackChunklistURL

```
public String getPlaybackChunklistURL(String filename,
    boolean forABRPlaylist)
```

resetNewPacketizer

```
public void resetNewPacketizer(ILiveStreamPacketizer liveStreamPacketizer)
```

sendGroupPlaylist

```
public void sendGroupPlaylist(String groupName,
    ManifestModel manifest)
```

getGroupPlaylistRenditionDescription

```
public String getGroupPlaylistRenditionDescription(boolean forABRPlaylist)
```

isGroupReady

```
public Boolean isGroupReady(java.util.List groupingsByRedundantPairs,
    java.util.List groupingsByAbrGroups)
```

(continued from last page)

adaptiveGroupPlaylistNeedsUpdating

```
public Boolean adaptiveGroupPlaylistNeedsUpdating(long lastUpdateTime,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups)
```

getPlaylistProperties

```
public WMSProperties getPlaylistProperties()
```

padInt

```
public String padInt(int value,  
    int len)
```

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

isDeleteSentChunks

```
public boolean isDeleteSentChunks()
```

setDeleteSentChunks

```
public void setDeleteSentChunks(boolean deleteSentChunks)
```

setRepresentationId

```
public void setRepresentationId(String representationId)
```

(continued from last page)

isDebugLog

```
public boolean isDebugLog()
```

setDebugLog

```
public void setDebugLog(boolean debugLog)
```

Set debug logging.

getLiveStreamPacketizerName

```
public String getLiveStreamPacketizerName()
```

getPacketizerLock

```
public Object getPacketizerLock(ILiveStreamPacketizer liveStreamPacketizer)
```

getLastChunkId

```
public int getLastChunkId(ILiveStreamPacketizer liveStreamPacketizer)
```

getChunkDurationTarget

```
public int getChunkDurationTarget(ILiveStreamPacketizer liveStreamPacketizer)
```

outputOpen

```
public boolean outputOpen()
```

outputClose

```
public boolean outputClose()
```

getConnectedState

```
public int getConnectedState()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

(continued from last page)

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

load

```
public void load(java.util.HashMap dataMap)
```

Loads map and profile parameters

error

```
public void error(int errorCode)
```

onWriteEntry

```
public void onWriteEntry(java.util.Map oldEntry,  
    java.util.Map newEntry)
```

onReadEntry

```
public void onReadEntry(java.util.Map entry)
```

onDeleteEntry

```
public void onDeleteEntry(java.util.Map entry)
```

validateEntry

```
public boolean validateEntry(java.util.Map entry)
```

isParent

```
public boolean isParent(java.util.Map entry)
```

(continued from last page)

createGroupPlaylist

```
public ManifestModel createGroupPlaylist(String id,  
    java.util.List groupingsByRedundantPairs,  
    java.util.List groupingsByAbrGroups,  
    IApplicationInstance appInstance,  
    String context,  
    WMSProperties properties)
```

setVHost

```
public void setVHost(IVHost vhost)
```

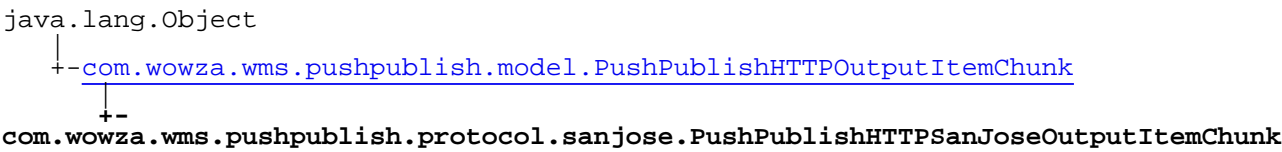
setApplicationName

```
public void setApplicationName(String appName)
```

setApplicationInstance

```
public void setApplicationInstance(IApplicationInstance appInstance)
```

com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJoseOutputItemChunk



```
public class PushPublishHTTPSanJoseOutputItemChunk
extends PushPublishHTTPOutputItemChunk
```

Fields inherited from class com.wowza.wms.pushpublish.model.PushPublishHTTPOutputItemChunk
chunk , isCustomChunkId , playlistEntry , renditionIndex

Constructor Summary	
public	PushPublishHTTPSanJoseOutputItemChunk()

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

```
PushPublishHTTPSanJoseOutputItemChunk
public PushPublishHTTPSanJoseOutputItemChunk()
```


com.wowza.wms.pushpublish.protocol.sanjose Class PushPublishHTTPSanJosePlaylistEntry

java.lang.Object

└─ [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)
└─ **com.wowza.wms.pushpublish.protocol.sanjose.PushPublishHTTPSanJosePlaylistEntry**

public class **PushPublishHTTPSanJosePlaylistEntry**
extends [PushPublishHTTPPlaylistEntry](#)

Field Summary

public	chunk
public	chunkListCustomId
public	chunkListId
public	playlistChunkMediaName

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishHTTPPlaylistEntry](#)

[delete](#)

Constructor Summary

public	PushPublishHTTPSanJosePlaylistEntry()
--------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

playlistChunkMediaName

public java.lang.String **playlistChunkMediaName**

chunkListId

public long **chunkListId**

chunkListCustomId

public long **chunkListCustomId**

chunk

public
com.wowza.wms.httpstreamer.sanjosestreaming.livestreampacketizer.LiveStreamPacketizerS
anJoseChunk **chunk**

Constructors

PushPublishHTTPSanJosePlaylistEntry

public **PushPublishHTTPSanJosePlaylistEntry()**

Package

**com.wowza.wms.pushpublish.protocol.shout
cast**

com.wowza.wms.pushpublish.protocol.shoutcast Interface IPushPublishShoutcastConnector

public interface **IPushPublishShoutcastConnector**
extends

Method Summary

abstract void	<u>addMetaData</u> (String key, String value)
abstract void	<u>clearMetaData</u> ()
abstract void	<u>close</u> (boolean log)
abstract void	<u>connect</u> ()
abstract String	<u>encodeURL</u> (String url)
abstract java.util.HashMap	<u>expandQueryString</u> (String url)
abstract boolean	<u>getConnected</u> ()
abstract boolean	<u>getDebug</u> ()
abstract java.util.HashMap	<u>getMetaData</u> ()
abstract boolean	<u>isMetaDataReady</u> ()
abstract boolean	<u>sendData</u> (byte[] data)
abstract void	<u>sendMetaData</u> (java.util.HashMap metaData)
abstract void	<u>setDebug</u> (boolean debug)
abstract void	<u>setPushPublishShoutcast</u> (<u>PushPublishShoutcast</u> shoutcast)

Methods

connect

public abstract void **connect**()

(continued from last page)

setPushPublishShoutcast

```
public abstract void setPushPublishShoutcast(PushPublishShoutcast shoutcast)
```

sendMetaData

```
public abstract void sendMetaData(java.util.HashMap metaData)
```

isMetaDataReady

```
public abstract boolean isMetaDataReady()
```

getMetaData

```
public abstract java.util.HashMap getMetaData()
```

clearMetaData

```
public abstract void clearMetaData()
```

addMetaData

```
public abstract void addMetaData(String key,  
    String value)
```

getConnected

```
public abstract boolean getConnected()
```

sendData

```
public abstract boolean sendData(byte[] data)
```

setDebug

```
public abstract void setDebug(boolean debug)
```

getDebug

```
public abstract boolean getDebug()
```

(continued from last page)

close

```
public abstract void close(boolean log)
```

encodeURL

```
public abstract String encodeURL(String url)
```

expandQueryString

```
public abstract java.util.HashMap expandQueryString(String url)
```

com.wowza.wms.pushpublish.protocol.shoutcast Interface IPushPublishShoutcastNotify

public interface **IPushPublishShoutcastNotify**
extends

Method Summary

abstract void	<u>onConnect</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onConnectFailure</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onConnectStart</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onConnectSuccess</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onDisconnect</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onPushPublisherSessionCreate</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
abstract void	<u>onPushPublisherSessionDestroy</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)

Methods

onConnectStart

public abstract void **onConnectStart**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onConnectSuccess

public abstract void **onConnectSuccess**([IPushPublishShoutcastConnector](#) pushPublisherSession)

onConnectFailure

public abstract void **onConnectFailure**([IPushPublishShoutcastConnector](#) pushPublisherSession)

(continued from last page)

onConnect

```
public abstract void onConnect(IPushPublishShoutcastConnector pushPublisherSession)
```

onDisconnect

```
public abstract void onDisconnect(IPushPublishShoutcastConnector pushPublisherSession)
```

onPushPublisherSessionCreate

```
public abstract void onPushPublisherSessionCreate(IPushPublishShoutcastConnector  
pushPublisherSession)
```

onPushPublisherSessionDestroy

```
public abstract void onPushPublisherSessionDestroy(IPushPublishShoutcastConnector  
pushPublisherSession)
```


com.wowza.wms.pushpublish.protocol.shoutcast Class PushPublishShoutcast

java.lang.Object

└- [com.wowza.wms.pushpublish.model.PushPublishBase](#)
└- [com.wowza.wms.pushpublish.protocol.shoutcast.PushPublishShoutcast](#)

All Implemented Interfaces:

[IPushPublish](#)

public class **PushPublishShoutcast**
extends [PushPublishBase](#)

Field Summary

protected	aacType
protected	bitrate
protected	channels
public static final	CLASS
public static final	CLASSNAME Value: PushPublishShoutcast
protected	connected
protected	connectionResetCount
protected	connectionTimeout
protected	connectLastAttempt
protected	connectLastSuccess
protected	doSendOnMetaData
protected	frameLength
protected	frequency
protected	isReconnectorRunning
protected	listeners

protected	lock
protected	mpegLayer
protected	mpegProtection
protected	mpegVersion
protected	shoutcastAIM
protected	shoutcastBitrate
protected	shoutcastConnectorProvider
protected	shoutcastContentType
protected	shoutcastDescription
protected	shoutcastGenre
protected	shoutcastICQ
protected	shoutcastIRC
protected	shoutcastName
protected	shoutcastPublic
protected	shoutcastQosH
protected	shoutcastQosL
protected	shoutcastRunner
protected	shoutcastStreamExpandMeta
protected	shoutcastStreamTitleMetaName
protected	shoutcastURL
protected	tryConnect
protected	waitOnMetadataAudio
protected	waitOnMetadataAudioDataRate

Fields inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[appInstance](#), [className](#), [DESTINATION_BAK](#), [DESTINATION_PRI](#), [DESTINATION_RED](#), [destinationName](#), [destinationServer](#), [dstStreamName](#), [entryName](#), [hostname](#), [inetAddr](#), [isAdaptiveStreaming](#), [isExternalRedundancy](#), [logger](#), [mImplementation](#), [myMap](#), [password](#), [playbackHostname](#), [port](#), [profile](#), [properties](#), [pushPublishSession](#), [pushPublishStreamDebug](#), [pushPublishType](#), [reconnectWaitTime](#), [sendingPerformance](#), [srcStream](#), [srcStreamName](#), [totalIOPerformance2Last](#), [totalIOPerformanceLast](#), [userName](#)

Fields inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[CONNECTED_STATE_CONNECTED](#), [CONNECTED_STATE_CONNECTING](#), [CONNECTED_STATE_NOT_CONNECTED](#), [CONNECTED_STATE_WAITING](#), [PUSHPUBLISH_TYPE_CUPERTINO](#), [PUSHPUBLISH_TYPE_MPEGDASH](#), [PUSHPUBLISH_TYPE_NOTIFY_PACKET](#), [PUSHPUBLISH_TYPE_RTMP](#), [PUSHPUBLISH_TYPE_RTP](#), [PUSHPUBLISH_TYPE_RTP_BUFFERED](#), [PUSHPUBLISH_TYPE_SANJOSE](#), [PUSHPUBLISH_TYPE_SRT](#), [PUSHPUBLISH_TYPE_UNKNOWN](#)

Constructor Summary

public	PushPublishShoutcast()
--------	--

Method Summary

String	aacChannel (int channel)
int	aacSamplerate (int freq)
int	aacsampleraterev (int freq)
String	aacType (int type)
void	addListener (IPushPublishShoutcastNotify listener) Add IPushPublishShoutcastNotify listener
void	bumpReconnectWaitTime () Bump the reconnect wait time
void	connect ()
byte[]	createAACHeader (int aacProfile, int frequency, int channel, int length)
void	disconnect ()
void	disconnect (boolean hard)
int	getConnectedState ()
int	getConnectionTimeout () Get the connection timeout (milliseconds)
String	getContextStr ()
java.util.List	getLocalListeners () Get a list of IPushPublishShoutcastNotify listeners

long	<u>getMessagesAttemptedCount()</u>
long	<u>getMessagesFailedCount()</u>
long	<u>getMessagesRetriedCount()</u>
int	<u>getReconnectDelay()</u> (long currTime)
<u>IPushPublishShoutcastConnector</u>	<u>getShoutcasConnectorProvider()</u>
String	<u>getShoutcastStreamTitleMetaName()</u>
int	<u>mp3bitrate</u> (int version, int layer, int bitrateidx)
String	<u>mp3channel</u> (int channel)
int	<u>mp3samplerate</u> (int version, int samplerateidx)
void	<u>notifyConnect</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyConnectFailure</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyConnectStart</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyConnectSuccess</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyDisconnect</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyPushPublisherSessionCreate</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>notifyPushPublisherSessionDestroy</u> (<u>IPushPublishShoutcastConnector</u> pushPublisherSession)
void	<u>resetConnection</u> ()
void	<u>resetWaitTime</u> ()
String	<u>resolveHostName</u> ()
void	<u>setConnectionTimeout</u> (int connectionTimeout) Set the connection timeout (milliseconds)
void	<u>setShoutcastConnectorProvider</u> (<u>IPushPublishShoutcastConnector</u> scConn)
void	<u>setShoutcastExpandMetaData</u> (String flag)
void	<u>setShoutcastStreamAIM</u> (String aim)

void	<u>setShoutcastStreamBitrate</u> (String bitrate)
void	<u>setShoutcastStreamContentType</u> (String contenttype)
void	<u>setShoutcastStreamDescription</u> (String desc)
void	<u>setShoutcastStreamGenre</u> (String genre)
void	<u>setShoutcastStreamICQ</u> (String icq)
void	<u>setShoutcastStreamIRC</u> (String irc)
void	<u>setShoutcastStreamName</u> (String name)
void	<u>setShoutcastStreamPublic</u> (String publicf)
void	<u>setShoutcastStreamTitleMetaName</u> (String metaName)
void	<u>setShoutcastStreamURL</u> (String url)

Methods inherited from class [com.wowza.wms.pushpublish.model.PushPublishBase](#)

[add](#), [addIOPerformance2](#), [clearLoggingValues](#), [createPushPublishSession](#), [getAppInstance](#), [getBandwidth](#), [getBaseParams](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDestinationServer](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getImplementation](#), [getInetAddr](#), [getMap](#), [getMessagesOutBytes](#), [getMessagesOutCount](#), [getPassword](#), [getPlaybackHostname](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getPushPublishVersionStr](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [getUserName](#), [getWowzaStreamingEngineVersionStr](#), [incrementMessagesOut](#), [init](#), [isAdaptiveStreaming](#), [isDebugLog](#), [isExternalRedundancy](#), [load](#), [logDebug](#), [logError](#), [logError](#), [logError](#), [logInfo](#), [logWarn](#), [setAdaptiveStreaming](#), [setAdaptiveStreaming](#), [setAppInstance](#), [setDebugLog](#), [setDestinationName](#), [setDestinationServer](#), [setDestinationServer](#), [setDstStreamName](#), [setEntryName](#), [setExternalRedundancy](#), [setExternalRedundancy](#), [setHost](#), [setHostname](#), [setImplementation](#), [setInetAddr](#), [setPassword](#), [setPlaybackHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [setUserName](#), [updateLoggingValues](#), [updateUsageTracker](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.pushpublish.model.IPushPublish](#)

[connect](#), [createPushPublishSession](#), [disconnect](#), [getConnectedState](#), [getContextStr](#), [getDestinationID](#), [getDestinationName](#), [getDstStreamName](#), [getEntryName](#), [getHostname](#), [getMap](#), [getMessagesAttemptedCount](#), [getMessagesFailedCount](#), [getMessagesRetriedCount](#), [getPort](#), [getProfile](#), [getProperties](#), [getPushPublishType](#), [getReconnectWaitTime](#), [getSrcStream](#), [getSrcStreamName](#), [init](#), [isDebugLog](#), [resetConnection](#), [setDebugLog](#), [setDestinationName](#), [setDstStreamName](#), [setEntryName](#), [setHost](#), [setHostname](#), [setPort](#), [setPort](#), [setProfile](#), [setReconnectWaitTime](#), [setSrcStream](#), [setSrcStreamName](#), [setStreamName](#), [updateUsageTracker](#)

Fields

CLASS

```
public static final java.lang.Class CLASS
```

CLASSNAME

```
public static final java.lang.String CLASSNAME
```

Constant value: **PushPublishShoutcast**

shoutcastQosH

```
protected int shoutcastQosH
```

shoutcastQosL

```
protected int shoutcastQosL
```

shoutcastName

```
protected java.lang.String shoutcastName
```

shoutcastURL

```
protected java.lang.String shoutcastURL
```

shoutcastIRC

```
protected java.lang.String shoutcastIRC
```

shoutcastAIM

```
protected java.lang.String shoutcastAIM
```

shoutcastICQ

```
protected java.lang.String shoutcastICQ
```

shoutcastPublic

protected java.lang.String **shoutcastPublic**

shoutcastGenre

protected java.lang.String **shoutcastGenre**

shoutcastBitrate

protected java.lang.String **shoutcastBitrate**

shoutcastContentType

protected java.lang.String **shoutcastContentType**

shoutcastDescription

protected java.lang.String **shoutcastDescription**

shoutcastStreamTitleMetaName

protected java.lang.String **shoutcastStreamTitleMetaName**

shoutcastStreamExpandMeta

protected boolean **shoutcastStreamExpandMeta**

mpegVersion

protected int **mpegVersion**

mpegLayer

protected int **mpegLayer**

mpegProtection

protected int **mpegProtection**

(continued from last page)

bitrate

protected int **bitrate**

channels

protected int **channels**

frequency

protected int **frequency**

frameLength

protected int **frameLength**

aacType

protected int **aacType**

shoutcastConnectorProvider

protected com.wowza.wms.pushpublish.protocol.shoutcast.IPushPublishShoutcastConnector
shoutcastConnectorProvider

shoutcastRunner

protected com.wowza.wms.pushpublish.protocol.shoutcast.PushPublishShoutcastRunner
shoutcastRunner

listeners

protected java.util.List **listeners**

connectLastAttempt

protected long **connectLastAttempt**

connectLastSuccess

protected long **connectLastSuccess**

connectionResetCount

protected long **connectionResetCount**

connectionTimeout

protected int **connectionTimeout**

connected

protected boolean **connected**

doSendOnMetaData

protected boolean **doSendOnMetaData**

waitOnMetadataAudio

protected boolean **waitOnMetadataAudio**

waitOnMetadataAudioDataRate

protected boolean **waitOnMetadataAudioDataRate**

lock

protected java.lang.Object **lock**

isReconnectorRunning

protected boolean **isReconnectorRunning**

tryConnect

protected boolean **tryConnect**

(continued from last page)

Constructors

PushPublishShoutcast

```
public PushPublishShoutcast()
```

Methods

setShoutcastConnectorProvider

```
public void setShoutcastConnectorProvider(IPushPublishShoutcastConnector scConn)
```

getShoutcasConnectorProvider

```
public IPushPublishShoutcastConnector getShoutcasConnectorProvider()
```

connect

```
public void connect()
```

disconnect

```
public void disconnect()
```

disconnect

```
public void disconnect(boolean hard)
```

resetConnection

```
public void resetConnection()
```

getConnectedState

```
public int getConnectedState()
```

getMessagesAttemptedCount

```
public long getMessagesAttemptedCount()
```

(continued from last page)

getMessagesRetriedCount

```
public long getMessagesRetriedCount()
```

getMessagesFailedCount

```
public long getMessagesFailedCount()
```

getReconnectDelay

```
protected int getReconnectDelay(long currTime)
```

resetWaitTime

```
protected void resetWaitTime()
```

bumpReconnectWaitTime

```
protected void bumpReconnectWaitTime()
```

Bump the reconnect wait time

getConnectionTimeout

```
public int getConnectionTimeout()
```

Get the connection timeout (milliseconds)

Returns:

connection timeout (milliseconds)

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

Set the connection timeout (milliseconds)

Parameters:

connectionTimeout - connection timeout (milliseconds)

resolveHostName

```
protected String resolveHostName()
```

(continued from last page)

getLocalListeners

```
protected java.util.List getLocalListeners()
```

Get a list of IPushPublishShoutcastNotify listeners

Returns:

list of IPushPublishShoutcastNotify listeners

addListener

```
public void addListener(IPushPublishShoutcastNotify listener)
```

Add IPushPublishShoutcastNotify listener

Parameters:

listener - IPushPublishShoutcastNotify listener

notifyConnect

```
protected void notifyConnect(IPushPublishShoutcastConnector pushPublisherSession)
```

notifyConnectStart

```
protected void notifyConnectStart(IPushPublishShoutcastConnector pushPublisherSession)
```

notifyConnectSuccess

```
protected void notifyConnectSuccess(IPushPublishShoutcastConnector  
pushPublisherSession)
```

notifyConnectFailure

```
protected void notifyConnectFailure(IPushPublishShoutcastConnector  
pushPublisherSession)
```

notifyPushPublisherSessionCreate

```
protected void notifyPushPublisherSessionCreate(IPushPublishShoutcastConnector  
pushPublisherSession)
```

notifyPushPublisherSessionDestroy

```
protected void notifyPushPublisherSessionDestroy(IPushPublishShoutcastConnector  
pushPublisherSession)
```

(continued from last page)

notifyDisconnect

```
protected void notifyDisconnect(IPushPublishShoutcastConnector pushPublisherSession)
```

aacChannel

```
public String aacChannel(int channel)
```

aacSamplerate

```
public int aacSamplerate(int freq)
```

aacsampleraterev

```
public int aacsampleraterev(int freq)
```

mp3bitrate

```
public int mp3bitrate(int version,  
                      int layer,  
                      int bitrateidx)
```

mp3samplerate

```
public int mp3samplerate(int version,  
                        int samplerateidx)
```

mp3channel

```
public String mp3channel(int channel)
```

aacType

```
public String aacType(int type)
```

createAACHeader

```
public byte[] createAACHeader(int aacProfile,  
                              int frequency,  
                              int channel,  
                              int length)
```

setShoutcastStreamDescription

```
public void setShoutcastStreamDescription(String desc)
```

setShoutcastStreamName

```
public void setShoutcastStreamName(String name)
```

setShoutcastStreamURL

```
public void setShoutcastStreamURL(String url)
```

setShoutcastStreamIRC

```
public void setShoutcastStreamIRC(String irc)
```

setShoutcastStreamAIM

```
public void setShoutcastStreamAIM(String aim)
```

setShoutcastStreamICQ

```
public void setShoutcastStreamICQ(String icq)
```

setShoutcastStreamPublic

```
public void setShoutcastStreamPublic(String publicf)
```

setShoutcastStreamGenre

```
public void setShoutcastStreamGenre(String genre)
```

setShoutcastStreamBitrate

```
public void setShoutcastStreamBitrate(String bitrate)
```

setShoutcastStreamContentType

```
public void setShoutcastStreamContentType(String contenttype)
```

(continued from last page)

setShoutcastStreamTitleMetaName

```
public void setShoutcastStreamTitleMetaName(String metaName)
```

getShoutcastStreamTitleMetaName

```
public String getShoutcastStreamTitleMetaName()
```

setShoutcastExpandMetaData

```
public void setShoutcastExpandMetaData(String flag)
```

getContextStr

```
public String getContextStr()
```

Package

com.wowza.wms.response

com.wowza.wms.response Class ResponseFunction

java.lang.Object

└─com.wowza.wms.response.ResponseFunction

public class **ResponseFunction**
extends Object

ResponseFunction: class for sending status messages to the client.

Field Summary

public	doBreak
--------	-------------------------

Constructor Summary

public	ResponseFunction (IClient client) Create an empty ResponseFunction
public	ResponseFunction (INetConnection netConnection) Create an empty ResponseFunction
public	ResponseFunction (INetConnection netConnection, AMFObj amfObj) Create an empty ResponseFunction
public	ResponseFunction (IClient client, AMFObj amfObj) Create an empty ResponseFunction
public	ResponseFunction (IMediaStream stream, AMFObj amfObj) Create an empty ResponseFunction

Method Summary

void	addBody (AMFData body) Add AMFData to the body of the message.
void	addBytes (byte[] inbytes) Add raw AMFData bytes[] to message body
void	createBroadcastMessage (java.nio.ByteBuffer messageBytes) Create broadcast message.
void	createConnectMessage (String inName, double inResultNum) Create net connection connect message.
void	createDefaultMessage (String inName, double inResultNum) Create a default message (onStatus type messages).
void	createEnhancedSeekMessage (byte[] messageBuffer, int src, int tc)

void	<u>createPlayStatusMessage</u> (String inName) Create onPlayStatus message.
void	<u>createSeekMessage</u> (String inName) Create a seek result message.
void	<u>createSOMessage</u> (byte[] messageBuffer, int objectEncoding) Create shared object message.
long	<u>getTimecode</u> () Get function timecode (milliseconds).
int	<u>getType</u> () Get message type.
boolean	<u>isForceAMF0</u> ()
void	<u>setBody</u> (int index, <u>AMFData</u> body) Add AMFData to the body of the message.
void	<u>setForceAMF0</u> (boolean forceAMF0)
void	<u>setMessageBytes</u> (byte[] messageBytes)
void	<u>setRetAMFNumber</u> (int innum) Set the return channel id
void	<u>setSrc</u> (int src) Set the src (stream id) for the message.
void	<u>setTimecode</u> (long timecode) Set function timecode (milliseconds).
void	<u>setType</u> (int type) Set message type.
int	<u>write</u> (java.io.OutputStream out, boolean isAbsTimecode, int chunkSize) Write message directly to OutputStream
int	<u>write</u> (java.io.OutputStream out, int chunkSize) Write message directly to OutputStream.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

doBreak

public boolean **doBreak**

(continued from last page)

Constructors

ResponseFunction

```
public ResponseFunction(IClient client)
```

Create an empty ResponseFunction

Parameters:

client - client

ResponseFunction

```
public ResponseFunction(INetConnection netConnection)
```

Create an empty ResponseFunction

Parameters:

netConnection - net connection

ResponseFunction

```
public ResponseFunction(INetConnection netConnection,  
                        AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

netConnection - net connection

amfObj - amf object

ResponseFunction

```
public ResponseFunction(IClient client,  
                        AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

client - client object

amfObj - amf object

ResponseFunction

```
public ResponseFunction(IMediaStream stream,  
                        AMFObj amfObj)
```

Create an empty ResponseFunction

Parameters:

stream - media stream object

amfObj - amf object

Methods

setSrc

```
public void setSrc(int src)
```

(continued from last page)

Set the src (stream id) for the message.

Parameters:

src - src (stream id)

createDefaultMessage

```
public void createDefaultMessage(String inName,  
    double inResultNum)
```

Create a default message (onStatus type messages).

Parameters:

inName - handler name (example: onStatus)

inResultNum - result number of 0 if not result

createConnectMessage

```
public void createConnectMessage(String inName,  
    double inResultNum)
```

Create net connection connect message.

Parameters:

inName - handler name (example: connection)

inResultNum - result number if 0 not a result

createSeekMessage

```
public void createSeekMessage(String inName)
```

Create a seek result message.

Parameters:

inName - handler name (example: onStatus)

createPlayStatusMessage

```
public void createPlayStatusMessage(String inName)
```

Create onPlayStatus message.

Parameters:

inName - handler name (example: onPlayStatus)

setMessageBytes

```
public void setMessageBytes(byte[] messageBytes)
```

createBroadcastMessage

```
public void createBroadcastMessage(java.nio.ByteBuffer messageBytes)
```

Create broadcast message. Used for ByteBuffer handler calls.

Parameters:

(continued from last page)

messageBytes - ByteBuffer with raw AMFData bytes to be sent to client

createSOMessage

```
public void createSOMessage(byte[] messageBuffer,  
    int objectEncoding)
```

Create shared object message. Used for ByteBuffer handler calls.

Parameters:

messageBuffer

createEnhancedSeekMessage

```
public void createEnhancedSeekMessage(byte[] messageBuffer,  
    int src,  
    int tc)
```

addBody

```
public void addBody(AMFData body)
```

Add AMFData to the body of the message.

Parameters:

body - AMFData message

setBody

```
public void setBody(int index,  
    AMFData body)
```

Add AMFData to the body of the message.

Parameters:

index - index in body list

body - AMFData message

addBytes

```
public void addBytes(byte[] inbytes)
```

Add raw AMFData bytes[] to message body

Parameters:

inbytes - raw AMFData bytes[]

setRetAMFNumber

```
public void setRetAMFNumber(int innum)
```

Set the return channel id

Parameters:

innum - return channel id

(continued from last page)

getTimecode

```
public long getTimecode()
```

Get function timecode (milliseconds).

Returns:

function timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set function timecode (milliseconds).

Parameters:

timecode - function timecode (milliseconds)

setType

```
public void setType(int type)
```

Set message type. See IVHost.CONTENTTYPE_*

Parameters:

type - message type

getType

```
public int getType()
```

Get message type. See IVHost.CONTENTTYPE_*

Returns:

message type

write

```
public int write(java.io.OutputStream out,  
int chunkSize)
```

Write message directly to OutputStream.

Parameters:

out - OutputStream

Returns:

number of bytes written

isForceAMF0

```
public boolean isForceAMF0()
```

setForceAMF0

```
public void setForceAMF0(boolean forceAMF0)
```

(continued from last page)

write

```
public int write(java.io.OutputStream out,  
                boolean isAbsTimecode,  
                int chunkSize)
```

Write message directly to OutputStream

Parameters:

out - OutputStream
isAbsTimecode - is timecode absolute

Returns:

number of bytes written

com.wowza.wms.response Class ResponseFunctions

java.lang.Object

└─com.wowza.wms.response.ResponseFunctions

public class **ResponseFunctions**
extends Object

ResponseFunctions: collection of ResponseFunction objects. This interface is used to asynchronously collect up a set of client responses that will be sent to the client at the next opportunity.

Constructor Summary

public	ResponseFunctions()
--------	-------------------------------------

Method Summary

void	add(ResponseFunction wmsResponseFunction) Add a function.
void	clear()
boolean	isPending() Are there any pending items in the list.
int	output(java.io.OutputStream out, int sendChunkSize) Write all functions (in order added to list) to OutputStream.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseFunctions

public **ResponseFunctions()**

Methods

add

public void **add**([ResponseFunction wmsResponseFunction](#))

Add a function.

(continued from last page)

Parameters:`wmsResponseFunction` - function

clear

```
public void clear()
```

isPending

```
public boolean isPending()
```

Are there any pending items in the list.

Returns:

true if items in list

output

```
public int output(java.io.OutputStream out,  
                 int sendChunkSize)
```

Write all functions (in order added to list) to OutputStream.

Parameters:

`out` - OutputStream

Returns:

total number of bytes written

com.wowza.wms.response Class ResponseStream

java.lang.Object

└─com.wowza.wms.response.ResponseStream

public class **ResponseStream**
extends Object

Constructor Summary

public	ResponseStream (IMediaStream stream)
--------	---

Method Summary

void	addPackets (java.util.List packets)
void	clearPackets ()
java.util.List	getPackets ()
IMediaStream	getStream ()
void	setStream (IMediaStream stream)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseStream

public **ResponseStream**([IMediaStream](#) stream)

Methods

addPackets

public void **addPackets**(java.util.List packets)

(continued from last page)

getPackets

```
public java.util.List getPackets()
```

clearPackets

```
public void clearPackets()
```

getStream

```
public IMediaStream getStream()
```

setStream

```
public void setStream(IMediaStream stream)
```

com.wowza.wms.response Class ResponseStreams

java.lang.Object

└─com.wowza.wms.response.ResponseStreams

public class **ResponseStreams**
extends Object

Constructor Summary

public	ResponseStreams()
--------	-----------------------------------

Method Summary

void	addStreamResponse (IMediaStream stream)
boolean	isPending ()
int	output (java.io.OutputStream out, IClient clientInt)
int	size ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ResponseStreams

public **ResponseStreams**()

Methods

addStreamResponse

public void **addStreamResponse**([IMediaStream](#) stream)

(continued from last page)

output

```
public int output(java.io.OutputStream out,  
    IClient clientInt)
```

isPending

```
public boolean isPending()
```

size

```
public int size()
```

Package

com.wowza.wms.rtp.model

com.wowza.wms.rtp.model Interface IRTPEncryptionProvider

public interface **IRTPEncryptionProvider**
extends

Method Summary

abstract void	onTrack (RTPSession rtpSession, RTPTrack rtpTrack)
---------------	---

Methods

onTrack

```
public abstract void onTrack(RTPSession rtpSession,  
    RTPTrack rtpTrack)
```

com.wowza.wms.rtp.model Interface IRTPMessageHandler

public interface **IRTPMessageHandler**
extends

IRTPMessageHandler: Internal use.

Method Summary

abstract void	handleMessage (java.net.SocketAddress socketAddr, byte[] buffer, int offset, int len)
---------------	---

Methods

handleMessage

```
public abstract void handleMessage(java.net.SocketAddress socketAddr,  
    byte[] buffer,  
    int offset,  
    int len)
```


com.wowza.wms.rtp.model

Interface IRTPMetadataProvider

public interface IRTPMetadataProvider

extends

IRTPMetadataProvider: Internal use.

Method Summary	
abstract byte[]	getMetadataPacket (RTPStream stream)

Methods

getMetadataPacket

public abstract byte[] **getMetadataPacket**([RTPStream](#) stream)

com.wowza.wms.rtp.model

Interface IRTPSessionNotify

public interface **IRTPSessionNotify**
extends

IRTPSessionNotify: listener interface for RTP sessions. See RTPSessions.addSessionListener(IRTPSessionNotify listener)

Method Summary	
abstract void	onRTPSessionCreate (RTPSession rtpSession) Invoked when RTP session is created
abstract void	onRTPSessionDestroy (RTPSession rtpSession) Invoked when RTP session is destroyed

Methods

onRTPSessionCreate

public abstract void **onRTPSessionCreate**([RTPSession](#) rtpSession)

 Invoked when RTP session is created

Parameters:
 rtpSession - RTP session

onRTPSessionDestroy

public abstract void **onRTPSessionDestroy**([RTPSession](#) rtpSession)

 Invoked when RTP session is destroyed

Parameters:
 rtpSession - RTP session

com.wowza.wms.rtp.model Interface IRTSPActionNotify

All Known Implementing Classes:

[PushPublishRTSPActionNotify](#)

public interface **IRTSPActionNotify**
extends

IRTSPActionNotify: listener interface for RTSP actions. See RTPSession.addActionListener(IRTSPActionNotify actionListener)

Method Summary

abstract void	onAnnounce (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by ANNOUNCE command
abstract void	onDescribe (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by DESCRIBE command
abstract void	onGetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by GET_PARAMETER command
abstract void	onOptions (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by OPTIONS command
abstract void	onPause (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by PAUSE command
abstract void	onPlay (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by PLAY command
abstract void	onRecord (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by RECORD command
abstract void	onRedirect (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by REDIRECT command
abstract void	onSetParameter (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by SET_PARAMETER command
abstract void	onSetup (RTPSession rtspSession, com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked by SETUP command

abstract void

```
onTearDown(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by TEARDOWN command

Methods

onDescribe

```
public abstract void onDescribe(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by DESCRIBE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onAnnounce

```
public abstract void onAnnounce(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by ANNOUNCE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onSetParameter

```
public abstract void onSetParameter(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by SET_PARAMETER command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onGetParameter

```
public abstract void onGetParameter(RTPSession rtspSession,  
com.wowza.wms.rtp.RTSPRequestMessage req,  
com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by GET_PARAMETER command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onOptions

```
public abstract void onOptions(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by OPTIONS command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onPause

```
public abstract void onPause(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by PAUSE command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onPlay

```
public abstract void onPlay(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by PLAY command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onRecord

```
public abstract void onRecord(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by RECORD command

Parameters:

rtspSession
req
resp

onRedirect

```
public abstract void onRedirect(RTPSession rtspSession,  
    com.wowza.wms.rtp.RTSPRequestMessage req,  
    com.wowza.wms.rtp.RTSPResponseMessages resp)
```

Invoked by REDIRECT command

(continued from last page)

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onSetup

```
public abstract void onSetup(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked by SETUP command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

onTeardown

```
public abstract void onTeardown(RTPSession rtspSession,  
    com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked by TEARDOWN command

Parameters:

rtspSession - RTP session
req - RTP request
resp - RTP response

com.wowza.wms.rtp.model

Class RTPContext

java.lang.Object

└─com.wowza.wms.rtp.model.RTPContext

public class **RTPContext**
extends Object

RTPContext: RTP context

Constructor Summary

public	RTPContext (IVHost vhost) Constructor
--------	---

Method Summary

boolean	acquireSocketAddress (java.net.SocketAddress socketAddress) Acquire UDP socket address
int	acquireUDPPortPair () Acquire next available UDP port pair
int	acquireUDPPortPair (int port) Acquire UDP port pair
void	cacheRTPStream (RTPStream stream) Cache an RTP stream, Internal use.
void	doWatchdog () Idle events for cleanup
boolean	existsRTSPTunnelingSession (String sessionId) Return true if session id is valid RTSP/RTP tunneling session id
int[]	expandToPortPair (int port) Expand a single port to a pair.
RTPPacketizerItem	getAudioPacketizerItem (IApplicationInstance appInstance, int codecId) Get audio packetizer for a given codec id.
com.wowza.wms.rtp.dep acketizer.RTPDePacket izerList	getDePacketizerList () Get a list of the available depacketizers
String	getDePacketizerName (RTPTrack rtpTrack) Get a depacketizer by name
Object	getLock () Get the UDP port manager lock
Object	getRTSPTunnelingLock () Get the RTSP/RTP tunneling lock

com.wowza.wms.rtsp.RTSP TunnelingSession	getRTSP TunnelingSession (String sessionId) Get RTSP/RTP tunneling session by session id
RTPSessions	getSessions () Get RTP sessions
RTPPacketizerItem	getStreamPacketizerItem (IApplicationInstance appInstance, int codecId) Get stream packetizer for a given codec id.
UDPTransportManager	getUDPTransportManager () Get the UDP transport manager
IVHost	getVHost () Get vhost
RTPPacketizerItem	getVideoPacketizerItem (IApplicationInstance appInstance, int codecId) Get video packetizer for a given codec id.
void	init () Initialize
boolean	isUDPPortDebugLog ()
void	putAudioPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the audio packetizer for a given codec id
void	putRTSP TunnelingSession (String sessionId, com.wowza.wms.rtsp.RTSP TunnelingSession rtspTunnelingSession) Remove RTSP/RTP tunneling session by session id
void	putStreamPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the stream packetizer for a given codec id
void	putVideoPacketizerItem (int codecId, RTPPacketizerItem rtpPacketizerInfo) Set the video packetizer for a given codec id
boolean	releaseSocketAddress (java.net.SocketAddress socketAddress) Release UDP socket address
void	releaseUDPPortPair (int port) Release port pair
com.wowza.wms.rtsp.RTSP TunnelingSession	removeRTSP TunnelingSession (String sessionId) Remove RTSP/RTP tunneling session by session id
void	shutdown () Shutdown
void	shutdownRTPSession (RTPSession rtpSession) Gracefully and forcefully shutdown and RTP session
void	shutdownRTPSession (String sessionId) Gracefully and forcefully shutdown and RTP session
RTPStream	uncacheRTPStream (String streamId) UnCache an RTP stream, Internal use.

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

RTPContext

```
public RTPContext(IVHost vhost)
```

Constructor

Parameters:

vhost - vhost

Methods

doWatchdog

```
public void doWatchdog()
```

Idle events for cleanup

init

```
public void init()
```

Initialize

shutdown

```
public void shutdown()
```

Shutdown

getAudioPacketizerItem

```
public RTPPacketizerItem getAudioPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get audio packetizer for a given codec id.

Parameters:

appInstance - application instance

codecId - codec id, see `IVHost.CODEC_AUDIO_*`

Returns:

packetizer info

putAudioPacketizerItem

```
public void putAudioPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the audio packetizer for a given codec id

(continued from last page)

Parameters:

codecId - codec id, see IVHost.CODEC_AUDIO_*
rtpPacketizerInfo - packetizer info

getVideoPacketizerItem

```
public RTPPacketizerItem getVideoPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get video packetizer for a given codec id.

Parameters:

appInstance - application instance
codecId - codec id, see IVHost.CODEC_VIDEO_*

Returns:

packetizer info

putVideoPacketizerItem

```
public void putVideoPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the video packetizer for a given codec id

Parameters:

codecId - codec id, see IVHost.CODEC_VIDEO_*
rtpPacketizerInfo - packetizer info

getStreamPacketizerItem

```
public RTPPacketizerItem getStreamPacketizerItem(IApplicationInstance appInstance,  
int codecId)
```

Get stream packetizer for a given codec id.

Parameters:

appInstance - application instance
codecId - codec id, see IVHost.CODEC_STREAM_*

Returns:

packetizer info

putStreamPacketizerItem

```
public void putStreamPacketizerItem(int codecId,  
RTPPacketizerItem rtpPacketizerInfo)
```

Set the stream packetizer for a given codec id

Parameters:

codecId - codec id, see IVHost.CODEC_STREAM_*
rtpPacketizerInfo - packetizer info

getSessions

```
public RTPSessions getSessions()
```

(continued from last page)

Get RTP sessions

Returns:

RTP sessions

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

getUDPTransportManager

```
public UDPTransportManager getUDPTransportManager()
```

Get the UDP transport manager

Returns:

UDP transport manager

getLock

```
public Object getLock()
```

Get the UDP port manager lock

Returns:

UDP port manager lock

acquireSocketAddress

```
public boolean acquireSocketAddress(java.net.SocketAddress socketAddress)
```

Acquire UDP socket address

Parameters:

socketAddress - UDP socket address

Returns:

true if available

releaseSocketAddress

```
public boolean releaseSocketAddress(java.net.SocketAddress socketAddress)
```

Release UDP socket address

Parameters:

socketAddress - UDP socket address

Returns:

true if available

(continued from last page)

acquireUDPPortPair

```
public int acquireUDPPortPair(int port)
```

Acquire UDP port pair

Parameters:

port - starting port

Returns:

port

expandToPortPair

```
public int[] expandToPortPair(int port)
```

Expand a single port to a pair. Ports are allocated in pairs always starting with even port number.

Parameters:

port - port

Returns:

port

acquireUDPPortPair

```
public int acquireUDPPortPair()
```

Acquire next available UDP port pair

Returns:

port

releaseUDPPortPair

```
public void releaseUDPPortPair(int port)
```

Release port pair

Parameters:

port - first port of pair

isUDPPortDebugLog

```
public boolean isUDPPortDebugLog()
```

cacheRTPStream

```
public void cacheRTPStream(RTPStream stream)
```

Cache an RTP stream, Internal use.

Parameters:

stream - RTP stream

(continued from last page)

uncacheRTPStream

```
public RTPStream uncacheRTPStream(String streamId)
```

UnCache an RTP stream, Internal use.

Parameters:

streamId - stream id

Returns:

RTP Stream

getDePacketizerList

```
public com.wowza.wms.rtp.depaketizer.RTPDePacketizerList getDePacketizerList()
```

Get a list of the available depacketizers

Returns:

list of the available depacketizers

getDePacketizerName

```
public String getDePacketizerName(RTPTrack rtpTrack)
```

Get a depacketizer by name

Parameters:

rtpTrack - track

Returns:

depacketizer

getRTSPTunnelingLock

```
public Object getRTSPTunnelingLock()
```

Get the RTSP/RTP tunneling lock

Returns:

RTSP/RTP tunneling lock

getRTSPTunnelingSession

```
public com.wowza.wms.rtsp.RTSPTunnelingSession getRTSPTunnelingSession(String sessionId)
```

Get RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

Returns:

RTSP/RTP tunneling session

(continued from last page)

removeRTSPTunnelingSession

```
public com.wowza.wms.rtp.RTSPTunnelingSession removeRTSPTunnelingSession(String  
sessionId)
```

Remove RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

Returns:

RTSP/RTP tunneling session if removed

existsRTSPTunnelingSession

```
public boolean existsRTSPTunnelingSession(String sessionId)
```

Return true if session id is valid RTSP/RTP tunneling session id

Parameters:

sessionId - session id

Returns:

true if session id is valid RTSP/RTP tunneling session id

putRTSPTunnelingSession

```
public void putRTSPTunnelingSession(String sessionId,  
com.wowza.wms.rtp.RTSPTunnelingSession rtspTunnelingSession)
```

Remove RTSP/RTP tunneling session by session id

Parameters:

sessionId - session id

rtspTunnelingSession - RTSP/RTP tunneling session

shutdownRTPSession

```
public void shutdownRTPSession(String sessionId)
```

Gracefully and forcefully shutdown and RTP session

Parameters:

sessionId

shutdownRTPSession

```
public void shutdownRTPSession(RTPSession rtpSession)
```

Gracefully and forcefully shutdown and RTP session

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model

Class RTPDestination

java.lang.Object

└─com.wowza.wms.rtp.model.RTPDestination

public class **RTPDestination**
extends Object

RTPDestination: Fully describes an RTP destination.

Constructor Summary

public	RTPDestination()
--------	----------------------------------

Method Summary

String	getAudioHost() Get audio host
int	getAudioPort() Get audio port
String	getHost() Get the host
String	getHostType() Get host type (default IP4)
String	getMulticastInterfaceAddress()
String	getName() Get name
int	getStreamPort() Get stream port
int	getTTL() Get time to live
String	getVideoHost() Get video host
int	getVideoPort() Get video port
boolean	isMulticast() Return true if multicast destination
boolean	isRTPWrapped() Is stream wrapped in RTP (MPEG-TS in RTP)

boolean	<code>isStream()</code> Return true if stream destination (and not native RTP destination)
void	<code>setAudioHost(String audioHost)</code> Set audio host
void	<code>setAudioPort(int audioPort)</code> Set audio port
void	<code>setHost(String host)</code> Set host
void	<code>setHostType(String hostType)</code> Set host type (default IP4)
void	<code>setMulticastInterfaceAddress(String multicastInterfaceAddress)</code>
void	<code>setName(String name)</code> Set name
void	<code>setRTPWrapped(boolean isRTPWrapped)</code> Is stream wrapped in RTP (MPEG-TS in RTP)
void	<code>setStreamPort(int streamPort)</code> Set stream port
void	<code>setTTL(int ttl)</code> Set time to live
void	<code>setVideoHost(String videoHost)</code> Set video host
void	<code>setVideoPort(int videoPort)</code> Set video port
String	<code>toString()</code>

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

RTPDestination

```
public RTPDestination()
```

Methods

toString

```
public String toString()
```


(continued from last page)

isMulticast

```
public boolean isMulticast()
```

Return true if multicast destination

Returns:

true if multicast destination

isStream

```
public boolean isStream()
```

Return true if stream destination (and not native RTP destination)

Returns:

true if stream destination

getHost

```
public String getHost()
```

Get the host

Returns:

host

setHost

```
public void setHost(String host)
```

Set host

Parameters:

host - host

getVideoPort

```
public int getVideoPort()
```

Get video port

Returns:

video port

setVideoPort

```
public void setVideoPort(int videoPort)
```

Set video port

Parameters:

videoPort - video port

(continued from last page)

getAudioPort

```
public int getAudioPort()
```

Get audio port

Returns:

audio port

setAudioPort

```
public void setAudioPort(int audioPort)
```

Set audio port

Parameters:

audioPort - audio port

getStreamPort

```
public int getStreamPort()
```

Get stream port

Returns:

stream port

setStreamPort

```
public void setStreamPort(int streamPort)
```

Set stream port

Parameters:

streamPort - stream port

getVideoHost

```
public String getVideoHost()
```

Get video host

Returns:

video host

setVideoHost

```
public void setVideoHost(String videoHost)
```

Set video host

Parameters:

videoHost - video host

getAudioHost

```
public String getAudioHost()
```

(continued from last page)

Get audio host

Returns:

audio host

setAudioHost

```
public void setAudioHost(String audioHost)
```

Set audio host

Parameters:

audioHost - audio host

getHostType

```
public String getHostType()
```

Get host type (default IP4)

Returns:

host type

setHostType

```
public void setHostType(String hostType)
```

Set host type (default IP4)

Parameters:

hostType - host type

getTTL

```
public int getTTL()
```

Get time to live

Returns:

time to live

setTTL

```
public void setTTL(int ttl)
```

Set time to live

Parameters:

ttl - time to live

isRTPWrapped

```
public boolean isRTPWrapped()
```

Is stream wrapped in RTP (MPEG-TS in RTP)

Returns:

true if stream wrapped in RTP

setRTPWrapped

```
public void setRTPWrapped(boolean isRTPWrapped)
```

Is stream wrapped in RTP (MPEG-TS in RTP)

Parameters:

isRTPWrapped - true if stream wrapped in RTP

getName

```
public String getName()
```

Get name

Returns:

name

setName

```
public void setName(String name)
```

Set name

Parameters:

name - name

getMulticastInterfaceAddress

```
public String getMulticastInterfaceAddress()
```

setMulticastInterfaceAddress

```
public void setMulticastInterfaceAddress(String multicastInterfaceAddress)
```

com.wowza.wms.rtp.model

Class RTPPort

java.lang.Object

└─com.wowza.wms.rtp.model.RTPPort

All Implemented Interfaces:

[IUDPMessageHandler](#)

public class **RTPPort**
 extends Object
 implements [IUDPMessageHandler](#)

Constructor Summary

public	RTPPort (String inIpAddress, int inPort, String outIpAddress, int outPort, boolean isMulticast) Constructor
--------	--

Method Summary

void	bind (int direction) Bind to port
int	getAddressCount () Get address count
IRTPMessageHandler	getHandler () Get the message handler
String	getInIpAddress () Get in IP address
int	getInPort () Get in port
String	getOutIpAddress () Get out IP address
int	getOutPort () Get out port
RTPTrack	getTrack () Get RTP track
int	getTTL () Get time to live (milliseconds)
IUDPTransport	getUDPTransport () Get the UDP transport
void	handleMessage (java.net.SocketAddress socketAddr, Object message)

boolean	<u>isBlockUDPOut</u> ()
boolean	<u>isConnected</u> ()
boolean	<u>isInMulticast</u> () Is in stream multicast
boolean	<u>isMulticast</u> () Is multicast
boolean	<u>isOutMulticast</u> () Is out stream multicast
void	<u>sendMessage</u> (byte[] message, int offset, int len) Send a message out
void	<u>sendResponse</u> (byte[] message) Send a response
void	<u>sendResponse</u> (byte[] message, int offset, int len) Send response
void	<u>sendResponse</u> (byte[] message, int offset, int len, java.net.SocketAddress destination, long timecode) Send response to destination
void	<u>sessionClosed</u> (<u>IUDPTransportSession</u> session)
void	<u>sessionOpened</u> (<u>IUDPTransportSession</u> session)
void	<u>setAddressCount</u> (int addressCount) Set address count
void	<u>setBlockUDPOut</u> (boolean blockUDPOut)
void	<u>setHandler</u> (<u>IRTPMessageHandler</u> handler) Set the message handler
void	<u>setTrack</u> (RTPTrack track) Set RTP track
void	<u>setTTL</u> (int ttl) Set time to live (milliseconds)
void	<u>shutdown</u> () Shutdown port
void	<u>unbind</u> () Unbind

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.rtp.transport.IUDPMessageHandler](#)

[handleMessage](#), [sessionClosed](#), [sessionOpened](#)

Constructors

RTPPort

```
public RTPPort(String inIpAddress,
               int inPort,
               String outIpAddress,
               int outPort,
               boolean isMulticast)
```

Constructor

Parameters:

inIpAddress - in ip address
inPort - in port
outIpAddress - out ip address
outPort - out port
isMulticast - true if multicast

Methods

getTrack

```
public RTPTrack getTrack()
```

Get RTP track

Returns:

RTP track

setTrack

```
public void setTrack(RTPTrack track)
```

Set RTP track

Parameters:

track - RTP track

getUDPTransport

```
public IUDPTransport getUDPTransport()
```

Get the UDP transport

Returns:

UDP transport

getInIpAddress

```
public String getInIpAddress()
```

Get in IP address

(continued from last page)

Returns:

in IP address

getOutIpAddress

```
public String getOutIpAddress()
```

Get out IP address

Returns:

out IP address

getInPort

```
public int getInPort()
```

Get in port

Returns:

in port

getOutPort

```
public int getOutPort()
```

Get out port

Returns:

out port

isConnected

```
public boolean isConnected()
```

bind

```
public void bind(int direction)
```

Bind to port

Parameters:

direction - in or out, see IUDPTransport.DIRECTION_*

unbind

```
public void unbind()
```

Unbind

shutdown

```
public void shutdown()
```

Shutdown port

(continued from last page)

getHandler

```
public IRTPMessageHandler getHandler()
```

Get the message handler

Returns:

message handler

setHandler

```
public void setHandler(IRTPMessageHandler handler)
```

Set the message handler

Parameters:

handler - message handler

sendMessage

```
public void sendMessage(byte[] message,  
    int offset,  
    int len)
```

Send a message out

Parameters:

message - message

offset - offset

len - len

sendResponse

```
public void sendResponse(byte[] message)
```

Send a response

Parameters:

message - message

sendResponse

```
public void sendResponse(byte[] message,  
    int offset,  
    int len)
```

Send response

Parameters:

message - message

offset - offset

len - len

(continued from last page)

sendResponse

```
public void sendResponse(byte[] message,  
    int offset,  
    int len,  
    java.net.SocketAddress destination,  
    long timecode)
```

Send response to destination

Parameters:

message - message
offset - offset
len - len
destination - destination address

sessionOpened

```
public void sessionOpened(IUDPTransportSession session)
```

sessionClosed

```
public void sessionClosed(IUDPTransportSession session)
```

handleMessage

```
public void handleMessage(java.net.SocketAddress socketAddr,  
    Object message)
```

isInMulticast

```
public boolean isInMulticast()
```

Is in stream multicast

Returns:

true if multicast

isOutMulticast

```
public boolean isOutMulticast()
```

Is out stream multicast

Returns:

true if multicast

isMulticast

```
public boolean isMulticast()
```

Is multicast

(continued from last page)

Returns:

true if multicast

getTTL

```
public int getTTL()
```

Get time to live (milliseconds)

Returns:

time to live (milliseconds)

setTTL

```
public void setTTL(int ttl)
```

Set time to live (milliseconds)

Parameters:

ttl - time to live (milliseconds)

getAddressCount

```
public int getAddressCount()
```

Get address count

Returns:

address count

setAddressCount

```
public void setAddressCount(int addressCount)
```

Set address count

Parameters:

addressCount - address count

isBlockUDPOut

```
public boolean isBlockUDPOut()
```

setBlockUDPOut

```
public void setBlockUDPOut(boolean blockUDPOut)
```

com.wowza.wms.rtp.model Class RTPPushPublishSession

java.lang.Object

└─com.wowza.wms.rtp.model.RTPPushPublishSession

public class **RTPPushPublishSession**
extends Object

RTPPushPublishSession: RTP push publishing session

Constructor Summary

public	RTPPushPublishSession()
--------	---

Method Summary

RTPSession	getRTPSession() Get RTP session
String	getSDPData() Get SDP data
void	setRTPSession(RTPSession rtpSession) Set RTP session
void	setSDPData(String sdpData) Set SDP data

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPPushPublishSession

public **RTPPushPublishSession()**

Methods

getSDPData

public String **getSDPData()**

Get SDP data

(continued from last page)

Returns:SDP data

setSDPData

```
public void setSDPData(String sdpData)
```

Set SDP data

Parameters:sdpData - SDP data

getRTPSession

```
public RTPSession getRTPSession()
```

Get RTP session

Returns:RTP session

setRTPSession

```
public void setRTPSession(RTPSession rtpSession)
```

Set RTP session

Parameters:rtpSession - RTP session

com.wowza.wms.rtp.model Class RTPSession

java.lang.Object

└-com.wowza.wms.rtp.model.RTPSession

public class **RTPSession**
extends Object

RTPSession: RTP session

Field Summary

protected	actionListeners
protected	active
protected	appInstance
protected	appInstanceShutdown
protected	audioPacketizers
protected	authenticatePlayHandler
protected	authenticatePublishHandler
public static final	AUTHMETHOD_PLAY Value: 1
public static final	AUTHMETHOD_PUBLISH Value: 2
public static final	AUTHMETHOD_UNKNOWN Value: 0
protected	connectionHolder
protected	cookieStr
protected	debugRTSPSession
protected	elapsedTime
protected	encryptionProvider

protected	<u>idleFrequency</u>
protected	<u>idleHandler</u>
protected	<u>ioPerformanceCounter</u>
protected	<u>ioSession</u>
protected	<u>ip</u>
protected	<u>isAnnounce</u>
protected	<u>isConnected</u>
protected	<u>isDescribe</u>
protected	<u>isSessionValid</u>
protected	<u>lastAuthenticateMethod</u>
protected	<u>lock</u>
protected	<u>loggedConnect</u>
protected	<u>multicastInterfaceAddress</u>
protected	<u>properties</u>
protected	<u>queryStr</u>
protected	<u>redirectSession</u>
protected	<u>redirectSessionCode</u>
protected	<u>redirectSessionMessage</u>
protected	<u>redirectSessionURL</u>
protected	<u>referrer</u>
protected	<u>rtpWriteListener</u>
protected	<u>rtspPlayRangeStart</u>
protected	<u>rtspPlayRangeStop</u>
protected	<u>rtspTunnelingSessionId</u>

protected	serverIp
protected	serverPort
protected	sessionId
protected	shutdownClient
protected	streamPacketizers
protected	streams
protected	streamsOrder
protected	timeCreated
protected	totalIOPerformance2Last
protected	totalIOPerformanceLast
protected	uri
protected	userAgent
protected	vhost
protected	videoPacketizers
protected	webRTCSession

Constructor Summary

public	RTPSession (String sessionId) Constructor
--------	--

Method Summary

void	acceptSession () Accept this session
void	addActionListener (IRTSPActionNotify actionListener) Add action listener
void	addIOPerformance (IOPerformanceCounter totalIOPerformanceResult) Internal use
void	addIOPerformance2 (IOPerformanceCounter totalIOPerformanceResult) Internal use
void	addRTSPStream (RTPStream stream) Add RTP stream

boolean	<u>allPortsConnected()</u>
void	<u>clearLoggingValues()</u> Clear logging values, Internal use.
void	<u>doIdle()</u>
<u>IApplicationInstance</u>	<u>getAppInstance()</u> Get application instance
RTPPacketizerItem	<u>getAudioPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId)</u> Get audio packetizer for a given codec id.
<u>IAuthenticateRTSP</u>	<u>getAuthenticatePlayHandler()</u> Get the authentication play handler
<u>IAuthenticateRTSP</u>	<u>getAuthenticatePublishHandler()</u> Get the RTP authentication handler
ConnectionHolder	<u>getConnectionHolder()</u> Get connection holder, Internal use.
String	<u>getCookieStr()</u> Get cookie string
<u>ElapsedTimer</u>	<u>getElapsedTime()</u> Get the elapsed timer for this RTP session
<u>IRTPEncryptionProvider</u>	<u>getEncryptionProvider()</u>
int	<u>getIdleFrequency()</u> Get idle frequency (milliseconds)
RTPIdleHandler	<u>getIdleHandler()</u> Get idle handler
<u>IOPerformanceCounter</u>	<u>getIOPerformanceCounter()</u> Get IO performance counter
org.apache.mina.common.support.BaseIoSession	<u>getIoSession()</u>
String	<u>getIp()</u> Get remote IP address
int	<u>getLastAuthenticateMethod()</u> Get the last method received
String	<u>getMulticastInterfaceAddress()</u>
<u>WMSProperties</u>	<u>getProperties()</u> Get properties
String	<u>getQueryStr()</u> Get query string

int	<u>getRedirectSessionCode()</u>
String	<u>getRedirectSessionMessage()</u>
String	<u>getRedirectSessionURL()</u>
String	<u>getReferrer()</u> Get referrer
RTPWriteListener	<u>getRTPWriteListener()</u> Get the RTP write listener for this session
double	<u>getRTSPPlayRangeStart()</u> Get play start range, Internal use.
double	<u>getRTSPPlayRangeStop()</u> Get play stop range, Internal use.
<u>RTPStream</u>	<u>getRTSPStream()</u> Get the default RTP Stream (all RTP sessions have a single RTP Stream)
<u>RTPStream</u>	<u>getRTSPStream(String streamId)</u> Get RTP Stream
String	<u>getRTSPTunnelingSessionId()</u> Get the RTSP/RTP tunneling session id
String	<u>getServerIp()</u> Get the server IP address
int	<u>getServerPort()</u> Get server port
String	<u>getSessionId()</u> Get session id
RTPPacketizerItem	<u>getStreamPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId)</u> Get stream packetizer for a given codec id.
String	<u>getTimeRunning()</u> Get the time running for this RTP session
double	<u>getTimeRunningSeconds()</u> Get the number of second this RTP session has been running
String	<u>getUri()</u> Get URI
String	<u>getUserAgent()</u> Get user agent
<u>IVHost</u>	<u>getVHost()</u> Get vhost
RTPPacketizerItem	<u>getVideoPacketizerItem(RTPContext rtpContext, IApplicationInstance appInstance, int codecId)</u> Get video packetizer for a given codec id.

com.wowza.wms.webrtc. model.WebRTCSession	<u>getWebRTCSession()</u>
boolean	<u>isActive()</u>
boolean	<u>isAnnounce()</u> Has ANNOUNCE command been called on this session
boolean	<u>isAnnounceOrDescribe()</u> Has announce or described been called
boolean	<u>isConnected()</u> Is session connection
boolean	<u>isDebugRTSPSession()</u> True if debugging RTSP session
boolean	<u>isDescribe()</u> Has DESCRIBE command been called on this session
boolean	<u>isLoggedConnect()</u> Is connect logged
boolean	<u>isRedirectSession()</u>
boolean	<u>isSessionValid()</u> Is this session valid
boolean	<u>isShutdownClient()</u> Is RTP session shutdown
boolean	<u>isWebRTC()</u>
void	<u>onAnnounce()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on ANNOUNCE command
void	<u>onDescribe()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on DESCRIBE command
void	<u>onGetParameter()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on GET_PARAMETER command
void	<u>onOptions()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on OPTIONS command
void	<u>onPause()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on PAUSE command
void	<u>onPlay()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on PLAY command
void	<u>onRecord()</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on RECORD command

void	<u>onRedirect</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on REDIRECT command
void	<u>onSetParameter</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on SET_PARAMETER command
void	<u>onSetup</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on SETUP command
void	<u>onTeardown</u> (com.wowza.wms.rtsp.RTSPRequestMessage req, com.wowza.wms.rtsp.RTSPResponseMessages resp) Invoked on TEARDOWN command
void	<u>putAudioPacketizerItem</u> (int codecId, String classPath) Set the audio packetizer for a given codec id
void	<u>putStreamPacketizerItem</u> (int codecId, String classPath) Set the stream packetizer for a given codec id
void	<u>putVideoPacketizerItem</u> (int codecId, String classPath) Set the video packetizer for a given codec id
void	<u>redirectSession</u> (String redirectSessionURL)
void	<u>redirectSession</u> (String redirectSessionURL, int redirectSessionCode)
void	<u>rejectSession</u> () Reject this session
void	<u>removeActionListener</u> (<u>IRTSPActionNotify</u> actionListener) Remove action listener
<u>RTPStream</u>	<u>removeRTSPStream</u> (String streamId) Remove RTP stream
void	<u>setAnnounce</u> (boolean isAnnounce) Set ANNOUNCE command been called on this session
void	<u>setAppInstance</u> (<u>IApplicationInstance</u> appInstance) Set application instance
void	<u>setAuthenticatePlayHandler</u> (<u>IAuthenticateRTSP</u> authenticatePlayHandler) Set the authentication play handler
void	<u>setAuthenticatePublishHandler</u> (<u>IAuthenticateRTSP</u> authenticatePublishHandler) Set the RTP authentication handler
void	<u>setConnected</u> (boolean isConnected) Set session is connected
void	<u>setCookieStr</u> (String cookieStr) Set cooking string
void	<u>setDebugRTSPSession</u> (boolean debugRTSPSession) Set debugging RTSP session

void	<u>setDescribe</u> (boolean isDescribe) Set DESCRIBE command been called on this session
void	<u>setEncryptionProvider</u> (<u>IRTPEncryptionProvider</u> encryptionProvider)
void	<u>setIdleFrequency</u> (int idleFrequency) Set idle frequency (milliseconds)
void	<u>setIdleHandler</u> (RTPIIdleHandler idleHandler) Set idle handler
void	<u>setIOPerformanceCounter</u> (<u>IOPerformanceCounter</u> ioPerformanceCounter) Set IO performance counter
void	<u>setIoSession</u> (org.apache.mina.common.support.BaseIoSession ioSession)
void	<u>setIp</u> (String ip) Set remote IP address
void	<u>setLastAuthenticateMethod</u> (int lastAuthenticateMethod) Set last method received
void	<u>setLoggedConnect</u> (boolean loggedConnect) Set connect logged
void	<u>setMulticastInterfaceAddress</u> (String multicastInterfaceAddress)
void	<u>setQueryStr</u> (String queryStr) Set query string
void	<u>setRedirectSession</u> (boolean redirectSession)
void	<u>setRedirectSessionCode</u> (int redirectSessionCode)
void	<u>setRedirectSessionMessage</u> (String redirectSessionMessage)
void	<u>setRedirectSessionURL</u> (String redirectSessionURL)
void	<u>setReferrer</u> (String referrer) Set referrer
void	<u>setRTSPPlayRangeStart</u> (double rtspPlayRangeStart) Set play start range, Internal use.
void	<u>setRTSPPlayRangeStop</u> (double rtspPlayRangeStop) Set play stop range, Internal use.
void	<u>setRTSPTunnelingSessionId</u> (String rtspTunnelingSessionId) Set the RTSP/RTP tunneling session id
void	<u>setServerIp</u> (String serverIp) Set the server IP address
void	<u>setServerPort</u> (int serverPort) Set server port

void	<u>setSessionId</u> (String sessionId) Set session id
void	<u>setSessionValid</u> (boolean isSessionValid) Set session valid
void	<u>setShutdownClient</u> (boolean shutdownClient) Set RTP session shutdown
void	<u>setUri</u> (String uri) Set URI
void	<u>setUserAgent</u> (String userAgent) Set user agent
void	<u>setVHost</u> (<u>IVHost</u> vhost) Set vhost
void	<u>setWebRTCSession</u> (com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
void	<u>shutdown</u> () shutdown RTP session, Internal use.
void	<u>shutdown</u> (RTPRequestStatus status) shutdown RTP session, Internal use.
void	<u>touch</u> () Touch the stream so it doesn't timeout
void	<u>updateLoggingValues</u> () Update logging values, Internal use.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AUTHMETHOD_UNKNOWN

```
public static final int AUTHMETHOD_UNKNOWN
```

Constant value: **0**

AUTHMETHOD_PLAY

```
public static final int AUTHMETHOD_PLAY
```

Constant value: **1**

(continued from last page)

AUTHMETHOD_PUBLISH

```
public static final int AUTHMETHOD_PUBLISH
```

Constant value: **2**

sessionId

```
protected java.lang.String sessionId
```

rtspTunnelingSessionId

```
protected java.lang.String rtspTunnelingSessionId
```

streams

```
protected java.util.Map streams
```

streamsOrder

```
protected java.util.List streamsOrder
```

vhost

```
protected com.wowza.wms.vhost.IVHost vhost
```

userAgent

```
protected java.lang.String userAgent
```

cookieStr

```
protected java.lang.String cookieStr
```

ip

```
protected java.lang.String ip
```

isSessionValid

```
protected boolean isSessionValid
```

(continued from last page)

authenticatePlayHandler

protected com.wowza.wms.authentication.IAuthenticateRTSP **authenticatePlayHandler**

authenticatePublishHandler

protected com.wowza.wms.authentication.IAuthenticateRTSP **authenticatePublishHandler**

lastAuthenticateMethod

protected int **lastAuthenticateMethod**

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

appInstanceShutdown

protected com.wowza.wms.application.IApplicationInstance **appInstanceShutdown**

loggedConnect

protected boolean **loggedConnect**

properties

protected com.wowza.wms.application.WMSProperties **properties**

isDescribe

protected boolean **isDescribe**

isAnnounce

protected boolean **isAnnounce**

(continued from last page)

rtpWriteListenerprotected com.wowza.wms.rtp.model.RTPWriteListener **rtpWriteListener**

timeCreatedprotected long **timeCreated**

ioPerformanceCounterprotected com.wowza.util.IOPerformanceCounter **ioPerformanceCounter**

totalIOPerformanceLastprotected com.wowza.util.IOPerformanceCounter **totalIOPerformanceLast**

totalIOPerformance2Lastprotected com.wowza.util.IOPerformanceCounter **totalIOPerformance2Last**

connectionHolderprotected com.wowza.wms.client.ConnectionHolder **connectionHolder**

isConnectedprotected boolean **isConnected**

idleHandlerprotected com.wowza.wms.rtp.model.RTPIdleHandler **idleHandler**

serverIpprotected java.lang.String **serverIp**

serverPortprotected int **serverPort**

(continued from last page)

uri

protected java.lang.String **uri**

referrer

protected java.lang.String **referrer**

queryStr

protected java.lang.String **queryStr**

actionListeners

protected java.util.List **actionListeners**

elapsedTime

protected com.wowza.util.ElapsedTimer **elapsedTime**

idleFrequency

protected int **idleFrequency**

debugRTSPSession

protected boolean **debugRTSPSession**

rtspPlayRangeStart

protected double **rtspPlayRangeStart**

rtspPlayRangeStop

protected double **rtspPlayRangeStop**

(continued from last page)

shutdownClient

protected boolean **shutdownClient**

audioPacketizers

protected java.util.Map **audioPacketizers**

videoPacketizers

protected java.util.Map **videoPacketizers**

streamPacketizers

protected java.util.Map **streamPacketizers**

redirectSession

protected boolean **redirectSession**

redirectSessionCode

protected int **redirectSessionCode**

redirectSessionMessage

protected java.lang.String **redirectSessionMessage**

redirectSessionURL

protected java.lang.String **redirectSessionURL**

lock

protected java.lang.Object **lock**

ioSession

protected org.apache.mina.common.support.BaseIoSession **ioSession**

(continued from last page)

encryptionProvider

protected com.wowza.wms.rtp.model.IRTPEncryptionProvider **encryptionProvider**

active

protected boolean **active**

webRTCSession

protected com.wowza.wms.webrtc.model.WebRTCSession **webRTCSession**

multicastInterfaceAddress

protected java.lang.String **multicastInterfaceAddress**

Constructors

RTPSession

public **RTPSession**(String sessionId)

Constructor

Parameters:

sessionId - session id

Methods

acceptSession

public void **acceptSession**()

Accept this session

rejectSession

public void **rejectSession**()

Reject this session

getSessionId

public String **getSessionId**()

Get session id

Returns:

(continued from last page)

session id

setSessionId

```
public void setSessionId(String sessionId)
```

Set session id

Parameters:

sessionId - session id

addRTSPStream

```
public void addRTSPStream(RTSPStream stream)
```

Add RTP stream

Parameters:

stream - RTP stream

removeRTSPStream

```
public RTSPStream removeRTSPStream(String streamId)
```

Remove RTP stream

Parameters:

streamId - stream id

Returns:

RTP stream

getRTSPStream

```
public RTSPStream getRTSPStream(String streamId)
```

Get RTP Stream

Parameters:

streamId - stream id

Returns:

RTP Stream

getRTSPStream

```
public RTSPStream getRTSPStream( )
```

Get the default RTP Stream (all RTP sessions have a single RTP Stream)

Returns:

RTP stream

getVHost

```
public IVHost getVHost( )
```

Get vhost

(continued from last page)

Returns:vhost

setVHost

```
public void setVHost(IVHost vhost)
```

Set vhost

Parameters:vhost - vhost

getUserAgent

```
public String getUserAgent()
```

Get user agent

Returns:user agent

setUserAgent

```
public void setUserAgent(String userAgent)
```

Set user agent

Parameters:userAgent - user agent

touch

```
public void touch()
```

Touch the stream so it doesn't timeout

shutdown

```
public void shutdown()
```

shutdown RTP session, Internal use.

shutdown

```
public void shutdown(RTPRequestStatus status)
```

shutdown RTP session, Internal use.

Parameters:status

allPortsConnected

```
public boolean allPortsConnected()
```

isSessionValid

```
public boolean isSessionValid()
```

Is this session valid

Returns:

true if valid

setSessionValid

```
public void setSessionValid(boolean isSessionValid)
```

Set session valid

Parameters:

isSessionValid - true if valid

getAuthenticatePublishHandler

```
public IAuthenticateRTSP getAuthenticatePublishHandler()
```

Get the RTP authentication handler

Returns:

RTP authentication handler

setAuthenticatePublishHandler

```
public void setAuthenticatePublishHandler(IAuthenticateRTSP  
authenticatePublishHandler)
```

Set the RTP authentication handler

Parameters:

authenticatePublishHandler - RTP authentication handler

getAuthenticatePlayHandler

```
public IAuthenticateRTSP getAuthenticatePlayHandler()
```

Get the authentication play handler

Returns:

authentication play handler

setAuthenticatePlayHandler

```
public void setAuthenticatePlayHandler(IAuthenticateRTSP authenticatePlayHandler)
```

Set the authentication play handler

Parameters:

authenticatePlayHandler - authentication play handler

(continued from last page)

getLastAuthenticateMethod

```
public int getLastAuthenticateMethod()
```

Get the last method received

Returns:

last method received

setLastAuthenticateMethod

```
public void setLastAuthenticateMethod(int lastAuthenticateMethod)
```

Set last method received

Parameters:

lastAuthenticateMethod - last method received

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

setAppInstance

```
public void setAppInstance(IApplicationInstance appInstance)
```

Set application instance

Parameters:

appInstance - application instance

isLoggedConnect

```
public boolean isLoggedConnect()
```

Is connect logged

Returns:

true if logged

setLoggedConnect

```
public void setLoggedConnect(boolean loggedConnect)
```

Set connect logged

Parameters:

loggedConnect - true if logged

getIp

```
public String getIp()
```


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Get remote IP address

Returns:

remote IP address

setIp

```
public void setIp(String ip)
```

Set remote IP address

Parameters:

ip - remote IP address

getProperties

```
public WMSProperties getProperties()
```

Get properties

Returns:

properties

isDescribe

```
public boolean isDescribe()
```

Has DESCRIBE command been called on this session

Returns:

true if called

setDescribe

```
public void setDescribe(boolean isDescribe)
```

Set DESCRIBE command been called on this session

Parameters:

isDescribe - true if called

isAnnounce

```
public boolean isAnnounce()
```

Has ANNOUNCE command been called on this session

Returns:

true if called

setAnnounce

```
public void setAnnounce(boolean isAnnounce)
```

Set ANNOUNCE command been called on this session

Parameters:

isAnnounce - true if called

isAnnounceOrDescribe

```
public boolean isAnnounceOrDescribe()
```

Has announce or described been called

Returns:

true if either called

getRTPWriteListener

```
public RTPWriteListener getRTPWriteListener()
```

Get the RTP write listener for this session

Returns:

RTP write listener

addIOPerformance

```
public void addIOPerformance(IOPerformanceCounter totalIOPerformanceResult)
```

Internal use

Parameters:

totalIOPerformanceResult - IO performance counter

addIOPerformance2

```
public void addIOPerformance2(IOPerformanceCounter totalIOPerformanceResult)
```

Internal use

Parameters:

totalIOPerformanceResult - IO performance counter

getConnectionHolder

```
public ConnectionHolder getConnectionHolder()
```

Get connection holder, Internal use.

Returns:

connection holder

isConnected

```
public boolean isConnected()
```

Is session connection

Returns:

true if connected

setConnected

```
public void setConnected(boolean isConnected)
```

(continued from last page)

Set session is connected

Parameters:

isConnected - true if connected

getIdleHandler

```
public RTPIdleHandler getIdleHandler()
```

Get idle handler

Returns:

idle handler

setIdleHandler

```
public void setIdleHandler(RTPIdleHandler idleHandler)
```

Set idle handler

Parameters:

idleHandler - idle handler

getServerIp

```
public String getServerIp()
```

Get the server IP address

Returns:

IP address

setServerIp

```
public void setServerIp(String serverIp)
```

Set the server IP address

Parameters:

serverIp - IP address

getServerPort

```
public int getServerPort()
```

Get server port

Returns:

server port

setServerPort

```
public void setServerPort(int serverPort)
```

Set server port

Parameters:

serverPort - server port

getUri

```
public String getUri()
```

Get URI

Returns:
URI

setUri

```
public void setUri(String uri)
```

Set URI

Parameters:
uri - URI

getReferrer

```
public String getReferrer()
```

Get referrer

Returns:
referrer

setReferrer

```
public void setReferrer(String referrer)
```

Set referrer

Parameters:
referrer - referrer

getQueryStr

```
public String getQueryStr()
```

Get query string

Returns:
query string

setQueryStr

```
public void setQueryStr(String queryStr)
```

Set query string

Parameters:
queryStr - query string

updateLoggingValues

```
public void updateLoggingValues()
```

(continued from last page)

Update logging values, Internal use.

clearLoggingValues

```
public void clearLoggingValues()
```

Clear logging values, Internal use.

addActionListener

```
public void addActionListener(IRTSPActionNotify actionListener)
```

Add action listener

Parameters:

actionListener - action listener

removeActionListener

```
public void removeActionListener(IRTSPActionNotify actionListener)
```

Remove action listener

Parameters:

actionListener - action listener

onDescribe

```
public void onDescribe(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on DESCRIBE command

Parameters:

req - RTP request

resp - RTP response

onAnnounce

```
public void onAnnounce(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on ANNOUNCE command

Parameters:

req - RTP request

resp - RTP response

onGetParameter

```
public void onGetParameter(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on GET_PARAMETER command

Parameters:

req - RTP request

resp - RTP response

onSetParameter

```
public void onSetParameter(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on SET_PARAMETER command

Parameters:

req - RTP request
resp - RTP response

onOptions

```
public void onOptions(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on OPTIONS command

Parameters:

req - RTP request
resp - RTP response

onPause

```
public void onPause(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on PAUSE command

Parameters:

req - RTP request
resp - RTP response

onPlay

```
public void onPlay(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on PLAY command

Parameters:

req - RTP request
resp - RTP response

onRecord

```
public void onRecord(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on RECORD command

Parameters:

req - RTP request
resp - RTP response

(continued from last page)

onRedirect

```
public void onRedirect(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on REDIRECT command

Parameters:

req - RTP request
resp - RTP response

onSetup

```
public void onSetup(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on SETUP command

Parameters:

req - RTP request
resp - RTP response

onTeardown

```
public void onTeardown(com.wowza.wms.rtsp.RTSPRequestMessage req,  
    com.wowza.wms.rtsp.RTSPResponseMessages resp)
```

Invoked on TEARDOWN command

Parameters:

req - RTP request
resp - RTP response

getIdleFrequency

```
public int getIdleFrequency()
```

Get idle frequency (milliseconds)

Returns:

idle frequency (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set idle frequency (milliseconds)

Parameters:

idleFrequency - idle frequency (milliseconds)

isDebugRTSPSession

```
public boolean isDebugRTSPSession()
```

True if debugging RTSP session

Returns:

true if debugging RTSP session

setDebugRTSPSession

```
public void setDebugRTSPSession(boolean debugRTSPSession)
```

Set debugging RTSP session

Parameters:

debugRTSPSession - true if debugging RTSP session

getRTSPTunnelingSessionId

```
public String getRTSPTunnelingSessionId()
```

Get the RTSP/RTP tunneling session id

Returns:

RTSP/RTP tunneling session id

setRTSPTunnelingSessionId

```
public void setRTSPTunnelingSessionId(String rtspTunnelingSessionId)
```

Set the RTSP/RTP tunneling session id

Parameters:

rtspTunnelingSessionId - RTSP/RTP tunneling session id

getRTSPPlayRangeStart

```
public double getRTSPPlayRangeStart()
```

Get play start range, Internal use.

Returns:

start range

setRTSPPlayRangeStart

```
public void setRTSPPlayRangeStart(double rtspPlayRangeStart)
```

Set play start range, Internal use.

Parameters:

rtspPlayRangeStart - start range

getRTSPPlayRangeStop

```
public double getRTSPPlayRangeStop()
```

Get play stop range, Internal use.

Returns:

stop range

setRTSPPlayRangeStop

```
public void setRTSPPlayRangeStop(double rtspPlayRangeStop)
```

(continued from last page)

Set play stop range, Internal use.

Parameters:

rtspPlayRangeStop - stop range

getCookieStr

```
public String getCookieStr()
```

Get cookie string

Returns:

cookie string

setCookieStr

```
public void setCookieStr(String cookieStr)
```

Set cooking string

Parameters:

cookieStr - cooking string

getIOPerformanceCounter

```
public IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter

Returns:

IO performance counter

setIOPerformanceCounter

```
public void setIOPerformanceCounter(IOPerformanceCounter ioPerformanceCounter)
```

Set IO performance counter

Parameters:

ioPerformanceCounter - IO performance counter

isShutdownClient

```
public boolean isShutdownClient()
```

Is RTP session shutdown

Returns:

true if shutdown

setShutdownClient

```
public void setShutdownClient(boolean shutdownClient)
```

Set RTP session shutdown

Parameters:

shutdownClient - true if shutdown

getAudioPacketizerItem

```
public RTPPacketizerItem getAudioPacketizerItem(RTPContext rtpContext,  
        IApplicationInstance appInstance,  
        int codecId)
```

Get audio packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

Returns:

packetizer info

getVideoPacketizerItem

```
public RTPPacketizerItem getVideoPacketizerItem(RTPContext rtpContext,  
        IApplicationInstance appInstance,  
        int codecId)
```

Get video packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

Returns:

packetizer info

getStreamPacketizerItem

```
public RTPPacketizerItem getStreamPacketizerItem(RTPContext rtpContext,  
        IApplicationInstance appInstance,  
        int codecId)
```

Get stream packetizer for a given codec id.

Parameters:

rtpContext - RTP context
appInstance - application instance
codecId - codec id

Returns:

packetizer info

putAudioPacketizerItem

```
public void putAudioPacketizerItem(int codecId,  
        String classPath)
```

Set the audio packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

putVideoPacketizerItem

```
public void putVideoPacketizerItem(int codecId,  
    String classPath)
```

Set the video packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

putStreamPacketizerItem

```
public void putStreamPacketizerItem(int codecId,  
    String classPath)
```

Set the stream packetizer for a given codec id

Parameters:

codecId - codec id
classPath - class path

getElapsedTime

```
public ElapsedTimer getElapsedTime()
```

Get the elapsed timer for this RTP session

Returns:

elapsed timer

getTimeRunning

```
public String getTimeRunning()
```

Get the time running for this RTP session

Returns:

time running as a string

getTimeRunningSeconds

```
public double getTimeRunningSeconds()
```

Get the number of second this RTP session has been running

Returns:

number of second this RTP session has been running

isRedirectSession

```
public boolean isRedirectSession()
```

(continued from last page)

setRedirectSession

```
public void setRedirectSession(boolean redirectSession)
```

getRedirectSessionCode

```
public int getRedirectSessionCode()
```

setRedirectSessionCode

```
public void setRedirectSessionCode(int redirectSessionCode)
```

getRedirectSessionURL

```
public String getRedirectSessionURL()
```

setRedirectSessionURL

```
public void setRedirectSessionURL(String redirectSessionURL)
```

redirectSession

```
public void redirectSession(String redirectSessionURL)
```

redirectSession

```
public void redirectSession(String redirectSessionURL,  
    int redirectSessionCode)
```

getRedirectSessionMessage

```
public String getRedirectSessionMessage()
```

setRedirectSessionMessage

```
public void setRedirectSessionMessage(String redirectSessionMessage)
```

getIoSession

```
public org.apache.mina.common.support.BaseIoSession getIoSession()
```

(continued from last page)

setIoSession

```
public void setIoSession(org.apache.mina.common.support.BaseIoSession ioSession)
```

doIdle

```
public void doIdle()
```

getEncryptionProvider

```
public IRTPEncryptionProvider getEncryptionProvider()
```

setEncryptionProvider

```
public void setEncryptionProvider(IRTPEncryptionProvider encryptionProvider)
```

isActive

```
public boolean isActive()
```

getWebRTCSession

```
public com.wowza.wms.webrtc.model.WebRTCSession getWebRTCSession()
```

setWebRTCSession

```
public void setWebRTCSession(com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
```

isWebRTC

```
public boolean isWebRTC()
```

getMulticastInterfaceAddress

```
public String getMulticastInterfaceAddress()
```

(continued from last page)

setMulticastInterfaceAddress

```
public void setMulticastInterfaceAddress(String multicastInterfaceAddress)
```

com.wowza.wms.rtp.model

Class RTPSessions

java.lang.Object

└─com.wowza.wms.rtp.model.RTPSessions

public class **RTPSessions**
extends Object

RTPSessions: collection of RTP sessions

Constructor Summary

public	RTPSessions (IVHost vhost) Constructor
--------	--

Method Summary

RTPSession	addSession (RTPSession session) Add RTP session
void	addSessionListener (IRTPSessionNotify listener) Add a RTP session listener
String	getNextSessionId () Get next RTP session id for new session
RTPSession	getSession (String sessionId) Get RTP session by session id
java.util.List	getSessionIds () Get list of current RTP session ids
IVHost	getVHost () Get vhost
void	notifySessionCreate (IApplicationInstance appInstance, RTPSession rtpSession) Notify session create
void	notifySessionCreate (RTPSession rtpSession) Notify session create
void	notifySessionDestroy (IApplicationInstance appInstance, RTPSession rtpSession) Notify session destroy
void	notifySessionDestroy (RTPSession rtpSession) Notify session destroy
void	releaseSessionId (String sessionIdStr) Release an RTP session id

RTPSession	removeSession (RTPSession session) Remove RTP session by object
RTPSession	removeSession (String sessionId) Remove RTP session by session id
void	removeSessionListener (IRTPSessionNotify listener) Remove an RTP session listener

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPSessions

```
public RTPSessions(IVHost vhost)
```

Constructor

Parameters:

vhost - vhost

Methods

getNextSessionId

```
public String getNextSessionId()
```

Get next RTP session id for new session

Returns:

RTP session id

getSessionIds

```
public java.util.List getSessionIds()
```

Get list of current RTP session ids

Returns:

list of current RTP session ids

releaseSessionId

```
public void releaseSessionId(String sessionIdStr)
```

Release an RTP session id

Parameters:

sessionIdStr - RTP session id

(continued from last page)

getSession

```
public RTPSession getSession(String sessionId)
```

Get RTP session by session id

Parameters:

sessionId - session id

Returns:

RTP session

removeSession

```
public RTPSession removeSession(String sessionId)
```

Remove RTP session by session id

Parameters:

sessionId - session id

Returns:

RTP session if removed

removeSession

```
public RTPSession removeSession(RTPSession session)
```

Remove RTP session by object

Parameters:

session - RTP session

Returns:

RTP session if removed

addSession

```
public RTPSession addSession(RTPSession session)
```

Add RTP session

Parameters:

session - RTP session

Returns:

RTP session added

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

(continued from last page)

addSessionListener

```
public void addSessionListener(IRTPSessionNotify listener)
```

Add a RTP session listener

Parameters:

listener - RTP session listener

removeSessionListener

```
public void removeSessionListener(IRTPSessionNotify listener)
```

Remove an RTP session listener

Parameters:

listener - RTP session listener

notifySessionCreate

```
public void notifySessionCreate(IApplicationInstance appInstance,  
    RTPSession rtpSession)
```

Notify session create

Parameters:

appInstance - application instance

rtpSession - RTP session

notifySessionDestroy

```
public void notifySessionDestroy(IApplicationInstance appInstance,  
    RTPSession rtpSession)
```

Notify session destroy

Parameters:

appInstance - application instance

rtpSession - RTP session

notifySessionCreate

```
public void notifySessionCreate(RTPSession rtpSession)
```

Notify session create

Parameters:

rtpSession - RTP session

notifySessionDestroy

```
public void notifySessionDestroy(RTPSession rtpSession)
```

Notify session destroy

Parameters:

rtpSession - RTP session

com.wowza.wms.rtp.model Class RTPStream

java.lang.Object

└--com.wowza.wms.rtp.model.RTPStream

public class **RTPStream**
extends Object

RTPStream: RTP Stream class which encapsulates an IMediaStream class for RTP streaming.

Field Summary

public static final	AVSYNCMETHODS_RTPTIMECODE Value: 3
public static final	AVSYNCMETHODS_SENDERREPORT Value: 1
public static final	AVSYNCMETHODS_SYSTEMCLOCK Value: 2
public static final	AVSYNCMETHODS_UNKNOWN Value: 0
public static final	DEFAULT_RTP_TRANSPORT_STR Value: RTP/AVP
public static final	DEFAULT_RTPIGNOREPROFILELEVELID Value: false
public static final	DEFAULT_RTPIGNORESPROPPARAMETERSETS Value: false
public static final	DEFAULT_RTSPSESSIONNAME Value:
public static final	MODE_PLAY Value: 1
public static final	MODE_PUBLISH Value: 2
public static final	MODE_UNKNOWN Value: 0

public static final	<u>SDPLOCATION_AUDIO</u> Value: 1
public static final	<u>SDPLOCATION_STREAM</u> Value: 0
public static final	<u>SDPLOCATION_VIDEO</u> Value: 2
public static final	<u>STREAMINFO_SESSIONATTRIBUTES</u> Value: attributes
public static final	<u>STREAMINFO_SESSIONBANDWIDTH</u> Value: bandwidth
public static final	<u>STREAMINFO_SESSIONCONNECTIONDATA</u> Value: connectiondata
public static final	<u>STREAMINFO_SESSIONEMAILADDRESS</u> Value: emailaddress
public static final	<u>STREAMINFO_SESSIONINFORMATION</u> Value: information
public static final	<u>STREAMINFO_SESSIONNAME</u> Value: name
public static final	<u>STREAMINFO_SESSIONPHONENUMBER</u> Value: phonenummer
public static final	<u>STREAMINFO_SESSIONPORIGIN</u> Value: origin
public static final	<u>STREAMINFO_SESSIONPROTOCOLVERSION</u> Value: protocolversion
public static final	<u>STREAMINFO_SESSIONREPEATTIMES</u> Value: repeattimes
public static final	<u>STREAMINFO_SESSIONTIMEZONES</u> Value: timezones
public static final	<u>STREAMINFO_SESSIONTIMING</u> Value: timing
public static final	<u>STREAMINFO_SESSIONURI</u> Value: uri

Constructor Summary

public	RTPStream (RTPContext context, String streamId) Constructor
--------	---

Method Summary

void	addLockRepeaterStreams (String streamName, MediaCasterStreamItem mediaCasterStreamItem)
void	addStreamAttribute (String key, String value) Add a name value pair to the stream attribute collection
void	addStreamInfo (String key, String value) Add a name value pair to the stream info collection
void	addTrack (RTPTrack track) Add a track
void	addTrackId (String seq, String trackId) Add track
void	addTrackInternal (RTPTrack track) Add RTP track
void	announce (RTPRequestStatus status) Execute announce command
void	attachToWMSSession (RtmpSessionInfo wmsSessionInfo) Attach to WMS session, Internal use
static int	avSyncNameToId (String avSyncName) Get audio/video sync id from name
void	checkSendMetadata (long adjTimecode, RTPTrack rtpTrack) Check to see if we have sent onMetadata event, if not send
void	clearRTSPSessionExtraLines () Clear SDP extra lines
void	clearTracks () Clear all tracks
boolean	createStream (RTPRequestStatus status)
boolean	createStream (RTPRequestStatus status, IApplicationInstance appInstance) Create IMediaStream, Internal use.
String	describe (RTPSession rtspSession, int isStreamPacketizer, RTPRequestStatus status, int[] validCodecsAudio, int[] validCodecsVideo) Get RTP describe details
String	describe (RTPSession rtspSession, RTPRequestStatus status) Execute describe command

RTPSDPParts	describeGetDetails (RTPSession rtspSession, int isStreamPacketizer, RTPRequestStatus status, int[] validCodecsAudio, int[] validCodecsVideo) Get RTP describe details
void	detachFromWMSSession (RtmpSessionInfo wmsSessionInfo) Detach from WMS session, Internal use.
void	extractCodecConfigFromTrackInfo () Extract codec config information from SDP data
String	formatRTPInfo (long timecode, int videoSeq, int audioSeq) Format RTP info
IApplicationInstance	getAppInstance () Get application instance
String	getAppInstanceName () Get the application instance name
String	getAppName () Get the application name
RTPTrack	getAudioTrack () Get the most likely audio track
int	getAutoAllocateInterleavePorts ()
int	getAVSyncMethod () Get the audio/video sync method.
double	getDuration () Get the duration of the stream if video on demand
String	getHost () Get host
AMFPacket[]	getLastPacketsByType (IMediaReader localReader, double startTime) Analyzes stream to get information, Internal use.
AMFPacket[]	getLastPacketsByType (IMediaStream localStream) Analyzes stream to get information, Internal use.
int	getMaxRTCPWaitTime () Get max time to wait for RTCP sender reports (milliseconds)
String	getMediaCasterType () Get the media caster stream type for this stream
IMediaReader	getMediaReader () Get media reader if video on demand stream
byte[]	getMetadataPacket () Get the onMetadata packet for this RTP stream
int	getMode () Get the current play/publish mode
String	getModeName ()

int	<u>getMPEGTSAudioBitrate()</u>
String	<u>getMPEGTSAudioLanguage()</u>
int	<u>getMPEGTSAudioPID()</u> Get the audio PID id if MPEG-TS stream
int	<u>getMPEGTSProgramID()</u>
int	<u>getMPEGTSVideoBitrate()</u>
int	<u>getMPEGTSVideoPID()</u> Get the video PID id if MPEG-TS stream
long	<u>getNormalizedNTPTimecode()</u> (long timecode) Turn a millisecond timcode into an NTP timecode
String	<u>getOutHost()</u> Get the out host
String	<u>getResyncAudioVideoOnSRLogStreamSuffix()</u> Get the stream suffixes that are set for timing information logging
<u>RTPContext</u>	<u>getRTPContext()</u> Get the RTP context
<u>RTPDestination</u>	<u>getRTPDestination()</u> Get RTP destination
RTPStream.RTPInfo	<u>getRTPInfo()</u> (double startTime, int videoSeq, int audioSeq) Get the RTP info
RTPStreamContext	<u>getRTPStreamContext()</u>
String	<u>getRTSPBindIpAddress()</u> Get the bind RTSP bind IP address
String	<u>getRTSPConnectionAddressType()</u> Get the connection address type
String	<u>getRTSPConnectionIpAddress()</u> Get the connection IP address
int	<u>getRTSPMaximumPendingWriteBytes()</u> Get the maximum number of waiting bytes allow for this RTSP session
String	<u>getRTSPOriginAddressType()</u> Get the origin address type
String	<u>getRTSPOriginIpAddress()</u> Get the origin IP address
String	<u>getRTSPSessionDescription()</u> Get session description
java.util.List	<u>getRTSPSessionExtraLines()</u> Get extra SDP lines

String	<u>getRTSPSessionName()</u> Get session name
int	<u>getRTSPSessionTimeout()</u> Get RTP session timeout (milliseconds)
String	<u>getSDPLang()</u> Get the SDP language
String	<u>getSDPTransportStr()</u>
<u>RTPSession</u>	<u>getSession()</u> Get the RTP session
<u>IMediaStream</u>	<u>getStream()</u> Get the IMediaStream
java.util.Map	<u>getStreamAttributes()</u> Get all name/value pairs in the stream attributes collection
String	<u>getStreamExt()</u> Get the stream extension
String	<u>getStreamId()</u> Get the stream id
java.util.Map	<u>getStreamInfo()</u> Get all name/value pairs in the stream info collection
String	<u>getStreamInfo()</u> (String key) Get stream info by name
Object	<u>getStreamLock()</u> Get the synchronization lock for this stream
String	<u>getStreamName()</u> Get stream name
String	<u>getStreamNameLogging()</u> Get the stream name used for logging
String	<u>getStreamQueryStr()</u> Get the stream query string
long	<u>getStreamSessionId()</u> Get the stream session id
String	<u>getStreamSessionIp()</u> Get the stream session ip
long	<u>getStreamSessionVersion()</u> Get the stream session version
RTPTrack	<u>getStreamTrack()</u> Get the most likely stream track
String	<u>getStreamType()</u> Get the stream type

RTPTrack	<u>getTrack</u> (String trackId) Get track by id
String	<u>getTrackId</u> (String seq) Get track by sequence number
java.util.List	<u>getTrackNames</u> () Get a list of track ids
String	<u>getTransportMode</u> () Get the transport mode
int	<u>getUDPManagedDeliveryCount</u> ()
int	<u>getUDPManagedDeliveryDelay</u> ()
<u>IUDPTransport</u>	<u>getUDPTransport</u> (boolean isMulticast) Get the UDP transport for this stream
<u>IVHost</u>	<u>getVHost</u> () Get vhost
RTPTrack	<u>getVideoTrack</u> () Get the most likely video track
long	<u>getVODLastTimeTC</u> () Get the last timecode (milliseconds) sent for video on demand
long	<u>getVODPlayLen</u> () Get the video on demand play duration (milliseconds)
long	<u>getVODStartTimeTC</u> () Get the video on demand start time (milliseconds)
void	<u>idle</u> (org.apache.mina.common.IoSession session, RtmpResponseMessage resp) Process idle event
void	<u>incrementMediaInBytes</u> (long bytes) Increment the media bytes in, Internal use.
void	<u>initProperties</u> (<u>IApplicationInstance</u> appInstance)
boolean	<u>isAVSyncNonSR</u> () Is sync method based on RTCP packets (sender report)
boolean	<u>isBlockUDPOut</u> ()
boolean	<u>isCheckIpAddr</u> () Are we checking the ip address of each incoming RTP packet
boolean	<u>isCheckSSRC</u> () Are we checking the ssrc values of each incoming RTP packet
boolean	<u>isForceMPEGTSOut</u> ()

boolean	<u>isForceRTSPInterleaved()</u> True if forcing RTSP interleaved
boolean	<u>isLive()</u> Is live stream
boolean	<u>isModePlay()</u> Is this a play stream
boolean	<u>isModePublish()</u> Is this a publish stream
boolean	<u>isModeUnknown()</u> Is the stream mode unknown (publish vs play)
boolean	<u>isMPEGTSOut()</u> Is MPEG-TS out
boolean	<u>isPaused()</u> Is stream paused
boolean	<u>isPublishStreamReady()</u> See if a publishing stream has enough data to start playback
boolean	<u>isRefuseIncomingUDPConnections()</u>
boolean	<u>isRefuseOutgoingUDPConnections()</u>
boolean	<u>isResetPlayStream()</u> Is reset stream trigger, Internal use.
boolean	<u>isResyncAudioVideoOnSR()</u> Reset audio/video sync on new RTCP packets (not just first packet)
boolean	<u>isResyncAudioVideoOnSRLog()</u> Log audio/video sync on new RTCP packets (not just first packet)
boolean	<u>isRTPIgnoreProfileLevelId()</u>
boolean	<u>isRTPIgnoreSPropParameterSets()</u>
boolean	<u>isRTSP()</u> Is this RTP Stream managed by RTSP session
boolean	<u>isRTSPAlwaysUseSDPPorts()</u> Force RTSP to use ports in SDP data
boolean	<u>isRTSPPull()</u> Is this RTP Stream managed by RTSP session
boolean	<u>isSendSDESEvents()</u> Send RTCP SDES events
boolean	<u>isStreamStarted()</u> Is stream started
boolean	<u>isTimeout()</u> (long currTime, int timeout) Is the stream timeout out

boolean	<u>isUDPTransportOverride()</u>
boolean	<u>isWebRTC()</u>
void	<u>lockRepeaterStreams()</u> (java.util.List streamNames) Lock a list of live repeater stream names, Internal use.
void	<u>notifyEncryptionProvider()</u> (RTPTrack rtpTrack)
void	<u>notifyEncryptionProviderAllTracks()</u>
void	<u>pause()</u> (RTPRequestStatus status) Execute pause
RTPStreamPlayResult	<u>play()</u> (RTPRequestStatus status) Execute play
RTPStreamPlayResult	<u>play()</u> (RTPRequestStatus status, double startTime, double stopTime) Execute play
void	<u>putRTSPSessionExtraLine()</u> (int location, String line) Add an extra line to the SDP data
RTPStreamPlayResult	<u>record()</u> (RTPRequestStatus status) Execute record
RTPStreamPlayResult	<u>record()</u> (RTPRequestStatus status, double startTime, double stopTime) Execute record
RTPTrack	<u>removeTrack()</u> (String trackId) Remove a track by id
RTPTrack	<u>removeTrackInternal()</u> (String trackId) Remove track by track id
void	<u>resetSentMetadataFlag()</u> Reset sendMetadata flag
void	<u>setAppInstanceName()</u> (String appInstanceName) Set the application instance name
void	<u>setAppName()</u> (String appName) Get the application name
void	<u>setAVSyncMethod()</u> (int avSyncMethod) Set the audio/video sync method.
void	<u>setBlockUDPOut()</u> (boolean blockUDPOut)
void	<u>setCheckIpAddr()</u> (boolean checkIpAddr) Are we checking the ip address of each incoming RTP packet
void	<u>setCheckSSRC()</u> (boolean checkSSRC) Are we checking the ssrc values of each incoming RTP packet
void	<u>setForceMPEGTSOut()</u> (boolean isForceMPEGTSOut)

void	<u>setForceRTSPInterleaved</u> (boolean isForceRTSPInterleaved) True if forcing RTSP interleaved
void	<u>setHost</u> (String host) Set host
void	<u>setLive</u> (boolean isLive) Is live stream
void	<u>setMaxRTCPWaitTime</u> (int maxRTCPWaitTime) Set max time to wait for RTCP sender reports (milliseconds)
void	<u>setMode</u> (int mode) Set the play/publish mode
void	<u>setMPEGTSAudioBitrate</u> (int mpegtsAudioBitrate)
void	<u>setMPEGTSAudioLanguage</u> (String mpegtsAudioLanguage)
void	<u>setMPEGTSAudioPID</u> (int mpegtsAudioPID) Set the audio PID id if MPEG-TS stream
void	<u>setMPEGTSOut</u> (boolean isMPEGTSOut) Is MPEG-TS out
void	<u>setMPEGTSProgramID</u> (int mpegtsProgramId)
void	<u>setMPEGTSVideoBitrate</u> (int mpegtsVideoBitrate)
void	<u>setMPEGTSVideoPID</u> (int mpegtsVideoPID) Set the video PID id if MPEG-TS stream
void	<u>setOutHost</u> (String outHost) Set out host
void	<u>setRefuseIncomingUDPConnections</u> (boolean refuseIncomingUDPConnections)
void	<u>setRefuseOutgoingUDPConnections</u> (boolean refuseOutgoingUDPConnections)
void	<u>setResetPlayStream</u> (boolean doResetPlayStream) Set reset stream trigger
void	<u>setResyncAudioVideoOnSR</u> (boolean resyncAudioVideoOnSR) Reset audio/video sync on new RTCP packets (not just first packet)
void	<u>setResyncAudioVideoOnSRLog</u> (boolean resyncAudioVideoOnSRLog) Log audio/video sync on new RTCP packets (not just first packet)
void	<u>setResyncAudioVideoOnSRLogStreamSuffix</u> (String names) Set the stream names that require to be logged for timing information
void	<u>setRTPDestination</u> (<u>RTPDestination</u> rtpDestination) Set RTP destination
void	<u>setRTPIgnoreProfileLevelId</u> (boolean rtpIgnoreProfileLevelId)

void	<u>setRTPIgnoreSPropParameterSets</u> (boolean rtpIgnoreSPropParameterSets) Is this RTP Stream managed by RTSP session
void	<u>setRTPStreamContext</u> (RTPStreamContext rtpStreamContext)
void	<u>setRTSP</u> (boolean isRTSP) Is this RTP Stream managed by RTSP session
void	<u>setRTSPAlwaysUseSDPPorts</u> (boolean rtspAlwaysUseSDPPorts) Force RTSP to use ports in SDP data
void	<u>setRTSPBindIpAddress</u> (String rtspBindIpAddress) Set the bind RTSP bind IP address
void	<u>setRTSPConnectionAddressType</u> (String rtspConnectionAddressType) Set the connection address type
void	<u>setRTSPConnectionIpAddress</u> (String rtspConnectionIpAddress) Set the connection IP address
void	<u>setRTSPMaximumPendingWriteBytes</u> (int rtspMaximumPendingWriteBytes) Set the maximum number of waiting bytes allow for this RTSP session
void	<u>setRTSPOriginAddressType</u> (String rtspOriginAddressType) Set the origin address type
void	<u>setRTSPOriginIpAddress</u> (String rtspOriginIpAddress) Set the origin IP address
void	<u>setRTSPPull</u> (boolean isRTSPPull) Is this RTP Stream managed by RTSP session
void	<u>setRTSPSessionDescription</u> (String rtspSessionDescription) Get session description
void	<u>setRTSPSessionName</u> (String rtspSessionName) Set session name
void	<u>setRTSPSessionTimeout</u> (int rtspSessionTimeout) Set RTP session timeout (milliseconds)
void	<u>setSDPLang</u> (String sdpLang) Set the SDP language
void	<u>setSDPTransportStr</u> (String sdpTransportStr)
void	<u>setSendSDESEvents</u> (boolean sendSDESEvents) Send RTCP SDES events
void	<u>setSession</u> (<u>RTPSession</u> session) Set the RTP session
void	<u>setStreamExt</u> (String streamExt) Set the stream extension
void	<u>setStreamName</u> (String streamName) Set stream name

void	<u>setStreamNameLogging</u> (String streamNameLogging) Set the stream name used for logging
void	<u>setStreamQueryStr</u> (String streamQueryStr) Set the stream query string
void	<u>setStreamSessionId</u> (long streamSessionId) Set the stream session id
void	<u>setStreamSessionIp</u> (String streamSessionIp) Set the stream session ip
void	<u>setStreamSessionVersion</u> (long streamSessionVersion) Set the stream session version
void	<u>setStreamType</u> (String streamType) Set the stream type
void	<u>setTransportMode</u> (String transportMode) Set the transport mode
void	<u>setUDPMangedDeliveryCount</u> (int udpManagedDeliveryCount)
void	<u>setUDPMangedDeliveryDelay</u> (int udpManagedDeliveryDelay)
void	<u>setUDPTransport</u> (<u>IUDPTransport</u> udpTransport)
void	<u>setVODLastTimeTC</u> (long vodLastTimeTC) Set the last timecode (milliseconds) sent for video on demand
void	<u>setVODPlayLen</u> (long vodPlayLen) Set the video on demand play duration (milliseconds)
void	<u>setVODStartTimeTC</u> (long vodStartTimeTC) Set the video on demand start time (milliseconds)
void	<u>setWebRTC</u> (boolean isWebRTC)
void	<u>shutdown</u> (RTPRequestStatus status) shutdown RTP stream, Internal use.
RTPTrack	<u>sloppyGetTrack</u> (String trackId) Sloppy method for finding track by name, Internal use.
boolean	<u>streamExists</u> () Return true if RTP stream contains a IMediaStream
void	<u>switchSetupToMPEGTS</u> () Switch a stream to MPEG-TS, Internal use.
void	<u>touch</u> () Touch the stream so that it does not timeout
String	<u>transportFindBestMatch</u> (String transport) Based on a trasport string from SETUP command find best match
void	<u>unlockRepeaterStreams</u> () Unlock live repeater streams

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,`
`wait`

Fields

SDPLOCATION_STREAM

```
public static final int SDPLOCATION_STREAM
```

Constant value: **0**

SDPLOCATION_AUDIO

```
public static final int SDPLOCATION_AUDIO
```

Constant value: **1**

SDPLOCATION_VIDEO

```
public static final int SDPLOCATION_VIDEO
```

Constant value: **2**

MODE_UNKNOWN

```
public static final int MODE_UNKNOWN
```

Constant value: **0**

MODE_PLAY

```
public static final int MODE_PLAY
```

Constant value: **1**

MODE_PUBLISH

```
public static final int MODE_PUBLISH
```

Constant value: **2**

AVSYNCMETHODS_UNKNOWN

```
public static final int AVSYNCMETHODS_UNKNOWN
```

Constant value: **0**

AVSYNCMETHODS_SENDERREPORT

```
public static final int AVSYNCMETHODS_SENDERREPORT
```

Constant value: **1**

AVSYNCMETHODS_SYSTEMCLOCK

```
public static final int AVSYNCMETHODS_SYSTEMCLOCK
```

Constant value: **2**

AVSYNCMETHODS_RTPTIMECODE

```
public static final int AVSYNCMETHODS_RTPTIMECODE
```

Constant value: **3**

STREAMINFO_SESSIONPROTOCOLVERSION

```
public static final java.lang.String STREAMINFO_SESSIONPROTOCOLVERSION
```

Constant value: **protocolversion**

STREAMINFO_SESSIONPORIGIN

```
public static final java.lang.String STREAMINFO_SESSIONPORIGIN
```

Constant value: **origin**

STREAMINFO_SESSIONNAME

```
public static final java.lang.String STREAMINFO_SESSIONNAME
```

Constant value: **name**

STREAMINFO_SESSIONINFORMATION

```
public static final java.lang.String STREAMINFO_SESSIONINFORMATION
```

Constant value: **information**

STREAMINFO_SESSIONURI

```
public static final java.lang.String STREAMINFO_SESSIONURI
```

Constant value: **uri**

STREAMINFO_SESSIONEMAILADDRESS

```
public static final java.lang.String STREAMINFO_SESSIONEMAILADDRESS
```


(continued from last page)

Constant value: **emailaddress**

STREAMINFO_SESSIONPHONENUMBER

```
public static final java.lang.String STREAMINFO_SESSIONPHONENUMBER
```

Constant value: **phonenumber**

STREAMINFO_SESSIONCONNECTIONDATA

```
public static final java.lang.String STREAMINFO_SESSIONCONNECTIONDATA
```

Constant value: **connectiondata**

STREAMINFO_SESSIONBANDWIDTH

```
public static final java.lang.String STREAMINFO_SESSIONBANDWIDTH
```

Constant value: **bandwidth**

STREAMINFO_SESSIONTIMING

```
public static final java.lang.String STREAMINFO_SESSIONTIMING
```

Constant value: **timing**

STREAMINFO_SESSIONREPEATTIMES

```
public static final java.lang.String STREAMINFO_SESSIONREPEATTIMES
```

Constant value: **repeattimes**

STREAMINFO_SESSIONTIMEZONES

```
public static final java.lang.String STREAMINFO_SESSIONTIMEZONES
```

Constant value: **timezones**

STREAMINFO_SESSIONATTRIBUTES

```
public static final java.lang.String STREAMINFO_SESSIONATTRIBUTES
```

Constant value: **attributes**

DEFAULT_RTSPSESSIONNAME

```
public static final java.lang.String DEFAULT_RTSPSESSIONNAME
```

Constant value:

DEFAULT_RTPIGNOREPROFILELEVELID

```
public static final boolean DEFAULT_RTPIGNOREPROFILELEVELID
```

Constant value: **false**

DEFAULT_RTPIGNORESPROPPARAMETERSETS

```
public static final boolean DEFAULT_RTPIGNORESPROPPARAMETERSETS
```

Constant value: **false**

DEFAULT_RTP_TRANSPORT_STR

```
public static final java.lang.String DEFAULT_RTP_TRANSPORT_STR
```

Constant value: **RTP/AVP**

Constructors

RTPStream

```
public RTPStream(RTPContext context,  
                 String streamId)
```

Constructor

Parameters:

context - RTP context
streamId - stream id

Methods

getRTPContext

```
public RTPContext getRTPContext()
```

Get the RTP context

Returns:

RTP context

getStreamLock

```
public Object getStreamLock()
```

Get the synchronization lock for this stream

Returns:

synchronization lock for this stream

addTrack

```
public void addTrack(RTPTrack track)
```

(continued from last page)

Add a track

Parameters:

track - RTP track

removeTrack

```
public RTPTrack removeTrack(String trackId)
```

Remove a track by id

Parameters:

trackId - track id

Returns:

RTP track

addTrackInternal

```
public void addTrackInternal(RTPTrack track)
```

Add RTP track

Parameters:

track - RTP track

removeTrackInternal

```
public RTPTrack removeTrackInternal(String trackId)
```

Remove track by track id

Parameters:

trackId - track id

Returns:

RTP track that was removed

clearTracks

```
public void clearTracks()
```

Clear all tracks

incrementMediaInBytes

```
public void incrementMediaInBytes(long bytes)
```

Increment the media bytes in, Internal use.

Parameters:

bytes

sloppyGetTrack

```
public RTPTrack sloppyGetTrack(String trackId)
```

Sloppy method for finding track by name, Internal use.

(continued from last page)

Parameters:

trackId - track name

Returns:

RTP track

getTrack

```
public RTPTrack getTrack(String trackId)
```

Get track by id

Parameters:

trackId - track id

Returns:

RTP track

addTrackId

```
public void addTrackId(String seq,  
    String trackId)
```

Add track

Parameters:

seq - sequence number

trackId - track id

getTrackId

```
public String getTrackId(String seq)
```

Get track by sequence number

Parameters:

seq - sequence number

Returns:

RTP track

getTrackNames

```
public java.util.List getTrackNames()
```

Get a list of track ids

Returns:

list of track ids

getSession

```
public RTPSession getSession()
```

Get the RTP session

Returns:

RTP session

setSession

```
public void setSession(RTPSession session)
```

Set the RTP session

Parameters:

session - RTP session

getStreamId

```
public String getStreamId()
```

Get the stream id

Returns:

stream id

getStream

```
public IMediaStream getStream()
```

Get the IMediaStream

Returns:

stream (IMediaStream) interface

getAudioTrack

```
public RTPTrack getAudioTrack()
```

Get the most likely audio track

Returns:

RTP track

getVideoTrack

```
public RTPTrack getVideoTrack()
```

Get the most likely video track

Returns:

RTP track

getStreamTrack

```
public RTPTrack getStreamTrack()
```

Get the most likely stream track

Returns:

RTP track

(continued from last page)

addStreamInfo

```
public void addStreamInfo(String key,  
    String value)
```

Add a name value pair to the stream info collection

Parameters:

key - name
value - value

getStreamInfo

```
public String getStreamInfo(String key)
```

Get stream info by name

Parameters:

key - name

Returns:

value

addStreamAttribute

```
public void addStreamAttribute(String key,  
    String value)
```

Add a name value pair to the stream attribute collection

Parameters:

key - name
value - value

getVHost

```
public IVHost getVHost()
```

Get vhost

Returns:

vhost

getHost

```
public String getHost()
```

Get host

Returns:

host

setHost

```
public void setHost(String host)
```

Set host

Parameters:

(continued from last page)

host - host

streamExists

```
public boolean streamExists()
```

Return true if RTP stream contains a IMediaStream

Returns:

true if RTP stream contains a IMediaStream

isPublishStreamReady

```
public boolean isPublishStreamReady()
```

See if a publishing stream has enough data to start playback

Returns:

true, if the stream is ready for playback

lockRepeaterStreams

```
public void lockRepeaterStreams(java.util.List streamNames)
```

Lock a list of live repeater stream names, Internal use.

Parameters:

streamNames - stream names

addLockRepeaterStreams

```
public void addLockRepeaterStreams(String streamName,  
    MediaCasterStreamItem mediaCasterStreamItem)
```

unlockRepeaterStreams

```
public void unlockRepeaterStreams()
```

Unlock live repeater streams

getMediaCasterType

```
public String getMediaCasterType()
```

Get the media caster stream type for this stream

Returns:

media caster stream type

createStream

```
public boolean createStream(RTPRequestStatus status)
```

(continued from last page)

createStream

```
public boolean createStream(RTPRequestStatus status,  
    IApplicationInstance appInstance)
```

Create IMediaStream, Internal use.

Parameters:

status - status

Returns:

true if successful

shutdown

```
public void shutdown(RTPRequestStatus status)
```

shutdown RTP stream, Internal use.

Parameters:

status - status

initProperties

```
public void initProperties(IApplicationInstance appInstance)
```

getAppInstance

```
public IApplicationInstance getAppInstance()
```

Get application instance

Returns:

application instance

isPaused

```
public boolean isPaused()
```

Is stream paused

Returns:

true if stream is paused

getDuration

```
public double getDuration()
```

Get the duration of the stream if video on demand

Returns:

duration in seconds

isResetPlayStream

```
public boolean isResetPlayStream()
```

(continued from last page)

Is reset stream trigger, Internal use.

Returns:

true if reset trigger

setResetPlayStream

```
public void setResetPlayStream(boolean doResetPlayStream)
```

Set reset stream trigger

Parameters:

doResetPlayStream - true if reset trigger

record

```
public RTPStreamPlayResult record(RTPRequestStatus status)
```

Execute record

Parameters:

status - RTP status

Returns:

status

record

```
public RTPStreamPlayResult record(RTPRequestStatus status,  
    double startTime,  
    double stopTime)
```

Execute record

Parameters:

status - RTP status

startTime - playback start time

stopTime - playback stop time

Returns:

status

play

```
public RTPStreamPlayResult play(RTPRequestStatus status)
```

Execute play

Parameters:

status - RTP status

Returns:

status

(continued from last page)

play

```
public RTPStreamPlayResult play(RTPRequestStatus status,  
    double startTime,  
    double stopTime)
```

Execute play

Parameters:

status - RTP status
startTime - playback start time
stopTime - playback stop time

Returns:

status

attachToWMSession

```
public void attachToWMSession(RtmpSessionInfo wmsSessionInfo)
```

Attach to WMS session, Internal use

Parameters:

wmsSessionInfo - session info

detachFromWMSession

```
public void detachFromWMSession(RtmpSessionInfo wmsSessionInfo)
```

Detach from WMS session, Internal use.

Parameters:

wmsSessionInfo - session info

pause

```
public void pause(RTPRequestStatus status)
```

Execute pause

Parameters:

status - RTP status

announce

```
public void announce(RTPRequestStatus status)
```

Execute announce command

Parameters:

status - RTP status

isResyncAudioVideoOnSR

```
public boolean isResyncAudioVideoOnSR()
```

Reset audio/video sync on new RTCP packets (not just first packet)

Returns:

(continued from last page)

true if resetting audio/video on new RTCP packets

setResyncAudioVideoOnSR

```
public void setResyncAudioVideoOnSR(boolean resyncAudioVideoOnSR)
```

Reset audio/video sync on new RTCP packets (not just first packet)

Parameters:

resyncAudioVideoOnSR - true if resetting audio/video on new RTCP packets

isResyncAudioVideoOnSRLog

```
public boolean isResyncAudioVideoOnSRLog()
```

Log audio/video sync on new RTCP packets (not just first packet)

Returns:

true if logging audio/video on new RTCP packets

setResyncAudioVideoOnSRLog

```
public void setResyncAudioVideoOnSRLog(boolean resyncAudioVideoOnSRLog)
```

Log audio/video sync on new RTCP packets (not just first packet)

Parameters:

resyncAudioVideoOnSRLog - true if logging audio/video on new RTCP packets

setResyncAudioVideoOnSRLogStreamSuffix

```
public void setResyncAudioVideoOnSRLogStreamSuffix(String names)
```

Set the stream names that require to be logged for timing information

Parameters:

names

getResyncAudioVideoOnSRLogStreamSuffix

```
public String getResyncAudioVideoOnSRLogStreamSuffix()
```

Get the stream suffixes that are set for timing information logging

Returns:

resyncAudioVideoOnSRLogStreamNames

getMetadataPacket

```
public byte[] getMetadataPacket()
```

Get the onMetadata packet for this RTP stream

Returns:

onMetadata packet

(continued from last page)

resetSentMetadataFlag

```
public void resetSentMetadataFlag()
```

Reset sendMetadata flag

checkSendMetadata

```
public void checkSendMetadata(long adjTimecode,  
    RTPTrack rtpTrack)
```

Check to see if we have sent onMetadata event, if not send

Parameters:

adjTimecode - timecode (milliseconds)

extractCodecConfigFromTrackInfo

```
public void extractCodecConfigFromTrackInfo()
```

Extract codec config information from SDP data

getStreamType

```
public String getStreamType()
```

Get the stream type

Returns:

stream type

setStreamType

```
public void setStreamType(String streamType)
```

Set the stream type

Parameters:

streamType - stream type

getAppName

```
public String getAppName()
```

Get the application name

Returns:

application name

setAppName

```
public void setAppName(String appName)
```

Get the application name

Parameters:

appName - application name

getAppName

```
public String getAppName()
```

Get the application instance name

Returns:

application instance name

setAppName

```
public void setAppName(String appName)
```

Set the application instance name

Parameters:

appName - application instance name

getStreamExt

```
public String getStreamExt()
```

Get the stream extension

Returns:

stream extension

setStreamExt

```
public void setStreamExt(String streamExt)
```

Set the stream extension

Parameters:

streamExt - stream extension

getStreamName

```
public String getStreamName()
```

Get stream name

Returns:

stream name

setStreamName

```
public void setStreamName(String streamName)
```

Set stream name

Parameters:

streamName - stream name

getStreamNameLogging

```
public String getStreamNameLogging()
```

(continued from last page)

Get the stream name used for logging

Returns:

stream name used for logging

setStreamNameLogging

```
public void setStreamNameLogging(String streamNameLogging)
```

Set the stream name used for logging

Parameters:

streamNameLogging - stream name used for logging

getStreamSessionId

```
public long getStreamSessionId()
```

Get the stream session id

Returns:

stream session id

setStreamSessionId

```
public void setStreamSessionId(long streamSessionId)
```

Set the stream session id

Parameters:

streamSessionId - stream session id

getStreamSessionVersion

```
public long getStreamSessionVersion()
```

Get the stream session version

Returns:

stream session version

setStreamSessionVersion

```
public void setStreamSessionVersion(long streamSessionVersion)
```

Set the stream session version

Parameters:

streamSessionVersion - stream session version

getStreamSessionIp

```
public String getStreamSessionIp()
```

Get the stream session ip

Returns:

stream session ip

setStreamSessionIp

```
public void setStreamSessionIp(String streamSessionIp)
```

Set the stream session ip

Parameters:

streamSessionIp - stream session ip

isCheckSSRC

```
public boolean isCheckSSRC()
```

Are we checking the ssrc values of each incoming RTP packet

Returns:

true if checking

setCheckSSRC

```
public void setCheckSSRC(boolean checkSSRC)
```

Are we checking the ssrc values of each incoming RTP packet

Parameters:

checkSSRC - true if checking

isCheckIpAddr

```
public boolean isCheckIpAddr()
```

Are we checking the ip address of each incoming RTP packet

Returns:

true if checking ip address of each incoming RTP packet

setCheckIpAddr

```
public void setCheckIpAddr(boolean checkIpAddr)
```

Are we checking the ip address of each incoming RTP packet

Parameters:

checkIpAddr - true if checking ip address of each incoming RTP packet

getUDPTransport

```
public IUDPTransport getUDPTransport(boolean isMulticast)
```

Get the UDP transport for this stream

Parameters:

isMulticast - true if multicast

Returns:

UDP transport

getAVSyncMethod

```
public int getAVSyncMethod()
```

Get the audio/video sync method. See AVSYNCMETHODS_*

Returns:

audio/video sync method. See AVSYNCMETHODS_*

setAVSyncMethod

```
public void setAVSyncMethod(int avSyncMethod)
```

Set the audio/video sync method. See AVSYNCMETHODS_*

Parameters:

avSyncMethod - audio/video sync method. See AVSYNCMETHODS_*

isAVSyncNonSR

```
public boolean isAVSyncNonSR()
```

Is sync method based on RTCP packets (sender report)

Returns:

true if based in RTCP sender reports

getMaxRTCPWaitTime

```
public int getMaxRTCPWaitTime()
```

Get max time to wait for RTCP sender reports (milliseconds)

Returns:

max time to wait for RTCP sender reports (milliseconds)

setMaxRTCPWaitTime

```
public void setMaxRTCPWaitTime(int maxRTCPWaitTime)
```

Set max time to wait for RTCP sender reports (milliseconds)

Parameters:

maxRTCPWaitTime - max time to wait for RTCP sender reports (milliseconds)

getStreamInfo

```
public java.util.Map getStreamInfo()
```

Get all name/value pairs in the stream info collection

Returns:

map of name/value pairs

getStreamAttributes

```
public java.util.Map getStreamAttributes()
```

(continued from last page)

Get all name/value pairs in the stream attributes collection

Returns:

map of name/value pairs

avSyncNameToId

```
public static int avSyncNameToId(String avSyncName)
```

Get audio/video sync id from name

Parameters:

avSyncName - audio/video sync name

Returns:

audio/video sync id, see AVSYNCMETHODS_*

getMPEGTSAudioLanguage

```
public String getMPEGTSAudioLanguage()
```

setMPEGTSAudioLanguage

```
public void setMPEGTSAudioLanguage(String mpegtsAudioLanguage)
```

getMPEGTSProgramID

```
public int getMPEGTSProgramID()
```

setMPEGTSProgramID

```
public void setMPEGTSProgramID(int mpegtsProgramId)
```

getMPEGTSVideoPID

```
public int getMPEGTSVideoPID()
```

Get the video PID id if MPEG-TS stream

Returns:

video PID id if MPEG-TS stream

setMPEGTSVideoPID

```
public void setMPEGTSVideoPID(int mpegtsVideoPID)
```

Set the video PID id if MPEG-TS stream

Parameters:

mpegtsVideoPID - video PID id if MPEG-TS stream

getMPEGTSAudioPID

```
public int getMPEGTSAudioPID()
```

Get the audio PID id if MPEG-TS stream

Returns:

audio PID id if MPEG-TS stream

setMPEGTSAudioPID

```
public void setMPEGTSAudioPID(int mpegtsAudioPID)
```

Set the audio PID id if MPEG-TS stream

Parameters:

mpegtsAudioPID - audio PID id if MPEG-TS stream

isRTSP

```
public boolean isRTSP()
```

Is this RTP Stream managed by RTSP session

Returns:

true if managed by RTSP session

setRTSP

```
public void setRTSP(boolean isRTSP)
```

Is this RTP Stream managed by RTSP session

Parameters:

isRTSP - true if managed by RTSP session

isRTSPPull

```
public boolean isRTSPPull()
```

Is this RTP Stream managed by RTSP session

Returns:

true if managed by RTSP session

setRTSPPull

```
public void setRTSPPull(boolean isRTSPPull)
```

Is this RTP Stream managed by RTSP session

Parameters:

isRTSPPull - true if managed by RTSP session

getStreamQueryStr

```
public String getStreamQueryStr()
```

(continued from last page)

Get the stream query string

Returns:

stream query string

setStreamQueryStr

```
public void setStreamQueryStr(String streamQueryStr)
```

Set the stream query string

Parameters:

streamQueryStr - stream query string

getModeName

```
public String getModeName()
```

isModePublish

```
public boolean isModePublish()
```

Is this a publish stream

Returns:

true if publish stream

isModePlay

```
public boolean isModePlay()
```

Is this a play stream

Returns:

true if play stream

isModeUnknown

```
public boolean isModeUnknown()
```

Is the stream mode unknown (publish vs play)

Returns:

true if stream mode is unknown

getOutHost

```
public String getOutHost()
```

Get the out host

Returns:

out host

(continued from last page)

setOutHost

```
public void setOutHost(String outHost)
```

Set out host

Parameters:

outHost - out host

idle

```
public void idle(org.apache.mina.common.IoSession session,  
    RtmpResponseMessage resp)
```

Process idle event

Parameters:

session - io session

resp - idle request

getLastPacketsByType

```
public AMFPacket\[\] getLastPacketsByType(IMediaStream localStream)
```

Analyzes stream to get information, Internal use.

Parameters:

localStream - local stream

Returns:

important packets

getLastPacketsByType

```
public AMFPacket\[\] getLastPacketsByType(IMediaReader localReader,  
    double startTime)
```

Analyzes stream to get information, Internal use.

Parameters:

localReader - media reader

startTime - start time

Returns:

important packets

switchSetupToMPEGTS

```
public void switchSetupToMPEGTS()
```

Switch a stream to MPEG-TS, Internal use.

describe

```
public String describe(RTPSession rtspSession,  
    RTPRequestStatus status)
```

Execute describe command

(continued from last page)

Parameters:

rtspSession - RTP session
status - RTP status

Returns:

describe response

describe

```
public String describe(RTPSession rtspSession,  
    int isStreamPacketizer,  
    RTPRequestStatus status,  
    int[] validCodecsAudio,  
    int[] validCodecsVideo)
```

Get RTP describe details

Parameters:

rtspSession - rtp session
isStreamPacketizer - is packetizing as a stream
status - status
validCodecsAudio - list of valid audio codecs
validCodecsVideo - list of valid video codecs

Returns:

SDP info as a string

describeGetDetails

```
public RTPSDPParts describeGetDetails(RTPSession rtspSession,  
    int isStreamPacketizer,  
    RTPRequestStatus status,  
    int[] validCodecsAudio,  
    int[] validCodecsVideo)
```

Get RTP describe details

Parameters:

rtspSession - rtp session
isStreamPacketizer - is packetizing as a stream
status - status
validCodecsAudio - list of valid audio codecs
validCodecsVideo - list of valid video codecs

Returns:

SDP parts

getMode

```
public int getMode()
```

Get the current play/publish mode

Returns:

play/publish mode

setMode

```
public void setMode(int mode)
```

(continued from last page)

Set the play/publish mode

Parameters:

mode - play/publish mode

getTransportMode

```
public String getTransportMode()
```

Get the transport mode

Returns:

transport mode

setTransportMode

```
public void setTransportMode(String transportMode)
```

Set the transport mode

Parameters:

transportMode - transport mode

getNormalizedNTPTimecode

```
public long getNormalizedNTPTimecode(long timecode)
```

Turn a millisecond timecode into an NTP timecode

Parameters:

timecode - timecode (milliseconds)

Returns:

NTP timecode

isForceRTSPInterleaved

```
public boolean isForceRTSPInterleaved()
```

True if forcing RTSP interleaved

Returns:

true if forcing RTSP interleaved

setForceRTSPInterleaved

```
public void setForceRTSPInterleaved(boolean isForceRTSPInterleaved)
```

True if forcing RTSP interleaved

Parameters:

isForceRTSPInterleaved - true if forcing RTSP interleaved

getRTPInfo

```
public RTPStream.RTPInfo getRTPInfo(double startTime,  
    int videoSeq,  
    int audioSeq)
```

(continued from last page)

Get the RTP info

Parameters:

startTime - start time
videoSeq - video sequence number
audioSeq - audio sequence number

Returns:

RTP info string

formatRTPInfo

```
public String formatRTPInfo(long timecode,  
    int videoSeq,  
    int audioSeq)
```

Format RTP info

Parameters:

timecode - timecode
videoSeq - video sequence number
audioSeq - audio sequence number

Returns:

RTP Info string

getRTSPSessionName

```
public String getRTSPSessionName()
```

Get session name

Returns:

session name

setRTSPSessionName

```
public void setRTSPSessionName(String rtspSessionName)
```

Set session name

Parameters:

rtspSessionName - session name

getRTSPSessionDescription

```
public String getRTSPSessionDescription()
```

Get session description

Returns:

session description

setRTSPSessionDescription

```
public void setRTSPSessionDescription(String rtspSessionDescription)
```

Get session description

(continued from last page)

Parameters:`rtspSessionDescription` - session description

isSendSDESEvents

```
public boolean isSendSDESEvents()
```

Send RTCP SDES events

Returns:

true if sending RTCP SDES events

setSendSDESEvents

```
public void setSendSDESEvents(boolean sendSDESEvents)
```

Send RTCP SDES events

Parameters:

`sendSDESEvents` - true if sending RTCP SDES events

isMPEGTSOut

```
public boolean isMPEGTSOut()
```

Is MPEG-TS out

Returns:

true if MPEG-TS out

setMPEGTSOut

```
public void setMPEGTSOut(boolean isMPEGTSOut)
```

Is MPEG-TS out

Parameters:

`isMPEGTSOut` - true if MPEG-TS out

transportFindBestMatch

```
public String transportFindBestMatch(String transport)
```

Based on a transport string from SETUP command find best match

Parameters:

`transport` - transport string

Returns:

best match

getAutoAllocateInterleavePorts

```
public int getAutoAllocateInterleavePorts()
```

(continued from last page)

isLive

```
public boolean isLive()
```

Is live stream

Returns:

true if live

setLive

```
public void setLive(boolean isLive)
```

Is live stream

Parameters:

isLive - true if live

getMediaReader

```
public IMediaReader getMediaReader()
```

Get media reader if video on demand stream

Returns:

media reader

getRTSPSessionTimeout

```
public int getRTSPSessionTimeout()
```

Get RTP session timeout (milliseconds)

Returns:

RTP session timeout (milliseconds)

setRTSPSessionTimeout

```
public void setRTSPSessionTimeout(int rtspSessionTimeout)
```

Set RTP session timeout (milliseconds)

Parameters:

rtspSessionTimeout - RTP session timeout (milliseconds)

getRTSPMaximumPendingWriteBytes

```
public int getRTSPMaximumPendingWriteBytes()
```

Get the maximum number of waiting bytes allow for this RTSP session

Returns:

maximum number of waiting bytes allow for this RTSP session

setRTSPMaximumPendingWriteBytes

```
public void setRTSPMaximumPendingWriteBytes(int rtspMaximumPendingWriteBytes)
```

(continued from last page)

Set the maximum number of waiting bytes allow for this RTSP session

Parameters:

rtspMaximumPendingWriteBytes - maximum number of waiting bytes allow for this RTSP session

isTimeout

```
public boolean isTimeout(long currTime,  
    int timeout)
```

Is the stream timeout out

Parameters:

currTime - current time

timeout - timeout value

Returns:

true if timed out

touch

```
public void touch()
```

Touch the stream so that it does not timeout

getRTSPBindIpAddress

```
public String getRTSPBindIpAddress()
```

Get the bind RTSP bind IP address

Returns:

bind RTSP bind IP address

setRTSPBindIpAddress

```
public void setRTSPBindIpAddress(String rtspBindIpAddress)
```

Set the bind RTSP bind IP address

Parameters:

rtspBindIpAddress - bind RTSP bind IP address

getRTSPConnectionIpAddress

```
public String getRTSPConnectionIpAddress()
```

Get the connection IP address

Returns:

connection IP address

setRTSPConnectionIpAddress

```
public void setRTSPConnectionIpAddress(String rtspConnectionIpAddress)
```

Set the connection IP address

Parameters:

(continued from last page)

rtspConnectionIpAddress - connection IP address

getRTSPConnectionAddressType

```
public String getRTSPConnectionAddressType()
```

Get the connection address type

Returns:

connection address type

setRTSPConnectionAddressType

```
public void setRTSPConnectionAddressType(String rtspConnectionAddressType)
```

Set the connection address type

Parameters:

rtspConnectionAddressType - connection address type

getRTSPOriginIpAddress

```
public String getRTSPOriginIpAddress()
```

Get the origin IP address

Returns:

origin IP address

setRTSPOriginIpAddress

```
public void setRTSPOriginIpAddress(String rtspOriginIpAddress)
```

Set the origin IP address

Parameters:

rtspOriginIpAddress - origin IP address

getRTSPOriginAddressType

```
public String getRTSPOriginAddressType()
```

Get the origin address type

Returns:

origin address type

setRTSPOriginAddressType

```
public void setRTSPOriginAddressType(String rtspOriginAddressType)
```

Set the origin address type

Parameters:

rtspOriginAddressType - origin address type

(continued from last page)

getVODStartTimeTC

```
public long getVODStartTimeTC( )
```

Get the video on demand start time (milliseconds)

Returns:

video on demand start time (milliseconds)

setVODStartTimeTC

```
public void setVODStartTimeTC(long vodStartTimeTC)
```

Set the video on demand start time (milliseconds)

Parameters:

vodStartTimeTC - video on demand start time (milliseconds)

getVODLastTimeTC

```
public long getVODLastTimeTC( )
```

Get the last timecode (milliseconds) sent for video on demand

Returns:

last timecode (milliseconds) sent for video on demand

setVODLastTimeTC

```
public void setVODLastTimeTC(long vodLastTimeTC)
```

Set the last timecode (milliseconds) sent for video on demand

Parameters:

vodLastTimeTC - last timecode (milliseconds) sent for video on demand

getVODPlayLen

```
public long getVODPlayLen( )
```

Get the video on demand play duration (milliseconds)

Returns:

video on demand play duration (milliseconds)

setVODPlayLen

```
public void setVODPlayLen(long vodPlayLen)
```

Set the video on demand play duration (milliseconds)

Parameters:

vodPlayLen - video on demand play duration (milliseconds)

isStreamStarted

```
public boolean isStreamStarted( )
```

(continued from last page)

Is stream started

Returns:

true if stream has started playback

isRTSPAlwaysUseSDPPorts

```
public boolean isRTSPAlwaysUseSDPPorts()
```

Force RTSP to use ports in SDP data

Returns:

true if using ports in SDP data

setRTSPAlwaysUseSDPPorts

```
public void setRTSPAlwaysUseSDPPorts(boolean rtspAlwaysUseSDPPorts)
```

Force RTSP to use ports in SDP data

Parameters:

rtspAlwaysUseSDPPorts - true if using ports in SDP data

putRTSPSessionExtraLine

```
public void putRTSPSessionExtraLine(int location,  
    String line)
```

Add an extra line to the SDP data

Parameters:

location - location of line, see SDPLOCATION_

line - line to add

clearRTSPSessionExtraLines

```
public void clearRTSPSessionExtraLines()
```

Clear SDP extra lines

getRTSPSessionExtraLines

```
public java.util.List getRTSPSessionExtraLines()
```

Get extra SDP lines

Returns:

extra SDP lines

getRTPDestination

```
public RTPDestination getRTPDestination()
```

Get RTP destination

Returns:

RTP destination

(continued from last page)

setRTPDestination

```
public void setRTPDestination(RTPDestination rtpDestination)
```

Set RTP destination

Parameters:

rtpDestination - RTP destination

getSDPLang

```
public String getSDPLang()
```

Get the SDP language

Returns:

SDP language

setSDPLang

```
public void setSDPLang(String sdpLang)
```

Set the SDP language

Parameters:

sdpLang - SDP language

isRTPIgnoreProfileLevelId

```
public boolean isRTPIgnoreProfileLevelId()
```

setRTPIgnoreProfileLevelId

```
public void setRTPIgnoreProfileLevelId(boolean rtpIgnoreProfileLevelId)
```

getUDPManagedDeliveryDelay

```
public int getUDPManagedDeliveryDelay()
```

setUDPManagedDeliveryDelay

```
public void setUDPManagedDeliveryDelay(int udpManagedDeliveryDelay)
```

getUDPManagedDeliveryCount

```
public int getUDPManagedDeliveryCount()
```

(continued from last page)

setUDPManagedDeliveryCount

```
public void setUDPManagedDeliveryCount(int udpManagedDeliveryCount)
```

isForceMPEGTSOut

```
public boolean isForceMPEGTSOut()
```

setForceMPEGTSOut

```
public void setForceMPEGTSOut(boolean isForceMPEGTSOut)
```

isBlockUDPOut

```
public boolean isBlockUDPOut()
```

setBlockUDPOut

```
public void setBlockUDPOut(boolean blockUDPOut)
```

getMPEGTSAudioBitrate

```
public int getMPEGTSAudioBitrate()
```

setMPEGTSAudioBitrate

```
public void setMPEGTSAudioBitrate(int mpegtsAudioBitrate)
```

getMPEGTSVideoBitrate

```
public int getMPEGTSVideoBitrate()
```

setMPEGTSVideoBitrate

```
public void setMPEGTSVideoBitrate(int mpegtsVideoBitrate)
```

isRTPIgnoreSPropParameterSets

```
public boolean isRTPIgnoreSPropParameterSets()
```

(continued from last page)

setRTPIgnoreSPropParameterSets

```
public void setRTPIgnoreSPropParameterSets(boolean rtpIgnoreSPropParameterSets)
```

getRTPStreamContext

```
public RTPStreamContext getRTPStreamContext()
```

setRTPStreamContext

```
public void setRTPStreamContext(RTPStreamContext rtpStreamContext)
```

isRefuseIncomingUDPConnections

```
public boolean isRefuseIncomingUDPConnections()
```

setRefuseIncomingUDPConnections

```
public void setRefuseIncomingUDPConnections(boolean refuseIncomingUDPConnections)
```

isRefuseOutgoingUDPConnections

```
public boolean isRefuseOutgoingUDPConnections()
```

setRefuseOutgoingUDPConnections

```
public void setRefuseOutgoingUDPConnections(boolean refuseOutgoingUDPConnections)
```

notifyEncryptionProviderAllTracks

```
public void notifyEncryptionProviderAllTracks()
```

notifyEncryptionProvider

```
public void notifyEncryptionProvider(RTPTrack rtpTrack)
```

(continued from last page)

isUDPTransportOverride

```
public boolean isUDPTransportOverride()
```

setUDPTransport

```
public void setUDPTransport(IUDPTransport udpTransport)
```

getSDPTransportStr

```
public String getSDPTransportStr()
```

setSDPTransportStr

```
public void setSDPTransportStr(String sdpTransportStr)
```

isWebRTC

```
public boolean isWebRTC()
```

setWebRTC

```
public void setWebRTC(boolean isWebRTC)
```

Package

com.wowza.wms.rtp.transport

com.wowza.wms.rtp.transport Interface IUDPMessageHandler

All Known Implementing Classes:

[RTPPort](#)

public interface **IUDPMessageHandler**
extends

Method Summary

abstract void	handleMessage (java.net.SocketAddress socketAddr, Object message)
abstract void	sessionClosed (IUDPTransportSession session)
abstract void	sessionOpened (IUDPTransportSession session)

Methods

handleMessage

public abstract void **handleMessage**(java.net.SocketAddress socketAddr,
Object message)

sessionOpened

public abstract void **sessionOpened**([IUDPTransportSession](#) session)

sessionClosed

public abstract void **sessionClosed**([IUDPTransportSession](#) session)

com.wowza.wms.rtp.transport Interface IUDPTransport

public interface **IUDPTransport**
extends

Field Summary

public static final	<u>DIRECTION_IN</u> Value: 1
public static final	<u>DIRECTION_OUT</u> Value: 2

Method Summary

abstract java.net.InetSocketAddress	<u>bind</u> (RTPUDPDatagramConfig datagramConfig, <u>IUDPMessageHandler</u> handler, String inIPAddress, int inPort, String outIPAddress, int outPort, int direction)
abstract void	<u>copyContext</u> (<u>IUDPTransport</u> transport)
abstract String	<u>getLoggingContextStr</u> ()
abstract java.net.InetAddress	<u>getMulticastInterfaceAddress</u> ()
abstract long	<u>getReceivedPacketCount</u> (java.net.InetSocketAddress socketAddress)
abstract <u>RTPContext</u>	<u>getRTPContext</u> ()
abstract long	<u>getSentPacketCount</u> (java.net.InetSocketAddress socketAddress)
abstract int	<u>getTimeToLive</u> ()
abstract void	<u>setLoggingContextStr</u> (String loggingContextStr)
abstract void	<u>setMulticastInterfaceAddress</u> (java.net.InetAddress multicastInterfaceAddress)
abstract void	<u>setRTPContext</u> (<u>RTPContext</u> rtpContext)
abstract void	<u>setTimeToLive</u> (int timeToLive)
abstract void	<u>unbind</u> (java.net.InetSocketAddress socketAddress)
abstract void	<u>unbindAll</u> ()

Fields

DIRECTION_IN

```
public static final int DIRECTION_IN
```

Constant value: **1**

DIRECTION_OUT

```
public static final int DIRECTION_OUT
```

Constant value: **2**

Methods

bind

```
public abstract java.net.InetSocketAddress bind(RTPUDPDatagramConfig datagramConfig,  
    IUDPMessageHandler handler,  
    String inIPAddress,  
    int inPort,  
    String outIPAddress,  
    int outPort,  
    int direction)
```

unbindAll

```
public abstract void unbindAll()
```

unbind

```
public abstract void unbind(java.net.InetSocketAddress socketAddress)
```

setRTPContext

```
public abstract void setRTPContext(RTPContext rtpContext)
```

getRTPContext

```
public abstract RTPContext getRTPContext()
```

(continued from last page)

setTimeToLive

```
public abstract void setTimeToLive(int timeToLive)
```

getTimeToLive

```
public abstract int getTimeToLive()
```

setMulticastInterfaceAddress

```
public abstract void setMulticastInterfaceAddress(java.net.InetAddress  
multicastInterfaceAddress)
```

getLoggingContextStr

```
public abstract String getLoggingContextStr()
```

setLoggingContextStr

```
public abstract void setLoggingContextStr(String loggingContextStr)
```

getMulticastInterfaceAddress

```
public abstract java.net.InetAddress getMulticastInterfaceAddress()
```

copyContext

```
public abstract void copyContext(IUDPTransport transport)
```

getReceivedPacketCount

```
public abstract long getReceivedPacketCount(java.net.InetSocketAddress socketAddress)
```

getSentPacketCount

```
public abstract long getSentPacketCount(java.net.InetSocketAddress socketAddress)
```

com.wowza.wms.rtp.transport Interface IUDPTransportSession

public interface **IUDPTransportSession**
extends

Method Summary

abstract void	write (byte[] buffer, int offset, int len, java.net.SocketAddress destination, long timecode)
---------------	---

Methods

write

```
public abstract void write(byte[] buffer,  
    int offset,  
    int len,  
    java.net.SocketAddress destination,  
    long timecode)
```

Package

com.wowza.wms.server

com.wowza.wms.server Interface ICommandInterfaceCommand

public interface **ICommandInterfaceCommand**
extends

Method Summary

abstract boolean	<u>canHandle</u> (CommandInterfaceRequestMessage req)
abstract void	<u>invoke</u> (CommandInterfaceRequestMessage req, CommandInterfaceResponseMessage resp)

Methods

invoke

```
public abstract void invoke(CommandInterfaceRequestMessage req,  
    CommandInterfaceResponseMessage resp)
```

canHandle

```
public abstract boolean canHandle(CommandInterfaceRequestMessage req)
```

com.wowza.wms.server Interface ICompilerDirectives

public interface **ICompilerDirectives**
extends

Field Summary

public static final	RTMPENABLED
	Value: true

Fields

RTMPENABLED

public static final boolean **RTMPENABLED**

Constant value: **true**

com.wowza.wms.server Interface IResponseListener

public interface **IResponseListener**
extends

IResponseListener: Internal use.

Method Summary

abstract void	onResponseWriteStart (RtmpResponseMessage response)
abstract void	onResponseWriteStop (RtmpResponseMessage response)

Methods

onResponseWriteStart

public abstract void **onResponseWriteStart**(RtmpResponseMessage response)

onResponseWriteStop

public abstract void **onResponseWriteStop**(RtmpResponseMessage response)

com.wowza.wms.server Interface IServer

public interface **IServer**
extends

IServer: public interface to Server object.

Field Summary

public static final	<u>SERVER_DEFAULT</u> Value: <code>_defaultServer_</code>
---------------------	--

Method Summary

abstract boolean	<u>addAuthorizedRESTAPI</u> (Class classType) Returns true if the class has been added to the REST API.
abstract boolean	<u>addAuthorizedRESTAPI</u> (Class classType, String url) Returns true if the class has been added to the REST API at the specified URL
abstract void	<u>addServerListener</u> (<u>IServerNotify</u> serverListener) Add server listener
abstract boolean	<u>addUnAuthorizedRESTAPI</u> (Class classType) Returns true if the class has been added to the REST API.
abstract boolean	<u>addUnAuthorizedRESTAPI</u> (Class classType, String url) Returns true if the class has been added to the REST API at the specified URL
abstract com.wowza.wms.admin.AdminAgent	<u>getAdminAgent</u> () Get the JMX interface
abstract String	<u>getAdminGUID</u> () Get the admin guid
abstract java.util.List	<u>getAdminInterfaceObjectList</u> () Get the list of objects exposed through JMX interface
abstract RandomIdGenerator	<u>getClientIdGenerator</u> () Get the client id generator for the server
abstract int	<u>getClientIdGeneratorRecycleDelaySize</u> () Get the client ID generator recycle delay size
abstract int	<u>getClientIdGeneratorRecycleSize</u> () Get the client ID generator recycle size
abstract long	<u>getClientIdGeneratorTimeout</u> () Get the client ID generator timeout

abstract CommandInterfaceCommandHandler	<u>getCommandInterfaceCommandHandler()</u> Get the command interface command handler
abstract <u>HostPort</u>	<u>getCommandInterfaceHostPort()</u> Get the definition of the command interface
abstract long	<u>getCommittedVirtualMemory()</u> Get the committed virtual memory
abstract <u>ConnectionCounter</u>	<u>getConnectionCounter()</u> Get the server connection counter.
abstract ConnectionCounterSimple	<u>getConnectionCounter(int counterIndex)</u> Get the server connection counter for a specific technology (see IVHost.COUNTER_*)
abstract long	<u>getConnectionsMaximum()</u> Returns maximum number of connections allowed to the server (-1 means unlimited)
abstract int	<u>getCoreHandlerPoolSize()</u> Get the handler core thread pool size.
abstract int	<u>getCoreTransportPoolSize()</u> Get the transport core thread pool size.
abstract long	<u>getCurrentHeapSize()</u> Get the current heap size
abstract String	<u>getDateStarted()</u> Get the date and time the server was started.
abstract String	<u>getDefaultStreamPrefix()</u> Get the default stream prefix used if the stream name does not include a prefix (default is mp4)
abstract java.util.Properties	<u>getDynamicLogProperties()</u> Get the dynamic log properties defined at the server level in conf/log4j.properties
abstract String	<u>getGUID()</u> Get the base guid
abstract <u>ThreadPool</u>	<u>getHandlerThreadPool()</u> Get the server handler thread pool.
abstract String	<u>getHTTPHeaderServer()</u> Get the Server header used for HTTP responses
abstract <u>IOPerformanceCounter</u>	<u>getIoPerformanceCounter()</u> Get the server performance counter.
abstract <u>IOPerformanceCounter</u>	<u>getIoPerformanceCounter(int counterIndex)</u> Get the server performance counter for a specific technology (see IVHost.COUNTER_*)
abstract long	<u>getLiveStreamTranscoderSessionCount()</u> Get the current number of live stream transcoder sessions.
abstract long	<u>getLiveThreads()</u> Get the count of live threads
abstract <u>WMSProperties</u>	<u>getManagerProperties()</u> Get server's manager's properties collection

abstract long	<u>getMaxHeapSize()</u> Get the max heap size
abstract long	<u>getPeakThreads()</u> Get the count of peak threads
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get server level properties collection
abstract Server.ProtocolUsageSessionTracker	<u>getProtocolUsageTracker()</u> Get the server level protocol usage tracker
abstract long	<u>getPublishersMaximum()</u> Get the maximum number of streams that can be published to the server
abstract <u>PushPublishUsageTracker</u>	<u>getPushPublishUsageTracker()</u> Get the server level push publishing usage tracker
abstract com.wowza.wms.rest.restserver.RESTUsageTracker	<u>getRESTUsageTracker()</u> Get the server level REST usage tracker
abstract String	<u>getRTMPHeaderServer()</u> Get the Server header used for RTMPT responses
abstract String	<u>getServerGUID()</u> Get the server guid
abstract String	<u>getSessionGUID()</u> Get the session guid
abstract <u>ThreadPool</u>	<u>getThreadPool()</u> Get the server handler thread pool.
abstract com.wowza.wms.transcoder.thumbnailer.ThumbnailerUsageTracker	<u>getThumbnailerUsageTracker()</u> Get the server level thumbnail usage tracker
abstract String	<u>getTimeRunning()</u> Get a formatted String of how long the server has been running.
abstract double	<u>getTimeRunningSeconds()</u> Get time running in seconds
abstract com.wowza.wms.transcoder.capture.TranscoderCaptureManager	<u>getTranscoderCaptureManager()</u> Get the transcoder capture manager
abstract TranscoderContextServer	<u>getTranscoderContextServer()</u> Get the server level transcoder context
abstract long	<u>getTranscoderLicenseInUse()</u> Get the total number of transcoder licenses in use.
abstract long	<u>getTranscoderLicenseTotal()</u> Get the total number of transcoder licenses (-1 means unlimited - subscription)

abstract TranscoderUsageTracker	<u>getTranscoderUsageTracker()</u> Get the server level live transcoder usage tracker
abstract com.wowza.wms.transcoder.vod.TranscoderVODUsageTracker	<u>getTranscoderVODUsageTracker()</u> Get the server level VOD transcoder usage tracker
abstract <u>ThreadPool</u>	<u>getTransportThreadPool()</u> Get the server transport thread pool.
abstract ServerTuningHandler	<u>getTuningHandler()</u> Get the handler that control automatic server tuning
abstract com.wowza.wms.transport.udp.UDPPortManager	<u>getUDPPortManager()</u> Get the UDP port manager which manages the allocation of incoming UDP port binding to be sure there are not port conflicts
abstract com.wowza.wms.transport.udp.UDPPortSharingManager	<u>getUDPPortSharingManager()</u> Get the UDP port sharing manager.
abstract String[]	<u>getUserAgents()</u> Get a pipe " " delimited list of user agents that the server recognizes as RTMPT client.
abstract String	<u>getVersion()</u> Get server version number.
abstract <u>VHostList</u>	<u>getVHostList()</u> Returns the interface to the VHostList for the server
abstract boolean	<u>isAcceptWOWZConnections()</u> If true, WOWZ connections will use the WOWZ protocol.
abstract boolean	<u>isDRMAvailable()</u> Returns true if DRM is properly licensed.
abstract boolean	<u>isDRMInUse()</u> Returns true if DRM is in-use.
abstract boolean	<u>isDVRAvailable()</u> Returns true if nDVR is properly licensed.
abstract boolean	<u>isDVRInUse()</u> Returns true if nDVR is in-use.
abstract boolean	<u>isDynamicLogContextLoaded()</u> (String logContext) Returns true if the given dynamic log context is already loaded.
abstract boolean	<u>isHTTPOriginAvailable()</u> Returns true if HTTP origin is properly licensed.
abstract boolean	<u>isInitiateWOWZConnections()</u> If true, NetConnection attempts will use the WOWZ protocol when possible.
abstract boolean	<u>isLoggingRemoveStdoutIfRunningAsService()</u> If true, stdout log4j appender is removed from logging configuration if running as a service.
abstract boolean	<u>isPushPublishAvailable()</u> Returns true if Push Publish is properly licensed.

abstract boolean	<u>isRESTAPIAvailable()</u> Returns true if REST API is properly licensed.
abstract boolean	<u>isRestDocumentationServerEnabled()</u> Returns true if REST API documentation server is enabled
abstract boolean	<u>isRestServerEnabled()</u> Returns true if REST API is enabled
abstract boolean	<u>isSuspended()</u> Is the server current suspended
abstract boolean	<u>isTranscoderWatermark()</u> Return true if transcoder has a watermark
abstract boolean	<u>isVHostRunning(String name)</u> Returns true if the name provided is a running VHost name
abstract String	<u>readConfig(String sName)</u> Method to read xml config file..
abstract void	<u>reloadVHostConfig()</u> Reload the VHosts.xml file.
abstract void	<u>removeServerListener(IServerNotify serverListener)</u> Remove server listener
abstract void	<u>setAcceptWOWZConnections(boolean acceptWOWZConnections)</u> If true, WOWZ connections will use the WOWZ protocol.
abstract void	<u>setCommandInterfaceHostPort(HostPort commandInterfaceHostPort)</u> Set the definition for the command interface.
abstract void	<u>setCoreHandlerPoolSize(int corePoolSize)</u> Set the handler core thread pool size.
abstract void	<u>setCoreTransportPoolSize(int corePoolSize)</u> Set the transport core thread pool size.
abstract void	<u>setDefaultStreamPrefix(String defaultStreamPrefix)</u> Set the default stream prefix used if the stream name does not include a prefix (default is mp4)
abstract void	<u>setDynamicLogProperties(java.util.Properties dynamicLogProperties)</u> Set the dynamic log properties set at the server level
abstract void	<u>setHTTPHeaderServer(String httpHeaderServer)</u> Set the Server header used for HTTP responses
abstract void	<u>setInitiateWOWZConnections(boolean initiateWOWZConnections)</u> If true, NetConnection attempts will use the WOWZ protocol when possible.
abstract void	<u>setLoggingRemoveStdoutIfRunningAsService(boolean loggingRemoveStdoutIfRunningAsService)</u> If true, stdout log4j appender is removed from logging configuration if running as a service.
abstract void	<u>setRestDocumentationServerEnabled(boolean restDocumentationServerEnabled)</u> Sets if REST API documentation server will be enabled

abstract void	<u>setRestServerEnabled</u> (boolean restServerEnabled) Sets if REST API server will be enabled
abstract void	<u>setRTMPTHeaderServer</u> (String rtmptHeaderServer) Set the Server header used for RTMPT responses
abstract void	<u>setUserAgents</u> (String[] userAgents) Set a pipe " " delimited list of user agents that the server recognizes as RTMPT client.
abstract void	<u>startCommandInterface</u> () Start the command interface as defined in Server.xml.
abstract void	<u>startStats</u> () Starts the statistics manager to collect server and application statistics
abstract void	<u>startVHost</u> (String vhostName) Start a vHost by name.
abstract void	<u>startVHosts</u> () Start all vHosts
abstract void	<u>stopAdminAgent</u> () Stop the JMX interface
abstract void	<u>stopCommandInterface</u> () Stop the command interface as defined in Server.xml.
abstract void	<u>stopStats</u> () Stops the statistics manager
abstract void	<u>stopVHost</u> (String vhostName) Stop a vHost by name.
abstract void	<u>stopVHosts</u> () Stop all vHosts
abstract void	<u>suspendAllVHosts</u> () Suspend all virtual hosts (Calls IVHost.suspendAllHostPorts for each vhost)
abstract void	<u>suspendCommandInterface</u> () Suspend the command interface as defined in Server.xml.
abstract void	<u>suspendServer</u> () Suspend all virtual hosts and the command interface
abstract void	<u>unbindAllVHosts</u> () Unbind all virtual hosts (Calls IVHost.unbindAllHostPorts for each vhost)
abstract boolean	<u>writeConfig</u> (String sName, String data) Method to write xml config file..

Fields

SERVER_DEFAULT

```
public static final java.lang.String SERVER_DEFAULT
```

(continued from last page)

Constant value: `_defaultServer_`

Methods

startCommandInterface

```
public abstract void startCommandInterface()
```

Start the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

stopCommandInterface

```
public abstract void stopCommandInterface()
```

Stop the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

suspendCommandInterface

```
public abstract void suspendCommandInterface()
```

Suspend the command interface as defined in Server.xml. The command interface is used by shutdown.sh script to stop the server. It is also used by ant task to stop and start the server on build events.

getVersion

```
public abstract String getVersion()
```

Get server version number.

Returns:

server version number

reloadVHostConfig

```
public abstract void reloadVHostConfig()
```

Reload the VHosts.xml file. This method can be invoked through the JMX interface to manage vHosts while the server is running.

stopVHost

```
public abstract void stopVHost(String vhostName)
```

Stop a vHost by name.

Parameters:

vhostName - vHost name

stopVHosts

```
public abstract void stopVHosts()
```

Stop all vHosts

(continued from last page)

isVHostRunning

```
public abstract boolean isVHostRunning(String name)
```

Returns true if the name provided is a running VHost name

Parameters:

name - of a running VHost

Returns:

true if the name provided is a running VHost name

startVHost

```
public abstract void startVHost(String vhostName)
```

Start a vHost by name.

Parameters:

vhostName - vHost name

startVHosts

```
public abstract void startVHosts()
```

Start all vHosts

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter()
```

Get the server performance counter.

Returns:

io performance counter

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get the server performance counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

io performance counter

getConnectionCounter

```
public abstract ConnectionCounter getConnectionCounter()
```

Get the server connection counter.

Returns:

connection counter

(continued from last page)

getPublishersMaximum

```
public abstract long getPublishersMaximum()
```

Get the maximum number of streams that can be published to the server

Returns:

maximum number of streams that can be published to the server

getConnectionCounter

```
public abstract ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get the server connection counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

getDateStarted

```
public abstract String getDateStarted()
```

Get the date and time the server was started.

Returns:

date and time the server was started

getTimeRunning

```
public abstract String getTimeRunning()
```

Get a formatted String of how long the server has been running.

Returns:

formatted String of how long the server has been running

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

getCommandInterfaceHostPort

```
public abstract HostPort getCommandInterfaceHostPort()
```

Get the definition of the command interface

Returns:

host port definition of command interface

(continued from last page)

setCommandInterfaceHostPort

```
public abstract void setCommandInterfaceHostPort(HostPort commandInterfaceHostPort)
```

Set the definition for the command interface.

Parameters:

commandInterfaceHostPort - host port definition of command interface

getUserAgents

```
public abstract String[] getUserAgents()
```

Get a pipe "|" delimited list of user agents that the server recognizes as RTMPT client.

Returns:

pipe "|" delimited list of user agents that the server recognizes as RTMPT client

setUserAgents

```
public abstract void setUserAgents(String[] userAgents)
```

Set a pipe "|" delimited list of user agents that the server recognizes as RTMPT client.

Parameters:

userAgents - pipe "|" delimited list of user agents that the server recognizes as RTMPT client

addServerListener

```
public abstract void addServerListener(IServerNotify serverListener)
```

Add server listener

Parameters:

serverListener - server listener

removeServerListener

```
public abstract void removeServerListener(IServerNotify serverListener)
```

Remove server listener

Parameters:

serverListener - server listener

getAdminInterfaceObjectList

```
public abstract java.util.List getAdminInterfaceObjectList()
```

Get the list of objects exposed through JMX interface

Returns:

list of objects exposed through JMX interface

getCoreTransportPoolSize

```
public abstract int getCoreTransportPoolSize()
```

(continued from last page)

Get the transport core thread pool size.

Returns:

default core thread pool size

setCoreTransportPoolSize

```
public abstract void setCoreTransportPoolSize(int corePoolSize)
```

Set the transport core thread pool size.

Parameters:

corePoolSize - core thread pool size

getCoreHandlerPoolSize

```
public abstract int getCoreHandlerPoolSize()
```

Get the handler core thread pool size.

Returns:

default core thread pool size

setCoreHandlerPoolSize

```
public abstract void setCoreHandlerPoolSize(int corePoolSize)
```

Set the handler core thread pool size.

Parameters:

corePoolSize - core thread pool size

getThreadPool

```
public abstract ThreadPool getThreadPool()
```

Get the server handler thread pool. Same as getHandlerThreadPool.

Returns:

server handler thread pool

getTransportThreadPool

```
public abstract ThreadPool getTransportThreadPool()
```

Get the server transport thread pool. This thread pool is used to read/write data from the transports sockets.

Returns:

server transport thread pool

getHandlerThreadPool

```
public abstract ThreadPool getHandlerThreadPool()
```

Get the server handler thread pool. This thread pool is used to process the incoming events.

Returns:

server handler thread pool

getProperties

public abstract [WMSProperties](#) **getProperties()**

Get server level properties collection

Returns:

server level properties collection

getManagerProperties

public abstract [WMSProperties](#) **getManagerProperties()**

Get server's manager's properties collection

Returns:

manager's property collection

getClientIdGenerator

public abstract RandomIdGenerator **getClientIdGenerator()**

Get the client id generator for the server

Returns:

client id generator for the server

getDynamicLogProperties

public abstract java.util.Properties **getDynamicLogProperties()**

Get the dynamic log properties defined at the server level in conf/log4j.properties

Returns:

dynamic log properties defined at the server level

setDynamicLogProperties

public abstract void **setDynamicLogProperties**(java.util.Properties dynamicLogProperties)

Set the dynamic log properties set at the server level

Parameters:

dynamicLogProperties - dynamic log properties defined at the server level

isDynamicLogContextLoaded

public abstract boolean **isDynamicLogContextLoaded**(String logContext)

Returns true of the given dynamic log context is already loaded. If not loaded it will return false and add it to the a Set of loaded log context. Log context is [VHost].[Application].[AppInstance]

getVHostList

public abstract [VHostList](#) **getVHostList()**

Returns the interface to the VHostList for the server

(continued from last page)

Returns:

vhostList

suspendAllVHosts

```
public abstract void suspendAllVHosts()
```

Suspend all virtual hosts (Calls IVHost.suspendAllHostPorts for each vhost)

unbindAllVHosts

```
public abstract void unbindAllVHosts()
```

Unbind all virtual hosts (Calls IVHost.unbindAllHostPorts for each vhost)

suspendServer

```
public abstract void suspendServer()
```

Suspend all virtual hosts and the command interface

isSuspended

```
public abstract boolean isSuspended()
```

Is the server current suspended

stopAdminAgent

```
public abstract void stopAdminAgent()
```

Stop the JMX interface

getAdminAgent

```
public abstract com.wowza.wms.admin.AdminAgent getAdminAgent()
```

Get the JMX interface

Returns:

JMX Admin agent

getSessionGUID

```
public abstract String getSessionGUID()
```

Get the session guid

Returns:

session guid

getServerGUID

```
public abstract String getServerGUID()
```

Get the server guid

(continued from last page)

Returns:
server guid

getGUID

```
public abstract String getGUID()
```

Get the base guid

Returns:
base guid

getAdminGUID

```
public abstract String getAdminGUID()
```

Get the admin guid

Returns:
admin guid

getUDPPortManager

```
public abstract com.wowza.wms.transport.udp.UDPPortManager getUDPPortManager()
```

Get the UDP port manager which manages the allocation of incoming UDP port binding to be sure there are not port conflicts

Returns:
UDP port manager

getUDPPortSharingManager

```
public abstract com.wowza.wms.transport.udp.UDPPortSharingManager  
getUDPPortSharingManager()
```

Get the UDP port sharing manager.

Returns:
UDP port sharing manager

getLiveThreads

```
public abstract long getLiveThreads()
```

Get the count of live threads

Returns:
count of live threads

getPeakThreads

```
public abstract long getPeakThreads()
```

Get the count of peak threads

Returns:
count of peak threads

getCurrentHeapSize

```
public abstract long getCurrentHeapSize()
```

Get the current heap size

Returns:

current heap size

getMaxHeapSize

```
public abstract long getMaxHeapSize()
```

Get the max heap size

Returns:

map heap size

getCommittedVirtualMemory

```
public abstract long getCommittedVirtualMemory()
```

Get the committed virtual memory

Returns:

committed virtual memory

readConfig

```
public abstract String readConfig(String sName)
```

Method to read xml config file..

writeConfig

```
public abstract boolean writeConfig(String sName,  
    String data)
```

Method to write xml config file..

getClientIdGeneratorTimeout

```
public abstract long getClientIdGeneratorTimeout()
```

Get the client ID generator timeout

Returns:

client ID generator timeout

getClientIdGeneratorRecycleSize

```
public abstract int getClientIdGeneratorRecycleSize()
```

Get the client ID generator recycle size

Returns:

client ID generator recycle size

getClientIdGeneratorRecycleDelaySize

```
public abstract int getClientIdGeneratorRecycleDelaySize()
```

Get the client ID generator recycle delay size

Returns:

client ID generator recycle delay size

getCommandInterfaceCommandHandler

```
public abstract CommandInterfaceCommandHandler getCommandInterfaceCommandHandler()
```

Get the command interface command handler

Returns:

command interface command handler

getProtocolUsageTracker

```
public abstract Server.ProtocolUsageSessionTracker getProtocolUsageTracker()
```

Get the server level protocol usage tracker

Returns:

server level protocol usage tracker

isAcceptWOWZConnections

```
public abstract boolean isAcceptWOWZConnections()
```

If true, WOWZ connections will use the WOWZ protocol. If false, WOWZ connection attempts will fall back to RTMP.

Returns:

true, WOWZ connections will use the WOWZ protocol

setAcceptWOWZConnections

```
public abstract void setAcceptWOWZConnections(boolean acceptWOWZConnections)
```

If true, WOWZ connections will use the WOWZ protocol. If false, WOWZ connection attempts will fall back to RTMP.

Parameters:

acceptWOWZConnections - true, WOWZ connections will use the WOWZ protocol

isInitiateWOWZConnections

```
public abstract boolean isInitiateWOWZConnections()
```

If true, NetConnection attempts will use the WOWZ protocol when possible.

Returns:

true, NetConnection attempts will use the WOWZ protocol when possible.

setInitiateWOWZConnections

```
public abstract void setInitiateWOWZConnections(boolean initiateWOWZConnections)
```

(continued from last page)

If true, NetConnection attempts will use the WOWZ protocol when possible.

Parameters:

initiateWOWZConnections - true, NetConnection attempts will use the WOWZ protocol when possible.

getLiveStreamTranscoderSessionCount

```
public abstract long getLiveStreamTranscoderSessionCount()
```

Get the current number of live stream transcoder sessions.

Returns:

current number of live stream transcoder sessions

getTuningHandler

```
public abstract ServerTuningHandler getTuningHandler()
```

Get the handler that control automatic server tuning

Returns:

handler that control automatic server tuning

getTranscoderLicenseInUse

```
public abstract long getTranscoderLicenseInUse()
```

Get the total number of transcoder licenses in use.

Returns:

total number of transcoder licenses in use.

getTranscoderLicenseTotal

```
public abstract long getTranscoderLicenseTotal()
```

Get the total number of transcoder licenses (-1 means unlimited - subscription)

Returns:

total number of transcoder licenses

isTranscoderWatermark

```
public abstract boolean isTranscoderWatermark()
```

Return true if transcoder has a watermark

Returns:

true if transcoder has a watermark

isDVRAvailable

```
public abstract boolean isDVRAvailable()
```

Returns true if nDVR is properly licensed.

Returns:

true if nDVR is properly licensed

isDVRInUse

```
public abstract boolean isDVRInUse()
```

Returns true if nDVR is in-use.

Returns:

true if nDVR is in-use

isDRMAvailable

```
public abstract boolean isDRMAvailable()
```

Returns true if DRM is properly licensed.

Returns:

true if DRM is properly licensed

isDRMInUse

```
public abstract boolean isDRMInUse()
```

Returns true if DRM is in-use.

Returns:

true if DRM is in-use

isHTTPOriginAvailable

```
public abstract boolean isHTTPOriginAvailable()
```

Returns true if HTTP origin is properly licensed.

Returns:

true if HTTP origin is properly licensed

isRESTAPIAvailable

```
public abstract boolean isRESTAPIAvailable()
```

Returns true if REST API is properly licensed.

Returns:

true if REST API is properly licensed

isPushPublishAvailable

```
public abstract boolean isPushPublishAvailable()
```

Returns true if Push Publish is properly licensed.

Returns:

true if Push Publish is properly licensed.

setRestServerEnabled

```
public abstract void setRestServerEnabled(boolean restServerEnabled)
```

(continued from last page)

Sets if REST API server will be enabled

Parameters:

`restServerEnabled` - if the REST API server will be enabled

isRestServerEnabled

```
public abstract boolean isRestServerEnabled()
```

Returns true if REST API is enabled

Returns:

true if REST API is enabled

setRestDocumentationServerEnabled

```
public abstract void setRestDocumentationServerEnabled(boolean  
restDocumentationServerEnabled)
```

Sets if REST API documentation server will be enabled

Parameters:

`restDocumentationServerEnabled` - if the REST API server will be enabled

isRestDocumentationServerEnabled

```
public abstract boolean isRestDocumentationServerEnabled()
```

Returns true if REST API documentation server is enabled

Returns:

true if REST API documentation server is enabled

addAuthorizedRESTAPI

```
public abstract boolean addAuthorizedRESTAPI(Class classType)
```

Returns true if the class has been added to the REST API.

Returns:

true if the class has been added to the REST API

addUnAuthorizedRESTAPI

```
public abstract boolean addUnAuthorizedRESTAPI(Class classType,  
String url)
```

Returns true if the class has been added to the REST API at the specified URL

Returns:

true if the class has been added to the REST API at the specified URL

addUnAuthorizedRESTAPI

```
public abstract boolean addUnAuthorizedRESTAPI(Class classType)
```

Returns true if the class has been added to the REST API.

(continued from last page)

Returns:

true if the class has been added to the REST API

addAuthorizedRESTAPI

```
public abstract boolean addAuthorizedRESTAPI(Class classType,  
String url)
```

Returns true if the class has been added to the REST API at the specified URL

Returns:

true if the class has been added to the REST API at the specified URL

getConnectionsMaximum

```
public abstract long getConnectionsMaximum()
```

Returns maximum number of connections allowed to the server (-1 means unlimited)

Returns:

maximum number of connections allowed to the server (-1 means unlimited)

startStats

```
public abstract void startStats()
```

Starts the statistics manager to collect server and application statistics

stopStats

```
public abstract void stopStats()
```

Stops the statistics manager

getDefaultStreamPrefix

```
public abstract String getDefaultStreamPrefix()
```

Get the default stream prefix used if the stream name does not include a prefix (default is mp4)

Returns:

default stream prefix

setDefaultStreamPrefix

```
public abstract void setDefaultStreamPrefix(String defaultStreamPrefix)
```

Set the default stream prefix used if the stream name does not include a prefix (default is mp4)

Parameters:

defaultStreamPrefix - default stream prefix

getRTMPTHeaderServer

```
public abstract String getRTMPTHeaderServer()
```

Get the Server header used for RTMPT responses

(continued from last page)

Returns:

Server header used for RTMPT responses

setRTMPTHeaderServer

```
public abstract void setRTMPTHeaderServer(String rtmptHeaderServer)
```

Set the Server header used for RTMPT responses

Parameters:

rtmptHeaderServer - Server header used for RTMPT responses

getHTTPHeaderServer

```
public abstract String getHTTPHeaderServer()
```

Get the Server header used for HTTP responses

Returns:

the Server header used for HTTP responses

setHTTPHeaderServer

```
public abstract void setHTTPHeaderServer(String httpHeaderServer)
```

Set the Server header used for HTTP responses

Parameters:

httpHeaderServer

isLoggingRemoveStdoutIfRunningAsService

```
public abstract boolean isLoggingRemoveStdoutIfRunningAsService()
```

If true, stdout log4j appender is removed from logging configuration if running as a service.

Returns:

stdout log4j appender is removed from logging configuration if running as a service

setLoggingRemoveStdoutIfRunningAsService

```
public abstract void setLoggingRemoveStdoutIfRunningAsService(boolean loggingRemoveStdoutIfRunningAsService)
```

If true, stdout log4j appender is removed from logging configuration if running as a service.

Parameters:

loggingRemoveStdoutIfRunningAsService - stdout log4j appender is removed from logging configuration if running as a service

getTranscoderUsageTracker

```
public abstract TranscoderUsageTracker getTranscoderUsageTracker()
```

Get the server level live transcoder usage tracker

Returns:

server level live transcoder usage tracker

getTranscoderVODUsageTracker

```
public abstract com.wowza.wms.transcoder.vod.TranscoderVODUsageTracker  
getTranscoderVODUsageTracker()
```

Get the server level VOD transcoder usage tracker

Returns:

server level VOD transcoder usage tracker

getThumbnailerUsageTracker

```
public abstract com.wowza.wms.transcoder.thumbnailer.ThumbnailerUsageTracker  
getThumbnailerUsageTracker()
```

Get the server level thumbnail usage tracker

Returns:

server level thumbnail usage tracker

getRESTUsageTracker

```
public abstract com.wowza.wms.rest.restserver.RESTUsageTracker getRESTUsageTracker()
```

Get the server level REST usage tracker

Returns:

server level REST usage tracker

getTranscoderContextServer

```
public abstract TranscoderContextServer getTranscoderContextServer()
```

Get the server level transcoder context

Returns:

server level transcoder context

getTranscoderCaptureManager

```
public abstract com.wowza.wms.transcoder.capture.TranscoderCaptureManager  
getTranscoderCaptureManager()
```

Get the transcoder capture manager

Returns:

transcoder capture manager

getPushPublishUsageTracker

```
public abstract PushPublishUsageTracker getPushPublishUsageTracker()
```

Get the server level push publishing usage tracker

Returns:

server level push publishing usage tracker

com.wowza.wms.server Interface IServerNotify

All Subinterfaces:

[IServerNotify2](#), [IServerNotify3](#)

public interface **IServerNotify**
extends

IServerNotify: listener interface. Configured by adding class entries definitions to Server.xml.Startup order is: [constructor]; onServerConfigLoaded, onServerCreate, onServerInit Shutdown order is: onServerShutdownStart, onServerShutdownComplete, [exit]

Method Summary

abstract void	onServerCreate (IServer server) Triggered when server object is first created.
abstract void	onServerInit (IServer server) Triggered when server initialization is complete and all VHosts have been started
abstract void	onServerShutdownComplete (IServer server) Triggered at the end of server shutdown
abstract void	onServerShutdownStart (IServer server) Triggered at the beginning of server shutdown

Methods

onServerCreate

public abstract void **onServerCreate**([IServer](#) server)

Triggered when server object is first created.

Parameters:

server - server object

onServerInit

public abstract void **onServerInit**([IServer](#) server)

Triggered when server initialization is complete and all VHosts have been started

Parameters:

server - server object

onServerShutdownStart

public abstract void **onServerShutdownStart**([IServer](#) server)

Triggered at the beginning of server shutdown

(continued from last page)

Parameters:

server - server object

onServerShutdownComplete

```
public abstract void onServerShutdownComplete(IServer server)
```

Triggered at the end of server shutdown

Parameters:

server - server object

com.wowza.wms.server Interface IServerNotify2

All Superinterfaces:

[IServerNotify](#)

All Subinterfaces:

[IServerNotify3](#)

All Known Implementing Classes:

[ServerListenerStreamDemoPublisher](#)

public interface **IServerNotify2**
extends [IServerNotify](#)

IServerNotify2: listener interface. Configured by adding class entries definitions to Server.xml.Startup order is: [constructor]; onServerConfigLoaded, onServerCreate, onServerInit Shutdown order is: onServerShutdownStart, onServerShutdownComplete, [exit]

Method Summary

abstract void	onServerConfigLoaded (IServer server) Triggered when server configuration is loaded
---------------	---

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods

onServerConfigLoaded

public abstract void **onServerConfigLoaded**([IServer](#) server)

Triggered when server configuration is loaded

Parameters:

server - server object

com.wowza.wms.server Interface IServerNotify3

All Superinterfaces:

[IServerNotify2](#), [IServerNotify](#)

public interface **IServerNotify3**
extends [IServerNotify2](#)

Method Summary

abstract void	onServerAfterVHostStartup (IServer server) Triggered just after virtual hosts are started.
abstract void	onServerBeforeVHostStartup (IServer server) Triggered just before virtual hosts are started.

Methods inherited from interface [com.wowza.wms.server.IServerNotify2](#)

[onServerConfigLoaded](#)

Methods inherited from interface [com.wowza.wms.server.IServerNotify](#)

[onServerCreate](#), [onServerInit](#), [onServerShutdownComplete](#), [onServerShutdownStart](#)

Methods

onServerBeforeVHostStartup

public abstract void **onServerBeforeVHostStartup**([IServer](#) server)

Triggered just before virtual hosts are started.

Parameters:

server - server object

onServerAfterVHostStartup

public abstract void **onServerAfterVHostStartup**([IServer](#) server)

Triggered just after virtual hosts are started.

Parameters:

server - server object

Package

com.wowza.wms.sharedobject

com.wowza.wms.sharedobject Interface ISharedObject

All Known Implementing Classes:

[SharedObject](#)

public interface **ISharedObject**
extends

ISharedObject: public interface to SharedObject class.

Field Summary

public static final	FILEEXTENSION Value: rso
public static final	SHARED_OBJECT_CMD_CONNECT shared object command: connect Value: 1
public static final	SHARED_OBJECT_CMD_CONNECTSUCCESS shared object command: clear Value: 11
public static final	SHARED_OBJECT_CMD_DELETE shared object command: delete Value: 10
public static final	SHARED_OBJECT_CMD_DISCONNECT shared object command: disconnect Value: 2
public static final	SHARED_OBJECT_CMD_ERROR shared object command: error Value: 7
public static final	SHARED_OBJECT_CMD_SEND shared object command: send Value: 6
public static final	SHARED_OBJECT_CMD_SETVALUE shared object command: setvalue Value: 3
public static final	SHARED_OBJECT_STATUS_CHANGE shared object status: change Value: 4
public static final	SHARED_OBJECT_STATUS_CLEAR shared object status: clear Value: 8

public static final	<u>SHARED_OBJECT_STATUS_DELETE</u> shared object status: delete Value: 9
public static final	<u>SHARED_OBJECT_STATUS_SUCCESS</u> shared object status: success Value: 5

Method Summary

abstract void	<u>acquire()</u> Increment the reference count to this shared object.
abstract void	<u>addClient(IClient client)</u> Add a client to this shared object.
abstract void	<u>addSlotListener(ISharedObjectSlotNotify slotListener)</u> Add a slot listener.
abstract void	<u>clear()</u> Clear all properties from a shared object
abstract void	<u>close()</u> Force close this shared object (not implemented)
abstract boolean	<u>containsProperty(String slotName)</u> Returns true is slot/property name exists
abstract boolean	<u>containsSlot(String slotName)</u> Returns true is slot/property name exists
abstract void	<u>deleteSlot(IClient client, String slotName)</u> Remove a slot (property)
abstract void	<u>deleteSlot(String slotName)</u> Remove slot (property)
abstract void	<u>disconnect(IClient client)</u> Disconnect client from shared object.
abstract void	<u>flush()</u> Flush (write to disk) shared object
abstract java.util.List	<u>getClients()</u> Get a list of client that are connected to this shared object.
abstract String	<u>getName()</u> Get shared object name
abstract <u>ISharedObjects</u>	<u>getParent()</u> Get the shared object container to which this shared object belongs.
abstract <u>AMFData</u>	<u>getProperty(String slotName)</u> Get slot (property) value.
abstract int	<u>getRefCount()</u> Get the current reference (clients) connected to this shared object.

abstract ISharedObjectSlot	getSlot (String name) Get ISharedObjectSlot interface to a slot (property) by name
abstract java.util.List	getSlotNames () Get a list of slot (property) names
abstract java.util.List	getSlots () Get a list of active slots
abstract String	getStorageDir () Get path used to store shared object.
abstract int	getVersion () Get the interval version number.
abstract boolean	isClient (IClient client) Is this client connected to shared object
abstract boolean	isPersistent () Is this shared object being persisted.
abstract void	lock () Lock a shared object for write access
abstract int	purge (int version) Purge all deleted properties older than the version number
abstract void	putSlot (String name, ISharedObjectSlot slot) Add a new slot (property) to a shared object.
abstract void	release () Decrement the reference count to this shared object.
abstract void	removeClient (IClient client) Remove a client from this shared object.
abstract void	removeSlotListener (ISharedObjectSlotNotify slotListener) Remove slot listener
abstract void	send (String handlerName) Call client side handler attached to shared object (no parameters).
abstract void	send (String handlerName, Object[] params) Call client side handler attached to shared object.
abstract void	setName (String name) Set shared object name
abstract void	setPersistent (boolean isPersistent) Set is shared object persisted.
abstract void	setProperty (String slotName, AMFData data) Set slot (property) value as AMFData object.
abstract void	setProperty (String slotName, boolean value) Set slot (property) value as a boolean value (will be wrapped in an AMFDataItem object)
abstract void	setProperty (String slotName, java.util.Date value) Set slot (property) value as a date value (will be wrapped in an AMFDataItem object)

abstract void	<code>setProperty</code> (String slotName, double value) Set slot (property) value as a double value (will be wrapped in an AMFDataItem object)
abstract void	<code>setProperty</code> (String slotName, int value) Set slot (property) value as a int value (will be wrapped in an AMFDataItem object)
abstract void	<code>setProperty</code> (String slotName, long value) Set slot (property) value as a long value (will be wrapped in an AMFDataItem object)
abstract void	<code>setProperty</code> (String slotName, String value) Set slot (property) value as a string value (will be wrapped in an AMFDataItem object)
abstract void	<code>setStorageDir</code> (String storageDir) Set path used to store shared object.
abstract void	<code>setVersion</code> (int version) Set the internal version number.
abstract int	<code>size</code> () Get the number of active slot (properties).
abstract void	<code>unlock</code> () Unlock a shared object for write access
abstract void	<code>writeDeleteError</code> (IClient client, String soName, boolean isPersistent, String slotName, String errorMsg) Write an delete error message back to the client
abstract void	<code>writeSetValueError</code> (IClient client, String soName, boolean isPersistent, String slotName, String errorMsg) Write an set value error message back to the client

Fields

FILEEXTENSION

```
public static final java.lang.String FILEEXTENSION
```

Constant value: **rs0**

SHARED_OBJECT_CMD_CONNECT

```
public static final byte SHARED_OBJECT_CMD_CONNECT
```

shared object command: connect

Constant value: **1**

SHARED_OBJECT_CMD_DISCONNECT

```
public static final byte SHARED_OBJECT_CMD_DISCONNECT
```

shared object command: disconnect

Constant value: **2**

(continued from last page)

SHARED_OBJECT_CMD_SETVALUE

```
public static final byte SHARED_OBJECT_CMD_SETVALUE
```

shared object command: setvalue
Constant value: **3**

SHARED_OBJECT_CMD_SEND

```
public static final byte SHARED_OBJECT_CMD_SEND
```

shared object command: send
Constant value: **6**

SHARED_OBJECT_CMD_ERROR

```
public static final byte SHARED_OBJECT_CMD_ERROR
```

shared object command: error
Constant value: **7**

SHARED_OBJECT_CMD_DELETE

```
public static final byte SHARED_OBJECT_CMD_DELETE
```

shared object command: delete
Constant value: **10**

SHARED_OBJECT_CMD_CONNECTSUCCESS

```
public static final byte SHARED_OBJECT_CMD_CONNECTSUCCESS
```

shared object command: clear
Constant value: **11**

SHARED_OBJECT_STATUS_CHANGE

```
public static final byte SHARED_OBJECT_STATUS_CHANGE
```

shared object status: change
Constant value: **4**

SHARED_OBJECT_STATUS_SUCCESS

```
public static final byte SHARED_OBJECT_STATUS_SUCCESS
```

shared object status: success
Constant value: **5**

SHARED_OBJECT_STATUS_CLEAR

```
public static final byte SHARED_OBJECT_STATUS_CLEAR
```

shared object status: clear
Constant value: **8**

SHARED_OBJECT_STATUS_DELETE

```
public static final byte SHARED_OBJECT_STATUS_DELETE
```

(continued from last page)

shared object status: delete
Constant value: **9**

Methods

getSlotNames

```
public abstract java.util.List getSlotNames()
```

Get a list of slot (property) names

Returns:

list of slot (property) names

getSlot

```
public abstract ISharedObjectSlot getSlot(String name)
```

Get ISharedObjectSlot interface to a slot (property) by name

Parameters:

name - slot (property) name

Returns:

ISharedObjectSlot interface

putSlot

```
public abstract void putSlot(String name,  
    ISharedObjectSlot slot)
```

Add a new slot (property) to a shared object.

Parameters:

name - slot (property) name

slot - new slot

getClients

```
public abstract java.util.List getClients()
```

Get a list of client that are connected to this shared object.

Returns:

list of client that are connected to this shared object

isClient

```
public abstract boolean isClient(IClient client)
```

Is this client connected to shared object

Parameters:

client - client

Returns:

true if client is conencted to shared object

addClient

```
public abstract void addClient(IClient client)
```

Add a client to this shared object.

Parameters:

client - client

removeClient

```
public abstract void removeClient(IClient client)
```

Remove a client from this shared object.

Parameters:

client - client

size

```
public abstract int size()
```

Get the number of active slot (properties). Deleted slots are not counted.

Returns:

number of active slot (properties). Deleted slots are not counted

acquire

```
public abstract void acquire()
```

Increment the reference count to this shared object.

release

```
public abstract void release()
```

Decrement the reference count to this shared object.

close

```
public abstract void close()
```

Force close this shared object (not implemented)

getRefCount

```
public abstract int getRefCount()
```

Get the current reference (clients) connected to this shared object. Includes unbalanced count of calls to acquire.

Returns:

the current reference (clients) connected to this shared object

isPersistent

```
public abstract boolean isPersistent()
```

(continued from last page)

Is this shared object being persisted.

Returns:

true if shared object is being persisted

setPersistent

```
public abstract void setPersistent(boolean isPersistent)
```

Set is shared object persisted.

Parameters:

isPersistent - true if shared object is being persisted

getVersion

```
public abstract int getVersion()
```

Get the interval version number.

Returns:

interval version number

setVersion

```
public abstract void setVersion(int version)
```

Set the internal version number.

Parameters:

version - internal version number

flush

```
public abstract void flush()
```

Flush (write to disk) shared object

deleteSlot

```
public abstract void deleteSlot(IClient client,  
    String slotName)
```

Remove a slot (property)

Parameters:

client - client removing slot or null if server side code
slotName - slot (property) name

deleteSlot

```
public abstract void deleteSlot(String slotName)
```

Remove slot (property)

Parameters:

slotName - slot (property) name

getProperty

```
public abstract AMFData getProperty(String slotName)
```

Get slot (property) value.

Parameters:

slotName - slot (property) name

Returns:

slot (property) value as AMFData object

setProperty

```
public abstract void setProperty(String slotName,  
    String value)
```

Set slot (property) value as a string value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - string value

setProperty

```
public abstract void setProperty(String slotName,  
    double value)
```

Set slot (property) value as a double value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - double value

setProperty

```
public abstract void setProperty(String slotName,  
    int value)
```

Set slot (property) value as a int value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - int value

setProperty

```
public abstract void setProperty(String slotName,  
    long value)
```

Set slot (property) value as a long value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name

value - long value

(continued from last page)

setProperty

```
public abstract void setProperty(String slotName,  
    java.util.Date value)
```

Set slot (property) value as a date value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name
value - date value

setProperty

```
public abstract void setProperty(String slotName,  
    boolean value)
```

Set slot (property) value as a boolean value (will be wrapped in an AMFDataItem object)

Parameters:

slotName - slot (property) name
value - boolean value

setProperty

```
public abstract void setProperty(String slotName,  
    AMFData data)
```

Set slot (property) value as AMFData object.

Parameters:

slotName - slot (property) name
data - slot value as AMFData object. Example: new AMFDataItem((double)1.234) or new AMFDataItem()

disconnect

```
public abstract void disconnect(IClient client)
```

Disconnect client from shared object.

Parameters:

client - client to disconnect

getName

```
public abstract String getName()
```

Get shared object name

Returns:

shared object name

setName

```
public abstract void setName(String name)
```

Set shared object name

Parameters:

name - shared object name

send

```
public abstract void send(String handlerName,  
    Object[] params)
```

Call client side handler attached to shared object.

Parameters:

handlerName - handler name

params - variable argument list of parameters

send

```
public abstract void send(String handlerName)
```

Call client side handler attached to shared object (no parameters).

Parameters:

handlerName - handler name

addSlotListener

```
public abstract void addSlotListener(ISharedObjectSlotNotify slotListener)
```

Add a slot listener. Will receive the following events: onSlotSetValue and onSlotDelete

Parameters:

slotListener - slot listener

removeSlotListener

```
public abstract void removeSlotListener(ISharedObjectSlotNotify slotListener)
```

Remove slot listener

Parameters:

slotListener - slot listener

getStorageDir

```
public abstract String getStorageDir()
```

Get path used to store shared object.

Returns:

path used to store shared object

setStorageDir

```
public abstract void setStorageDir(String storageDir)
```

Set path used to store shared object.

Parameters:

storageDir - path used to store shared object

(continued from last page)

writeSetValueError

```
public abstract void writeSetValueError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

Write an set value error message back to the client

Parameters:

client - client removing slot or null if server side code
soName - sharedObject name
isPersistent - is persistent
slotName - slot name
errorMsg - error message

writeDeleteError

```
public abstract void writeDeleteError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

Write an delete error message back to the client

Parameters:

client - client removing slot or null if server side code
soName - sharedObject name
isPersistent - is persistent
slotName - slot name
errorMsg - error message

clear

```
public abstract void clear()
```

Clear all properties from a shared object

purge

```
public abstract int purge(int version)
```

Purge all deleted properties older than the version number

Returns:

number of slots purged

getSlots

```
public abstract java.util.List getSlots()
```

Get a list of active slots

Returns:

list of active slots

(continued from last page)

containsProperty

```
public abstract boolean containsProperty(String slotName)
```

Returns true is slot/property name exists

Parameters:

slotName - slot/property name

Returns:

true is slot/property name exists

containsSlot

```
public abstract boolean containsSlot(String slotName)
```

Returns true is slot/property name exists

Parameters:

slotName - slot/property name

Returns:

true is slot/property name exists

lock

```
public abstract void lock()
```

Lock a shared object for write access

unlock

```
public abstract void unlock()
```

Unlock a shared object for write access

getParent

```
public abstract ISharedObjects getParent()
```

Get the shared object container to which this shared object belongs.

Returns:

shared object container

com.wowza.wms.sharedobject Interface ISharedObjectNotify

public interface **ISharedObjectNotify**
extends

ISharedObjectNotify: listener interface used by IApplicationInstance addSharedObjectListener

Method Summary

abstract void	onSharedObjectConnect (ISharedObject sharedObject, IClient client) Triggered when client connects to sharedObject
abstract void	onSharedObjectCreate (ISharedObject sharedObject) Triggered when sharedObject created
abstract void	onSharedObjectDestroy (ISharedObject sharedObject) Triggered when sharedObject destroyed
abstract void	onSharedObjectDisconnect (ISharedObject sharedObject, IClient client) Triggered when client disconnects from sharedObject

Methods

onSharedObjectCreate

public abstract void **onSharedObjectCreate**([ISharedObject](#) sharedObject)

Triggered when sharedObject created

Parameters:

sharedObject - sharedObject

onSharedObjectDestroy

public abstract void **onSharedObjectDestroy**([ISharedObject](#) sharedObject)

Triggered when sharedObject destroyed

Parameters:

sharedObject - sharedObject

onSharedObjectConnect

public abstract void **onSharedObjectConnect**([ISharedObject](#) sharedObject, [IClient](#) client)

Triggered when client connects to sharedObject

Parameters:

sharedObject - sharedObject

client - client

onSharedObjectDisconnect

```
public abstract void onSharedObjectDisconnect(ISharedObject sharedObject,  
IClient client)
```

Triggered when client disconnects from sharedObject

Parameters:

sharedObject - sharedObject

client - client

com.wowza.wms.sharedobject Interface ISharedObjects

public interface **ISharedObjects**
extends

ISharedObjects: public interface to SharedObjects. Represent the list of shared objects managed by IApplicationInstance.

Method Summary

abstract void	addSharedObjectListener (ISharedObjectNotify sharedObjectListener) Add a shared object listener.
abstract void	disconnect (IClient client) Disconnect client from all shared objects in list.
abstract boolean	exists (ISharedObject sharedObject) Is sharedObject in this list (by shared object reference).
abstract boolean	exists (String objectName) Is sharedObject in this list (by name).
abstract void	flush () Flush all persistent shared objects to disk.
abstract ISharedObject	get (String name) Get shared object by name.
abstract java.util.List	getObjectNames () Get a list of shared object names.
abstract ISharedObject	getOrCreate (String name) Get shared object by name if it does not exist create a new shared object with the given name.
abstract String	getStorageDir () Get the storage directory for all shared objects in list.
abstract boolean	isPersistent () Are shared objects in list persistent.
abstract void	load () Load persistent shared objects from file system.
abstract void	put (String objectName, ISharedObject sharedObject) Add or replace a shared object.
abstract void	remove (String objectName) Remove a shared object.
abstract void	removeClient (IClient client) Remove a client from any shared object that it is connected to in this list.
abstract void	removeSharedObjectListener (ISharedObjectNotify sharedObjectListener) Remove a shared object listener.

abstract void	<code>setPersistent</code> (boolean isPersistent) Set is shared object in list persistent
abstract void	<code>setStorageDir</code> (String storageDir) Set the storage directory for all shared objects in list.
abstract int	<code>size</code> () Get number of shared objects.

Methods

size

```
public abstract int size()
```

Get number of shared objects.

Returns:

number of shared objects

get

```
public abstract ISharedObject get(String name)
```

Get shared object by name. If the shared object does not exist null will be returned. (see ISharedObjects.getOrCreate)

Parameters:

name - shared object name

Returns:

shared object

getOrCreate

```
public abstract ISharedObject getOrCreate(String name)
```

Get shared object by name if it does not exist create a new shared object with the given name.

Parameters:

name - shared object name

Returns:

shared object

getObjectNames

```
public abstract java.util.List getObjectNames()
```

Get a list of shared object names.

Returns:

list of shared object names

(continued from last page)

put

```
public abstract void put(String objectName,  
    ISharedObject sharedObject)
```

Add or replace a shared object.

Parameters:

objectName - shared object name
sharedObject - shared object

remove

```
public abstract void remove(String objectName)
```

Remove a shared object.

Parameters:

objectName - shared object name

exists

```
public abstract boolean exists(String objectName)
```

Is sharedObject in this list (by name).

Parameters:

objectName - shared object name

Returns:

true if shared object in list

exists

```
public abstract boolean exists(ISharedObject sharedObject)
```

Is sharedObject in this list (by shared object reference).

Parameters:

sharedObject - shared object

Returns:

true if shared object in list

isPersistent

```
public abstract boolean isPersistent()
```

Are shared objects in list persistent.

Returns:

true is shared objects in list are persistent

setPersistent

```
public abstract void setPersistent(boolean isPersistent)
```

Set is shared object in list persistent

(continued from last page)

Parameters:

isPersistent - true is shared objects in list are persistent

removeClient

```
public abstract void removeClient(IClient client)
```

Remove a client from any shared object that it is connected to in this list.

Parameters:

client - client

flush

```
public abstract void flush()
```

Flush all persistent shared objects to disk.

disconnect

```
public abstract void disconnect(IClient client)
```

Disconnect client from all shared objects in list.

Parameters:

client - client

addSharedObjectListener

```
public abstract void addSharedObjectListener(ISharedObjectNotify sharedObjectListener)
```

Add a shared object listener. The listener will receive the following events: onSharedObjectCreate, onSharedObjectDestroy, onSharedObjectConnect, onSharedObjectDisconnect.

Parameters:

sharedObjectListener

removeSharedObjectListener

```
public abstract void removeSharedObjectListener(ISharedObjectNotify  
sharedObjectListener)
```

Remove a shared object listener.

Parameters:

sharedObjectListener

getStorageDir

```
public abstract String getStorageDir()
```

Get the storage directory for all shared objects in list.

Returns:

storage dir

(continued from last page)

setStorageDir

```
public abstract void setStorageDir(String storageDir)
```

Set the storage directory for all shared objects in list.

Parameters:

storageDir

load

```
public abstract void load()
```

Load persistent shared objects from file system.

com.wowza.wms.sharedobject Interface ISharedObjectSlot

public interface **ISharedObjectSlot**
extends

ISharedObjectSlot: public interface to SharedObjectSlot class.

Method Summary

abstract AMFData	getData() Get slot data as AMFData object.
abstract int	getLastClientId() Get client id of client that performed last operation on slot.
abstract int	getLastOperation() Get last slot (property) operation.
abstract String	getName() Get slot (property) name.
abstract int	getSlotVersion() Get slot version
abstract int	getSoVersion() Get parent shared object version
abstract void	incSlotVersion() Increment slot version by 1.
abstract void	init (String name, AMFData data, int slotVersion) Initialize shared object slot
abstract void	setData (AMFData data) Set slot data as AMFData object.
abstract void	setData (byte[] data) Set slot data as byte[].
abstract void	setData (byte[] data, AMFDataContextDeserialize context) Set slot data as byte[].
abstract void	setLastClientId (int lastClientId) Set client id of client that performed last operation on slot.
abstract void	setLastOperation (int lastOperation) Set last slot (property) operation.
abstract void	setName (String name) Set slot (property) name
abstract void	setSlotVersion (int slotVersion) Set slot version

abstract void	setSoVersion (int soVersion) Set parent shared object version
---------------	--

Methods

init

```
public abstract void init(String name,  
    AMFData data,  
    int slotVersion)
```

Initialize shared object slot

Parameters:

name - slot (property) name
data - data
slotVersion - version

getData

```
public abstract AMFData getData()
```

Get slot data as AMFData object.

Returns:

slot data as AMFData object

setData

```
public abstract void setData(byte[] data,  
    AMFDataContextDeserialize context)
```

Set slot data as byte[]. Data will be deserialized as AMFData object.

Parameters:

data - data as byte[]
context - deserialization context

setData

```
public abstract void setData(byte[] data)
```

Set slot data as byte[]. Data will be deserialized as AMFData object.

Parameters:

data - data as byte[]

setData

```
public abstract void setData(AMFData data)
```

Set slot data as AMFData object.

Parameters:

data - data as AMFData object

getName

```
public abstract String getName()
```

Get slot (property) name.

Returns:

slot (property) name

setName

```
public abstract void setName(String name)
```

Set slot (property) name

Parameters:

name - slot (property) name

getSlotVersion

```
public abstract int getSlotVersion()
```

Get slot version

Returns:

slot version

setSlotVersion

```
public abstract void setSlotVersion(int slotVersion)
```

Set slot version

Parameters:

slotVersion - slot version

incSlotVersion

```
public abstract void incSlotVersion()
```

Increment slot version by 1.

getSoVersion

```
public abstract int getSoVersion()
```

Get parent shared object version

Returns:

parent shared object version

setSoVersion

```
public abstract void setSoVersion(int soVersion)
```

Set parent shared object version

(continued from last page)

Parameters:

soVersion - parent shared object version

getLastOperation

```
public abstract int getLastOperation()
```

Get last slot (property) operation. See ISharedObject.SHAREDOBJECT_CMD_*.

Returns:

last slot (property) operation (ISharedObject.SHAREDOBJECT_CMD_*)

setLastOperation

```
public abstract void setLastOperation(int lastOperation)
```

Set last slot (property) operation. See ISharedObject.SHAREDOBJECT_CMD_*.

Parameters:

lastOperation - last slot (property) operation (ISharedObject.SHAREDOBJECT_CMD_*)

getLastClientId

```
public abstract int getLastClientId()
```

Get client id of client that performed last operation on slot.

Returns:

client id of client that performed last operation on slot

setLastClientId

```
public abstract void setLastClientId(int lastClientId)
```

Set client id of client that performed last operation on slot.

Parameters:

lastClientId - client id of client that performed last operation on slot

com.wowza.wms.sharedobject

Interface ISharedObjectSlotNotify

public interface **ISharedObjectSlotNotify**
extends

ISharedObjectNotify: listener interface used by ISharedObject addSlotListener

Method Summary	
abstract void	onSlotDelete (ISharedObject sharedObject, ISharedObjectSlot slot) Triggered when sharedObject slot value deleted
abstract void	onSlotSetValue (ISharedObject sharedObject, ISharedObjectSlot slot) Triggered when sharedObject slot value set

Methods

onSlotSetValue

public abstract void **onSlotSetValue**([ISharedObject](#) sharedObject, [ISharedObjectSlot](#) slot)

Triggered when sharedObject slot value set

Parameters:
sharedObject
slot

onSlotDelete

public abstract void **onSlotDelete**([ISharedObject](#) sharedObject, [ISharedObjectSlot](#) slot)

Triggered when sharedObject slot value deleted

Parameters:
sharedObject
slot

com.wowza.wms.sharedobject Class SharedObject

java.lang.Object

└─com.wowza.wms.sharedobject.SharedObject

All Implemented Interfaces:

[ISharedObject](#)

public class **SharedObject**
extends Object
implements [ISharedObject](#)

Field Summary

public static final	READACCESS Value: 0
public static final	WRITEACCESS Value: 1

Fields inherited from interface [com.wowza.wms.sharedobject.ISharedObject](#)

[FILEEXTENSION](#), [SHARED_OBJECT_CMD_CONNECT](#), [SHARED_OBJECT_CMD_CONNECTSUCCESS](#),
[SHARED_OBJECT_CMD_DELETE](#), [SHARED_OBJECT_CMD_DISCONNECT](#), [SHARED_OBJECT_CMD_ERROR](#),
[SHARED_OBJECT_CMD_SEND](#), [SHARED_OBJECT_CMD_SETVALUE](#), [SHARED_OBJECT_STATUS_CHANGE](#),
[SHARED_OBJECT_STATUS_CLEAR](#), [SHARED_OBJECT_STATUS_DELETE](#), [SHARED_OBJECT_STATUS_SUCCESS](#)

Constructor Summary

public	SharedObject (String name) Create new shared object
public	SharedObject (String name, boolean isPersistent, String storageDir) Create new shared object

Method Summary

void	acquire ()
void	addClient (IClient client)
void	addSlotListener (ISharedObjectSlotNotify slotListener)
void	clear ()
void	close ()

boolean	<u>containsProperty</u> (String slotName)
boolean	<u>containsSlot</u> (String slotName)
void	<u>deleteSlot</u> (<u>IClient</u> client, String slotName)
void	<u>deleteSlot</u> (String slotName)
void	<u>disconnect</u> (<u>IClient</u> client)
void	<u>flush</u> ()
static boolean[]	<u>getAccess</u> (<u>IClient</u> client, String soName)
java.util.List	<u>getClients</u> ()
void	<u>getClientUpdates</u> (<u>IClient</u> client)
String	<u>getName</u> ()
<u>ISharedObjects</u>	<u>getParent</u> ()
<u>AMFData</u>	<u>getProperty</u> (String slotName)
int	<u>getRefCount</u> ()
<u>ISharedObjectSlot</u>	<u>getSlot</u> (String name)
java.util.List	<u>getSlotNames</u> ()
java.util.List	<u>getSlots</u> ()
String	<u>getStorageDir</u> ()
int	<u>getVersion</u> ()
boolean	<u>isClient</u> (<u>IClient</u> client)
boolean	<u>isPersistent</u> ()
void	<u>load</u> ()
void	<u>lock</u> ()
void	<u>notifySlotDelete</u> (<u>ISharedObjectSlot</u> slot)
void	<u>notifySlotSetValue</u> (<u>ISharedObjectSlot</u> slot)

int	purge (int version)
void	putSlot (String name, ISharedObjectSlot slot)
void	release ()
void	removeClient (IClient client)
void	removeSlotListener (ISharedObjectSlotNotify slotListener)
void	send (String handlerName)
void	send (String handlerName, Object[] params)
void	sendInternal (IClient client, String handlerName, byte[] msgBytes)
void	sendInternal (IClient client, String handlerName, byte[] msgBytes, AMFDataContextDeserialize context)
void	sendInternal (String handlerName, AMFData[] params)
void	setName (String name)
void	setParent (ISharedObjects parent)
void	setPersistent (boolean isPersistent)
void	setProperty (String slotName, AMFData data)
void	setProperty (String slotName, boolean value)
void	setProperty (String slotName, java.util.Date value)
void	setProperty (String slotName, double value)
void	setProperty (String slotName, int value)
void	setProperty (String slotName, long value)
void	setProperty (String slotName, String value)
void	setSlotValue (IClient client, String slotName, AMFData amfData)
void	setSlotValue (IClient client, String slotName, byte[] byteData)
void	setSlotValue (IClient client, String slotName, byte[] byteData, AMFData amfData)

void	setSlotValue(IClient client, String slotName, byte[] byteData, AMFData amfData, AMFDataContextDeserialize context)
void	setSlotValue(IClient client, String slotName, byte[] byteData, AMFDataContextDeserialize context)
void	setStorageDir (String storageDir)
void	setVersion (int version)
int	size ()
void	unlock ()
void	writeDeleteError(IClient client, String soName, boolean isPersistent, String slotName, String errorMsg)
static void	writeError(IClient client, String soName, boolean isPersistent, String errorMsg, boolean isConnect)
void	writeSetValueError(IClient client, String soName, boolean isPersistent, String slotName, String errorMsg)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.sharedobject.ISharedObject](#)

[acquire](#), [addClient](#), [addSlotListener](#), [clear](#), [close](#), [containsProperty](#), [containsSlot](#), [deleteSlot](#), [deleteSlot](#), [disconnect](#), [flush](#), [getClients](#), [getName](#), [getParent](#), [getProperty](#), [getRefCount](#), [getSlot](#), [getSlotNames](#), [getSlots](#), [getStorageDir](#), [getVersion](#), [isClient](#), [isPersistent](#), [lock](#), [purge](#), [putSlot](#), [release](#), [removeClient](#), [removeSlotListener](#), [send](#), [send](#), [setName](#), [setPersistent](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setProperty](#), [setStorageDir](#), [setVersion](#), [size](#), [unlock](#), [writeDeleteError](#), [writeSetValueError](#)

Fields

READACCESS

public static final int **READACCESS**

Constant value: **0**

WRITEACCESS

public static final int **WRITEACCESS**

Constant value: **1**

(continued from last page)

Constructors

SharedObject

```
public SharedObject(String name)
```

Create new shared object

Parameters:

name - shared object name

SharedObject

```
public SharedObject(String name,  
                    boolean isPersistent,  
                    String storageDir)
```

Create new shared object

Parameters:

name - shared object name

isPersistent - is persistent

storageDir - storage directory for persistent shared object

Methods

size

```
public int size()
```

purge

```
public int purge(int version)
```

clear

```
public void clear()
```

getSlots

```
public java.util.List getSlots()
```

getSlotNames

```
public java.util.List getSlotNames()
```

(continued from last page)

getSlot

```
public ISharedObjectSlot getSlot(String name)
```

putSlot

```
public void putSlot(String name,  
    ISharedObjectSlot slot)
```

getClients

```
public java.util.List getClients()
```

isClient

```
public boolean isClient(IClient client)
```

addClient

```
public void addClient(IClient client)
```

removeClient

```
public void removeClient(IClient client)
```

acquire

```
public void acquire()
```

release

```
public void release()
```

getRefCount

```
public int getRefCount()
```

isPersistent

```
public boolean isPersistent()
```

(continued from last page)

setPersistent

```
public void setPersistent(boolean isPersistent)
```

getVersion

```
public int getVersion()
```

setVersion

```
public void setVersion(int version)
```

deleteSlot

```
public void deleteSlot(String slotName)
```

containsProperty

```
public boolean containsProperty(String slotName)
```

containsSlot

```
public boolean containsSlot(String slotName)
```

deleteSlot

```
public void deleteSlot(IClient client,  
                        String slotName)
```

getProperty

```
public AMFData getProperty(String slotName)
```

setProperty

```
public void setProperty(String slotName,  
                        boolean value)
```

setProperty

```
public void setProperty(String slotName,  
    java.util.Date value)
```

setProperty

```
public void setProperty(String slotName,  
    double value)
```

setProperty

```
public void setProperty(String slotName,  
    long value)
```

setProperty

```
public void setProperty(String slotName,  
    int value)
```

setProperty

```
public void setProperty(String slotName,  
    String value)
```

setProperty

```
public void setProperty(String slotName,  
    AMFData data)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    AMFData amfData)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData)
```

(continued from last page)

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFDataContextDeserialize context)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFData amfData)
```

setSlotValue

```
public void setSlotValue(IClient client,  
    String slotName,  
    byte[] byteData,  
    AMFData amfData,  
    AMFDataContextDeserialize context)
```

writeError

```
public static void writeError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String errorMsg,  
    boolean isConnect)
```

writeSetValueError

```
public void writeSetValueError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

writeDeleteError

```
public void writeDeleteError(IClient client,  
    String soName,  
    boolean isPersistent,  
    String slotName,  
    String errorMsg)
```

getClientUpdates

```
public void getClientUpdates(IClient client)
```

(continued from last page)

disconnect

```
public void disconnect(IClient client)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

send

```
public void send(String handlerName,  
                 Object[] params)
```

send

```
public void send(String handlerName)
```

sendInternal

```
public void sendInternal(String handlerName,  
                        AMFData\[\] params)
```

sendInternal

```
public void sendInternal(IClient client,  
                        String handlerName,  
                        byte[] msgBytes)
```

sendInternal

```
public void sendInternal(IClient client,  
                        String handlerName,  
                        byte[] msgBytes,  
                        AMFDataContextDeserialize context)
```

(continued from last page)

addSlotListener

```
public void addSlotListener(ISharedObjectSlotNotify slotListener)
```

removeSlotListener

```
public void removeSlotListener(ISharedObjectSlotNotify slotListener)
```

notifySlotSetValue

```
public void notifySlotSetValue(ISharedObjectSlot slot)
```

notifySlotDelete

```
public void notifySlotDelete(ISharedObjectSlot slot)
```

getStorageDir

```
public String getStorageDir()
```

setStorageDir

```
public void setStorageDir(String storageDir)
```

flush

```
public void flush()
```

load

```
public void load()
```

close

```
public void close()
```

lock

```
public void lock()
```

(continued from last page)

unlock

```
public void unlock()
```

setParent

```
public void setParent(ISharedObjects parent)
```

getParent

```
public ISharedObjects getParent()
```

getAccess

```
public static boolean[] getAccess(IClient client,  
    String soName)
```

Package

com.wowza.wms.sourcecontrol

com.wowza.wms.sourcecontrol Interface ISourceControl

All Subinterfaces:

[ISourceControlCamera](#)

public interface **ISourceControl**
extends

Public interface to generic source control device.

Method Summary

abstract SourceControlContext	createContext() Create an empty context structure
abstract ISourceControlSession	createSourceControlSession (String streamName, IApplicationInstance appInstance) Create a SourceControlSession for the device and associate it with the provided stream name and application instance
abstract SourceControlContext	getContext() Get the SourceControlContext for the device.
abstract SourceControlInformation	getSouceFeatures() Get the SourceControlFeatures for the device.
abstract SourceControlInformation	getSouceInformation() Get the SourceControlInformation for the device.
abstract void	setContext (SourceControlContext context) Set the SourceControlContext for the device.

Methods

createContext

public abstract SourceControlContext **createContext()**

Create an empty context structure

setContext

public abstract void **setContext**(SourceControlContext context)

Set the SourceControlContext for the device.

Parameters:

context

(continued from last page)

getContext

```
public abstract SourceControlContext getContext()
```

Get the SourceControlContext for the device.

Returns:

SourceControlContext the source control context for this source control device

getSouceInformation

```
public abstract SourceControlInformation getSouceInformation()
```

Get the SourceControlInformation for the device.

Returns:

SourceControlInformation class containing information and features about the source control device

getSouceFeatures

```
public abstract SourceControlInformation getSouceFeatures()
```

Get the SourceControlFeatures for the device.

Returns:

SourceControlFeatures class containing information and features about the source control device

createSourceControlSession

```
public abstract ISourceControlSession createSourceControlSession(String streamName,  
    IApplicationInstance appInstance)
```

Create a SourceControlSession for the device and associate it with the provided stream name and application instance

Parameters:

streamName - the stream name to associate the source control session with

appInstance - the application instance to associate the source control session with

com.wowza.wms.sourcecontrol Interface ISourceControlCamera

All Superinterfaces:

[ISourceControl](#)

public interface **ISourceControlCamera**

extends [ISourceControl](#)

Public interface for a Camera Source Control device.

Method Summary

abstract String	captureImage() Command the camera to capture a single frame image and return it in a base64 encoded string
abstract boolean	panTiltStep(String direction) Command the camera to Pan/Tilt one step in the direction indicated.
abstract boolean	zoomStep(String direction) Command the camera to Zoom one step in the direction indicated.

Methods inherited from interface [com.wowza.wms.sourcecontrol.ISourceControl](#)

[createContext](#), [createSourceControlSession](#), [getContext](#), [getSouceFeatures](#),
[getSouceInformation](#), [setContext](#)

Methods

panTiltStep

public abstract boolean **panTiltStep**(String direction)

Command the camera to Pan/Tilt one step in the direction indicated.

Parameters:

direction - to Pan/Tilt the camera (see SourceControlCameraFeature for list of available directions, see SourceControlInformation.features for the list of supported directions)

Returns:

true if the command was successfully performed

zoomStep

public abstract boolean **zoomStep**(String direction)

Command the camera to Zoom one step in the direction indicated.

Parameters:

direction - to zoom the camera (see SourceControlCameraFeature for list of available directions, see SourceControlInformation.features for the list of supported directions)

(continued from last page)

Returns:

true if the command was successfully performed

captureImage

```
public abstract String captureImage()
```

Command the camera to capture a single frame image and return it in a base64 encoded string

Returns:

base64 encoded image or null if the capture failed.

com.wowza.wms.sourcecontrol Interface ISourceControlSession

public interface **ISourceControlSession**
extends

Public interface for a Source Control device session

Method Summary

abstract IApplicationInstance	getApplicationInstance() Get the IApplicationInstance associated with this session
abstract ISourceControl	getSourceControlImpl() Get the underlying ISourceControl implementation
abstract String	getStreamName() Get the stream name associated with this session
abstract void	setApplicationInstance(IApplicationInstance appInstance) Set the IApplicationInstance associated wit this session
abstract void	setSrouceControlImpl(ISourceControl sourceControlImpl) Set the underlying ISourceControl Implementation
abstract void	setStreamName(String streamName) Set the stream name associated with this session

Methods

getSourceControlImpl

public abstract [ISourceControl](#) **getSourceControlImpl()**

Get the underlying ISourceControl implementation

Returns:

ISourceControl implementation

setSrouceControlImpl

public abstract void **setSrouceControlImpl([ISourceControl](#) sourceControlImpl)**

Set the underlying ISourceControl Implementation

Parameters:

sourceControlImpl - implementation

getApplicationInstance

public abstract [IApplicationInstance](#) **getApplicationInstance()**

(continued from last page)

Get the IApplicationInstance associated with this session

Returns:

IApplicationInstance associated with this session

setApplicationInstance

```
public abstract void setApplicationInstance(IApplicationInstance appInstance)
```

Set the IApplicationInstance associated with this session

Parameters:

appInstance - IApplicationInstance to associate with this session

getStreamName

```
public abstract String getStreamName()
```

Get the stream name associated with this session

Returns:

String containing the stream name

setStreamName

```
public abstract void setStreamName(String streamName)
```

Set the stream name associated with this session

Parameters:

streamName - A String containing the stream name to associate with this session

com.wowza.wms.sourcecontrol Interface ISourceControlSessionNotify

public interface **ISourceControlSessionNotify**
extends

Method Summary

abstract void	<code>onSourceControlSessionCreate</code> (String streamName, <code>ISourceControlSession</code> sourceControlSession) Invoked when source control session is created
abstract void	<code>onSourceControlSessionDestroy</code> (String streamName, <code>ISourceControlSession</code> sourceControlSession) Invoked when source control session is destroyed

Methods

onSourceControlSessionCreate

public abstract void **onSourceControlSessionCreate**(String streamName, [`ISourceControlSession`](#) sourceControlSession)

Invoked when source control session is created

Parameters:

streamName - stream name
sourceControlSession - source control session

onSourceControlSessionDestroy

public abstract void **onSourceControlSessionDestroy**(String streamName, [`ISourceControlSession`](#) sourceControlSession)

Invoked when source control session is destroyed

Parameters:

streamName - stream name
sourceControlSession - source Control session

Package

com.wowza.wms.sourcecontrol.drivers

com.wowza.wms.sourcecontrol.drivers

Class SourceControlDriverItem

java.lang.Object

└─com.wowza.wms.sourcecontrol.drivers.SourceControlDriverItem

public class **SourceControlDriverItem**
extends Object

SourceControlDriverItem: data class that holds the definition of a Source Control Driver.

Constructor Summary

public	SourceControlDriverItem (String name, String baseClass) Create a SourceControlDriverItem with the provided name and baseClass settings.
--------	--

Method Summary

void	clearProperty (String name) Clear a property by name.
String	getBaseClass () Get the baseClass of the driver.
String	getDescription () Get the description.
String	getName () Get the name used to refer to this driver item.
WMSProperties	getProperties () Get the set of properties defined.
String	getProperty (String name) Get a property by name.
void	setBaseClass (String baseClass) Set the baseClass of the driver.
void	setDescription (String description) Set the description.
void	setName (String name) Set the name use to refer to this driver item.
void	setProperty (String name, String value) Set a property to a string value.
String	toString () Returns a string presentation of the driver item.

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Constructors

SourceControlDriverItem

```
public SourceControlDriverItem(String name,  
                               String baseClass)
```

Create a SourceControlDriverItem with the provided name and baseClass settings.

Parameters:

name - The name used when configuring a source control driver that uses the supplied baseClass
baseClass - the baseClass to use for a SourceControlDriver configured with the supplied name

Methods

getBaseClass

```
public String getBaseClass()
```

Get the baseClass of the driver.

Returns:

the string name of the baseClass

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set the baseClass of the driver.

Parameters:

baseClass - the string name of the baseClass

getName

```
public String getName()
```

Get the name used to refer to this driver item.

Returns:

the name used to refer to this driver item

setName

```
public void setName(String name)
```

Set the name use to refer to this driver item.

Parameters:

name - the name to refer to this driver item by

(continued from last page)

setProperty

```
public void setProperty(String name,  
                        String value)
```

Set a property to a string value.

Parameters:

name - property name

value - property value

clearProperty

```
public void clearProperty(String name)
```

Clear a property by name.

Parameters:

name - of the property to clear

getProperty

```
public String getProperty(String name)
```

Get a property by name.

Parameters:

name - of the property to get

Returns:

the value of the property or null if not set

getProperties

```
public WMSProperties getProperties()
```

Get the set of properties defined.

Returns:

WMSProperties containing the set of defined properties

getDescription

```
public String getDescription()
```

Get the description.

Returns:

the description of the SourceControlDriverItem

setDescription

```
public void setDescription(String description)
```

Set the description.

Parameters:

description

toString

```
public String toString()
```

Returns a string presentation of the driver item.

Returns:

string presentation for the driver item

com.wowza.wms.sourcecontrol.drivers Class SourceControlResponse

java.lang.Object

└─com.wowza.wms.sourcecontrol.drivers.SourceControlResponse

public class **SourceControlResponse**
extends Object

Container of the response code as well as data for communications with a Source Control Driver.

Field Summary

public	<u>responseCode</u> the response code return from the request to the device
public	<u>responseData</u> Any data that might be returned from a request to a device

Constructor Summary

public	<u>SourceControlResponse()</u>
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

responseCode

public int **responseCode**

the response code return from the request to the device

responseData

public byte **responseData**

Any data that might be returned from a request to a device

Constructors

SourceControlResponse

public **SourceControlResponse()**

Package

com.wowza.wms.sourcecontrol.manager

com.wowza.wms.sourcecontrol.manager Class SourceControlManager

java.lang.Object

└-com.wowza.wms.sourcecontrol.SourceControlLogging

└-com.wowza.wms.sourcecontrol.manager.SourceControlManager

public class **SourceControlManager**
extends SourceControlLogging

Class for the management and construction of Source Control devices

Method Summary

ISourceControlSession	createSourceControlSession (String streamName, IApplicationInstance appInstance) Creates a SourceControlSession for the indicated stream and application instance.
java.util.List	getDriverList () Get a list of the Source Control Drivers
static SourceControlManager	getInstance () Static method to reference a single instance of the Source Control Manager.
ISourceControl	getSourceControlInstance (SourceControlContext context) Gets the ISourceControl implemenation for the provided SourceControlContext
static String	getXMLConfigPath () For testing purposes only
boolean	isDriverListLoaded () Returns true if the list of Source Control Drivers was successfully loaded.
SourceControlContext	loadContext (JSON jsonData) Get a SourceControlContext for the source control device described by the provided JSON data
static void	reset () Static method to clear the Source Control Manager, you will need to get a new reference via the getInstance() method.

Methods inherited from class com.wowza.wms.sourcecontrol.SourceControlLogging

enableDebug, logDebug, logError, logError, logInfo, logWarn

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods

(continued from last page)

getInstance

```
public static SourceControlManager getInstance()
```

Static method to reference a single instance of the Source Control Manager.

Returns:

a reference to the single instance of the source control manager

reset

```
public static void reset()
```

Static method to clear the Source Control Manager, you will need to get a new reference via the getInstance() method.

getXMLConfigPath

```
public static String getXMLConfigPath()
```

For testing purposes only

isDriverListLoaded

```
public boolean isDriverListLoaded()
```

Returns true if the list of Source Control Drivers was successfully loaded.

Returns:

true if the list of Source Control Drivers was successfully loaded

getDriverList

```
public java.util.List getDriverList()
```

Get a list of the Source Control Drivers

Returns:

a list of the Source Control Drivers

loadContext

```
public SourceControlContext loadContext(JSON jsonData)
```

Get a SourceControlContext for the source control device described by the provided JSON data

Parameters:

jsonData - JSON class that contains the key value pairs that describe a source control device

Returns:

SourceControlContext for the device if the JSON data describes one, otherwise returns NULL

getSourceControlInstance

```
public ISourceControl getSourceControlInstance(SourceControlContext context)
```

Gets the ISourceControl implementation for the provided SourceControlContext

Parameters:

(continued from last page)

context - that contains the information to instantiate an ISourceControl device

Returns:

ISourceControl if the context properly describes a source Control Device, otherwise NULL

createSourceControlSession

```
public ISourceControlSession createSourceControlSession(String streamName,  
    IApplicationInstance appInstance)
```

Creates a SourceControlSession for the indicated stream and application instance. This will create the session, underlying ISourceControl instance as well and associate them in the returned ISourceControlSession.

Parameters:

streamName - the stream name to associate it with

appInstance - the application instance to associate it with

Returns:

ISourceControlSession

Package

com.wowza.wms.stats

com.wowza.wms.stats Interface IStatsManager

public interface **IStatsManager**
extends

Field Summary

public static final	<u>DAYS_OF_DAILY_STORAGE</u> Value: 365
public static final	<u>DAYS_OF_HOURLY_STORAGE</u> Value: 30
public static final	<u>DAYS_OF_MINUTES_STORAGE</u> Value: 3
public static final	<u>HOURS_OF_REALTIME_STORAGE</u> Value: 12
public static final	<u>SECONDS_RESOLUTION</u> Value: 5

Method Summary

abstract <u>IStatsDatabaseManager</u>	<u>getStatsDatabaseManager</u> () Gets the currently used IStatsDBManager interface
abstract boolean	<u>isEnabled</u> () Indicates if the Stats Manager is enabled.
abstract void	<u>rollup</u> (<u>IStatsDatabase</u> database) Rollups up the provided database
abstract void	<u>setDebugLogging</u> (boolean enable) enables/disables debug logging in the StatsManager.
abstract void	<u>setStatsDatabaseManager</u> (<u>IStatsDatabaseManager</u> dbManager) Sets the DBManager to be used by the stats manager for open/closing the various databases
abstract void	<u>startManager</u> (<u>IServer</u> server) Starts the stats manager collecting stats data
abstract void	<u>stopManager</u> () Stops the Stats manager collecting stats data

Fields

(continued from last page)

SECONDS_RESOLUTION

```
public static final int SECONDS_RESOLUTION
```

Constant value: **5**

HOURS_OF_REALTIME_STORAGE

```
public static final int HOURS_OF_REALTIME_STORAGE
```

Constant value: **12**

DAYS_OF_MINUTES_STORAGE

```
public static final int DAYS_OF_MINUTES_STORAGE
```

Constant value: **3**

DAYS_OF_HOURLY_STORAGE

```
public static final int DAYS_OF_HOURLY_STORAGE
```

Constant value: **30**

DAYS_OF_DAILY_STORAGE

```
public static final int DAYS_OF_DAILY_STORAGE
```

Constant value: **365**

Methods

startManager

```
public abstract void startManager(IServer server)
```

Starts the stats manager collecting stats data

Parameters:

server -- IServer to collect data from

stopManager

```
public abstract void stopManager()
```

Stops the Stats manager collecting stats data

isEnabled

```
public abstract boolean isEnabled()
```

Indicates if the Stats Manager is enabled.

setStatsDatabaseManager

```
public abstract void setStatsDatabaseManager(IStatsDatabaseManager dbManager)
```

Sets the DBManager to be used by the stats manager for open/closing the various databases

Parameters:

dbManager - - IStatsDBManager database manager

getStatsDatabaseManager

```
public abstract IStatsDatabaseManager getStatsDatabaseManager()
```

Gets the currently used IStatsDBManager interface

Returns:

IStatsDBManager

rollup

```
public abstract void rollup(IStatsDatabase database)
```

Rollups up the provided database

Parameters:

database - server - IServer to collect data from

setDebugLogging

```
public abstract void setDebugLogging(boolean enable)
```

enables/disables debug logging in the StatsManager.

Parameters:

enable

Package

com.wowza.wms.stats.database

com.wowza.wms.stats.database Interface IStatsDatabase

public interface **IStatsDatabase**
extends

Field Summary

public static final	<u>APPLICATION_FIELD_COUNT</u> Value: 10
public static final	<u>FIELD_ALL</u> Value: -1
public static final	<u>FIELD_ALL_CONN</u> Value: 2
public static final	<u>FIELD_BW_IN</u> Value: 0
public static final	<u>FIELD_BW_OUT</u> Value: 1
public static final	<u>FIELD_CPU</u> Value: 0
public static final	<u>FIELD_DASH_CONN</u> Value: 9
public static final	<u>FIELD_DISK</u> Value: 2
public static final	<u>FIELD_HDS_CONN</u> Value: 4
public static final	<u>FIELD_HEAP_MEMORY</u> Value: 3
public static final	<u>FIELD_HLS_CONN</u> Value: 5
public static final	<u>FIELD_INVALID</u> Value: -2
public static final	<u>FIELD_MEM</u> Value: 1

public static final	FIELD_RTMP_CONN Value: 2
public static final	FIELD_RTSP_CONN Value: 3
public static final	FIELD_SMOOTH_CONN Value: 6
public static final	FIELD_WEBM_CONN Value: 8
public static final	FIELD_WEBRTC_CONN Value: 7
public static final	LEVEL_COUNT Value: 4
public static final	LEVEL_DAYS Value: 3
public static final	LEVEL_HOURS Value: 2
public static final	LEVEL_INVALID Value: -1
public static final	LEVEL_MINUTES Value: 1
public static final	LEVEL_SECONDS Value: 0
public static final	MACHINE_FIELD_COUNT Value: 3
public static final	SERVER_FIELD_COUNT Value: 4
public static final	TABLE_AVE Value: 2
public static final	TABLE_COUNT Value: 3
public static final	TABLE_INVALID Value: -1

public static final	<u>TABLE_MAX</u> Value: 1
public static final	<u>TABLE_MIN</u> Value: 0
public static final	<u>TABLE_SECONDS</u> Value: 0
public static final	<u>VHOST_FIELD_COUNT</u> Value: 3

Method Summary

abstract void	<u>close()</u> Closes the database for reading and writing
abstract boolean	<u>create</u> (String filename, int fieldCount) Creates an empty database for use
abstract boolean	<u>delete</u> (int level, org.joda.time.DateTime datetime) Deletes all entries in the level from the date time provided (inclusive) to the end of the table
abstract void	<u>dumpDebug</u> () dumps debug data for the database.
abstract String	<u>getFilename</u> () Gets the filename of the file on disk to be used
abstract int	<u>getRefCount</u> () Debug only.
abstract boolean	<u>open</u> () Opens the database for reading/writing
abstract java.util.List	<u>read</u> (int level, int table, org.joda.time.DateTime start, org.joda.time.DateTime end) Reads the Stats Entries from the database
abstract void	<u>setDebugLogging</u> (boolean enable) Enables/disables debug logging on within the database methods
abstract void	<u>setFilename</u> (String filename) Sets the filename of the file on disk to be used
abstract boolean	<u>write</u> (int level, StatsEntry[] data) Writes the provided stats entries to the database.

Fields

LEVEL_INVALID

public static final int **LEVEL_INVALID**

(continued from last page)

Constant value: **-1**

LEVEL_SECONDS

```
public static final int LEVEL_SECONDS
```

Constant value: **0**

LEVEL_MINUTES

```
public static final int LEVEL_MINUTES
```

Constant value: **1**

LEVEL_HOURS

```
public static final int LEVEL_HOURS
```

Constant value: **2**

LEVEL_DAYS

```
public static final int LEVEL_DAYS
```

Constant value: **3**

LEVEL_COUNT

```
public static final int LEVEL_COUNT
```

Constant value: **4**

TABLE_INVALID

```
public static final int TABLE_INVALID
```

Constant value: **-1**

TABLE_SECONDS

```
public static final int TABLE_SECONDS
```

Constant value: **0**

TABLE_MIN

```
public static final int TABLE_MIN
```

Constant value: **0**

(continued from last page)

TABLE_MAX

```
public static final int TABLE_MAX
```

Constant value: **1**

TABLE_AVE

```
public static final int TABLE_AVE
```

Constant value: **2**

TABLE_COUNT

```
public static final int TABLE_COUNT
```

Constant value: **3**

FIELD_BW_IN

```
public static final int FIELD_BW_IN
```

Constant value: **0**

FIELD_BW_OUT

```
public static final int FIELD_BW_OUT
```

Constant value: **1**

FIELD_RTMP_CONN

```
public static final int FIELD_RTMP_CONN
```

Constant value: **2**

FIELD_RTSP_CONN

```
public static final int FIELD_RTSP_CONN
```

Constant value: **3**

FIELD_HDS_CONN

```
public static final int FIELD_HDS_CONN
```

Constant value: **4**

FIELD_HLS_CONN

```
public static final int FIELD_HLS_CONN
```

(continued from last page)

Constant value: **5**

FIELD_SMOOTH_CONN

```
public static final int FIELD_SMOOTH_CONN
```

Constant value: **6**

FIELD_WEBRTC_CONN

```
public static final int FIELD_WEBRTC_CONN
```

Constant value: **7**

FIELD_WEBM_CONN

```
public static final int FIELD_WEBM_CONN
```

Constant value: **8**

FIELD_DASH_CONN

```
public static final int FIELD_DASH_CONN
```

Constant value: **9**

APPLICATION_FIELD_COUNT

```
public static final int APPLICATION_FIELD_COUNT
```

Constant value: **10**

FIELD_CPU

```
public static final int FIELD_CPU
```

Constant value: **0**

FIELD_MEM

```
public static final int FIELD_MEM
```

Constant value: **1**

FIELD_DISK

```
public static final int FIELD_DISK
```

Constant value: **2**

MACHINE_FIELD_COUNT

```
public static final int MACHINE_FIELD_COUNT
```

Constant value: **3**

FIELD_ALL_CONN

```
public static final int FIELD_ALL_CONN
```

Constant value: **2**

FIELD_HEAP_MEMORY

```
public static final int FIELD_HEAP_MEMORY
```

Constant value: **3**

SERVER_FIELD_COUNT

```
public static final int SERVER_FIELD_COUNT
```

Constant value: **4**

VHOST_FIELD_COUNT

```
public static final int VHOST_FIELD_COUNT
```

Constant value: **3**

FIELD_ALL

```
public static final int FIELD_ALL
```

Constant value: **-1**

FIELD_INVALID

```
public static final int FIELD_INVALID
```

Constant value: **-2**

Methods

setFilename

```
public abstract void setFilename(String filename)
```

Sets the filename of the file on disk to be used

Parameters:

(continued from last page)

filename

getFilename

```
public abstract String getFilename()
```

Gets the filename of the file on disk to be used

Returns:

returns null if setFilename has not been called

create

```
public abstract boolean create(String filename,  
    int fieldCount)
```

Creates an empty database for use

Parameters:

filename - to be used.

fieldCount - number of fields being stored

Returns:

returns false if unable to create the DB otherwise true

open

```
public abstract boolean open()
```

Opens the database for reading/writing

Returns:

returns false if unable to open the database otherwise true

read

```
public abstract java.util.List read(int level,  
    int table,  
    org.joda.time.DateTime start,  
    org.joda.time.DateTime end)
```

Reads the Stats Entries from the database

Parameters:

level - to read from

table - to read from

start - start date and time (inclusive) to start reading from

end - end date and time (inclusive) to stop reading from. Okay if null, reads to end of table then.

Returns:

returns a List of the stats entries (appropriate class) from the database

write

```
public abstract boolean write(int level,  
    StatsEntry[] data)
```

Writes the provided stats entries to the database. The first entry is written to the first table of the level, the second to the second table of the level etc. Must provide an entry for all tables in the level.

(continued from last page)

Parameters:

level
data

Returns:

returns false if unable to write or incorrect number of entries for the level

delete

```
public abstract boolean delete(int level,  
                                org.joda.time.DateTime datetime)
```

Deletes all entries in the level from the date time provided (inclusive) to the end of the table

Parameters:

level - to delete from
datetime

Returns:

returns false if unable to delete the requested entries, true otherwise. Doesn't not return false if there are no entries that meet the criteria

close

```
public abstract void close()
```

Closes the database for reading and writing

getRefCount

```
public abstract int getRefCount()
```

Debug only. Gets the current refcount for the database

Returns:

ref count for the database

setDebugLogging

```
public abstract void setDebugLogging(boolean enable)
```

Enables/disables debug logging on within the database methods

Parameters:

enable

dumpDebug

```
public abstract void dumpDebug()
```

dumps debug data for the database.

com.wowza.wms.stats.database Interface IStatsDatabaseManager

public interface **IStatsDatabaseManager**
extends

Method Summary

abstract void	<u>applicationDeleteDatabase</u> (String vhost, String appName) Deletes the stats database used to store the specified application stats data
abstract <u>IStatsDatabase</u>	<u>applicationGetDatabase</u> (String vhost, String appName) Gets the IStatsDB database reference for use in reading and writing to the specified application stats data
abstract void	<u>checkStorage</u> () Checks the permissions on the storage root provided.
abstract boolean	<u>isStorageAvailable</u> () Indicates if the DB manager can read/write to the supplied storage root.
abstract void	<u>machineDeleteDatabase</u> () Deletes the stats database used to store the machine stats data
abstract <u>IStatsDatabase</u>	<u>machineGetDatabase</u> () Gets the IStatsDB database reference for use in reading and writing to the machine stats data
abstract void	<u>serverDeleteDatabase</u> () Deletes the stats database used to store the server stats data
abstract <u>IStatsDatabase</u>	<u>serverGetDatabase</u> () Gets the IStatsDB database reference for use in reading and writing to the server stats data
abstract void	<u>setDebugLogging</u> (boolean enable) sets debug logging within the DB manager as well as any Stats Databases opened/created
abstract void	<u>setStorageRoot</u> (String storageRoot) Sets the storage root for the stats database files
abstract void	<u>vhostDeleteDatabase</u> (String vhost) Deletes the stats database used to store the specified vhost stats data
abstract <u>IStatsDatabase</u>	<u>vhostGetDatabase</u> (String vhost) Gets the IStatsDB database reference for use in reading and writing to the specified vhost stats data

Methods

setStorageRoot

public abstract void **setStorageRoot**(String storageRoot)

Sets the storage root for the stats database files

(continued from last page)

Parameters:

storageRoot - absolute or relative paths accepted

checkStorage

```
public abstract void checkStorage()
```

Checks the permissions on the storage root provided. Call only if you suspect permissions has changed.

isStorageAvailable

```
public abstract boolean isStorageAvailable()
```

Indicates if the DB manager can read/write to the supplied storage root.

Returns:

returns false if unable to access/create the provided storage root otherwise true.

serverGetDatabase

```
public abstract IStatsDatabase serverGetDatabase()
```

Gets the IStatsDB database reference for use in reading and writing to the server stats data

Returns:

returns null if unable to find/create the server stats database

machineGetDatabase

```
public abstract IStatsDatabase machineGetDatabase()
```

Gets the IStatsDB database reference for use in reading and writing to the machine stats data

Returns:

returns null if unable to find/create the machine stats database

vhostGetDatabase

```
public abstract IStatsDatabase vhostGetDatabase(String vhost)
```

Gets the IStatsDB database reference for use in reading and writing to the specified vhost stats data

Returns:

returns null if unable to find/create the specified vhost stats database

applicationGetDatabase

```
public abstract IStatsDatabase applicationGetDatabase(String vhost,  
String appName)
```

Gets the IStatsDB database reference for use in reading and writing to the specified application stats data

Returns:

returns null if unable to find/create the specified application stats database

(continued from last page)

serverDeleteDatabase

```
public abstract void serverDeleteDatabase()
```

Deletes the stats database used to store the server stats data

machineDeleteDatabase

```
public abstract void machineDeleteDatabase()
```

Deletes the stats database used to store the machine stats data

vhostDeleteDatabase

```
public abstract void vhostDeleteDatabase(String vhost)
```

Deletes the stats database used to store the specified vhost stats data

applicationDeleteDatabase

```
public abstract void applicationDeleteDatabase(String vhost,  
String appName)
```

Deletes the stats database used to store the specified application stats data

setDebugLogging

```
public abstract void setDebugLogging(boolean enable)
```

sets debug logging within the DB manager as well as any Stats Databases opened/created

Parameters:

enable

Package

com.wowza.wms.stats.database.file

com.wowza.wms.stats.database.file Interface IStatsFileDatabase

public interface **IStatsFileDatabase**
extends

Field Summary

public static final	ATOMID_HEADER Value: head
public static final	ATOMID_LEVEL Value: levl
public static final	ATOMID_LEVEL_DATATABLE Value: ldat
public static final	ATOMID_LEVEL_HEADER Value: lhdr
public static final	ATOMID_LEVEL_TIME Value: ltme
public static final	ATOMID_LEVEL_TIMEINDEX Value: ltmi
public static final	ATOMSIZE Value: 8
public static final	BYTESPERTIMECODE Value: 4
public static final	DEFAULT_BYTESPERFIELD Value: 3
public static final	DEFAULT_FIELDSPERROW Value: 12
public static final	DEFAULT_TABLECOUNT Value: 1
public static final	DEFAULT_TIMEINDEX_FACTOR Value: 10
public static final	EPOCH_SECS Value: 1341360000

public static final	FILE_SIGNATURE Value: WSDB
public static final	FILE_VERSION Value: 0

Method Summary

abstract void	close() Close open database (will leak descriptors if not closed)
abstract long	getEpoch() Get the defined time epoch
abstract int	getFlags() Get the flags
abstract IStatsFileDatabaseLevel	getLevel(int levelIndex) Get level
abstract StatsFileDatabaseStorageContext	getStorageContext() Get the storage context for open database.
abstract int	getVersion() Get version
abstract boolean	isValidSecondsTime(long timecode) Returns true if valid timecode value (in seconds).
abstract void	putLevel(int levelIndex, StatsFileDatabaseLevel level) Put level
abstract boolean	writeEmptyDatabase(String path) Write empty database

Fields

ATOMSIZE

public static final int **ATOMSIZE**

Constant value: **8**

FILE_SIGNATURE

public static final java.lang.String **FILE_SIGNATURE**

Constant value: **WSDB**

FILE_VERSION

public static final int **FILE_VERSION**

(continued from last page)

Constant value: **0**

ATOMID_HEADER

public static final java.lang.String **ATOMID_HEADER**

Constant value: **head**

ATOMID_LEVEL

public static final java.lang.String **ATOMID_LEVEL**

Constant value: **levl**

ATOMID_LEVEL_HEADER

public static final java.lang.String **ATOMID_LEVEL_HEADER**

Constant value: **lhdr**

ATOMID_LEVEL_TIME

public static final java.lang.String **ATOMID_LEVEL_TIME**

Constant value: **ltme**

ATOMID_LEVEL_TIMEINDEX

public static final java.lang.String **ATOMID_LEVEL_TIMEINDEX**

Constant value: **ltmi**

ATOMID_LEVEL_DATATABLE

public static final java.lang.String **ATOMID_LEVEL_DATATABLE**

Constant value: **ldat**

EPOCH_SECS

public static final long **EPOCH_SECS**

Constant value: **1341360000**

BYTESPERTIMECODE

public static final int **BYTESPERTIMECODE**

Constant value: **4**

DEFAULT_TIMEINDEX_FACTOR

```
public static final int DEFAULT_TIMEINDEX_FACTOR
```

Constant value: **10**

DEFAULT_BYTESPERFIELD

```
public static final int DEFAULT_BYTESPERFIELD
```

Constant value: **3**

DEFAULT_FIELDSPERROW

```
public static final int DEFAULT_FIELDSPERROW
```

Constant value: **12**

DEFAULT_TABLECOUNT

```
public static final int DEFAULT_TABLECOUNT
```

Constant value: **1**

Methods

writeEmptyDatabase

```
public abstract boolean writeEmptyDatabase(String path)
```

Write empty database

Parameters:

path

Returns:

true if successful

getLevel

```
public abstract IStatsFileDatabaseLevel getLevel(int levelIndex)
```

Get level

Parameters:

levelIndex

Returns:

level index

(continued from last page)

putLevel

```
public abstract void putLevel(int levelIndex,  
    StatsFileDatabaseLevel level)
```

Put level

Parameters:

levelIndex
level

isValidSecondsTime

```
public abstract boolean isValidSecondsTime(long timecode)
```

Returns true if valid timecode value (in seconds). Must be greater than define epoch and less than epoch+Inter.MAX_VALUE

Parameters:

timecode

Returns:

true if valid timecode

getStorageContext

```
public abstract StatsFileDatabaseStorageContext getStorageContext()
```

Get the storage context for open database. You can get read/write stats

Returns:

storage context for open database

getEpoch

```
public abstract long getEpoch()
```

Get the defined time epoch

Returns:

epoch time

getVersion

```
public abstract int getVersion()
```

Get version

Returns:

version

getFlags

```
public abstract int getFlags()
```

Get the flags

Returns:

flags

close

```
public abstract void close()
```

Close open database (will leak descriptors if not closed)

com.wowza.wms.stats.database.file Interface IStatsFileDatabaseLevel

public interface **IStatsFileDatabaseLevel**
extends

Method Summary

abstract boolean	<code>deleteRows(int row)</code> Deletes all rows equal to and greater than supplied row.
abstract boolean	<code>deleteRowsAll()</code> Deletes all data in level.
abstract void	<code>dropIndexData()</code> As time and records are read/written some storage is used to speed operation.
abstract boolean	<code>findTime(long time, StatsFileDatabaseTime timeResult)</code> Find the closest row with a given time.
abstract int	<code>getBytesPerField()</code> Get the number of bytes per-field
abstract int	<code>getFieldCount()</code> Get the number of fields per-row.
abstract boolean	<code>getFirstTime(StatsFileDatabaseTime timeResult)</code> Get the time of row 0
abstract int	<code>getFlags()</code> Get flags
abstract boolean	<code>getLastTime(StatsFileDatabaseTime timeResult)</code> Get the time of last row
abstract long	<code>getLastWriteTime()</code> Get the time of the last row written.
abstract int	<code>getLevelIndex()</code> Get level index
abstract int	<code>getRowCountCurrent()</code> Get the current number of rows in the level
abstract int	<code>getRowCountMax()</code> Get the maximum number of rows for this level
abstract int	<code>getRowStorageSize()</code> Get the storage size in bytes for a single row of data.
abstract int	<code>getTableCount()</code> Get the number of tables
abstract boolean	<code>getTime(int row, StatsFileDatabaseTime timeResult)</code> Get time associated with a given row.

abstract int	<u>getTimeIncrement()</u> Get the time increment for this level (only informational)
abstract int	<u>getTimeIndexFactor()</u> Not really used - may use in the future
abstract int	<u>getTimes(int row, int count, long[] time)</u> Get time for a range or rows.
abstract int	<u>getVersion()</u> Get version
abstract boolean	<u>readRows(int table, int row, int count, byte[] rowBytes, int offset)</u> Read the data for a range of rows.
abstract void	<u>setBytesPerField(int bytesPerField)</u> Set the number of bytes per-field (only when creating empty database)
abstract void	<u>setFieldCount(int fieldCount)</u> Set the number of fields per-row (only when creating empty database)
abstract void	<u>setRowCountMax(int rowCountMax)</u> Get the max number of rows (only when creating empty database)
abstract void	<u>setTableCount(int tableCount)</u> Set number of tables (only when creating empty database)
abstract void	<u>setTimeIncrement(int timeIncrement)</u> Set the time increment for this level v
abstract void	<u>setTimeIndexFactor(int timeIndexFactor)</u> Not really used - may use in the future
abstract boolean	<u>writeRow(long timecode, int[] fields)</u> Write a row to the level.
abstract boolean	<u>writeRow(long timecode, int[][] fieldsArr)</u> Write a row to the level.

Methods

getLevelIndex

public abstract int **getLevelIndex()**

Get level index

Returns:

level index

dropIndexData

public abstract void **dropIndexData()**

As time and records are read/written some storage is used to speed operation. This will dump the storage. It will be re-created if needed by underlying APIs.

findTime

```
public abstract boolean findTime(long time,  
    StatsFileDatabaseTime timeResult)
```

Find the closest row with a given time. If the time is greater then the last row false will be returned. If the level is empty false will be returned. It will find closets time not greater then the requested time.

Parameters:

time
timeResult

Returns:

returns false if time is greater than last row in level or level is empty

getFirstTime

```
public abstract boolean getFirstTime(StatsFileDatabaseTime timeResult)
```

Get the time of row 0

Parameters:

timeResult

Returns:

returns false if level is empty

getLastTime

```
public abstract boolean getLastTime(StatsFileDatabaseTime timeResult)
```

Get the time of last row

Parameters:

timeResult

Returns:

returns false if level is empty

getTime

```
public abstract boolean getTime(int row,  
    StatsFileDatabaseTime timeResult)
```

Get time associated with a given row.

Parameters:

row
timeResult

Returns:

returns false if row is greater then total row count or level is empty

getTimes

```
public abstract int getTimes(int row,  
    int count,  
    long[] time)
```

(continued from last page)

Get time for a range or rows. If count = -1 it will get times for all rows to end of table.

Parameters:

row
count
time

Returns:

returns false if row+count is greater then total row count or level is empty

getLastWriteTime

```
public abstract long getLastWriteTime()
```

Get the time of the last row written. writeRow will fail if try to write row using timecode less than this value. If returns -1 means level is empty.

Returns:

time of the last row written (milliseconds)

deleteRowsAll

```
public abstract boolean deleteRowsAll()
```

Deletes all data in level.

Returns:

true, if rows deleted

deleteRows

```
public abstract boolean deleteRows(int row)
```

Deletes all rows equal to and greater than supplied row.

Parameters:

row

Returns:

true, if rows deleted

getRowStorageSize

```
public abstract int getRowStorageSize()
```

Get the storage size in bytes for a single row of data.

Returns:

storage size in bytes

readRows

```
public abstract boolean readRows(int table,  
    int row,  
    int count,  
    byte[] rowBytes,  
    int offset)
```

Read the data for a range of rows. If count = -1 will read from row to the end of the level.

(continued from last page)

Parameters:

table
row
count
rowBytes
offset

Returns:

true if successful

writeRow

```
public abstract boolean writeRow(long timecode,  
    int[] fields)
```

Write a row to the level. This is for writing the level with only a single table's worth of data.

Parameters:

timecode
fields

Returns:

true if successful

writeRow

```
public abstract boolean writeRow(long timecode,  
    int[][] fieldsArr)
```

Write a row to the level. This is for writing to a level with more than one table (avg, min, max)

Parameters:

timecode
fieldsArr

Returns:

true if successful

getRowCountMax

```
public abstract int getRowCountMax()
```

Get the maximum number of rows for this level

Returns:

maximum number of rows for this level

setRowCountMax

```
public abstract void setRowCountMax(int rowCountMax)
```

Get the max number of rows (only when creating empty database)

Parameters:

rowCountMax

(continued from last page)

getRowCountCurrent

```
public abstract int getRowCountCurrent()
```

Get the current number of rows in the level

Returns:

current number of rows in the level

getFieldCount

```
public abstract int getFieldCount()
```

Get the number of fields per-row.

Returns:

number of fields per-row

setFieldCount

```
public abstract void setFieldCount(int fieldCount)
```

Set the number of fields per-row (only when creating empty database)

Parameters:

fieldCount

getTableCount

```
public abstract int getTableCount()
```

Get the number of tables

Returns:

number of tables

setTableCount

```
public abstract void setTableCount(int tableCount)
```

Set number of tables (only when creating empty database)

Parameters:

tableCount

getBytesPerField

```
public abstract int getBytesPerField()
```

Get the number of bytes per-field

Returns:

number of bytes per-field

setBytesPerField

```
public abstract void setBytesPerField(int bytesPerField)
```

(continued from last page)

Set the number of bytes per-field (only when creating empty database)

Parameters:

bytesPerField

getTimeIncrement

```
public abstract int getTimeIncrement()
```

Get the time increment for this level (only informational)

Returns:

time increment for this level

setTimeIncrement

```
public abstract void setTimeIncrement(int timeIncrement)
```

Set the time increment for this level v

Parameters:

timeIncrement

getTimeIndexFactor

```
public abstract int getTimeIndexFactor()
```

Not really used - may use in the future

Returns:

not used

setTimeIndexFactor

```
public abstract void setTimeIndexFactor(int timeIndexFactor)
```

Not really used - may use in the future

Parameters:

timeIndexFactor

getVersion

```
public abstract int getVersion()
```

Get version

Returns:

version

getFlags

```
public abstract int getFlags()
```

Get flags

Returns:

flags

Package

com.wowza.wms.stream

com.wowza.wms.stream Interface IMediaIndexItem

public interface **IMediaIndexItem**
extends

IMediaIndexItem: generic interface to mediaIndex

Field Summary

public static final	MISSING media file is missing Value: **missing**
---------------------	---

Method Summary

abstract IMediaIndexItem	clone() Make a clone copy of media index
abstract String	getChecksum() Get checksum for media index
abstract int	getExtent() Get the duration (milliseconds) of media index
abstract long	getLastAccessed() Get last time media index was accessed (milliseconds)
abstract boolean	isHitEnd() Is media index complete
abstract void	setChecksum(IRandomAccessReader file) Set media index checksum.
abstract void	setChecksum(String checksum) Set media index checksum
abstract void	setLastAccessed(long time) Set last time media index accessed (milliseconds)
abstract void	touch() Set last time accessed to current time

Fields

MISSING

public static final java.lang.String **MISSING**

media file is missing
Constant value: ****missing****

(continued from last page)

Methods

getExtent

```
public abstract int getExtent()
```

Get the duration (milliseconds) of media index

Returns:

duration (milliseconds)

getChecksum

```
public abstract String getChecksum()
```

Get checksum for media index

Returns:

checksum

setChecksum

```
public abstract void setChecksum(String checksum)
```

Set media index checksum

Parameters:

checksum

setChecksum

```
public abstract void setChecksum(IRandomAccessReader file)
```

Set media index checksum. Extract data from File spec

Parameters:

file

clone

```
public abstract IMediaIndexItem clone()
```

Make a clone copy of media index

Returns:

shallow copy of media index

getLastAccessed

```
public abstract long getLastAccessed()
```

Get last time media index was accessed (milliseconds)

Returns:

time media index was accessed (milliseconds)

(continued from last page)

setLastAccessed

```
public abstract void setLastAccessed(long time)
```

Set last time media index accessed (milliseconds)

Parameters:

time - media index was accessed (milliseconds)

isHitEnd

```
public abstract boolean isHitEnd()
```

Is media index complete

Returns:

true if media index is complete

touch

```
public abstract void touch()
```

Set last time accessed to current time

com.wowza.wms.stream Interface IMediaListProvider

public interface **IMediaListProvider**
extends

Method Summary

abstract MediaList	resolveMediaList (IMediaListReader mediaListReader, IMediaStream stream, String streamName) Called to resolve a amlst:streamname to a media list
------------------------------------	--

Methods

resolveMediaList

```
public abstract MediaList resolveMediaList(IMediaListReader mediaListReader,  
      IMediaStream stream,  
      String streamName)
```

Called to resolve a amlst:streamname to a media list

Parameters:

mediaListReader - mediaListReader
stream - media stream
streamName - stream name

Returns:

media list

com.wowza.wms.stream Interface IMediaListReader

public interface **IMediaListReader**
extends

Method Summary

abstract void	close() close file
abstract IHTTPStreamerSession	getHTTPStreamerSession() Get the HTTPStreamerSession associated with this media list reader
abstract String	getMediaExtension() Get media extension
abstract MediaList	getMediaList() Get the MediaList object
abstract String	getPath() Get abstract path to the media item
abstract void	init(IApplicationInstance appInstance, IMediaStream stream, String mediaReadType, String basePath, String mediaName, IHTTPStreamerSession httpStreamerSession) Initialize mediaReader
abstract boolean	isOpen() is file open
abstract void	open(String basePath, String name) Open the file for reading
abstract void	setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession) Set the HTTPStreamerSession associated with this media list reader
abstract void	setMediaReaderItem(MediaReaderItem mediaReaderItem) Set the mediaReader item definition
abstract void	setProperties(WMSProperties properties) Set the properties for this media reader

Methods

init

```
public abstract void init(IApplicationInstance appInstance,
    IMediaStream stream,
    String mediaReadType,
    String basePath,
    String mediaName,
    IHTTPStreamerSession httpStreamerSession)
```

(continued from last page)

Initialize mediaReader

Parameters:

stream - parent stream
mediaReadType - media reader type id. Example: flv
basePath - Base path for application instance
mediaName - name of the media item

setMediaReaderItem

```
public abstract void setMediaReaderItem(MediaReaderItem mediaReaderItem)
```

Set the mediaReader item definition

Parameters:

mediaReaderItem

open

```
public abstract void open(String basePath,  
    String name)
```

Open the file for reading

Parameters:

basePath - base path to file
name - file name without extension

close

```
public abstract void close()
```

close file

isOpen

```
public abstract boolean isOpen()
```

is file open

Returns:

is file open

setProperties

```
public abstract void setProperties(WMSProperties properties)
```

Set the properties for this media reader

Parameters:

properties - properties

getPath

```
public abstract String getPath()
```

Get abstract path to the media item

Returns:

(continued from last page)

abstract path to the media item

getMediaExtension

```
public abstract String getMediaExtension()
```

Get media extension

Returns:

media extension

getMediaList

```
public abstract MediaList getMediaList()
```

Get the MediaList object

Returns:

MediaList object

getHTTPStreamerSession

```
public abstract IHTTPStreamerSession getHTTPStreamerSession()
```

Get the HTTPStreamerSession associated with this media list reader

Returns:

HTTPStreamerSession

setHTTPStreamerSession

```
public abstract void setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Set the HTTPStreamerSession associated with this media list reader

Parameters:

httpStreamerSession - HTTPStreamerSession

com.wowza.wms.stream

Interface IMediaReader

All Subinterfaces:

[IMediaReaderSmoothStreamer](#), [IMediaReaderSanJose](#), [IMediaReaderMPEGDash](#), [IMediaReaderCupertino](#)

public interface **IMediaReader**
extends

IMediaReader: generic media reader interface. All media types implement this interface to interact with PlaylistPlayer.

Field Summary

public static final	CONTENTTYPE_MEDIA Value: 1
public static final	CONTENTTYPE_MEDIALIST Value: 2
public static final	DEFAULT_RANDOMACCESSREADER Value: com.wowza.io.DirectRandomAccessReader
public static final	DEFAULT_RANDOMACCESSREADEROPTIMIZER Value: com.wowza.io.RandomAccessReadOptimizer
public static final	PLAYEVENT_AFTERBUFFERFILL Value: 5
public static final	PLAYEVENT_AFTERMETADATA Value: 3
public static final	PLAYEVENT_BEFOREBUFFERFILL Value: 4
public static final	PLAYEVENT_BEFOREMETADATA Value: 2
public static final	PLAYEVENT_STARTPLAYBACK Value: 1
public static final	SEEK_EXACT Seek direction: closest frame (audio, video) (key, no-key) Value: 4
public static final	SEEK_KEYCLOSE Seek direction: closest key frame Value: 3

public static final	SEEK_KEYDOWN Seek direction: down to closets key frame Value: 2
public static final	SEEK_KEYUP Seek direction: up to closets key frame Value: 1
public static final	SEEKTARGET_AUDIO Value: 3
public static final	SEEKTARGET_ENHANCED Value: 4
public static final	SEEKTARGET_VIDEOKEYFRAME Value: 1

Method Summary

abstract void	close() close file
abstract long	getDuration() Get duration or time (milliseconds) of the media file
abstract long	getLength() Get the stream length in bytes
abstract String	getMediaExtension() Get media extension
abstract java.util.List	getMetadata() Get a collection of metadata packets in ByteBuffers for this file.
abstract String	getPath() Get abstract path to the media item
abstract IMediaReaderStreamPosition	getStreamPosition() Get a reference to the current stream position
abstract void	init(IApplicationInstance appInstance, IMediaStream stream, String mediaReadType, String basePath, String mediaName) Initialize mediaReader
abstract boolean	isOpen() is file open
abstract void	open(String basePath, String name) Open the file for reading
abstract void	rewind() rewind file to start
abstract PlaylistSeekResult	seek(long timecode, int seektype) seek to timecode in file

abstract int	sendZeroLengthPacket (int type, int timecode, boolean isAbsolute, IMediaStream stream, java.io.OutputStream out, AMFObj wmsObj, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, boolean isForceTCZero)
abstract void	setMediaReaderItem (MediaReaderItem mediaReaderItem) Set the mediaReader item definition
abstract void	setProperties (WMSProperties properties) Set the properties for this media reader
abstract void	setStreamPosition (IMediaReaderStreamPosition pos) Set the file position within the media file
abstract void	startPlayback () Called each time the player being playback (before the buffer it filled)
abstract int	writeGeneratedKeyFrame (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings, boolean isForceTCZero) From current location in file generate a key frame (enhanced seek) and write it to out
abstract int	writePackets (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings, boolean isForceTCZero) From current location in file write packets to output
abstract int	writePackets (java.util.List packetList, PlaylistCursor flvCursor, PlaylistWriteControl control, PlaylistReaderWriteResults results, long[] sizes, FastPlaySettings fastPlaySettings) Write packets to the packetList as AMFPackets

Fields

CONTENTTYPE_MEDIA

public static final int **CONTENTTYPE_MEDIA**

Constant value: **1**

CONTENTTYPE_MEDIALIST

public static final int **CONTENTTYPE_MEDIALIST**

Constant value: **2**

DEFAULT_RANDOMACCESSREADER

public static final java.lang.String **DEFAULT_RANDOMACCESSREADER**

Constant value: **com.wowza.io.DirectRandomAccessReader**

DEFAULT_RANDOMACCESSREADEROPTIMIZER

```
public static final java.lang.String DEFAULT_RANDOMACCESSREADEROPTIMIZER
```

Constant value: **com.wowza.io.RandomAccessReadOptimizer**

SEEKTARGET_VIDEOKEYFRAME

```
public static final int SEEKTARGET_VIDEOKEYFRAME
```

Constant value: **1**

SEEKTARGET_AUDIO

```
public static final int SEEKTARGET_AUDIO
```

Constant value: **3**

SEEKTARGET_ENHANCED

```
public static final int SEEKTARGET_ENHANCED
```

Constant value: **4**

PLAYEVENT_STARTPLAYBACK

```
public static final int PLAYEVENT_STARTPLAYBACK
```

Constant value: **1**

PLAYEVENT_BEFOREMETADATA

```
public static final int PLAYEVENT_BEFOREMETADATA
```

Constant value: **2**

PLAYEVENT_AFTERMETADATA

```
public static final int PLAYEVENT_AFTERMETADATA
```

Constant value: **3**

PLAYEVENT_BEFOREBUFFERFILL

```
public static final int PLAYEVENT_BEFOREBUFFERFILL
```

Constant value: **4**

(continued from last page)

PLAYEVENT_AFTERBUFFERFILL

```
public static final int PLAYEVENT_AFTERBUFFERFILL
```

Constant value: **5**

SEEK_KEYUP

```
public static final int SEEK_KEYUP
```

Seek direction: up to closets key frame
Constant value: **1**

SEEK_KEYDOWN

```
public static final int SEEK_KEYDOWN
```

Seek direction: down to closets key frame
Constant value: **2**

SEEK_KEYCLOSE

```
public static final int SEEK_KEYCLOSE
```

Seek direction: closest key frame
Constant value: **3**

SEEK_EXACT

```
public static final int SEEK_EXACT
```

Seek direction: closest frame (audio, video) (key, no-key)
Constant value: **4**

Methods

init

```
public abstract void init(IApplicationInstance appInstance,  
    IMediaStream stream,  
    String mediaReadType,  
    String basePath,  
    String mediaName)
```

Initialize mediaReader

Parameters:

stream - parent stream
mediaReadType - media reader type id. Example: flv
basePath - Base path for application instance
mediaName - name of the media item

setMediaReaderItem

```
public abstract void setMediaReaderItem(MediaReaderItem mediaReaderItem)
```

Set the mediaReader item definition

Parameters:

(continued from last page)

mediaReaderItem

open

```
public abstract void open(String basePath,  
    String name)
```

Open the file for reading

Parameters:

basePath - base path to file

name - file name without extension

getMetadata

```
public abstract java.util.List getMetadata()
```

Get a collection of metadata packets in ByteBuffers for this file. You can use 'new AMFDataList(data)' to convert to AMF objects.

Returns:

collection of metadata packets in ByteBuffers

rewind

```
public abstract void rewind()
```

rewind file to start

close

```
public abstract void close()
```

close file

isOpen

```
public abstract boolean isOpen()
```

is file open

Returns:

is file open

seek

```
public abstract PlaylistSeekResult seek(long timecode,  
    int seektype)
```

seek to timecode in file

Parameters:

timecode - timecode (milliseconds) to seek to

seektype - seek type IMediaReader.SEEK_*

Returns:

detailed results object of seek or null if failure

(continued from last page)

writePackets

```
public abstract int writePackets(IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObjAudio,
    AMFObj wmsObjVideo,
    AMFObj wmsObjData,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings,
    boolean isForceTCZero)
```

From current location in file write packets to output

Parameters:

stream - parent mediaStream
 out - output stream
 wmsObjAudio - audio channel amfObj
 wmsObjVideo - video channel amfObj
 wmsObjData - data channel amfObj
 flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
 control - write control flags. Mainly used to control when it should stop writing
 results - write results returned from this routine
 sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
 fastPlaySettings - current fastPlay settings for the stream
 isForceTCZero - are we forcing all timecodes to zero

Returns:

number of bytes written

writePackets

```
public abstract int writePackets(java.util.List packetList,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings)
```

Write packets to the packetList as AMFPackets

Parameters:

packetList - list to which to write packets
 flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
 control - write control flags. Mainly used to control when it should stop writing
 results - write results returned from this routine
 sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
 fastPlaySettings - current fastPlay settings for the stream

Returns:

number of bytes written

(continued from last page)

writeGeneratedKeyFrame

```
public abstract int writeGeneratedKeyFrame(IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObjAudio,
    AMFObj wmsObjVideo,
    AMFObj wmsObjData,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    FastPlaySettings fastPlaySettings,
    boolean isForceTCZero)
```

From current location in file generate a key frame (enhanced seek) and write it to out

Parameters:

stream - parent mediaStream
 out - output stream
 wmsObjAudio - audio channel amfObj
 wmsObjVideo - video channel amfObj
 wmsObjData - data channel amfObj
 flvCursor - current cursor that keeps track of timecodes and flags indicating position in media file
 control - write control flags. Mainly used to control when it should stop writing
 results - write results returned from this routine
 sizes - array of values that keep track of number of bytes written and number of packets for each data type (audio, video, data). See IMediaStreamPlay.PLAYSIZES_*
 fastPlaySettings - current fastPlay settings for the stream
 isForceTCZero - are we forcing all timecodes to zero

Returns:

number of bytes written

sendZeroLengthPacket

```
public abstract int sendZeroLengthPacket(int type,
    int timecode,
    boolean isAbsolute,
    IMediaStream stream,
    java.io.OutputStream out,
    AMFObj wmsObj,
    PlaylistCursor flvCursor,
    PlaylistWriteControl control,
    PlaylistReaderWriteResults results,
    long[] sizes,
    boolean isForceTCZero)
```

startPlayback

```
public abstract void startPlayback()
```

Called each time the player being playback (before the buffer it filled)

getDuration

```
public abstract long getDuration()
```

Get duration or time (milliseconds) of the media file

Returns:

(continued from last page)

duration or time (milliseconds) of the media file

getLength

```
public abstract long getLength()
```

Get the stream length in bytes

Returns:

stream length in bytes

getPath

```
public abstract String getPath()
```

Get abstract path to the media item

Returns:

abstract path to the media item

getMediaExtension

```
public abstract String getMediaExtension()
```

Get media extension

Returns:

media extension

getStreamPosition

```
public abstract IMediaReaderStreamPosition getStreamPosition()
```

Get a reference to the current stream position

Returns:

stream position

setStreamPosition

```
public abstract void setStreamPosition(IMediaReaderStreamPosition pos)
```

Set the file position within the media file

Parameters:

pos - stream position

setProperties

```
public abstract void setProperties(WMSProperties properties)
```

Set the properties for this media reader

Parameters:

properties - properties

com.wowza.wms.stream Interface IMediaReaderActionNotify

All Known Implementing Classes:
[MediaReaderActionNotifyBase](#)

public interface **IMediaReaderActionNotify**
extends

IMediaReaderActionNotify: listener interface for IMediaReader actions: See
IApplicationInstance.addMediaReaderListener(IMediaReaderActionNotify mediaReaderListener)

Method Summary

abstract void	onMediaReaderClose (IMediaReader mediaReader, IMediaStream stream) Called when media reader is closed
abstract void	onMediaReaderCreate (IMediaReader mediaReader) Called when media reader is created
abstract void	onMediaReaderExtractMetaData (IMediaReader mediaReader, IMediaStream stream) Called after media reader metadata is extracted from the file
abstract void	onMediaReaderInit (IMediaReader mediaReader, IMediaStream stream) Called after media reader is initialized
abstract void	onMediaReaderOpen (IMediaReader mediaReader, IMediaStream stream) Called after media reader is opened

Methods

onMediaReaderCreate

public abstract void **onMediaReaderCreate**([IMediaReader](#) mediaReader)

Called when media reader is created

Parameters:

mediaReader - media reader

onMediaReaderInit

public abstract void **onMediaReaderInit**([IMediaReader](#) mediaReader, [IMediaStream](#) stream)

Called after media reader is initialized

Parameters:

mediaReader - media reader

stream - stream

onMediaReaderOpen

```
public abstract void onMediaReaderOpen(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called after media reader is opened

Parameters:

mediaReader - media reader
stream - stream

onMediaReaderExtractMetaData

```
public abstract void onMediaReaderExtractMetaData(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called after media reader metadata is extraced from the file

Parameters:

mediaReader - media reader
stream - stream

onMediaReaderClose

```
public abstract void onMediaReaderClose(IMediaReader mediaReader,  
    IMediaStream stream)
```

Called when media reader is closed

Parameters:

mediaReader - media reader
stream - stream

com.wowza.wms.stream

Interface IMediaReaderEncInfo

public interface IMediaReaderEncInfo

extends

Method Summary	
<div>abstract</div> <div>MediaReaderEncInfo</div>	<div>getEncInfo()</div>

Methods

getEncInfo

public abstract [MediaReaderEncInfo](#) **getEncInfo()**

com.wowza.wms.stream Interface IMediaReaderStreamPosition

public interface **IMediaReaderStreamPosition**
extends

IMediaReaderStreamPosition: Internal use

Method Summary

abstract boolean	isValid()
------------------	---------------------------

Methods

isValid

public abstract boolean **isValid()**

com.wowza.wms.stream Interface IMediaStream

public interface **IMediaStream**
extends

IMediaStream: public, generic interface to mediaStream object. Upon creation of a new mediaStream, the client connection's default streamType value will be used to dynamically create a mediaStream object based on the definitions available in the vHosts.mediaStreamMap. All mediaStream implementations implement this interface.

Field Summary

public static final	<u>AUDIOSAMPLEACCESS</u> Value: 2
public static final	<u>PACKET_COUNTS_AUDIO</u> Value: 0
public static final	<u>PACKET_COUNTS_DATA</u> Value: 3
public static final	<u>PACKET_COUNTS_SIZE</u> Value: 4
public static final	<u>PACKET_COUNTS_VIDEO</u> Value: 1
public static final	<u>PACKET_COUNTS_VIDEOKEY</u> Value: 2
public static final	<u>PUBLISH_BITRATE_SOURCE_LASTGOP</u> Value: 3
public static final	<u>PUBLISH_BITRATE_SOURCE_MEASURE</u> Value: 1
public static final	<u>PUBLISH_BITRATE_SOURCE_METADATA</u> Value: 2
public static final	<u>PUBLISH_FRAMERATE_SOURCE_MEASURE</u> Value: 1
public static final	<u>PUBLISH_FRAMERATE_SOURCE_METADATA</u> Value: 2
public static final	<u>READACCESS</u> Value: 0

public static final	VIDEOSAMPLEACCESS Value: 3
public static final	WRITEACCESS Value: 1

Method Summary

abstract void	addAudioCodecConfigPacket (long timecode, AMFPacket packet) Set audio codec configuration packet (needed for H.264/AAC playback)
abstract void	addAudioData (byte[] data, int offset, int size) Add data to current audio packet
abstract void	addAudioExtraData (java.util.Map extraData) Add extra data to the current audio packet
abstract void	addCalbackListener (IMediaStreamCallback callbackListener) Add a callback listener to listen for all stream metadata
abstract void	addClientListener (IMediaStreamActionNotify actionListener) Add client listener.
abstract void	addClientListener (IMediaStreamActionNotify2 actionListener) Add client listener.
abstract void	addClientListener (IMediaStreamActionNotify3 actionListener) Add client listener.
abstract void	addDataData (byte[] data, int offset, int size) Add data to current data packet
abstract void	addDataExtraData (java.util.Map extraData) Add extra data to the current data packet
abstract void	addLivePacketListener (IMediaStreamLivePacketNotify listener) Add a listener to receiver notification of new live AMF packets
abstract void	addVideoCodecConfigPacket (long timecode, AMFPacket packet) Set video codec configuration packet (needed for H.264/AAC playback)
abstract void	addVideoData (byte[] data, int offset, int size) Add data to current video packet
abstract void	addVideoExtraData (java.util.Map extraData) Add extra data to the current video packet
abstract void	addVideoH264SEIListener (IMediaStreamH264SEINotify h264SEIListener) Add an H.264 SEI listener.
abstract void	clear () Delete media file pointed to by this mediaStream (be careful)
abstract void	clearFastPlaySettings () Clear fastPlay settings
abstract void	clearLoggingValues ()

abstract void	<u>close()</u> Close mediaStream
abstract void	<u>flush()</u> Force publishing packets to be flushed from the input buffers to the output buffers
abstract boolean[]	<u>getAccess(IClient client, String name)</u> Get the read/write access to this stream for this client
abstract <u>AMFPacket</u>	<u>getAudioCodecConfigPacket(long timecode)</u> Get audio codec configuration packet (needed for H.264/AAC playback)
abstract int	<u>getAudioMissing()</u> Get number of audio bytes missing from current audio packet
abstract int	<u>getAudioSize()</u> Get the size of the current audio packet that is being streamed from the client to the server
abstract long	<u>getAudioTC()</u> Get last absolute audio timecode (milliseconds) sent to mediaStream
abstract int	<u>getBufferTime()</u> Get buffer time for mediaStream (milliseconds)
abstract byte[]	<u>getBurstStartStop(boolean isStart)</u> Get the dynamic streaming burst start/stop AMF packet
abstract String	<u>getCacheName()</u> not used
abstract <u>IClient</u>	<u>getClient()</u> Get parent client connection
abstract int	<u>getClientId()</u> Get parent client connection (id)
abstract String	<u>getContextStr()</u> Returns the stream context string in the form [application]/[appInstance]/[streamName].
abstract int	<u>getDataMissing()</u> Get number of data bytes missing from current data packet
abstract int	<u>getDataSize()</u> Get the size of the current data packet that is being streamed from the client to the server
abstract long	<u>getDataTC()</u> Get last absolute data timecode (milliseconds) sent to mediaStream
abstract int	<u>getDataType()</u> Get the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)
abstract String	<u>getDvrRecorder()</u> Get the DVR Recorder for this stream
abstract <u>ILiveStreamDvrRecorder</u>	<u>getDvrRecorder(String name)</u> Get the DVR Recorder interface to a stream by name

abstract String	<u>getDvrRecorderList()</u> Get the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)
abstract String	<u>getDvrRepeater()</u> Get the DVR repeater name for this stream
abstract <u>ElapsedTimer</u>	<u>getElapsedTime()</u> Get the interface to the elapse timer
abstract String	<u>getExt()</u> Get media file extension
abstract FastPlaySettings	<u>getFastPlaySettings()</u> Get current fastPlay settings
abstract int	<u>getHeaderSize()</u> Get the last packet header size (debugging)
abstract <u>IHTTPStreamerSession</u>	<u>getHTTPStreamerSession()</u> Get the HTTPStreamer session associated with this stream
abstract boolean	<u>getIsWebRTC()</u>
abstract <u>AMFPacket</u>	<u>getLastKeyFrame()</u> Get most recent video key frame
abstract <u>AMFPacket</u>	<u>getLastPacket()</u> Get most recent live packet
abstract String	<u>getLiveStreamPacketizer()</u> Get the live stream packetizer that this stream is using
abstract <u>ILiveStreamPacketizer</u>	<u>getLiveStreamPacketizer(String name)</u> Get the LiveStreamPacketizer interface to a stream by name
abstract String	<u>getLiveStreamPacketizerList()</u> Get the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)
abstract String	<u>getLiveStreamRepeater()</u> Get the live stream repeater name for the stream
abstract <u>ILiveStreamTranscoder</u>	<u>getLiveStreamTranscoder(String name)</u> Get a live stream transcoder for this stream by name
abstract String	<u>getLiveStreamTranscoderList()</u> Get the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)
abstract java.util.Map	<u>getLiveStreamTranscoders()</u> Get the list of transcoders for this stream.
abstract long	<u>getMaxTimecode()</u> Get the timecode of the latest received packet
abstract <u>IOPerformanceCounter</u>	<u>getMediaIOPerformance()</u> Get IO performance counter

abstract IMediaStreamMetaDataProvider	getMetaDataProvider() Get the metaData provider
abstract String	getName() Get stream name
abstract INetConnection	getNetConnection() Get parent netConnection (future server to server communication)
abstract IMediaStreamPlay	getPlayer() Get underlying player (IMediaStreamPlay) object
abstract java.util.List	getPlayPackets() Get all available live packets
abstract WMSProperties	getProperties() Get mediaStream properties
abstract int	getPublishAudioCodecId() Get the codec id of the most recently published audio packet
abstract int	getPublishBitrateAudio() Get the audio bitrate of an incoming live published stream (bits per second).
abstract int	getPublishBitrateAudio(int source) Get the audio bitrate of an incoming live published stream (bits per second).
abstract int	getPublishBitrateVideo() Get the video bitrate of an incoming live published stream (bits per second).
abstract int	getPublishBitrateVideo(int source) Get the video bitrate of an incoming live published stream (bits per second).
abstract long	getPublishFrameCountAudio() Get the total number of audio frames received for an incoming live stream.
abstract long	getPublishFrameCountData() Get the total number of data frames received for an incoming live stream.
abstract long	getPublishFrameCounts(long[] counts) Get the total number of frames received for an incoming live stream.
abstract long	getPublishFrameCountVideo() Get the total number of video frames received for an incoming live stream.
abstract long	getPublishFrameCountVideoKey() Get the total number of video key frames received for an incoming live stream.
abstract double	getPublishFramerateVideo() Get the video framerate of an incoming live published stream (frames per second).
abstract double	getPublishFramerateVideo(int source) Get the video framerate of an incoming live published stream (frames per second).
abstract int[]	getPublishKeyFrameIntervalsVideo() Get the last n key frame intervals for an incoming publish stream (frames per GOP), Most recent GOPs are first in the list.

abstract int	<u>getPublishVideoCodecId()</u> Get the codec id of the most recently published video packet
abstract String	<u>getQueryStr()</u> Get play/publish name query string.
abstract int	<u>getReceiveVideoFPS()</u> Set frame per seconds for video (not currently implemented)
abstract <u>AMFObj</u>	<u>getRespAMFAudioObj()</u> Get audio response channel object
abstract <u>AMFObj</u>	<u>getRespAMFDataObj()</u> Get data response channel object
abstract <u>AMFObj</u>	<u>getRespAMFVideoObj()</u> Get video response channel object
abstract <u>RTPStream</u>	<u>getRTPStream()</u> Get the RTP based stream this stream is associated with
abstract int	<u>getSrc()</u> Get the stream id
abstract java.io.File	<u>getStreamFileForRead()</u> Get the File object to read from a stream (get stream name, ext and query from stream object)
abstract java.io.File	<u>getStreamFileForRead(String name, String ext, String query)</u> Get the File object to read from a stream (specify name, ext and query)
abstract java.io.File	<u>getStreamFileForWrite()</u> Get the File object to write to a stream (get stream name, ext and query from stream object)
abstract java.io.File	<u>getStreamFileForWrite(String name, String ext, String query)</u> Get the File object to write to a stream (specify name, ext and query)
abstract <u>MediaStreamMap</u>	<u>getStreams()</u> Get parent mediaStreamMap (owned by applicationInstance)
abstract String	<u>getStreamType()</u> Get mediaStream streamType
abstract com.wowza.wms.transcoder.encoder.TranscoderEncoderStreamInfo	<u>getTranscoderEncoderStreamInfo()</u> Get the transcoder encoder context information for this stream.
abstract TranscoderSessionDestination	<u>getTranscoderSessionDestination()</u> If stream is result of transcode get the transcoder stream session for this stream.
abstract String	<u>getUniqueStreamIdStr()</u> Get a string that uniquely identifies this stream
abstract <u>AMFPacket</u>	<u>getVideoCodecConfigPacket(long timecode)</u> Get video codec configuration packet (needed for H.264/AAC playback)
abstract int	<u>getVideoMissing()</u> Get number of video bytes missing from current video packet

abstract int	<u>getVideoSize()</u> Get the size of the current video packet that is being streamed from the client to the server
abstract long	<u>getVideoTC()</u> Get last absolute video timecode (milliseconds) sent to mediaStream
abstract void	<u>handleCallback()</u> (com.wowza.wms.request.RequestFunction function) Routes request function to callback handler onStatus, onPlayStatus or [method/handler]
abstract boolean	<u>idle()</u> Allow the mediaStream to perform idle work (not currently in use)
abstract long	<u>incrementMediaInBytes()</u> (long increment) Increment the number of mediaStream bytes received
abstract long	<u>incrementMediaLossBytes()</u> (long bytes, long count) Increment the number of mediaStream loss bytes sent and number of packets sent
abstract long	<u>incrementMediaOutBytes()</u> (long bytes, long count) Increment the number of mediaStream bytes sent and number of packets sent
abstract void	<u>init()</u> (MediaStreamMap parent, int src, <u>WMSProperties</u> properties) Initialize the mediaStream object after creation.
abstract void	<u>initLiveStreamRepeating()</u> (String liveStreamPacketizer, String liveStreamRepeater) Initialize this stream for live stream repeating
abstract boolean	<u>isAppend()</u> Is append to media file (only valid if isRecord)
abstract boolean	<u>isClustered()</u> not used
abstract boolean	<u>isMediaCasterPlay()</u> Is MediaCaster play enabled (if true, will trigger MediaCaster startup)
abstract boolean	<u>isMergeOnMetadata()</u> If true, merge incoming onMetadata events with the current onMetadata event data.
abstract boolean	<u>isOpen()</u> Is mediaStream open
abstract boolean	<u>isPlay()</u> Is the stream a play stream (vs a publish stream)
abstract boolean	<u>isPlaying()</u> Is mediaStream playing (or paused - false)
abstract boolean	<u>isPublisherStream()</u> Returns true if stream was created by stream publisher API.
abstract boolean	<u>isPublishStreamReady()</u> (boolean checkAudio, boolean checkVideo) Returns true if the publishing stream contains enough video/audio data to start playback
abstract boolean	<u>isReceiveAudio()</u> Is client currently receiving audio.
abstract boolean	<u>isReceiveVideo()</u> Is client currently receiving video.

abstract boolean	<u>isRecord()</u> Is set to true if second parameter of NetStream.publish is "record"
abstract boolean	<u>isSendPlayStopLogEvent()</u> Get need to send a log event for stop
abstract boolean	<u>isSendPublishStopLogEvent()</u> Get need to send a log event for publishing
abstract boolean	<u>isSendRecordStopLogEvent()</u> Get need to send a log event for recording
abstract boolean	<u>isTranscoderEncoderStreamRoot()</u> True if this stream object is a transcoder encoder stream root.
abstract boolean	<u>isTranscodeResult()</u> Is this stream the result of a transcode operation.
abstract boolean	<u>isVideoH264SEIListenerEmpty()</u> Is H.264 SEI listener list empty.
abstract double	<u>length()</u> Get length/duration (seconds) of media file pointed to by mediaStream
abstract void	<u>notifyActionOnCodecInfoAudio()</u> (com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Notify client listeners of audio codec information change
abstract void	<u>notifyActionOnCodecInfoVideo()</u> (com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Notify client listeners of video codec information change
abstract void	<u>notifyActionOnMetaData()</u> (<u>AMFPacket</u> metaDataPacket) Notify client listeners of onMetaData change
abstract void	<u>notifyActionPause()</u> (boolean isPause, long location) Notify client listeners of pause action
abstract void	<u>notifyActionPauseRaw()</u> (boolean isPause, long location) Notify client listeners of pauseRaw action
abstract void	<u>notifyActionPlay()</u> (String streamName, double playStart, double playLen, int playReset) Notify client listeners of play action
abstract void	<u>notifyActionPublish()</u> (String streamName, boolean isRecord, boolean isAppend) Notify client listeners of publish action
abstract void	<u>notifyActionSeek()</u> (double location) Notify client listeners of seek action
abstract void	<u>notifyActionStop()</u> Notify client listeners of stop action
abstract void	<u>notifyActionUnPublish()</u> (String streamName, boolean isRecord, boolean isAppend) Notify client listeners of unpublish action
abstract void	<u>notifyLivePacket()</u> (<u>AMFPacket</u> packet) Notify new live AMF packet

abstract void	<code>notifyVideoH264Packet</code> (<code>AMFPacket</code> packet, <code>com.wowza.wms.media.h264.H264SEIMessages</code> seiMessages) Notify H.264 SEI listener.
abstract void	<code>packetComplete</code> () Invoked by requestAdapter when at the end of a set of packets
abstract void	<code>publish</code> () Publish mediaStream
abstract void	<code>putDvrRecorder</code> (String name, <code>ILiveStreamDvrRecorder</code> dvr) Add a live stream dvr to this stream
abstract void	<code>putLiveStreamTranscoder</code> (String name, <code>ILiveStreamTranscoder</code> <code>LiveStreamTranscoder</code>) Add a live stream transcoder to this stream
abstract void	<code>registerCallback</code> (String handlerName, <code>IMediaStreamCallback</code> callback) Register a callback handler
abstract void	<code>registerOnPlayStatus</code> (<code>IMediaStreamCallback</code> callback) Register onPlayStatus handler
abstract void	<code>registerOnStatus</code> (<code>IMediaStreamCallback</code> callback) Register onStatus handler
abstract void	<code>removeCallbackListener</code> (<code>IMediaStreamCallback</code> callbackListener) Remove a callback listener to listen for all stream metadata
abstract void	<code>removeClientListener</code> (<code>IMediaStreamActionNotify</code> actionListener) Remove client listener.
abstract void	<code>removeClientListener</code> (<code>IMediaStreamActionNotify2</code> actionListener) Remove client listener.
abstract void	<code>removeClientListener</code> (<code>IMediaStreamActionNotify3</code> actionListener) Remove client listener.
abstract <code>ILiveStreamDvrRecorder</code>	<code>removeDvrRecorder</code> (String name) Remove a live stream dvr by name
abstract void	<code>removeLivePacketListener</code> (<code>IMediaStreamLivePacketNotify</code> listener) Remove a listener to receiver notification of new live AMF packets
abstract <code>ILiveStreamTranscoder</code>	<code>removeLiveStreamTranscoder</code> (String name) Remove a live stream transcoder by name
abstract void	<code>removeVideoH264SEIListener</code> (<code>IMediaStreamH264SEINotify</code> h264SEIListener) Remove an H.264 SEI listener.
abstract void	<code>send</code> (String handlerName) Call client side NetStream method/handler with no parameters
abstract void	<code>send</code> (String handlerName, Object[] params) Call client side NetStream method/handler
abstract void	<code>sendAMF3</code> (String handlerName) Call client side NetStream method/handler with no parameters.

abstract void	<code>sendAMF3</code> (String handlerName, Object[] params) Call client side NetStream method/handler.
abstract int	<code>sendControlBytes</code> (int controlType, java.io.OutputStream out) Send playback control bytes.
abstract void	<code>sendDirect</code> (String handlerName) Call client side NetStream method/handler and send event to underlying stream (will record event)
abstract void	<code>sendDirect</code> (String handlerName, Object[] params) Call client side NetStream method/handler and send event to underlying stream (will record event)
abstract void	<code>sendDirectAMF3</code> (String handlerName) Call client side NetStream method/handler and send event to underlying stream (will record event).
abstract void	<code>sendDirectAMF3</code> (String handlerName, Object[] params) Call client side NetStream method/handler and send event to underlying stream (will record event).
abstract int	<code>sendLivePlaySeek</code> (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Seek.Notify) event
abstract int	<code>sendLivePlayStart</code> (java.io.OutputStream out, String name, long timecode, long timecodeOffset) Send onStatus(NetStream.Play.Start) event
abstract int	<code>sendLivePlaySwitch</code> (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Play.Transition) event
abstract int	<code>sendPauseNotify</code> (long timecode, String name) Send onStatus(NetStream.Pause.Notify) event
abstract int	<code>sendPauseNotify</code> (java.io.OutputStream out, long timecode, String name) Send onStatus(NetStream.Pause.Notify) event.
abstract int	<code>sendPlayReset</code> (java.io.OutputStream out, String name) Send onStatus(NetStream.Play.Reset) event.
abstract int	<code>sendPlayReset</code> (String name) Send onStatus(NetStream.Play.Reset) event
abstract int	<code>sendPlaySeek</code> (long location, long seekLocation, String name) Send onStatus(NetStream.Seek.Notify) event.
abstract int	<code>sendPlaySeek</code> (java.io.OutputStream out, long location, long seekLocation, String name) Send onStatus(NetStream.Seek.Notify) event.
abstract int	<code>sendPlaySeek</code> (java.io.OutputStream out, long location, long seekLocation, String name, java.util.List seekTypes) Send onStatus(NetStream.Seek.Notify) event.
abstract int	<code>sendPlayStart</code> (java.io.OutputStream out, String name, boolean isSwitch, boolean isLive, long timecode, java.util.List seekTypes) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).

abstract int	<u>sendPlayStart</u> (java.io.OutputStream out, String name, boolean isSwitch, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
abstract int	<u>sendPlayStart</u> (java.io.OutputStream out, String name, boolean isSwitch, long timecode, java.util.List seekTypes) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
abstract int	<u>sendPlayStart</u> (String name, long timecode) Send onStatus(NetStream.Play.Start) event
abstract int	<u>sendPlayStatus</u> (long timecode, int statusType, double duration, double bytesSent) Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event
abstract int	<u>sendPlayStatus</u> (java.io.OutputStream out, long timecode, int statusType, double duration, double bytesSent) Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event.
abstract int	<u>sendPlayStop</u> (long location, String name) Send onStatus(NetStream.Play.Stop) event
abstract int	<u>sendPlayStop</u> (java.io.OutputStream out, long location, String name) Send onStatus(NetStream.Play.Stop) event.
abstract int	<u>sendPlaySwitch</u> (java.io.OutputStream out, String name, boolean isSwitch, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
abstract int	<u>sendPlaySwitch</u> (String name, long timecode) Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).
abstract int	<u>sendStreamNotFound</u> (java.io.OutputStream out, String name) Send onStatus(NetStream.Play.StreamNotFound) event.
abstract int	<u>sendStreamNotFound</u> (String name) Send onStatus(NetStream.Play.StreamNotFound) event
abstract int	<u>sendUnpauseNotify</u> (long location, String name) Send onStatus(NetStream.Unpause.Notify) event
abstract int	<u>sendUnpauseNotify</u> (java.io.OutputStream out, long location, String name) Send onStatus(NetStream.Unpause.Notify) event.
abstract int	<u>sendUnpauseNotify</u> (java.io.OutputStream out, long location, String name, java.util.List seekTypes) Send onStatus(NetStream.Unpause.Notify) event
abstract int	<u>sendVODPlaySwitch</u> (java.io.OutputStream out, String name, long timecode) Send onStatus(NetStream.Play.Transition) event
abstract void	<u>setAppend</u> (boolean isAppend) Set is append to media file (only valid if isRecord)
abstract void	<u>setAudioSize</u> (int audioSize) Set the size of the current audio packet that is being streamed from the client to the server

abstract void	<u>setAudioTC</u> (long audioTC) Set last absolute audio timecode (milliseconds) sent to mediaStream
abstract void	<u>setAudioTC</u> (long audioTC, boolean isAbsolute) Set last absolute audio timecode (milliseconds) sent to mediaStream
abstract void	<u>setBufferTime</u> (int bufferTime) Set buffer time for mediaStream (milliseconds)
abstract void	<u>setClient</u> (<u>IClient</u> client) Set parent client connection
abstract void	<u>setClustered</u> (boolean isClustered) not used
abstract void	<u>setDataSize</u> (int dataSize) Set the size of the current data packet that is being streamed from the client to the server
abstract void	<u>setDataTC</u> (long dataTC) Set last absolute data timecode (milliseconds) sent to mediaStream
abstract void	<u>setDataTC</u> (long dataTC, boolean isAbsolute) Set last absolute data timecode (milliseconds) sent to mediaStream
abstract void	<u>setDataType</u> (int dataType) Set the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)
abstract void	<u>setDvrRecorder</u> (String recorderName) Set the DVR Recorder that this stream is using
abstract void	<u>setDvrRecorderList</u> (String recorderList) Set the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)
abstract void	<u>setExt</u> (String ext) Set media file extension
abstract void	<u>setFastPlaySettings</u> (FastPlaySettings fastPlaySettings) Set fastPlay settings
abstract void	<u>setHeaderSize</u> (int headerSize) Set the last packet header size (debugging)
abstract void	<u>setHTTPStreamerSession</u> (<u>IHTTPStreamerSession</u> httpStreamerSession) Set the HTTPStreamer session associated with this stream
abstract void	<u>setIsPlaying</u> (boolean isPlaying) Set is mediaStream playing
abstract void	<u>setIsWebRTC</u> (boolean isWebRTC)
abstract void	<u>setLiveStreamPacketizer</u> (String liveStreamPacketizer) Set the live stream packetizer that this stream is using
abstract void	<u>setLiveStreamPacketizerList</u> (String liveStreamPacketizerList) Set the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)

abstract void	<u>setLiveStreamRepeater</u> (String liveStreamRepeater) Set the live stream repeater name for the stream
abstract void	<u>setLiveStreamTranscoderList</u> (String liveStreamTranscoderList) Set the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)
abstract void	<u>setMediaCasterPlay</u> (boolean isMediaCasterPlay) Is MediaCaster play enabled (if true, will trigger MediaCaster startup)
abstract void	<u>setMergeOnMetadata</u> (boolean mergeOnMetadata) If true, merge incoming onMetadata events with the current onMetadata event data.
abstract void	<u>setMetaDataProvider</u> (<u>IMediaStreamMetaDataProvider</u> metaDataProvider) Set the metaData provider
abstract void	<u>setName</u> (String name) Set stream name
abstract void	<u>setName</u> (String name, String ext) Set stream name and extension.
abstract void	<u>setName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Set stream name, extension, query string, play start, play len and play reset from play command.
abstract void	<u>setNetConnection</u> (<u>INetConnection</u> netConnection) Set parent netConnection (future server to server communication)
abstract void	<u>setOpen</u> (boolean isOpen) Set mediaStream open
abstract void	<u>setPlay</u> (boolean isPlay) Set is the stream a play stream (vs a publish stream)
abstract void	<u>setPlayer</u> (<u>IMediaStreamPlay</u> player) Set underlying player (IMediaStreamPlay) object
abstract void	<u>setPublishAudioCodecId</u> (int publishAudioCodecId) Set the codec id of the most recently published audio packet
abstract void	<u>setPublisherStream</u> (boolean isPublisherStream) Set stream was created by stream publisher.
abstract void	<u>setPublishVideoCodecId</u> (int publishVideoCodecId) Set the codec id of the most recently published video packet
abstract void	<u>setQueryStr</u> (String queryStr) Set play/publish name query string.
abstract void	<u>setReceiveAudio</u> (boolean receiveAudio) Set receive audio
abstract void	<u>setReceiveVideo</u> (boolean receiveVideo) Set receive video
abstract void	<u>setReceiveVideoFPS</u> (int receiveVideoFPS) Set frame per second for video (not currently implemented)

abstract void	<u>setRecord</u> (boolean isRecord) Set to true if second parameter of NetStream.publish is "record"
abstract void	<u>setRTPStream</u> (<u>RTPStream</u> rtpStream) Set the RTP based stream this stream is associated with
abstract void	<u>setSendPlayStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for stop
abstract void	<u>setSendPublishStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for publishing
abstract void	<u>setSendRecordStopLogEvent</u> (boolean sendPlayStopLogEvent) Set need to send a log event for recording
abstract void	<u>setSrc</u> (int src) Set stream id
abstract void	<u>setStreamType</u> (String streamType) Set mediaStream streamType.
abstract void	<u>setTranscoderEncoderStreamInfo</u> (com.wowza.wms.transcoder.encoder.TranscoderEncoderStreamInfo transcoderEncoderStreamInfo) Set the transcoder encoder context information for this stream.
abstract void	<u>setTranscodeResult</u> (boolean isTranscodeResult) Is this stream the result of a transcode operation.
abstract void	<u>setVideoSize</u> (int videoSize) Set the size of the current video packet that is being streamed from the client to the server
abstract void	<u>setVideoTC</u> (long videoTC) Set last absolute video timecode (milliseconds) sent to mediaStream
abstract void	<u>setVideoTC</u> (long videoTC, boolean isAbsolute) Set last absolute video timecode (milliseconds) sent to mediaStream
abstract void	<u>shutdown</u> () shutdown or close this mediaStream
abstract long	<u>size</u> () Get size (bytes) of media file pointed to by mediaStream
abstract void	<u>startAudioPacket</u> () Called when an audio packet is first being populated with data
abstract void	<u>startDataPacket</u> () Called when a data packet is first being populated with data
abstract void	<u>startPublishing</u> () Start publishing live stream
abstract void	<u>startVideoPacket</u> () Called when a video packet is first being populated with data
abstract void	<u>stopName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Stop stream name

abstract void	stopPublishing() Stop publishing live stream
abstract void	switchName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Switch to stream name
abstract void	trim() Trim mediaStream.
abstract void	unregisterCallback (String handlerName) Unregister a callback handler
abstract void	unregisterOnPlayStatus (IMediaStreamCallback callback) Unregister onPlayStatus handler
abstract void	unregisterOnStatus (IMediaStreamCallback callback) Unregister onStatus handler
abstract void	updateLoggingDuration () Update logging.MDC with mediaStream logging information
abstract void	updateLoggingValues () Update logging.MDC with mediaStream logging information

Fields

READACCESS

public static final int **READACCESS**

Constant value: **0**

WRITEACCESS

public static final int **WRITEACCESS**

Constant value: **1**

AUDIOSAMPLEACCESS

public static final int **AUDIOSAMPLEACCESS**

Constant value: **2**

VIDEOSAMPLEACCESS

public static final int **VIDEOSAMPLEACCESS**

Constant value: **3**

(continued from last page)

PUBLISH_BITRATE_SOURCE_MEASURE

```
public static final int PUBLISH_BITRATE_SOURCE_MEASURE
```

Constant value: **1**

PUBLISH_BITRATE_SOURCE_METADATA

```
public static final int PUBLISH_BITRATE_SOURCE_METADATA
```

Constant value: **2**

PUBLISH_BITRATE_SOURCE_LASTGOP

```
public static final int PUBLISH_BITRATE_SOURCE_LASTGOP
```

Constant value: **3**

PUBLISH_FRAMERATE_SOURCE_MEASURE

```
public static final int PUBLISH_FRAMERATE_SOURCE_MEASURE
```

Constant value: **1**

PUBLISH_FRAMERATE_SOURCE_METADATA

```
public static final int PUBLISH_FRAMERATE_SOURCE_METADATA
```

Constant value: **2**

PACKET_COUNTS_AUDIO

```
public static final int PACKET_COUNTS_AUDIO
```

Constant value: **0**

PACKET_COUNTS_VIDEO

```
public static final int PACKET_COUNTS_VIDEO
```

Constant value: **1**

PACKET_COUNTS_VIDEOKEY

```
public static final int PACKET_COUNTS_VIDEOKEY
```

Constant value: **2**

PACKET_COUNTS_DATA

```
public static final int PACKET_COUNTS_DATA
```

(continued from last page)

Constant value: **3**

PACKET_COUNTS_SIZE

```
public static final int PACKET_COUNTS_SIZE
```

Constant value: **4**

Methods

init

```
public abstract void init(MediaStreamMap parent,  
    int src,  
    WMSProperties properties)
```

Initialize the mediaStream object after creation. Creation and initialization are separated due to the order of the creation events.

Parameters:

parent - parent mediaStreamMap of the parent applicationInstance
src - stream id for this stream
properties - initial properties as defined in Streams.xml

getBufferTime

```
public abstract int getBufferTime()
```

Get buffer time for mediaStream (milliseconds)

Returns:

buffer time (milliseconds)

setBufferTime

```
public abstract void setBufferTime(int bufferTime)
```

Set buffer time for mediaStream (milliseconds)

Parameters:

bufferTime - buffer time (milliseconds)

isPlaying

```
public abstract boolean isPlaying()
```

Is mediaStream playing (or paused - false)

Returns:

is playing

setIsPlaying

```
public abstract void setIsPlaying(boolean isPlaying)
```

Set is mediaStream playing

(continued from last page)

Parameters:

isPlaying

getAudioSize

```
public abstract int getAudioSize()
```

Get the size of the current audio packet that is being streamed from the client to the server

Returns:

size

getVideoSize

```
public abstract int getVideoSize()
```

Get the size of the current video packet that is being streamed from the client to the server

Returns:

size

getDataSize

```
public abstract int getDataSize()
```

Get the size of the current data packet that is being streamed from the client to the server

Returns:

size

setAudioSize

```
public abstract void setAudioSize(int audioSize)
```

Set the size of the current audio packet that is being streamed from the client to the server

Parameters:

audioSize

setVideoSize

```
public abstract void setVideoSize(int videoSize)
```

Set the size of the current video packet that is being streamed from the client to the server

Parameters:

videoSize

setDataSize

```
public abstract void setDataSize(int dataSize)
```

Set the size of the current data packet that is being streamed from the client to the server

Parameters:

dataSize

(continued from last page)

addAudioExtraData

```
public abstract void addAudioExtraData(java.util.Map extraData)
```

Add extra data to the current audio packet

Parameters:

extraData - extra data

addVideoExtraData

```
public abstract void addVideoExtraData(java.util.Map extraData)
```

Add extra data to the current video packet

Parameters:

extraData - extra data

addDataExtraData

```
public abstract void addDataExtraData(java.util.Map extraData)
```

Add extra data to the current data packet

Parameters:

extraData - extra data

getSrc

```
public abstract int getSrc()
```

Get the stream id

Returns:

stream id

setSrc

```
public abstract void setSrc(int src)
```

Set stream id

Parameters:

src - stream id

getName

```
public abstract String getName()
```

Get stream name

Returns:

stream name

setName

```
public abstract void setName(String name)
```

(continued from last page)

Set stream name

Parameters:

name - stream name

setName

```
public abstract void setName(String name,  
    String ext)
```

Set stream name and extension. Example: if play command sent flv:test name=test, ext=flv.

Parameters:

name - stream name

ext - stream extension

setName

```
public abstract void setName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Set stream name, extension, query string, play start, play len and play reset from play command.

Parameters:

name - stream name

oldName - old stream name

ext - stream extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

switchName

```
public abstract void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Switch to stream name

Parameters:

name - stream name

oldName - old stream name

ext - stream extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

(continued from last page)

stopName

```
public abstract void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Stop stream name

Parameters:

name - stream name

oldName - old stream name

ext - stream extension

queryStr - query string

playStart - play start

playLen - play len

playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

shutdown

```
public abstract void shutdown()
```

shutdown or close this mediaStream

getAudioTC

```
public abstract long getAudioTC()
```

Get last absolute audio timecode (milliseconds) sent to mediaStream

Returns:

last absolute audio timecode (milliseconds)

setAudioTC

```
public abstract void setAudioTC(long audioTC,  
    boolean isAbsolute)
```

Set last absolute audio timecode (milliseconds) sent to mediaStream

Parameters:

audioTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

setAudioTC

```
public abstract void setAudioTC(long audioTC)
```

Set last absolute audio timecode (milliseconds) sent to mediaStream

Parameters:

audioTC - timecode (milliseconds)

getVideoTC

```
public abstract long getVideoTC()
```

(continued from last page)

Get last absolute video timecode (milliseconds) sent to mediaStream

Returns:

last absolute video timecode (milliseconds)

setVideoTC

```
public abstract void setVideoTC(long videoTC,  
    boolean isAbsolute)
```

Set last absolute video timecode (milliseconds) sent to mediaStream

Parameters:

videoTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

setVideoTC

```
public abstract void setVideoTC(long videoTC)
```

Set last absolute video timecode (milliseconds) sent to mediaStream

Parameters:

videoTC - timecode (milliseconds)

getDataTC

```
public abstract long getDataTC()
```

Get last absolute data timecode (milliseconds) sent to mediaStream

Returns:

last absolute data timecode (milliseconds)

setDataTC

```
public abstract void setDataTC(long dataTC,  
    boolean isAbsolute)
```

Set last absolute data timecode (milliseconds) sent to mediaStream

Parameters:

dataTC - timecode (milliseconds)

isAbsolute - is the timecode value relative to last timecode or absolute

getDataType

```
public abstract int getDataType()
```

Get the data packet type: (IVHost.CONTENTTYPE_DATA0 or IVHost.CONTENTTYPE_DATA3)

Returns:

data packet type

setDataType

```
public abstract void setDataType(int dataType)
```

(continued from last page)

Set the data packet type: (IVHost.CONTENT*TYPE_DATA0 or IVHost.CONTENT*TYPE_DATA3)

Parameters:

dataType - data packet type

setDataTC

```
public abstract void setDataTC(long dataTC)
```

Set last absolute data timecode (milliseconds) sent to mediaStream

Parameters:

dataTC - timecode (milliseconds)

isRecord

```
public abstract boolean isRecord()
```

Is set to true if second parameter of NetStream.publish is "record"

Returns:

is true if second parameter of NetStream.publish is "record"

setRecord

```
public abstract void setRecord(boolean isRecord)
```

Set to true if second parameter of NetStream.publish is "record"

Parameters:

isRecord - true if second parameter of NetStream.publish is "record"

isPlay

```
public abstract boolean isPlay()
```

Is the stream a play stream (vs a publish stream)

Returns:

is play stream (has nothing to do with if its playing just that its play vs publish)

setPlay

```
public abstract void setPlay(boolean isPlay)
```

Set is the stream a play stream (vs a publish stream)

Parameters:

isPlay - is play stream (has nothing to do with if its playing just that its play vs publish)

idle

```
public abstract boolean idle()
```

Allow the mediaStream to perform idle work (not currently in use)

Returns:

true if it did some work

getClientId

```
public abstract int getClientId()
```

Get parent client connection (id)

Returns:

parent client connection (id)

getClient

```
public abstract IClient getClient()
```

Get parent client connection

Returns:

parent client connection

getNetConnection

```
public abstract INetConnection getNetConnection()
```

Get parent netConnection (future server to server communication)

Returns:

parent netConnection connection

setNetConnection

```
public abstract void setNetConnection(INetConnection netConnection)
```

Set parent netConnection (future server to server communication)

Parameters:

netConnection - netConnection connection

setClient

```
public abstract void setClient(IClient client)
```

Set parent client connection

Parameters:

client - parent client connection

getStreams

```
public abstract MediaStreamMap getStreams()
```

Get parent mediaStreamMap (owned by applicationInstance)

Returns:

parent mediaStreamMap

packetComplete

```
public abstract void packetComplete()
```

(continued from last page)

Invoked by requestAdapter when at the end of a set of packets

sendStreamNotFound

```
public abstract int sendStreamNotFound(String name)
```

Send onStatus(NetStream.Play.StreamNotFound) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendStreamNotFound

```
public abstract int sendStreamNotFound(java.io.OutputStream out,  
    String name)
```

Send onStatus(NetStream.Play.StreamNotFound) event. Send directly to OutputStream.

Parameters:

out - OutputStream

name - stream name

Returns:

bytes sent to client

sendLivePlayStart

```
public abstract int sendLivePlayStart(java.io.OutputStream out,  
    String name,  
    long timecode,  
    long timecodeOffset)
```

Send onStatus(NetStream.Play.Start) event

Parameters:

out - OutputStream

name - stream name

timecode - timecode

timecodeOffset - timecode offset

Returns:

bytes sent to client

sendVODPlaySwitch

```
public abstract int sendVODPlaySwitch(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Transition) event

Parameters:

out - OutputStream

name - stream name

timecode - timecode

(continued from last page)

Returns:

bytes sent to client

sendLivePlaySwitch

```
public abstract int sendLivePlaySwitch(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Transition) event

Parameters:

out - OutputStream
name - stream name
timecode - timecode

Returns:

bytes sent to client

sendLivePlaySeek

```
public abstract int sendLivePlaySeek(java.io.OutputStream out,  
    String name,  
    long timecode)
```

Send onStatus(NetStream.Seek.Notify) event

Parameters:

out - OutputStream
name - stream name
timecode - timecode

Returns:

bytes sent to client

sendPlayReset

```
public abstract int sendPlayReset(String name)
```

Send onStatus(NetStream.Play.Reset) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendPlayReset

```
public abstract int sendPlayReset(java.io.OutputStream out,  
    String name)
```

Send onStatus(NetStream.Play.Reset) event. Send directly to OutputStream.

Parameters:

out - OutputStream
name - stream name

Returns:

(continued from last page)

bytes sent to client

sendPlayStop

```
public abstract int sendPlayStop(long location,  
    String name)
```

Send onStatus(NetStream.Play.Stop) event

Parameters:

location - timecode where play stopped
name - stream name

Returns:

bytes sent to client

sendPlayStop

```
public abstract int sendPlayStop(java.io.OutputStream out,  
    long location,  
    String name)
```

Send onStatus(NetStream.Play.Stop) event. Send directly to OutputStream

Parameters:

out - OutputStream
location - timecode where play stopped
name - stream name

Returns:

bytes sent to client

sendPlaySeek

```
public abstract int sendPlaySeek(java.io.OutputStream out,  
    long location,  
    long seekLocation,  
    String name,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Seek.Notify) event.

Parameters:

out - OutputStream
location - request location of seek
seekLocation - result location of seek
name - stream name
seekTypes - list of commands to respond to (seek, unpause, play)

Returns:

bytes sent to client

sendPlaySeek

```
public abstract int sendPlaySeek(long location,  
    long seekLocation,  
    String name)
```

Send onStatus(NetStream.Seek.Notify) event.

(continued from last page)

Parameters:

location - request location of seek
seekLocation - result location of seek
name - stream name

Returns:

bytes sent to client

sendPlaySeek

```
public abstract int sendPlaySeek(java.io.OutputStream out,  
    long location,  
    long seekLocation,  
    String name)
```

Send onStatus(NetStream.Seek.Notify) event. Send directly to OutputStream

Parameters:

out - OutputStream
location - request location of seek
seekLocation - result location of seek
name - stream name

Returns:

bytes sent to client

sendPlayStart

```
public abstract int sendPlayStart(String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event

Parameters:

name - stream name

Returns:

bytes sent to client

sendPlaySwitch

```
public abstract int sendPlaySwitch(String name,  
    long timecode)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch).

Parameters:

name - stream name
timecode - timecode of event

Returns:

bytes sent to client

sendPlaySwitch

```
public abstract int sendPlaySwitch(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode)
```

(continued from last page)

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
timecode - timecode of event

Returns:

bytes sent to client

sendPlayStart

```
public abstract int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    boolean isLive,  
    long timecode,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
isLive - is the stream live
timecode - timecode of event
seekTypes - commands to respond to (seek, unpause, play)

sendPlayStart

```
public abstract int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
timecode - timecode of event
seekTypes - commands to respond to (seek, unpause, play)

Returns:

bytes sent to client

sendPlayStart

```
public abstract int sendPlayStart(java.io.OutputStream out,  
    String name,  
    boolean isSwitch,  
    long timecode)
```

(continued from last page)

Send onStatus(NetStream.Play.Start) event (it is not a typo, this also send play start but with different control codes for media switch). Send directly to OutputStream

Parameters:

out - OutputStream
name - stream name
isSwitch - is this a switch or a start
timecode - timecode of event

Returns:

bytes sent to client

sendPlayStatus

```
public abstract int sendPlayStatus(long timecode,  
    int statusType,  
    double duration,  
    double bytesSent)
```

Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event

Parameters:

timecode - timecode of event
statusType - status type IMediaStreamPlay.PLAYSTATUSTYPE_*
duration - (not used)
bytesSent - (not used)

Returns:

bytes sent to client

sendPlayStatus

```
public abstract int sendPlayStatus(java.io.OutputStream out,  
    long timecode,  
    int statusType,  
    double duration,  
    double bytesSent)
```

Send onPlayStatus(NetStream.Play.Switch, NetStream.Play.Complete, NetStream.Play.Stop) event. Send directly to OutputStream.

Parameters:

out - OutputStream
timecode - timecode of event
statusType - status type IMediaStreamPlay.PLAYSTATUSTYPE_*
duration - (not used)
bytesSent - (not used)

Returns:

bytes sent to client

sendPauseNotify

```
public abstract int sendPauseNotify(long timecode,  
    String name)
```

Send onStatus(NetStream.Pause.Notify) event

Parameters:

timecode - timecode of event

(continued from last page)

name - stream name

Returns:

bytes sent to client

sendPauseNotify

```
public abstract int sendPauseNotify(java.io.OutputStream out,  
    long timecode,  
    String name)
```

Send onStatus(NetStream.Pause.Notify) event. Send directly to OutputStream.

Parameters:

out - OutputStream
timecode - timecode of event
name - stream name

Returns:

bytes sent to client

sendUnpauseNotify

```
public abstract int sendUnpauseNotify(java.io.OutputStream out,  
    long location,  
    String name,  
    java.util.List seekTypes)
```

Send onStatus(NetStream.Unpause.Notify) event

Parameters:

out - OutputStream
location - timecode of event
name - stream name
seekTypes - list of operations to respond to (seek, play, unpause)

Returns:

bytes sent to client

sendUnpauseNotify

```
public abstract int sendUnpauseNotify(long location,  
    String name)
```

Send onStatus(NetStream.Unpause.Notify) event

Parameters:

location - timecode of event
name - stream name

Returns:

bytes sent to client

sendUnpauseNotify

```
public abstract int sendUnpauseNotify(java.io.OutputStream out,  
    long location,  
    String name)
```

Send onStatus(NetStream.Unpause.Notify) event. Send directly to OutputStream.

(continued from last page)

Parameters:

out - OutputStream
location - timecode of event
name - stream name

Returns:

bytes sent to client

isAppend

```
public abstract boolean isAppend()
```

Is append to media file (only valid if isRecord)

Returns:

is appending or rewriting media file

setAppend

```
public abstract void setAppend(boolean isAppend)
```

Set is append to media file (only valid if isRecord)

Parameters:

isAppend - is appending or rewriting media file

setPlayer

```
public abstract void setPlayer(IMediaStreamPlay player)
```

Set underlying player (IMediaStreamPlay) object

Parameters:

player - underlying player (IMediaStreamPlay) object

getPlayer

```
public abstract IMediaStreamPlay getPlayer()
```

Get underlying player (IMediaStreamPlay) object

Returns:

underlying player (IMediaStreamPlay) object

getAudioMissing

```
public abstract int getAudioMissing()
```

Get number of audio bytes missing from current audio packet

Returns:

number of bytes missing

getVideoMissing

```
public abstract int getVideoMissing()
```

(continued from last page)

Get number of video bytes missing from current video packet

Returns:

number of bytes missing

getDataMissing

```
public abstract int getDataMissing()
```

Get number of data bytes missing from current data packet

Returns:

number of bytes missing

addVideoData

```
public abstract void addVideoData(byte[] data,  
    int offset,  
    int size)
```

Add data to current video packet

Parameters:

data - byte array

offset - offset in byte array

size - size of data to add

addAudioData

```
public abstract void addAudioData(byte[] data,  
    int offset,  
    int size)
```

Add data to current audio packet

Parameters:

data - byte array

offset - offset in byte array

size - size of data to add

addDataData

```
public abstract void addDataData(byte[] data,  
    int offset,  
    int size)
```

Add data to current data packet

Parameters:

data - byte array

offset - offset in byte array

size - size of data to add

getProperties

```
public abstract WMSPProperties getProperties()
```

Get mediaStream properties

Returns:

(continued from last page)

properties

getPlayPackets

```
public abstract java.util.List getPlayPackets()
```

Get all available live packets

Returns:

play packets

getMaxTimecode

```
public abstract long getMaxTimecode()
```

Get the timecode of the latest received packet

Returns:

timecode of the latest received packet

getLastKeyFrame

```
public abstract AMFPacket getLastKeyFrame()
```

Get most recent video key frame

Returns:

play packets

getLastPacket

```
public abstract AMFPacket getLastPacket()
```

Get most recent live packet

Returns:

most recent live packet or null or no live packets

getStreamType

```
public abstract String getStreamType()
```

Get mediaStream streamType

Returns:

streamType

setStreamType

```
public abstract void setStreamType(String streamType)
```

Set mediaStream streamType. This method will not change the type of the current stream.

Parameters:

streamType

(continued from last page)

sendDirectAMF3

```
public abstract void sendDirectAMF3(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler and send event to underlying stream (will record event). Force AMF3 encoding.

Parameters:

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendDirect

```
public abstract void sendDirect(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler and send event to underlying stream (will record event)

Parameters:

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendDirectAMF3

```
public abstract void sendDirectAMF3(String handlerName)
```

Call client side NetStream method/handler and send event to underlying stream (will record event). Force AMF3 encoding.

Parameters:

handlerName - handler name

sendDirect

```
public abstract void sendDirect(String handlerName)
```

Call client side NetStream method/handler and send event to underlying stream (will record event)

Parameters:

handlerName - handler name

sendAMF3

```
public abstract void sendAMF3(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler. Force AMF3 encoding.

Parameters:

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

send

```
public abstract void send(String handlerName,  
    Object[] params)
```

Call client side NetStream method/handler

Parameters:

(continued from last page)

handlerName - handler name

params - variable list of parameters. All parameters will be wrapped in AMFDataObj.

sendAMF3

```
public abstract void sendAMF3(String handlerName)
```

Call client side NetStream method/handler with no parameters. Force AMF3 encoding.

Parameters:

handlerName - handler name

send

```
public abstract void send(String handlerName)
```

Call client side NetStream method/handler with no parameters

Parameters:

handlerName - handler name

close

```
public abstract void close()
```

Close mediaStream

isOpen

```
public abstract boolean isOpen()
```

Is mediaStream open

Returns:

is mediaStream open

setOpen

```
public abstract void setOpen(boolean isOpen)
```

Set mediaStream open

Parameters:

isOpen - mediaStream open

getFastPlaySettings

```
public abstract FastPlaySettings getFastPlaySettings()
```

Get current fastPlay settings

Returns:

fastPlay settings

setFastPlaySettings

```
public abstract void setFastPlaySettings(FastPlaySettings fastPlaySettings)
```

(continued from last page)

Set fastPlay settings

Parameters:

fastPlaySettings - fastPlay settings

clearFastPlaySettings

```
public abstract void clearFastPlaySettings()
```

Clear fastPlay settings

isReceiveAudio

```
public abstract boolean isReceiveAudio()
```

Is client currently receiving audio. Controlled by client side call receiveAudio.

Returns:

receive audio

setReceiveAudio

```
public abstract void setReceiveAudio(boolean receiveAudio)
```

Set receive audio

Parameters:

receiveAudio - receive audio

isReceiveVideo

```
public abstract boolean isReceiveVideo()
```

Is client currently receiving video. Controlled by client side call receiveVideo

Returns:

receive video

setReceiveVideo

```
public abstract void setReceiveVideo(boolean receiveVideo)
```

Set receive video

Parameters:

receiveVideo - receive video

getReceiveVideoFPS

```
public abstract int getReceiveVideoFPS()
```

Set frame per seconds for video (not currently implemented)

Returns:

video frames per second

(continued from last page)

setReceiveVideoFPS

```
public abstract void setReceiveVideoFPS(int receiveVideoFPS)
```

Set frame per second for video (not currently implemented)

Parameters:

receiveVideoFPS - video frames per second

getMediaIOPerformance

```
public abstract IOPerformanceCounter getMediaIOPerformance()
```

Get IO performance counter

Returns:

IO performance counter

incrementMediaOutBytes

```
public abstract long incrementMediaOutBytes(long bytes,  
                                             long count)
```

Increment the number of mediaStream bytes sent and number of packets sent

Parameters:

bytes - number of bytes sent

count - number of packets sent

Returns:

total number of bytes sent (after increment)

incrementMediaLossBytes

```
public abstract long incrementMediaLossBytes(long bytes,  
                                             long count)
```

Increment the number of mediaStream loss bytes sent and number of packets sent

Parameters:

bytes - number of bytes sent

count - number of packets sent

Returns:

total number of bytes sent (after increment)

incrementMediaInBytes

```
public abstract long incrementMediaInBytes(long increment)
```

Increment the number of mediaStream bytes received

Parameters:

increment - number of byte received

Returns:

total number of bytes received (after increment)

(continued from last page)

publish

```
public abstract void publish()
```

Publish mediaStream

trim

```
public abstract void trim()
```

Trim mediaStream. This method will remove live packets that are older than the live buffer size.

handleCallback

```
public abstract void handleCallback(com.wowza.wms.request.RequestFunction function)
```

Routes request function to callback handler onStatus, onPlayStatus or [method/handler]

Parameters:

function - request function

unregisterCallback

```
public abstract void unregisterCallback(String handlerName)
```

Unregister a callback handler

Parameters:

handlerName - handler name

registerCallback

```
public abstract void registerCallback(String handlerName,  
    IMediaStreamCallback callback)
```

Register a callback handler

Parameters:

handlerName - handler name
callback - callback object

unregisterOnStatus

```
public abstract void unregisterOnStatus(IMediaStreamCallback callback)
```

Unregister onStatus handler

Parameters:

callback

registerOnStatus

```
public abstract void registerOnStatus(IMediaStreamCallback callback)
```

Register onStatus handler

Parameters:

callback - callback object

unregisterOnPlayStatus

public abstract void **unregisterOnPlayStatus**([IMediaStreamCallback](#) callback)

Unregister onPlayStatus handler

Parameters:

callback - callback object

registerOnPlayStatus

public abstract void **registerOnPlayStatus**([IMediaStreamCallback](#) callback)

Register onPlayStatus handler

Parameters:

callback - callback object

addClientListener

public abstract void **addClientListener**([IMediaStreamActionNotify](#) actionListener)

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

addClientListener

public abstract void **addClientListener**([IMediaStreamActionNotify2](#) actionListener)

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

addClientListener

public abstract void **addClientListener**([IMediaStreamActionNotify3](#) actionListener)

Add client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

public abstract void **removeClientListener**([IMediaStreamActionNotify](#) actionListener)

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

public abstract void **removeClientListener**([IMediaStreamActionNotify2](#) actionListener)

(continued from last page)

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

removeClientListener

```
public abstract void removeClientListener(IMediaStreamActionNotify3 actionListener)
```

Remove client listener. Listens for (onPlay, onPublish, onPause, onSeek, onStop)

Parameters:

actionListener - listener

notifyActionPlay

```
public abstract void notifyActionPlay(String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

Notify client listeners of play action

Parameters:

streamName - stream name
playStart - play start
playLen - play length
playReset - play reset

notifyActionPauseRaw

```
public abstract void notifyActionPauseRaw(boolean isPause,  
    long location)
```

Notify client listeners of pauseRaw action

Parameters:

isPause - is pause or unpause
location - timecode (milliseconds) of action

notifyActionPause

```
public abstract void notifyActionPause(boolean isPause,  
    long location)
```

Notify client listeners of pause action

Parameters:

isPause - is pause or unpause
location - timecode (milliseconds) of action

notifyActionSeek

```
public abstract void notifyActionSeek(double location)
```

Notify client listeners of seek action

Parameters:

location - timecode (milliseconds) of seek request

notifyActionPublish

```
public abstract void notifyActionPublish(String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Notify client listeners of publish action

Parameters:

streamName - stream name
isRecord - is record or live
isAppend - is append if isRecord is true

notifyActionUnPublish

```
public abstract void notifyActionUnPublish(String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Notify client listeners of unpublish action

Parameters:

streamName - stream name
isRecord - is record or live
isAppend - is append if isRecord is true

notifyActionOnMetaData

```
public abstract void notifyActionOnMetaData(AMFPacket metaDataPacket)
```

Notify client listeners of onMetaData change

Parameters:

metaDataPacket - metaDataPacket

notifyActionOnCodecInfoVideo

```
public abstract void  
notifyActionOnCodecInfoVideo(com.wowza.wms.media.model.MediaCodecInfoVideo  
codecInfoVideo)
```

Notify client listeners of video codec information change

Parameters:

codecInfoVideo - video codec information

notifyActionOnCodecInfoAudio

```
public abstract void  
notifyActionOnCodecInfoAudio(com.wowza.wms.media.model.MediaCodecInfoAudio  
codecInfoAudio)
```

Notify client listeners of audio codec information change

Parameters:

codecInfoAudio - audio codec information

(continued from last page)

notifyActionStop

```
public abstract void notifyActionStop()
```

Notify client listeners of stop action

isClustered

```
public abstract boolean isClustered()
```

not used

Returns:

isClustered

setClustered

```
public abstract void setClustered(boolean isClustered)
```

not used

Parameters:

isClustered

getCacheName

```
public abstract String getCacheName()
```

not used

Returns:

cache name

startPublishing

```
public abstract void startPublishing()
```

Start publishing live stream

stopPublishing

```
public abstract void stopPublishing()
```

Stop publishing live stream

getStreamFileForWrite

```
public abstract java.io.File getStreamFileForWrite()
```

Get the File object to write to a stream (get stream name, ext and query from stream object)

Returns:

resultant File object

(continued from last page)

getStreamFileForWrite

```
public abstract java.io.File getStreamFileForWrite(String name,  
    String ext,  
    String query)
```

Get the File object to write to a stream (specify name, ext and query)

Parameters:

name - stream name
ext - stream prefix (Ex. mp4:)
query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

getStreamFileForRead

```
public abstract java.io.File getStreamFileForRead()
```

Get the File object to read from a stream (get stream name, ext and query from stream object)

Returns:

resultant File object

getStreamFileForRead

```
public abstract java.io.File getStreamFileForRead(String name,  
    String ext,  
    String query)
```

Get the File object to read from a stream (specify name, ext and query)

Parameters:

name - stream name
ext - stream prefix (Ex. mp4:)
query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

sendControlBytes

```
public abstract int sendControlBytes(int controlType,  
    java.io.OutputStream out)
```

Send playback control bytes. Valid values are (0, 1, 4)

Parameters:

controlType - control types (0, 1, 4)
out - OutputStream

Returns:

bytes sent to client

getBurstStartStop

```
public abstract byte[] getBurstStartStop(boolean isStart)
```

(continued from last page)

Get the dynamic streaming burst start/stop AMF packet

Parameters:

isStart - is start

Returns:

byte array with AMF packet

getRespAMFAudioObj

```
public abstract AMFObj getRespAMFAudioObj()
```

Get audio response channel object

Returns:

audio response channel object

getRespAMFVideoObj

```
public abstract AMFObj getRespAMFVideoObj()
```

Get video response channel object

Returns:

video response channel object

getRespAMFDataObj

```
public abstract AMFObj getRespAMFDataObj()
```

Get data response channel object

Returns:

data response channel object

getQueryStr

```
public abstract String getQueryStr()
```

Get play/publish name query string. Example: if play name is flv:test?param1=data1¶m2=data2, query string is "param1=data1¶m2=data2".

Returns:

query string

setQueryStr

```
public abstract void setQueryStr(String queryStr)
```

Set play/publish name query string. Example: if play name is flv:test?param1=data1¶m2=data2, query string is "param1=data1¶m2=data2".

Parameters:

queryStr

updateLoggingDuration

```
public abstract void updateLoggingDuration()
```

(continued from last page)

Update logging.MDC with mediaStream logging information

updateLoggingValues

```
public abstract void updateLoggingValues()
```

Update logging.MDC with mediaStream logging information

clearLoggingValues

```
public abstract void clearLoggingValues()
```

length

```
public abstract double length()
```

Get length/duration (seconds) of media file pointed to by mediaStream

Returns:

length (seconds)

size

```
public abstract long size()
```

Get size (bytes) of media file pointed to by mediaStream

Returns:

size (bytes)

getExt

```
public abstract String getExt()
```

Get media file extension

Returns:

media file extension

setExt

```
public abstract void setExt(String ext)
```

Set media file extension

Parameters:

ext

clear

```
public abstract void clear()
```

Delete media file pointed to by this mediaStream (be careful)

(continued from last page)

isSendPlayStopLogEvent

```
public abstract boolean isSendPlayStopLogEvent()
```

Get need to send a log event for stop

Returns:

need to send a log event for stop

setSendPlayStopLogEvent

```
public abstract void setSendPlayStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for stop

Parameters:

sendPlayStopLogEvent - need to send a log event for stop

isSendRecordStopLogEvent

```
public abstract boolean isSendRecordStopLogEvent()
```

Get need to send a log event for recording

Returns:

need to send a log event for stop

setSendRecordStopLogEvent

```
public abstract void setSendRecordStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for recording

Parameters:

sendPlayStopLogEvent - need to send a log event for stop

isSendPublishStopLogEvent

```
public abstract boolean isSendPublishStopLogEvent()
```

Get need to send a log event for publishing

Returns:

need to send a log event for stop

setSendPublishStopLogEvent

```
public abstract void setSendPublishStopLogEvent(boolean sendPlayStopLogEvent)
```

Set need to send a log event for publishing

Parameters:

sendPlayStopLogEvent - need to send a log event for stop

getAccess

```
public abstract boolean[] getAccess(IClient client,  
String name)
```


(continued from last page)

Get the read/write access to this stream for this client

Parameters:

client - client
name - stream name

Returns:

array of booleans read[0], write[1]

getMetaDataProvider

```
public abstract IMediaStreamMetaDataProvider getMetaDataProvider()
```

Get the metaData provider

Returns:

metaData provider

setMetaDataProvider

```
public abstract void setMetaDataProvider(IMediaStreamMetaDataProvider  
metaDataProvider)
```

Set the metaData provider

Parameters:

metaDataProvider - metaData provider

getHeaderSize

```
public abstract int getHeaderSize()
```

Get the last packet header size (debugging)

Returns:

last packet header size

setHeaderSize

```
public abstract void setHeaderSize(int headerSize)
```

Set the last packet header size (debugging)

Parameters:

headerSize - last packet header size

getAudioCodecConfigPacket

```
public abstract AMFPacket getAudioCodecConfigPacket(long timecode)
```

Get audio codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode of the packet to which you want to get the codec config information

Returns:

audio codec configuration packet (needed for H.264/AAC playback)

addAudioCodecConfigPacket

```
public abstract void addAudioCodecConfigPacket(long timecode,  
        AMFPacket packet)
```

Set audio codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode in milliseconds of first packet that uses this timecode
packet - audio codec configuration packet (needed for H.264/AAC playback)

getVideoCodecConfigPacket

```
public abstract AMFPacket getVideoCodecConfigPacket(long timecode)
```

Get video codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode of the packet to which you want to get the codec config information

Returns:

video codec configuration packet (needed for H.264/AAC playback)

addVideoCodecConfigPacket

```
public abstract void addVideoCodecConfigPacket(long timecode,  
        AMFPacket packet)
```

Set video codec configuration packet (needed for H.264/AAC playback)

Parameters:

timecode - timecode in milliseconds of first packet that uses this timecode
packet - video codec configuration packet (needed for H.264/AAC playback)

getRTPStream

```
public abstract RTPStream getRTPStream()
```

Get the RTP based stream this stream is associated with

Returns:

RTP based stream this stream is associated with

setRTPStream

```
public abstract void setRTPStream(RTPStream rtpStream)
```

Set the RTP based stream this stream is associated with

Parameters:

rtpStream - RTP based stream this stream is associated with

flush

```
public abstract void flush()
```

Force publishing packets to be flushed from the input buffers to the output buffers

startAudioPacket

```
public abstract void startAudioPacket()
```

Called when an audio packet is first being populated with data

startVideoPacket

```
public abstract void startVideoPacket()
```

Called when a video packet is first being populated with data

startDataPacket

```
public abstract void startDataPacket()
```

Called when a data packet is first being populated with data

getLiveStreamPacketizerList

```
public abstract String getLiveStreamPacketizerList()
```

Get the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)

Returns:

comma separated list of LiveStreamPacketizers names

setLiveStreamPacketizerList

```
public abstract void setLiveStreamPacketizerList(String liveStreamPacketizerList)
```

Set the comma separated list of LiveStreamPacketizers names being used by this stream (see conf/LiveStreamPacketizers.xml)

Parameters:

liveStreamPacketizerList - comma separated list of LiveStreamPacketizers names

getLiveStreamTranscoderList

```
public abstract String getLiveStreamTranscoderList()
```

Get the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)

Returns:

comma separated list of LiveStreamTranscoders names

setLiveStreamTranscoderList

```
public abstract void setLiveStreamTranscoderList(String liveStreamTranscoderList)
```

Set the comma separated list of LiveStreamTranscoders names being used by this stream (see conf/LiveStreamTranscoders.xml)

Parameters:

liveStreamTranscoderList - comma separated list of LiveStreamTranscoders names

(continued from last page)

getLiveStreamPacketizer

```
public abstract ILiveStreamPacketizer getLiveStreamPacketizer(String name)
```

Get the LiveStreamPacketizer interface to a stream by name

Parameters:

name - LiveStreamPacketizer name

Returns:

LiveStreamPacketizer interface

getDvrRecorderList

```
public abstract String getDvrRecorderList()
```

Get the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)

Returns:

comma separated list of DVR Recorder names

setDvrRecorderList

```
public abstract void setDvrRecorderList(String recorderList)
```

Set the comma separated list of DVR Recorder names being used by this stream (see conf/Dvr.xml)

Parameters:

recorderList - comma separated list of DVR Recorder names

getDvrRecorder

```
public abstract ILiveStreamDvrRecorder getDvrRecorder(String name)
```

Get the DVR Recorder interface to a stream by name

Parameters:

name - DVR Recorder name

Returns:

DVR Recorder interface

getUniqueStreamIdStr

```
public abstract String getUniqueStreamIdStr()
```

Get a string that uniquely identifies this stream

Returns:

unique stream identifier

getHTTPStreamerSession

```
public abstract IHTTPStreamerSession getHTTPStreamerSession()
```

Get the HTTPStreamer session associated with this stream

Returns:

(continued from last page)

HTTPStreamer session associated with this stream

setHTTPStreamerSession

```
public abstract void setHTTPStreamerSession(IHTTPStreamerSession httpStreamerSession)
```

Set the HTTPStreamer session associated with this stream

Parameters:

httpStreamerSession - HTTPStreamer session associated with this stream

getElapsedTime

```
public abstract ElapsedTimer getElapsedTime()
```

Get the interface to the elapse timer

Returns:

interface to the elapse timer

getLiveStreamPacketizer

```
public abstract String getLiveStreamPacketizer()
```

Get the live stream packetizer that this stream is using

Returns:

live stream packetizer

setLiveStreamPacketizer

```
public abstract void setLiveStreamPacketizer(String liveStreamPacketizer)
```

Set the live stream packetizer that this stream is using

Parameters:

liveStreamPacketizer - live stream packetizer

getLiveStreamRepeater

```
public abstract String getLiveStreamRepeater()
```

Get the live stream repeater name for the stream

Returns:

live stream repeater name

setLiveStreamRepeater

```
public abstract void setLiveStreamRepeater(String liveStreamRepeater)
```

Set the live stream repeater name for the stream

Parameters:

liveStreamRepeater - live stream repeater name

(continued from last page)

initLiveStreamRepeating

```
public abstract void initLiveStreamRepeating(String liveStreamPacketizer,  
String liveStreamRepeater)
```

Initialize this stream for live stream repeating

Parameters:

liveStreamPacketizer - live stream packetizer

liveStreamRepeater - live stream repeater name

getPublishVideoCodecId

```
public abstract int getPublishVideoCodecId()
```

Get the codec id of the most recently published video packet

Returns:

codec id of the most recently published video packet

setPublishVideoCodecId

```
public abstract void setPublishVideoCodecId(int publishVideoCodecId)
```

Set the codec id of the most recently published video packet

Parameters:

publishVideoCodecId - codec id of the most recently published video packet

getPublishAudioCodecId

```
public abstract int getPublishAudioCodecId()
```

Get the codec id of the most recently published audio packet

Returns:

codec id of the most recently published audio packet

setPublishAudioCodecId

```
public abstract void setPublishAudioCodecId(int publishAudioCodecId)
```

Set the codec id of the most recently published audio packet

Parameters:

publishAudioCodecId - codec id of the most recently published audio packet

isPublishStreamReady

```
public abstract boolean isPublishStreamReady(boolean checkAudio,  
boolean checkVideo)
```

Returns true if the publishing stream contains enough video/audio data to start playback

Parameters:

checkAudio - check audio stream

checkVideo - check video stream

Returns:

(continued from last page)

true if the publishing stream contains enough video/audio data to start playback

getContextStr

```
public abstract String getContextStr()
```

Returns the stream context string in the form [application]/[appInstance]/[streamName].

Returns:

stream context string

isMediaCasterPlay

```
public abstract boolean isMediaCasterPlay()
```

Is MediaCaster play enabled (if true, will trigger MediaCaster startup)

Returns:

true if MediaCaster play enabled

setMediaCasterPlay

```
public abstract void setMediaCasterPlay(boolean isMediaCasterPlay)
```

Is MediaCaster play enabled (if true, will trigger MediaCaster startup)

Parameters:

isMediaCasterPlay - true if MediaCaster play enabled

isMergeOnMetadata

```
public abstract boolean isMergeOnMetadata()
```

If true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

Returns:

true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

setMergeOnMetadata

```
public abstract void setMergeOnMetadata(boolean mergeOnMetadata)
```

If true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

Parameters:

mergeOnMetadata - true, merge incoming onMetadata events with the current onMetadata event data. If false, replace.

getDvrRecorder

```
public abstract String getDvrRecorder()
```

Get the DVR Recorder for this stream

Returns:

DVR Recorder

(continued from last page)

getDvrRepeater

```
public abstract String getDvrRepeater()
```

Get the DVR repeater name for this stream

Returns:

repeater name

setDvrRecorder

```
public abstract void setDvrRecorder(String recorderName)
```

Set the DVR Recorder that this stream is using

Parameters:

recorderName - DVR Recorder

removeDvrRecorder

```
public abstract ILiveStreamDvrRecorder removeDvrRecorder(String name)
```

Remove a live stream dvr by name

Parameters:

name - dvr name

Returns:

live stream dvr

putDvrRecorder

```
public abstract void putDvrRecorder(String name,  
    ILiveStreamDvrRecorder dvr)
```

Add a live stream dvr to this stream

Parameters:

name - dvr name

dvr - live stream dvr

getLiveStreamTranscoders

```
public abstract java.util.Map getLiveStreamTranscoders()
```

Get the list of transcoders for this stream.

Returns:

list of transcoders for this stream

getLiveStreamTranscoder

```
public abstract ILiveStreamTranscoder getLiveStreamTranscoder(String name)
```

Get a live stream transcoder for this stream by name

Parameters:

name - transcoder name

(continued from last page)

Returns:

live stream transcoder

removeLiveStreamTranscoder

```
public abstract ILiveStreamTranscoder removeLiveStreamTranscoder(String name)
```

Remove a live stream transcoder by name

Parameters:

name - transcoder name

Returns:

live stream transcoder

putLiveStreamTranscoder

```
public abstract void putLiveStreamTranscoder(String name,  
        ILiveStreamTranscoder liveStreamTranscoder)
```

Add a live stream transcoder to this stream

Parameters:

name - transcoder name

liveStreamTranscoder - live stream transcoder

isTranscodeResult

```
public abstract boolean isTranscodeResult()
```

Is this stream the result of a transcode operation.

Returns:

true if stream the result of a transcode operation

getTranscoderSessionDestination

```
public abstract TranscoderSessionDestination getTranscoderSessionDestination()
```

If stream is result of transcode get the transcoder stream session for this stream.

Returns:

transcoder stream session

setTranscodeResult

```
public abstract void setTranscodeResult(boolean isTranscodeResult)
```

Is this stream the result of a transcode operation.

Parameters:

isTranscodeResult - true if stream the result of a transcode operation

addVideoH264SEIListener

```
public abstract void addVideoH264SEIListener(IMediaStreamH264SEINotify  
h264SEIListener)
```

(continued from last page)

Add an H.264 SEI listener. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Parameters:

h264SEIListener - H.264 SEI listener

removeVideoH264SEIListener

```
public abstract void removeVideoH264SEIListener(IMediaStreamH264SEINotify
h264SEIListener)
```

Remove an H.264 SEI listener. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Parameters:

h264SEIListener - H.264 SEI listener

isVideoH264SEIListenerEmpty

```
public abstract boolean isVideoH264SEIListenerEmpty()
```

Is H.264 SEI listener list empty. This listener will be notified of all incoming H.264 video packets and has the ability to read and/or modify SEI section of the video frame.

Returns:

true if H.264 SEI listener list empty

notifyVideoH264Packet

```
public abstract void notifyVideoH264Packet(AMFPacket packet,
com.wowza.wms.media.h264.H264SEIMessages seiMessages)
```

Notify H.264 SEI listener.

Parameters:

packet - AMF Packet
seiMessages - seiMessages

addCalbackListener

```
public abstract void addCalbackListener(IMediaStreamCallback callbackListener)
```

Add a callback listener to listen for all stream metadata

Parameters:

callbackListener

removeCalbackListener

```
public abstract void removeCalbackListener(IMediaStreamCallback callbackListener)
```

Remove a callback listener to listen for all stream metadata

Parameters:

callbackListener

addLivePacketListener

```
public abstract void addLivePacketListener(IMediaStreamLivePacketNotify listener)
```

(continued from last page)

Add a listener to receiver notification of new live AMF packets

Parameters:

listener - listener

removeLivePacketListener

```
public abstract void removeLivePacketListener(IMediaStreamLivePacketNotify listener)
```

Remove a listener to receiver notification of new live AMF packets

Parameters:

listener - listener

notifyLivePacket

```
public abstract void notifyLivePacket(AMFPacket packet)
```

Notify new live AMF packet

Parameters:

packet - new live AMF packet

isPublisherStream

```
public abstract boolean isPublisherStream()
```

Returns true if stream was created by stream publisher API.

Returns:

true if stream was created by stream publisher API

setPublisherStream

```
public abstract void setPublisherStream(boolean isPublisherStream)
```

Set stream was created by stream publisher.

Parameters:

isPublisherStream - true if stream was created by stream publisher API

getPublishFrameCounts

```
public abstract long getPublishFrameCounts(long[] counts)
```

Get the total number of frames received for an incoming live stream. See PACKET_COUNTS_* for the index into the array. The array passed in should be PACKET_COUNTS_SIZE.

Returns:

total total number of frames received (audio + video + data)

getPublishFrameCountVideoKey

```
public abstract long getPublishFrameCountVideoKey()
```

Get the total number of video key frames received for an incoming live stream.

Returns:

(continued from last page)

total number of video key frames received

getPublishFrameCountVideo

```
public abstract long getPublishFrameCountVideo()
```

Get the total number of video frames received for an incoming live stream.

Returns:

total number of video frames received

getPublishFrameCountAudio

```
public abstract long getPublishFrameCountAudio()
```

Get the total number of audio frames received for an incoming live stream.

Returns:

total number of audio frames received

getPublishFrameCountData

```
public abstract long getPublishFrameCountData()
```

Get the total number of data frames received for an incoming live stream.

Returns:

total number of data frames received

getPublishBitrateVideo

```
public abstract int getPublishBitrateVideo()
```

Get the video bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Returns:

video bitrate of an incoming live published stream (bits per second)

getPublishFramerateVideo

```
public abstract double getPublishFramerateVideo()
```

Get the video framerate of an incoming live published stream (frames per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Returns:

video framerate

getPublishKeyFrameIntervalsVideo

```
public abstract int[] getPublishKeyFrameIntervalsVideo()
```

Get the last n key frame intervals for an incoming publish stream (frames per GOP), Most recent GOPs are first in the list. -1 indicates the end of the list.

Returns:

last n key frame intervals for an incoming publish stream (frames per GOP)

getPublishBitrateAudio

```
public abstract int getPublishBitrateAudio()
```

Get the audio bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain audio.

Returns:

audio bitrate of an incoming live published stream (bits per second)

getPublishBitrateVideo

```
public abstract int getPublishBitrateVideo(int source)
```

Get the video bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Parameters:

source - source of bitrate (see IMediaStream.PUBLISH_BITRATE_SOURCE_*)

Returns:

video bitrate of an incoming live published stream (bits per second)

getPublishFramerateVideo

```
public abstract double getPublishFramerateVideo(int source)
```

Get the video framerate of an incoming live published stream (frames per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain video.

Parameters:

source - source of framerate (see IMediaStream.PUBLISH_FRAMERATE_SOURCE_*)

Returns:

video frame rate

getPublishBitrateAudio

```
public abstract int getPublishBitrateAudio(int source)
```

Get the audio bitrate of an incoming live published stream (bits per second). Value of -1 indicates still measuring bandwidth. Value of 0 indicates the stream does not contain audio.

Parameters:

source - source of bitrate (see IMediaStream.PUBLISH_BITRATE_SOURCE_*)

Returns:

audio bitrate of an incoming live published stream (bits per second)

getTranscoderEncoderStreamInfo

```
public abstract com.wowza.wms.transcoder.encoder.TranscoderEncoderStreamInfo  
getTranscoderEncoderStreamInfo()
```

Get the transcoder encoder context information for this stream. This object will be available if this stream is an encoder stream root.

Returns:

(continued from last page)

transcoder encoder context information

setTranscoderEncoderStreamInfo

```
public abstract void  
setTranscoderEncoderStreamInfo(com.wowza.wms.transcoder.encoder.TranscoderEncoderStreamInfo transcoderEncoderStreamInfo)
```

Set the transcoder encoder context information for this stream. This object will be available if this stream is an encoder stream root.

Parameters:

transcoderEncoderStreamInfo - transcoder encoder context information

isTranscoderEncoderStreamRoot

```
public abstract boolean isTranscoderEncoderStreamRoot()
```

True if this stream object is a transcoder encoder stream root.

Returns:

True if this stream object is a transcoder encoder stream root

setIsWebRTC

```
public abstract void setIsWebRTC(boolean isWebRTC)
```

getIsWebRTC

```
public abstract boolean getIsWebRTC()
```

com.wowza.wms.stream Interface IMediaStreamActionNotify

All Subinterfaces:

[IMediaStreamActionNotify2](#), [IMediaStreamActionNotify3](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#)

public interface **IMediaStreamActionNotify**
extends

IMediaStreamActionNotify: listener interface used by IMediaStream addClientListener

Method Summary

abstract void	onPause (IMediaStream stream, boolean isPause, double location) Triggered on mediaStream pause
abstract void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset) Triggered on mediaStream play
abstract void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend) Triggered on mediaStream publish
abstract void	onSeek (IMediaStream stream, double location) Triggered on mediaStream seek
abstract void	onStop (IMediaStream stream) Triggered on mediaStream stop
abstract void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend) Triggered on mediaStream unpublish

Methods

onPlay

```
public abstract void onPlay(IMediaStream stream,  
    String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

Triggered on mediaStream play

Parameters:

stream - mediaStream
streamName - streamName
playStart - playStart offset
playLen - playLen

(continued from last page)

playReset - reset playlist

onPublish

```
public abstract void onPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Triggered on mediaStream publish

Parameters:

stream - mediaStream
streamName - streamName
isRecord - recording stream
isAppend - appending to file

onUnPublish

```
public abstract void onUnPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

Triggered on mediaStream unpublish

Parameters:

stream - mediaStream
streamName - streamName
isRecord - recording stream
isAppend - appending to file

onPause

```
public abstract void onPause(IMediaStream stream,  
    boolean isPause,  
    double location)
```

Triggered on mediaStream pause

Parameters:

stream - mediaStream
isPause - pause or unpause
location - location (milliseconds)

onSeek

```
public abstract void onSeek(IMediaStream stream,  
    double location)
```

Triggered on mediaStream seek

Parameters:

stream - mediaStream
location - location (milliseconds)

onStop

```
public abstract void onStop(IMediaStream stream)
```


(continued from last page)

Triggered on mediaStream stop

Parameters:

stream - mediaStream

com.wowza.wms.stream Interface IMediaStreamActionNotify2

All Superinterfaces:

[IMediaStreamActionNotify](#)

All Subinterfaces:

[IMediaStreamActionNotify3](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#)

public interface **IMediaStreamActionNotify2**
extends [IMediaStreamActionNotify](#)

Method Summary

abstract void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket) Triggered when a published streams metadata is set or changes
abstract void	onPauseRaw (IMediaStream stream, boolean isPause, double location) Triggered on mediaStream pauseRaw.

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods

onMetaData

public abstract void **onMetaData**([IMediaStream](#) stream, [AMFPacket](#) metaDataPacket)

Triggered when a published streams metadata is set or changes

onPauseRaw

public abstract void **onPauseRaw**([IMediaStream](#) stream, boolean isPause, double location)

Triggered on mediaStream pauseRaw. The pauseRaw method is called when a pause occurs in the player.

Parameters:

stream - mediaStream
isPause - pause or unpause
location - location (milliseconds)

com.wowza.wms.stream Interface IMediaStreamActionNotify3

All Superinterfaces:

[IMediaStreamActionNotify2](#), [IMediaStreamActionNotify](#)

All Known Implementing Classes:

[MediaStreamActionNotifyBase](#), [MediaStreamActionNotify3Base](#)

public interface **IMediaStreamActionNotify3**
extends [IMediaStreamActionNotify2](#)

Method Summary

abstract void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Triggered when publishing stream receives codec information.
abstract void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Triggered when publishing stream receives codec information.

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods

onCodecInfoVideo

public abstract void **onCodecInfoVideo**([IMediaStream](#) stream,
[com.wowza.wms.media.model.MediaCodecInfoVideo](#) codecInfoVideo)

Triggered when publishing stream receives codec information.

Parameters:

stream - mediaStream

codecInfoVideo - video codec information

onCodecInfoAudio

public abstract void **onCodecInfoAudio**([IMediaStream](#) stream,
[com.wowza.wms.media.model.MediaCodecInfoAudio](#) codecInfoAudio)

Triggered when publishing stream receives codec information.

Parameters:

stream - mediaStream

(continued from last page)

codecInfoAudio - video codec information

com.wowza.wms.stream

Interface IMediaStreamCallback

public interface **IMediaStreamCallback**
extends

IMediaStreamCallback: callback interface used by IMediaStream registerCallback, registerOnStatus, registerOnPlayStatus

Method Summary	
abstract void	<div><div>onCallback(IMediaStream stream, com.wowza.wms.request.RequestFunction function, AMFDataList params)</div><div>Triggered on callback event</div></div>

Methods

onCallback

```
public abstract void onCallback(IMediaStream stream,  
                                com.wowza.wms.request.RequestFunction function,  
                                AMFDataList params)
```

Triggered on callback event

Parameters:

- stream - mediaStream
- function - function that triggered callback
- params - function parameters

com.wowza.wms.stream Interface IMediaStreamFileMapper

public interface **IMediaStreamFileMapper**
extends

Interface for mapping a IMediaStream to the underlying file system. Implement this interface and set your class using `IApplicationInstance.setStreamFileMapper(IMediaStreamFileMapper streamFileMapper)`. Your class will then be called each time a stream needs to be mapped to the underlying file system.

Method Summary

abstract java.io.File	streamToFileForRead (IMediaStream stream) Get the File object to read from a stream (get stream name, ext and query from stream object)
abstract java.io.File	streamToFileForRead (IMediaStream stream, String name, String ext, String query) Get the File object to read from a stream (specify name, ext and query)
abstract java.io.File	streamToFileForWrite (IMediaStream stream) Get the File object to write to a stream (get stream name, ext and query from stream object)
abstract java.io.File	streamToFileForWrite (IMediaStream stream, String name, String ext, String query) Get the File object to write to a stream (specify name, ext and query)

Methods

streamToFileForRead

```
public abstract java.io.File streamToFileForRead(IMediaStream stream,  
    String name,  
    String ext,  
    String query)
```

Get the File object to read from a stream (specify name, ext and query)

Parameters:

stream - stream
name - stream name
ext - stream prefix (Ex. mp4:)
query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

streamToFileForRead

```
public abstract java.io.File streamToFileForRead(IMediaStream stream)
```

Get the File object to read from a stream (get stream name, ext and query from stream object)

Parameters:

(continued from last page)

stream - stream

Returns:

resultant File object

streamToFileForWrite

```
public abstract java.io.File streamToFileForWrite(IMediaStream stream,  
    String name,  
    String ext,  
    String query)
```

Get the File object to write to a stream (specify name, ext and query)

Parameters:

stream - stream

name - stream name

ext - stream prefix (Ex. mp4:)

query - query part of stream name (Ex. mystream?param1=value1)

Returns:

resultant File object

streamToFileForWrite

```
public abstract java.io.File streamToFileForWrite(IMediaStream stream)
```

Get the File object to write to a stream (get stream name, ext and query from stream object)

Parameters:

stream - stream

Returns:

resultant File object

com.wowza.wms.stream

Interface IMediaStreamH264SEINotify

public interface IMediaStreamH264SEINotify

extends

Method Summary	
abstract void	onVideoH264Packet (IMediaStream stream, AMFPacket packet, com.wowza.wms.media.h264.H264SEIMessages seiMessages)

Methods

onVideoH264Packet

public abstract void **onVideoH264Packet**([IMediaStream](#) stream, [AMFPacket](#) packet, [com.wowza.wms.media.h264.H264SEIMessages](#) seiMessages)

com.wowza.wms.stream**Interface IMediaStreamLivePacketNotify**

All Known Implementing Classes:

[MediaStreamLivePacketNotifyBase](#)

public interface IMediaStreamLivePacketNotify

extends

Method Summary

abstract void	onLivePacket (IMediaStream stream, AMFPacket packet)
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Methods**onLivePacket****public abstract void onLivePacket**([IMediaStream](#) stream,
[AMFPacket](#) packet)

com.wowza.wms.stream

Interface IMediaStreamMediaCaster

public interface IMediaStreamMediaCaster

extends

IMediaStreamMediaCaster: Internal use

Method Summary	
abstract IMediaCaster	getMediaCaster()
abstract void	setMediaCasterItem(MediaCasterItem mediaCasterItem)

Methods

setMediaCasterItem

public abstract void **setMediaCasterItem**([MediaCasterItem](#) mediaCasterItem)

getMediaCaster

public abstract [IMediaCaster](#) **getMediaCaster**()

com.wowza.wms.stream Interface IMediaStreamMetaDataProvider

public interface **IMediaStreamMetaDataProvider**
extends

IMediaStreamMetaDataProvider: Live streaming metadata provider.

Method Summary

abstract void	<u>onStreamStart</u> (java.util.List metaDataList, long timecode) Called to get the onMetadata data at a particular point in time in the stream
---------------	--

Methods

onStreamStart

public abstract void **onStreamStart**(java.util.List metaDataList,
long timecode)

Called to get the onMetadata data at a particular point in time in the stream

Parameters:

metaDataList - list of onMetadata data (should always be one item in list)
timecode - timecode in milliseconds

com.wowza.wms.stream Interface IMediaStreamNameAliasProvider

All Subinterfaces:

[IMediaStreamNameAliasProvider2](#), [IMediaStreamNameAliasProvider3](#)

All Known Implementing Classes:

[MediaStreamNameAliasProviderBase](#)

public interface **IMediaStreamNameAliasProvider**
extends

IMediaStreamNameAliasProvider: alias provider interface. See `IApplication.setStreamNameAliasProvider(IMediaStreamNameAliasProvider streamNameAliasProvider)`. See updated interface `IMediaStreamNameAliasProvider2` which provides more complete context information.

Method Summary

abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name) Called to resolve a play alias
abstract String	resolveStreamAlias (IApplicationInstance appInstance, String name) Called to resolve a stream alias

Methods

resolvePlayAlias

public abstract String **resolvePlayAlias**([IApplicationInstance](#) appInstance, String name)

Called to resolve a play alias

Parameters:

appInstance - applicationInstance
name - stream name

Returns:

resultant name, null if want to block playback

resolveStreamAlias

public abstract String **resolveStreamAlias**([IApplicationInstance](#) appInstance, String name)

Called to resolve a stream alias

Parameters:

appInstance - applicationInstance
name - stream name

Returns:

(continued from last page)

resultant name, null if want to block playback

com.wowza.wms.stream Interface IMediaStreamNameAliasProvider2

All Superinterfaces:

[IMediaStreamNameAliasProvider](#)

All Subinterfaces:

[IMediaStreamNameAliasProvider3](#)

All Known Implementing Classes:

[MediaStreamNameAliasProviderBase](#)

public interface **IMediaStreamNameAliasProvider2**
extends [IMediaStreamNameAliasProvider](#)

IMediaStreamNameAliasProvider: alias provider interface. See

`IApplication.setStreamNameAliasProvider(IMediaStreamNameAliasProvider streamNameAliasProvider).`

Method Summary

abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, IClient client) Resolve play alias for RTMP streaming
abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, IHTTPStreamerSession httpSession) Resolve play alias for HTTP streaming.
abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, ILiveStreamPacketizer liveStreamPacketizer) Resolve play alias for live stream packetizer
abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, RTPSession rtpSession) Resolve play alias for RTSP/RTP streaming
abstract String	resolveStreamAlias (IApplicationInstance appInstance, String name, IMediaCaster mediaCaster) Resolve stream alias for MediaCaster

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods

resolvePlayAlias

```
public abstract String resolvePlayAlias(IApplicationInstance appInstance,
    String name,
    IClient client)
```

Resolve play alias for RTMP streaming

(continued from last page)

Parameters:

appInstance - application instance
name - stream name
client - client interface

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public abstract String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IHTTPStreamerSession httpSession)
```

Resolve play alias for HTTP streaming. This callback may be called when there is not a valid HTTP session. In this case a phantom HTTP session will be created and will be populated with information from the underlying HTTP request (such as IP address and query string) but the session Id will be null.

Parameters:

appInstance - application instance
name - name
httpSession - HTTP session

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public abstract String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    RTPSession rtpSession)
```

Resolve play alias for RTSP/RTP streaming

Parameters:

appInstance - application instance
name - name
rtpSession - RTP session

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public abstract String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

Resolve play alias for live stream packetizer

Parameters:

appInstance - application instance
name - name
liveStreamPacketizer - live stream packetizer

Returns:

resultant name, null if want to block playback

(continued from last page)

resolveStreamAlias

```
public abstract String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IMediaCaster mediaCaster)
```

Resolve stream alias for MediaCaster

Parameters:

appInstance - application instance
name - name
mediaCaster - media caster

Returns:

resultant name, null if want to block playback

com.wowza.wms.stream Interface IMediaStreamNameAliasProvider3

All Superinterfaces:

[IMediaStreamNameAliasProvider2](#), [IMediaStreamNameAliasProvider](#)

All Known Implementing Classes:

[MediaStreamNameAliasProviderBase](#)

public interface **IMediaStreamNameAliasProvider3**
extends [IMediaStreamNameAliasProvider2](#)

IMediaStreamNameAliasProvider3: alias provider interface. See [IApplication.setStreamNameAliasProvider\(IMediaStreamNameAliasProvider streamNameAliasProvider\)](#).

Method Summary

abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, IWebSocketSession websocket) Resolve play alias for IWebSocketSession
abstract String	resolvePlayAlias (IApplicationInstance appInstance, String name, com.wowza.wms.webrtc.model.WebRTCSession webrtcSession) Resolve play alias for WebRTCSession
abstract String	resolveStreamAlias (IApplicationInstance appInstance, String name, IWebSocketSession websocket) Resolve stream alias for IWebSocketSession
abstract String	resolveStreamAlias (IApplicationInstance appInstance, String name, com.wowza.wms.webrtc.model.WebRTCSession webrtcSession) Resolve stream alias for WebRTCSession

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider2](#)

[resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#),
[resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods

resolvePlayAlias

public abstract String **resolvePlayAlias**([IApplicationInstance](#) appInstance, String name, [IWebSocketSession](#) websocket)

Resolve play alias for IWebSocketSession

Parameters:

(continued from last page)

appInstance - application instance
name - name
IWebSocketSession - session

Returns:

resultant name, null if want to block playback

resolveStreamAlias

```
public abstract String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IWebSocketSession webSocket)
```

Resolve stream alias for IWebSocketSession

Parameters:

appInstance - application instance
name - name
IWebSocketSession - session

Returns:

resultant name, null if want to block playback

resolvePlayAlias

```
public abstract String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
```

Resolve play alias for WebRTCSession

Parameters:

appInstance - application instance
name - name
WebRTCSession - session

Returns:

resultant name, null if want to block playback

resolveStreamAlias

```
public abstract String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webRTCSession)
```

Resolve stream alias for WebRTCSession

Parameters:

appInstance - application instance
name - name
WebRTCSession - session

Returns:

resultant name, null if want to block playback

com.wowza.wms.stream Interface IMediaStreamNotify

public interface **IMediaStreamNotify**
extends

IMediaStreamNotify: listener interface used by IApplicationInstance addMediaStreamListener

Method Summary

abstract void	onMediaStreamCreate (IMediaStream stream) Triggered when mediaStream created
abstract void	onMediaStreamDestroy (IMediaStream stream) Triggered when mediaStream destroyed

Methods

onMediaStreamCreate

public abstract void **onMediaStreamCreate**([IMediaStream](#) stream)

Triggered when mediaStream created

Parameters:

stream - mediaStream

onMediaStreamDestroy

public abstract void **onMediaStreamDestroy**([IMediaStream](#) stream)

Triggered when mediaStream destroyed

Parameters:

stream - mediaStream

com.wowza.wms.stream Interface IMediaStreamPlay

public interface **IMediaStreamPlay**
extends

IMediaStreamPlay: public interface of mediaStreamPlayer object.

Field Summary

public static final	<u>PAUSE_PAUSE</u> Pause type: pause Value: 1
public static final	<u>PAUSE_PLAY</u> Pause type: play Value: 0
public static final	<u>PAUSE_TOGGLE</u> Pause type: toggle Value: -1
public static final	<u>PLAYSIZES_AUDIO_BYTES</u> IMediaReader sizes array: audio byte count Value: 0
public static final	<u>PLAYSIZES_AUDIO_COUNT</u> IMediaReader sizes array: audio packet count Value: 1
public static final	<u>PLAYSIZES_DATA_BYTES</u> IMediaReader sizes array: data byte count Value: 4
public static final	<u>PLAYSIZES_DATA_COUNT</u> IMediaReader sizes array: data packet count Value: 5
public static final	<u>PLAYSIZES_LOSS_BYTES</u> IMediaReader sizes array: data byte count Value: 6
public static final	<u>PLAYSIZES_LOSS_COUNT</u> IMediaReader sizes array: data packet count Value: 7
public static final	<u>PLAYSIZES_SIZE</u> IMediaReader sizes array: size of sizes array long[PLAYSIZES_SIZE] Value: 8
public static final	<u>PLAYSIZES_VIDEO_BYTES</u> IMediaReader sizes array: video byte count Value: 2

public static final	PLAYSIZES_VIDEO_COUNT IMediaReader sizes array: video packet count Value: 3
public static final	PLAYSTATUSTYPE_COMPLETE onPlayStatus type: complete Value: 2
public static final	PLAYSTATUSTYPE_STOP onPlayStatus type: stop Value: 3
public static final	PLAYSTATUSTYPE_SWITCH onPlayStatus type: switch Value: 1

Method Summary

abstract void	close() Close mediaStreamPlay
abstract IMediaStream	getParent() Get the parent media stream object
abstract void	init (IMediaStream parent, MediaStreamMap streams) Initialize mediaStreamPlayer
abstract void	initLiveStreamRepeating (String liveStreamPacketizer, String liveStreamRepeater) Initialize this stream for live stream repeating
abstract void	interruptPlay() Interrupt play to perform operation.
abstract double	length() Get stream length/seconds (seconds)
abstract void	pause (int pauseType, long timecode) pause mediaPlayStream
abstract void	pauseRaw (int pauseType, long timecode) pauseRaw mediaPlayStream
abstract boolean	play() Return true if there are packets to play
abstract int	play (java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes) Write new packets or play packets
abstract void	reset (boolean isReset) Reset mediaStreamPlayer
abstract void	resetNoLookup() Reset but do not lookup current position in live stream
abstract void	seek (int location) seek mediaPlayStream

abstract void	<u>setBufferTime</u> (int bufferTime) Set buffer time
abstract void	<u>setName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Set mediaPlayStream name, extension, query string, play start, play len, play reset
abstract void	<u>shutdown</u> () Shutdown mediaStreamPlayer
abstract long	<u>size</u> () Get stream media file size
abstract void	<u>startPlay</u> () Start playing stream
abstract void	<u>stopName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Stop stream name
abstract void	<u>switchName</u> (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition) Switch to stream name
abstract void	<u>switchPlay</u> ()
abstract void	<u>updateLoggingValues</u> () Update internal logging values

Fields

PAUSE_PAUSE

public static final int **PAUSE_PAUSE**

Pause type: pause
Constant value: **1**

PAUSE_TOGGLE

public static final int **PAUSE_TOGGLE**

Pause type: toggle
Constant value: **-1**

PAUSE_PLAY

public static final int **PAUSE_PLAY**

Pause type: play
Constant value: **0**

PLAYSTATUSTYPE_SWITCH

public static final int **PLAYSTATUSTYPE_SWITCH**

onPlayStatus type: switch

(continued from last page)

Constant value: **1**

PLAYSTATUSTYPE_COMPLETE

```
public static final int PLAYSTATUSTYPE_COMPLETE
```

onPlayStatus type: complete
Constant value: **2**

PLAYSTATUSTYPE_STOP

```
public static final int PLAYSTATUSTYPE_STOP
```

onPlayStatus type: stop
Constant value: **3**

PLAYSIZES_AUDIO_BYTES

```
public static final int PLAYSIZES_AUDIO_BYTES
```

IMediaReader sizes array: audio byte count
Constant value: **0**

PLAYSIZES_AUDIO_COUNT

```
public static final int PLAYSIZES_AUDIO_COUNT
```

IMediaReader sizes array: audio packet count
Constant value: **1**

PLAYSIZES_VIDEO_BYTES

```
public static final int PLAYSIZES_VIDEO_BYTES
```

IMediaReader sizes array: video byte count
Constant value: **2**

PLAYSIZES_VIDEO_COUNT

```
public static final int PLAYSIZES_VIDEO_COUNT
```

IMediaReader sizes array: video packet count
Constant value: **3**

PLAYSIZES_DATA_BYTES

```
public static final int PLAYSIZES_DATA_BYTES
```

IMediaReader sizes array: data byte count
Constant value: **4**

PLAYSIZES_DATA_COUNT

```
public static final int PLAYSIZES_DATA_COUNT
```

IMediaReader sizes array: data packet count
Constant value: **5**

(continued from last page)

PLAYSIZES_LOSS_BYTES

```
public static final int PLAYSIZES_LOSS_BYTES
```

IMediaReader sizes array: data byte count
Constant value: **6**

PLAYSIZES_LOSS_COUNT

```
public static final int PLAYSIZES_LOSS_COUNT
```

IMediaReader sizes array: data packet count
Constant value: **7**

PLAYSIZES_SIZE

```
public static final int PLAYSIZES_SIZE
```

IMediaReader sizes array: size of sizes array long[PLAYSIZES_SIZE]
Constant value: **8**

Methods

init

```
public abstract void init(IMediaStream parent,  
    MediaStreamMap streams)
```

Initialize mediaStreamPlayer

Parameters:

parent - parent mediaStream object
streams - parent mediaStreamMap

shutdown

```
public abstract void shutdown()
```

Shutdown mediaStreamPlayer

reset

```
public abstract void reset(boolean isReset)
```

Reset mediaStreamPlayer

Parameters:

isReset - is this a playlist reset or addition, true if reset

resetNoLookup

```
public abstract void resetNoLookup()
```

Reset but do not lookup current position in live stream

(continued from last page)

play

```
public abstract int play(java.io.OutputStream out,
    AMFObj wmsObjAudio,
    AMFObj wmsObjVideo,
    AMFObj wmsObjData,
    long[] sizes)
```

Write new packets or play packets

Parameters:

out - OutputStream
wmsObjAudio - audio response channel
wmsObjVideo - video response channel
wmsObjData - data response channel
sizes - sizes array. See IMediaStreamPlay.PLAYSIZES_*

Returns:

total byte output

play

```
public abstract boolean play()
```

Return true if there are packets to play

Returns:

true if packets to play

seek

```
public abstract void seek(int location)
```

seek mediaPlayStream

Parameters:

location - timecode (milliseconds)

pause

```
public abstract void pause(int pauseType,
    long timecode)
```

pause mediaPlayStream

Parameters:

pauseType - pause type. See IMediaStreamPlay.PAUSE_*
timecode - timecode (milliseconds)

pauseRaw

```
public abstract void pauseRaw(int pauseType,
    long timecode)
```

pauseRaw mediaPlayStream

Parameters:

pauseType - pause type. See IMediaStreamPlay.PAUSE_*
timecode - timecode (milliseconds)

setBufferTime

```
public abstract void setBufferTime(int bufferTime)
```

Set buffer time

Parameters:

bufferTime

setName

```
public abstract void setName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Set mediaPlayStream name, extension, query string, play start, play len, play reset

Parameters:

name - stream name
oldName - old stream name
ext - extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play reset

switchName

```
public abstract void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

Switch to stream name

Parameters:

name - stream name
oldName - old stream name
ext - stream extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

stopName

```
public abstract void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

(continued from last page)

Stop stream name

Parameters:

name - stream name
oldName - old stream name
ext - stream extension
queryStr - query string
playStart - play start
playLen - play len
playTransition - play transition (see MediaBase.PLAYTRANSITION_*)

close

```
public abstract void close()
```

Close mediaStreamPlay

interruptPlay

```
public abstract void interruptPlay()
```

Interrupt play to perform operation. Usually for seek or pause.

startPlay

```
public abstract void startPlay()
```

Start playing stream

switchPlay

```
public abstract void switchPlay()
```

updateLoggingValues

```
public abstract void updateLoggingValues()
```

Update internal logging values

length

```
public abstract double length()
```

Get stream length/seconds (seconds)

Returns:

length/duration (seconds)

size

```
public abstract long size()
```

Get stream media file size

Returns:

media file size

getParent

```
public abstract IMediaStream getParent()
```

Get the parent media stream object

Returns:

parent media stream object

initLiveStreamRepeating

```
public abstract void initLiveStreamRepeating(String liveStreamPacketizer,  
String liveStreamRepeater)
```

Initialize this stream for live stream repeating

Parameters:

liveStreamPacketizer - live stream packetizer

liveStreamRepeater - live stream repeater name

com.wowza.wms.stream**Interface IMediaStreamTimecodeControl**

public interface **IMediaStreamTimecodeControl**
extends

IMediaStreamTimecodeControl: Internal use.

Method Summary

abstract void	resetTimecodes()
---------------	----------------------------------

Methods

resetTimecodes

public abstract void **resetTimecodes()**

com.wowza.wms.stream

Interface IMediaWriter

public interface **IMediaWriter**
extends

IMediaWriter: generic media writer interface. The flv recording system using this interface to persist .flv data captured from the Flash client. These classes are referenced in [\[install-dir\]/conf/MediaWriters.xml](#).

Example IMediaWriter implementation: MediaWriterFLVBasic

This is a basic IMediaWriter implementation that can handle record and append.

```
import java.io.*;
import java.nio.ByteBuffer;
import java.util.*;

import com.wowza.util.*;
import com.wowza.wms.stream.*;
import com.wowza.wms.amf.AMFData;
import com.wowza.wms.logging.*;

public class MediaWriterFLV implements IMediaWriter
{
    private IMediaStream parent = null;
    private MediaWriterItem mediaWriterItem = null;
    private long[] currentTCs = new long[3];
    private long duration = 0;
    private Map extraMetadata = new HashMap();
    private boolean versionFile = false;

    public void setMediaWriterItem(MediaWriterItem mediaWriterItem)
    {
        this.mediaWriterItem = mediaWriterItem;
    }

    public void setParent(IMediaStream parent)
    {
        this.parent = parent;
    }

    public void writePackets(List audioPackets, List videoPackets,
                             List dataPackets, List audioTCs, List videoTCs, List dataTCs, List
dataTypes,
                             boolean isFirst, boolean isLast)
    {
        File newFile = this.parent.getStreamFile();

        boolean localAppend = this.parent.isAppend();

        if (isFirst)
        {
            long startTC = 0;
            if (newFile.exists())
            {
                if (localAppend)
                    startTC = FLVUtils.getLastTC(newFile);
                else
                {
                    if (versionFile)
                        FileUtils.versionFile(newFile);
                    else
                    {
                        try
```

```

        {
            newFile.delete();
        }
        catch (Exception e)
        {
        }
    }
}
else
    localAppend = false;

this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO] = startTC;
this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO] = startTC;
this.currentTCs[FLVUtils.FLV_TCINDEXDATA] = startTC;
}
else
    localAppend = true;

try
{
    if (newFile.getParentFile() == null)

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: File path does not
exist: "+newFile.getPath());
        else if (!newFile.getParentFile().exists())

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: Folder does not exist:
"+newFile.getParentFile().getPath());
        else if (newFile.exists() && !newFile.canWrite())

WMSLoggerFactory.getLogger(MediaWriterFLV.class).warn("MediaWriterFLV: Cannot write to file
(permission error): "+newFile.getPath());

        FileOutputStream ds = new FileOutputStream(newFile, localAppend);

        if (isFirst)
        {
            if (!localAppend)
            {
                FLVUtils.writeHeader(ds, 0.0, extraMetadata);

                boolean writeZeroPacket = true;
                while(true)
                {
                    if (audioPackets.size() == 0)
                        break;

                    ByteBuffer data =
(ByteBuffer)audioPackets.get(0);

                    long tcA = ((Long)audioTCs.get(0)).longValue();

```



```

        if (tcA == 0 && data.limit() == 0)
            writeZeroPacket = false;

        break;
    }

    if (writeZeroPacket)
    {
        FLVUtils.writeChunk(ds, null, 0,

this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO],

                                                                    (byte) 0x08); //
write zero length audio block
    }
}

    FLVUtils.writePackets(ds, audioPackets, videoPackets, dataPackets,
        audioTCs, videoTCs, dataTCs, dataTypes, currentTCs);

    ds.flush();
    ds.close();
}
catch (Exception e)
{
    WMSLoggerFactory.getLogger(MediaWriterFLV.class).error(
        "MediaWriterFLV: Error writing to file:
"+newFile.getPath()+": "+e.toString());
    e.printStackTrace();
}

    if (isLast)
    {
        duration = Math.max(Math.max(currentTCs[FLVUtils.FLV_TCINDEXAUDIO],
            currentTCs[FLVUtils.FLV_TCINDEXVIDEO]),
            currentTCs[FLVUtils.FLV_TCINDEXDATA]);
        double durationSecs = ((double)duration) / 1000.0;

        FLVUtils.writeDuration(newFile, durationSecs);
    }
}

public Map getExtraMetadata()
{
    return extraMetadata;
}

public void setExtraMetadata(Map extraMetadata)
{
    this.extraMetadata = extraMetadata;
}

```

```
    }

    public boolean isVersionFile()
    {
        return versionFile;
    }

    public void setVersionFile(boolean versionFile)
    {
        this.versionFile = versionFile;
    }

    public void putMetaData(String name, AMFData value)
    {
        this.extraMetadata.put(name, value);
    }
}
```

To use this class, edit [install-dir]/conf/MediaWriter and replace the definition for the **flv** MediaWriter:

```
<MediaWriter>
  <Name>flv</Name>
  <Description>FLV Media Writer</Description>
  <FileExtension>flv</FileExtension>
  <ClassBase>com.wowza.wms.plugin.mediawriter.flv.MediaWriterFLVBasic</ClassBase>
</MediaWriter>
```

Example IMediaWriter implementation: MediaWriterFLVMetadata

This example illustrates how to write custom metadata into the recorded flv file on the fly.

```
public class MediaWriterFLVMetadata implements IMediaWriter
{
    private IMediaStream parent = null;
    private MediaWriterItem mediaWriterItem = null;
    private long[] currentTCs = new long[3];
    private long duration = 0;
    private File tmpFile = null;
    private Map extraMetadata = new HashMap();
    private boolean versionFile = false;

    public void setMediaWriterItem(MediaWriterItem mediaWriterItem)
    {
        this.mediaWriterItem = mediaWriterItem;
    }

    public void setParent(IMediaStream parent)
    {
        this.parent = parent;
    }

    public void writePackets(List audioPackets, List videoPackets,
        List dataPackets, List audioTCs, List videoTCs, List dataTCs,
        boolean isFirst, boolean isLast)
    {
        File newFile = this.parent.getStreamFile();
        try
        {
            if (tmpFile == null)
                tmpFile = File.createTempFile("wowza", "flv");
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
                "MediaWriterFLVMetadata: Error createTempFile: "+
                tmpFile+" :"+e.toString());
        }

        boolean localAppend = this.parent.isAppend();
        if (isFirst)
        {
            AMFDataArray keyFrames = null;

            long startTC = 0;
            if (newFile.exists())
            {
                if (localAppend)
                {
                    startTC = FLVUtils.getLastTC(newFile);
                    keyFrames = getKeyFrames(newFile);
                    copyPacketsToTmpFile(newFile, tmpFile);
                }
            }
        }
    }
}
```

```

        if (versionFile)
            FileUtils.versionFile(newFile);
        else
        {
            try
            {
                newFile.delete();
            }
            catch (Exception e)
            {
            }
        }
    }
    else
        localAppend = false;

    if (keyFrames == null)
        keyFrames = new AMFDataArray();
    extraMetadata.put("keyFrames", keyFrames);

    this.currentTCs[FLVUtils.FLV_TCINDEXAUDIO] = startTC;
    this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO] = startTC;
    this.currentTCs[FLVUtils.FLV_TCINDEXDATA] = startTC;
}
else
    localAppend = true;

    AMFDataArray keyFrames = (AMFDataArray)extraMetadata.get("keyFrames");
    long timecode = this.currentTCs[FLVUtils.FLV_TCINDEXVIDEO];
    int size = videoPackets.size();
    for(int i=0;i<size;i++)
    {
        ByteBuffer data = (ByteBuffer)videoPackets.get(i);
        int firstByte = data.get(0);
        timecode += ((Long)videoTCs.get(i)).longValue();
        if (FLVUtils.getFrameType(firstByte) == FLVUtils.FLV_KFRAME)
        {
            double durationSecs = ((double)timecode) / 1000.0;
            AMFDataObj dataObj = new AMFDataObj();
            dataObj.put("name", new AMFDataItem("keyframe
"+durationSecs));

            dataObj.put("time", new AMFDataItem(durationSecs));
            keyFrames.add(dataObj);
        }
    }

    try
    {
        FileOutputStream ds = new FileOutputStream(tmpFile, localAppend);
        FLVUtils.writePackets(ds, audioPackets, videoPackets, dataPackets,

```

```

        audioTCs, videoTCs, dataTCs, currentTCs);

        ds.flush();
        ds.close();
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
            "MediaWriterFLVMetadata: Error writing to tmp file:

"+
            newFile.getPath()+" :"+e.toString());
    }

    if (isLast)
    {
        duration = Math.max(Math.max(currentTCs[FLVUtils.FLV_TCINDEXAUDIO],
            currentTCs[FLVUtils.FLV_TCINDEXVIDEO]),
            currentTCs[FLVUtils.FLV_TCINDEXDATA]);
        double durationSecs = ((double)duration) / 1000.0;

        try
        {
            AMFPacket packet = null;
            FileOutputStream ds = new FileOutputStream(newFile);

            FileInputStream di = new FileInputStream(tmpFile);
            FLVUtils.writeHeader(ds, durationSecs, extraMetadata);
            while((packet = FLVUtils.readChunk(di)) != null)
            {
                FLVUtils.writeChunk(ds, packet.getDataBuffer(),
packet.getSize(),
                                packet.getTimecode(),
(byte)packet.getType());
            }
            di.close();

            ds.flush();
            ds.close();

            tmpFile.delete();
        }
        catch (Exception e)
        {
            WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
                "MediaWriterFLVMetadata: Error tmp writing to

file: "+
                newFile.getPath()+" :"+e.toString());
        }
    }
}

private void copyPacketsToTmpFile(File newFile, File tmpFile)

```

```

{
    AMFDataArray keyFrames = null;
    try
    {
        AMFPacket packet = null;
        FileOutputStream ds = new FileOutputStream(tmpFile);

        FileInputStream di = new FileInputStream(newFile);
        FLVUtils.readHeader(di);
        FLVUtils.readChunk(di); // skip metaData packet
        while((packet = FLVUtils.readChunk(di)) != null)
        {
            FLVUtils.writeChunk(ds, packet.getDataBuffer(),
packet.getSize(),
                                packet.getTimecode(),
(byte)packet.getType());
        }
        di.close();

        ds.flush();
        ds.close();
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
            "MediaWriterFLVMetadata: Error copyPacketsToTmpFile:
"+
            newFile.getPath()+" :"+e.toString());
    }
}

private AMFDataArray getKeyFrames(File newFile)
{
    AMFDataArray keyFrames = null;
    try
    {
        BufferedInputStream inStream = new BufferedInputStream(new
FileInputStream(newFile));
        FLVUtils.readHeader(inStream);
        AMFPacket packet = FLVUtils.readChunk(inStream);
        if (packet.getType() == IVHost.CONTENTTYPE_DATA0 || packet.getType()
== IVHost.CONTENTTYPE_DATA3)
        {
            byte[] mbytes = packet.getData();
            int moffset = 0;
            if (packet.getType() == IVHost.CONTENTTYPE_DATA3 &&
mbytes.length > 0)
            {
                if (mbytes[0] == 0)
                    moffset = 1;
            }
        }
    }
}

```

```

        AMFDataList dataList = new AMFDataList(mbytes, moffset,
mbytes.length-moffset);
        if (dataList.size() > 1)
        {
            if (dataList.get(1).getType() ==
AMFData.DATA_TYPE_MIXED_ARRAY)
            {
                AMFDataMixedArray metaValues =
                (AMFDataMixedArray)dataList.get(1);
                if (metaValues.containsKey("keyFrames"))
                    keyFrames =
                (AMFDataArray)metaValues.get("keyFrames");
            }
        }
        inStream.close();
    }
    catch (Exception e)
    {
        WMSLoggerFactory.getLogger(MediaWriterFLVBasic.class).error(
            "MediaWriterFLVMetadata: Error getKeyFrames: "+
            newFile.getPath()+" :"+e.toString());
    }

    return keyFrames;
}

public boolean isVersionFile()
{
    return versionFile;
}

public void setVersionFile(boolean versionFile)
{
    this.versionFile = versionFile;
}

public void putMetaData(String name, AMFData value)
{
    this.extraMetadata.put(name, value);
}
}

```

To use this class, edit [install-dir]/conf/MediaWriter and replace the definition for the **flv** MediaWriter:

```

<MediaWriter>
  <Name>flv</Name>
  <Description>FLV Media Writer</Description>
  <FileExtension>flv</FileExtension>
  <ClassBase>com.wowza.wms.plugin.mediawriter.flv.MediaWriterFLVMetadata</ClassBase>
</MediaWriter>

```

Method Summary

abstract long	<u>getDuration()</u> Get the recorded duration of the file in seconds
abstract boolean	<u>isAudioWaitForVideoKeyFrame()</u> Set to true if waiting for first video key frame to start recording audio
abstract boolean	<u>isDataWaitForVideoKeyFrame()</u>
abstract boolean	<u>isUseCalculatedAudioTimecodes()</u> Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)
abstract boolean	<u>isVersionFile()</u> Return true if the old file is to be versioned
abstract boolean	<u>isWaitForVideoKeyFrame()</u> get wait for key frame
abstract void	<u>putMetaData()</u> (String name, <u>AMFData</u> value) Add metadata to the metadata packet.
abstract void	<u>setAudioWaitForVideoKeyFrame()</u> (boolean audioWaitForVideoKeyFrame) Set to true if waiting for first video key frame to start recording audio
abstract void	<u>setDataWaitForVideoKeyFrame()</u> (boolean dataWaitForVideoKeyFrame)
abstract void	<u>setMediaWriterItem()</u> (MediaWriterItem mediaWriterItem) Set the media write definition
abstract void	<u>setParent()</u> (<u>IMediaStream</u> parent) Set the parent stream for this media write object
abstract void	<u>setUseCalculatedAudioTimecodes()</u> (boolean calculateTimecodes) Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)
abstract void	<u>setVersionFile()</u> (boolean versionFile) Set to true if the old file is to be versioned
abstract void	<u>setWaitForVideoKeyFrame()</u> (boolean waitForVideoKeyFrame) Set to true if you want the recorder to skip opening frames until it hits a key frame
abstract void	<u>writePackets()</u> (java.util.List audioPackets, java.util.List videoPackets, java.util.List dataPackets, java.util.List audioTCs, java.util.List videoTCs, java.util.List dataTCs, java.util.List dataTypes, boolean isFirst, boolean isLast) Invoked each time a set of packets are ready to be presisted.

Methods

writePackets

```
public abstract void writePackets(java.util.List audioPackets,  
    java.util.List videoPackets,  
    java.util.List dataPackets,  
    java.util.List audioTCs,  
    java.util.List videoTCs,  
    java.util.List dataTCs,  
    java.util.List dataTypes,  
    boolean isFirst,  
    boolean isLast)
```

Invoked each time a set of packets are ready to be persisted.

Parameters:

audioPackets - List of audio packets

videoPackets - List of video packets

dataPackets - List of data packets

audioTCs - List of audio timecodes

videoTCs - List of video timecodes

dataTCs - List of data timecodes

dataTypes - list of integer packets types (IVHost.CONTENTTYPE_DATA0, IVHost.CONTENTTYPE_DATA3) - if null assumed to be IVHost.CONTENTTYPE_DATA0

isFirst - true if first packet to be written

isLast - false if last packet to be written

setMediaWriterItem

```
public abstract void setMediaWriterItem(MediaWriterItem mediaWriterItem)
```

Set the media write definition

Parameters:

mediaWriterItem - media write definition

setParent

```
public abstract void setParent(IMediaStream parent)
```

Set the parent stream for this media write object

Parameters:

parent

isVersionFile

```
public abstract boolean isVersionFile()
```

Return true if the old file is to be versioned

Returns:

true if the old file is to be versioned

(continued from last page)

setVersionFile

```
public abstract void setVersionFile(boolean versionFile)
```

Set to true if the old file is to be versioned

Parameters:

versionFile

isWaitForVideoKeyFrame

```
public abstract boolean isWaitForVideoKeyFrame()
```

get wait for key frame

Returns:

wait for key frame

setWaitForVideoKeyFrame

```
public abstract void setWaitForVideoKeyFrame(boolean waitForVideoKeyFrame)
```

Set to true if you want the recorder to skip opening frames until it hits a key frame

Parameters:

waitForVideoKeyFrame - wait for key frame

putMetaData

```
public abstract void putMetaData(String name,  
    AMFData value)
```

Add metadata to the metadata packet. Only metadata added before the first call to writePackets will be included in the file

Parameters:

name - field name

value - metadata value

getDuration

```
public abstract long getDuration()
```

Get the recorded duration of the file in seconds

Returns:

recorded duration of the file in seconds

isAudioWaitForVideoKeyFrame

```
public abstract boolean isAudioWaitForVideoKeyFrame()
```

Set to true if waiting for first video key frame to start recording audio

Returns:

true if waiting for first video key frame to start recording audio

(continued from last page)

setAudioWaitForVideoKeyFrame

```
public abstract void setAudioWaitForVideoKeyFrame(boolean audioWaitForVideoKeyFrame)
```

Set to true if waiting for first video key frame to start recording audio

Parameters:

audioWaitForVideoKeyFrame - true if waiting for first video key frame to start recording audio

isDataWaitForVideoKeyFrame

```
public abstract boolean isDataWaitForVideoKeyFrame()
```

setDataWaitForVideoKeyFrame

```
public abstract void setDataWaitForVideoKeyFrame(boolean dataWaitForVideoKeyFrame)
```

isUseCalculatedAudioTimecodes

```
public abstract boolean isUseCalculatedAudioTimecodes()
```

Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)

Returns:

true to calculate timecodes based on samples per-frame

setUseCalculatedAudioTimecodes

```
public abstract void setUseCalculatedAudioTimecodes(boolean calculateTimecodes)
```

Set to true to calculate timecodes based on samples per-frame (more accurate, default is true)

Parameters:

calculateTimecodes - true to calculate timecodes based on samples per-frame

com.wowza.wms.stream Interface IMediaWriterActionNotify

All Known Implementing Classes:
[MediaWriterActionNotifyBase](#)

public interface **IMediaWriterActionNotify**
extends

IMediaWriterActionNotify: listener interface for file writing. See
IApplicationInstance.addMediaWriterListener(IMediaWriterActionNotify listener)

Method Summary

abstract void	onFLVAddMetadata (IMediaStream stream, java.util.Map extraMetadata) Called just before metadata is written to the file (FLV only)
abstract void	onWriteComplete (IMediaStream stream, java.io.File file) Called when writing is complete

Methods

onWriteComplete

```
public abstract void onWriteComplete(IMediaStream stream,  
    java.io.File file)
```

Called when writing is complete

Parameters:

stream - stream
file - file handle

onFLVAddMetadata

```
public abstract void onFLVAddMetadata(IMediaStream stream,  
    java.util.Map extraMetadata)
```

Called just before metadata is written to the file (FLV only)

Parameters:

stream - stream
extraMetadata - additional metadata, add to this collection to add items to onMetadata event written to FLV file.

com.wowza.wms.stream Class MediaReaderActionNotifyBase

java.lang.Object

└─com.wowza.wms.stream.MediaReaderActionNotifyBase

All Implemented Interfaces:

[IMediaReaderActionNotify](#)

public abstract class **MediaReaderActionNotifyBase**

extends Object

implements [IMediaReaderActionNotify](#)

Abstract base class for IMediaReaderActionNotify interface

Constructor Summary

public	MediaReaderActionNotifyBase()
--------	---

Method Summary

void	onMediaReaderClose (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderCreate (IMediaReader mediaReader)
void	onMediaReaderExtractMetaData (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderInit (IMediaReader mediaReader, IMediaStream stream)
void	onMediaReaderOpen (IMediaReader mediaReader, IMediaStream stream)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaReaderActionNotify](#)

[onMediaReaderClose](#), [onMediaReaderCreate](#), [onMediaReaderExtractMetaData](#), [onMediaReaderInit](#), [onMediaReaderOpen](#)

Constructors

MediaReaderActionNotifyBase

public **MediaReaderActionNotifyBase**()

Methods

onMediaReaderCreate

```
public void onMediaReaderCreate(IMediaReader mediaReader)
```

onMediaReaderInit

```
public void onMediaReaderInit(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderOpen

```
public void onMediaReaderOpen(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderExtractMetaData

```
public void onMediaReaderExtractMetaData(IMediaReader mediaReader,  
    IMediaStream stream)
```

onMediaReaderClose

```
public void onMediaReaderClose(IMediaReader mediaReader,  
    IMediaStream stream)
```

com.wowza.wms.stream Class MediaReaderEncInfo

java.lang.Object

└─com.wowza.wms.stream.MediaReaderEncInfo

public class **MediaReaderEncInfo**
extends Object

Field Summary

public static final	METHOD_NONE Value: 0
public static final	METHOD_SAMPLE_PLAYREADY Value: 1

Constructor Summary

public	MediaReaderEncInfo()
--------	--------------------------------------

Method Summary

void	addPlayReadyDecryptorKey (com.wowza.wms.drm.playready.PlayReadyKeyInfo decryptorKey)
int	getEncMethod ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadyDecryptorKey ()
com.wowza.wms.drm.playready.PlayReadyKeyInfo	getPlayReadyDecryptorKey (String keyId)
void	setEncMethod (int encMethod)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

METHOD_NONE

public static final int **METHOD_NONE**

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Constant value: **0**

METHOD_SAMPLE_PLAYREADY

```
public static final int METHOD_SAMPLE_PLAYREADY
```

Constant value: **1**

Constructors

MediaReaderEncInfo

```
public MediaReaderEncInfo()
```

Methods

addPlayReadyDecryptorKey

```
public void addPlayReadyDecryptorKey(com.wowza.wms.drm.playready.PlayReadyKeyInfo  
decryptorKey)
```

getPlayReadyDecryptorKey

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyDecryptorKey()
```

getPlayReadyDecryptorKey

```
public com.wowza.wms.drm.playready.PlayReadyKeyInfo getPlayReadyDecryptorKey(String  
keyId)
```

getEncMethod

```
public int getEncMethod()
```

setEncMethod

```
public void setEncMethod(int encMethod)
```


com.wowza.wms.stream Class MediaStreamActionNotify3Base

java.lang.Object

└─com.wowza.wms.stream.MediaStreamActionNotify3Base

All Implemented Interfaces:

[IMediaStreamActionNotify3](#)

public class **MediaStreamActionNotify3Base**
extends Object
implements [IMediaStreamActionNotify3](#)

Constructor Summary

public	MediaStreamActionNotify3Base()
--------	--

Method Summary

void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket)
void	onPause (IMediaStream stream, boolean isPause, double location)
void	onPauseRaw (IMediaStream stream, boolean isPause, double location)
void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset)
void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)
void	onSeek (IMediaStream stream, double location)
void	onStop (IMediaStream stream)
void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify3](#)

[onCodecInfoAudio](#), [onCodecInfoVideo](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Constructors

MediaStreamActionNotify3Base

```
public MediaStreamActionNotify3Base()
```

Methods

onMetaData

```
public void onMetaData(IMediaStream stream,  
    AMFPacket metaDataPacket)
```

onPauseRaw

```
public void onPauseRaw(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onPlay

```
public void onPlay(IMediaStream stream,  
    String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

onPublish

```
public void onPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

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onUnPublish

```
public void onUnPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

onPause

```
public void onPause(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onSeek

```
public void onSeek(IMediaStream stream,  
    double location)
```

onStop

```
public void onStop(IMediaStream stream)
```

onCodecInfoVideo

```
public void onCodecInfoVideo(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onCodecInfoAudio

```
public void onCodecInfoAudio(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

com.wowza.wms.stream Class MediaStreamActionNotifyBase

java.lang.Object

└─com.wowza.wms.stream.MediaStreamActionNotifyBase

All Implemented Interfaces:

[IMediaStreamActionNotify3](#), [IMediaStreamActionNotify2](#), [IMediaStreamActionNotify](#)

public abstract class **MediaStreamActionNotifyBase**

extends Object

implements [IMediaStreamActionNotify](#), [IMediaStreamActionNotify2](#), [IMediaStreamActionNotify3](#)

Abstract base class for IMediaCasterNotify interfaces

Constructor Summary

public	MediaStreamActionNotifyBase()
--------	---

Method Summary

void	onCodecInfoAudio (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onCodecInfoVideo (IMediaStream stream, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	onMetaData (IMediaStream stream, AMFPacket metaDataPacket)
void	onPause (IMediaStream stream, boolean isPause, double location)
void	onPauseRaw (IMediaStream stream, boolean isPause, double location)
void	onPlay (IMediaStream stream, String streamName, double playStart, double playLen, int playReset)
void	onPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)
void	onSeek (IMediaStream stream, double location)
void	onStop (IMediaStream stream)
void	onUnPublish (IMediaStream stream, String streamName, boolean isRecord, boolean isAppend)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify3](#)

[onCodecInfoAudio](#), [onCodecInfoVideo](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify2](#)

[onMetaData](#), [onPauseRaw](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamActionNotify](#)

[onPause](#), [onPlay](#), [onPublish](#), [onSeek](#), [onStop](#), [onUnPublish](#)

Constructors

MediaStreamActionNotifyBase

```
public MediaStreamActionNotifyBase()
```

Methods

onCodecInfoVideo

```
public void onCodecInfoVideo(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onCodecInfoAudio

```
public void onCodecInfoAudio(IMediaStream stream,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onMetaData

```
public void onMetaData(IMediaStream stream,  
    AMFPacket metaDataPacket)
```

onPauseRaw

```
public void onPauseRaw(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onPlay

```
public void onPlay(IMediaStream stream,  
    String streamName,  
    double playStart,  
    double playLen,  
    int playReset)
```

onPublish

```
public void onPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

onUnPublish

```
public void onUnPublish(IMediaStream stream,  
    String streamName,  
    boolean isRecord,  
    boolean isAppend)
```

onPause

```
public void onPause(IMediaStream stream,  
    boolean isPause,  
    double location)
```

onSeek

```
public void onSeek(IMediaStream stream,  
    double location)
```

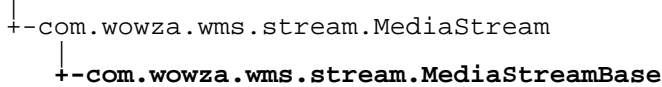
onStop

```
public void onStop(IMediaStream stream)
```

com.wowza.wms.stream

Class MediaStreamBase

java.lang.Object



All Implemented Interfaces:

[IMediaStream](#)

public class **MediaStreamBase**
 extends [MediaStream](#)

Field Summary

public static	p Deprecated.
public static	sinfo Deprecated.

Fields inherited from class com.wowza.wms.stream.MediaStream

actionListeners, AMLST_STREAM_EXT, audioBytes, audioSize, audioTC, audioWrapBase, audioWrapCounter, audioWrapDelta, audioWrapThreshold, BASE_STREAM_EXT, bufferTime, callbackListeners, callbacks, client, dataBytes, dataSize, dataTC, dataType, dataWrapBase, dataWrapCounter, dataWrapDelta, dataWrapThreshold, dvrLock, dvrMap, dvrPlayer, dvrRecorder, dvrRecorderList, dvrRepeater, elapsedTime, enhancedWrapEnabled, ext, fastPlaySettings, FLV_STREAM_EXT, h264SEIListeners, headerSize, httpStreamerSession, ID3_STREAM_EXT, isAppend, isClustered, isMediaCasterPlay, isOpen, isPlay, isPlaying, isPublisherStream, isRecord, isTranscodeResult, isWebRTC, livePacketListeners, liveStreamPacketizer, liveStreamPacketizerList, liveStreamRepeater, liveStreamTranscoderList, lock, mediaIOPerformance, mergeOnMetadata, metaDataProvider, MP3_STREAM_EXT, MP4_STREAM_EXT, name, netConnection, NGRP_STREAM_EXT, parent, player, playLen, playStart, playTransition, previousAudioDeltaTC, previousAudioTC, previousDataDeltaTC, previousDataTC, previousVideoDeltaTC, previousVideoTC, properties, queryStr, receiveAudio, receiveVideo, receiveVideoFPS, rtpStream, SEND_CONTROL0, SEND_CONTROL1, SEND_CONTROL3, SEND_CONTROL4, sendDirectLock, sendDirectMessages, sendPlayStopLogEvent, sendPublishStopLogEvent, sendRecordStopLogEvent, SMIL_STREAM_EXT, src, STREAM_DEFAULTNAME, streamType, timecodeMax32Bit, transcoderEncoderStreamInfo, transcoderLock, transcoderMap, transcoderSessionDestination, tss, videoBytes, videoSize, videoTC, videoWrapBase, videoWrapCounter, videoWrapDelta, videoWrapThreshold

Fields inherited from interface [com.wowza.wms.stream.IMediaStream](#)

[AUDIOSAMPLEACCESS](#), [PACKET_COUNTS_AUDIO](#), [PACKET_COUNTS_DATA](#), [PACKET_COUNTS_SIZE](#), [PACKET_COUNTS_VIDEO](#), [PACKET_COUNTS_VIDEOKEY](#), [PUBLISH_BITRATE_SOURCE_LASTGOP](#), [PUBLISH_BITRATE_SOURCE_MEASURE](#), [PUBLISH_BITRATE_SOURCE_METADATA](#), [PUBLISH_FRAMERATE_SOURCE_MEASURE](#), [PUBLISH_FRAMERATE_SOURCE_METADATA](#), [READACCESS](#), [VIDEOSAMPLEACCESS](#), [WRITEACCESS](#)

Constructor Summary

public	MediaStreamBase()
--------	-----------------------------------

Method Summary

void	init() (MediaStreamMap parent, int src, WMSProperties properties)
void	publish()
void	trim()

Methods inherited from class `com.wowza.wms.stream.MediaStream`

addAudioCodecConfigPacket, addAudioData, addAudioExtraData, addCallbackListener, addClientListener, addClientListener, addClientListener, addDataData, addDataExtraData, addLivePacketListener, addVideoCodecConfigPacket, addVideoData, addVideoExtraData, addVideoH264SEILListener, clear, clearFastPlaySettings, clearLoggingValues, close, flush, getAccess, getAudioCodecConfigPacket, getAudioMissing, getAudioSize, getAudioTC, getBufferTime, getBurstStartStop, getCacheName, getClient, getClientId, getContextStr, getDataMissing, getDataSize, getDataTC, getDataType, getDvrRecorder, getDvrRecorder, getDvrRecorderList, getDvrRepeater, getElapsedTime, getExt, getFastPlaySettings, getHeaderSize, getHTTPStreamerSession, getIsWebRTC, getLastKeyFrame, getLastPacket, getLiveStreamDvr, getLiveStreamDvrs, getLiveStreamPacketizer, getLiveStreamPacketizer, getLiveStreamPacketizerList, getLiveStreamRepeater, getLiveStreamTranscoder, getLiveStreamTranscoderList, getLiveStreamTranscoders, getMaxTimecode, getMediaIOPerformance, getMetaDataProvider, getName, getNetConnection, getPlayer, getPlayPackets, getProperties, getPublishAudioCodecId, getPublishBitrateAudio, getPublishBitrateAudio, getPublishBitrateVideo, getPublishBitrateVideo, getPublishFrameCountAudio, getPublishFrameCountData, getPublishFrameCounts, getPublishFrameCountVideo, getPublishFrameCountVideoKey, getPublishFramerateVideo, getPublishFramerateVideo, getPublishKeyFrameIntervalsVideo, getPublishVideoCodecId, getQueryStr, getReceiveVideoFPS, getRespAMFAudioObj, getRespAMFDataObj, getRespAMFVideoObj, getRTPStream, getSrc, getStreamFileForRead, getStreamFileForRead, getStreamFileForWrite, getStreamFileForWrite, getStreams, getStreamType, getTranscoderEncoderStreamInfo, getTranscoderSessionDestination, getTss, getUniqueStreamIdStr, getVideoCodecConfigPacket, getVideoMissing, getVideoSize, getVideoTC, handleCallback, idle, incrementMediaInBytes, incrementMediaLossBytes, incrementMediaOutBytes, init, initDvrRepeating, initLiveStreamRepeating, isAppend, isClustered, isMediaCasterPlay, isMergeOnMetadata, isOpen, isPlay, isPlaying, isPublisherStream, isPublishStreamReady, isReceiveAudio, isReceiveVideo, isRecord, isSendDirectMessages, isSendPlayStopLogEvent, isSendPublishStopLogEvent, isSendRecordStopLogEvent, isTranscoderEncoderStreamRoot, isTranscodeResult, isVideoH264SEILListenerEmpty, length, notifyActionOnCodecInfoAudio, notifyActionOnCodecInfoVideo, notifyActionOnMetaData, notifyActionPause, notifyActionPauseRaw, notifyActionPlay, notifyActionPublish, notifyActionSeek, notifyActionStop, notifyActionUnPublish, notifyLivePacket, notifyVideoH264Packet, packetComplete, processSendDirectMessages, publish, putDvrRecorder, putLiveStreamTranscoder, registerCallback, registerOnPlayStatus, registerOnStatus, removeCallbackListener, removeClientListener, removeClientListener, removeClientListener, removeDvrRecorder, removeLivePacketListener, removeLiveStreamTranscoder, removeVideoH264SEILListener, reset, send, send, sendAMF3, sendAMF3, sendControlBytes, sendDataToCallback, sendDirect, sendDirect, sendDirectAMF3, sendDirectAMF3, sendDirectInternal, sendDirectInternal, sendInternal, sendInternal, sendLivePlaySeek, sendLivePlayStart, sendLivePlaySwitch, sendPauseNotify, sendPauseNotify, sendPlayReset, sendPlayReset, sendPlaySeek, sendPlaySeek, sendPlaySeek, sendPlayStart, sendPlayStart, sendPlayStart, sendPlayStart, sendPlayStatus, sendPlayStatus, sendPlayStop, sendPlayStop, sendPlaySwitch, sendPlaySwitch, sendStreamNotFound, sendStreamNotFound, sendUnpauseNotify, sendUnpauseNotify, sendUnpauseNotify, sendVODPlaySwitch, setAppend, setAudioSize, setAudioTC, setAudioTC, setBufferTime, setClient, setClustered, setDataSize, setDataTC, setDataTC, setDataTC, setDataType, setDvrRecorder, setDvrRecorderList, setDvrRepeater, setExt, setFastPlaySettings, setHeaderSize, setHTTPStreamerSession, setIsPlaying, setIsWebRTC, setJustName, setLiveStreamPacketizer, setLiveStreamPacketizerList, setLiveStreamRepeater, setLiveStreamTranscoderList, setMediaCasterPlay, setMergeOnMetadata, setMetaDataProvider, setName, setName, setName, setNetConnection, setOpen, setPlay, setPlayer, setPublishAudioCodecId, setPublisherStream, setPublishVideoCodecId, setQueryStr, setReceiveAudio, setReceiveVideo, setReceiveVideoFPS, setRecord, setRTPStream, setSendPlayStopLogEvent, setSendPublishStopLogEvent,

```
setSendRecordStopLogEvent, setSrc, setStreamType, setTranscoderEncoderStreamInfo,  
setTranscodeResult, setTranscoderSessionDestination, setTss, setVideoSize,  
setVideoTC, setVideoTC, shutdown, size, startAudioPacket, startDataPacket,  
startPublishing, startVideoPacket, stopName, stopPublishing, switchName, trim,  
unregisterCallback, unregisterOnPlayStatus, unregisterOnStatus,  
updateLoggingDuration, updateLoggingValues
```

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,  
wait
```

Methods inherited from interface [com.wowza.wms.stream.IMediaStream](#)

[addAudioCodecConfigPacket](#), [addAudioData](#), [addAudioExtraData](#), [addCallbackListener](#),
[addClientListener](#), [addClientListener](#), [addClientListener](#), [addDataData](#),
[addDataExtraData](#), [addLivePacketListener](#), [addVideoCodecConfigPacket](#), [addVideoData](#),
[addVideoExtraData](#), [addVideoH264SEIListener](#), [clear](#), [clearFastPlaySettings](#),
[clearLoggingValues](#), [close](#), [flush](#), [getAccess](#), [getAudioCodecConfigPacket](#),
[getAudioMissing](#), [getAudioSize](#), [getAudioTC](#), [getBufferTime](#), [getBurstStartStop](#),
[getCacheName](#), [getClient](#), [getClientId](#), [getContextStr](#), [getDataMissing](#), [getDataSize](#),
[getDataTC](#), [getDataType](#), [getDvrRecorder](#), [getDvrRecorder](#), [getDvrRecorderList](#),
[getDvrRepeater](#), [getElapsedTime](#), [getExt](#), [getFastPlaySettings](#), [getHeaderSize](#),
[getHTTPStreamerSession](#), [getIsWebRTC](#), [getLastKeyFrame](#), [getLastPacket](#),
[getLiveStreamPacketizer](#), [getLiveStreamPacketizer](#), [getLiveStreamPacketizerList](#),
[getLiveStreamRepeater](#), [getLiveStreamTranscoder](#), [getLiveStreamTranscoderList](#),
[getLiveStreamTranscoders](#), [getMaxTimecode](#), [getMediaIOPerformance](#), [getMetaDataProvider](#),
[getName](#), [getNetConnection](#), [getPlayer](#), [getPlayPackets](#), [getProperties](#),
[getPublishAudioCodecId](#), [getPublishBitrateAudio](#), [getPublishBitrateAudio](#),
[getPublishBitrateVideo](#), [getPublishBitrateVideo](#), [getPublishFrameCountAudio](#),
[getPublishFrameCountData](#), [getPublishFrameCounts](#), [getPublishFrameCountVideo](#),
[getPublishFrameCountVideoKey](#), [getPublishFramerateVideo](#), [getPublishFramerateVideo](#),
[getPublishKeyFrameIntervalsVideo](#), [getPublishVideoCodecId](#), [getQueryStr](#),
[getReceiveVideoFPS](#), [getRespAMFAudioObj](#), [getRespAMFDataObj](#), [getRespAMFVideoObj](#),
[getRTPStream](#), [getSrc](#), [getStreamFileForRead](#), [getStreamFileForRead](#),
[getStreamFileForWrite](#), [getStreamFileForWrite](#), [getStreams](#), [getStreamType](#),
[getTranscoderEncoderStreamInfo](#), [getTranscoderSessionDestination](#),
[getUniqueStreamIdStr](#), [getVideoCodecConfigPacket](#), [getVideoMissing](#), [getVideoSize](#),
[getVideoTC](#), [handleCallback](#), [idle](#), [incrementMediaInBytes](#), [incrementMediaLossBytes](#),
[incrementMediaOutBytes](#), [init](#), [initLiveStreamRepeating](#), [isAppend](#), [isClustered](#),
[isMediaCasterPlay](#), [isMergeOnMetadata](#), [isOpen](#), [isplay](#), [isplaying](#), [isPublisherStream](#),
[isPublishStreamReady](#), [isReceiveAudio](#), [isReceiveVideo](#), [isRecord](#),
[isSendPlayStopLogEvent](#), [isSendPublishStopLogEvent](#), [isSendRecordStopLogEvent](#),
[isTranscoderEncoderStreamRoot](#), [isTranscodeResult](#), [isVideoH264SEIListenerEmpty](#),
[length](#), [notifyActionOnCodecInfoAudio](#), [notifyActionOnCodecInfoVideo](#),
[notifyActionOnMetaData](#), [notifyActionPause](#), [notifyActionPauseRaw](#), [notifyActionPlay](#),
[notifyActionPublish](#), [notifyActionSeek](#), [notifyActionStop](#), [notifyActionUnPublish](#),
[notifyLivePacket](#), [notifyVideoH264Packet](#), [packetComplete](#), [publish](#), [putDvrRecorder](#),
[putLiveStreamTranscoder](#), [registerCallback](#), [registerOnPlayStatus](#), [registerOnStatus](#),
[removeCallbackListener](#), [removeClientListener](#), [removeClientListener](#),
[removeClientListener](#), [removeDvrRecorder](#), [removeLivePacketListener](#),
[removeLiveStreamTranscoder](#), [removeVideoH264SEIListener](#), [send](#), [send](#), [sendAMF3](#),
[sendAMF3](#), [sendControlBytes](#), [sendDirect](#), [sendDirect](#), [sendDirectAMF3](#), [sendDirectAMF3](#),
[sendLivePlaySeek](#), [sendLivePlayStart](#), [sendLivePlaySwitch](#), [sendPauseNotify](#),
[sendPauseNotify](#), [sendPlayReset](#), [sendPlayReset](#), [sendPlaySeek](#), [sendPlaySeek](#),
[sendPlaySeek](#), [sendPlayStart](#), [sendPlayStart](#), [sendPlayStart](#), [sendPlayStart](#),
[sendPlayStatus](#), [sendPlayStatus](#), [sendPlayStop](#), [sendPlayStop](#), [sendPlaySwitch](#),
[sendPlaySwitch](#), [sendStreamNotFound](#), [sendStreamNotFound](#), [sendUnpauseNotify](#),
[sendUnpauseNotify](#), [sendUnpauseNotify](#), [sendVODPlaySwitch](#), [setAppend](#), [setAudioSize](#),
[setAudioTC](#), [setAudioTC](#), [setBufferTime](#), [setClient](#), [setClustered](#), [setDataSize](#),
[setDataTC](#), [setDataTC](#), [setDataType](#), [setDvrRecorder](#), [setDvrRecorderList](#), [setExt](#),
[setFastPlaySettings](#), [setHeaderSize](#), [setHTTPStreamerSession](#), [setIsPlaying](#),
[setIsWebRTC](#), [setLiveStreamPacketizer](#), [setLiveStreamPacketizerList](#),
[setLiveStreamRepeater](#), [setLiveStreamTranscoderList](#), [setMediaCasterPlay](#),
[setMergeOnMetadata](#), [setMetaDataProvider](#), [setName](#), [setName](#), [setName](#), [setNetConnection](#),
[setOpen](#), [setPlay](#), [setPlayer](#), [setPublishAudioCodecId](#), [setPublisherStream](#),
[setPublishVideoCodecId](#), [setQueryStr](#), [setReceiveAudio](#), [setReceiveVideo](#),
[setReceiveVideoFPS](#), [setRecord](#), [setRTPStream](#), [setSendPlayStopLogEvent](#),
[setSendPublishStopLogEvent](#), [setSendRecordStopLogEvent](#), [setSrc](#), [setStreamType](#),
[setTranscoderEncoderStreamInfo](#), [setTranscodeResult](#), [setVideoSize](#), [setVideoTC](#),
[setVideoTC](#), [shutdown](#), [size](#), [startAudioPacket](#), [startDataPacket](#), [startPublishing](#),

```
startVideoPacket, stopName, stopPublishing, switchName, trim, unregisterCallback,  
unregisterOnPlayStatus, unregisterOnStatus, updateLoggingDuration,  
updateLoggingValues
```

Fields

sinfo

```
public static java.util.Map sinfo
```

Deprecated.

p

```
public static java.lang.String p
```

Deprecated.

Constructors

MediaStreamBase

```
public MediaStreamBase()
```

Methods

init

```
public void init(MediaStreamMap parent,  
                int src,  
                WMSProperties properties)
```

publish

```
public void publish()
```

trim

```
public void trim()
```

com.wowza.wms.stream Class MediaStreamLivePacketNotifyBase

java.lang.Object

└─com.wowza.wms.stream.MediaStreamLivePacketNotifyBase

All Implemented Interfaces:

[IMediaStreamLivePacketNotify](#)

public abstract class **MediaStreamLivePacketNotifyBase**
extends [Object](#)
implements [IMediaStreamLivePacketNotify](#)

Constructor Summary

public	MediaStreamLivePacketNotifyBase()
--------	---

Method Summary

void	onLivePacket (IMediaStream stream, AMFPacket packet)
------	---

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamLivePacketNotify](#)

[onLivePacket](#)

Constructors

MediaStreamLivePacketNotifyBase

public **MediaStreamLivePacketNotifyBase**()

Methods

onLivePacket

public void **onLivePacket**([IMediaStream](#) stream, [AMFPacket](#) packet)

com.wowza.wms.stream

Class MediaStreamMap

java.lang.Object

└─com.wowza.wms.stream.MediaStreamMap

public class **MediaStreamMap**
extends Object

MediaStreamMap: collection of IMediaStream object. This collection is usually attached to an IApplicationInstance object.

Field Summary

protected	appInstance
public	debugDVRShutdown
protected	dvrRecorders
protected	liveStreamPacketizers
public static final	MAXSTREAMINDEX Value: 65536
protected	mediaStreamListeners
protected	nameGroupDelayRemoveMap
protected	nameGroupId
protected	nameGroupRemoveDelayTime
protected	nameGroups
protected	nextStreamId
protected	packetizerLicenses
protected	streamLicenses
protected	streamLock
protected	streamNames
protected	streamNamesLock

protected	streamNameToGroup
protected	streams

Constructor Summary

public	MediaStreamMap (IApplicationInstance appInstance) Create empty MediaStreamMap collection
--------	--

Method Summary

LicenseHolder	addLicense (ILiveStreamPacketizer liveStreamPacketizer, int licenseType)
LicenseHolder	addLicense (IMediaStream stream, int licenseType)
void	addMediaStreamListener (IMediaStreamNotify mediaStreamListener) Add a media stream listener.
MediaStreamMapGroup	addNameGroup (MediaStreamMapGroup newGroup)
void	broadcastPlayMessage (IMediaStream stream, long timecode, java.nio.ByteBuffer msg, int objectEncoding) Send a broadcast message to all play stream that are listening to this live published stream.
int	broadcastGetObjectEncoding (IMediaStream stream) Get the minimum object encoding level for the clients playing this stream.
void	clearStreamName (String name) Unregister a published live media stream name.
void	clearStreamName (String name, IMediaStream stream) Unregister a published live media stream name.
void	doWatchdog ()
IApplicationInstance	getAppInstance () Get the parent applicationInstance.
String	getAppInstanceName () Get the name of the parent applicationInstance.
String	getAppName () Get the name of the parent application.
int	getCount () Get the total number of streams stored in the mediaStreamMap
ILiveStreamDvrRecorder	getDvrRecorder (String streamName, String recorderName, boolean doCreate) Get a DVR recorder by name and recorder name
java.util.List	getDvrRecorders () Returns a list of ILiveStreamDvrRecorder objects

<u>ILiveStreamPacketizer</u>	<u>getLiveStreamPacketizer</u> (String streamName, String packetizerName, boolean doCreate) Get a live stream packetizer by name and packetizer id
Object	<u>getLiveStreamPacketizerLock</u> () Get the lock to the live stream packetizer system
MediaStreamMapGroup	<u>getNameGroupByGroupName</u> (String groupName)
int	<u>getNameGroupRemoveDelayTime</u> ()
java.util.Set	<u>getNameGroups</u> ()
java.util.Set	<u>getNameGroups</u> (String streamName)
java.util.Set	<u>getNameGroupStreamNames</u> (String streamName)
long	<u>getNextNameGroupId</u> (MediaStreamMapGroup newGroup)
int	<u>getNextStreamIndex</u> () Reserve a clientless stream id for a new media stream.
int	<u>getNextStreamIndex</u> (<u>IClient</u> client) Reserve a stream for a client connection.
int	<u>getNextStreamIndex</u> (<u>INetConnection</u> netConnection) Reserve a stream for a netConnection connection.
java.util.List	<u>getPublishStreamNames</u> () Returns a List of published stream names
<u>IMediaStream</u>	<u>getStream</u> (<u>IClient</u> client, int index) Get a media stream reference by stream id.
<u>IMediaStream</u>	<u>getStream</u> (<u>IClient</u> client, int index, boolean doCreate) Get a media stream reference by stream id.
<u>IMediaStream</u>	<u>getStream</u> (<u>INetConnection</u> netConnection, int index) Get a media stream object that is owned by a server to server netConnection object (not yet implemented).
<u>IMediaStream</u>	<u>getStream</u> (<u>INetConnection</u> netConnection, int index, boolean doCreate) Get a media stream reference by stream id.
<u>IMediaStream</u>	<u>getStream</u> (String name) Get a media stream by stream name.
<u>IMediaStream</u>	<u>getStreamClientless</u> (int index, String streamTypeStr) Get a media stream reference by stream id.
edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	<u>getStreamListLock</u> () Get the underlying read/write lock associated with the list of streams

edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock	getStreamNameLock() Get the underlying read/write lock associated with the stream names list
java.util.List	getStreams() Returns a list of IMediaStream objects
IVHost	getVHost() Get the parent vHost.
void	notifyMediaStreamCreate(IMediaStream mediaStream) Notify all media stream listeners that a new media stream object has been created.
void	notifyMediaStreamDestroy(IMediaStream mediaStream) Notify all media stream listeners that a media stream object is being destroyed.
void	notifyPlayPublish(IMediaStream stream) Notify all play streams that are listening to this stream that the stream is going into a state of publish (NetStream.Play.PublishNotify).
void	notifyPlayUnpublish(IMediaStream stream) Notify all play streams that are listening to this stream that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).
void	notifyPlayUnpublish(String streamName) Notify all play streams that are listening to this stream name that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).
void	removeDvrRecorder(String streamName)
ILiveStreamDvrRecorder	removeDvrRecorder(String streamName, String recorderName) Remove DVR Recorder
void	removeLiveStreamPacketizer(String streamName) Remove all live stream packetizers for this stream name
ILiveStreamPacketizer	removeLiveStreamPacketizer(String streamName, String packetizerName) Remove live stream packetizer
void	removeMediaStreamListener(IMediaStreamNotify mediaStreamListener) Remove a media stream listener.
MediaStreamMapGroup	removeNameGroup(int groupId)
MediaStreamMapGroup	removeNameGroup(MediaStreamMapGroup nameGroup)
void	removeStream(IClient client, int index) Remove a stream associated with a client connection
void	removeStream(INetConnection netConnection, int index) Remove a stream associated with a netConnection object
void	removeStream(int index) Remove a clientless media stream
void	setNameGroupRemoveDelayTime(int nameGroupRemoveDelayTime)

void	setStreamName (IMediaStream stream, String name) Insert live media stream into the mediaStreamMap by name.
long	streamToIndex (IMediaStream stream) Get the unique stream identifier for a given stream

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields

MAXSTREAMINDEX

```
public static final int MAXSTREAMINDEX
```

Constant value: **65536**

streams

```
protected java.util.Map streams
```

streamNames

```
protected java.util.Map streamNames
```

streamLicenses

```
protected java.util.Map streamLicenses
```

packetizerLicenses

```
protected java.util.Map packetizerLicenses
```

streamNameToGroup

```
protected java.util.Map streamNameToGroup
```

nameGroups

```
protected java.util.List nameGroups
```

nameGroupId

protected long **nameGroupId**

nameGroupRemoveDelayTime

protected int **nameGroupRemoveDelayTime**

nameGroupDelayRemoveMap

protected java.util.Map **nameGroupDelayRemoveMap**

streamLock

protected edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock
streamLock

streamNamesLock

protected edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock
streamNamesLock

appInstance

protected com.wowza.wms.application.IApplicationInstance **appInstance**

mediaStreamListeners

protected java.util.List **mediaStreamListeners**

nextStreamId

protected java.util.concurrent.atomic.AtomicLong **nextStreamId**

liveStreamPacketizers

protected java.util.Map **liveStreamPacketizers**

(continued from last page)

dvrRecorders

```
protected java.util.Map dvrRecorders
```

debugDVRShutdown

```
public boolean debugDVRShutdown
```

Constructors

MediaStreamMap

```
public MediaStreamMap(IApplicationInstance appInstance)
```

Create empty MediaStreamMap collection

Parameters:

appInstance - parent applicationInstance

Methods

getStreamListLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getStreamListLock()
```

Get the underlying read/write lock associated with the list of streams

Returns:

underlying read/write lock associated with the list of streams

getStreamNameLock

```
public edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getStreamNameLock()
```

Get the underlying read/write lock associated with the stream names list

Returns:

underlying read/write lock associated with the stream names list

getPublishStreamNames

```
public java.util.List getPublishStreamNames()
```

Returns a List of published stream names

Returns:

List of published stream names

getStreams

```
public java.util.List getStreams()
```

(continued from last page)

Returns a list of IMediaStream objects

Returns:

list of IMediaStream objects

getStream

```
public IMediaStream getStream(IClient client,
    int index)
```

Get a media stream reference by stream id.

Parameters:

client - client
index - stream id

Returns:

media stream object or null if does not exist.

getStreamClientless

```
public IMediaStream getStreamClientless(int index,
    String streamTypeStr)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. This is a clientless stream that is served by the backend of the server. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(\)](#).

Parameters:

index - stream id
streamTypeStr - stream type

Returns:

media stream object

getStream

```
public IMediaStream getStream(IClient client,
    int index,
    boolean doCreate)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(IClient\)](#).

Parameters:

client - client
index - stream id
doCreate - true to create if it does not exist

Returns:

media stream object

getStream

```
public IMediaStream getStream(INetConnection netConnection,
    int index)
```

Get a media stream object that is owned by a server to server netConnection object (not yet implemented).

Parameters:

(continued from last page)

netConnection - netConnection to remote server
index - stream id

Returns:

media stream object or null if does not exist

getStream

```
public IMediaStream getStream(INetConnection netConnection,  
    int index,  
    boolean doCreate)
```

Get a media stream reference by stream id. If it does not exist, create a new one with the given id. If creating a new media stream object, its id must first be obtained by calling [getNextStreamIndex\(INetConnection\)](#).

Parameters:

netConnection - netConnection to remote server
index - stream id
doCreate - true to create if it does not exist

Returns:

media stream object

getStream

```
public IMediaStream getStream(String name)
```

Get a media stream by stream name. Only published live streams are stored in the mediaStreamMap by name. This method is used to lookup a published live stream by name.

Parameters:

name - stream name

Returns:

media stream object or null if does not exist

setStreamName

```
public void setStreamName(IMediaStream stream,  
    String name)
```

Insert live media stream into the mediaStreamMap by name.

Parameters:

stream - media stream object
name - media stream name

clearStreamName

```
public void clearStreamName(String name)
```

Unregister a published live media stream name.

Parameters:

name - stream name

streamToIndex

```
public long streamToIndex(IMediaStream stream)
```

(continued from last page)

Get the unique stream identifier for a given stream

Parameters:

stream - stream

Returns:

unique stream identifier

clearStreamName

```
public void clearStreamName(String name,  
    IMediaStream stream)
```

Unregister a published live media stream name.

Parameters:

name - stream name

stream - stream

getNextStreamIndex

```
public int getNextStreamIndex(INetConnection netConnection)
```

Reserve a stream for a netConnection connection. Use [getStream\(INetConnection, int, boolean\)](#) to create stream.

Parameters:

netConnection

Returns:

next stream index

getNextStreamIndex

```
public int getNextStreamIndex(IClient client)
```

Reserve a stream for a client connection. Use [getStream\(IClient, int, boolean\)](#) to create stream.

Parameters:

client - parent client

Returns:

stream index

getNextStreamIndex

```
public int getNextStreamIndex()
```

Reserve a clientless stream id for a new media stream. Use this method to obtain a stream id for a new media stream object that is then created with a call to getClientlessStream().

Returns:

new reserved stream id

getCount

```
public int getCount()
```

Get the total number of streams stored in the mediaStreamMap

(continued from last page)

Returns:

total number of streams stored in the mediaStreamMap

removeStream

```
public void removeStream(INetConnection netConnection,  
    int index)
```

Remove a stream associated with a netConnection object

Parameters:

netConnection - net connection

index - stream index

removeStream

```
public void removeStream(IClient client,  
    int index)
```

Remove a stream associated with a client connection

Parameters:

client - client

index - stream index

removeStream

```
public void removeStream(int index)
```

Remove a clientless media stream

Parameters:

index - stream index

getAppName

```
public String getAppName()
```

Get the name of the parent application.

Returns:

parent application name.

getAppInstanceName

```
public String getAppInstanceName()
```

Get the name of the parent applicationInstance.

Returns:

parent applicationInstance name

getVHost

```
public IVHost getVHost()
```

Get the parent vHost.

(continued from last page)

Returns:

parent vHost

getAppInstance

```
public IApplicationInstance getAppInstance( )
```

Get the parent applicationInstance.

Returns:

parent applicationInstance

notifyPlayUnpublish

```
public void notifyPlayUnpublish(IMediaStream stream)
```

Notify all play streams that are listening to this stream that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).

Parameters:

stream - live published stream that is being unpublished

notifyPlayUnpublish

```
public void notifyPlayUnpublish(String streamName)
```

Notify all play streams that are listening to this stream name that the stream is going into a state of unpublished (NetStream.Play.UnpublishNotify).

Parameters:

streamName - live published stream that is being unpublished

broadcastGetObjectEncoding

```
public int broadcastGetObjectEncoding(IMediaStream stream)
```

Get the minimum object encoding level for the clients playing this stream.

Parameters:

stream - publish stream

Returns:

object encoding level (AMF0 or AMF3)

broadcastPlayMessage

```
public void broadcastPlayMessage(IMediaStream stream,  
    long timecode,  
    java.nio.ByteBuffer msg,  
    int objectEncoding)
```

Send a broadcast message to all play stream that are listening to this live published stream.

Parameters:

stream - media stream

timecode - timecode (milliseconds)

msg - byte[] of data that will be deserialized as an AMFData object.

objectEncoding - object encoding (AMF0 or AMF3)

notifyPlayPublish

```
public void notifyPlayPublish(IMediaStream stream)
```

Notify all play streams that are listening to this stream that the stream is going into a state of publish (NetStream.Play.PublishNotify).

Parameters:

stream - live published stream that is being published

addMediaStreamListener

```
public void addMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Add a media stream listener. A media stream listener will receive the following events: onMediaStreamCreate, onMediaStreamDestroy.

Parameters:

mediaStreamListener - media stream listener

removeMediaStreamListener

```
public void removeMediaStreamListener(IMediaStreamNotify mediaStreamListener)
```

Remove a media stream listener.

Parameters:

mediaStreamListener - media stream listener

notifyMediaStreamCreate

```
public void notifyMediaStreamCreate(IMediaStream mediaStream)
```

Notify all media stream listeners that a new media stream object has been created.

Parameters:

mediaStream - new media stream object

notifyMediaStreamDestroy

```
public void notifyMediaStreamDestroy(IMediaStream mediaStream)
```

Notify all media stream listeners that a media stream object is being destroyed.

Parameters:

mediaStream - media stream object being destroyed

removeLiveStreamPacketizer

```
public void removeLiveStreamPacketizer(String streamName)
```

Remove all live stream packetizers for this stream name

Parameters:

streamName - streamName

(continued from last page)

removeLiveStreamPacketizer

```
public ILiveStreamPacketizer removeLiveStreamPacketizer(String streamName,  
String packetizerName)
```

Remove live stream packetizer

Parameters:

streamName - stream name
packetizerName - packetizer id

Returns:

live stream packetizer

getLiveStreamPacketizerLock

```
public Object getLiveStreamPacketizerLock()
```

Get the lock to the live stream packetizer system

Returns:

lock to the live stream packetizer system

getLiveStreamPacketizer

```
public ILiveStreamPacketizer getLiveStreamPacketizer(String streamName,  
String packetizerName,  
boolean doCreate)
```

Get a live stream packetizer by name and packetizer id

Parameters:

streamName - stream name
packetizerName - packetizer id
doCreate - create if does not exist

Returns:

live stream packetizer

getNextNameGroupId

```
public long getNextNameGroupId(MediaStreamMapGroup newGroup)
```

addNameGroup

```
public MediaStreamMapGroup addNameGroup(MediaStreamMapGroup newGroup)
```

removeNameGroup

```
public MediaStreamMapGroup removeNameGroup(int groupId)
```

(continued from last page)

removeNameGroup

```
public MediaStreamMapGroup removeNameGroup(MediaStreamMapGroup nameGroup)
```

getNameGroups

```
public java.util.Set getNameGroups()
```

getNameGroupByGroupName

```
public MediaStreamMapGroup getNameGroupByGroupName(String groupName)
```

getNameGroups

```
public java.util.Set getNameGroups(String streamName)
```

getNameGroupStreamNames

```
public java.util.Set getNameGroupStreamNames(String streamName)
```

getDvrRecorder

```
public ILiveStreamDvrRecorder getDvrRecorder(String streamName,  
    String recorderName,  
    boolean doCreate)
```

Get a DVR recorder by name and recorder name

Parameters:

streamName - stream name
recorderName - packetizer id
doCreate - create if does not exist

Returns:

dvr recorder

removeDvrRecorder

```
public void removeDvrRecorder(String streamName)
```

removeDvrRecorder

```
public ILiveStreamDvrRecorder removeDvrRecorder(String streamName,  
    String recorderName)
```

Remove DVR Recorder

(continued from last page)

Parameters:

streamName - stream name
recorderName - recorder name

Returns:

DVR Recorder

getDvrRecorders

```
public java.util.List getDvrRecorders()
```

Returns a list of `ILiveStreamDvrRecorder` objects

Returns:

list of `ILiveStreamDvrRecorder` objects

addLicense

```
public LicenseHolder addLicense(IMediaStream stream,  
int licenseType)
```

addLicense

```
public LicenseHolder addLicense(ILiveStreamPacketizer liveStreamPacketizer,  
int licenseType)
```

doWatchdog

```
public void doWatchdog()
```

getNameGroupRemoveDelayTime

```
public int getNameGroupRemoveDelayTime()
```

setNameGroupRemoveDelayTime

```
public void setNameGroupRemoveDelayTime(int nameGroupRemoveDelayTime)
```

com.wowza.wms.stream

Class MediaStreamNameAliasProviderBase

java.lang.Object

└--com.wowza.wms.stream.MediaStreamNameAliasProviderBase

All Implemented Interfaces:

[IMediaStreamNameAliasProvider3](#), [IMediaStreamNameAliasProvider2](#), [IMediaStreamNameAliasProvider](#)

public abstract class **MediaStreamNameAliasProviderBase**

extends Object

implements [IMediaStreamNameAliasProvider](#), [IMediaStreamNameAliasProvider2](#),
[IMediaStreamNameAliasProvider3](#)

Abstract base class for IMediaStreamNameAliasProvider interfaces

Constructor Summary

public	MediaStreamNameAliasProviderBase()
--------	--

Method Summary

String	resolvePlayAlias() (IApplicationInstance appInstance, String name)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, IClient client)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, IHTTPStreamerSession httpSession)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, ILiveStreamPacketizer liveStreamPacketizer)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, IWebSocketSession webSocket)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, RTPSession rtpSession)
String	resolvePlayAlias() (IApplicationInstance appInstance, String name, com.wowza.wms.webrtc.model.WebRTCSession webrtcSession)
String	resolveStreamAlias() (IApplicationInstance appInstance, String name)
String	resolveStreamAlias() (IApplicationInstance appInstance, String name, IMediaCaster mediaCaster)
String	resolveStreamAlias() (IApplicationInstance appInstance, String name, IWebSocketSession webSocket)

String

[resolveStreamAlias](#)([IApplicationInstance](#) appInstance, String name, [com.wowza.wms.webrtc.model.WebRTCSession](#) webrtcSession)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider2](#)

[resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider3](#)

[resolvePlayAlias](#), [resolvePlayAlias](#), [resolveStreamAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider2](#)

[resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#), [resolvePlayAlias](#), [resolveStreamAlias](#)

Methods inherited from interface [com.wowza.wms.stream.IMediaStreamNameAliasProvider](#)

[resolvePlayAlias](#), [resolveStreamAlias](#)

Constructors

MediaStreamNameAliasProviderBase

```
public MediaStreamNameAliasProviderBase()
```

Methods

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,
    String name,
    IWebSocketSession websocket)
```

(continued from last page)

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IWebSocketSession websocket)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webrtcSession)
```

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    com.wowza.wms.webrtc.model.WebRTCSession webrtcSession)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IClient client)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    IHTTPStreamerSession httpSession)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    RTPSession rtpSession)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name,  
    ILiveStreamPacketizer liveStreamPacketizer)
```

(continued from last page)

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name,  
    IMediaCaster mediaCaster)
```

resolvePlayAlias

```
public String resolvePlayAlias(IApplicationInstance appInstance,  
    String name)
```

resolveStreamAlias

```
public String resolveStreamAlias(IApplicationInstance appInstance,  
    String name)
```

com.wowza.wms.stream Class MediaWriterActionNotifyBase

java.lang.Object

└─com.wowza.wms.stream.MediaWriterActionNotifyBase

All Implemented Interfaces:

[IMediaWriterActionNotify](#)

public abstract class **MediaWriterActionNotifyBase**
extends Object
implements [IMediaWriterActionNotify](#)

Abstract base class for IMediaWriterActionNotify interface

Constructor Summary

public	MediaWriterActionNotifyBase()
--------	---

Method Summary

void	onFLVAddMetadata (IMediaStream stream, java.util.Map extraMetadata)
------	--

void	onWriteComplete (IMediaStream stream, java.io.File file)
------	---

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.IMediaWriterActionNotify](#)

[onFLVAddMetadata](#), [onWriteComplete](#)

Constructors

MediaWriterActionNotifyBase

public **MediaWriterActionNotifyBase**()

Methods

onWriteComplete

public void **onWriteComplete**([IMediaStream](#) stream,
java.io.File file)

onFLVAddMetadata

```
public void onFLVAddMetadata(IMediaStream stream,  
                             java.util.Map extraMetadata)
```

Package

com.wowza.wms.stream.live

com.wowza.wms.stream.live Interface ILivePacketSorter

public interface **ILivePacketSorter**
extends

Method Summary

abstract void	addAudio (AMFPacket packet, long systime)
abstract void	addData (AMFPacket packet, long systime)
abstract void	addPacket (AMFPacket packet, long systime)
abstract void	addVideo (AMFPacket packet, long systime)
abstract java.util.List	getPackets (long systime, int bufferSize)

Methods

addPacket

```
public abstract void addPacket(AMFPacket packet,  
                                long systime)
```

addAudio

```
public abstract void addAudio(AMFPacket packet,  
                                long systime)
```

addVideo

```
public abstract void addVideo(AMFPacket packet,  
                                long systime)
```

addData

```
public abstract void addData(AMFPacket packet,  
                                long systime)
```

(continued from last page)

getPackets

```
public abstract java.util.List getPackets(long systime,  
                                           int bufferSize)
```

com.wowza.wms.stream.live Interface ILivePlayer

public interface **ILivePlayer**
extends

Field Summary

public static final	BEHINDRESET Value: 60000
public static final	FILTER_NODFRAMES Value: 3
public static final	FILTER_NOKFRAMES Value: 0
public static final	FILTER_NOPFRAMES Value: 1
public static final	FILTER_OUTPUTALL Value: 7

Method Summary

abstract void	close()
abstract long	getLastSentAudioTC()
abstract long	getLastSentDataTC()
abstract long	getLastSentVideoTC()
abstract long	getLastTimecodeOffset()
abstract int	getLastVideoFilter()
abstract void	init (IMediaStream parent, MediaStreamMap streams)
abstract void	interruptPlay()
abstract double	length()
abstract void	pause (int pauseType, long timecode)

abstract void	pauseRaw (int pauseType, long timecode)
abstract boolean	play ()
abstract boolean	play (IMediaStream stream)
abstract int	play (IMediaStream stream, java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes)
abstract int	play (java.io.OutputStream out, AMFObj wmsObjAudio, AMFObj wmsObjVideo, AMFObj wmsObjData, long[] sizes)
abstract void	reset (boolean isReset)
abstract void	resetNoLookup ()
abstract void	seek (int location)
abstract void	setBufferTime (int bufferTime)
abstract void	setName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
abstract void	shutdown ()
abstract long	size ()
abstract void	startPlay ()
abstract void	stopName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
abstract void	switchName (String name, String oldName, String ext, String queryStr, double playStart, double playLen, int playTransition)
abstract void	switchPlay ()
abstract void	updateLoggingValues ()

Fields

FILTER_OUTPUTALL

public static final int **FILTER_OUTPUTALL**

Constant value: **7**

(continued from last page)

FILTER_NODFRAMES

```
public static final int FILTER_NODFRAMES
```

Constant value: **3**

FILTER_NOPFRAMES

```
public static final int FILTER_NOPFRAMES
```

Constant value: **1**

FILTER_NOKFRAMES

```
public static final int FILTER_NOKFRAMES
```

Constant value: **0**

BEHINDRESET

```
public static final int BEHINDRESET
```

Constant value: **60000**

Methods

init

```
public abstract void init(IMediaStream parent,  
    MediaStreamMap streams)
```

play

```
public abstract int play(IMediaStream stream,  
    java.io.OutputStream out,  
    AMFObj wmsObjAudio,  
    AMFObj wmsObjVideo,  
    AMFObj wmsObjData,  
    long[] sizes)
```

play

```
public abstract int play(java.io.OutputStream out,  
    AMFObj wmsObjAudio,  
    AMFObj wmsObjVideo,  
    AMFObj wmsObjData,  
    long[] sizes)
```

(continued from last page)

play

```
public abstract boolean play(IMediaStream stream)
```

play

```
public abstract boolean play()
```

close

```
public abstract void close()
```

resetNoLookup

```
public abstract void resetNoLookup()
```

reset

```
public abstract void reset(boolean isReset)
```

pause

```
public abstract void pause(int pauseType,  
    long timecode)
```

pauseRaw

```
public abstract void pauseRaw(int pauseType,  
    long timecode)
```

seek

```
public abstract void seek(int location)
```

setBufferTime

```
public abstract void setBufferTime(int bufferTime)
```

(continued from last page)

shutdown

```
public abstract void shutdown()
```

setName

```
public abstract void setName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

switchName

```
public abstract void switchName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

stopName

```
public abstract void stopName(String name,  
    String oldName,  
    String ext,  
    String queryStr,  
    double playStart,  
    double playLen,  
    int playTransition)
```

interruptPlay

```
public abstract void interruptPlay()
```

startPlay

```
public abstract void startPlay()
```

switchPlay

```
public abstract void switchPlay()
```

(continued from last page)

updateLoggingValues

```
public abstract void updateLoggingValues()
```

length

```
public abstract double length()
```

size

```
public abstract long size()
```

getLastTimecodeOffset

```
public abstract long getLastTimecodeOffset()
```

getLastSentVideoTC

```
public abstract long getLastSentVideoTC()
```

getLastSentAudioTC

```
public abstract long getLastSentAudioTC()
```

getLastSentDataTC

```
public abstract long getLastSentDataTC()
```

getLastVideoFilter

```
public abstract int getLastVideoFilter()
```

com.wowza.wms.stream.live Interface ILiveReceiver

public interface **ILiveReceiver**
extends

Method Summary

abstract void	addAudioCodecConfigPacket (long timecode, AMFPacket packet)
abstract void	addAudioData (byte[] data, int offset, int size, int totalSize, long audioTC)
abstract void	addAudioExtraData (java.util.Map extraData)
abstract void	addDataData (byte[] data, int offset, int size, int totalSize, long dataTC)
abstract void	addDataExtraData (java.util.Map extraData)
abstract void	addVideoCodecConfigPacket (long timecode, AMFPacket packet)
abstract void	addVideoData (byte[] data, int offset, int size, int totalSize, long videoTC)
abstract void	addVideoExtraData (java.util.Map extraData)
abstract void	close ()
abstract void	flush ()
abstract AMFPacket	getAudioCodecConfigPacket (long timecode)
abstract int	getAudioCodecId ()
abstract int	getAudioMissing (int totalSize)
abstract int	getDataMissing (int totalSize)
abstract long	getFirstPacketTC ()
abstract long	getLastFlushAudioTC ()
abstract long	getLastFlushDataTC ()
abstract long	getLastFlushRTTimecode ()

abstract long	<u>getLastFlushTime()</u>
abstract long	<u>getLastFlushTimecode()</u>
abstract long	<u>getLastFlushVideoTC()</u>
abstract <u>AMFPacket</u>	<u>getLastKeyFrame()</u>
abstract <u>AMFPacket</u>	<u>getLastPacket()</u>
abstract long	<u>getLastPacketTC()</u>
abstract long	<u>getLastReceivedAudioTC()</u>
abstract long	<u>getLastReceivedDataTC()</u>
abstract long	<u>getLastReceivedVideoTC()</u>
abstract long	<u>getLastSentAudioTC()</u>
abstract long	<u>getLastSentDataTC()</u>
abstract long	<u>getLastSentVideoTC()</u>
abstract <u>ILiveStreamPacketizer</u>	<u>getLiveStreamPacketizer</u> (String name)
abstract int	<u>getMaximumLiveLatency()</u>
abstract long	<u>getMaxTimecode()</u>
abstract int	<u>getPacketCount()</u>
abstract java.util.List	<u>getPlayPackets()</u>
abstract int	<u>getPublishBitrateAudio()</u>
abstract int	<u>getPublishBitrateAudio</u> (int source)
abstract int	<u>getPublishBitrateVideo()</u>
abstract int	<u>getPublishBitrateVideo</u> (int source)
abstract long	<u>getPublishFrameCountAudio()</u>
abstract long	<u>getPublishFrameCountData()</u>
abstract long	<u>getPublishFrameCounts</u> (long[] counts)

abstract long	getPublishFrameCountVideo()
abstract long	getPublishFrameCountVideoKey()
abstract double	getPublishFramerateVideo()
abstract double	getPublishFramerateVideo(int source)
abstract int[]	getPublishKeyFrameIntervalsVideo()
abstract int	getSrc()
abstract long	getTimecodeOffset()
abstract AMFPacket	getVideoCodecConfigPacket(long timecode)
abstract int	getVideoCodecId()
abstract int	getVideoMissing(int totalSize)
abstract void	init(IMediaStream stream)
abstract boolean	isPublishStreamReady(boolean checkAudio, boolean checkVideo)
abstract void	onStreamStart(java.util.List metaDataList, long timecode)
abstract void	resetTimecodes()
abstract void	setAudioCodecId(int publishAudioCodecId)
abstract void	setMaximumLiveLatency(int maximumLiveLatency)
abstract void	setMaximumPacketsPerSecond(int maximumPacketsPerSecond)
abstract void	setSrc(int src)
abstract void	setVideoCodecId(int publishVideoCodecId)
abstract void	shutdown()
abstract void	startAudioPacket()
abstract void	startDataPacket()
abstract void	startVideoPacket()
abstract void	trim()

abstract void	trim (java.util.List dataObjs)
abstract void	updateLoggingValues ()

Methods

init

```
public abstract void init(IMediaStream stream)
```

resetTimecodes

```
public abstract void resetTimecodes()
```

getVideoMissing

```
public abstract int getVideoMissing(int totalSize)
```

getDataMissing

```
public abstract int getDataMissing(int totalSize)
```

getAudioMissing

```
public abstract int getAudioMissing(int totalSize)
```

startVideoPacket

```
public abstract void startVideoPacket()
```

addVideoData

```
public abstract void addVideoData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long videoTC)
```

startDataPacket

```
public abstract void startDataPacket()
```


(continued from last page)

addDataData

```
public abstract void addDataData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long dataTC)
```

startAudioPacket

```
public abstract void startAudioPacket()
```

addAudioData

```
public abstract void addAudioData(byte[] data,  
    int offset,  
    int size,  
    int totalSize,  
    long audioTC)
```

getPacketCount

```
public abstract int getPacketCount()
```

getLastPacketTC

```
public abstract long getLastPacketTC()
```

getFirstPacketTC

```
public abstract long getFirstPacketTC()
```

getLastPacket

```
public abstract AMFPacket getLastPacket()
```

getPlayPackets

```
public abstract java.util.List getPlayPackets()
```

(continued from last page)

getLastKeyFrame

```
public abstract AMFPacket getLastKeyFrame()
```

trim

```
public abstract void trim(java.util.List dataObjs)
```

trim

```
public abstract void trim()
```

getMaximumLiveLatency

```
public abstract int getMaximumLiveLatency()
```

setMaximumLiveLatency

```
public abstract void setMaximumLiveLatency(int maximumLiveLatency)
```

getSrc

```
public abstract int getSrc()
```

setSrc

```
public abstract void setSrc(int src)
```

close

```
public abstract void close()
```

getMaxTimecode

```
public abstract long getMaxTimecode()
```

getTimecodeOffset

```
public abstract long getTimecodeOffset()
```

(continued from last page)

updateLoggingValues

```
public abstract void updateLoggingValues()
```

getLastReceivedAudioTC

```
public abstract long getLastReceivedAudioTC()
```

getLastReceivedVideoTC

```
public abstract long getLastReceivedVideoTC()
```

getLastReceivedDataTC

```
public abstract long getLastReceivedDataTC()
```

getLastSentAudioTC

```
public abstract long getLastSentAudioTC()
```

getLastSentVideoTC

```
public abstract long getLastSentVideoTC()
```

getLastSentDataTC

```
public abstract long getLastSentDataTC()
```

getLastFlushAudioTC

```
public abstract long getLastFlushAudioTC()
```

getLastFlushVideoTC

```
public abstract long getLastFlushVideoTC()
```

(continued from last page)

getLastFlushDataTC

```
public abstract long getLastFlushDataTC()
```

getLastFlushTimecode

```
public abstract long getLastFlushTimecode()
```

getLastFlushRTTimecode

```
public abstract long getLastFlushRTTimecode()
```

getLastFlushTime

```
public abstract long getLastFlushTime()
```

addAudioCodecConfigPacket

```
public abstract void addAudioCodecConfigPacket(long timecode,  
    AMFPacket packet)
```

getVideoCodecConfigPacket

```
public abstract AMFPacket getVideoCodecConfigPacket(long timecode)
```

addVideoCodecConfigPacket

```
public abstract void addVideoCodecConfigPacket(long timecode,  
    AMFPacket packet)
```

onStreamStart

```
public abstract void onStreamStart(java.util.List metaDataList,  
    long timecode)
```

flush

```
public abstract void flush()
```

(continued from last page)

getLiveStreamPacketizer

```
public abstract ILiveStreamPacketizer getLiveStreamPacketizer(String name)
```

getAudioCodecConfigPacket

```
public abstract AMFPacket getAudioCodecConfigPacket(long timecode)
```

getVideoCodecId

```
public abstract int getVideoCodecId()
```

getAudioCodecId

```
public abstract int getAudioCodecId()
```

setVideoCodecId

```
public abstract void setVideoCodecId(int publishVideoCodecId)
```

setAudioCodecId

```
public abstract void setAudioCodecId(int publishAudioCodecId)
```

isPublishStreamReady

```
public abstract boolean isPublishStreamReady(boolean checkAudio,  
        boolean checkVideo)
```

setMaximumPacketsPerSecond

```
public abstract void setMaximumPacketsPerSecond(int maximumPacketsPerSecond)
```

shutdown

```
public abstract void shutdown()
```

addAudioExtraData

```
public abstract void addAudioExtraData(java.util.Map extraData)
```

(continued from last page)

addVideoExtraData

```
public abstract void addVideoExtraData(java.util.Map extraData)
```

addDataExtraData

```
public abstract void addDataExtraData(java.util.Map extraData)
```

getPublishBitrateVideo

```
public abstract int getPublishBitrateVideo()
```

getPublishBitrateAudio

```
public abstract int getPublishBitrateAudio()
```

getPublishBitrateVideo

```
public abstract int getPublishBitrateVideo(int source)
```

getPublishBitrateAudio

```
public abstract int getPublishBitrateAudio(int source)
```

getPublishFramerateVideo

```
public abstract double getPublishFramerateVideo()
```

getPublishKeyFrameIntervalsVideo

```
public abstract int[] getPublishKeyFrameIntervalsVideo()
```

getPublishFramerateVideo

```
public abstract double getPublishFramerateVideo(int source)
```

(continued from last page)

getPublishFrameCounts

```
public abstract long getPublishFrameCounts(long[] counts)
```

getPublishFrameCountVideo

```
public abstract long getPublishFrameCountVideo()
```

getPublishFrameCountVideoKey

```
public abstract long getPublishFrameCountVideoKey()
```

getPublishFrameCountAudio

```
public abstract long getPublishFrameCountAudio()
```

getPublishFrameCountData

```
public abstract long getPublishFrameCountData()
```

Package

com.wowza.wms.stream.livedvr

com.wowza.wms.stream.livedvr Interface IDvrStreamManagerActionNotify

All Subinterfaces:

[IDvrStreamManagerActionNotify2](#)

public interface **IDvrStreamManagerActionNotify**
extends

IDvrStreamManagerActionNotify notify interface for dvr stores. See
IApplicationInstance.addDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)

Method Summary

abstract void	onDvrStreamManagerCreate (IDvrStreamManager dvrMgr) Called when DVR stream manager created but before it is initialized.
abstract void	onDvrStreamManagerDestroy (IDvrStreamManager dvrMgr) Called when DVR stream manager destroyed.
abstract void	onDvrStreamManagerInit (IDvrStreamManager dvrMgr) Called when DVR stream manager initialized.

Methods

onDvrStreamManagerCreate

public abstract void **onDvrStreamManagerCreate**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager created but before it is initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInit

public abstract void **onDvrStreamManagerInit**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerDestroy

public abstract void **onDvrStreamManagerDestroy**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager destroyed.

Parameters:

dvrMgr - DVR stream manager

com.wowza.wms.stream.livedvr Interface IDvrStreamManagerActionNotify2

All Superinterfaces:

[IDvrStreamManagerActionNotify](#)

public interface **IDvrStreamManagerActionNotify2**

extends [IDvrStreamManagerActionNotify](#)

IDvrStreamManagerActionNotify notify interface for dvr stores. See
IApplicationInstance.addDvrStreamManagerListener(IDvrStreamManagerActionNotify listener)

Method Summary

abstract void	onDvrStreamManagerCreate (IDvrStreamManager dvrMgr) Called when DVR stream manager created but before it is initialized.
abstract void	onDvrStreamManagerDestroy (IDvrStreamManager dvrMgr) Called when DVR stream manager destroyed.
abstract void	onDvrStreamManagerInit (IDvrStreamManager dvrMgr) Called when DVR stream manager initialized.
abstract void	onDvrStreamManagerInitStreamName (IDvrStreamManager dvrManager, String streamName)

Methods inherited from interface [com.wowza.wms.stream.livedvr.IDvrStreamManagerActionNotify](#)

[onDvrStreamManagerCreate](#), [onDvrStreamManagerDestroy](#), [onDvrStreamManagerInit](#)

Methods

onDvrStreamManagerCreate

public abstract void **onDvrStreamManagerCreate**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager created but before it is initialized.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInit

public abstract void **onDvrStreamManagerInit**([IDvrStreamManager](#) dvrMgr)

Called when DVR stream manager initialized.

Parameters:

dvrMgr - DVR stream manager

(continued from last page)

onDvrStreamManagerDestroy

```
public abstract void onDvrStreamManagerDestroy(IDvrStreamManager dvrMgr)
```

Called when DVR stream manager destroyed.

Parameters:

dvrMgr - DVR stream manager

onDvrStreamManagerInitStreamName

```
public abstract void onDvrStreamManagerInitStreamName(IDvrStreamManager dvrManager,  
String streamName)
```

com.wowza.wms.stream.livedvr Interface **ILiveStreamDvrRecorder**

public interface **ILiveStreamDvrRecorder**
extends

ILiveStreamDvrRecorder: DVR Recorder interface.

Method Summary

abstract boolean	<u>canRecordAudio()</u> True if audio is being recorded
abstract boolean	<u>canRecordData()</u> True if data is being recorded
abstract boolean	<u>canRecordVideo()</u> True if video is being recorded
abstract <u>IMediaStream</u>	<u>getAndSetStartStream()</u> (<u>IMediaStream</u> stream)
abstract <u>IApplicationInstance</u>	<u>getAppInstance()</u> Get associated applicationInstance.
abstract <u>IDvrStreamManager</u>	<u>getDvrManager()</u> Get DVR recorder's associated DVR stream manager
abstract int	<u>getDvrRecorderId()</u> Get the DVR recorder id
abstract LicenseHolder	<u>getLicenseHolder()</u>
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get properties
abstract String	<u>getRecordingName()</u>
abstract <u>IMediaStream</u>	<u>getStream()</u> Get the current stream that is being recorded
abstract void	<u>handlePacket()</u> (<u>IMediaStream</u> stream, <u>AMFPacket</u> packet) Called to handle an incoming packet
abstract void	<u>init()</u> (String streamName, String recorderName, <u>IApplicationInstance</u> appInstance, DvrRecorderItem dvrRecorderItem) Initialize DVR recorder.
abstract boolean	<u>isActive()</u> Is the DVR recorder active
abstract boolean	<u>isRecording()</u> Is this stream currently recording.

abstract boolean	<u>isRecordingPaused()</u> Is this stream currently paused from recording.
abstract boolean	<u>pauseRecording()</u> Request that stream recording pause.
abstract void	<u>resetStream()</u> (<u>IMediaStream</u> stream) Called when something happens that forces the stream to reset
abstract boolean	<u>resumeRecording()</u> Request that stream recording resume.
abstract void	<u>setDvrRecorderId()</u> (int liveStreamId) Set the DVR recorder id
abstract void	<u>setRecordAudio()</u> (boolean recordAudio) Set to true to record audio
abstract void	<u>setRecordData()</u> (boolean recordVideo) Set to true to record data
abstract void	<u>setRecordingName()</u> (String name)
abstract void	<u>setRecordVideo()</u> (boolean recordVideo) Set to true to record video
abstract void	<u>setStartRecordingOnStartup()</u> (boolean shouldStartRecordingOnStartup) Set recording behavior of DVR Manager on startup.
abstract boolean	<u>shouldStartRecordingOnStartup()</u> Should DVR start recording when packets start flowing.
abstract void	<u>shutdown()</u> Called to shutdown the DVR recorder
abstract <u>IDvrStreamManager</u>	<u>startRecording()</u> Request that stream recording start.
abstract void	<u>startStream()</u> (<u>IMediaStream</u> stream) Called when the stream starts
abstract boolean	<u>stopRecording()</u> Request that stream recording stop.
abstract void	<u>touch()</u> (long timecode) Touch the stream to keep it active

Methods

init

```
public abstract void init(String streamName,
    String recorderName,
    IApplicationInstance appInstance,
    DvrRecorderItem dvrRecorderItem)
```

Initialize DVR recorder.

(continued from last page)

Parameters:

streamName - stream name
recorderName - DVR recorder name
appInstance - application instance
dvrRecorderItem - DVR recorder

shutdown

```
public abstract void shutdown()
```

Called to shutdown the DVR recorder

getStream

```
public abstract IMediaStream getStream()
```

Get the current stream that is being recorded

Returns:

stream

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get associated applicationInstance.

Returns:

application Instance

handlePacket

```
public abstract void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called to handle an incoming packet

Parameters:

stream - stream
packet - packet

startStream

```
public abstract void startStream(IMediaStream stream)
```

Called when the stream starts

Parameters:

stream - stream

resetStream

```
public abstract void resetStream(IMediaStream stream)
```

Called when something happens that forces the stream to reset

Parameters:

stream - stream

touch

```
public abstract void touch(long timecode)
```

Touch the stream to keep it active

Parameters:

timecode - timecode of touch in milliseconds

isActive

```
public abstract boolean isActive()
```

Is the DVR recorder active

Returns:

true if active

getProperties

```
public abstract WMSProperties getProperties()
```

Get properties

Returns:

properties

getDvrRecorderId

```
public abstract int getDvrRecorderId()
```

Get the DVR recorder id

Returns:

DVR recorder id

setDvrRecorderId

```
public abstract void setDvrRecorderId(int liveStreamId)
```

Set the DVR recorder id

Parameters:

liveStreamId

getDvrManager

```
public abstract IDvrStreamManager getDvrManager()
```

Get DVR recorder's associated DVR stream manager

Returns:

DVR manager

canRecordAudio

```
public abstract boolean canRecordAudio()
```

(continued from last page)

True if audio is being recorded

Returns:

True if audio is being recorded

setRecordAudio

```
public abstract void setRecordAudio(boolean recordAudio)
```

Set to true to record audio

Parameters:

recordAudio - true to record audio

canRecordVideo

```
public abstract boolean canRecordVideo()
```

True if video is being recorded

Returns:

True if video is being recorded

setRecordVideo

```
public abstract void setRecordVideo(boolean recordVideo)
```

Set to true to record video

Parameters:

recordVideo - true to record video

canRecordData

```
public abstract boolean canRecordData()
```

True if data is being recorded

Returns:

True if data is being recorded

setRecordData

```
public abstract void setRecordData(boolean recordVideo)
```

Set to true to record data

Parameters:

recordVideo - true to record data

startRecording

```
public abstract IDvrStreamManager startRecording()
```

Request that stream recording start.

Returns:

stream manager if successful. null otherwise.

isRecording

```
public abstract boolean isRecording()
```

Is this stream currently recording. If this stream is not recordable, the method returns false.

Returns:

true if has a recording stream and it is recording.

isRecordingPaused

```
public abstract boolean isRecordingPaused()
```

Is this stream currently paused from recording. If this stream is not recording and not paused, the method returns false.

Returns:

true if has a recording is paused.

stopRecording

```
public abstract boolean stopRecording()
```

Request that stream recording stop. Note that this call places the DVR stream in the *not* recording state.

A successful stop will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingStopped\(IDvrStreamStore\)](#) method called.

Success only occurs if the stream is already in the recording state [IDvrStreamStore.isRecording\(\)](#).

Returns:

store if successful. null otherwise.

pauseRecording

```
public abstract boolean pauseRecording()
```

Request that stream recording pause. The stream does not have to be actively recording to be paused. For example, it could be paused before packets start flowing.

A successful pause will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingPaused\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

resumeRecording

```
public abstract boolean resumeRecording()
```

Request that stream recording resume. The stream does not have to be actively recording to be resumed. For example, it could have been paused before the stream started, and this call would move it out of the paused state.

A successful resume will result in registered [IDvrRecordingListeners](#) to have their [IDvrRecordingListener.recordingResumed\(IDvrStreamStore\)](#) method called.

Returns:

store if successful. null otherwise.

(continued from last page)

setRecordingName

```
public abstract void setRecordingName(String name)
```

getRecordingName

```
public abstract String getRecordingName()
```

shouldStartRecordingOnStartup

```
public abstract boolean shouldStartRecordingOnStartup()
```

Should DVR start recording when packets start flowing.

Returns:

true if should start recording initially, false otherwise

setStartRecordingOnStartup

```
public abstract void setStartRecordingOnStartup(boolean shouldStartRecordingOnStartup)
```

Set recording behavior of DVR Manager on startup.

Parameters:

shouldStartRecordingOnStartup - should recording start when DVR manager starts.

getLicenseHolder

```
public abstract LicenseHolder getLicenseHolder()
```

getAndSetStartStream

```
public abstract IMediaStream getAndSetStartStream(IMediaStream stream)
```

com.wowza.wms.stream.livedvr Interface **ILiveStreamDvrRecorderActionNotify**

public interface **ILiveStreamDvrRecorderActionNotify**
extends

ILiveStreamDvrRecorderActionNotify: notify interface for dvr recorders.

See Also:

[IApplicationInstance.addDvrRecorderListener\(ILiveStreamDvrRecorderActionNotify\)](#),

Method Summary

abstract void	onLiveStreamDvrRecorderCreate (ILiveStreamDvrRecorder recorder, String streamName) Called when recorder created
abstract void	onLiveStreamDvrRecorderDestroy (ILiveStreamDvrRecorder recorder) Called when recorder destroyed
abstract void	onLiveStreamDvrRecorderInit (ILiveStreamDvrRecorder recorder, String streamName) Called after recorder is initialized

Methods

onLiveStreamDvrRecorderCreate

public abstract void **onLiveStreamDvrRecorderCreate**([ILiveStreamDvrRecorder](#) recorder, String streamName)

Called when recorder created

Parameters:

recorder - recorder
streamName - stream name

onLiveStreamDvrRecorderInit

public abstract void **onLiveStreamDvrRecorderInit**([ILiveStreamDvrRecorder](#) recorder, String streamName)

Called after recorder is initialized

Parameters:

recorder - recorder
streamName - stream name

onLiveStreamDvrRecorderDestroy

public abstract void **onLiveStreamDvrRecorderDestroy**([ILiveStreamDvrRecorder](#) recorder)

Called when recorder destroyed

(continued from last page)

Parameters:

recorder - recorder

com.wowza.wms.stream.livedvr

Interface ILiveStreamDvrRecorderControl

public interface **ILiveStreamDvrRecorderControl**
extends

ILiveStreamDvrRecorderControl: interface to control which recorders are run for which streams.
See Also:
[IApplicationInstance.setLiveStreamDvrRecorderControl\(ILiveStreamDvrRecorderControl\)](#)

Method Summary	
abstract boolean	shouldDvrRecord (String recorderName, IMediaStream stream) Returns true if given string should be recorded.;

Methods

shouldDvrRecord

public abstract boolean **shouldDvrRecord**(String recorderName, [IMediaStream](#) stream)

Returns true if given string should be recorded.;

Parameters:

recorderName - recorder name
stream - stream

Returns:

true to record

Package

com.wowza.wms.stream.livepacketizer

com.wowza.wms.stream.livepacketizer

Interface ILiveStreamPacketizer

All Subinterfaces:

[IDvrStreamManager](#)

public interface **ILiveStreamPacketizer**

extends

ILiveStreamPacketizer: live stream packetizer interface.

Method Summary

abstract IMediaStream	getAndSetStartStream (IMediaStream stream) Get the current stream that is being packetized
abstract IApplicationInstance	getApplicationInstance () Get the application instance associated with this live stream packetizer.
abstract int	getChunkDurationTarget () Deprecated. <i>Deprecated to support usage of term segment, instead of chunk</i> getSegmentDurationTarget ()
abstract int	getLiveStreamPacketizerId () Get the live stream packetizer id
abstract WMSProperties	getProperties () Get properties
abstract long	getRepeaterLastSequence () Get the sequence number of the last added repeater item
abstract int	getSegmentDurationTarget () Returns the duration in milliseconds of the segment else throws an <code>UnsupportedOperationException</code>
int	getSessionFormat () Returns the session format that this packetizer generates
abstract void	handlePacket (IMediaStream stream, AMFPacket packet) Called to handle an incoming packet
abstract void	init (String streamName, String packetizerName, IApplicationInstance appInstance, <code>LiveStreamPacketizerItem</code> liveStreamPacketizerItem) Initialize live stream packetizer
abstract boolean	isActive () Is the live stream packetizer active
abstract boolean	isPacketizeAudio () True if audio is being packetized
abstract boolean	isPacketizeData () True if data is being packetized

abstract boolean	<u>isPacketizeVideo()</u> True if video is being packetized
abstract boolean	<u>isRepeaterEdge()</u> Is this packetizer a live repeater edge
abstract void	<u>resetStream()</u> (<u>IMediaStream</u> stream) Called when something happens that forces the stream to reset
abstract void	<u>setLiveStreamPacketizerId()</u> (int id) Set the live stream packetizer id
abstract void	<u>setPacketizeAudio()</u> (boolean packetizeAudio) Set to true to packetize audio
abstract void	<u>setPacketizeData()</u> (boolean packetizeVideo) Set to true to packetize data
abstract void	<u>setPacketizeVideo()</u> (boolean packetizeVideo) Set to true to packetize video
abstract void	<u>setRepeaterEdge()</u> (boolean isRepeaterEdge) Set is live repeater edge
abstract void	<u>shutdown()</u> Called to shutdown the live stream packetizer
abstract void	<u>startStream()</u> (<u>IMediaStream</u> stream) Called when the stream starts
abstract void	<u>touch()</u> (long timecode) Touch the stream to keep it active

Methods

init

```
public abstract void init(String streamName,
    String packetizerName,
    IApplicationInstance appInstance,
    LiveStreamPacketizerItem liveStreamPacketizerItem)
```

Initialize live stream packetizer

Parameters:

streamName - stream name
 packetizerName - packetizer name
 appInstance - application instance
 liveStreamPacketizerItem - live stream packetizer

shutdown

```
public abstract void shutdown()
```

Called to shutdown the live stream packetizer

(continued from last page)

isActive

```
public abstract boolean isActive()
```

Is the live stream packetizer active

Returns:

true if active

getProperties

```
public abstract WMSProperties getProperties()
```

Get properties

Returns:

properties

getRepeaterLastSequence

```
public abstract long getRepeaterLastSequence()
```

Get the sequence number of the last added repeater item

Returns:

sequence number

getLiveStreamPacketizerId

```
public abstract int getLiveStreamPacketizerId()
```

Get the live stream packetizer id

Returns:

live stream packetizer id

setLiveStreamPacketizerId

```
public abstract void setLiveStreamPacketizerId(int id)
```

Set the live stream packetizer id

Parameters:

id

handlePacket

```
public abstract void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called to handle an incoming packet

Parameters:

stream - stream

packet - packet

(continued from last page)

startStream

```
public abstract void startStream(IMediaStream stream)
```

Called when the stream starts

Parameters:

stream - stream

resetStream

```
public abstract void resetStream(IMediaStream stream)
```

Called when something happens that forces the stream to reset

Parameters:

stream - stream

touch

```
public abstract void touch(long timecode)
```

Touch the stream to keep it active

Parameters:

timecode - timecode of touch in milliseconds

isRepeaterEdge

```
public abstract boolean isRepeaterEdge()
```

Is this packetizer a live repeater edge

Returns:

true if live repeater edge

setRepeaterEdge

```
public abstract void setRepeaterEdge(boolean isRepeaterEdge)
```

Set is live repeater edge

Parameters:

isRepeaterEdge - is live repeater edge

isPacketizeAudio

```
public abstract boolean isPacketizeAudio()
```

True if audio is being packetized

Returns:

True if audio is being packetized

setPacketizeAudio

```
public abstract void setPacketizeAudio(boolean packetizeAudio)
```

(continued from last page)

Set to true to packetize audio

Parameters:

packetizeAudio - true to packetize audio

isPacketizeVideo

```
public abstract boolean isPacketizeVideo()
```

True if video is being packetized

Returns:

True if video is being packetized

setPacketizeVideo

```
public abstract void setPacketizeVideo(boolean packetizeVideo)
```

Set to true to packetize video

Parameters:

packetizeVideo - true to packetize video

isPacketizeData

```
public abstract boolean isPacketizeData()
```

True if data is being packetized

Returns:

True if data is being packetized

setPacketizeData

```
public abstract void setPacketizeData(boolean packetizeVideo)
```

Set to true to packetize data

Parameters:

packetizeVideo - true to packetize data

getAndSetStartStream

```
public abstract IMediaStream getAndSetStartStream(IMediaStream stream)
```

Get the current stream that is being packetized

Returns:

stream

getApplicationInstance

```
public abstract IApplicationInstance getApplicationInstance()
```

Get the application instance associated with this live stream packetizer.

Returns:

application instance

getChunkDurationTarget

```
public abstract int getChunkDurationTarget()
```

Deprecated. *Deprecated to support usage of term segment, instead of chunk* [getSegmentDurationTarget\(\)](#)

getSegmentDurationTarget

```
public abstract int getSegmentDurationTarget()
```

Returns the duration in milliseconds of the segment else throws an UnsupportedOperationException

Returns:

getSessionFormat

```
public int getSessionFormat()
```

Returns the session format that this packetizer generates

Returns:

a IHTTPStreamerSession.SESSIONFORMAT*

com.wowza.wms.stream.livepacketizer Interface **ILiveStreamPacketizerActionNotify**

public interface **ILiveStreamPacketizerActionNotify**
extends

ILiveStreamPacketizerActionNotify: notify interface for live stream packetizers. See
IApplicationInstance.addLiveStreamPacketizerListener(ILiveStreamPacketizerActionNotify liveStreamPacketizerListener)

Method Summary

abstract void	onLiveStreamPacketizerCreate (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Called when packetizer created
abstract void	onLiveStreamPacketizerDestroy (ILiveStreamPacketizer liveStreamPacketizer) Called when packetizer destroyed
abstract void	onLiveStreamPacketizerInit (ILiveStreamPacketizer liveStreamPacketizer, String streamName) Called after packetizer is initialized

Methods

onLiveStreamPacketizerCreate

```
public abstract void onLiveStreamPacketizerCreate(ILiveStreamPacketizer liveStreamPacketizer, String streamName)
```

Called when packetizer created

Parameters:

liveStreamPacketizer - packetizer
streamName - stream name

onLiveStreamPacketizerDestroy

```
public abstract void onLiveStreamPacketizerDestroy(ILiveStreamPacketizer liveStreamPacketizer)
```

Called when packetizer destroyed

Parameters:

liveStreamPacketizer - packetizer

onLiveStreamPacketizerInit

```
public abstract void onLiveStreamPacketizerInit(ILiveStreamPacketizer liveStreamPacketizer, String streamName)
```

(continued from last page)

Called after packetizer is initialized

Parameters:

liveStreamPacketizer - packetizer
streamName - stream name

com.wowza.wms.stream.livepacketizer Interface ILiveStreamPacketizerControl

public interface **ILiveStreamPacketizerControl**
extends

ILiveStreamPacketizerControl: interface to control which packetizers are run for which streams. See:
IApplicationInstance.setLiveStreamPacketizerControl(ILiveStreamPacketizerControl liveStreamPacketizerControl)

Method Summary

abstract boolean	isLiveStreamPacketize (String packetizer, IMediaStream stream) Return true to packetize stream
------------------	---

Methods

isLiveStreamPacketize

public abstract boolean **isLiveStreamPacketize**(String packetizer,
[IMediaStream](#) stream)

Return true to packetize stream

Parameters:

packetizer - packetizer name
stream - stream

Returns:

true to packetize

Package

com.wowza.wms.stream.livetranscoder

com.wowza.wms.stream.livetranscoder Interface **ILiveStreamTranscoder**

public interface **ILiveStreamTranscoder**
extends

ILiveStreamTranscoder: Interface to live stream transcoder.

Field Summary

public static final	<u>TRANSCODERTYPE_LIVE</u> Value: 1
public static final	<u>TRANSCODERTYPE_VOD</u> Value: 2

Method Summary

abstract void	<u>close</u> (<u>IMediaStream</u> stream) Called when live stream transcoder is stream is closed
abstract <u>IApplicationInstance</u>	<u>getAppInstance</u> () Get the application instance associated with this live stream transcoder.
abstract String	<u>getContextStr</u> () Get the streaming context for this live stream transcoder.
abstract LicenseHolder	<u>getLicenseHolder</u> () Get license holder.
abstract LiveStreamTranscoderItem	<u>getLiveStreamTranscoderItem</u> () Get the definition for live stream transcoder.
abstract <u>WMSProperties</u>	<u>getProperties</u> () Get the user properties
abstract java.util.List	<u>getPublisherNames</u> () Get a list of publisher stream names for this transcoder (resultant streams)
abstract java.util.List	<u>getPublishers</u> () Get a list of publishers for this transcoder (resultant streams)
abstract String	<u>getStreamName</u> () Get the stream name of the source stream.
abstract String	<u>getTranscoderName</u> () Get the live stream transcoder name
abstract int	<u>getTranscoderType</u> () Get the live stream transcoder type.

abstract void	<code>handleOnMetadata</code> (<code>IMediaStream</code> stream, <code>AMFPacket</code> packet, long timecode, boolean isSetDataFrame) Called for each new onMetaData packet
abstract void	<code>handlePacket</code> (<code>IMediaStream</code> stream, <code>AMFPacket</code> packet) Called for each new source packet
abstract void	<code>init</code> (String streamName, <code>IMediaStream</code> stream, String transcoderName, <code>IApplicationInstance</code> appInstance, <code>LiveStreamTranscoderItem</code> liveStreamTranscoderItem) Called when live stream transcoder interface is initialized.
abstract boolean	<code>isEncoder</code> () Is this transcoder an encoder session (capture)
abstract boolean	<code>isTemplateLoaded</code> () Is the transcoder template loaded.
abstract boolean	<code>isTranscoderActive</code> (long currTime) Returns true if the transcoder is actively receiving packets
abstract void	<code>resetStream</code> (<code>IMediaStream</code> stream) Called when source stream changes.
abstract void	<code>setAppInstance</code> (<code>IApplicationInstance</code> appInstance) Set the application instance associated with this live stream transcoder.
abstract void	<code>setLiveStreamTranscoderItem</code> (<code>LiveStreamTranscoderItem</code> liveStreamTranscoderItem) Set the definition for live stream transcoder.
abstract void	<code>setStreamName</code> (String streamName) Set source stream name.
abstract void	<code>setTranscoderName</code> (String transcoderName) Get the live stream transcoder name
abstract void	<code>setTranscoderType</code> (int transcoderType) Set the live stream transcoder type.
abstract void	<code>shutdown</code> (<code>IMediaStream</code> stream) Called when live stream transcoder is shutdown

Fields

TRANSCODERTYPE_LIVE

```
public static final int TRANSCODERTYPE_LIVE
```

Constant value: **1**

TRANSCODERTYPE_VOD

```
public static final int TRANSCODERTYPE_VOD
```

Constant value: **2**

Methods

init

```
public abstract void init(String streamName,  
    IMediaStream stream,  
    String transcoderName,  
    IApplicationInstance appInstance,  
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

Called when live stream transcoder interface is initialized.

Parameters:

streamName - stream name
transcoderName - transcoder name
appInstance - application instance
liveStreamTranscoderItem - live stream transcoder config item

handlePacket

```
public abstract void handlePacket(IMediaStream stream,  
    AMFPacket packet)
```

Called for each new source packet

Parameters:

stream - stream
packet - packet

handleOnMetadata

```
public abstract void handleOnMetadata(IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    boolean isSetDataFrame)
```

Called for each new onMetaData packet

Parameters:

stream - stream
packet - packet
timecode - timecode (milliseconds)
isSetDataFrame - is SetDataFrame call

resetStream

```
public abstract void resetStream(IMediaStream stream)
```

Called when source stream changes.

Parameters:

stream - stream interface

close

```
public abstract void close(IMediaStream stream)
```

Called when live stream transcoder is stream is closed

(continued from last page)

Parameters:

stream - stream interface

shutdown

```
public abstract void shutdown(IMediaStream stream)
```

Called when live stream transcoder is shutdown

Parameters:

stream - stream interface

getStreamName

```
public abstract String getStreamName()
```

Get the stream name of the source stream.

Returns:

stream name of the source stream

setStreamName

```
public abstract void setStreamName(String streamName)
```

Set source stream name.

Parameters:

streamName - source stream name

getTranscoderName

```
public abstract String getTranscoderName()
```

Get the live stream transcoder name

Returns:

live stream transcoder name

setTranscoderName

```
public abstract void setTranscoderName(String transcoderName)
```

Get the live stream transcoder name

Parameters:

transcoderName - live stream transcoder name

getAppInstance

```
public abstract IApplicationInstance getAppInstance()
```

Get the application instance associated with this live stream transcoder.

Returns:

application instance associated with this live stream transcoder

(continued from last page)

setAppInstance

```
public abstract void setAppInstance(IApplicationInstance appInstance)
```

Set the application instance associated with this live stream transcoder.

Parameters:

appInstance - application instance associated with this live stream transcoder

getLiveStreamTranscoderItem

```
public abstract LiveStreamTranscoderItem getLiveStreamTranscoderItem()
```

Get the definition for live stream transcoder.

Returns:

definition for live stream transcoder

setLiveStreamTranscoderItem

```
public abstract void setLiveStreamTranscoderItem(LiveStreamTranscoderItem  
liveStreamTranscoderItem)
```

Set the definition for live stream transcoder.

Parameters:

liveStreamTranscoderItem - definition for live stream transcoder

getProperties

```
public abstract WMSProperties getProperties()
```

Get the user properties

Returns:

user properties

getLicenseHolder

```
public abstract LicenseHolder getLicenseHolder()
```

Get license holder.

Returns:

license holder

isTranscoderActive

```
public abstract boolean isTranscoderActive(long currTime)
```

Returns true if the transcoder is actively receiving packets

Parameters:

currTime - current timecode in milliseconds

Returns:

true if the transcoder is actively receiving packets

isTemplateLoaded

```
public abstract boolean isTemplateLoaded()
```

Is the transcoder template loaded.

Returns:

true if transcoder template is loaded.

getContextStr

```
public abstract String getContextStr()
```

Get the streaming context for this live stream transcoder.

Returns:

streaming context for this live stream transcoder

getTranscoderType

```
public abstract int getTranscoderType()
```

Get the live stream transcoder type. See `ILiveStreamTranscoder.TRANSCODERTYPE_*`

Returns:

live stream transcoder type

setTranscoderType

```
public abstract void setTranscoderType(int transcoderType)
```

Set the live stream transcoder type. See `ILiveStreamTranscoder.TRANSCODERTYPE_*`

Parameters:

transcoderType - live stream transcoder type

getPublishers

```
public abstract java.util.List getPublishers()
```

Get a list of publishers for this transcoder (resultant streams)

Returns:

list of publishers for this transcoder

getPublisherNames

```
public abstract java.util.List getPublisherNames()
```

Get a list of publisher stream names for this transcoder (resultant streams)

Returns:

list of publishers names

isEncoder

```
public abstract boolean isEncoder()
```

(continued from last page)

Is this transcoder an encoder session (capture)

Returns:

true if this live transcoder is an encoder session

com.wowza.wms.stream.livetranscoder Interface **ILiveStreamTranscoderControl**

public interface **ILiveStreamTranscoderControl**
extends

Interface used to control if stream is transcoded. See
`IApplicationInstance.setLiveStreamTranscoderControl(ILiveStreamTranscoderControl)`

Method Summary

abstract boolean	<code>isLiveStreamTranscode</code> (String transcoder, <code>IMediaStream</code> stream) Called each time a new publishing stream is started.
------------------	--

Methods

isLiveStreamTranscode

public abstract boolean **isLiveStreamTranscode**(String transcoder,
[`IMediaStream`](#) stream)

Called each time a new publishing stream is started. Return true if you wish stream to be transcoded. See
`IApplicationInstance.setLiveStreamTranscoderControl(ILiveStreamTranscoderControl)`

Parameters:

transcoder - name of transcoder
stream - stream interface

Returns:

true if wish stream to be transcoded

com.wowza.wms.stream.livetranscoder Interface `ILiveStreamTranscoderNotify`

public interface `ILiveStreamTranscoderNotify`
extends

`ILiveStreamTranscoderNotify`: Listener interface for listening for new live stream transcoders. See `IApplicationInstance.addLiveStreamTranscoderListener(ILiveStreamTranscoderNotify)`

Method Summary

abstract void	<code>onLiveStreamTranscoderCreate</code> (<code>ILiveStreamTranscoder</code> liveStreamTranscoder, <code>IMediaStream</code> stream) Triggered when live stream transcoder is created.
abstract void	<code>onLiveStreamTranscoderDestroy</code> (<code>ILiveStreamTranscoder</code> liveStreamTranscoder, <code>IMediaStream</code> stream) Triggered when live stream transcoder is destroyed.
abstract void	<code>onLiveStreamTranscoderInit</code> (<code>ILiveStreamTranscoder</code> liveStreamTranscoder, <code>IMediaStream</code> stream) Triggered after live stream transcoder is initialized.

Methods

`onLiveStreamTranscoderCreate`

```
public abstract void onLiveStreamTranscoderCreate(ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream)
```

Triggered when live stream transcoder is created.

Parameters:

liveStreamTranscoder - live stream transcoder
stream - source stream

`onLiveStreamTranscoderDestroy`

```
public abstract void onLiveStreamTranscoderDestroy(ILiveStreamTranscoder liveStreamTranscoder, IMediaStream stream)
```

Triggered when live stream transcoder is destroyed.

Parameters:

liveStreamTranscoder - live stream transcoder
stream - source stream

(continued from last page)

onLiveStreamTranscoderInit

```
public abstract void onLiveStreamTranscoderInit(ILiveStreamTranscoder  
liveStreamTranscoder,  
    IMediaStream stream)
```

Triggered after live stream transcoder is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
stream - source stream

Package

com.wowza.wms.stream.publish

com.wowza.wms.stream.publish Interface IPublishingProvider

All Known Implementing Classes:

[PublishingProviderMediaReader](#), [PublishingProviderLive](#)

public interface **IPublishingProvider**
extends

IPublishingProvider: publishing provider interface.

Method Summary

abstract void	close() Invoked on stream close
abstract boolean	isSendOnMetadata() Get to send onMetadata event when stream starts
abstract boolean	play(Publisher publisher) Invoked on play
abstract boolean	seek(long timecode) Invoked on seek
abstract boolean	seek(long timecode, int seekType) Invoked on seek
abstract void	setDuration(long duration) Set target duration for playback (milliseconds)
abstract void	setRealTimeStartTime(long realTimeStartTime) Set real start time (milliseconds)
abstract void	setSendOnMetadata(boolean sendOnMetadata) Set to send onMetadata event when stream starts

Methods

play

public abstract boolean **play**([Publisher](#) publisher)

Invoked on play

Parameters:

publisher - publisher

Returns:

true if successful

(continued from last page)

close

```
public abstract void close()
```

Invoked on stream close

seek

```
public abstract boolean seek(long timecode,  
    int seekType)
```

Invoked on seek

Parameters:

timecode - target timecode

seekType - seek type, see IMediaReader.SEEKTARGET_*

Returns:

true, if seek successful

seek

```
public abstract boolean seek(long timecode)
```

Invoked on seek

Parameters:

timecode - target timecode

Returns:

true, if seek successful

setDuration

```
public abstract void setDuration(long duration)
```

Set target duration for playback (milliseconds)

Parameters:

duration - duration for playback (milliseconds)

setRealTimeStartTime

```
public abstract void setRealTimeStartTime(long realTimeStartTime)
```

Set real start time (milliseconds)

Parameters:

realTimeStartTime - real start time (milliseconds)

setSendOnMetadata

```
public abstract void setSendOnMetadata(boolean sendOnMetadata)
```

Set to send onMetadata event when stream starts

Parameters:

sendOnMetadata - true to send onMetadata event

isSendOnMetadata

```
public abstract boolean isSendOnMetadata()
```

Get to send onMetadata event when stream starts

Returns:

true to send onMetadata event

com.wowza.wms.stream.publish Interface IStreamActionNotify

public interface **IStreamActionNotify**
extends

IStreamActionNotify: listener interface to Stream class for playlist items. See Stream.addListener(IStreamActionNotify listener)

Method Summary

abstract void	onPlaylistItemStart (Stream stream, PlaylistItem playlistItem) Invoked when playlist item playback is started
abstract void	onPlaylistItemStop (Stream stream, PlaylistItem playlistItem) Invoked when playlist item playback has ended

Methods

onPlaylistItemStart

```
public abstract void onPlaylistItemStart(Stream stream,  
    PlaylistItem playlistItem)
```

Invoked when playlist item playback is started

Parameters:

stream - stream

playlistItem - playlist item

onPlaylistItemStop

```
public abstract void onPlaylistItemStop(Stream stream,  
    PlaylistItem playlistItem)
```

Invoked when playlist item playback has ended

Parameters:

stream - stream

playlistItem - playlist item

com.wowza.wms.stream.publish Class Playlist

java.lang.Object

└─com.wowza.wms.stream.publish.Playlist

public class **Playlist**
extends Object

Constructor Summary

public	Playlist (String sName) Class constructor - A simple structure that maintains a list of playlist items.
--------	--

Method Summary

void	addItem (String sName, int start, int length) Appends an item to this playlist
java.util.List	getItems () Get the items in the playlist (returns a copy of the list)
String	getName () Returns the name of this playlist as defined in the XML definition file
boolean	getRepeat ()
boolean	open (Stream s) Opens this playlist on the given stream...
void	removeItem (int index) Remove an item from the list
void	setRepeat (boolean repeat)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

Playlist

public **Playlist**(String sName)

Class constructor - A simple structure that maintains a list of playlist items.

Parameters:

sName -- name of playlist - as defined in the XML definition file

Methods

getItems

```
public java.util.List getItems()
```

Get the items in the playlist (returns a copy of the list)

Returns:

items in the playlist (returns a copy of the list)

getRepeat

```
public boolean getRepeat()
```

setRepeat

```
public void setRepeat(boolean repeat)
```

addItem

```
public void addItem(String sName,  
                    int start,  
                    int length)
```

Appends an item to this playlist

Parameters:

sName - - item name

start - - start seconds

length - - playlength seconds

removeItem

```
public void removeItem(int index)
```

Remove an item from the list

Parameters:

index - index of item to remove

open

```
public boolean open(Stream s)
```

Opens this playlist on the given stream... stopping anything currently playing on that stream and switching over.

Parameters:

s - - stream to play on

Returns:

- true if successful

getName

```
public String getName()
```

Returns the name of this playlist as defined in the XML definition file

Returns:

name of this playlist

com.wowza.wms.stream.publish Class PlaylistItem

java.lang.Object

└─com.wowza.wms.stream.publish.PlaylistItem

public class **PlaylistItem**
extends Object

Constructor Summary

public	PlaylistItem (String name, int start, int length, int index) Class constructor - A simple structure to define parameters associated with a playlist item
--------	---

Method Summary

int	getIndex()
int	getLength() Number of seconds of track to play
String	getName() Name of playlist stream
int	getStart() Number of seconds into track to start from
void	setIndex (int index)
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

PlaylistItem

```
public PlaylistItem(String name,
                    int start,
                    int length,
                    int index)
```

Class constructor - A simple structure to define parameters associated with a playlist item

Parameters:

name - - name of the playlist stream

start - - number of seconds into the track to start from (-2 means live stream)

(continued from last page)

length -- number of seconds of track to play

index -- index in the playlist

Methods

getName

```
public String getName()
```

Name of playlist stream

Returns:- name of stream

getStart

```
public int getStart()
```

Number of seconds into track to start from

Returns:- number of seconds

getLength

```
public int getLength()
```

Number of seconds of track to play

Returns:- number of seconds

getIndex

```
public int getIndex()
```

setIndex

```
public void setIndex(int index)
```

toString

```
public String toString()
```

com.wowza.wms.stream.publish Class Publisher

java.lang.Object

└─com.wowza.wms.stream.publish.Publisher

```
public class Publisher  
extends Object
```

Publisher: clientless stream publisher. This class can be used to publish raw video, audio and metadata packets to the Wowza Pro server. Here is a quick snippet of code that illustrates how to use it.

This code below will publish data the stream named "myStream". It will be streamed to the default virtual host and available at the rtmp address rtmp://[server-ip-address]/streamtest.

```
IVHost vhost = VHostSingleton.getInstance(VHost.VHOST_DEFAULT);
Publisher publisher = Publisher.createInstance(vhost, "streamtest");

publisher.setFileExtension("flv");
publisher.setStreamType("live");

publisher.publish("myStream", "live");

// sit in a loop adding data
boolean done = false;
while(true)
{
    AMFPacket amfPacket;

    // read packet from audio, video, data source
    // amfPacket = readPacketFromSomewhere();

    switch (amfPacket.getType())
    {
        case IVHost.CONTENTTYPE_AUDIO:
            publisher.addAudioData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
            break;
        case IVHost.CONTENTTYPE_VIDEO:
            publisher.addVideoData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
            break;
        case IVHost.CONTENTTYPE_DATA:
            publisher.addDataData(amfPacket.getData(), amfPacket.getSize(),
amfPacket.getTimecode());
            break;
    }
    if (done)
        break;
}

publisher.unpublish();
publisher.close();
```

Basic packet format:

Audio:

AAC

[1-byte header]

[1-byte codec config indicator (1 - audio data, 0 - codec config packet)]

[n-bytes audio content or codec config data]

All others

[1-byte header]

[n-bytes audio content]

Below is the bit

layout of the header byte of data (table goes from least significant bit to most significant bit):

1 bit Number of channels:

- 0 mono
- 1 stereo

1 bit Sample size:

- 0 8 bits per sample
- 1 16 bits per sample

2 bits Sample rate:

- 0 special or 8KHz
- 1 11KHz
- 2 22KHz
- 3 44KHz

4 bits Audio type:

- 0 PCM (big endian)
- 1 PCM (swf - ADPCM)
- 2 MP3
- 3 PCM (little endian)
- 4 Nelly Moser ASAO 16KHz Mono
- 5 Nelly Moser ASAO 8KHz Mono
- 6 Nelly Moser ASAO
- 7 G.711 ALaw
- 8 G.711 MULaw
- 9 Reserved
- a AAC
- b Speex
- f MP3 8Khz

Note: For AAC the codec config data is generally a two byte packet that describes the stream. It must

be published first. Here is the basic code to fill in the codec config data.

```
AACFrame frame = new AACFrame();
```

```
int sampleRate = 22100;
int channels = 2;
frame.setSampleRate(sampleRate);
frame.setRateIndex(AACUtils.sampleRateToIndex(sampleRate));
frame.setChannels(channels);
frame.setChannelIndex(AACUtils.channelCountToIndex(sampleRate));
byte[] codecConfig = new byte[2];
AACUtils.encodeAACCodecConfig(frame, codecConfig, 0);
```

Note: For AAC the header byte is always 0xaf

Note: For Speex the audio data must be encoded as 16000Hz wide band

Video:

H.264

```
[1-byte header]
[1-byte codec config indicator (1 - video data, 0 - codec config packet)]
[3-byte time difference between dts and pts in milliseconds]
[n-bytes video content or codec config data]
```

All others

```
[1-byte header]
[n-bytes audio content]
```

Below is the bit layout of the header byte of data (table goes from least significant bit to most significant bit):

4 bits Video type:

- | | |
|---|------------------------|
| 2 | Sorenson Spark (H.263) |
| 3 | Screen |
| 4 | On2 VP6 |
| 5 | On2 VP6A |
| 6 | Screen2 |
| 7 | H.264 |

2 bit Frame type:

- | | |
|---|---------------------|
| 1 | K frame (key frame) |
| 2 | P frame |
| 3 | B frame |

Note: H.264 codec config data is the same as the AVCc packet in a QuickTime container.

Note: All timecode data is in milliseconds

Method Summary

void	addAudioData (byte[] data, int offset, int len, long timecode)
------	--

void	addAudioData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add audio data
void	addAudioData (byte[] data, int len, long timecode) Add audio data
void	addAudioData (byte[] data, long timecode) Add audio data
void	addAudioDataInc (byte[] data, int offset, int len)
void	addDataData (byte[] data, int offset, int len, long timecode)
void	addDataData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add metadata
void	addDataData (byte[] data, int len, long timecode) Add metadata
void	addDataData (byte[] data, long timecode) Add metadata
void	addDataDataInc (byte[] data, int offset, int len)
void	addVideoData (byte[] data, int offset, int len, long timecode) Add video data
void	addVideoData (byte[] data, int offset, int len, long timecode, java.util.Map extraData) Add video data
void	addVideoData (byte[] data, int len, long timecode) Add video data
void	addVideoData (byte[] data, long timecode) Add video data
void	addVideoDataInc (byte[] data, int offset, int len)
void	close () Close the publisher
static Publisher	createInstance (IApplicationInstance appInstance)
static Publisher	createInstance (IVHost vhost, String applicationName)
static Publisher	createInstance (IVHost vhost, String applicationName, String appInstanceName)
void	createStream () Create underlying IMediaStream object if not already created
void	flush () Flush the packets from the input buffer to the output buffer

<u>IApplicationInstance</u>	<u>getAppInstance()</u>
String	<u>getFileExtension()</u> Get the file extension (default flv)
long	<u>getLastAudioTimecode()</u> Get last audio timecode written through this publisher (milliseconds).
long	<u>getLastDataTimecode()</u> Get last data timecode written through this publisher (milliseconds).
long	<u>getLastGapAudioTimecode()</u> Get gap time from last audio timecode.
long	<u>getLastGapVideoTimecode()</u> Get gap time from last video timecode.
long	<u>getLastVideoTimecode()</u> Get last video timecode written through this publisher (milliseconds).
long	<u>getMaxTimecode()</u> Highest timecode written through this publisher (milliseconds).
<u>IMediaStream</u>	<u>getStream()</u> Get the media stream object
String	<u>getStreamType()</u>
boolean	<u>isPublishDataEvents()</u>
void	<u>publish()</u> (String streamName) Publish a stream (null to stop publishing)
void	<u>publish()</u> (String streamName, String howToPublish) Start publishing a stream (streamName = null to stop).
void	<u>setFileExtension()</u> (String fileExtension) Set the file extension
void	<u>setPublishDataEvents()</u> (boolean publishDataEvents)
void	<u>setStreamType()</u> (String streamType) Set the stream type (default live)
void	<u>startAudioData()</u> (int len, long timecode)
void	<u>startAudioData()</u> (int len, long timecode, java.util.Map extraData)
void	<u>startDataData()</u> (int len, long timecode)
void	<u>startDataData()</u> (int len, long timecode, java.util.Map extraData)
void	<u>startVideoData()</u> (int len, long timecode)
void	<u>startVideoData()</u> (int len, long timecode, java.util.Map extraData)

void	unpublish()
------	-----------------------------

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Methods

createInstance

```
public static Publisher createInstance(IVHost vhost,  
    String applicationName)
```

createInstance

```
public static Publisher createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName)
```

createInstance

```
public static Publisher createInstance(IApplicationInstance appInstance)
```

getStream

```
public IMediaStream getStream()
```

Get the media stream object

Returns:

media stream object

getStreamType

```
public String getStreamType()
```

setStreamType

```
public void setStreamType(String streamType)
```

Set the stream type (default live)

Parameters:

streamType - stream type

(continued from last page)

publish

```
public void publish(String streamName)
```

Publish a stream (null to stop publishing)

Parameters:

streamName - stream name

getFileExtension

```
public String getFileExtension()
```

Get the file extension (default flv)

Returns:

file extension

setFileExtension

```
public void setFileExtension(String fileExtension)
```

Set the file extension

Parameters:

fileExtension - file extension

getAppInstance

```
public IApplicationInstance getAppInstance()
```

unpublish

```
public void unpublish()
```

createStream

```
public void createStream()
```

Create underlying IMediaStream object if not already created

publish

```
public void publish(String streamName,  
                    String howToPublish)
```

Start publishing a stream (streamName = null to stop). Valid howToPublish values are (live, record, append)

Parameters:

streamName - stream name

howToPublish - publish method (live, record, append)

(continued from last page)

addVideoData

```
public void addVideoData(byte[] data,  
    long timecode)
```

Add video data

Parameters:

data - data
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int len,  
    long timecode)
```

Add video data

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

Add video data

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)

addVideoData

```
public void addVideoData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add video data

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)
extraData - extra data

startVideoData

```
public void startVideoData(int len,  
    long timecode)
```

(continued from last page)

startVideoData

```
public void startVideoData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addVideoDataInc

```
public void addVideoDataInc(byte[] data,  
    int offset,  
    int len)
```

startAudioData

```
public void startAudioData(int len,  
    long timecode)
```

startAudioData

```
public void startAudioData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addAudioDataInc

```
public void addAudioDataInc(byte[] data,  
    int offset,  
    int len)
```

addAudioData

```
public void addAudioData(byte[] data,  
    long timecode)
```

Add audio data

Parameters:

data - data

timecode - absolute timecode (milliseconds)

addAudioData

```
public void addAudioData(byte[] data,  
    int len,  
    long timecode)
```

Add audio data

(continued from last page)

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

addAudioData

```
public void addAudioData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add audio data

Parameters:

data - data
len - data length
offset - offset
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    long timecode)
```

Add metadata

Parameters:

data - data
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    int len,  
    long timecode)
```

Add metadata

Parameters:

data - data
len - data length
timecode - absolute timecode (milliseconds)

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int len,  
    long timecode)
```

(continued from last page)

addDataData

```
public void addDataData(byte[] data,  
    int offset,  
    int len,  
    long timecode,  
    java.util.Map extraData)
```

Add metadata

Parameters:

data - data
offset - offset
len - data length
timecode - absolute timecode (milliseconds)

startDataData

```
public void startDataData(int len,  
    long timecode)
```

startDataData

```
public void startDataData(int len,  
    long timecode,  
    java.util.Map extraData)
```

addDataDataInc

```
public void addDataDataInc(byte[] data,  
    int offset,  
    int len)
```

flush

```
public void flush()
```

Flush the packets from the input buffer to the output buffer

close

```
public void close()
```

Close the publisher

getMaxTimecode

```
public long getMaxTimecode()
```

Highest timecode written through this publisher (milliseconds).

(continued from last page)

Returns:

highest timecode written through this publisher (milliseconds)

getLastAudioTimecode

```
public long getLastAudioTimecode()
```

Get last audio timecode written through this publisher (milliseconds).

Returns:

last audio timecode written through this publisher (milliseconds).

getLastGapAudioTimecode

```
public long getLastGapAudioTimecode()
```

Get gap time from last audio timecode.

Returns:

gap time from audio timecode written through this publisher (milliseconds).

getLastVideoTimecode

```
public long getLastVideoTimecode()
```

Get last video timecode written through this publisher (milliseconds).

Returns:

last video timecode written through this publisher (milliseconds).

getLastGapVideoTimecode

```
public long getLastGapVideoTimecode()
```

Get gap time from last video timecode.

Returns:

gap time from video timecode written through this publisher (milliseconds).

getLastDataTimecode

```
public long getLastDataTimecode()
```

Get last data timecode written through this publisher (milliseconds).

Returns:

last data timecode written through this publisher (milliseconds).

isPublishDataEvents

```
public boolean isPublishDataEvents()
```

setPublishDataEvents

```
public void setPublishDataEvents(boolean publishDataEvents)
```

(continued from last page)

com.wowza.wms.stream.publish Class PublishingProviderBase

java.lang.Object

└-com.wowza.wms.stream.publish.PublishingProviderBase

Direct Known Subclasses:

[PublishingProviderMediaReader](#), [PublishingProviderLive](#)

```
public class PublishingProviderBase
extends Object
```

PublishingProviderBase: Base class for publishing providers.

Field Summary

protected	sendOnMetadata
-----------	--------------------------------

Constructor Summary

public	PublishingProviderBase()
--------	--

Method Summary

boolean	isSendOnMetadata() True to send onMetadata event on stream start
void	setSendOnMetadata(boolean sendOnMetadata) True to send onMetadata event on stream start

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

sendOnMetadata

protected boolean **sendOnMetadata**

Constructors

PublishingProviderBase

```
public PublishingProviderBase()
```

(continued from last page)

Methods

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

True to send onMetadata event on stream start

Returns:

True to send onMetadata event on stream start

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

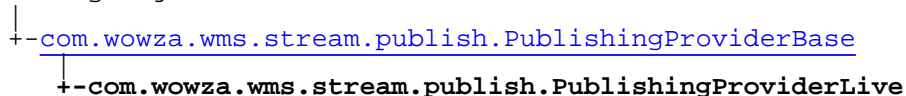
True to send onMetadata event on stream start

Parameters:

sendOnMetadata - True to send onMetadata event on stream start

com.wowza.wms.stream.publish Class PublishingProviderLive

java.lang.Object



All Implemented Interfaces:

[IPublishingProvider](#)

public class **PublishingProviderLive**

extends [PublishingProviderBase](#)

implements [IPublishingProvider](#)

Fields inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[sendOnMetadata](#)

Constructor Summary

public	PublishingProviderLive (Publisher publisher, long timeoffset, String streamName)
--------	---

Method Summary

void	close ()
long	getDuration ()
long	getStartOnPreviousBufferTime ()
boolean	isStartOnPreviousKeyFrame ()
boolean	isStopIfStreamMissing ()
boolean	play (Publisher publisher)
boolean	seek (long timecode)
boolean	seek (long timecode, int seekType)
void	setDuration (long duration)
void	setRealTimeStartTime (long realTimeStartTime)
void	setStartOnPreviousBufferTime (long startOnPreviousBufferTime)

void	setStartOnPreviousKeyFrame (boolean startOnPreviousKeyFrame)
void	setStopIfStreamMissing (boolean stopIfStreamMissing)

Methods inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[isSendOnMetadata](#), [setSendOnMetadata](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.publish.IPublishingProvider](#)

[close](#), [isSendOnMetadata](#), [play](#), [seek](#), [seek](#), [setDuration](#), [setRealTimeStartTime](#), [setSendOnMetadata](#)

Constructors

PublishingProviderLive

```
public PublishingProviderLive(Publisher publisher,
                             long timeoffset,
                             String streamName)
```

Methods

close

```
public void close()
```

play

```
public boolean play(Publisher publisher)
```

seek

```
public boolean seek(long timecode)
```

seek

```
public boolean seek(long timecode,
                    int seekType)
```

getDuration

```
public long getDuration()
```

setDuration

```
public void setDuration(long duration)
```

setRealTimeStartTime

```
public void setRealTimeStartTime(long realTimeStartTime)
```

isStartOnPreviousKeyFrame

```
public boolean isStartOnPreviousKeyFrame()
```

setStartOnPreviousKeyFrame

```
public void setStartOnPreviousKeyFrame(boolean startOnPreviousKeyFrame)
```

getStartOnPreviousBufferTime

```
public long getStartOnPreviousBufferTime()
```

setStartOnPreviousBufferTime

```
public void setStartOnPreviousBufferTime(long startOnPreviousBufferTime)
```

isStopIfStreamMissing

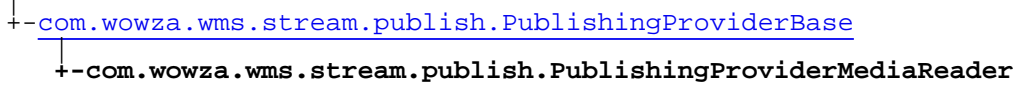
```
public boolean isStopIfStreamMissing()
```

setStopIfStreamMissing

```
public void setStopIfStreamMissing(boolean stopIfStreamMissing)
```

com.wowza.wms.stream.publish Class PublishingProviderMediaReader

java.lang.Object



All Implemented Interfaces:

[IPublishingProvider](#)

public class **PublishingProviderMediaReader**

extends [PublishingProviderBase](#)

implements [IPublishingProvider](#)

PublishingProviderMediaReader: Publishing provider for media reader based stream (vod).

Field Summary

public static final	ONMETADATA_FILTER_DURATION Value: 1
public static final	ONMETADATA_FILTER_NONE Value: 0

Fields inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[sendOnMetadata](#)

Constructor Summary

public	PublishingProviderMediaReader (Publisher publisher, long timeoffset, String streamName) Constructor
--------	---

Method Summary

void	close ()
byte[]	filterMetadata (byte[] dataDataBytes)
String	getCaptionFilenameQueryParameter ()
String	getCaptionFilenameStr ()
String	getCaptionLanguageQueryParameter ()
String	getCaptionLanguageStr ()

long	<u>getDuration()</u> Get the target playback duration (milliseconds)
long	<u>getOnMetadataFilter()</u> Filter that control what metadata items are removed from onMetaData event.
double	<u>getSpeed()</u>
String	<u>getTimedTextEventName()</u>
void	<u>getTimeTextedReader()</u> (<u>IMediaReader</u> mediaReader, <u>IApplicationInstance</u> appInstance, String mediaName, String mediaExtension, String queryStr, <u>IMediaStream</u> stream)
boolean	<u>isTimedTextEnabled()</u>
boolean	<u>play()</u> (<u>Publisher</u> publisher)
boolean	<u>seek()</u> (long timecode)
boolean	<u>seek()</u> (long timecode, int seekType)
void	<u>setCaptionFilenameQueryParameter()</u> (String captionFilenameQueryParameter)
void	<u>setCaptionFilenameStr()</u> (String captionFilenameStr)
void	<u>setCaptionLanguageQueryParameter()</u> (String captionLanguageQueryParameter)
void	<u>setCaptionLanguageStr()</u> (String captionLanguageStr)
void	<u>setDuration()</u> (long duration)
void	<u>setOnMetadataFilter()</u> (long onMetadataFilter) Filter that control what metadata items are removed from onMetaData event.
void	<u>setRealTimeStartTime()</u> (long realTimeStartTime)
void	<u>setSpeed()</u> (double speed)
void	<u>setTimedTextEnabled()</u> (boolean timedTextEnabled)
void	<u>setTimedTextEventName()</u> (String timedTextEventName)

Methods inherited from class [com.wowza.wms.stream.publish.PublishingProviderBase](#)

[isSendOnMetadata](#), [setSendOnMetadata](#)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.stream.publish.IPublishingProvider](#)

[close](#), [isSendOnMetadata](#), [play](#), [seek](#), [seek](#), [setDuration](#), [setRealTimeStartTime](#), [setSendOnMetadata](#)

Fields

ONMETADATA_FILTER_NONE

```
public static final long ONMETADATA_FILTER_NONE
```

Constant value: **0**

ONMETADATA_FILTER_DURATION

```
public static final long ONMETADATA_FILTER_DURATION
```

Constant value: **1**

Constructors

PublishingProviderMediaReader

```
public PublishingProviderMediaReader(Publisher publisher,  
                                     long timeoffset,  
                                     String streamName)
```

Constructor

Parameters:

`publisher` - publisher
`timeoffset` - timeoffset (milliseconds)
`streamName` - stream name

Methods

getTimeTextedReader

```
public void getTimeTextedReader(IMediaReader mediaReader,  
                                IApplicationInstance appInstance,  
                                String mediaName,  
                                String mediaExtension,  
                                String queryStr,  
                                IMediaStream stream)
```

seek

```
public boolean seek(long timecode)
```

(continued from last page)

seek

```
public boolean seek(long timecode,  
                    int seekType)
```

filterMetadata

```
public byte[] filterMetadata(byte[] dataDataBytes)
```

play

```
public boolean play(Publisher publisher)
```

close

```
public void close()
```

getDuration

```
public long getDuration()
```

Get the target playback duration (milliseconds)

Returns:

playback duration (milliseconds)

setDuration

```
public void setDuration(long duration)
```

setRealTimeStartTime

```
public void setRealTimeStartTime(long realTimeStartTime)
```

getSpeed

```
public double getSpeed()
```

setSpeed

```
public void setSpeed(double speed)
```

getOnMetadataFilter

```
public long getOnMetadataFilter()
```

Filter that control what metadata items are removed from onMetaData event. Default is ONMETADATA_FILTER_DURATION. Value is a bit mask of ONMETADATA_FILTER_* value.

Returns:

control what metadata items are removed from onMetaData event

setOnMetadataFilter

```
public void setOnMetadataFilter(long onMetadataFilter)
```

Filter that control what metadata items are removed from onMetaData event. Default is ONMETADATA_FILTER_DURATION. Value is a bit mask of ONMETADATA_FILTER_* value.

Parameters:

onMetadataFilter - control what metadata items are removed from onMetaData event

getCaptionLanguageQueryParameter

```
public String getCaptionLanguageQueryParameter()
```

setCaptionLanguageQueryParameter

```
public void setCaptionLanguageQueryParameter(String captionLanguageQueryParameter)
```

getCaptionFilenameQueryParameter

```
public String getCaptionFilenameQueryParameter()
```

setCaptionFilenameQueryParameter

```
public void setCaptionFilenameQueryParameter(String captionFilenameQueryParameter)
```

getCaptionLanguageStr

```
public String getCaptionLanguageStr()
```

setCaptionLanguageStr

```
public void setCaptionLanguageStr(String captionLanguageStr)
```

(continued from last page)

getCaptionFilenameStr

```
public String getCaptionFilenameStr()
```

setCaptionFilenameStr

```
public void setCaptionFilenameStr(String captionFilenameStr)
```

getTimedTextEventName

```
public String getTimedTextEventName()
```

setTimedTextEventName

```
public void setTimedTextEventName(String timedTextEventName)
```

isTimedTextEnabled

```
public boolean isTimedTextEnabled()
```

setTimedTextEnabled

```
public void setTimedTextEnabled(boolean timedTextEnabled)
```

com.wowza.wms.stream.publish Class Stream

java.lang.Object

└─com.wowza.wms.stream.publish.Stream

All Implemented Interfaces:

Runnable

public class **Stream**
extends Object
implements Runnable

Constructor Summary

public	Stream()
--------	--------------------------

Method Summary

void	addListener(IStreamActionNotify listener) Add a listener
boolean	addToPlaylist(int index, String name, int start, int length) Inserts a media source item to this playlist at a particular index, without interruption.
boolean	addToPlaylist(String existing, String name, int start, int length) Insert item into playlist just after the first item in the playlist with a given name.
void	close() Call this method when you have finished with the playlist object.
void	closeAndWait() Call this method when you have finished with the playlist object.
static Stream	createInstance(IApplicationInstance appInstance, String sName) Use this to create a named Stream on an application instance.
static Stream	createInstance(IVHost vhost, String applicationName, String sName) Use this to create a named Stream on the default instance (_definst_) of an application on a particular VHost.
static Stream	createInstance(IVHost vhost, String applicationName, String appInstanceName, String sName) Use this to create a named Stream on the non-default instance of an application on a particular VHost.
static Stream	createInstance(IVHost vhost, String applicationName, String appInstanceName, String sName, String streamType) Use this to create a named Stream on the non-default instance of an application on a particular VHost.
PlaylistItem	getCurrentItem() Get the currently playing playlist item

Object	<u>getLock()</u> Get the synchronization lock for this interface.
String	<u>getName()</u> Returns the name of the playlist stream - the client would play this stream by this name.
java.util.List	<u>getPlaylist()</u> Get the current playlist
int	<u>getPollingInterval()</u> Get the polling interval (milliseconds)
<u>Publisher</u>	<u>getPublisher()</u>
boolean	<u>getRepeat()</u> Use this to determine if the playlist is auto-repeating
long	<u>getStartLiveOnPreviousBufferTime()</u> Get time in milliseconds to go back in live stream buffer to get previous key frame
String	<u>getStreamType()</u>
int	<u>getTimeOffsetBetweenItems()</u> Get time in milliseconds to add to stream time between playlist items (default is zero)
double	<u>getVODSpeed()</u>
boolean	<u>isMoveToNextIfLiveStreamMissing()</u> If true, will move to next playlist item if live stream is missing or is unpublished.
boolean	<u>isSendOnMetadata()</u> True if sending onMetadata events
boolean	<u>isStartLiveOnPreviousKeyFrame()</u> Set to true to start live streams on most recent key frame (smoother switching)
boolean	<u>isSwitchLog()</u> Log when a playlist switch occurs
boolean	<u>isTimesInMilliseconds()</u> If true start time and duration and are milliseconds.
boolean	<u>isUnpublishOnEnd()</u> If true, stop publishing if end of playlist and repeat is false
void	<u>next()</u>
void	<u>next(int n)</u>
void	<u>play(int n)</u>
boolean	<u>play(String sPlaylist)</u> Add a media item to the playlist as defined by an XML file ..
boolean	<u>play(String name, int start, int length, boolean reset)</u> Adds a media source item to this playlist -

void	<u>previous</u> ()
void	<u>previous</u> (int n)
boolean	<u>removeFromPlaylist</u> (int index) Remove item from playlist based on index.
boolean	<u>removeFromPlaylist</u> (String name) Remove all items matching the given stream name from the playlist.
void	<u>removeListener</u> (<u>IStreamActionNotify</u> listener) Remove a listener
void	<u>run</u> () Overridden from class Runnable
void	<u>setMoveToNextIfLiveStreamMissing</u> (boolean moveToNextIfLiveStreamMissing) If true, will move to next playlist item if live stream is missing or is unpublished.
void	<u>setPollingInterval</u> (int pollingInterval) Set the polling interval (milliseconds)
void	<u>setRepeat</u> (boolean repeat) Use this to make the playlist repeat or not...
void	<u>setSendOnMetadata</u> (boolean sendOnMetadata) True if sending onMetadata events
void	<u>setStartLiveOnPreviousBufferTime</u> (long startLiveOnPreviousBufferTime) Set time in milliseconds to go back in live stream buffer to get previous key frame
void	<u>setStartLiveOnPreviousKeyFrame</u> (boolean startLiveOnPreviousKeyFrame) Set to true to start live streams on most recent key frame (smoother switching)
void	<u>setSwitchLog</u> (boolean switchLog) Log when a playlist switch occurs
void	<u>setTimeOffsetBetweenItems</u> (int timeOffsetBetweenItems) Set time in milliseconds to add to stream time between playlist items (default is zero)
void	<u>setTimesInMilliseconds</u> (boolean timesInMilliseconds) If true start time and duration and are milliseconds.
void	<u>setUnpublishOnEnd</u> (boolean stopOnEnd) If true, stop publishing if end of playlist and repeat is false
void	<u>setVODSpeed</u> (double vodSpeed)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface java.lang.Runnable

run

Constructors

Stream

```
public Stream()
```

Methods

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String sName)
```

Use this to create a named Stream on the default instance (_definst_) of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
sName -- Name of Stream

Returns:

stream interface

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName,  
    String sName)
```

Use this to create a named Stream on the non-default instance of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
appInstanceName -- Instance name
sName -- Name of Stream

Returns:

stream interface

createInstance

```
public static Stream createInstance(IVHost vhost,  
    String applicationName,  
    String appInstanceName,  
    String sName,  
    String streamType)
```

Use this to create a named Stream on the non-default instance of an application on a particular VHost.

Parameters:

vhost -- Virtual Host
applicationName -- Application name
appInstanceName -- Instance name

(continued from last page)

sName - - Name of Stream
streamType - - Stream type

Returns:

stream interface

getLock

```
public Object getLock()
```

Get the synchronization lock for this interface.

Returns:

synchronization lock for this interface

createInstance

```
public static Stream createInstance(IApplicationInstance appInstance,  
String sName)
```

Use this to create a named Stream on an application instance.

Parameters:

appInstance - - Application instance
sName - - Name of Stream

Returns:

stream interface

run

```
public void run()
```

Overridden from class Runnable do NOT call this directly. This method handles switching between media sources in the playlist.

getPlaylist

```
public java.util.List getPlaylist()
```

Get the current playlist

Returns:

current playlist

getCurrentItem

```
public PlaylistItem getCurrentItem()
```

Get the currently playing playlist item

Returns:

currently playing playlist item

(continued from last page)

play

```
public boolean play(String name,  
                    int start,  
                    int length,  
                    boolean reset)
```

Adds a media source item to this playlist -

Parameters:

name -- name of media item
start -- where to start playing the item. (-2 implies play a live stream)
length -- how much of the item to play (-1 implies play the entire file or live stream)
reset -- if true, will begin a new playlist, otherwise items are appended

Returns:

- returns true if item was added successfully ...otherwise false.

addToPlaylist

```
public boolean addToPlaylist(int index,  
                             String name,  
                             int start,  
                             int length)
```

Inserts a media source item to this playlist at a particular index, without interruption.

Parameters:

index -- insertion index
name -- name of media item being inserted
start -- where to start playing the item. (-2 implies play a live stream)
length -- how much of the item to play (-1 implies play the entire file or live stream)

Returns:

- returns true if item was inserted successfully ...otherwise false. this should not interrupt anything that might be currently playing.... will do nothing if existing item does not exist.. if existing == "" insert at head of list

addToPlaylist

```
public boolean addToPlaylist(String existing,  
                             String name,  
                             int start,  
                             int length)
```

Insert item into playlist just after the first item in the playlist with a given name.

Parameters:

existing - name of playlist item in which to insert the item after
name - name of new item
start - where to start playing the item. (-2 implies play a live stream)
length - how much of the item to play (-1 implies play the entire file or live stream)

Returns:

true if item inserted

removeFromPlaylist

```
public boolean removeFromPlaylist(int index)
```

Remove item from playlist based on index.

(continued from last page)

Parameters:

index - item index

Returns:

true if at least one item from removed

removeFromPlaylist

```
public boolean removeFromPlaylist(String name)
```

Remove all items matching the given stream name from the playlist. If the item is currently being played, it is not removed.

Parameters:

name - stream name

Returns:

true if at least one item from removed

play

```
public boolean play(String sPlaylist)
```

Add a media item to the playlist as defined by an XML file ..

Parameters:

sPlaylist -- the playlist XML definition file

Returns:

- returns true if item was added successfully ...otherwise false.

close

```
public void close()
```

Call this method when you have finished with the playlist object. It will terminate the playlist thread. The playlist object cannot be used after this call.

closeAndWait

```
public void closeAndWait()
```

Call this method when you have finished with the playlist object. It will terminate the playlist thread. The playlist object cannot be used after this call. This method will wait for the thread to exit.

getName

```
public String getName()
```

Returns the name of the playlist stream - the client would play this stream by this name.

Returns:

- the name of the playlist stream

getRepeat

```
public boolean getRepeat()
```

Use this to determine if the playlist is auto-repeating

(continued from last page)

Returns:

- true if repeating otherwise false.

setRepeat

```
public void setRepeat(boolean repeat)
```

Use this to make the playlist repeat or not...

Parameters:

repeat -- true to repeat otherwise false

play

```
public void play(int n)
```

next

```
public void next(int n)
```

next

```
public void next()
```

previous

```
public void previous()
```

previous

```
public void previous(int n)
```

getPollingInterval

```
public int getPollingInterval()
```

Get the polling interval (milliseconds)

Returns:

polling interval (milliseconds)

setPollingInterval

```
public void setPollingInterval(int pollingInterval)
```

Set the polling interval (milliseconds)

(continued from last page)

Parameters:

pollingInterval - polling interval (milliseconds)

getPublisher

```
public Publisher getPublisher()
```

addListener

```
public void addListener(IStreamActionNotify listener)
```

Add a listener

Parameters:

listener - listener

removeListener

```
public void removeListener(IStreamActionNotify listener)
```

Remove a listener

Parameters:

listener - listener

isSwitchLog

```
public boolean isSwitchLog()
```

Log when a playlist switch occurs

Returns:

log when a playlist switch occurs

setSwitchLog

```
public void setSwitchLog(boolean switchLog)
```

Log when a playlist switch occurs

Parameters:

switchLog - log when a playlist switch occurs

isSendOnMetadata

```
public boolean isSendOnMetadata()
```

True if sending onMetadata events

Returns:

True if sending onMetadata events

setSendOnMetadata

```
public void setSendOnMetadata(boolean sendOnMetadata)
```

(continued from last page)

True if sending onMetadata events

Parameters:

sendOnMetadata - True if sending onMetadata events

isTimesInMilliseconds

```
public boolean isTimesInMilliseconds()
```

If true start time and duration and are milliseconds. If false startTime and duration are in seconds.

Returns:

true start time and duration and are milliseconds

setTimesInMilliseconds

```
public void setTimesInMilliseconds(boolean timesInMilliseconds)
```

If true start time and duration and are milliseconds. If false startTime and duration are in seconds.

Parameters:

timesInMilliseconds - true start time and duration and are milliseconds

isStartLiveOnPreviousKeyFrame

```
public boolean isStartLiveOnPreviousKeyFrame()
```

Set to true to start live streams on most recent key frame (smoother switching)

Returns:

true to start live streams on most recent key frame

setStartLiveOnPreviousKeyFrame

```
public void setStartLiveOnPreviousKeyFrame(boolean startLiveOnPreviousKeyFrame)
```

Set to true to start live streams on most recent key frame (smoother switching)

Parameters:

startLiveOnPreviousKeyFrame - true to start live streams on most recent key frame

getStartLiveOnPreviousBufferTime

```
public long getStartLiveOnPreviousBufferTime()
```

Get time in milliseconds to go back in live stream buffer to get previous key frame

Returns:

time in milliseconds to go back in live stream buffer to get previous key frame

setStartLiveOnPreviousBufferTime

```
public void setStartLiveOnPreviousBufferTime(long startLiveOnPreviousBufferTime)
```

Set time in milliseconds to go back in live stream buffer to get previous key frame

Parameters:

startLiveOnPreviousBufferTime - time in milliseconds to go back in live stream buffer to get previous key frame

getTimeOffsetBetweenItems

```
public int getTimeOffsetBetweenItems()
```

Get time in milliseconds to add to stream time between playlist items (default is zero)

Returns:

time in milliseconds to add to stream time between playlist items

setTimeOffsetBetweenItems

```
public void setTimeOffsetBetweenItems(int timeOffsetBetweenItems)
```

Set time in milliseconds to add to stream time between playlist items (default is zero)

Parameters:

timeOffsetBetweenItems - time in milliseconds to add to stream time between playlist items

isMoveToNextIfLiveStreamMissing

```
public boolean isMoveToNextIfLiveStreamMissing()
```

If true, will move to next playlist item if live stream is missing or is unpublished.

Returns:

move to next playlist item if live stream is missing or is unpublished

setMoveToNextIfLiveStreamMissing

```
public void setMoveToNextIfLiveStreamMissing(boolean moveToNextIfLiveStreamMissing)
```

If true, will move to next playlist item if live stream is missing or is unpublished.

Parameters:

moveToNextIfLiveStreamMissing - move to next playlist item if live stream is missing or is unpublished

isUnpublishOnEnd

```
public boolean isUnpublishOnEnd()
```

If true, stop publishing if end of playlist and repeat is false

Returns:

stop publishing if end of playlist and repeat is false

setUnpublishOnEnd

```
public void setUnpublishOnEnd(boolean stopOnEnd)
```

If true, stop publishing if end of playlist and repeat is false

Parameters:

stopOnEnd - stop publishing if end of playlist and repeat is false

getVODSpeed

```
public double getVODSpeed()
```

(continued from last page)

setVODSpeed

```
public void setVODSpeed(double vodSpeed)
```

getStreamType

```
public String getStreamType()
```

com.wowza.wms.stream.publish Class VODTimedTextDelegatePublisher

java.lang.Object

```

  |
  +--com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase
      |
      +--com.wowza.wms.stream.publish.VODTimedTextDelegatePublisher
  
```

All Implemented Interfaces:

IVODTimedTextDelegate, IVODTimedTextDelegate

```

public class VODTimedTextDelegatePublisher
    extends com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase
    implements IVODTimedTextDelegate, IVODTimedTextDelegate
  
```

Fields inherited from class com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase

captionDefaultLanguages, ctx, debugLanguageSelection, debugProviderDetermination, maximumLanguagesSupported, mediaReader, providers, supportedInterface

Constructor Summary

public	VODTimedTextDelegatePublisher()
--------	---

Method Summary

void	init (IMediaReader reader, com.wowza.wms.timedtext.vod.model.TimedTextMediaReaderContext ctx, Class inf)
void	initializeTimedTextProviders ()
boolean	shouldCreateTimedTextProvider (String providerName, VODTimedTextProviderItem item)

Methods inherited from class com.wowza.wms.timedtext.vod.model.VODTimedTextDelegateBase

determineCaptionLanguages, findAvailableProviders, findProvidersByExtension, findProvidersThatSupportInterface, getContext, getTimedTextProviders, getTimedTextProviders, getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders, narrowAndOrderProviders, setTimedTextProviders, shouldCreateTimedTextProvider

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface com.wowza.wms.timedtext.model.IVODTimedTextDelegate

```
determineCaptionLanguages, getTimedTextProviders, getTimedTextProviders,  
getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders,  
setTimedTextProviders
```

Methods inherited from interface `com.wowza.wms.timedtext.model.IVODTimedTextDelegate`

```
determineCaptionLanguages, getTimedTextProviders, getTimedTextProviders,  
getVODTimedTextProviders, indexTimedText, init, initializeTimedTextProviders,  
setTimedTextProviders
```

Constructors

VODTimedTextDelegatePublisher

```
public VODTimedTextDelegatePublisher()
```

Methods

init

```
public void init(IMediaReader reader,  
                 com.wowza.wms.timedtext.vod.model.TimedTextMediaReaderContext ctx,  
                 Class inf)
```

initializeTimedTextProviders

```
public void initializeTimedTextProviders()
```

shouldCreateTimedTextProvider

```
protected boolean shouldCreateTimedTextProvider(String providerName,  
                                                  VODTimedTextProviderItem item)
```

Package

com.wowza.wms.timedtext.cea608

com.wowza.wms.timedtext.cea608

Class ClosedCaptionCEA608Utils

```
java.lang.Object
```

```
├--com.wowza.wms.timedtext.cea608.CEA608Constants
```

```
├--com.wowza.wms.timedtext.cea608.ClosedCaptionCEA608Utils
```

Direct Known Subclasses:

[ClosedCaptionCEA608Utils](#)

```
public class ClosedCaptionCEA608Utils
extends CEA608Constants
```

Field Summary

public static final	CEA608_EXTENDED_FR_SP_MAP
public static final	CEA608_EXTENDED_NA_MAP
public static final	CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP
public static	CEA608_MUSICAL_NOTE
public static	CEA608_SOLID_BLOCK
public static final	CHANNEL1 Value: 0
public static final	CHANNEL2 Value: 1
public static final	COL_0 Value: 0
public static final	COL_12 Value: 6
public static final	COL_16 Value: 8
public static final	COL_20 Value: 10
public static final	COL_24 Value: 12

public static final	<u>COL_28</u> Value: 14
public static final	<u>COL_4</u> Value: 2
public static final	<u>COL_5</u> Value: 4
public static final	<u>COL0_BLUE</u> Value: 4
public static final	<u>COL0_CYAN</u> Value: 6
public static final	<u>COL0_GREEN</u> Value: 2
public static final	<u>COL0_HIBYTE</u> Move to set color (high-byte) [channel][row]
public static final	<u>COL0_LOWBYTE</u> Move to set color (low-byte) [color][row]
public static final	<u>COL0_MAGENTA</u> Value: 12
public static final	<u>COL0_RED</u> Value: 8
public static final	<u>COL0_WHITE</u> Value: 0
public static final	<u>COL0_YELLOW</u> Value: 10
public static final	<u>COLN_LOWBYTE</u>
public static final	<u>CONTROLCODES_AOF</u> AOF Reserved (formerly Alarm Off) [channel]
public static final	<u>CONTROLCODES_AON</u> AON Reserved (formerly Alarm On) [channel]
public static final	<u>CONTROLCODES_BAO</u> BAO Background Black, Opaque [channel]
public static final	<u>CONTROLCODES_BAS</u> BAS Background Black, Semi-transparent [channel]
public static final	<u>CONTROLCODES_BBO</u> BBO Background Blue, Opaque [channel]

public static final	CONTROLCODES_BBS BBS Background Blue, Semi-transparent [channel]
public static final	CONTROLCODES_BCO BCO Background Cyan, Opaque [channel]
public static final	CONTROLCODES_BCS BCS Background Cyan, Semi-transparent [channel]
public static final	CONTROLCODES_BGO BGO Background Green, Opaque [channel]
public static final	CONTROLCODES_BGS BGS Background Green, Semi-transparent [channel]
public static final	CONTROLCODES_BMO BMO Background Magenta, Opaque [channel]
public static final	CONTROLCODES_BMS BMS Background Magenta, Semi-transparent [channel]
public static final	CONTROLCODES_BRO BRO Background Red, Opaque [channel]
public static final	CONTROLCODES_BRS BRS Background Red, Semi-transparent [channel]
public static final	CONTROLCODES_BS BS Backspace [channel]
public static final	CONTROLCODES_BT BT Background Transparent [channel]
public static final	CONTROLCODES_BWO BWO Background White, Opaque [channel]
public static final	CONTROLCODES_BWS BWS Background White, Semi-transparent [channel]
public static final	CONTROLCODES_BYO BYO Background Yellow, Opaque [channel]
public static final	CONTROLCODES_BYS BYS Background Yellow, Semi-transparent [channel]
public static final	CONTROLCODES_CR CR Carriage Return [channel]
public static final	CONTROLCODES_DER DER Delete to End of Row [channel]
public static final	CONTROLCODES_EDM EDM Erase Displayed Memory [channel]
public static final	CONTROLCODES_ENM ENM Erase Non-Displayed Memory [channel]
public static final	CONTROLCODES_EOC EOC End of Caption (Flip Memories) [channel]

public static final	<u>CONTROLCODES_FA</u> FA Foreground Black [channel]
public static final	<u>CONTROLCODES_FAU</u> FAU Foreground Black Underline [channel]
public static final	<u>CONTROLCODES_FON</u> FON Flash On [channel]
public static final	<u>CONTROLCODES_RCL</u> RCL Resume caption loading [channel]
public static final	<u>CONTROLCODES_RDC</u> RDC Resume Direct Captioning [channel]
public static final	<u>CONTROLCODES_RTD</u> RTD Resume Text Display [channel]
public static final	<u>CONTROLCODES_RU2</u> RU2 Roll-Up Captions-2 Rows [channel]
public static final	<u>CONTROLCODES_RU3</u> RU3 Roll-Up Captions-3 Rows [channel]
public static final	<u>CONTROLCODES_RU4</u> RU4 Roll-Up Captions-4 Rows [channel]
public static final	<u>CONTROLCODES_TO1</u> TO1 Tab Offset 1 Column [channel]
public static final	<u>CONTROLCODES_TO2</u> TO2 Tab Offset 2 Columns [channel]
public static final	<u>CONTROLCODES_TO3</u> TO3 Tab Offset 3 Columns [channel]
public static final	<u>CONTROLCODES_TR</u> TR Text Restart [channel]
public static final	<u>COUNT_COLS</u> Total number of columns per frame Value: 31
public static final	<u>COUNT_ROWS</u> Total number of rows of characters per frame Value: 15
public static final	<u>DONOTHING_BYTE</u> Value: -128
public static final	<u>DONOTHING_SHORT</u> Value: -32640
public static final	<u>FORMAT_COLOR</u>
public static final	<u>FORMAT_FLASH</u> Value: -27480

public static final	<u>FORMAT_ITALICS</u> Value: -28242
public static final	<u>FORMAT_ITALICS_UNDERLINE</u> Value: -28369
public static final	<u>LANG_ASCII</u> Select the standard line 21 character set in normal size.
public static final	<u>LANG_ASCII_DBL</u> Select the standard line 21 character set in double size.
public static final	<u>LANG_GB231280</u> Select the People's Republic of China character set: GB 2312-80.
public static final	<u>LANG_KSC56011987</u> Select the Korean Standard character set: KSC 5601-1987.
public static final	<u>LANG_PRIV1</u> Select the first private character set.
public static final	<u>LANG_PRIV2</u> Select the second private character set.
public static final	<u>LANG_REG1</u> Select the first registered character set.
public static final	<u>MAX_CCCOUNT</u> Maximum number of closed caption codes per SEI packet Value: 31
public static final	<u>ODDPARITY</u> Odd parity calculator
public static final	<u>SEI_PAYLOADTYPE</u> Value: 4
public static final	<u>SEI_STARTCODE</u> SEI start code
public static final	<u>SEI_USERDATATYPECODE</u> Value: 3
public static final	<u>UTF8_BRITISH_POUND</u> Value: 163
public static final	<u>UTF8_BULLET</u> Value: 8226
public static final	<u>UTF8_CENTS</u> Value: 162
public static final	<u>UTF8_CLOSING_DOUBLE_QUOTE</u> Value: 8221

public static final	<u>UTF8_CLOSING_GUILLEMETS</u> Value: 187
public static final	<u>UTF8_CONNECTING_VERTICAL_BAR</u> Value: 9474
public static final	<u>UTF8_COPYRIGHT</u> Value: 169
public static final	<u>UTF8_CURRENCY</u> Value: 164
public static final	<u>UTF8_DASH</u> Value: 45
public static final	<u>UTF8_DEGREE</u> Value: 176
public static final	<u>UTF8_DOUBLEQUOTE</u> Value: 34
public static final	<u>UTF8_EM_DASH</u> Value: 8212
public static final	<u>UTF8_EXCLAMATION</u> Value: 33
public static final	<u>UTF8_GREATERTHAN</u> Value: 62
public static final	<u>UTF8_INVERTED_EXCLAMATION</u> Value: 161
public static final	<u>UTF8_LEFT_SINGLE_QUOTATION</u> Value: 8216
public static final	<u>UTF8_LEFTPAREN</u> Value: 40
public static final	<u>UTF8_LESSTHAN</u> Value: 60
public static final	<u>UTF8_LOWER_A</u> Value: 97
public static final	<u>UTF8_LOWER_A_WITH_CIRCUMFLEX</u> Value: 226

public static final	<u>UTF8_LOWER_A_WITH_DIAERESIS</u> Value: 228
public static final	<u>UTF8_LOWER_A_WITH_GRAVE</u> Value: 224
public static final	<u>UTF8_LOWER_A_WITH_RING</u> Value: 229
public static final	<u>UTF8_LOWER_A_WITH_TILDE</u> Value: 227
public static final	<u>UTF8_LOWER_B</u> Value: 98
public static final	<u>UTF8_LOWER_C</u> Value: 99
public static final	<u>UTF8_LOWER_D</u> Value: 100
public static final	<u>UTF8_LOWER_E</u> Value: 101
public static final	<u>UTF8_LOWER_E_WITH_CIRCUMFLEX</u> Value: 234
public static final	<u>UTF8_LOWER_E_WITH_DIAERESIS</u> Value: 235
public static final	<u>UTF8_LOWER_E_WITH_GRAVE</u> Value: 232
public static final	<u>UTF8_LOWER_F</u> Value: 102
public static final	<u>UTF8_LOWER_G</u> Value: 103
public static final	<u>UTF8_LOWER_H</u> Value: 104
public static final	<u>UTF8_LOWER_I</u> Value: 105
public static final	<u>UTF8_LOWER_I_WITH_CIRCUMFLEX</u> Value: 238

public static final	<u>UTF8_LOWER_I_WITH_DIAERESIS</u> Value: 239
public static final	<u>UTF8_LOWER_I_WITH_GRAVE</u> Value: 236
public static final	<u>UTF8_LOWER_J</u> Value: 106
public static final	<u>UTF8_LOWER_K</u> Value: 107
public static final	<u>UTF8_LOWER_L</u> Value: 108
public static final	<u>UTF8_LOWER_M</u> Value: 109
public static final	<u>UTF8_LOWER_N</u> Value: 110
public static final	<u>UTF8_LOWER_O</u> Value: 111
public static final	<u>UTF8_LOWER_O_WITH_CIRCUMFLEX</u> Value: 244
public static final	<u>UTF8_LOWER_O_WITH_DIAERESIS</u> Value: 246
public static final	<u>UTF8_LOWER_O_WITH_GRAVE</u> Value: 242
public static final	<u>UTF8_LOWER_O_WITH_STROKE</u> Value: 248
public static final	<u>UTF8_LOWER_O_WITH_TILDE</u> Value: 245
public static final	<u>UTF8_LOWER_P</u> Value: 112
public static final	<u>UTF8_LOWER_Q</u> Value: 113
public static final	<u>UTF8_LOWER_R</u> Value: 114

public static final	<u>UTF8_LOWER_S</u> Value: 115
public static final	<u>UTF8_LOWER_T</u> Value: 116
public static final	<u>UTF8_LOWER_U</u> Value: 117
public static final	<u>UTF8_LOWER_U_WITH_CIRCUMFLEX</u> Value: 251
public static final	<u>UTF8_LOWER_U_WITH_DIAERESIS</u> Value: 252
public static final	<u>UTF8_LOWER_U_WITH_GRAVE</u> Value: 249
public static final	<u>UTF8_LOWER_V</u> Value: 118
public static final	<u>UTF8_LOWER_W</u> Value: 119
public static final	<u>UTF8_LOWER_X</u> Value: 120
public static final	<u>UTF8_LOWER_Y</u> Value: 121
public static final	<u>UTF8_LOWER_Z</u> Value: 122
public static final	<u>UTF8_MINUSHYPHEN</u> Value: 45
public static final	<u>UTF8_MUSICAL_NOTE</u> Value: 9834
public static final	<u>UTF8_NBSP</u> Value: 160
public static final	<u>UTF8_NOTMATCH</u>
public static final	<u>UTF8_ONE_HALF</u> Value: 189

public static final	<u>UTF8_OPENING_DOUBLE_QUOTE</u> Value: 8220
public static final	<u>UTF8_OPENING_GUILLEMETS</u> Value: 171
public static final	<u>UTF8_PERIOD</u> Value: 46
public static final	<u>UTF8_PIPE</u> Value: 124
public static final	<u>UTF8_QUESTION</u> Value: 63
public static final	<u>UTF8_REGISTERED_MARK</u> Value: 174
public static final	<u>UTF8_REVERSE_QUERY</u> Value: 191
public static final	<u>UTF8_RIGHTPAREN</u> Value: 41
public static final	<u>UTF8_SERVICE_MARK</u> Value: 8480
public static final	<u>UTF8_SINGLEQUOTE</u> Value: 39
public static final	<u>UTF8_SPACE</u> Value: 32
public static final	<u>UTF8_TRADEMARK</u> Value: 8482
public static final	<u>UTF8_UNDERSCORE</u> Value: 84
public static final	<u>UTF8_UPPER_A</u> Value: 65
public static final	<u>UTF8_UPPER_A_WITH_ACUTE</u> Value: 193
public static final	<u>UTF8_UPPER_A_WITH_CURCUMFLEX</u> Value: 194

public static final	<u>UTF8_UPPER_A_WITH_DIAERESIS</u> Value: 196
public static final	<u>UTF8_UPPER_A_WITH_GRAVE</u> Value: 192
public static final	<u>UTF8_UPPER_A_WITH_RING</u> Value: 197
public static final	<u>UTF8_UPPER_A_WITH_TILDE</u> Value: 195
public static final	<u>UTF8_UPPER_B</u> Value: 66
public static final	<u>UTF8_UPPER_C</u> Value: 67
public static final	<u>UTF8_UPPER_C_WITH_CEDILLA</u> Value: 199
public static final	<u>UTF8_UPPER_D</u> Value: 68
public static final	<u>UTF8_UPPER_E</u> Value: 69
public static final	<u>UTF8_UPPER_E_WITH_ACUTE</u> Value: 201
public static final	<u>UTF8_UPPER_E_WITH_CIRCUMFLEX</u> Value: 202
public static final	<u>UTF8_UPPER_E_WITH_DIAERESIS</u> Value: 203
public static final	<u>UTF8_UPPER_E_WITH_GRAVE</u> Value: 200
public static final	<u>UTF8_UPPER_F</u> Value: 70
public static final	<u>UTF8_UPPER_G</u> Value: 71
public static final	<u>UTF8_UPPER_H</u> Value: 72

public static final	<u>UTF8_UPPER_I</u> Value: 73
public static final	<u>UTF8_UPPER_I_WITH_CIRCUMFLEX</u> Value: 206
public static final	<u>UTF8_UPPER_I_WITH_DIAERESIS</u> Value: 207
public static final	<u>UTF8_UPPER_I_WITH_GRAVE</u> Value: 204
public static final	<u>UTF8_UPPER_I_WITH_TILDE</u> Value: 205
public static final	<u>UTF8_UPPER_J</u> Value: 74
public static final	<u>UTF8_UPPER_K</u> Value: 75
public static final	<u>UTF8_UPPER_L</u> Value: 76
public static final	<u>UTF8_UPPER_M</u> Value: 77
public static final	<u>UTF8_UPPER_N</u> Value: 78
public static final	<u>UTF8_UPPER_O</u> Value: 79
public static final	<u>UTF8_UPPER_O_WITH_ACUTE</u> Value: 211
public static final	<u>UTF8_UPPER_O_WITH_CIRCUMFLEX</u> Value: 212
public static final	<u>UTF8_UPPER_O_WITH_DIAERESIS</u> Value: 214
public static final	<u>UTF8_UPPER_O_WITH_GRAVE</u> Value: 210
public static final	<u>UTF8_UPPER_O_WITH_STROKE</u> Value: 216

public static final	<u>UTF8_UPPER_O_WITH_TILDE</u> Value: 213
public static final	<u>UTF8_UPPER_P</u> Value: 80
public static final	<u>UTF8_UPPER_Q</u> Value: 81
public static final	<u>UTF8_UPPER_R</u> Value: 82
public static final	<u>UTF8_UPPER_S</u> Value: 83
public static final	<u>UTF8_UPPER_T</u> Value: 84
public static final	<u>UTF8_UPPER_U</u> Value: 85
public static final	<u>UTF8_UPPER_U_WITH_ACUTE</u> Value: 218
public static final	<u>UTF8_UPPER_U_WITH_CIRCUMFLEX</u> Value: 219
public static final	<u>UTF8_UPPER_U_WITH_DIAERESIS</u> Value: 220
public static final	<u>UTF8_UPPER_U_WITH_GRAVE</u> Value: 217
public static final	<u>UTF8_UPPER_V</u> Value: 86
public static final	<u>UTF8_UPPER_W</u> Value: 87
public static final	<u>UTF8_UPPER_X</u> Value: 88
public static final	<u>UTF8_UPPER_Y</u> Value: 89
public static final	<u>UTF8_UPPER_Z</u> Value: 90

public static final	UTF8_YEN Value: 165
public static final	UTF8MAP
public static final	UTF8MAP_INDEX_OFFSET Value: 32

Fields inherited from class com.wowza.wms.timedtext.cea608.CEA608Constants

CC_CHANNEL_CC1, CC_CHANNEL_CC2, CC_CHANNEL_CC3, CC_CHANNEL_CC4, CC_TYPE_DTVCC_PACKET_DATA, CC_TYPE_DTVCC_PACKET_START, CC_TYPE_NTSC_FIELD_1, CC_TYPE_NTSC_FIELD_2

Constructor Summary

public	ClosedCaptionCEA608Utils()
--------	--

Method Summary

static byte	calcParity (byte inByte)
static short	calcParity (short inShort)
static char	cea608CharToCharUTF8 (short b)
static Character	cea608ExtendedCharacterToUTF8 (short command)
static byte[]	charUTF8ToCAE608 (CEACaptionConversionContext ceaContext, String text, int pos, String characterSet, int channel)
static byte[]	charUTF8ToCAE608 (String text, int pos, String characterSet, int channel)
static boolean	checkParity (byte inByte)
static boolean	checkParity (short inShort)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

SEI_PAYLOADTYPE

public static final byte **SEI_PAYLOADTYPE**

Constant value: **4**

SEI_USERDATATYPECODE

```
public static final byte SEI_USERDATATYPECODE
```

Constant value: **3**

UTF8_BULLET

```
public static final char UTF8_BULLET
```

Constant value: **8226**

UTF8_CLOSING_DOUBLE_QUOTE

```
public static final char UTF8_CLOSING_DOUBLE_QUOTE
```

Constant value: **8221**

UTF8_CLOSING_GUILLEMETS

```
public static final char UTF8_CLOSING_GUILLEMETS
```

Constant value: **187**

UTF8_CONNECTING_VERTICAL_BAR

```
public static final char UTF8_CONNECTING_VERTICAL_BAR
```

Constant value: **9474**

UTF8_COPYRIGHT

```
public static final char UTF8_COPYRIGHT
```

Constant value: **169**

UTF8_CURRENCY

```
public static final char UTF8_CURRENCY
```

Constant value: **164**

UTF8_DEGREE

```
public static final char UTF8_DEGREE
```

Constant value: **176**

(continued from last page)

UTF8_EM_DASH

```
public static final char UTF8_EM_DASH
```

Constant value: **8212**

UTF8_INVERTED_EXCLAMATION

```
public static final char UTF8_INVERTED_EXCLAMATION
```

Constant value: **161**

UTF8_LEFT_SINGLE_QUOTATION

```
public static final char UTF8_LEFT_SINGLE_QUOTATION
```

Constant value: **8216**

UTF8_OPENING_DOUBLE_QUOTE

```
public static final char UTF8_OPENING_DOUBLE_QUOTE
```

Constant value: **8220**

UTF8_OPENING_GUILLEMETS

```
public static final char UTF8_OPENING_GUILLEMETS
```

Constant value: **171**

UTF8_REGISTERED_MARK

```
public static final char UTF8_REGISTERED_MARK
```

Constant value: **174**

UTF8_SERVICE_MARK

```
public static final char UTF8_SERVICE_MARK
```

Constant value: **8480**

UTF8_YEN

```
public static final char UTF8_YEN
```

Constant value: **165**

UTF8_LOWER_A_WITH_DIAERESIS

```
public static final char UTF8_LOWER_A_WITH_DIAERESIS
```

(continued from last page)

Constant value: **228**

UTF8_LOWER_A_WITH_RING

```
public static final char UTF8_LOWER_A_WITH_RING
```

Constant value: **229**

UTF8_LOWER_A_WITH_TILDE

```
public static final char UTF8_LOWER_A_WITH_TILDE
```

Constant value: **227**

UTF8_LOWER_E_WITH_DIAERESIS

```
public static final char UTF8_LOWER_E_WITH_DIAERESIS
```

Constant value: **235**

UTF8_LOWER_I_WITH_DIAERESIS

```
public static final char UTF8_LOWER_I_WITH_DIAERESIS
```

Constant value: **239**

UTF8_LOWER_I_WITH_GRAVE

```
public static final char UTF8_LOWER_I_WITH_GRAVE
```

Constant value: **236**

UTF8_LOWER_O_WITH_DIAERESIS

```
public static final char UTF8_LOWER_O_WITH_DIAERESIS
```

Constant value: **246**

UTF8_LOWER_O_WITH_GRAVE

```
public static final char UTF8_LOWER_O_WITH_GRAVE
```

Constant value: **242**

UTF8_LOWER_O_WITH_STROKE

```
public static final char UTF8_LOWER_O_WITH_STROKE
```

Constant value: **248**

UTF8_LOWER_O_WITH_TILDE

```
public static final char UTF8_LOWER_O_WITH_TILDE
```

Constant value: **245**

UTF8_LOWER_U_WITH_DIAERESIS

```
public static final char UTF8_LOWER_U_WITH_DIAERESIS
```

Constant value: **252**

UTF8_LOWER_U_WITH_GRAVE

```
public static final char UTF8_LOWER_U_WITH_GRAVE
```

Constant value: **249**

UTF8_UPPER_A_WITH_ACUTE

```
public static final char UTF8_UPPER_A_WITH_ACUTE
```

Constant value: **193**

UTF8_UPPER_A_WITH_CURCUMFLEX

```
public static final char UTF8_UPPER_A_WITH_CURCUMFLEX
```

Constant value: **194**

UTF8_UPPER_A_WITH_DIAERESIS

```
public static final char UTF8_UPPER_A_WITH_DIAERESIS
```

Constant value: **196**

UTF8_UPPER_A_WITH_GRAVE

```
public static final char UTF8_UPPER_A_WITH_GRAVE
```

Constant value: **192**

UTF8_UPPER_A_WITH_RING

```
public static final char UTF8_UPPER_A_WITH_RING
```

Constant value: **197**

(continued from last page)

UTF8_UPPER_A_WITH_TILDE

```
public static final char UTF8_UPPER_A_WITH_TILDE
```

Constant value: **195**

UTF8_UPPER_C_WITH_CEDILLA

```
public static final char UTF8_UPPER_C_WITH_CEDILLA
```

Constant value: **199**

UTF8_UPPER_E_WITH_ACUTE

```
public static final char UTF8_UPPER_E_WITH_ACUTE
```

Constant value: **201**

UTF8_UPPER_E_WITH_CIRCUMFLEX

```
public static final char UTF8_UPPER_E_WITH_CIRCUMFLEX
```

Constant value: **202**

UTF8_UPPER_E_WITH_DIAERESIS

```
public static final char UTF8_UPPER_E_WITH_DIAERESIS
```

Constant value: **203**

UTF8_UPPER_E_WITH_GRAVE

```
public static final char UTF8_UPPER_E_WITH_GRAVE
```

Constant value: **200**

UTF8_UPPER_I_WITH_CIRCUMFLEX

```
public static final char UTF8_UPPER_I_WITH_CIRCUMFLEX
```

Constant value: **206**

UTF8_UPPER_I_WITH_DIAERESIS

```
public static final char UTF8_UPPER_I_WITH_DIAERESIS
```

Constant value: **207**

UTF8_UPPER_I_WITH_GRAVE

```
public static final char UTF8_UPPER_I_WITH_GRAVE
```

(continued from last page)

Constant value: **204**

UTF8_UPPER_I_WITH_TILDE

```
public static final char UTF8_UPPER_I_WITH_TILDE
```

Constant value: **205**

UTF8_UPPER_O_WITH_ACUTE

```
public static final char UTF8_UPPER_O_WITH_ACUTE
```

Constant value: **211**

UTF8_UPPER_O_WITH_CIRCUMFLEX

```
public static final char UTF8_UPPER_O_WITH_CIRCUMFLEX
```

Constant value: **212**

UTF8_UPPER_O_WITH_DIAERESIS

```
public static final char UTF8_UPPER_O_WITH_DIAERESIS
```

Constant value: **214**

UTF8_UPPER_O_WITH_GRAVE

```
public static final char UTF8_UPPER_O_WITH_GRAVE
```

Constant value: **210**

UTF8_UPPER_O_WITH_STROKE

```
public static final char UTF8_UPPER_O_WITH_STROKE
```

Constant value: **216**

UTF8_UPPER_O_WITH_TILDE

```
public static final char UTF8_UPPER_O_WITH_TILDE
```

Constant value: **213**

UTF8_UPPER_U_WITH_ACUTE

```
public static final char UTF8_UPPER_U_WITH_ACUTE
```

Constant value: **218**

UTF8_UPPER_U_WITH_CIRCUMFLEX

```
public static final char UTF8_UPPER_U_WITH_CIRCUMFLEX
```

Constant value: **219**

UTF8_UPPER_U_WITH_DIAERESIS

```
public static final char UTF8_UPPER_U_WITH_DIAERESIS
```

Constant value: **220**

UTF8_UPPER_U_WITH_GRAVE

```
public static final char UTF8_UPPER_U_WITH_GRAVE
```

Constant value: **217**

MAX_CCCOUNT

```
public static final int MAX_CCCOUNT
```

Maximum number of closed caption codes per SEI packet

Constant value: **31**

SEI_STARTCODE

```
public static final byte SEI_STARTCODE
```

SEI start code

ODDPARITY

```
public static final byte ODDPARITY
```

Odd parity calculator

COL0_WHITE

```
public static final int COL0_WHITE
```

Constant value: **0**

COL0_GREEN

```
public static final int COL0_GREEN
```

Constant value: **2**

COL0_BLUE

```
public static final int COL0_BLUE
```

(continued from last page)

Constant value: **4**

COL0_CYAN

```
public static final int COL0_CYAN
```

Constant value: **6**

COL0_RED

```
public static final int COL0_RED
```

Constant value: **8**

COL0_YELLOW

```
public static final int COL0_YELLOW
```

Constant value: **10**

COL0_MAGENTA

```
public static final int COL0_MAGENTA
```

Constant value: **12**

CHANNEL1

```
public static final int CHANNEL1
```

Constant value: **0**

CHANNEL2

```
public static final int CHANNEL2
```

Constant value: **1**

DONOTHING_SHORT

```
public static final short DONOTHING_SHORT
```

Constant value: **-32640**

DONOTHING_BYTE

```
public static final byte DONOTHING_BYTE
```

Constant value: **-128**

(continued from last page)

CONTROLCODES_RCL

```
public static final short CONTROLCODES_RCL
```

RCL Resume caption loading [channel]

CONTROLCODES_BS

```
public static final short CONTROLCODES_BS
```

BS Backspace [channel]

CONTROLCODES_AOF

```
public static final short CONTROLCODES_AOF
```

AOF Reserved (formerly Alarm Off) [channel]

CONTROLCODES_AON

```
public static final short CONTROLCODES_AON
```

AON Reserved (formerly Alarm On) [channel]

CONTROLCODES_DER

```
public static final short CONTROLCODES_DER
```

DER Delete to End of Row [channel]

CONTROLCODES_RU2

```
public static final short CONTROLCODES_RU2
```

RU2 Roll-Up Captions-2 Rows [channel]

CONTROLCODES_RU3

```
public static final short CONTROLCODES_RU3
```

RU3 Roll-Up Captions-3 Rows [channel]

CONTROLCODES_RU4

```
public static final short CONTROLCODES_RU4
```

RU4 Roll-Up Captions-4 Rows [channel]

CONTROLCODES_FON

```
public static final short CONTROLCODES_FON
```

FON Flash On [channel]

CONTROLCODES_RDC

```
public static final short CONTROLCODES_RDC
```

(continued from last page)

RDC Resume Direct Captioning [channel]

CONTROLCODES_TR

public static final short **CONTROLCODES_TR**

TR Text Restart [channel]

CONTROLCODES_RTD

public static final short **CONTROLCODES_RTD**

RTD Resume Text Display [channel]

CONTROLCODES_EDM

public static final short **CONTROLCODES_EDM**

EDM Erase Displayed Memory [channel]

CONTROLCODES_CR

public static final short **CONTROLCODES_CR**

CR Carriage Return [channel]

CONTROLCODES_ENM

public static final short **CONTROLCODES_ENM**

ENM Erase Non-Displayed Memory [channel]

CONTROLCODES_EOC

public static final short **CONTROLCODES_EOC**

EOC End of Caption (Flip Memories) [channel]

CONTROLCODES_TO1

public static final short **CONTROLCODES_TO1**

TO1 Tab Offset 1 Column [channel]

CONTROLCODES_TO2

public static final short **CONTROLCODES_TO2**

TO2 Tab Offset 2 Columns [channel]

CONTROLCODES_TO3

public static final short **CONTROLCODES_TO3**

TO3 Tab Offset 3 Columns [channel]

(continued from last page)

CONTROLCODES_BWO

```
public static final short CONTROLCODES_BWO
```

BWO Background White, Opaque [channel]

CONTROLCODES_BWS

```
public static final short CONTROLCODES_BWS
```

BWS Background White, Semi-transparent [channel]

CONTROLCODES_BGO

```
public static final short CONTROLCODES_BGO
```

BGO Background Green, Opaque [channel]

CONTROLCODES_BGS

```
public static final short CONTROLCODES_BGS
```

BGS Background Green, Semi-transparent [channel]

CONTROLCODES_BBO

```
public static final short CONTROLCODES_BBO
```

BBO Background Blue, Opaque [channel]

CONTROLCODES_BBS

```
public static final short CONTROLCODES_BBS
```

BBS Background Blue, Semi-transparent [channel]

CONTROLCODES_BCO

```
public static final short CONTROLCODES_BCO
```

BCO Background Cyan, Opaque [channel]

CONTROLCODES_BCS

```
public static final short CONTROLCODES_BCS
```

BCS Background Cyan, Semi-transparent [channel]

CONTROLCODES_BRO

```
public static final short CONTROLCODES_BRO
```

BRO Background Red, Opaque [channel]

CONTROLCODES_BRS

```
public static final short CONTROLCODES_BRS
```

(continued from last page)

BRS Background Red, Semi-transparent [channel]

CONTROLCODES_BYO

public static final short **CONTROLCODES_BYO**

BYO Background Yellow, Opaque [channel]

CONTROLCODES_BYS

public static final short **CONTROLCODES_BYS**

BYS Background Yellow, Semi-transparent [channel]

CONTROLCODES_BMO

public static final short **CONTROLCODES_BMO**

BMO Background Magenta, Opaque [channel]

CONTROLCODES_BMS

public static final short **CONTROLCODES_BMS**

BMS Background Magenta, Semi-transparent [channel]

CONTROLCODES_BAO

public static final short **CONTROLCODES_BAO**

BAO Background Black, Opaque [channel]

CONTROLCODES_BAS

public static final short **CONTROLCODES_BAS**

BAS Background Black, Semi-transparent [channel]

CONTROLCODES_BT

public static final short **CONTROLCODES_BT**

BT Background Transparent [channel]

CONTROLCODES_FA

public static final short **CONTROLCODES_FA**

FA Foreground Black [channel]

CONTROLCODES_FAU

public static final short **CONTROLCODES_FAU**

FAU Foreground Black Underline [channel]

(continued from last page)

LANG_ASCII

public static final short **LANG_ASCII**

Select the standard line 21 character set in normal size. [channel]

LANG_ASCII_DBL

public static final short **LANG_ASCII_DBL**

Select the standard line 21 character set in double size. [channel]

LANG_PRIV1

public static final short **LANG_PRIV1**

Select the first private character set. [channel]

LANG_PRIV2

public static final short **LANG_PRIV2**

Select the second private character set. [channel]

LANG_GB231280

public static final short **LANG_GB231280**

Select the People's Republic of China character set: GB 2312-80. [channel]

LANG_KSC56011987

public static final short **LANG_KSC56011987**

Select the Korean Standard character set: KSC 5601-1987. [channel]

LANG_REG1

public static final short **LANG_REG1**

Select the first registered character set. [channel]

COUNT_ROWS

public static final int **COUNT_ROWS**

Total number of rows of characters per frame
Constant value: **15**

COUNT_COLS

public static final int **COUNT_COLS**

Total number of columns per frame
Constant value: **31**

(continued from last page)

COL0_HIBYTE

```
public static final short COL0_HIBYTE
```

Move to set color (high-byte) [channel][row]

COL0_LOWBYTE

```
public static final short COL0_LOWBYTE
```

Move to set color (low-byte) [color][row]

COL_0

```
public static final int COL_0
```

Constant value: **0**

COL_4

```
public static final int COL_4
```

Constant value: **2**

COL_5

```
public static final int COL_5
```

Constant value: **4**

COL_12

```
public static final int COL_12
```

Constant value: **6**

COL_16

```
public static final int COL_16
```

Constant value: **8**

COL_20

```
public static final int COL_20
```

Constant value: **10**

COL_24

```
public static final int COL_24
```

(continued from last page)

Constant value: **12**

COL_28

```
public static final int COL_28
```

Constant value: **14**

COLN_LOWBYTE

```
public static final short COLN_LOWBYTE
```

FORMAT_COLOR

```
public static final short FORMAT_COLOR
```

FORMAT_ITALICS

```
public static final short FORMAT_ITALICS
```

Constant value: **-28242**

FORMAT_ITALICS_UNDERLINE

```
public static final short FORMAT_ITALICS_UNDERLINE
```

Constant value: **-28369**

FORMAT_FLASH

```
public static final short FORMAT_FLASH
```

Constant value: **-27480**

UTF8_NOTMATCH

```
public static final byte UTF8_NOTMATCH
```

UTF8_PERIOD

```
public static final byte UTF8_PERIOD
```

Constant value: **46**

UTF8_SINGLEQUOTE

```
public static final byte UTF8_SINGLEQUOTE
```

(continued from last page)

Constant value: **39**

UTF8_DOUBLEQUOTE

```
public static final byte UTF8_DOUBLEQUOTE
```

Constant value: **34**

UTF8_DASH

```
public static final byte UTF8_DASH
```

Constant value: **45**

UTF8_UNDERSCORE

```
public static final byte UTF8_UNDERSCORE
```

Constant value: **84**

UTF8_LEFTPAREN

```
public static final byte UTF8_LEFTPAREN
```

Constant value: **40**

UTF8_RIGHTPAREN

```
public static final byte UTF8_RIGHTPAREN
```

Constant value: **41**

UTF8_SPACE

```
public static final byte UTF8_SPACE
```

Constant value: **32**

UTF8_EXCLAMATION

```
public static final byte UTF8_EXCLAMATION
```

Constant value: **33**

UTF8_QUESTION

```
public static final byte UTF8_QUESTION
```

Constant value: **63**

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UTF8_LESSTHAN

public static final byte **UTF8_LESSTHAN**

Constant value: **60**

UTF8_GREATERTHAN

public static final byte **UTF8_GREATERTHAN**

Constant value: **62**

UTF8_MINUSHYPHEN

public static final byte **UTF8_MINUSHYPHEN**

Constant value: **45**

UTF8_PIPE

public static final byte **UTF8_PIPE**

Constant value: **124**

UTF8_LOWER_A

public static final byte **UTF8_LOWER_A**

Constant value: **97**

UTF8_LOWER_B

public static final byte **UTF8_LOWER_B**

Constant value: **98**

UTF8_LOWER_C

public static final byte **UTF8_LOWER_C**

Constant value: **99**

UTF8_LOWER_D

public static final byte **UTF8_LOWER_D**

Constant value: **100**

UTF8_LOWER_E

public static final byte **UTF8_LOWER_E**

(continued from last page)

Constant value: **101**

UTF8_LOWER_Fpublic static final byte **UTF8_LOWER_F**Constant value: **102**

UTF8_LOWER_Gpublic static final byte **UTF8_LOWER_G**Constant value: **103**

UTF8_LOWER_Hpublic static final byte **UTF8_LOWER_H**Constant value: **104**

UTF8_LOWER_Ipublic static final byte **UTF8_LOWER_I**Constant value: **105**

UTF8_LOWER_Jpublic static final byte **UTF8_LOWER_J**Constant value: **106**

UTF8_LOWER_Kpublic static final byte **UTF8_LOWER_K**Constant value: **107**

UTF8_LOWER_Lpublic static final byte **UTF8_LOWER_L**Constant value: **108**

UTF8_LOWER_Mpublic static final byte **UTF8_LOWER_M**Constant value: **109**

UTF8_LOWER_N

public static final byte **UTF8_LOWER_N**

Constant value: **110**

UTF8_LOWER_O

public static final byte **UTF8_LOWER_O**

Constant value: **111**

UTF8_LOWER_P

public static final byte **UTF8_LOWER_P**

Constant value: **112**

UTF8_LOWER_Q

public static final byte **UTF8_LOWER_Q**

Constant value: **113**

UTF8_LOWER_R

public static final byte **UTF8_LOWER_R**

Constant value: **114**

UTF8_LOWER_S

public static final byte **UTF8_LOWER_S**

Constant value: **115**

UTF8_LOWER_T

public static final byte **UTF8_LOWER_T**

Constant value: **116**

UTF8_LOWER_U

public static final byte **UTF8_LOWER_U**

Constant value: **117**

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UTF8_LOWER_V

public static final byte **UTF8_LOWER_V**

Constant value: **118**

UTF8_LOWER_W

public static final byte **UTF8_LOWER_W**

Constant value: **119**

UTF8_LOWER_X

public static final byte **UTF8_LOWER_X**

Constant value: **120**

UTF8_LOWER_Y

public static final byte **UTF8_LOWER_Y**

Constant value: **121**

UTF8_LOWER_Z

public static final byte **UTF8_LOWER_Z**

Constant value: **122**

UTF8_UPPER_A

public static final byte **UTF8_UPPER_A**

Constant value: **65**

UTF8_UPPER_B

public static final byte **UTF8_UPPER_B**

Constant value: **66**

UTF8_UPPER_C

public static final byte **UTF8_UPPER_C**

Constant value: **67**

UTF8_UPPER_D

public static final byte **UTF8_UPPER_D**

(continued from last page)

Constant value: **68**

UTF8_UPPER_Epublic static final byte **UTF8_UPPER_E**Constant value: **69**

UTF8_UPPER_Fpublic static final byte **UTF8_UPPER_F**Constant value: **70**

UTF8_UPPER_Gpublic static final byte **UTF8_UPPER_G**Constant value: **71**

UTF8_UPPER_Hpublic static final byte **UTF8_UPPER_H**Constant value: **72**

UTF8_UPPER_Ipublic static final byte **UTF8_UPPER_I**Constant value: **73**

UTF8_UPPER_Jpublic static final byte **UTF8_UPPER_J**Constant value: **74**

UTF8_UPPER_Kpublic static final byte **UTF8_UPPER_K**Constant value: **75**

UTF8_UPPER_Lpublic static final byte **UTF8_UPPER_L**Constant value: **76**

UTF8_UPPER_M

public static final byte **UTF8_UPPER_M**

Constant value: **77**

UTF8_UPPER_N

public static final byte **UTF8_UPPER_N**

Constant value: **78**

UTF8_UPPER_O

public static final byte **UTF8_UPPER_O**

Constant value: **79**

UTF8_UPPER_P

public static final byte **UTF8_UPPER_P**

Constant value: **80**

UTF8_UPPER_Q

public static final byte **UTF8_UPPER_Q**

Constant value: **81**

UTF8_UPPER_R

public static final byte **UTF8_UPPER_R**

Constant value: **82**

UTF8_UPPER_S

public static final byte **UTF8_UPPER_S**

Constant value: **83**

UTF8_UPPER_T

public static final byte **UTF8_UPPER_T**

Constant value: **84**

(continued from last page)

UTF8_UPPER_U

```
public static final byte UTF8_UPPER_U
```

Constant value: **85**

UTF8_UPPER_V

```
public static final byte UTF8_UPPER_V
```

Constant value: **86**

UTF8_UPPER_W

```
public static final byte UTF8_UPPER_W
```

Constant value: **87**

UTF8_UPPER_X

```
public static final byte UTF8_UPPER_X
```

Constant value: **88**

UTF8_UPPER_Y

```
public static final byte UTF8_UPPER_Y
```

Constant value: **89**

UTF8_UPPER_Z

```
public static final byte UTF8_UPPER_Z
```

Constant value: **90**

UTF8_LOWER_A_WITH_CIRCUMFLEX

```
public static final char UTF8_LOWER_A_WITH_CIRCUMFLEX
```

Constant value: **226**

UTF8_LOWER_E_WITH_CIRCUMFLEX

```
public static final char UTF8_LOWER_E_WITH_CIRCUMFLEX
```

Constant value: **234**

UTF8_LOWER_I_WITH_CIRCUMFLEX

```
public static final char UTF8_LOWER_I_WITH_CIRCUMFLEX
```

(continued from last page)

Constant value: **238**

UTF8_LOWER_O_WITH_CIRCUMFLEX

```
public static final char UTF8_LOWER_O_WITH_CIRCUMFLEX
```

Constant value: **244**

UTF8_LOWER_U_WITH_CIRCUMFLEX

```
public static final char UTF8_LOWER_U_WITH_CIRCUMFLEX
```

Constant value: **251**

UTF8_LOWER_A_WITH_GRAVE

```
public static final char UTF8_LOWER_A_WITH_GRAVE
```

Constant value: **224**

UTF8_LOWER_E_WITH_GRAVE

```
public static final char UTF8_LOWER_E_WITH_GRAVE
```

Constant value: **232**

UTF8_NBSP

```
public static final char UTF8_NBSP
```

Constant value: **160**

UTF8_MUSICAL_NOTE

```
public static final char UTF8_MUSICAL_NOTE
```

Constant value: **9834**

UTF8_BRITISH_POUND

```
public static final char UTF8_BRITISH_POUND
```

Constant value: **163**

UTF8_CENTS

```
public static final char UTF8_CENTS
```

Constant value: **162**

UTF8_TRADEMARK

public static final char **UTF8_TRADEMARK**

Constant value: **8482**

UTF8_REVERSE_QUERY

public static final char **UTF8_REVERSE_QUERY**

Constant value: **191**

UTF8_ONE_HALF

public static final char **UTF8_ONE_HALF**

Constant value: **189**

CEA608_MUSICAL_NOTE

public static byte **CEA608_MUSICAL_NOTE**

CEA608_SOLID_BLOCK

public static byte **CEA608_SOLID_BLOCK**

UTF8MAP_INDEX_OFFSET

public static final int **UTF8MAP_INDEX_OFFSET**

Constant value: **32**

UTF8MAP

public static final byte **UTF8MAP**

CEA608_EXTENDED_NA_MAP

public static final char **CEA608_EXTENDED_NA_MAP**

CEA608_EXTENDED_FR_SP_MAP

public static final char **CEA608_EXTENDED_FR_SP_MAP**

CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP

```
public static final char CEA608_EXTENDED_PORT_GERMAN_DANISH_MAP
```

Constructors

ClosedCaptionCEA608Utils

```
public ClosedCaptionCEA608Utils()
```

Methods

charUTF8ToCAE608

```
public static byte[] charUTF8ToCAE608(CEACaptionConversionContext ceaContext,
    String text,
    int pos,
    String characterSet,
    int channel)
```

charUTF8ToCAE608

```
public static byte[] charUTF8ToCAE608(String text,
    int pos,
    String characterSet,
    int channel)
```

cea608CharToCharUTF8

```
public static char cea608CharToCharUTF8(short b)
```

calcParity

```
public static byte calcParity(byte inByte)
```

calcParity

```
public static short calcParity(short inShort)
```

checkParity

```
public static boolean checkParity(byte inByte)
```

checkParity

```
public static boolean checkParity(short inShort)
```

cea608ExtendedCharacterToUTF8

```
public static Character cea608ExtendedCharacterToUTF8(short command)
```

Package

com.wowza.wms.timedtext.model

com.wowza.wms.timedtext.model Interface ITimedTextConstants

public interface **ITimedTextConstants**
extends **ITimedTextPrivateConstants**

Field Summary

public static final	AMF_TEXTTYPE_ON_TEXT_DATA Value: onTextData
public static final	CEA608 Value: CEA608
public static final	DEFAULT_AMF_CONVERTER_TEXT_TYPE Value: onTextData
public static final	DEFAULT_AMF_CONVERTER_TRACK_INDEX Value: 99
public static final	DEFAULT_CAPTION_CHARACTER_SET Default value for Timed Text Property "captionCharacterSet". Value: UTF-8
public static final	DEFAULT_MAXIMUM_CAPTION_DURATION Default value for Timed Text Property "maximumCaptionDuration". Value: 5000
public static final	DEFAULT_PROPERTY_CAPTION_LANGUAGES Value: *
public static final	DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE Default value for Timed Text Property "captionFileNamingRule". Value: \${SourceStreamName}.\${FileExtension}
public static final	DEFAULT_PROPERTY_CAPTION_LANGUAGES Default value for Timed Text Property "captionLanguages". Value: *
public static final	DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE Default value for Timed Text Property "captionFileNamingRule". Value: \${SourceBasePath}
public static final	LANGUAGE_ID_ENGLISH Value: eng
public static final	LANGUAGE_LOCALE Value: locale

public static final	ON_CAPTION Value: onCaption
public static final	ON_CAPTION_INFO Value: onCaptionInfo
public static final	ON_TEXT_DATA Value: onTextData
public static final	OUTPUT_TYPE_AMF Value: AMF
public static final	OUTPUT_TYPE_CEA608 Value: CEA608
public static final	OUTPUT_TYPE_TTML Value: TTML
public static final	PROP_3GPP_CAPTION_CHARACTER_SET Timed Text Property "reader3GPPCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet" Value: reader3GPPCaptionCharacterSet
public static final	PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS Timed Text Property "amfCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION Value: amfCaptionConverterInsertErases
public static final	PROP_AMF_CONVERTER_TEXT_TYPE Timed Text Property "amfCaptionConverterTextType": AMF text type used in conversion Value: amfCaptionConverterTextType
public static final	PROP_AMF_CONVERTER_TRACK_INDEX Timed Text Property "amfCaptionConverterTrackIndex": track index used for captions Value: amfCaptionConverterTrackIndex
public static final	PROP_CAPTION_CHARACTER_SET Timed Text Property "captionCharacterSet": used to determine character set when ingesting captions Value: captionCharacterSet
public static final	PROP_CAPTION_FILE_NAMING_RULE Timed Text Property "captionFileNamingRule": to change logic determining the caption companion file naming scheme Value: captionFileNamingRule
public static final	PROP_CAPTION_FILENAME_QUERY_PARAMETER HTTP Streamer Property "captionFilenameQueryParameter": used for changing query string param used for caption file selection. Value: captionFilenameQueryParameter

public static final	<u>PROP_CAPTION_LANGUAGE_QUERY_PARAMETER</u> HTTP Streamer Property "captionLanguageQueryParameter": used for changing query string param used for caption language selection. Value: captionLanguageQueryParameter
public static final	<u>PROP_CAPTION_LANGUAGES</u> Timed Text Property "captionLanguages": used to select presented caption Language. Value: captionLanguages
public static final	<u>PROP_CAPTION_PATH_NAMING_RULE</u> Timed Text Property "captionPathNamingRule": to change logic determining the caption companion path Value: captionPathNamingRule
public static final	<u>PROP_CEA608_CONVERTER_CHARACTER_SET</u> Timed Text Property "cea608CaptionConverterCharacterSet": character set in default CEA caption converter. Value: cea608CaptionConverterCharacterSet
public static final	<u>PROP_CEA608_CONVERTER_CHARS_PER_LINE</u> Timed Text Property "cea608CaptionConverterCharsPerLine": max number characters per line in default CEA caption converter. Value: cea608CaptionConverterCharsPerLine
public static final	<u>PROP_CEA608_CONVERTER_COLOR</u> Timed Text Property "cea608CaptionConverterColor": color of text in default CEA caption converter. Value: cea608CaptionConverterColor
public static final	<u>PROP_CUPERTINO_CAPTION_LANGUAGES</u> Timed Text Property "cupertinoCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming. Value: cupertinoCaptionLanguages
public static final	<u>PROP_CUPERTINO_LIVE_USE_WEBVTT</u> Timed Text Property "cupertinoLiveCaptionsUseWebVTT" Value: cupertinoLiveCaptionsUseWebVTT
public static final	<u>PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION</u> Timed Text Property "cupertinoLiveWebVTTAddSpecialEmptyCaption" Value: cupertinoLiveWebVTTAddSpecialEmptyCaption
public static final	<u>PROP_CUPERTINO_VOD_CAPTIONS_ENABLED</u> Timed Text Property "cupertinoVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming. Value: cupertinoVODCaptionsEnabled
public static final	<u>PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608</u> Timed Text Property "cupertinoVODCaptionsRemoveExistingCEA608": if existing VOD has 608, remove them Value: cupertinoVODCaptionsRemoveExistingCEA608
public static final	<u>PROP_CUPERTINO_VOD_USE_WEBVTT</u> Timed Text Property "cupertinoVODCaptionsUseWebVTT" Value: cupertinoVODCaptionsUseWebVTT

public static final	<u>PROP_DEBUG_3GPP_CAPTION_PARSER</u> Timed Text Property "debug3GPPCaptionParser": adds info level logging regarding the 3GPP parser Value: debug3GPPCaptionParser
public static final	<u>PROP_DEBUG_3GPP_CAPTION_PARSER_TIME</u> Timed Text Property "debug3GPPCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debug3GPPCaptionParserTime
public static final	<u>PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION</u> Timed Text Property "cupertinoDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming Value: cupertinoDebugVODCaptionLanguageSelection
public static final	<u>PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION</u> Timed Text Property "cupertinoDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for Cupertino Streaming. Value: cupertinoDebugVODCaptionProviderDetermination
public static final	<u>PROP_DEBUG_LIVE_CAPTION_INGEST</u> Timed Text Property "debugCaptionLiveIngest" Value: debugCaptionLiveIngest
public static final	<u>PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW</u> Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsRaw" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in a raw binary state Value: debugCaptionLiveIngestOnCaptionCEA608LogAsRaw
public static final	<u>PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC</u> Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsSCC" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in SCC format Value: debugCaptionLiveIngestOnCaptionCEA608LogAsSCC
public static final	<u>PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE</u> Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608Verbose" : Adds verbose logging to AMF onCaption events of type "708" (CEA-608) Value: debugCaptionLiveIngestOnCaptionCEA608Verbose
public static final	<u>PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST</u> Timed Text Property "debugCaptionLiveOnCaptionIngest" Value: debugCaptionLiveOnCaptionIngest
public static final	<u>PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST</u> Timed Text Property "debugCaptionLiveOnTextDataIngest" Value: debugCaptionLiveOnTextDataIngest
public static final	<u>PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION</u> Timed Text Property "mpegdashDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming Value: mpegdashDebugVODCaptionLanguageSelection

public static final	<u>PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION</u> Timed Text Property "mpegdashDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for MPEGDash Streaming. Value: <code>mpegdashDebugVODCaptionProviderDetermination</code>
public static final	<u>PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION</u> Timed Text Property "rtmpDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for RTMP Streaming Value: <code>rtmpDebugVODCaptionLanguageSelection</code>
public static final	<u>PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION</u> Timed Text Property "rtmpDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for RTMP Streaming. Value: <code>rtmpDebugVODCaptionProviderDetermination</code>
public static final	<u>PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION</u> Timed Text Property "sanJoseDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for San Jose Streaming Value: <code>sanJoseDebugVODCaptionLanguageSelection</code>
public static final	<u>PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION</u> Timed Text Property "sanJoseVODDebugCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for San Jose Streaming. Value: <code>sanJoseVODDebugCaptionProviderDetermination</code>
public static final	<u>PROP_DEBUG_SCC_CAPTION_PARSER</u> Timed Text Property "debugSCCCaptionParser": adds info level logging regarding the SCC caption parser Value: <code>debugSCCCaptionParser</code>
public static final	<u>PROP_DEBUG_SCC_CAPTION_PARSER_TIME</u> Timed Text Property "debugSCCCaptionParserTime": adds info level logging regarding how long it took parser to index Value: <code>debugSCCCaptionParserTime</code>
public static final	<u>PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES</u> Timed Text Property "debugSCCVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SCC provider Value: <code>debugSCCVODCaptionFileDetermination</code>
public static final	<u>PROP_DEBUG_SRT_CAPTION_PARSER</u> Timed Text Property "debugSRTCaptionParser": adds info level logging regarding the SRT caption parser Value: <code>debugSRTCaptionParser</code>
public static final	<u>PROP_DEBUG_SRT_CAPTION_PARSER_TIME</u> Timed Text Property "debugSRTCaptionParserTime": adds info level logging regarding how long it took parser to index Value: <code>debugSRTCaptionParserTime</code>
public static final	<u>PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES</u> Timed Text Property "debugSRTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SRT provider Value: <code>debugSRTVODCaptionFileDetermination</code>

public static final	<u>PROP_DEBUG_TTML_CAPTION_PARSER</u> Timed Text Property "debugTTMLCaptionParser": adds info level logging regarding the TTML caption parser Value: debugTTMLCaptionParser
public static final	<u>PROP_DEBUG_TTML_CAPTION_PARSER_TIME</u> Timed Text Property "debugTTMLCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugTTMLCaptionParserTime
public static final	<u>PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES</u> Timed Text Property "debugTTMLVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for TTML Streaming. Value: debugTTMLVODCaptionFileDetermination
public static final	<u>PROP_DEBUG_VOD_CAPTION_COMPANION_FILES</u> Timed Text Property "debugVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset Value: debugVODCaptionFileDetermination
public static final	<u>PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION</u> Timed Text Property "debugVODCaptionLanguageSelection": adds info level logging regarding language selection Value: debugVODCaptionLanguageSelection
public static final	<u>PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION</u> Timed Text Property "debugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset Value: debugVODCaptionProviderDetermination
public static final	<u>PROP_DEBUG_WEBVTT_CAPTION_PARSER</u> Timed Text Property "debugWebVTTCaptionParser": adds info level logging regarding the WebVTT caption parser Value: debugWebVTTCaptionParser
public static final	<u>PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME</u> Timed Text Property "debugWebVTTCaptionParserTime": adds info level logging regarding how long it took parser to index Value: debugWebVTTCaptionParserTime
public static final	<u>PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES</u> Timed Text Property "debugWebVTTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for WebVTT provider Value: debugWebVTTVODCaptionFileDetermination
public static final	<u>PROP_LIVE_CAPTION_DEFAULT_LANGUAGES</u> Timed Text Property "captionLiveIngestLanguages": comma separated ISO-639 language codes determining what languages are expected in the live stream Value: captionLiveIngestLanguages
public static final	<u>PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING</u> Timed Text Property "captionLiveIngestAMFIDString": to change AMF identifier from default "onTextData" to something else Value: captionLiveIngestAMFIDString

public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1</u> Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField1": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 1 is enabled for decoding Value: captionLiveIngestOnCaptionCEA608EnableField1
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2</u> Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 2 is enabled for decoding Value: captionLiveIngestOnCaptionCEA608EnableField2
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER</u> Timed Text Property "captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder" Controls allowed amount of idle time when parsing CEA-608 captions when ingested from AMF 708 data events Value: captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID</u> Timed Text Property "captionLiveIngestOnCaptionCEA608LanguageID": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the language ID used to add captions as onTextData Value: captionLiveIngestOnCaptionCEA608LanguageID
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES</u> Timed Text Property "captionLiveIngestOnCaptionCEA608MaxWarnMessages": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the maximum number of warning messages that are logged by the decoder Value: captionLiveIngestOnCaptionCEA608MaxWarnMessages
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER</u> Timed Text Property "captionLiveIngestOnCaptionCEA608TrackNumber": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the track number used to add captions as onTextData Value: captionLiveIngestOnCaptionCEA608TrackNumber
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING</u> Timed Text Property "captionLiveIngestOnCaptionInfoString": to change AMF identifier from default "onCaptionInfo" to something else Value: captionLiveIngestOnCaptionInfoString
public static final	<u>PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING</u> Timed Text Property "captionLiveIngestOnCaptionString": to change AMF identifier from default "onCaption" to something else Value: captionLiveIngestOnCaptionString
public static final	<u>PROP_LIVE_CAPTION_INGEST_TYPE</u> Timed Text Property "captionLiveIngestType": type of live caption ingestion. Value: captionLiveIngestType
public static final	<u>PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS</u> Timed Text Property "captionLiveIngestUseStreamNameGroups": to enable use of smil files to determine available languages and ingest type Value: captionLiveIngestUseStreamNameGroups
public static final	<u>PROP_MAXIMUM_CAPTION_DURATION</u> Timed Text Property "maximumCaptionDuration": used to determine maximum caption duration Value: maximumCaptionDuration

public static final	<u>PROP_MPEGDASH_CAPTION_LANGUAGES</u> Timed Text Property "mpegdashCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming. Value: mpegdashCaptionLanguages
public static final	<u>PROP_MPEGDASH_VOD_CAPTIONS_ENABLED</u> Timed Text Property "mpegdashVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming. Value: mpegdashVODCaptionsEnabled
public static final	<u>PROP_RTMP_CAPTION_LANGUAGES</u> Timed Text Property "rtmpCaptionLanguages": to enabled captionLanguage selection for RTMP Type String. Value: rtmpCaptionLanguages
public static final	<u>PROP_RTMP_VOD_CAPTIONS_ENABLED</u> Timed Text Property "rtmpVODCaptionsEnabled": to enabled VOD captions for RTMP streaming. Value: rtmpVODCaptionsEnabled
public static final	<u>PROP_SANJOSE_CAPTION_LANGUAGES</u> Timed Text Property "sanJoseCaptionLanguages": to enabled captionLanguage selection for San Jose streaming. Value: sanJoseCaptionLanguages
public static final	<u>PROP_SANJOSE_VOD_CAPTIONS_ENABLED</u> Timed Text Property "sanJoseVODCaptionsEnabled": to enabled VOD captions for San Jose streaming. Value: sanJoseVODCaptionsEnabled
public static final	<u>PROP_SRT_CAPTION_CHARACTER_SET</u> Timed Text Property "srtReaderCaptionCharacterSet": used to determine character set when ingesting SRT captions Overrides general property "captionCharacterSet" Value: srtReaderCaptionCharacterSet
public static final	<u>PROP_TTML_CAPTION_CHARACTER_SET</u> Timed Text Property "ttmlReaderCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet" Value: ttmlReaderCaptionCharacterSet
public static final	<u>PROP_TTML_INLINE_TAGS_IN_TEXT</u> Timed Text Property "ttmlInlineTagsInText": TTML parser includes in-line styling and line-break tags in the sample text Value: ttmlInlineTagsInText
public static final	<u>PROP_UNDEFINED_LANG_CODE</u> Timed Text Property "captionUndefinedLanguageId": if incoming caption language is undefined, use this language ID. Value: captionUndefinedLanguageId
public static final	<u>PROP_VOD_CAPTIONS_ENABLED</u> Timed Text Property "vodCaptionsEnabled": to enabled VOD captions for all supported protocols Value: vodCaptionsEnabled
public static final	<u>PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS</u> Timed Text Property "webVTTCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION Value: webVTTCaptionConverterInsertErases

public static final	<u>QUERYSTR_CAPTION_FILENAME</u> Query string used for choosing caption languages. Value: wowzacaptionfile
public static final	<u>QUERYSTR_CAPTIONLANGUAGES</u> Query string used for choosing caption languages. Value: wowzacaptionlanguages
public static final	<u>SMIL_PARAM_IS_WOWZA_CAPTION_STREAM</u> Value: iswowzacaptionstream
public static final	<u>SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE</u> Value: wowzacaptioningesttype
public static final	<u>SOURCE_TYPE_3GPP</u> Value: 3GPP
public static final	<u>SOURCE_TYPE_AMF</u> Value: AMF
public static final	<u>SOURCE_TYPE_SCC</u> Value: SCC
public static final	<u>SOURCE_TYPE_SRT</u> Value: SRT
public static final	<u>SOURCE_TYPE_TTML</u> Value: TTML
public static final	<u>SOURCE_TYPE_WEBVTT</u> Value: WebVTT
public static final	<u>TIMED_TEXT_TYPE_CAPTION</u> Value: Caption

Fields inherited from interface `com.wowza.wms.timedtext.model.ITimedTextPrivateConstants`


```
DEFAULT_AMF_CONVERTER_CLASS, DEFAULT_CEA608_CONVERTER_CLASS,  
DEFAULT_CEA608_IDENTITY_CONVERTER_CLASS,  
DEFAULT_PROPERTY_CUPERTINO_VOD_CAPTIONS_DELEGATE_CLASS,  
DEFAULT_PROPERTY_MPEGDASH_VOD_CAPTIONS_DELEGATE_CLASS,  
DEFAULT_PROPERTY_RTMP_VOD_CAPTIONS_DELEGATE_CLASS,  
DEFAULT_PROPERTY_SANJOSE_VOD_CAPTIONS_DELEGATE_CLASS, DEFAULT_TIMED_TEXT_READER_SCC,  
DEFAULT_TIMED_TEXT_READER_SRT, DEFAULT_TIMED_TEXT_READER_TTML,  
DEFAULT_TIMED_TEXT_READER_WEBVTT, DEFAULT_WEBVTT_CONVERTER_CLASS,  
PROP_AMF_CONVERTER_CLASS, PROP_CEA608_CONVERTER_CLASS,  
PROP_CEA608_MAX_COMMANDS_PER_FRAME, PROP_CUPERTINO_VOD_CAPTIONS_DELEGATE_CLASS,  
PROP_LIVE_ONCAPTION_TO_AMF_CONVERTER_CLASS,  
PROP_LIVE_ONCAPTION_TO_WEBVTT_CONVERTER_CLASS,  
PROP_LIVE_ONTEXTDATA_TO_AMF_CONVERTER_CLASS,  
PROP_LIVE_ONTEXTDATA_TO_WEBVTT_CONVERTER_CLASS, PROP_MP4_TO_AMF_CONVERTER_CLASS,  
PROP_MP4_TO_CEA608_CONVERTER_CLASS, PROP_MP4_TO_WEBVTT_CONVERTER_CLASS,  
PROP_MPEGDASH_VOD_CAPTIONS_DELEGATE_CLASS, PROP_RTMP_VOD_CAPTIONS_DELEGATE_CLASS,  
PROP_SANJOSE_VOD_CAPTIONS_DELEGATE_CLASS, PROP_SCC_TO_AMF_CONVERTER_CLASS,  
PROP_SCC_TO_CEA608_CONVERTER_CLASS, PROP_SCC_TO_WEBVTT_CONVERTER_CLASS,  
PROP_SRT_TO_AMF_CONVERTER_CLASS, PROP_SRT_TO_CEA608_CONVERTER_CLASS,  
PROP_SRT_TO_WEBVTT_CONVERTER_CLASS, PROP_TTML_TO_AMF_CONVERTER_CLASS,  
PROP_TTML_TO_CEA608_CONVERTER_CLASS, PROP_TTML_TO_WEBVTT_CONVERTER_CLASS,  
PROP_WEBVTT_CONVERTER_CLASS, PROP_WEBVTT_TO_AMF_CONVERTER_CLASS,  
PROP_WEBVTT_TO_CEA608_CONVERTER_CLASS, PROP_WEBVTT_TO_WEBVTT_CONVERTER_CLASS,  
PROPERTY_SOURCE_DURATION, PROPERTY_SOURCE_TIME_SCALE, PROPERTY_SOURCE_TRACK_INDEX,  
TIMED_TEXT_READER_EXTENSION_SCC, TIMED_TEXT_READER_EXTENSION_SRT,  
TIMED_TEXT_READER_EXTENSION_TTML, TIMED_TEXT_READER_EXTENSION_WEBVTT
```

Fields

TIMED_TEXT_TYPE_CAPTION

```
public static final java.lang.String TIMED_TEXT_TYPE_CAPTION
```

Constant value: **Caption**

SOURCE_TYPE_AMF

```
public static final java.lang.String SOURCE_TYPE_AMF
```

Constant value: **AMF**

SOURCE_TYPE_TTML

```
public static final java.lang.String SOURCE_TYPE_TTML
```

Constant value: **TTML**

SOURCE_TYPE_3GPP

```
public static final java.lang.String SOURCE_TYPE_3GPP
```

Constant value: **3GPP**

SOURCE_TYPE_SRT

```
public static final java.lang.String SOURCE_TYPE_SRT
```

Constant value: **SRT**

SOURCE_TYPE_SCC

```
public static final java.lang.String SOURCE_TYPE_SCC
```

Constant value: **SCC**

SOURCE_TYPE_WEBVTT

```
public static final java.lang.String SOURCE_TYPE_WEBVTT
```

Constant value: **WebVTT**

OUTPUT_TYPE_CEA608

```
public static final java.lang.String OUTPUT_TYPE_CEA608
```

Constant value: **CEA608**

OUTPUT_TYPE_AMF

```
public static final java.lang.String OUTPUT_TYPE_AMF
```

Constant value: **AMF**

OUTPUT_TYPE_TTML

```
public static final java.lang.String OUTPUT_TYPE_TTML
```

Constant value: **TTML**

AMF_TEXTTYPE_ON_TEXT_DATA

```
public static final java.lang.String AMF_TEXTTYPE_ON_TEXT_DATA
```

Constant value: **onTextData**

LANGUAGE_LOCALE

```
public static final java.lang.String LANGUAGE_LOCALE
```

Constant value: **locale**

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LANGUAGE_ID_ENGLISH

```
public static final java.lang.String LANGUAGE_ID_ENGLISH
```

Constant value: **eng**

PROP_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_VOD_CAPTIONS_ENABLED
```

Timed Text Property "vodCaptionsEnabled": to enabled VOD captions for all supported protocols

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled on a per protocol basis using [PROP_CUPERTINO_VOD_CAPTIONS_ENABLED](#), [PROP_RTMP_VOD_CAPTIONS_ENABLED](#), [PROP_SANJOSE_VOD_CAPTIONS_ENABLED](#).

Constant value: **vodCaptionsEnabled**

See Also:

[PROP_CUPERTINO_VOD_CAPTIONS_ENABLED](#)

[PROP_RTMP_VOD_CAPTIONS_ENABLED](#)

[PROP_SANJOSE_VOD_CAPTIONS_ENABLED](#)

PROP_CUPERTINO_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_CUPERTINO_VOD_CAPTIONS_ENABLED
```

Timed Text Property "cupertinoVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).

Constant value: **cupertinoVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_MPEGDASH_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_MPEGDASH_VOD_CAPTIONS_ENABLED
```

Timed Text Property "mpegdashVODCaptionsEnabled": to enabled VOD captions for Cupertino streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).

Constant value: **mpegdashVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_RTMP_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_RTMP_VOD_CAPTIONS_ENABLED
```

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Timed Text Property "rtmpVODCaptionsEnabled": to enabled VOD captions for RTMP streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).
Constant value: **rtmpVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_SANJOSE_VOD_CAPTIONS_ENABLED

```
public static final java.lang.String PROP_SANJOSE_VOD_CAPTIONS_ENABLED
```

Timed Text Property "sanJoseVODCaptionsEnabled": to enabled VOD captions for San Jose streaming.

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_VOD_CAPTIONS_ENABLED](#).
Constant value: **sanJoseVODCaptionsEnabled**

See Also:

[PROP_VOD_CAPTIONS_ENABLED](#)

PROP_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_CAPTION_LANGUAGES
```

Timed Text Property "captionLanguages": used to select presented caption Language.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Caption languages can be specified on a per protocol basis using [PROP_CUPERTINO_CAPTION_LANGUAGES](#), [PROP_RTMP_CAPTION_LANGUAGES](#), [PROP_SANJOSE_CAPTION_LANGUAGES](#).
Constant value: **captionLanguages**

See Also:

[PROP_CUPERTINO_CAPTION_LANGUAGES](#)

[PROP_RTMP_CAPTION_LANGUAGES](#)

[PROP_SANJOSE_CAPTION_LANGUAGES](#)

DEFAULT_PROPERTY_CAPTION_LANGUAGES

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_LANGUAGES
```

Default value for Timed Text Property "captionLanguages".

Default value is "*", meaning present all found languages.
Constant value: *****

See Also:

[PROP_CAPTION_LANGUAGES](#)

DEFAULT_PROPERTY_CAPION_LANGUAGES

```
public static final java.lang.String DEFAULT_PROPERTY_CAPION_LANGUAGES
```

(continued from last page)

Constant value: *

PROP_CUPERTINO_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_CUPERTINO_CAPTION_LANGUAGES
```

Timed Text Property "cupertinoCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **cupertinoCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_MPEGDASH_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_MPEGDASH_CAPTION_LANGUAGES
```

Timed Text Property "mpegdashCaptionLanguages": to enabled captionLanguage selection for Cupertino streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **mpegdashCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_RTMP_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_RTMP_CAPTION_LANGUAGES
```

Timed Text Property "rtmpCaptionLanguages": to enabled captionLanguage selection for RTMP Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **rtmpCaptionLanguages**

See Also:

[PROP_CAPTION_LANGUAGES](#)

PROP_SANJOSE_CAPTION_LANGUAGES

```
public static final java.lang.String PROP_SANJOSE_CAPTION_LANGUAGES
```

Timed Text Property "sanJoseCaptionLanguages": to enabled captionLanguage selection for San Jose streaming.

Type String. The default is [DEFAULT_PROPERTY_CAPTION_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml

VOD Captions can be enabled for all protocols using [PROP_CAPTION_LANGUAGES](#).

Constant value: **sanJoseCaptionLanguages**

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See Also:[PROP_CAPTION_LANGUAGES](#)

PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "debugVODCaptionLanguageSelection": adds info level logging regarding language selection

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per protocol basis using [PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION](#), [PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION](#), [PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION](#).

Constant value: **debugVODCaptionLanguageSelection**

PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String  
PROP_DEBUG_CUPERTINO_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "cupertinoDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cupertinoDebugVODCaptionLanguageSelection**

See Also:[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String  
PROP_DEBUG_MPEGDASH_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "mpegdashDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for Cupertino Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **mpegdashDebugVODCaptionLanguageSelection**

See Also:[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_RTMP_VOD_CAPTION_LANGUAGE_SELECTION
```

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Timed Text Property "rtmpDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for RTMP Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **rtmpDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION

```
public static final java.lang.String PROP_DEBUG_SANJOSE_VOD_CAPTION_LANGUAGE_SELECTION
```

Timed Text Property "sanJoseDebugVODCaptionLanguageSelection": adds info level logging regarding language selection for San Jose Streaming

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **sanJoseDebugVODCaptionLanguageSelection**

See Also:

[PROP_DEBUG_VOD_CAPTION_LANGUAGE_SELECTION](#)

PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "debugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per protocol basis using [PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION](#), [PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION](#), [PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION](#).

Constant value: **debugVODCaptionProviderDetermination**

PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_CUPERTINO_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "cupertinoDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for Cupertino Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cupertinoDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_MPEGDASH_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "mpegdashDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for MPEGDash Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **mpegdashDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_RTMP_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "rtmpDebugVODCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for RTMP Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **rtmpDebugVODCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION

```
public static final java.lang.String  
PROP_DEBUG_SANJOSE_VOD_CAPTION_PROVIDER_DETERMINATION
```

Timed Text Property "sanJoseVODDebugCaptionProviderDetermination": adds info level logging regarding caption provider determination for a given VOD asset for San Jose Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **sanJoseVODDebugCaptionProviderDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_PROVIDER_DETERMINATION](#)

PROP_DEBUG_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_VOD_CAPTION_COMPANION_FILES
```

(continued from last page)

Timed Text Property "debugVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Can be enabled on a per provider basis as well using [PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES](#)
Constant value: **debugVODCaptionFileDetermination**

PROP_UNDEFINED_LANG_CODE

```
public static final java.lang.String PROP_UNDEFINED_LANG_CODE
```

Timed Text Property "captionUndefinedLanguageId": if incoming caption language is undefined, use this language ID.

Type String. If not defined, the Locale's 3 character language code is used. See `Locale.getDefault().getISO3Language()`

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionUndefinedLanguageId**

PROP_CAPTION_FILE_NAMING_RULE

```
public static final java.lang.String PROP_CAPTION_FILE_NAMING_RULE
```

Timed Text Property "captionFileNamingRule": to change logic determining the caption companion file naming scheme

Type String. The default value is [DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE](#).

This string is used to find the caption file for a given VOD asset. It is used in conjunction with [PROP_CAPTION_PATH_NAMING_RULE](#), which determines the file location.

It is comprised of variables preceded by a dollar sign and enclosed in squiggly brackets. For example: "\${var1}.\${var2}"

Valid variables include these:

- `${SourceStreamName}` : The baseName of the VOD file
- `${SourceBasePath}` : The base path of the VOD asset
- `${FileExtension}` : Registered file extensions with the Timed Text Provider

and these standard ones:

- `${com.wowza.wms.context.VHost}`
- `${com.wowza.wms.context.VHostConfigHome, appInstance.getVHost().getHomePath()};`
- `${com.wowza.wms.context.Application, appInstance.getApplication().getName()};`
- `${com.wowza.wms.context.ApplicationInstance, appInstance.getName()};`

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionFileNamingRule**

See Also:

[DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE](#)

DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_FILE_NAMING_RULE
```

Default value for Timed Text Property "captionFileNamingRule".

Default value is `"${SourceStreamName}.${FileExtension}"`

Constant value: **\${SourceStreamName}.\${FileExtension}**

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See Also:[PROP_CAPTION_FILE_NAMING_RULE](#)

PROP_CAPTION_PATH_NAMING_RULE

```
public static final java.lang.String PROP_CAPTION_PATH_NAMING_RULE
```

Timed Text Property "captionPathNamingRule": to change logic determining the caption companion path

Type String. The default value is [DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE](#).

This string is used to find the caption file location for a given VOD asset. It is used in conjunction with [PROP_CAPTION_FILE_NAMING_RULE](#), which determines the file name.

It is comprised of variables preceded by a dollar sign and enclosed in squiggly brackets. For example: "\${var1}.{var2}"

Valid variables include these:

- \${SourceStreamName} : The baseName of the VOD file
- \${SourceBasePath} : The base path of the VOD asset
- \${FileExtension} : Registered file extensions with the Timed Text Provider

and these standard ones:

- \${com.wowza.wms.context.VHost}
- \${com.wowza.wms.context.VHostConfigHome", appInstance.getVHost().getHomePath()};
- \${com.wowza.wms.context.Application", appInstance.getApplication().getName()};
- \${com.wowza.wms.context.ApplicationInstance", appInstance.getName()};

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionPathNamingRule**

See Also:[DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE](#)

DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE

```
public static final java.lang.String DEFAULT_PROPERTY_CAPTION_PATH_NAMING_RULE
```

Default value for Timed Text Property "captionFileNamingRule". Default value is "\${SourceBasePath}"

Constant value: **\${SourceBasePath}**

See Also:[PROP_CAPTION_PATH_NAMING_RULE](#)

PROP_MAXIMUM_CAPTION_DURATION

```
public static final java.lang.String PROP_MAXIMUM_CAPTION_DURATION
```

Timed Text Property "maximumCaptionDuration": used to determine maximum caption duration

Type Integer. In ms. The default is [DEFAULT_MAXIMUM_CAPTION_DURATION](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **maximumCaptionDuration**

(continued from last page)

DEFAULT_MAXIMUM_CAPTION_DURATION

```
public static final int DEFAULT_MAXIMUM_CAPTION_DURATION
```

Default value for Timed Text Property "maximumCaptionDuration".

Default value is 10000.
Constant value: **5000**

See Also:

[PROP_MAXIMUM_CAPTION_DURATION](#)

PROP_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_CAPTION_CHARACTER_SET
```

Timed Text Property "captionCharacterSet": used to determine character set when ingesting captions

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionCharacterSet**

DEFAULT_CAPTION_CHARACTER_SET

```
public static final java.lang.String DEFAULT_CAPTION_CHARACTER_SET
```

Default value for Timed Text Property "captionCharacterSet".

Default value is "UTF-8"
Constant value: **UTF-8**

See Also:

[PROP_CAPTION_CHARACTER_SET](#)

PROP_SRT_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_SRT_CAPTION_CHARACTER_SET
```

Timed Text Property "srtReaderCaptionCharacterSet": used to determine character set when ingesting SRT captions
Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)
Constant value: **srtReaderCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_TTML_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_TTML_CAPTION_CHARACTER_SET
```

Timed Text Property "ttmlReaderCaptionCharacterSet": used to determine character set when ingesting TTML captions
Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

(continued from last page)

Constant value: **ttmlReaderCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_3GPP_CAPTION_CHARACTER_SET

```
public static final java.lang.String PROP_3GPP_CAPTION_CHARACTER_SET
```

Timed Text Property "reader3GPPCaptionCharacterSet": used to determine character set when ingesting TTML captions Overrides general property "captionCharacterSet"

Type String. The default is [DEFAULT_CAPTION_CHARACTER_SET](#)

Constant value: **reader3GPPCaptionCharacterSet**

See Also:

Add the property to Application/TimedText/Properties in Application.xml

PROP_CEA608_CONVERTER_COLOR

```
public static final java.lang.String PROP_CEA608_CONVERTER_COLOR
```

Timed Text Property "cea608CaptionConverterColor": color of text in default CEA caption converter.

Type Integer. Default is [ClosedCaptionCEA608Utils.COL0_WHITE](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cea608CaptionConverterColor**

See Also:

[ClosedCaptionCEA608Utils.COL0_WHITE](#)

[ClosedCaptionCEA608Utils.COL0_GREEN](#)

[ClosedCaptionCEA608Utils.COL0_BLUE](#)

[ClosedCaptionCEA608Utils.COL0_CYAN](#)

[ClosedCaptionCEA608Utils.COL0_RED](#)

[ClosedCaptionCEA608Utils.COL0_YELLOW](#)

[ClosedCaptionCEA608Utils.COL0_MAGENTA](#)

PROP_CEA608_CONVERTER_CHARS_PER_LINE

```
public static final java.lang.String PROP_CEA608_CONVERTER_CHARS_PER_LINE
```

Timed Text Property "cea608CaptionConverterCharsPerLine": max number characters per line in default CEA caption converter.

Type Integer. Default is [ClosedCaptionCEA608Utils.COUNT_COLS](#)

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **cea608CaptionConverterCharsPerLine**

PROP_CEA608_CONVERTER_CHARACTER_SET

```
public static final java.lang.String PROP_CEA608_CONVERTER_CHARACTER_SET
```

(continued from last page)

Timed Text Property "cea608CaptionConverterCharacterSet": character set in default CEA caption converter.

Type String. Default is "UTF-8"

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cea608CaptionConverterCharacterSet**

PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608

```
public static final java.lang.String PROP_CUPERTINO_VOD_REMOVE_EXISTING_CEA608
```

Timed Text Property "cupertinoVODCaptionsRemoveExistingCEA608": if existing VOD has 608, remove them

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoVODCaptionsRemoveExistingCEA608**

PROP_CUPERTINO_VOD_USE_WEBVTT

```
public static final java.lang.String PROP_CUPERTINO_VOD_USE_WEBVTT
```

Timed Text Property "cupertinoVODCaptionsUseWebVTT"

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoVODCaptionsUseWebVTT**

PROP_CUPERTINO_LIVE_USE_WEBVTT

```
public static final java.lang.String PROP_CUPERTINO_LIVE_USE_WEBVTT
```

Timed Text Property "cupertinoLiveCaptionsUseWebVTT"

Type Boolean. Default is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoLiveCaptionsUseWebVTT**

PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION

```
public static final java.lang.String  
PROP_CUPERTINO_LIVE_WEBVTT_ADD_SPECIAL_EMPTY_CAPTION
```

Timed Text Property "cupertinoLiveWebVTTAddSpecialEmptyCaption"

Type Boolean. Default is true.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **cupertinoLiveWebVTTAddSpecialEmptyCaption**

PROP_AMF_CONVERTER_TEXT_TYPE

```
public static final java.lang.String PROP_AMF_CONVERTER_TEXT_TYPE
```

Timed Text Property "amfCaptionConverterTextType": AMF text type used in conversion

Type String. Default is [AMF_TEXTTYPE_ON_TEXT_DATA](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **amfCaptionConverterTextType**

(continued from last page)

DEFAULT_AMF_CONVERTER_TEXT_TYPE

```
public static final java.lang.String DEFAULT_AMF_CONVERTER_TEXT_TYPE
```

Constant value: **onTextData**

PROP_AMF_CONVERTER_TRACK_INDEX

```
public static final java.lang.String PROP_AMF_CONVERTER_TRACK_INDEX
```

Timed Text Property "amfCaptionConverterTrackIndex": track index used for captions

Type Integer.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **amfCaptionConverterTrackIndex**

DEFAULT_AMF_CONVERTER_TRACK_INDEX

```
public static final int DEFAULT_AMF_CONVERTER_TRACK_INDEX
```

Constant value: **99**

PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS

```
public static final java.lang.String PROP_AMF_CONVERTER_INSERT_ERASES_IN_GAPS
```

Timed Text Property "amfCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION

Type boolean. The default is true.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **amfCaptionConverterInsertErases**

PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS

```
public static final java.lang.String PROP_WEBVTT_CONVERTER_INSERT_ERASES_IN_GAPS
```

Timed Text Property "webVTTCaptionConverterInsertErases": insert erase captions if gaps between captions are greater than PROP_MAXIMUM_CAPTION_DURATION

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **webVTTCaptionConverterInsertErases**

PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_TTML_VOD_CAPTION_COMPANION_FILES
```

(continued from last page)

Timed Text Property "debugTTMLVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for TTML Streaming.

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_TTML_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_TTML_CAPTION_PARSER
```

Timed Text Property "debugTTMLCaptionParser": adds info level logging regarding the TTML caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLCaptionParser**

PROP_DEBUG_TTML_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_TTML_CAPTION_PARSER_TIME
```

Timed Text Property "debugTTMLCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugTTMLCaptionParserTime**

PROP_TTML_INLINE_TAGS_IN_TEXT

```
public static final java.lang.String PROP_TTML_INLINE_TAGS_IN_TEXT
```

Timed Text Property "ttmlInlineTagsInText": TTML parser includes in-line styling and line-break tags in the sample text

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Example sample: "

I can linebreak

or change fontWeight to bold in the middle of a sample." If ttmlInlineTagsInText=true then the parser provides the sample text as: "I can linebreak

or change fontWeight to bold in the middle of a sample." If ttmlInlineTagsInText=false then the parser provides the sample text as: "I can linebreak or change fontWeight to bold in the middle of a sample."

Constant value: **ttmlInlineTagsInText**

PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_SRT_VOD_CAPTION_COMPANION_FILES
```

(continued from last page)

Timed Text Property "debugSRTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SRT provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_SRT_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_SRT_CAPTION_PARSER
```

Timed Text Property "debugSRTCaptionParser": adds info level logging regarding the SRT caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTCaptionParser**

PROP_DEBUG_SRT_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_SRT_CAPTION_PARSER_TIME
```

Timed Text Property "debugSRTCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSRTCaptionParserTime**

PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_WEBVTT_VOD_CAPTION_COMPANION_FILES
```

Timed Text Property "debugWebVTTVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for WebVTT provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_WEBVTT_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_WEBVTT_CAPTION_PARSER
```

(continued from last page)

Timed Text Property "debugWebVTTCaptionParser": adds info level logging regarding the WebVTT caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTCaptionParser**

PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_WEBVTT_CAPTION_PARSER_TIME
```

Timed Text Property "debugWebVTTCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugWebVTTCaptionParserTime**

PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES

```
public static final java.lang.String PROP_DEBUG_SCC_VOD_CAPTION_COMPANION_FILES
```

Timed Text Property "debugSCCVODCaptionFileDetermination": adds info level logging regarding caption companion file determination for a given VOD asset for SCC provider

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSCCVODCaptionFileDetermination**

See Also:

[PROP_DEBUG_VOD_CAPTION_COMPANION_FILES](#)

PROP_DEBUG_SCC_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_SCC_CAPTION_PARSER
```

Timed Text Property "debugSCCCaptionParser": adds info level logging regarding the SCC caption parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugSCCCaptionParser**

PROP_DEBUG_SCC_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_SCC_CAPTION_PARSER_TIME
```

Timed Text Property "debugSCCCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

(continued from last page)

Constant value: **debugSCCCaptionParserTime**

PROP_DEBUG_3GPP_CAPTION_PARSER

```
public static final java.lang.String PROP_DEBUG_3GPP_CAPTION_PARSER
```

Timed Text Property "debug3GPPCaptionParser": adds info level logging regarding the 3GPP parser

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debug3GPPCaptionParser**

PROP_DEBUG_3GPP_CAPTION_PARSER_TIME

```
public static final java.lang.String PROP_DEBUG_3GPP_CAPTION_PARSER_TIME
```

Timed Text Property "debug3GPPCaptionParserTime": adds info level logging regarding how long it took parser to index

Type boolean. The default is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debug3GPPCaptionParserTime**

QUERYSTR_CAPTIONLANGUAGES

```
public static final java.lang.String QUERYSTR_CAPTIONLANGUAGES
```

Query string used for choosing caption languages. Language must be presented using ISO 3 letter language codes.

Constant value: **wowzacaptionlanguages**

PROP_CAPTION_LANGUAGE_QUERY_PARAMETER

```
public static final java.lang.String PROP_CAPTION_LANGUAGE_QUERY_PARAMETER
```

HTTP Streamer Property "captionLanguageQueryParameter": used for changing query string param used for caption language selection. Note: Must go into HTTPStreamers.xml under Properties for each streamer type

Type String. The default is "wowzacaptionlanguages"

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLanguageQueryParameter**

QUERYSTR_CAPTION_FILENAME

```
public static final java.lang.String QUERYSTR_CAPTION_FILENAME
```

Query string used for choosing caption languages. Language must be presented using ISO 3 letter language codes.

Constant value: **wowzacaptionfile**

PROP_CAPTION_FILENAME_QUERY_PARAMETER

```
public static final java.lang.String PROP_CAPTION_FILENAME_QUERY_PARAMETER
```

(continued from last page)

HTTP Streamer Property "captionFilenameQueryParameter": used for changing query string param used for caption file selection. Note: Must go into HTTPStreamers.xml under Properties for each streamer type

Type String. The default is "wowzacaptionfile"

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionFilenameQueryParameter**

PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_AMF_ID_STRING
```

Timed Text Property "captionLiveIngestAMFIDString": to change AMF identifier from default "onTextData" to something else

Type String. The default value is "onTextData".

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestAMFIDString**

PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS

```
public static final java.lang.String PROP_LIVE_CAPTION_USE_STREAM_NAME_GROUPS
```

Timed Text Property "captionLiveIngestUseStreamNameGroups": to enable use of smil files to determine available languages and ingest type

Type Boolean. The default value is true. Only affects streams started with .smil files using StartupStreams or stream manager.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestUseStreamNameGroups**

PROP_LIVE_CAPTION_DEFAULT_LANGUAGES

```
public static final java.lang.String PROP_LIVE_CAPTION_DEFAULT_LANGUAGES
```

Timed Text Property "captionLiveIngestLanguages": comma separated ISO-639 language codes determining what languages are expected in the live stream

Type String. The default value is the language returned by Locale.getDefault().getISO3Language().

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestLanguages**

PROP_LIVE_CAPTION_INGEST_TYPE

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_TYPE
```

Timed Text Property "captionLiveIngestType": type of live caption ingestion.

This corresponds to LiveIngestTypes in TimedTextProviders.

Type String. The default value is "onTextData". "onCaption" is also a valid value. "CEA608" is a valid value since 4.0.4

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestType**

PROP_DEBUG_LIVE_CAPTION_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_INGEST
```

(continued from last page)

Timed Text Property "debugCaptionLiveIngest "

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveIngest**

PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_ONTEXTDATA_INGEST
```

Timed Text Property "debugCaptionLiveOnTextDataIngest "

Type Boolean. The default value is false. Overrides [PROP_LIVE_CAPTION_DEFAULT_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveOnTextDataIngest**

PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST

```
public static final java.lang.String PROP_DEBUG_LIVE_CAPTION_ONCAPTION_INGEST
```

Timed Text Property "debugCaptionLiveOnCaptionIngest "

Type Boolean. The default value is false. Overrides [PROP_LIVE_CAPTION_DEFAULT_LANGUAGES](#)

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **debugCaptionLiveOnCaptionIngest**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_ON_CAPTION_STRING
```

Timed Text Property "captionLiveIngestOnCaptionString": to change AMF identifier from default "onCaption" to something else

Type String. The default value is "onCaption".

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **captionLiveIngestOnCaptionString**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING

```
public static final java.lang.String PROP_LIVE_CAPTION_INGEST_ON_CAPTION_INFO_STRING
```

Timed Text Property "captionLiveIngestOnCaptionInfoString": to change AMF identifier from default "onCaptionInfo" to something else

Type String. The default value is "onCaptionInfo".

Add the property to Application/TimedText/Properties in Application.xml
Constant value: **captionLiveIngestOnCaptionInfoString**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER

```
public static final java.lang.String  
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_IDLE_TIME_TO_FLUSH_DECODER
```

(continued from last page)

Timed Text Property "captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder" Controls allowed amount of idle time when parsing CEA-608 captions when ingested from AMF 708 data events

Type Integer. The default value is 250 ms.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608IdleTimeToFlushDecoder**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1

```
public static final java.lang.String
```

```
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD1
```

Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 1 is enabled for decoding

Type Boolean. Default is true;

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608EnableField1**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2

```
public static final java.lang.String
```

```
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_ENABLE_FIELD2
```

Timed Text Property "captionLiveIngestOnCaptionCEA608EnableField2": When ingesting AMF onCaption 708 data events (actually CEA-608), controls whether CEA-608 field 2 is enabled for decoding

Type Boolean. Default is false;

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608EnableField2**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES

```
public static final java.lang.String
```

```
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_MAX_WARN_MESSAGES
```

Timed Text Property "captionLiveIngestOnCaptionCEA608MaxWarnMessages": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the maximum number of warning messages that are logged by the decoder

Type Integer. Default is 25.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608MaxWarnMessages**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER

```
public static final java.lang.String
```

```
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_TRACK_NUMBER
```

Timed Text Property "captionLiveIngestOnCaptionCEA608TrackNumber": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the track number used to add captions as onTextData

Type Integer. Default is 99.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608TrackNumber**

PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID

```
public static final java.lang.String
```

```
PROP_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LANGUAGE_ID
```

(continued from last page)

Timed Text Property "captionLiveIngestOnCaptionCEA608LanguageID": When ingesting AMF onCaption 708 data events (actually CEA-608), controls the language ID used to add captions as onTextData

Type String. Default is language code of Java's locale.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **captionLiveIngestOnCaptionCEA608LanguageID**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_VERBOSE
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608Verbose" : Adds verbose logging to AMF onCaption events of type "708" (CEA-608)

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugCaptionLiveIngestOnCaptionCEA608Verbose**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_SCC
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsSCC" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in SCC format

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugCaptionLiveIngestOnCaptionCEA608LogAsSCC**

PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW

```
public static final java.lang.String  
PROP_DEBUG_LIVE_CAPTION_INGEST_ON_CAPTION_CEA608_LOG_AS_RAW
```

Timed Text Property "debugCaptionLiveIngestOnCaptionCEA608LogAsRaw" : Adds additional logging of decoding AMF onCaption events of type "708" (CEA-608) such that they are logged in a raw binary state

Type Boolean. The default value is false.

Add the property to Application/TimedText/Properties in Application.xml

Constant value: **debugCaptionLiveIngestOnCaptionCEA608LogAsRaw**

ON_TEXT_DATA

```
public static final java.lang.String ON_TEXT_DATA
```

Constant value: **onTextData**

ON_CAPTION_INFO

```
public static final java.lang.String ON_CAPTION_INFO
```

Constant value: **onCaptionInfo**

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ON_CAPTION

```
public static final java.lang.String ON_CAPTION
```

Constant value: **onCaption**

CEA608

```
public static final java.lang.String CEA608
```

Constant value: **CEA608**

SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE

```
public static final java.lang.String SMIL_PARAM_WOWZA_CAPTION_INGEST_TYPE
```

Constant value: **wowzacaptioningesttype**

SMIL_PARAM_IS_WOWZA_CAPTION_STREAM

```
public static final java.lang.String SMIL_PARAM_IS_WOWZA_CAPTION_STREAM
```

Constant value: **iswowzacaptionstream**

Package

com.wowza.wms.transcoder.model

com.wowza.wms.transcoder.model Interface ILiveStreamTranscoderActionNotify

All Known Implementing Classes:

[LiveStreamTranscoderActionNotifyBase](#)

public interface **ILiveStreamTranscoderActionNotify**
extends

ILiveStreamTranscoderActionNotify: listener interface for live stream transcoder events.

Method Summary

abstract void	onCalculateSourceAudioBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate) Called when the bitrate of the source audio stream is calculated
abstract void	onCalculateSourceVideoBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate) Called when the bitrate of the source video stream is calculated
abstract void	onInitAfterLoadTemplate (LiveStreamTranscoder liveStreamTranscoder) Called just after transcoder template is loaded.
abstract void	onInitBeforeLoadTemplate (LiveStreamTranscoder liveStreamTranscoder) Called just before transcoder template is loaded
abstract void	onInitStart (LiveStreamTranscoder liveStreamTranscoder, String streamName, String transcoderName, IApplicationInstance appInstance, LiveStreamTranscoderItem liveStreamTranscoderItem) Call when live stream transcoder is first created
abstract void	onInitStop (LiveStreamTranscoder liveStreamTranscoder) At the end of the initialization process
abstract void	onRegisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup) Called after a stream name group is resolved and registered with MediaStreamMap
abstract void	onResetStream (LiveStreamTranscoder liveStreamTranscoder) Called when the stream feeding the live stream transcoder switches.
abstract void	onSessionAudioDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Called when audio decoding information is available.
abstract void	onSessionAudioEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio) Called when audio encoding information is available.
abstract void	onSessionAudioEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called when audio encoder session is created.

abstract void	<u>onSessionAudioEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called after audio session is initialized.
abstract void	<u>onSessionAudioEncodeSetup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode) Called after native audio encoder is created and initialized.
abstract void	<u>onSessionDataEncodeCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode) Called when data encoder session is created.
abstract void	<u>onSessionDataEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode) Called after data session is initialized.
abstract void	<u>onSessionDestinationCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDestination sessionDestination) Called when transcoding destination is created
abstract void	<u>onSessionVideoDecodeCodecInfo</u> (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Called when video decoding information is available.
abstract void	<u>onSessionVideoEncodeCodecInfo</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo) Called when video encoding information is available.
abstract void	<u>onSessionVideoEncodeCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called when video encoder session is created.
abstract void	<u>onSessionVideoEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called after video session is initialized.
abstract void	<u>onSessionVideoEncodeSetup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode) Called after native video encoder is created and initialized.
abstract void	<u>onShutdownStart</u> (LiveStreamTranscoder liveStreamTranscoder) Called when the live stream transcoder starts to shutdown.
abstract void	<u>onShutdownStop</u> (LiveStreamTranscoder liveStreamTranscoder) Called when the live stream transcoder is shutdown.
abstract void	<u>onUnregisterStreamNameGroup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup) Called after a stream name group is unregistered with MediaStreamMap

Methods

onInitStart

```
public abstract void onInitStart(LiveStreamTranscoder liveStreamTranscoder,
    String streamName,
    String transcoderName,
    IApplicationInstance appInstance,
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

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Call when live stream transcoder is first created

Parameters:

liveStreamTranscoder - live stream transcoder
streamName - stream name
transcoderName - transcoder name
appInstance - application instance
liveStreamTranscoderItem - live stream transcoder definition

onInitBeforeLoadTemplate

```
public abstract void onInitBeforeLoadTemplate(LiveStreamTranscoder  
liveStreamTranscoder)
```

Called just before transcoder template is loaded

Parameters:

liveStreamTranscoder - live stream transcoder

onInitAfterLoadTemplate

```
public abstract void onInitAfterLoadTemplate(LiveStreamTranscoder  
liveStreamTranscoder)
```

Called just after transcoder template is loaded. Good place to modify values loaded from template.

Parameters:

liveStreamTranscoder - live stream transcoder

onInitStop

```
public abstract void onInitStop(LiveStreamTranscoder liveStreamTranscoder)
```

At the end of the initialization process

Parameters:

liveStreamTranscoder - live stream transcoder

onCalculateSourceVideoBitrate

```
public abstract void onCalculateSourceVideoBitrate(LiveStreamTranscoder  
liveStreamTranscoder,  
long bitrate)
```

Called when the bitrate of the source video stream is calculated

Parameters:

liveStreamTranscoder - live stream transcoder
bitrate - source bitrate (bytes per second)

onCalculateSourceAudioBitrate

```
public abstract void onCalculateSourceAudioBitrate(LiveStreamTranscoder  
liveStreamTranscoder,  
long bitrate)
```

Called when the bitrate of the source audio stream is calculated

Parameters:

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liveStreamTranscoder - live stream transcoder
bitrate - source bitrate (bytes per second)

onSessionDestinationCreate

```
public abstract void onSessionDestinationCreate(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionDestination sessionDestination)
```

Called when transcoding destination is created

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDestination - destination

onSessionVideoEncodeCreate

```
public abstract void onSessionVideoEncodeCreate(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionVideoEncode sessionVideoEncode)
```

Called when video encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

onSessionAudioEncodeCreate

```
public abstract void onSessionAudioEncodeCreate(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionAudioEncode sessionAudioEncode)
```

Called when audio encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionDataEncodeCreate

```
public abstract void onSessionDataEncodeCreate(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionDataEncode sessionDataEncode)
```

Called when data encoder session is created.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDataEncode - data session

onSessionVideoEncodeInit

```
public abstract void onSessionVideoEncodeInit(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionVideoEncode sessionVideoEncode)
```

Called after video session is initialized.

Parameters:

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liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

onSessionAudioEncodeInit

```
public abstract void onSessionAudioEncodeInit(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionAudioEncode sessionAudioEncode)
```

Called after audio session is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionDataEncodeInit

```
public abstract void onSessionDataEncodeInit(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionDataEncode sessionDataEncode)
```

Called after data session is initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionDataEncode - data session

onSessionVideoEncodeSetup

```
public abstract void onSessionVideoEncodeSetup(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionVideoEncode sessionVideoEncode)
```

Called after native video encoder is created and initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session

onSessionAudioEncodeSetup

```
public abstract void onSessionAudioEncodeSetup(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionAudioEncode sessionAudioEncode)
```

Called after native audio encoder is created and initialized.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session

onSessionVideoEncodeCodecInfo

```
public abstract void onSessionVideoEncodeCodecInfo(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderSessionVideoEncode sessionVideoEncode,  
com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

Called when video encoding information is available.

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Parameters:

liveStreamTranscoder - live stream transcoder
sessionVideoEncode - video session
codecInfoVideo - encoding info

onSessionAudioEncodeCodecInfo

```
public abstract void onSessionAudioEncodeCodecInfo(LiveStreamTranscoder  
liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

Called when audio encoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
sessionAudioEncode - audio session
codecInfoAudio - encoding info

onSessionVideoDecodeCodecInfo

```
public abstract void onSessionVideoDecodeCodecInfo(LiveStreamTranscoder  
liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

Called when video decoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
codecInfoVideo - video info

onSessionAudioDecodeCodecInfo

```
public abstract void onSessionAudioDecodeCodecInfo(LiveStreamTranscoder  
liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

Called when audio decoding information is available.

Parameters:

liveStreamTranscoder - live stream transcoder
codecInfoAudio - audio info

onRegisterStreamNameGroup

```
public abstract void onRegisterStreamNameGroup(LiveStreamTranscoder  
liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

Called after a stream name group is resolved and registered with MediaStreamMap

Parameters:

liveStreamTranscoder - live stream transcoder
streamNameGroup - stream name group

onUnregisterStreamNameGroup

```
public abstract void onUnregisterStreamNameGroup(LiveStreamTranscoder  
liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

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Called after a stream name group is unregistered with MediaStreamMap

Parameters:

liveStreamTranscoder - live stream transcoder
streamNameGroup - stream name group

onShutdownStart

```
public abstract void onShutdownStart(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the live stream transcoder starts to shutdown.

Parameters:

liveStreamTranscoder - live stream transcoder

onShutdownStop

```
public abstract void onShutdownStop(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the live stream transcoder is shutdown.

Parameters:

liveStreamTranscoder - live stream transcoder

onResetStream

```
public abstract void onResetStream(LiveStreamTranscoder liveStreamTranscoder)
```

Called when the stream feeding the live stream transcoder switches.

Parameters:

liveStreamTranscoder - live stream transcoder

com.wowza.wms.transcoder.model
Interface ITranscoderAudioFrameNotify

All Subinterfaces:
[ITranscoderAudioFrameNotify2](#)

public interface ITranscoderAudioFrameNotify
extends

Method Summary	
abstract void	onAudioFrame (TranscoderSessionAudio transcoderSessionAudio, TranscoderNativeAudioFrame nativeAudioFrame)

Methods

onAudioFrame

public abstract void **onAudioFrame**(TranscoderSessionAudio transcoderSessionAudio, TranscoderNativeAudioFrame nativeAudioFrame)

com.wowza.wms.transcoder.model Interface ITranscoderAudioFrameNotify2

All Superinterfaces:

[ITranscoderAudioFrameNotify](#)

public interface **ITranscoderAudioFrameNotify2**

extends [ITranscoderAudioFrameNotify](#)

Method Summary

abstract void	onAudioFrameAfterResample (TranscoderSessionAudio transcoderSessionAudio, TranscoderNativeAudioFrame nativeAudioFrame)
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Methods inherited from interface [com.wowza.wms.transcoder.model.ITranscoderAudioFrameNotify](#)

[onAudioFrame](#)

Methods

onAudioFrameAfterResample

```
public abstract void onAudioFrameAfterResample(TranscoderSessionAudio
transcoderSessionAudio,
    TranscoderNativeAudioFrame nativeAudioFrame)
```


com.wowza.wms.transcoder.model Interface ITranscoderFrameGrabProvider

public interface **ITranscoderFrameGrabProvider**
extends

ITranscoderFrameGrabProvider: interface used to grab frames from the live stream transcoder.

Method Summary

abstract java.util.List	<code>getAndClearPendingFrameGrabs()</code> Returns a list of all grab frame requests that are pending and clears the pending list.
abstract void	<code>grabFrame(ITranscoderFrameGrabResult grabResult)</code> Call to grab a frame.
abstract void	<code>grabFrame(ITranscoderFrameGrabResult grabResult, int width, int height)</code> Call to grab a frame.

Methods

grabFrame

public abstract void **grabFrame**([`ITranscoderFrameGrabResult`](#) grabResult)

Call to grab a frame. The size of the frame will be the full size of the video frame.

Parameters:

grabResult - the class that will be called back when frame is available

grabFrame

public abstract void **grabFrame**([`ITranscoderFrameGrabResult`](#) grabResult,
int width,
int height)

Call to grab a frame. The size of the frame is controlled by width and height.

Parameters:

grabResult - the class that will be called back when frame is available
width - frame width
height - frame height

getAndClearPendingFrameGrabs

public abstract java.util.List **getAndClearPendingFrameGrabs**()

Returns a list of all grab frame requests that are pending and clears the pending list.

Returns:

list of pending grab frames

com.wowza.wms.transcoder.model Interface ITranscoderFrameGrabResult

public interface **ITranscoderFrameGrabResult**
extends

ITranscoderFrameGrabResult: Implement this interface when using frame grabber interface to grab transcoder video frames.

Method Summary	
abstract void	onGrabFrame (TranscoderNativeVideoFrame nativeFrame) Trigger when frame is available.

Methods

onGrabFrame

public abstract void **onGrabFrame**([TranscoderNativeVideoFrame](#) nativeFrame)

Trigger when frame is available.

Parameters:

nativeFrame - native video frame.

com.wowza.wms.transcoder.model

Interface ITranscoderOverlayImages

public interface ITranscoderOverlayImages
extends

Method Summary	
abstract void	addOverlayImage (int index, TranscoderVideoOverlayFrame overlay)
abstract java.util.Map	getOverlayImages ()

Methods

addOverlayImage

public abstract void **addOverlayImage**(int index,
[TranscoderVideoOverlayFrame](#) overlay)

getOverlayImages

public abstract java.util.Map **getOverlayImages**()

com.wowza.wms.transcoder.model Interface ITranscoderOverlayProvider

public interface **ITranscoderOverlayProvider**
extends

ITranscoderOverlayProvider: interface to add and remove video overlays.

Method Summary

abstract void	<code>addOverlay</code> (int index, <code>TranscoderVideoOverlayFrame</code> overlay) Add an overlay to a video stream.
abstract void	<code>clearOverlay</code> (int index) Clear video overlay
abstract java.util.Map	<code>getAndClearPendingOverlays</code> () Get a list of pending overlay requests and clear the pending overlay queue.
abstract boolean	<code>isOverlayAvailable</code> () Returns true if there is a pending overlay request.

Methods

addOverlay

```
public abstract void addOverlay(int index,  
    TranscoderVideoOverlayFrame overlay)
```

Add an overlay to a video stream.

Parameters:

index - over lay index (zero is bottom in z-order)
overlay - overlay object

clearOverlay

```
public abstract void clearOverlay(int index)
```

Clear video overlay

Parameters:

index - over lay index (zero is bottom in z-order)

isOverlayAvailable

```
public abstract boolean isOverlayAvailable()
```

Returns true if there is a pending overlay request.

Returns:

true if there is a pending overlay request

getAndClearPendingOverlays

```
public abstract java.util.Map getAndClearPendingOverlays()
```

Get a list of pending overlay requests and clear the pending overlay queue.

Returns:

list of pending overlay requests

com.wowza.wms.transcoder.model Interface ITranscoderSessionNative

public interface **ITranscoderSessionNative**
extends

Field Summary

public static final	<u>AAC_SAMPLEBUFFER_SIZE</u> Value: 1024
public static final	<u>AC3_SAMPLEBUFFER_SIZE</u> Value: 2048
public static final	<u>AUDIO_DECODER_TYPE_CAPTURE</u> Value: 1
public static final	<u>AUDIO_DECODER_TYPE_COMPRESSED</u> Value: 0
public static final	<u>CAPTUREDEVICE_ACTIVESTATE_ACTIVE</u> Value: 1
public static final	<u>CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_DUALSTREAM3D</u> Value: 2
public static final	<u>CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_ENABLEFORMATDETECTION</u> Value: 1
public static final	<u>CAPTUREDEVICE_CAPTURE_PIXELFORMAT_UNKNOWN</u> Value: 0
public static final	<u>CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV10BIT</u> Value: 2
public static final	<u>CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV8BIT</u> Value: 1
public static final	<u>CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K2398</u> Value: 845886003
public static final	<u>CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K24</u> Value: 845886004
public static final	<u>CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K25</u> Value: 845886005

public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI2398 Value: 845427251
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI24 Value: 845427252
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI25 Value: 845427253
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2398 Value: 879440435
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P24 Value: 879440436
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P25 Value: 879440437
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2997 Value: 879440441
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P30 Value: 879440688
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P50 Value: 879441200
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P5994 Value: 879441209
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P60 Value: 879441456
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI2398 Value: 878981683
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI24 Value: 878981684
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI25 Value: 878981685
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I50 Value: 1214854448
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I5994 Value: 1214854457

public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I6000 Value: 1214854704
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2398 Value: 842231923
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P24 Value: 842297459
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P25 Value: 1215312437
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2997 Value: 1215312441
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P30 Value: 1215312688
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P50 Value: 1215313200
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P5994 Value: 1215313209
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P6000 Value: 1215313456
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P50 Value: 1752184112
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P5994 Value: 1752184121
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P60 Value: 1752184368
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC Value: 1853125475
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC2398 Value: 1853108787
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSCP Value: 1853125488
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPAL Value: 1885432864

public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPALP Value: 1885432944
public static final	CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEUNKNOWN Value: 1769303659
public static final	CLASS
public static final	CLASSNAME Value: ITranscoderSessionNative
public static final	CODEC_IMPL_DEFAULT Value: 0
public static final	DECODERESULT_ERROR Value: 64
public static final	DECODERESULT_FRAMEDONE Value: 1
public static final	DECODERESULT_FRAMEERROR Value: 16
public static final	DECODERESULT_FRAMEREADY Value: 2
public static final	DECODERESULT_FRAMESKIP Value: 8
public static final	DECODERESULT_FRAMEVALID Value: 4
public static final	DECODERESULT_SEQHEADER Value: 32
public static final	G711_SAMPLEBUFFER_SIZE Value: 2048
public static final	H264_1SEG Value: 16
public static final	H264_3GP Value: 25
public static final	H264_AVCHD Value: 14

public static final	H264_BASELINE Value: 0
public static final	H264_BD Value: 8
public static final	H264_BD_HDMV Value: 9
public static final	H264_CIF Value: 1
public static final	H264_D1 Value: 4
public static final	H264_DIVX Value: 22
public static final	H264_DVD Value: 6
public static final	H264_FLASH_HIGHRES Value: 24
public static final	H264_FLASH_LOWRES Value: 23
public static final	H264_HD_DVD Value: 7
public static final	H264_HD_DVD_BD_MV Value: 64
public static final	H264_HDTV_1080i Value: 12
public static final	H264_HDTV_720p Value: 11
public static final	H264_HIGH Value: 5
public static final	H264_INTRA_CLASS_100 Value: 19
public static final	H264_INTRA_CLASS_50 Value: 18

public static final	H264_INTRA_HIGH_10 Value: 17
public static final	H264_iPOD Value: 13
public static final	H264_iPOD_640x480 Value: 15
public static final	H264_LAST_H264_TYPE Value: 27
public static final	H264_MAIN Value: 2
public static final	H264_PSP Value: 10
public static final	H264_PSP_480x270 Value: 20
public static final	H264_PSP_640x480 Value: 21
public static final	H264_SILVERLIGHT Value: 26
public static final	H264_SVCD Value: 3
public static final	MP3_SAMPLEBUFFER_SIZE Value: 5760
public static final	NATIVELIBPATH_BASEPATH Value: 0
public static final	NATIVELIBPATH_QUICKSYNCPATH Value: 1
public static final	NATIVELIBPATH_VAAPIPATH Value: 2
public static final	OPUS_SAMPLEBUFFER_SIZE Value: 5760
public static final	SPEEX_SAMPLEBUFFER_SIZE Value: 2048

public static final	<u>VIDEO_DECODER_TYPE_CAPTURE</u> Value: 1
public static final	<u>VIDEO_DECODER_TYPE_COMPRESSED</u> Value: 0
public static final	<u>VORBIS_SAMPLEBUFFER_SIZE</u> Value: 2048

Method Summary

abstract long	<u>audioDecoderAddAudioResampler</u> (long classPtr, TranscoderNativeAudioResamplerParameters resamplerParameters)
abstract long	<u>audioDecoderApplyParameters</u> (long classPtr)
abstract long	<u>audioDecoderBuffersAllocate</u> (long classPtr, long sampleCount, long channels, long sampleRate)
abstract long	<u>audioDecoderBuffersCreate</u> (long classPtr, long count)
abstract long	<u>audioDecoderCaptureFrame</u> (long classPtr, long indexBuffer, TranscoderLongByReference decodeStatus, TranscoderLongByReference timecode)
abstract long	<u>audioDecoderCreate</u> (long classPtr, long decoderType, long codec, long implementation)
abstract long	<u>audioDecoderDecodeCodecConfig</u> (long classPtr, byte[] buffer, long offset, long len)
abstract long	<u>audioDecoderDecodeFirstFrame</u> (long classPtr, byte[] buffer, long offset, long len)
abstract long	<u>audioDecoderDecodeFrame</u> (long classPtr, byte[] buffer, long offset, long len, long timecode, long indexBuffer)
abstract long	<u>audioDecoderGetAudioFrame</u> (long classPtr, long indexBuffer, TranscoderNativeAudioFrame nativeAudioFrame)
abstract long	<u>audioDecoderGetChannels</u> (long classPtr, TranscoderLongByReference channels)
abstract long	<u>audioDecoderGetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>audioDecoderGetSampleRate</u> (long classPtr, TranscoderLongByReference sampleRate)
abstract long	<u>audioDecoderInitialize</u> (long classPtr)
abstract long	<u>audioDecoderIsFirstFrameDecoded</u> (long classPtr)

abstract long	<u>audioDecoderResampleFrame</u> (long classPtr, long timecode, long indexBuffer)
abstract long	<u>audioDecoderResetDecodedFrameState</u> (long classPtr)
abstract long	<u>audioDecoderSetCaptureDevice</u> (long classPtr, long deviceId)
abstract long	<u>audioDecoderSetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>audioDecoderUpdateAudioFrame</u> (long classPtr, long indexBuffer, TranscoderNativeAudioFrame nativeAudioFrame)
abstract long	<u>audioEncoderAdd</u> (long classPtr, long codec, long implementation, TranscoderLongByReference indexEncoder)
abstract long	<u>audioEncoderAddAudioResampler</u> (long classPtr, long indexEncoder, TranscoderNativeAudioResamplerParameters resamplerParameters)
abstract long	<u>audioEncoderAddSampleBuffer</u> (long classPtr, long indexEncoder, long indexBuffer, java.util.List frames)
abstract long	<u>audioEncoderApplyParameters</u> (long classPtr, long indexEncoder)
abstract long	<u>audioEncoderGetHeaders</u> (long classPtr, long indexEncoder, java.util.List frames)
abstract long	<u>audioEncoderGetParameterValues</u> (long classPtr, long indexEncoder, TranscoderNativeParameterValue[] values)
abstract long	<u>audioEncoderInitialize</u> (long classPtr, long indexEncoder)
abstract long	<u>audioEncoderSetBitrate</u> (long classPtr, long indexEncoder, long bitrate)
abstract long	<u>audioEncoderSetChannels</u> (long classPtr, long indexEncoder, long channels)
abstract long	<u>audioEncoderSetParameterValues</u> (long classPtr, long indexEncoder, TranscoderNativeParameterValue[] values)
abstract long	<u>audioEncoderSetQuality</u> (long classPtr, long indexEncoder, double quality)
abstract long	<u>audioEncoderSetSampleRate</u> (long classPtr, long indexEncoder, long sampleRate)
abstract long	<u>captureDeviceAddAncillaryDataFilter</u> (long deviceId, TranscoderNativeCaptureAncillaryDataFilter ancillaryDataFilter)
abstract long	<u>captureDeviceEndSessionParameterValues</u> (long deviceId, long sessionId)

abstract long	<u>captureDeviceGetAudioAllLevelDataLast</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelDataAll audioLevelDataAll)
abstract long	<u>captureDeviceGetAudioChannelMap</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioChannelMap audioChannelMap)
abstract long	<u>captureDeviceGetAudioLevelData</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelData audioLevelData)
abstract long	<u>captureDeviceGetAudioLevelDataLast</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelDataSingle audioLevelDataSingle)
abstract long	<u>captureDeviceGetInfo</u> (long deviceId, long flags, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceInfo captureDeviceInfo)
abstract long	<u>captureDeviceGetParameterValues</u> (long deviceId, long sessionId, TranscoderNativeParameterValue[] values)
abstract long	<u>captureDeviceGetSessionInfo</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureSessionInfo captureSessionInfo)
abstract long	<u>captureDeviceGetVideoCaptureInput</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureInputVideo videoCaptureInput)
abstract long	<u>captureDeviceGetVideoCaptureTarget</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureTargetVideo captureTargetVideo)
abstract long	<u>captureDeviceGetVideoFrame</u> (long deviceId, <u>TranscoderNativeVideoFrame</u> nativeVideoFrame)
abstract long	<u>captureDeviceResetTimecodeSyncToWallClock</u> (long deviceId)
abstract long	<u>captureDeviceSaveParameterValues</u> (long deviceId, long sessionId)
abstract long	<u>captureDeviceSetActiveState</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceStateInfo captureDeviceStateInfo)
abstract long	<u>captureDeviceSetAncillaryDataLineNumberRange</u> (long deviceId, long start, long mid1, long mid2, long stop)
abstract long	<u>captureDeviceSetAudioCaptureParams</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureParamsAudio audioCaptureParams)
abstract long	<u>captureDeviceSetAudioChannelMap</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioChannelMap audioChannelMap)

abstract long	<u>captureDeviceSetAudioLevelParams</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelParams audioLevelParams)
abstract long	<u>captureDeviceSetAudioVolume</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioVolume audioVolume)
abstract long	<u>captureDeviceSetOverlayInfo</u> (long deviceId, TranscoderCaptureDeviceOverlayInfo overlayInfo)
abstract long	<u>captureDeviceSetParameterValues</u> (long deviceId, long sessionId, TranscoderNativeParameterValue[] values)
abstract long	<u>captureDeviceSetVideoCaptureInput</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureInputVideo videoCaptureInput)
abstract long	<u>captureDeviceSetVideoCaptureParams</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureParamsVideo videoCaptureParams)
abstract long	<u>captureDeviceSetVideoCaptureTarget</u> (long deviceId, com.wowza.wms.transcoder.capture.TranscoderCaptureTargetVideo captureTargetVideo)
abstract long	<u>captureDeviceStartSessionParameterValues</u> (long deviceId, TranscoderLongByReference sessionIdObj)
abstract long	<u>captureManagerGetDeviceIds</u> (TranscoderNativeArrayLong ids)
abstract long	<u>captureManagerGetHardwareInfoJSON</u> (TranscoderStringByReference jsonStr)
abstract long	<u>captureManagerInit</u> ()
abstract long	<u>captureManagerInspectHardware</u> ()
abstract long	<u>captureManagerSetPath</u> (long pathIndex, String pathStr)
abstract long	<u>captureManagerShutdown</u> ()
abstract long	<u>createInstance</u> ()
abstract long	<u>destroyInstance</u> (long classPtr)
abstract long	<u>getHardwareInfoJSON</u> (TranscoderStringByReference jsonStr)
abstract long	<u>getLicenseChallenge</u> (long classPtr, TranscoderLongByReference challenge)
abstract long	<u>getLogStatements</u> (long classPtr, java.util.List statements)
abstract long	<u>initInstance</u> (long classPtr)

abstract long	<u>nativeInitialize()</u>
abstract long	<u>nativeShutdown()</u>
abstract long	<u>setLicenseResponse</u> (long classPtr, long response)
abstract long	<u>setNativeLibPath</u> (long pathIndex, String pathStr)
abstract long	<u>thumbnailerGetVideoFrame</u> (long classPtr, com.wowza.wms.transcoder.thumbnailer.ThumbnailerRequest request, com.wowza.wms.transcoder.thumbnailer.ThumbnailerResponse response)
abstract long	<u>videoDecoderAddFrame</u> (long classPtr, byte[] buffer, long offset, long len, long timecode, long frameType)
abstract long	<u>videoDecoderApplyParameters</u> (long classPtr)
abstract long	<u>videoDecoderBufferGetVideoFrame</u> (long classPtr, long decoderBufferSetIndex, <u>TranscoderNativeVideoFrame</u> nativeVideoFrame)
abstract long	<u>videoDecoderBuffersCreate</u> (long classPtr, long count)
abstract long	<u>videoDecoderBufferSetOverlayVideoFrame</u> (long classPtr, long overlayIndex, <u>TranscoderNativeVideoFrame</u> nativeVideoFrame)
abstract long	<u>videoDecoderCreate</u> (long classPtr, long decoderType, long codec, long codecVersion, long implementation, long fourcc)
abstract long	<u>videoDecoderDecode</u> (long classPtr, long decoderBufferSetIndex, TranscoderLongByReference decodeStatus, TranscoderLongByReference timecode, TranscoderNativeVideoDecodeFrameInfo frameInfo)
abstract long	<u>videoDecoderDecodeCodecConfig</u> (long classPtr, byte[] buffer, long offset, long len)
abstract long	<u>videoDecoderGetCaptureInfo</u> (long classPtr, com.wowza.wms.transcoder.capture.TranscoderVideoDecoderCaptureInfo captureInfo)
abstract long	<u>videoDecoderGetFrame</u> (long classPtr, long decoderBufferSetIndex, TranscoderLongByReference timecode)
abstract long	<u>videoDecoderGetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>videoDecoderInitialize</u> (long classPtr)
abstract long	<u>videoDecoderSetCaptureDevice</u> (long classPtr, long deviceId)
abstract long	<u>videoDecoderSetFrameSizeLimits</u> (long classPtr, long maxWidth, long maxHeight, long minWidth, long minHeight)
abstract long	<u>videoDecoderSetGPUID</u> (long classPtr, long GPUID)

abstract long	<u>videoDecoderSetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>videoDecoderTransferFrame</u> (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)
abstract long	<u>videoDecoderTransferFrameDone</u> (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)
abstract long	<u>videoDecoderTransferFrameSingle</u> (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex, long frameIndex)
abstract long	<u>videoDecoderTransferFrameStart</u> (long classPtr, long decoderBufferSetIndex, long encoderBufferSetIndex)
abstract long	<u>videoEncoderAdd</u> (long classPtr, long codec, long codecVersion, long implementation, TranscoderLongByReference encoderEncoderIndex)
abstract long	<u>videoEncoderAddFrame</u> (long classPtr, long encoderEncoderIndex, long encoderBufferSetIndex, long encoderBufferIndex, long frameType)
abstract long	<u>videoEncoderApplyParameters</u> (long classPtr, long encoderEncoderIndex)
abstract long	<u>videoEncoderBufferAdd</u> (long classPtr, long width, long height, long fitMode, long fourcc, long scaleMode, TranscoderLongByReference encoderBufferIndex)
abstract long	<u>videoEncoderBufferGetVideoFrame</u> (long classPtr, long encoderBufferSetIndex, long encoderBufferIndex, <u>TranscoderNativeVideoFrame</u> nativeVideoFrame)
abstract long	<u>videoEncoderBufferSetCrop</u> (long classPtr, long encoderBufferSetIndex, long[] crop)
abstract long	<u>videoEncoderBufferSetDestinationRect</u> (long classPtr, long encoderBufferSetIndex, long[] rect)
abstract long	<u>videoEncoderBufferSetOverlayVideoFrame</u> (long classPtr, long encoderBufferSetIndex, long overlayIndex, <u>TranscoderNativeVideoFrame</u> nativeVideoFrame)
abstract long	<u>videoEncoderBufferSetPadding</u> (long classPtr, long encoderBufferSetIndex, long[] padding)
abstract long	<u>videoEncoderBufferSetsCreate</u> (long classPtr, long setCount)
abstract long	<u>videoEncoderBufferSetSourceRect</u> (long classPtr, long encoderBufferSetIndex, long[] rect)
abstract long	<u>videoEncoderGetEncodedFrames</u> (long classPtr, long encoderEncoderIndex, java.util.List encodedFrames)
abstract long	<u>videoEncoderGetParameterValues</u> (long classPtr, long encoderEncoderIndex, TranscoderNativeParameterValue[] values)

abstract long	<u>videoEncoderInitialize</u> (long classPtr, long encoderEncoderIndex)
abstract long	<u>videoEncoderPreprocessFrame</u> (long classPtr, long encoderEncoderIndex, long encoderBufferSetIndex, long encoderBufferIndex)
abstract long	<u>videoEncoderSetBitrate</u> (long classPtr, long encoderEncoderIndex, long bitrate)
abstract long	<u>videoEncoderSetDefaults</u> (long classPtr, long encoderEncoderIndex, long video_type, long PAL)
abstract long	<u>videoEncoderSetFrameIndex</u> (long classPtr, long encoderEncoderIndex, long frameIndex)
abstract long	<u>videoEncoderSetFrameRate</u> (long classPtr, long encoderEncoderIndex, double frameRate)
abstract long	<u>videoEncoderSetFrameSize</u> (long classPtr, long encoderEncoderIndex, long width, long height)
abstract long	<u>videoEncoderSetGPUID</u> (long classPtr, long encoderEncoderIndex, long GPUID)
abstract long	<u>videoEncoderSetKeyFrameFollow</u> (long classPtr, long encoderEncoderIndex, long value)
abstract long	<u>videoEncoderSetParameterValues</u> (long classPtr, long encoderEncoderIndex, TranscoderNativeParameterValue[] values)
abstract long	<u>videoEncoderUpdateBitrate</u> (long classPtr, long encoderEncoderIndex, long bitrate)
abstract long	<u>videoPipelineApplyParameters</u> (long classPtr)
abstract long	<u>videoPipelineCreate</u> (long classPtr, long implementation)
abstract long	<u>videoPipelineGetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>videoPipelineInitialize</u> (long classPtr)
abstract long	<u>videoPipelineSetGPUID</u> (long classPtr, long GPUID)
abstract long	<u>videoPipelineSetParameterValues</u> (long classPtr, TranscoderNativeParameterValue[] values)
abstract long	<u>videoScalerCreate</u> (long classPtr)
abstract long	<u>videoScalerInitialize</u> (long classPtr)
abstract long	<u>videoScalerSetFlags</u> (long classPtr, long flags)

abstract long	videoScalerSetImplementation (long classPtr, long implementation, long gpuid)
abstract long	vodEncoderRun (long classPtr)
abstract long	vodTranscoderGetCodecConfig (long classPtr, TranscoderNativeVODTranscoderSettings settings, TranscoderPacket codecConfigFrame)
abstract long	vodTranscoderTranscodeFrames (long classPtr, TranscoderNativeVODTranscoderSettings settings, TranscoderPacket[] decodedFrames, java.util.List encodedFrames)

Fields

CLASS

public static final java.lang.Class **CLASS**

CLASSNAME

public static final java.lang.String **CLASSNAME**

Constant value: **ITranscoderSessionNative**

AAC_SAMPLEBUFFER_SIZE

public static final long **AAC_SAMPLEBUFFER_SIZE**

Constant value: **1024**

MP3_SAMPLEBUFFER_SIZE

public static final long **MP3_SAMPLEBUFFER_SIZE**

Constant value: **5760**

G711_SAMPLEBUFFER_SIZE

public static final long **G711_SAMPLEBUFFER_SIZE**

Constant value: **2048**

SPEEX_SAMPLEBUFFER_SIZE

public static final long **SPEEX_SAMPLEBUFFER_SIZE**

Constant value: **2048**

AC3_SAMPLEBUFFER_SIZE

```
public static final long AC3_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

VORBIS_SAMPLEBUFFER_SIZE

```
public static final long VORBIS_SAMPLEBUFFER_SIZE
```

Constant value: **2048**

OPUS_SAMPLEBUFFER_SIZE

```
public static final long OPUS_SAMPLEBUFFER_SIZE
```

Constant value: **5760**

CODEC_IMPL_DEFAULT

```
public static final long CODEC_IMPL_DEFAULT
```

Constant value: **0**

VIDEO_DECODER_TYPE_COMPRESSED

```
public static final long VIDEO_DECODER_TYPE_COMPRESSED
```

Constant value: **0**

VIDEO_DECODER_TYPE_CAPTURE

```
public static final long VIDEO_DECODER_TYPE_CAPTURE
```

Constant value: **1**

AUDIO_DECODER_TYPE_COMPRESSED

```
public static final long AUDIO_DECODER_TYPE_COMPRESSED
```

Constant value: **0**

AUDIO_DECODER_TYPE_CAPTURE

```
public static final long AUDIO_DECODER_TYPE_CAPTURE
```

Constant value: **1**

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DECODERESULT_FRAMEDONE

```
public static final long DECODERESULT_FRAMEDONE
```

Constant value: **1**

DECODERESULT_FRAMEREADY

```
public static final long DECODERESULT_FRAMEREADY
```

Constant value: **2**

DECODERESULT_FRAMEVALID

```
public static final long DECODERESULT_FRAMEVALID
```

Constant value: **4**

DECODERESULT_FRAMESKIP

```
public static final long DECODERESULT_FRAMESKIP
```

Constant value: **8**

DECODERESULT_FRAMEERROR

```
public static final long DECODERESULT_FRAMEERROR
```

Constant value: **16**

DECODERESULT_SEQHEADER

```
public static final long DECODERESULT_SEQHEADER
```

Constant value: **32**

DECODERESULT_ERROR

```
public static final long DECODERESULT_ERROR
```

Constant value: **64**

H264_BASELINE

```
public static final long H264_BASELINE
```

Constant value: **0**

H264_CIF

```
public static final long H264_CIF
```

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Constant value: **1**

H264_MAIN

public static final long **H264_MAIN**

Constant value: **2**

H264_SVCD

public static final long **H264_SVCD**

Constant value: **3**

H264_D1

public static final long **H264_D1**

Constant value: **4**

H264_HIGH

public static final long **H264_HIGH**

Constant value: **5**

H264_DVD

public static final long **H264_DVD**

Constant value: **6**

H264_HD_DVD

public static final long **H264_HD_DVD**

Constant value: **7**

H264_BD

public static final long **H264_BD**

Constant value: **8**

H264_BD_HDMV

public static final long **H264_BD_HDMV**

Constant value: **9**

H264_PSP

public static final long **H264_PSP**

Constant value: **10**

H264_HDTV_720p

public static final long **H264_HDTV_720p**

Constant value: **11**

H264_HDTV_1080i

public static final long **H264_HDTV_1080i**

Constant value: **12**

H264_iPOD

public static final long **H264_iPOD**

Constant value: **13**

H264_AVCHD

public static final long **H264_AVCHD**

Constant value: **14**

H264_iPOD_640x480

public static final long **H264_iPOD_640x480**

Constant value: **15**

H264_1SEG

public static final long **H264_1SEG**

Constant value: **16**

H264_INTRA_HIGH_10

public static final long **H264_INTRA_HIGH_10**

Constant value: **17**

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H264_INTRA_CLASS_50

```
public static final long H264_INTRA_CLASS_50
```

Constant value: **18**

H264_INTRA_CLASS_100

```
public static final long H264_INTRA_CLASS_100
```

Constant value: **19**

H264_PSP_480x270

```
public static final long H264_PSP_480x270
```

Constant value: **20**

H264_PSP_640x480

```
public static final long H264_PSP_640x480
```

Constant value: **21**

H264_DIVX

```
public static final long H264_DIVX
```

Constant value: **22**

H264_FLASH_LOWRES

```
public static final long H264_FLASH_LOWRES
```

Constant value: **23**

H264_FLASH_HIGHRES

```
public static final long H264_FLASH_HIGHRES
```

Constant value: **24**

H264_3GP

```
public static final long H264_3GP
```

Constant value: **25**

H264_SILVERLIGHT

```
public static final long H264_SILVERLIGHT
```

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Constant value: **26**

H264_LAST_H264_TYPE

```
public static final long H264_LAST_H264_TYPE
```

Constant value: **27**

H264_HD_DVD_BD_MV

```
public static final long H264_HD_DVD_BD_MV
```

Constant value: **64**

NATIVELIBPATH_BASEPATH

```
public static final int NATIVELIBPATH_BASEPATH
```

Constant value: **0**

NATIVELIBPATH_QUICKSYNCPATH

```
public static final int NATIVELIBPATH_QUICKSYNCPATH
```

Constant value: **1**

NATIVELIBPATH_VAAPIPATH

```
public static final int NATIVELIBPATH_VAAPIPATH
```

Constant value: **2**

CAPTUREDEVICE_ACTIVESTATE_ACTIVE

```
public static final int CAPTUREDEVICE_ACTIVESTATE_ACTIVE
```

Constant value: **1**

CAPTUREDEVICE_CAPTURE_PIXELFORMAT_UNKNOWN

```
public static final int CAPTUREDEVICE_CAPTURE_PIXELFORMAT_UNKNOWN
```

Constant value: **0**

CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV8BIT

```
public static final int CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV8BIT
```

Constant value: **1**

CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV10BIT

```
public static final int CAPTUREDEVICE_CAPTURE_PIXELFORMAT_YUV10BIT
```

Constant value: **2**

CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_ENABLEFORMATDETECTION

```
public static final int CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_ENABLEFORMATDETECTION
```

Constant value: **1**

CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_DUALSTREAM3D

```
public static final int CAPTUREDEVICE_CAPTURE_FLAGS_BLACKMAGIC_DUALSTREAM3D
```

Constant value: **2**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC
```

Constant value: **1853125475**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC2398

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSC2398
```

Constant value: **1853108787**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPAL

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPAL
```

Constant value: **1885432864**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSCP

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODENTSCP
```

Constant value: **1853125488**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPALP

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEPALP
```

Constant value: **1885432944**

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CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2398

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2398
```

Constant value: **842231923****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P24**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P24
```

Constant value: **842297459****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P25**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P25
```

Constant value: **1215312437****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2997**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P2997
```

Constant value: **1215312441****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P30**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P30
```

Constant value: **1215312688****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I50**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I50
```

Constant value: **1214854448****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I5994**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I5994
```

Constant value: **1214854457****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I6000**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080I6000
```

Constant value: **1214854704****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P50**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P50
```

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Constant value: **1215313200**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P5994**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P5994**Constant value: **1215313209**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P6000**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD1080P6000**Constant value: **1215313456**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P50**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P50**Constant value: **1752184112**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P5994**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P5994**Constant value: **1752184121**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P60**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEHD720P60**Constant value: **1752184368**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K2398**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K2398**Constant value: **845886003**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K24**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K24**Constant value: **845886004**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K25**public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2K25**Constant value: **845886005**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI2398

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI2398
```

Constant value: **845427251**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI24

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI24
```

Constant value: **845427252**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI25

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE2KDCI25
```

Constant value: **845427253**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2398

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2398
```

Constant value: **879440435**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P24

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P24
```

Constant value: **879440436**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P25

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P25
```

Constant value: **879440437**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2997

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P2997
```

Constant value: **879440441**

CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P30

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P30
```

Constant value: **879440688**

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CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P50

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P50
```

Constant value: **879441200****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P5994**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P5994
```

Constant value: **879441209****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P60**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4K2160P60
```

Constant value: **879441456****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI2398**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI2398
```

Constant value: **878981683****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI24**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI24
```

Constant value: **878981684****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI25**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODE4KDCI25
```

Constant value: **878981685****CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEUNKNOWN**

```
public static final int CAPTUREDEVICE_RENDITIONIDS_BLACKMAGIC_BMDMODEUNKNOWN
```

Constant value: **1769303659**

Methods

setNativeLibPath

```
public abstract long setNativeLibPath(long pathIndex,  
    String pathStr)
```

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getHardwareInfoJSON

```
public abstract long getHardwareInfoJSON(TranscoderStringByReference jsonStr)
```

nativeInitialize

```
public abstract long nativeInitialize()
```

nativeShutdown

```
public abstract long nativeShutdown()
```

captureManagerInit

```
public abstract long captureManagerInit()
```

captureManagerSetPath

```
public abstract long captureManagerSetPath(long pathIndex,  
String pathStr)
```

captureManagerInspectHardware

```
public abstract long captureManagerInspectHardware()
```

captureManagerGetHardwareInfoJSON

```
public abstract long captureManagerGetHardwareInfoJSON(TranscoderStringByReference  
jsonStr)
```

captureManagerGetDeviceIds

```
public abstract long captureManagerGetDeviceIds(TranscoderNativeArrayLong ids)
```

captureManagerShutdown

```
public abstract long captureManagerShutdown()
```

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captureDeviceGetInfo

```
public abstract long captureDeviceGetInfo(long deviceId,  
    long flags,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceInfo  
captureDeviceInfo)
```

captureDeviceGetSessionInfo

```
public abstract long captureDeviceGetSessionInfo(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureSessionInfo  
captureSessionInfo)
```

captureDeviceSetActiveState

```
public abstract long captureDeviceSetActiveState(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceStateInfo  
captureDeviceStateInfo)
```

captureDeviceResetTimecodeSyncToWallClock

```
public abstract long captureDeviceResetTimecodeSyncToWallClock(long deviceId)
```

captureDeviceSetAncillaryDataLineNumberRange

```
public abstract long captureDeviceSetAncillaryDataLineNumberRange(long deviceId,  
    long start,  
    long mid1,  
    long mid2,  
    long stop)
```

captureDeviceAddAncillaryDataFilter

```
public abstract long captureDeviceAddAncillaryDataFilter(long deviceId,  
    TranscoderNativeCaptureAncillaryDataFilter ancillaryDataFilter)
```

captureDeviceStartSessionParameterValues

```
public abstract long captureDeviceStartSessionParameterValues(long deviceId,  
    TranscoderLongByReference sessionIdObj)
```

captureDeviceEndSessionParameterValues

```
public abstract long captureDeviceEndSessionParameterValues(long deviceId,  
    long sessionId)
```

captureDeviceSetParameterValues

```
public abstract long captureDeviceSetParameterValues(long deviceId,  
    long sessionId,  
    TranscoderNativeParameterValue[] values)
```

captureDeviceGetParameterValues

```
public abstract long captureDeviceGetParameterValues(long deviceId,  
    long sessionId,  
    TranscoderNativeParameterValue[] values)
```

captureDeviceSaveParameterValues

```
public abstract long captureDeviceSaveParameterValues(long deviceId,  
    long sessionId)
```

captureDeviceSetVideoCaptureParams

```
public abstract long captureDeviceSetVideoCaptureParams(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureParamsVideo  
    videoCaptureParams)
```

captureDeviceGetVideoFrame

```
public abstract long captureDeviceGetVideoFrame(long deviceId,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

captureDeviceSetVideoCaptureInput

```
public abstract long captureDeviceSetVideoCaptureInput(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureInputVideo  
    videoCaptureInput)
```

captureDeviceGetVideoCaptureInput

```
public abstract long captureDeviceGetVideoCaptureInput(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureInputVideo  
    videoCaptureInput)
```

captureDeviceSetVideoCaptureTarget

```
public abstract long captureDeviceSetVideoCaptureTarget(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureTargetVideo  
    captureTargetVideo)
```

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captureDeviceGetVideoCaptureTarget

```
public abstract long captureDeviceGetVideoCaptureTarget(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureTargetVideo  
captureTargetVideo)
```

captureDeviceSetAudioCaptureParams

```
public abstract long captureDeviceSetAudioCaptureParams(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceCaptureParamsAudio  
audioCaptureParams)
```

captureDeviceSetAudioLevelParams

```
public abstract long captureDeviceSetAudioLevelParams(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelParams  
audioLevelParams)
```

captureDeviceGetAudioLevelData

```
public abstract long captureDeviceGetAudioLevelData(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelData  
audioLevelData)
```

captureDeviceGetAudioLevelDataLast

```
public abstract long captureDeviceGetAudioLevelDataLast(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelDataSingle  
audioLevelDataSingle)
```

captureDeviceSetAudioVolume

```
public abstract long captureDeviceSetAudioVolume(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioVolume  
audioVolume)
```

captureDeviceSetAudioChannelMap

```
public abstract long captureDeviceSetAudioChannelMap(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioChannelMap  
audioChannelMap)
```

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captureDeviceGetAudioChannelMap

```
public abstract long captureDeviceGetAudioChannelMap(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioChannelMap  
    audioChannelMap)
```

captureDeviceGetAudioAllLevelDataLast

```
public abstract long captureDeviceGetAudioAllLevelDataLast(long deviceId,  
    com.wowza.wms.transcoder.capture.TranscoderCaptureDeviceAudioLevelDataAll  
    audioLevelDataAll)
```

captureDeviceSetOverlayInfo

```
public abstract long captureDeviceSetOverlayInfo(long deviceId,  
    TranscoderCaptureDeviceOverlayInfo overlayInfo)
```

createInstance

```
public abstract long createInstance()
```

destroyInstance

```
public abstract long destroyInstance(long classPtr)
```

getLicenseChallenge

```
public abstract long getLicenseChallenge(long classPtr,  
    TranscoderLongByReference challenge)
```

setLicenseResponse

```
public abstract long setLicenseResponse(long classPtr,  
    long response)
```

initInstance

```
public abstract long initInstance(long classPtr)
```

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vodTranscoderTranscodeFrames

```
public abstract long vodTranscoderTranscodeFrames(long classPtr,  
    TranscoderNativeVODTranscoderSettings settings,  
    TranscoderPacket[] decodedFrames,  
    java.util.List encodedFrames)
```

vodTranscoderGetCodecConfig

```
public abstract long vodTranscoderGetCodecConfig(long classPtr,  
    TranscoderNativeVODTranscoderSettings settings,  
    TranscoderPacket codecConfigFrame)
```

thumbnailerGetVideoFrame

```
public abstract long thumbnailerGetVideoFrame(long classPtr,  
    com.wowza.wms.transcoder.thumbnailer.ThumbnailerRequest request,  
    com.wowza.wms.transcoder.thumbnailer.ThumbnailerResponse response)
```

vodEncoderRun

```
public abstract long vodEncoderRun(long classPtr)
```

videoPipelineCreate

```
public abstract long videoPipelineCreate(long classPtr,  
    long implementation)
```

videoPipelineSetGPUID

```
public abstract long videoPipelineSetGPUID(long classPtr,  
    long GPUID)
```

videoPipelineSetParameterValues

```
public abstract long videoPipelineSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoPipelineGetParameterValues

```
public abstract long videoPipelineGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

(continued from last page)

videoPipelineApplyParameters

```
public abstract long videoPipelineApplyParameters(long classPtr)
```

videoPipelineInitialize

```
public abstract long videoPipelineInitialize(long classPtr)
```

videoScalerCreate

```
public abstract long videoScalerCreate(long classPtr)
```

videoScalerSetImplementation

```
public abstract long videoScalerSetImplementation(long classPtr,  
                                                    long implementation,  
                                                    long gpuid)
```

videoScalerSetFlags

```
public abstract long videoScalerSetFlags(long classPtr,  
                                           long flags)
```

videoScalerInitialize

```
public abstract long videoScalerInitialize(long classPtr)
```

videoDecoderCreate

```
public abstract long videoDecoderCreate(long classPtr,  
                                           long decoderType,  
                                           long codec,  
                                           long codecVersion,  
                                           long implementation,  
                                           long fourcc)
```

videoDecoderBuffersCreate

```
public abstract long videoDecoderBuffersCreate(long classPtr,  
                                                  long count)
```

(continued from last page)

videoDecoderBufferGetVideoFrame

```
public abstract long videoDecoderBufferGetVideoFrame(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoDecoderBufferSetOverlayVideoFrame

```
public abstract long videoDecoderBufferSetOverlayVideoFrame(long classPtr,  
    long overlayIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoDecoderSetGPUID

```
public abstract long videoDecoderSetGPUID(long classPtr,  
    long GPUID)
```

videoDecoderApplyParameters

```
public abstract long videoDecoderApplyParameters(long classPtr)
```

videoDecoderSetParameterValues

```
public abstract long videoDecoderSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoDecoderGetParameterValues

```
public abstract long videoDecoderGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

videoDecoderInitialize

```
public abstract long videoDecoderInitialize(long classPtr)
```

videoDecoderDecodeCodecConfig

```
public abstract long videoDecoderDecodeCodecConfig(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

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videoDecoderAddFrame

```
public abstract long videoDecoderAddFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len,  
    long timecode,  
    long frameType)
```

videoDecoderDecode

```
public abstract long videoDecoderDecode(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderLongByReference decodeStatus,  
    TranscoderLongByReference timecode,  
    TranscoderNativeVideoDecodeFrameInfo frameInfo)
```

videoDecoderGetFrame

```
public abstract long videoDecoderGetFrame(long classPtr,  
    long decoderBufferSetIndex,  
    TranscoderLongByReference timecode)
```

videoDecoderTransferFrame

```
public abstract long videoDecoderTransferFrame(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderTransferFrameStart

```
public abstract long videoDecoderTransferFrameStart(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderTransferFrameSingle

```
public abstract long videoDecoderTransferFrameSingle(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex,  
    long frameIndex)
```

videoDecoderTransferFrameDone

```
public abstract long videoDecoderTransferFrameDone(long classPtr,  
    long decoderBufferSetIndex,  
    long encoderBufferSetIndex)
```

videoDecoderSetFrameSizeLimits

```
public abstract long videoDecoderSetFrameSizeLimits(long classPtr,  
    long maxWidth,  
    long maxHeight,  
    long minWidth,  
    long minHeight)
```

videoDecoderSetCaptureDevice

```
public abstract long videoDecoderSetCaptureDevice(long classPtr,  
    long deviceId)
```

videoDecoderGetCaptureInfo

```
public abstract long videoDecoderGetCaptureInfo(long classPtr,  
    com.wowza.wms.transcoder.capture.TranscoderVideoDecoderCaptureInfo  
    captureInfo)
```

videoEncoderBufferSetsCreate

```
public abstract long videoEncoderBufferSetsCreate(long classPtr,  
    long setCount)
```

videoEncoderBufferAdd

```
public abstract long videoEncoderBufferAdd(long classPtr,  
    long width,  
    long height,  
    long fitMode,  
    long fourcc,  
    long scaleMode,  
    TranscoderLongByReference encoderBufferIndex)
```

videoEncoderBufferGetVideoFrame

```
public abstract long videoEncoderBufferGetVideoFrame(long classPtr,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoEncoderBufferSetOverlayVideoFrame

```
public abstract long videoEncoderBufferSetOverlayVideoFrame(long classPtr,  
    long encoderBufferSetIndex,  
    long overlayIndex,  
    TranscoderNativeVideoFrame nativeVideoFrame)
```

videoEncoderBufferSetCrop

```
public abstract long videoEncoderBufferSetCrop(long classPtr,  
    long encoderBufferSetIndex,  
    long[] crop)
```

videoEncoderBufferSetSourceRect

```
public abstract long videoEncoderBufferSetSourceRect(long classPtr,  
    long encoderBufferSetIndex,  
    long[] rect)
```

videoEncoderBufferSetPadding

```
public abstract long videoEncoderBufferSetPadding(long classPtr,  
    long encoderBufferSetIndex,  
    long[] padding)
```

videoEncoderBufferSetDestinationRect

```
public abstract long videoEncoderBufferSetDestinationRect(long classPtr,  
    long encoderBufferSetIndex,  
    long[] rect)
```

videoEncoderAdd

```
public abstract long videoEncoderAdd(long classPtr,  
    long codec,  
    long codecVersion,  
    long implementation,  
    TranscoderLongByReference encoderEncoderIndex)
```

videoEncoderSetDefaults

```
public abstract long videoEncoderSetDefaults(long classPtr,  
    long encoderEncoderIndex,  
    long video_type,  
    long PAL)
```

videoEncoderSetBitrate

```
public abstract long videoEncoderSetBitrate(long classPtr,  
    long encoderEncoderIndex,  
    long bitrate)
```

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videoEncoderUpdateBitrate

```
public abstract long videoEncoderUpdateBitrate(long classPtr,  
    long encoderEncoderIndex,  
    long bitrate)
```

videoEncoderSetFrameSize

```
public abstract long videoEncoderSetFrameSize(long classPtr,  
    long encoderEncoderIndex,  
    long width,  
    long height)
```

videoEncoderSetFrameIndex

```
public abstract long videoEncoderSetFrameIndex(long classPtr,  
    long encoderEncoderIndex,  
    long frameIndex)
```

videoEncoderSetKeyFrameFollow

```
public abstract long videoEncoderSetKeyFrameFollow(long classPtr,  
    long encoderEncoderIndex,  
    long value)
```

videoEncoderSetFrameRate

```
public abstract long videoEncoderSetFrameRate(long classPtr,  
    long encoderEncoderIndex,  
    double frameRate)
```

videoEncoderSetGPUID

```
public abstract long videoEncoderSetGPUID(long classPtr,  
    long encoderEncoderIndex,  
    long GPUID)
```

videoEncoderApplyParameters

```
public abstract long videoEncoderApplyParameters(long classPtr,  
    long encoderEncoderIndex)
```

(continued from last page)

videoEncoderGetParameterValues

```
public abstract long videoEncoderGetParameterValues(long classPtr,  
    long encoderEncoderIndex,  
    TranscoderNativeParameterValue[] values)
```

videoEncoderSetParameterValues

```
public abstract long videoEncoderSetParameterValues(long classPtr,  
    long encoderEncoderIndex,  
    TranscoderNativeParameterValue[] values)
```

videoEncoderInitialize

```
public abstract long videoEncoderInitialize(long classPtr,  
    long encoderEncoderIndex)
```

videoEncoderPreprocessFrame

```
public abstract long videoEncoderPreprocessFrame(long classPtr,  
    long encoderEncoderIndex,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex)
```

videoEncoderAddFrame

```
public abstract long videoEncoderAddFrame(long classPtr,  
    long encoderEncoderIndex,  
    long encoderBufferSetIndex,  
    long encoderBufferIndex,  
    long frameType)
```

videoEncoderGetEncodedFrames

```
public abstract long videoEncoderGetEncodedFrames(long classPtr,  
    long encoderEncoderIndex,  
    java.util.List encodedFrames)
```

audioDecoderCreate

```
public abstract long audioDecoderCreate(long classPtr,  
    long decoderType,  
    long codec,  
    long implementation)
```

(continued from last page)

audioDecoderApplyParameters

```
public abstract long audioDecoderApplyParameters(long classPtr)
```

audioDecoderSetParameterValues

```
public abstract long audioDecoderSetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

audioDecoderGetParameterValues

```
public abstract long audioDecoderGetParameterValues(long classPtr,  
    TranscoderNativeParameterValue[] values)
```

audioDecoderInitialize

```
public abstract long audioDecoderInitialize(long classPtr)
```

audioDecoderDecodeCodecConfig

```
public abstract long audioDecoderDecodeCodecConfig(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

audioDecoderIsFirstFrameDecoded

```
public abstract long audioDecoderIsFirstFrameDecoded(long classPtr)
```

audioDecoderDecodeFirstFrame

```
public abstract long audioDecoderDecodeFirstFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len)
```

audioDecoderDecodeFrame

```
public abstract long audioDecoderDecodeFrame(long classPtr,  
    byte[] buffer,  
    long offset,  
    long len,  
    long timecode,  
    long indexBuffer)
```

audioDecoderResampleFrame

```
public abstract long audioDecoderResampleFrame(long classPtr,  
        long timecode,  
        long indexBuffer)
```

audioDecoderGetAudioFrame

```
public abstract long audioDecoderGetAudioFrame(long classPtr,  
        long indexBuffer,  
        TranscoderNativeAudioFrame nativeAudioFrame)
```

audioDecoderUpdateAudioFrame

```
public abstract long audioDecoderUpdateAudioFrame(long classPtr,  
        long indexBuffer,  
        TranscoderNativeAudioFrame nativeAudioFrame)
```

audioDecoderCaptureFrame

```
public abstract long audioDecoderCaptureFrame(long classPtr,  
        long indexBuffer,  
        TranscoderLongByReference decodeStatus,  
        TranscoderLongByReference timecode)
```

audioDecoderResetDecodedFrameState

```
public abstract long audioDecoderResetDecodedFrameState(long classPtr)
```

audioDecoderGetSampleRate

```
public abstract long audioDecoderGetSampleRate(long classPtr,  
        TranscoderLongByReference sampleRate)
```

audioDecoderGetChannels

```
public abstract long audioDecoderGetChannels(long classPtr,  
        TranscoderLongByReference channels)
```

audioDecoderSetCaptureDevice

```
public abstract long audioDecoderSetCaptureDevice(long classPtr,  
        long deviceId)
```

audioDecoderAddAudioResampler

```
public abstract long audioDecoderAddAudioResampler(long classPtr,  
    TranscoderNativeAudioResamplerParameters resamplerParameters)
```

audioDecoderBuffersCreate

```
public abstract long audioDecoderBuffersCreate(long classPtr,  
    long count)
```

audioDecoderBuffersAllocate

```
public abstract long audioDecoderBuffersAllocate(long classPtr,  
    long sampleCount,  
    long channels,  
    long sampleRate)
```

audioEncoderAdd

```
public abstract long audioEncoderAdd(long classPtr,  
    long codec,  
    long implementation,  
    TranscoderLongByReference indexEncoder)
```

audioEncoderSetSampleRate

```
public abstract long audioEncoderSetSampleRate(long classPtr,  
    long indexEncoder,  
    long sampleRate)
```

audioEncoderSetChannels

```
public abstract long audioEncoderSetChannels(long classPtr,  
    long indexEncoder,  
    long channels)
```

audioEncoderSetQuality

```
public abstract long audioEncoderSetQuality(long classPtr,  
    long indexEncoder,  
    double quality)
```

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audioEncoderSetBitrate

```
public abstract long audioEncoderSetBitrate(long classPtr,  
    long indexEncoder,  
    long bitrate)
```

audioEncoderApplyParameters

```
public abstract long audioEncoderApplyParameters(long classPtr,  
    long indexEncoder)
```

audioEncoderSetParameterValues

```
public abstract long audioEncoderSetParameterValues(long classPtr,  
    long indexEncoder,  
    TranscoderNativeParameterValue[] values)
```

audioEncoderGetParameterValues

```
public abstract long audioEncoderGetParameterValues(long classPtr,  
    long indexEncoder,  
    TranscoderNativeParameterValue[] values)
```

audioEncoderInitialize

```
public abstract long audioEncoderInitialize(long classPtr,  
    long indexEncoder)
```

audioEncoderGetHeaders

```
public abstract long audioEncoderGetHeaders(long classPtr,  
    long indexEncoder,  
    java.util.List frames)
```

audioEncoderAddSampleBuffer

```
public abstract long audioEncoderAddSampleBuffer(long classPtr,  
    long indexEncoder,  
    long indexBuffer,  
    java.util.List frames)
```

audioEncoderAddAudioResampler

```
public abstract long audioEncoderAddAudioResampler(long classPtr,  
    long indexEncoder,  
    TranscoderNativeAudioResamplerParameters resamplerParameters)
```

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getLogStatements

```
public abstract long getLogStatements(long classPtr,  
    java.util.List statements)
```


com.wowza.wms.transcoder.model Interface ITranscoderVideoDecoderNotify

public interface **ITranscoderVideoDecoderNotify**
extends

Method Summary

abstract void	<u>onAfterDecodeFrame</u> (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
abstract void	<u>onAfterScaleFrame</u> (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
abstract void	<u>onBeforeDecodeFrame</u> (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)
abstract void	<u>onBeforeScaleFrame</u> (TranscoderSessionVideo sessionVideo, TranscoderStreamSourceVideo sourceVideo, long frameCount)

Methods

onBeforeDecodeFrame

```
public abstract void onBeforeDecodeFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onAfterDecodeFrame

```
public abstract void onAfterDecodeFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onBeforeScaleFrame

```
public abstract void onBeforeScaleFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

onAfterScaleFrame

```
public abstract void onAfterScaleFrame(TranscoderSessionVideo sessionVideo,  
    TranscoderStreamSourceVideo sourceVideo,  
    long frameCount)
```

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com.wowza.wms.transcoder.model Interface ITranscoderVideoEncoderNotify

public interface **ITranscoderVideoEncoderNotify**
extends

Method Summary

abstract void	<u>onAfterEncodeFrame</u> (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, long frameCount)
abstract void	<u>onBeforeEncodeFrame</u> (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, long frameCount)

Methods

onBeforeEncodeFrame

```
public abstract void onBeforeEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,
    TranscoderStreamDestinationVideo destinationVideo,
    long frameCount)
```

onAfterEncodeFrame

```
public abstract void onAfterEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,
    TranscoderStreamDestinationVideo destinationVideo,
    long frameCount)
```

com.wowza.wms.transcoder.model

Interface ITranscoderVideoEncoderNotify2

public interface ITranscoderVideoEncoderNotify2

extends

Method Summary	
abstract void	onAfterEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, TranscoderVideoEncodeFrameContext frameContext)
abstract void	onBeforeEncodeFrame (TranscoderSessionVideoEncode sessionVideoEncode, TranscoderStreamDestinationVideo destinationVideo, TranscoderVideoEncodeFrameContext frameContext)

Methods

onBeforeEncodeFrame

```
public abstract void onBeforeEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,
    TranscoderStreamDestinationVideo destinationVideo,
    TranscoderVideoEncodeFrameContext frameContext)
```

onAfterEncodeFrame

```
public abstract void onAfterEncodeFrame(TranscoderSessionVideoEncode sessionVideoEncode,
    TranscoderStreamDestinationVideo destinationVideo,
    TranscoderVideoEncodeFrameContext frameContext)
```

com.wowza.wms.transcoder.model Interface ITranscoderVideoLoadBalancer

public interface **ITranscoderVideoLoadBalancer**
extends

Method Summary

abstract void	init (IServer server, TranscoderContextServer transcoderContextServer)
abstract void	onHardwareInspection (TranscoderContextServer transcoderContextServer)
abstract void	onTranscoderSessionCreate (LiveStreamTranscoder liveStreamTranscoder)
abstract void	onTranscoderSessionDestroy (LiveStreamTranscoder liveStreamTranscoder)
abstract void	onTranscoderSessionInit (LiveStreamTranscoder liveStreamTranscoder)
abstract void	onTranscoderSessionLoadBalance (LiveStreamTranscoder liveStreamTranscoder)
abstract void	onTranscoderSessionVODEncodeStart (LiveStreamTranscoder liveStreamTranscoder, TranscoderNativeVODTranscoderSettings videoEncodeSettings)
abstract void	onTranscoderSessionVODEncodeStop (LiveStreamTranscoder liveStreamTranscoder)

Methods

init

```
public abstract void init(IServer server,  
    TranscoderContextServer transcoderContextServer)
```

onHardwareInspection

```
public abstract void onHardwareInspection(TranscoderContextServer  
    transcoderContextServer)
```

onTranscoderSessionCreate

```
public abstract void onTranscoderSessionCreate(LiveStreamTranscoder  
    liveStreamTranscoder)
```

(continued from last page)

onTranscoderSessionInit

```
public abstract void onTranscoderSessionInit(LiveStreamTranscoder  
liveStreamTranscoder)
```

onTranscoderSessionDestroy

```
public abstract void onTranscoderSessionDestroy(LiveStreamTranscoder  
liveStreamTranscoder)
```

onTranscoderSessionLoadBalance

```
public abstract void onTranscoderSessionLoadBalance(LiveStreamTranscoder  
liveStreamTranscoder)
```

onTranscoderSessionVODEncodeStart

```
public abstract void onTranscoderSessionVODEncodeStart(LiveStreamTranscoder  
liveStreamTranscoder,  
TranscoderNativeVODTranscoderSettings videoEncodeSettings)
```

onTranscoderSessionVODEncodeStop

```
public abstract void onTranscoderSessionVODEncodeStop(LiveStreamTranscoder  
liveStreamTranscoder)
```

com.wowza.wms.transcoder.model Interface ITranscoderWorker

public interface **ITranscoderWorker**
extends

For internal use.

Method Summary

abstract void	<u>destroy()</u>
abstract String	<u>getContextStr()</u>
abstract long	<u>getFrameCount()</u>
abstract boolean	<u>isEncoderInUse()</u>
abstract boolean	<u>isRunning()</u> Returns true if transcoder worker is running (internal use)
abstract void	<u>setFrameCount()</u> (long frameCount)

Methods

isRunning

public abstract boolean **isRunning()**

Returns true if transcoder worker is running (internal use)

Returns:

true if transcoder worker is running (internal use)

getFrameCount

public abstract long **getFrameCount()**

setFrameCount

public abstract void **setFrameCount()**(long frameCount)

isEncoderInUse

public abstract boolean **isEncoderInUse()**

(continued from last page)

getContextStr

```
public abstract String getContextStr()
```

destroy

```
public abstract void destroy()
```


com.wowza.wms.transcoder.model Interface ITranscoderWorkerSorterSender

public interface **ITranscoderWorkerSorterSender**
extends

For internal use.

Method Summary

abstract void	addSorterPacket (TranscoderPacketSorterHolder sorterHolder) For internal use.
---------------	---

Methods

addSorterPacket

public abstract void **addSorterPacket**(TranscoderPacketSorterHolder sorterHolder)

For internal use.

Parameters:

sorterHolder - sorter holder

com.wowza.wms.transcoder.model Class LiveStreamTranscoderActionNotifyBase

java.lang.Object

└-com.wowza.wms.transcoder.model.LiveStreamTranscoderActionNotifyBase

All Implemented Interfaces:

[ILiveStreamTranscoderActionNotify](#)

public class **LiveStreamTranscoderActionNotifyBase**
 extends Object
 implements [ILiveStreamTranscoderActionNotify](#)

Constructor Summary

public	LiveStreamTranscoderActionNotifyBase()
--------	--

Method Summary

void	onCalculateSourceAudioBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate)
void	onCalculateSourceVideoBitrate (LiveStreamTranscoder liveStreamTranscoder, long bitrate)
void	onInitAfterLoadTemplate (LiveStreamTranscoder liveStreamTranscoder)
void	onInitBeforeLoadTemplate (LiveStreamTranscoder liveStreamTranscoder)
void	onInitStart (LiveStreamTranscoder liveStreamTranscoder, String streamName, String transcoderName, IApplicationInstance appInstance, LiveStreamTranscoderItem liveStreamTranscoderItem)
void	onInitStop (LiveStreamTranscoder liveStreamTranscoder)
void	onRegisterStreamNameGroup (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup)
void	onResetStream (LiveStreamTranscoder liveStreamTranscoder)
void	onSessionAudioDecodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onSessionAudioEncodeCodecInfo (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode, com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
void	onSessionAudioEncodeCreate (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)

void	<u>onSessionAudioEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)
void	<u>onSessionAudioEncodeSetup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionAudioEncode sessionAudioEncode)
void	<u>onSessionDataEncodeCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode)
void	<u>onSessionDataEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDataEncode sessionDataEncode)
void	<u>onSessionDestinationCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionDestination sessionDestination)
void	<u>onSessionVideoDecodeCodecInfo</u> (LiveStreamTranscoder liveStreamTranscoder, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	<u>onSessionVideoEncodeCodecInfo</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode, com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
void	<u>onSessionVideoEncodeCreate</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	<u>onSessionVideoEncodeInit</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	<u>onSessionVideoEncodeSetup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderSessionVideoEncode sessionVideoEncode)
void	<u>onShutdownStart</u> (LiveStreamTranscoder liveStreamTranscoder)
void	<u>onShutdownStop</u> (LiveStreamTranscoder liveStreamTranscoder)
void	<u>onUnregisterStreamNameGroup</u> (LiveStreamTranscoder liveStreamTranscoder, TranscoderStreamNameGroup streamNameGroup)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transcoder.model.ILiveStreamTranscoderActionNotify](#)

[onCalculateSourceAudioBitrate](#), [onCalculateSourceVideoBitrate](#), [onInitAfterLoadTemplate](#), [onInitBeforeLoadTemplate](#), [onInitStart](#), [onInitStop](#), [onRegisterStreamNameGroup](#), [onResetStream](#), [onSessionAudioDecodeCodecInfo](#), [onSessionAudioEncodeCodecInfo](#), [onSessionAudioEncodeCreate](#), [onSessionAudioEncodeInit](#), [onSessionAudioEncodeSetup](#), [onSessionDataEncodeCreate](#), [onSessionDataEncodeInit](#), [onSessionDestinationCreate](#), [onSessionVideoDecodeCodecInfo](#), [onSessionVideoEncodeCodecInfo](#), [onSessionVideoEncodeCreate](#), [onSessionVideoEncodeInit](#), [onSessionVideoEncodeSetup](#), [onShutdownStart](#), [onShutdownStop](#), [onUnregisterStreamNameGroup](#)

Constructors

LiveStreamTranscoderActionNotifyBase

```
public LiveStreamTranscoderActionNotifyBase()
```

Methods

onInitStart

```
public void onInitStart(LiveStreamTranscoder liveStreamTranscoder,  
    String streamName,  
    String transcoderName,  
    IApplicationInstance appInstance,  
    LiveStreamTranscoderItem liveStreamTranscoderItem)
```

onInitBeforeLoadTemplate

```
public void onInitBeforeLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

onInitAfterLoadTemplate

```
public void onInitAfterLoadTemplate(LiveStreamTranscoder liveStreamTranscoder)
```

onInitStop

```
public void onInitStop(LiveStreamTranscoder liveStreamTranscoder)
```

onCalculateSourceVideoBitrate

```
public void onCalculateSourceVideoBitrate(LiveStreamTranscoder liveStreamTranscoder,  
    long bitrate)
```

onCalculateSourceAudioBitrate

```
public void onCalculateSourceAudioBitrate(LiveStreamTranscoder liveStreamTranscoder,  
    long bitrate)
```

onSessionDestinationCreate

```
public void onSessionDestinationCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDestination sessionDestination)
```

(continued from last page)

onSessionVideoEncodeCreate

```
public void onSessionVideoEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeCreate

```
public void onSessionAudioEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

onSessionDataEncodeCreate

```
public void onSessionDataEncodeCreate(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

onSessionVideoEncodeInit

```
public void onSessionVideoEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeInit

```
public void onSessionAudioEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

onSessionDataEncodeInit

```
public void onSessionDataEncodeInit(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionDataEncode sessionDataEncode)
```

onSessionVideoEncodeSetup

```
public void onSessionVideoEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode)
```

onSessionAudioEncodeSetup

```
public void onSessionAudioEncodeSetup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode)
```

(continued from last page)

onSessionVideoEncodeCodecInfo

```
public void onSessionVideoEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionVideoEncode sessionVideoEncode,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onSessionAudioEncodeCodecInfo

```
public void onSessionAudioEncodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderSessionAudioEncode sessionAudioEncode,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onSessionVideoDecodeCodecInfo

```
public void onSessionVideoDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoVideo codecInfoVideo)
```

onSessionAudioDecodeCodecInfo

```
public void onSessionAudioDecodeCodecInfo(LiveStreamTranscoder liveStreamTranscoder,  
    com.wowza.wms.media.model.MediaCodecInfoAudio codecInfoAudio)
```

onShutdownStart

```
public void onShutdownStart(LiveStreamTranscoder liveStreamTranscoder)
```

onShutdownStop

```
public void onShutdownStop(LiveStreamTranscoder liveStreamTranscoder)
```

onResetStream

```
public void onResetStream(LiveStreamTranscoder liveStreamTranscoder)
```

onRegisterStreamNameGroup

```
public void onRegisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

onUnregisterStreamNameGroup

```
public void onUnregisterStreamNameGroup(LiveStreamTranscoder liveStreamTranscoder,  
    TranscoderStreamNameGroup streamNameGroup)
```

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com.wowza.wms.transcoder.model Class TranscoderNativeVideoFrame

java.lang.Object

└-com.wowza.wms.transcoder.model.TranscoderNativeVideoFrame

public class **TranscoderNativeVideoFrame**
extends Object

Native video frame.

Field Summary

public	bytes
public static final	DESTINATION_ALIGN_BOTTOM Value: 64
public static final	DESTINATION_ALIGN_HCENTER Value: 2
public static final	DESTINATION_ALIGN_LEFT Value: 1
public static final	DESTINATION_ALIGN_RIGHT Value: 4
public static final	DESTINATION_ALIGN_TOP Value: 16
public static final	DESTINATION_ALIGN_VCENTER Value: 32
public	dstAlign
public	dstHeight
public	dstWidth
public	dstX
public	dstY
public	fourcc
public	frameStartOffset

public	height
public	stride
public	timecode
public	width

Constructor Summary

public	TranscoderNativeVideoFrame()
--------	--

Method Summary

static int	deserialize (TranscoderNativeVideoFrame obj, byte[] buffer, int pos, boolean includeByteArray)
byte[]	getBytes() Get the raw image bytes.
int	getDstAlign() Get destination origin align (see DESTINATION_ALIGN_*)
int	getDstHeight() Get destination height
int	getDstWidth() Get destination width
int	getDstX() Get the destination x offset
int	getDstY() Get the destination y offset
long	getFourcc() Get the FOURCC format for this image (always BGRA)
long	getFrameStartOffset() Get the offset to first image row byte.
int	getHeight() Get image height
int	getSerializationSize (boolean includeByteArray)
long	getStride() Get the number of bytes in each image row.
long	getTimecode() Get timecode (milliseconds) of this frame if it is a frame grab.
int	getWidth() Get image width

int	<code>serialize</code> (byte[] buffer, int pos, boolean includeByteArray)
void	<code>setBytes</code> (byte[] bytes) Set raw image bytes.
void	<code>setDstAlign</code> (int dstAlign) Set destination origin align (see DESTINATION_ALIGN_*)
void	<code>setDstHeight</code> (int dstHeight) Set destination height
void	<code>setDstWidth</code> (int dstWidth) Set destination width
void	<code>setDstX</code> (int dstX) Set the destination x offset
void	<code>setDstY</code> (int dstY) Set the destination y offset
void	<code>setFourcc</code> (long fourcc) Set the FOURCC format for this image (always BGRA)
void	<code>setFrameStartOffset</code> (long frameStartOffset) Set the offset to first image row byte.
void	<code>setHeight</code> (int height) Set image height
void	<code>setStride</code> (long stride) Set the number of bytes in each image row.
void	<code>setTimecode</code> (long timecode) Set timecode (milliseconds) of this frame if it is a frame grab.
void	<code>setWidth</code> (int width) Set image width

Methods inherited from class java.lang.Object

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

DESTINATION_ALIGN_LEFT

```
public static final int DESTINATION_ALIGN_LEFT
```

Constant value: **1**

DESTINATION_ALIGN_HCENTER

```
public static final int DESTINATION_ALIGN_HCENTER
```

(continued from last page)

Constant value: **2**

DESTINATION_ALIGN_RIGHT

```
public static final int DESTINATION_ALIGN_RIGHT
```

Constant value: **4**

DESTINATION_ALIGN_TOP

```
public static final int DESTINATION_ALIGN_TOP
```

Constant value: **16**

DESTINATION_ALIGN_VCENTER

```
public static final int DESTINATION_ALIGN_VCENTER
```

Constant value: **32**

DESTINATION_ALIGN_BOTTOM

```
public static final int DESTINATION_ALIGN_BOTTOM
```

Constant value: **64**

fourcc

```
public long fourcc
```

bytes

```
public byte bytes
```

stride

```
public long stride
```

frameStartOffset

```
public long frameStartOffset
```

width

```
public int width
```

height

```
public int height
```

timecode

```
public long timecode
```

dstX

```
public int dstX
```

dstY

```
public int dstY
```

dstWidth

```
public int dstWidth
```

dstHeight

```
public int dstHeight
```

dstAlign

```
public int dstAlign
```

Constructors

TranscoderNativeVideoFrame

```
public TranscoderNativeVideoFrame()
```

Methods

getSerializationSize

```
public int getSerializationSize(boolean includeByteArray)
```

serialize

```
public int serialize(byte[] buffer,  
                    int pos,  
                    boolean includeByteArray)
```

deserialize

```
public static int deserialize(TranscoderNativeVideoFrame obj,  
                             byte[] buffer,  
                             int pos,  
                             boolean includeByteArray)
```

getFourcc

```
public long getFourcc()
```

Get the FOURCC format for this image (always BGRA)

Returns:

FOURCC format

setFourcc

```
public void setFourcc(long fourcc)
```

Set the FOURCC format for this image (always BGRA)

Parameters:

fourcc - FOURCC format

getBytes

```
public byte[] getBytes()
```

Get the raw image bytes.

Returns:

raw image bytes

setBytes

```
public void setBytes(byte[] bytes)
```

Set raw image bytes.

Parameters:

bytes - raw image bytes

getStride

```
public long getStride()
```

Get the number of bytes in each image row.

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Returns:

number of bytes in each image row

setStride

```
public void setStride(long stride)
```

Set the number of bytes in each image row.

Parameters:

stride - number of bytes in each image row

getFrameStartOffset

```
public long getFrameStartOffset()
```

Get the offset to first image row byte.

Returns:

offset to first image row byte

setFrameStartOffset

```
public void setFrameStartOffset(long frameStartOffset)
```

Set the offset to first image row byte.

Parameters:

frameStartOffset - offset to first image row byte

getWidth

```
public int getWidth()
```

Get image width

Returns:

image width

setWidth

```
public void setWidth(int width)
```

Set image width

Parameters:

width - image width

getHeight

```
public int getHeight()
```

Get image height

Returns:

image height

setHeight

```
public void setHeight(int height)
```

Set image height

Parameters:

height - image height

getDstX

```
public int getDstX()
```

Get the destination x offset

Returns:

destination x offset

setDstX

```
public void setDstX(int dstX)
```

Set the destination x offset

Parameters:

dstX - destination x offset

getDstY

```
public int getDstY()
```

Get the destination y offset

Returns:

destination y offset

setDstY

```
public void setDstY(int dstY)
```

Set the destination y offset

Parameters:

dstY - destination y offset

getDstWidth

```
public int getDstWidth()
```

Get destination width

Returns:

destination width

setDstWidth

```
public void setDstWidth(int dstWidth)
```

(continued from last page)

Set destination width

Parameters:

dstWidth - destination width

getDstHeight

```
public int getDstHeight()
```

Get destination height

Returns:

destination height

setDstHeight

```
public void setDstHeight(int dstHeight)
```

Set destination height

Parameters:

dstHeight - destination height

getDstAlign

```
public int getDstAlign()
```

Get destination origin align (see DESTINATION_ALIGN_*)

Returns:

destination origin align

setDstAlign

```
public void setDstAlign(int dstAlign)
```

Set destination origin align (see DESTINATION_ALIGN_*)

Parameters:

dstAlign - destination origin align

getTimecode

```
public long getTimecode()
```

Get timecode (milliseconds) of this frame if it is a frame grab.

Returns:

timecode (milliseconds)

setTimecode

```
public void setTimecode(long timecode)
```

Set timecode (milliseconds) of this frame if it is a frame grab.

Parameters:

timecode - timecode (milliseconds)

com.wowza.wms.transcoder.model Class TranscoderVideoOverlayFrame

java.lang.Object

└─com.wowza.wms.transcoder.model.TranscoderVideoOverlayFrame

public class **TranscoderVideoOverlayFrame**
extends Object

TranscoderVideoOverlayFrame: Video overlay frame.

Field Summary

public	enabled
public	imagePath
public	index
public	lastModDate
public static final	LOADSTATE_FAILURE Value: 2
public static final	LOADSTATE_INIT Value: 0
public static final	LOADSTATE_SUCCESS Value: 1
public	opacity
public	videoFrame

Constructor Summary

public	TranscoderVideoOverlayFrame()
public	TranscoderVideoOverlayFrame (String imagePath)
public	TranscoderVideoOverlayFrame (String imagePath, int opacity)
public	TranscoderVideoOverlayFrame (int width, int height, byte[] buffer)

Method Summary

int	<u>getDstAlign()</u>
int	<u>getDstHeight()</u>
int	<u>getDstWidth()</u>
int	<u>getDstX()</u>
int	<u>getDstY()</u>
String	<u>getImagePath()</u> Get the path to the overlay image.
int	<u>getIndex()</u> Get overlay index (z-order)
long	<u>getLastModDate()</u>
int	<u>getOpacity()</u>
<u>TranscoderNativeVideoFrame</u>	<u>getVideoFrame()</u> Get the video frame.
boolean	<u>isCheckForUpdates()</u>
boolean	<u>isEnabled()</u> Is this overlay enabled.
boolean	<u>isGood()</u>
boolean	<u>isImageFileUpdated()</u> <u>IApplicationInstance</u> appInstance)
boolean	<u>isTransparent()</u>
boolean	<u>loadImage()</u> <u>IApplicationInstance</u> appInstance, boolean reload) If you set a path to an image file (JPG, PNG, BMP...) this will load the image into this object.
void	<u>setCheckForUpdates()</u> (boolean checkForUpdates)
void	<u>setDstAlign()</u> (int align)
void	<u>setDstHeight()</u> (int height)
void	<u>setDstWidth()</u> (int width)
void	<u>setDstX()</u> (int x)
void	<u>setDstY()</u> (int y)
void	<u>setEnabled()</u> (boolean enabled) Set is this overlay enabled.

void	<code>setImagePath</code> (String imagePath) Set the path to the overlay image.
void	<code>setIndex</code> (int index) Set overlay index (z-order)
void	<code>setLastModDate</code> (long lastModDate)
void	<code>setOpacity</code> (int opacity)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

LOADSTATE_INIT

```
public static final int LOADSTATE_INIT
```

Constant value: **0**

LOADSTATE_SUCCESS

```
public static final int LOADSTATE_SUCCESS
```

Constant value: **1**

LOADSTATE_FAILURE

```
public static final int LOADSTATE_FAILURE
```

Constant value: **2**

videoFrame

```
public com.wowza.wms.transcoder.model.TranscoderNativeVideoFrame videoFrame
```

enabled

```
public boolean enabled
```

index

```
public int index
```

imagePath

```
public java.lang.String imagePath
```

opacity

```
public int opacity
```

lastModDate

```
public long lastModDate
```

Constructors

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame()
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(String imagePath)
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(String imagePath,  
                                     int opacity)
```

TranscoderVideoOverlayFrame

```
public TranscoderVideoOverlayFrame(int width,  
                                     int height,  
                                     byte[] buffer)
```

Methods

isGood

```
public boolean isGood()
```

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isImageFileUpdated

```
public boolean isImageFileUpdated(IApplicationInstance appInstance)
```

loadImage

```
public boolean loadImage(IApplicationInstance appInstance,  
    boolean reload)
```

If you set a path to an image file (JPG, PNG, BMP...) this will load the image into this object.

Parameters:

appInstance - application instance
reload - is it an image reload

Returns:

true if successful

isEnabled

```
public boolean isEnabled()
```

Is this overlay enabled.

Returns:

overlay enabled

setEnabled

```
public void setEnabled(boolean enabled)
```

Set is this overlay enabled.

Parameters:

enabled - overlay enabled

getVideoFrame

```
public TranscoderNativeVideoFrame getVideoFrame()
```

Get the video frame.

Returns:

video frame

getIndex

```
public int getIndex()
```

Get overlay index (z-order)

Returns:

overlay index (z-order)

(continued from last page)

setIndex

```
public void setIndex(int index)
```

Set overlay index (z-order)

Parameters:

index - overlay index (z-order)

getImagePath

```
public String getImagePath()
```

Get the path to the overlay image.

Returns:

path to the overlay image

setImagePath

```
public void setImagePath(String imagePath)
```

Set the path to the overlay image.

Parameters:

imagePath - path to the overlay image

getOpacity

```
public int getOpacity()
```

setOpacity

```
public void setOpacity(int opacity)
```

getDstX

```
public int getDstX()
```

setDstX

```
public void setDstX(int x)
```

getDstY

```
public int getDstY()
```

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setDstY

```
public void setDstY(int y)
```

getDstWidth

```
public int getDstWidth()
```

setDstWidth

```
public void setDstWidth(int width)
```

getDstHeight

```
public int getDstHeight()
```

setDstHeight

```
public void setDstHeight(int height)
```

getDstAlign

```
public int getDstAlign()
```

setDstAlign

```
public void setDstAlign(int align)
```

getLastModDate

```
public long getLastModDate()
```

setLastModDate

```
public void setLastModDate(long lastModDate)
```

isCheckForUpdates

```
public boolean isCheckForUpdates()
```

(continued from last page)

setCheckForUpdates

```
public void setCheckForUpdates(boolean checkForUpdates)
```

isTransparent

```
public boolean isTransparent()
```

Package

com.wowza.wms.transport.media

com.wowza.wms.transport.media Interface IMediaTransport

public interface **IMediaTransport**
extends

MediaTransport sub system. It manages transport providers and how objects are passed to each provider.

Method Summary

abstract void	<u>addTransportDataObject</u> (<u>IMediaTransportDataObject</u> transportDataObject) Adds a data object to the MediaTransport system which is then pushed to the transport providers configured.
abstract void	<u>addTransportListener</u> (<u>IMediaTransportListener</u> listener) This adds a transport listener which has the following calls onTransportProviderAdd onTransportProviderRemove These are triggered when a transport provider is added or removed.
abstract boolean	<u>addTransportProvider</u> (<u>IMediaTransportProvider</u> transportProvider) This adds a transport provider to the list of providers to use for any data objects passed into the MediaTransport system.
abstract boolean	<u>getDebug</u> () Get the state of the debugging flag.
abstract java.util.List	<u>getTransportListeners</u> () Returns a list of transport listeners available to the MediaTransport system.
abstract java.util.List	<u>getTransportProviders</u> () Returns a list of transport providers available to the MediaTransport system.
abstract void	<u>init</u> () Initialises the MediaTransport sub system.
abstract boolean	<u>isReady</u> () Return if the MediaTransport system is ready.
abstract boolean	<u>removeTransportProvider</u> (<u>IMediaTransportProvider</u> transportProvider) This removes a transport provider from the list of providers in use.
abstract void	<u>removeTransportProviderListener</u> (<u>IMediaTransportListener</u> listener) This removes a transport listener.
abstract void	<u>setDebug</u> (boolean debug) Set the debug flag, by default it should be false.
abstract void	<u>setIsReady</u> (boolean ready) This should be set to true if the MediaTransport object initialised correctly.

Methods

(continued from last page)

init

```
public abstract void init()
```

Initialises the MediaTransport sub system. This should be called prior immediately and instantiation.

setDebug

```
public abstract void setDebug(boolean debug)
```

Set the debug flag, by default it should be false.

Parameters:

debug - boolean

getDebug

```
public abstract boolean getDebug()
```

Get the state of the debugging flag.

Returns:

boolean

isReady

```
public abstract boolean isReady()
```

Return if the MediaTransport system is ready. It should only return true if at least one(1) transport provider has been added and it initialised correctly.

Returns:

boolean

setIsReady

```
public abstract void setIsReady(boolean ready)
```

This should be set to true if the MediaTransport object initialised correctly. Even when this is set to true isReady() should only return true if at least one(1) transport provider has been added.

Parameters:

ready

addTransportProvider

```
public abstract boolean addTransportProvider(IMediaTransportProvider  
transportProvider)
```

This adds a transport provider to the list of providers to use for any data objects passed into the MediaTransport system. The transport provider should be fully configured and initialised before being added. If the MediaTransport system allows the provider to be added it returns true. You can not add the same MediaTransport provider more than once, if you want to send objects to similar type destinations you MUST create two providers. When adding a provider it can ONLY return true if the MediaTransport object has been initialised.

Parameters:

transportProvider

Returns:

(continued from last page)

removeTransportProvider

```
public abstract boolean removeTransportProvider(IMediaTransportProvider
transportProvider)
```

This removes a transport provider from the list of providers in use. If the transport provider specified is not found as active then false is returned, otherwise it is true. Removing a transport provider should not interrupt any transport in progress.

Parameters:

transportProvider

Returns:

getTransportProviders

```
public abstract java.util.List getTransportProviders()
```

Returns a list of transport providers available to the MediaTransport system.

Returns:

List

addTransportListener

```
public abstract void addTransportListener(IMediaTransportListener listener)
```

This adds a transport listener which has the following calls onTransportProviderAdd onTransportProviderRemove These are triggered when a transport provider is added or removed.

Parameters:

IMediaTransportListener

removeTransportProviderListener

```
public abstract void removeTransportProviderListener(IMediaTransportListener listener)
```

This removes a transport listener.

Parameters:

IMediaTransportListener

getTransportListeners

```
public abstract java.util.List getTransportListeners()
```

Returns a list of transport listeners available to the MediaTransport system.

Returns:

List

addTransportDataObject

```
public abstract void addTransportDataObject(IMediaTransportDataObject
transportDataObject)
```

Adds a data object to the MediaTransport system which is then pushed to the transport providers configured.

(continued from last page)

Parameters:

IMediaTransportDataObject

com.wowza.wms.transport.media Interface IMediaTransportDataObject

public interface **IMediaTransportDataObject**
extends

IMediaTransportDataObject This object is used by the MediaTransport sub system and should contain a command (used by the appropriate transport provider), content-type, path and a byte[] array of the data to transport.

Method Summary

abstract String	<code>getCommand()</code> Get the command set
abstract String	<code>getContentType()</code> Get the content type set.
abstract byte[]	<code>getData()</code> Get the data body set
abstract String	<code>getHeader(String name)</code>
abstract java.util.HashMap	<code>getHeaders()</code>
abstract String	<code>getOption(String name)</code> Get an option for this object.
abstract java.util.HashMap	<code>getOptions()</code> Get the map of options set for this object.
abstract String	<code>getPath()</code> Get the path set
abstract String	<code>getUUID()</code> Return the UUID created when the object was initialised.
abstract void	<code>init()</code> This initialises the object.
abstract void	<code>setCommand(String command)</code> This is the command the object needs to use to execute transport within the transport provider.
abstract void	<code>setContentType(String contentType)</code> Set the content type of the object.
abstract void	<code>setData(byte[] data)</code> This sets the data body of the object and must be a byte array.
abstract void	<code>setHeader(String name, String value)</code>
abstract void	<code>setOption(String name, String value)</code> Set an option for this object.

abstract void

[setPath](#)(String path)

This sets the destination path of the object.

Methods

init

```
public abstract void init()
```

This initialises the object. IT MUST create a UUID for the object upon initialisation and MUST be a string. It is up to the individual implementation to determine the format however MUST have a low chance of conflict for the period of use of the specific object.

getUUID

```
public abstract String getUUID()
```

Return the UUID created when the object was initialised.

Returns:

String

setContentType

```
public abstract void setContentType(String contentType)
```

Set the content type of the object. This should be a known MIME type that can be understood by the destination for the transport provider being used.

Parameters:

String

setCommand

```
public abstract void setCommand(String command)
```

This is the command the object needs to use to execute transport within the transport provider. A default provider available is a HTTP provider so common commands would be GET, PUT, POST, DELETE This is implementation independent so can be anything the provider can understand.

Parameters:

String

setData

```
public abstract void setData(byte[] data)
```

This sets the data body of the object and must be a byte array.

Parameters:

byte[]

setPath

```
public abstract void setPath(String path)
```

(continued from last page)

This sets the destination path of the object. This will be used by the transport provider. A common path could be /sample.mp4 which would indicate the data set should be stored as sample.mp4 in the root of the transport provider destination.

Parameters:String

getData

```
public abstract byte[] getData()
```

Get the data body set

Returns:byte[]

getPath

```
public abstract String getPath()
```

Get the path set

Returns:String

getContentType

```
public abstract String getContentType()
```

Get the content type set.

Returns:String

getCommand

```
public abstract String getCommand()
```

Get the command set

Returns:String

setOption

```
public abstract void setOption(String name,  
                                String value)
```

Set an option for this object. The option name set would be used by a transport provider when transporting this object.

Parameters:

String

String

getOption

```
public abstract String getOption(String name)
```

Get an option for this object. If the option named does not exist it should return null.

(continued from last page)

Parameters:

String

Returns:String

getOptions

```
public abstract java.util.HashMap getOptions()
```

Get the map of options set for this object.

Returns:HashMap

setHeader

```
public abstract void setHeader(String name,  
                                String value)
```

getHeader

```
public abstract String getHeader(String name)
```

getHeaders

```
public abstract java.util.HashMap getHeaders()
```

com.wowza.wms.transport.media

Interface IMediaTransportListener

public interface **IMediaTransportListener**
extends

IMediaTransportListener provides call backs when a transport provider is added or removed from the MediaTransport system.

Method Summary	
abstract void	onTransportProviderAdd (IMediaTransportProvider thisProvider) When a transport provider is added this call back is triggered.
abstract void	onTransportProviderRemove (IMediaTransportProvider thisProvider) When a transport provider is removed this call back is triggered.

Methods

onTransportProviderAdd

public abstract void **onTransportProviderAdd**([IMediaTransportProvider](#) thisProvider)

When a transport provider is added this call back is triggered.

Parameters:
[IMediaTransportProvider](#)

onTransportProviderRemove

public abstract void **onTransportProviderRemove**([IMediaTransportProvider](#) thisProvider)

When a transport provider is removed this call back is triggered.

Parameters:
[IMediaTransportProvider](#)

com.wowza.wms.transport.media Interface IMediaTransportObject

public interface **IMediaTransportObject**
extends

IMediaTransportObject This object is used by a transport provider to manage data delivery. This is used by the MediaTransportProviderBase class and is an internal object only.

Method Summary

abstract IMediaTransportDataObject	getDataObject() Gets the IMediaTransportDataObject from this transport object.
abstract int	getMaxAttempts() Gets the max attempts for this object.
abstract long	getRetryTime() Gets the retry time for this object.
abstract void	setDataObject(IMediaTransportDataObject dataObject) Sets the IMediaTransportDataObject object for this transport object
abstract void	setMaxAttempts(int attempts) Sets the max attempts for this object.
abstract void	setRetryTime(long retrytime) Sets the retry time for this object.

Methods

setDataObject

public abstract void **setDataObject**([IMediaTransportDataObject](#) dataObject)

Sets the IMediaTransportDataObject object for this transport object

Parameters:

[IMediaTransportDataObject](#)

getDataObject

public abstract [IMediaTransportDataObject](#) **getDataObject()**

Gets the IMediaTransportDataObject from this transport object.

Returns:

[IMediaTransportDataObject](#)

setRetryTime

public abstract void **setRetryTime**(long retrytime)

(continued from last page)

Sets the retry time for this object.

Parameters:
long

getRetryTime

```
public abstract long getRetryTime()
```

Gets the retry time for this object.

Returns:
long

setMaxAttempts

```
public abstract void setMaxAttempts(int attempts)
```

Sets the max attempts for this object.

Parameters:
int

getMaxAttempts

```
public abstract int getMaxAttempts()
```

Gets the max attempts for this object.

Returns:
int

com.wowza.wms.transport.media Interface IMediaTransportProvider

public interface **IMediaTransportProvider**
extends

IMediaTransportProvider enables data objects to be transported to the defined destination.

Field Summary

public static final	<u>TRANSPORT_PROVIDER_DEFAULT_PROCESS</u> Value: 2
public static final	<u>TRANSPORT_PROVIDER_PROCESS_ASYNC</u> Value: 2
public static final	<u>TRANSPORT_PROVIDER_PROCESS_SYNC</u> Value: 1

Method Summary

abstract void	<u>addProviderListener</u> (<u>IMediaTransportProviderListener</u> providerlistener) This adds a transport provider listener which has the following calls onTransportObjectStatus This is triggered when a transport provider attempts to transport an object.
abstract boolean	<u>addTransportObject</u> (<u>IMediaTransportDataObject</u> transportDataObject) This method gets called by the IMediaTransport object when a data object is added for transport.
abstract boolean	<u>getDebug</u> () Get the debug flag set.
abstract int	<u>getTransportProcessType</u> () Get the transport type used by this provider.
abstract <u>IMediaTransportProviderConfiguration</u>	<u>getTransportProviderConfiguration</u> () Get the configuration for this transport provider
abstract String	<u>getTransportProviderName</u> () Get the transport provider name.
abstract void	<u>init</u> () Initialise this transport provider.
abstract boolean	<u>isReady</u> () This should return true if the transport provider is ready to use.
abstract void	<u>removeProviderListener</u> (<u>IMediaTransportProviderListener</u> providerlistener) This removes a transport provider listener.
abstract void	<u>setDebug</u> (boolean debug) Set the debug flag.

abstract void	<code>setIsReady</code> (boolean ready) Set the state of the transport provider.
abstract void	<code>setThreadPoolSize</code> (int threadpoolsize) If you have configured the transport provider to use ASYNC processing then you should also define a thread pool size.
abstract void	<code>setTransportProcessType</code> (int type) Set the processing type for this provider.
abstract void	<code>setTransportProviderConfiguration</code> (<code>IMediaTransportProviderConfiguration</code> configuration) Set the configuration for this transport provider
abstract void	<code>setTransportProviderName</code> (String methodName) Set the name of this transport provider.
abstract <code>IMediaTransportResponse</code>	<code>transportObject</code> (<code>IMediaTransportObject</code> transportObject) This is called when the provider attempts to transport the object.

Fields

TRANSPORT_PROVIDER_PROCESS_SYNC

public static final int **TRANSPORT_PROVIDER_PROCESS_SYNC**

Constant value: **1**

TRANSPORT_PROVIDER_PROCESS_ASYNC

public static final int **TRANSPORT_PROVIDER_PROCESS_ASYNC**

Constant value: **2**

TRANSPORT_PROVIDER_DEFAULT_PROCESS

public static final int **TRANSPORT_PROVIDER_DEFAULT_PROCESS**

Constant value: **2**

Methods

setTransportProviderConfiguration

public abstract void
setTransportProviderConfiguration([`IMediaTransportProviderConfiguration`](#) configuration)

Set the configuration for this transport provider

Parameters:

`IMediaTransportProviderConfiguration`

(continued from last page)

getTransportProviderConfiguration

```
public abstract IMediaTransportProviderConfiguration  
getTransportProviderConfiguration()
```

Get the configuration for this transport provider

Returns:

[IMediaTransportProviderConfiguration](#)

init

```
public abstract void init()
```

Initialise this transport provider. This should ONLY be called AFTER the configuration has been added so to allow any custom initialisation from the configuration provided.

setDebug

```
public abstract void setDebug(boolean debug)
```

Set the debug flag. By default it should be false

Parameters:

boolean

getDebug

```
public abstract boolean getDebug()
```

Get the debug flag set.

Returns:

boolean

setTransportProcessType

```
public abstract void setTransportProcessType(int type)
```

Set the processing type for this provider. It should be set as `MediaTransportProviderBase.TRANSPORT_PROVIDER_PROCESS_SYNC` or `MediaTransportProviderBase.TRANSPORT_PROVIDER_PROCESS_ASYNC` The provider MUST provide both synchronous and asynchronous delivery types.

Parameters:

type

getTransportProcessType

```
public abstract int getTransportProcessType()
```

Get the transport type used by this provider.

Returns:

int

setTransportProviderName

```
public abstract void setTransportProviderName(String methodName)
```

(continued from last page)

Set the name of this transport provider. This name is passed to the IMediaTransportProviderListener if implemented when objects have been processed.

Parameters:

String

getTransportProviderName

```
public abstract String getTransportProviderName()
```

Get the transport provider name.

Returns:

String

setThreadPoolSize

```
public abstract void setThreadPoolSize(int threadpoolsize)
```

If you have configured the transport provider to use ASYNC processing then you should also define a thread pool size.

Parameters:

int

addTransportObject

```
public abstract boolean addTransportObject(IMediaTransportDataObject  
transportDataObject)
```

This method gets called by the IMediaTransport object when a data object is added for transport. If this transport provider does not want to handle this object it should return false. If you have configured the transport provider to use ASYNC processing then you need to add this to your pool of executors to process.

Parameters:

IMediaTransportDataObject

Returns:

boolean

transportObject

```
public abstract IMediaTransportResponse transportObject(IMediaTransportObject  
transportObject)
```

This is called when the provider attempts to transport the object. It MUST return an IMediaTransportResponse object.

Parameters:

IMediaTransportObject

Returns:

IMediaTransportResponse

addProviderListener

```
public abstract void addProviderListener(IMediaTransportProviderListener  
providerlistener)
```

This adds a transport provider listener which has the following calls onTransportObjectStatus. This is triggered when a transport provider attempts to transport an object.

(continued from last page)

Parameters:`IMediaTransportProviderListener`

removeProviderListener

```
public abstract void removeProviderListener(IMediaTransportProviderListener
providerlistener)
```

This removes a transport provider listener.

Parameters:`IMediaTransportProviderListener`

isReady

```
public abstract boolean isReady()
```

This should return true if the transport provider is ready to use.

Returns:

setIsReady

```
public abstract void setIsReady(boolean ready)
```

Set the state of the transport provider.

Parameters:`ready`

com.wowza.wms.transport.media Interface IMediaTransportProviderConfiguration

public interface **IMediaTransportProviderConfiguration**
extends

IMediaTransportProviderConfiguration This object provides a mechanism to configure a media transport provider. *

Method Summary

abstract void	<u>addCustomHeader</u> (String name, String value) Add a custom output header for this configuration item.
abstract boolean	<u>getAttributeBoolean</u> (String name) Attempt to get a boolean attribute with the name specified.
abstract int	<u>getAttributeInt</u> (String name) Attempt to get an int attribute with the name specified.
abstract long	<u>getAttributeLong</u> (String name) Attempt to get a long attribute with the name specified.
abstract java.util.Set	<u>getAttributeNames</u> () Get a list of all the attribute names set.
abstract String	<u>getAttributeString</u> (String name) Attempt to get a string attribute with the name specified.
abstract String	<u>getConfigurationName</u> () Get the name of this configuration item.
abstract java.util.HashMap	<u>getCustomHeaders</u> () Get all the custom headers set.
abstract boolean	<u>getDebug</u> () Get the debug flag for this configuration object.
abstract <u>WMSPProperties</u>	<u>getProperties</u> () Get the WMSPProperties holder.
abstract java.util.HashMap	<u>getTransportHeaderOutput</u> (java.util.HashMap dynamictransportinformation, <u>IMediaTransportObject</u> transportObject) This should be called by the transport provider using this configuration item.
abstract void	<u>init</u> () Initialise the provider configuration.
abstract boolean	<u>isReady</u> () Get the ready flag for this configuration object.
abstract void	<u>removeCustomHeader</u> (String name) Remove a custom output header
abstract void	<u>setAttributeBoolean</u> (String name, boolean value) Set an attribute with a boolean type

abstract void	<code>setAttributeInt</code> (String name, int value) Set an attribute with an int type
abstract void	<code>setAttributeLong</code> (String name, long value) Set an attribute with a long type
abstract void	<code>setAttributeString</code> (String name, String value) Set an attribute with a string type
abstract void	<code>setConfigurationName</code> (String name) Set the name of this configuration object.
abstract void	<code>setDebug</code> (boolean debug) Set the debug flag for this configuration object.
abstract void	<code>setIsReady</code> (boolean ready) Set if this configuration object is ready.
abstract void	<code>setProperties</code> (<code>WMSProperties</code> props) When the object is created a WMSProperties holder is created.

Methods

init

public abstract void **init**()

Initialise the provider configuration. This should only be called when all appropriate attributes have been set.

setConfigurationName

public abstract void **setConfigurationName**(String name)

Set the name of this configuration object.

Parameters:

String

getConfigurationName

public abstract String **getConfigurationName**()

Get the name of this configuration item.

Returns:

String

addCustomHeader

public abstract void **addCustomHeader**(String name,
String value)

Add a custom output header for this configuration item. This is more geared towards HTTP transport providers but can be used by any transport provider.

Parameters:

String

(continued from last page)

String

removeCustomHeader

```
public abstract void removeCustomHeader(String name)
```

Remove a custom output header

Parameters:

String

getCustomHeaders

```
public abstract java.util.HashMap getCustomHeaders()
```

Get all the custom headers set.

Returns:

HashMap

setAttributeString

```
public abstract void setAttributeString(String name,  
String value)
```

Set an attribute with a string type

Parameters:

name

value

setAttributeBoolean

```
public abstract void setAttributeBoolean(String name,  
boolean value)
```

Set an attribute with a boolean type

Parameters:

name

boolean

setAttributeLong

```
public abstract void setAttributeLong(String name,  
long value)
```

Set an attribute with a long type

Parameters:

name

long

setAttributeInt

```
public abstract void setAttributeInt(String name,  
int value)
```

Set an attribute with an int type

(continued from last page)

Parameters:name
int

getAttributeString

```
public abstract String getAttributeString(String name)
```

Attempt to get a string attribute with the name specified. If the attribute is not found a null should be returned.

Parameters:

name

Returns:

String

getAttributeBoolean

```
public abstract boolean getAttributeBoolean(String name)
```

Attempt to get a boolean attribute with the name specified. If the attribute is not found false should be returned.

Parameters:

name

Returns:

boolean

getAttributeLong

```
public abstract long getAttributeLong(String name)
```

Attempt to get a long attribute with the name specified. If the attribute is not found -1 should be returned.

Parameters:

name

Returns:

long

getAttributeInt

```
public abstract int getAttributeInt(String name)
```

Attempt to get an int attribute with the name specified. If the attribute is not found -1 should be returned.

Parameters:

name

Returns:

int

getAttributeNames

```
public abstract java.util.Set getAttributeNames()
```

Get a list of all the attribute names set.

(continued from last page)

Returns:
Set

getTransportHeaderOutput

```
public abstract java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
IMediaTransportObject transportObject)
```

This should be called by the transport provider using this configuration item. You can pass in two objects, one is a HashMap and the other is a IMediaTransportObject The result should be a HashMap that the transport provider can then use to process the data block being transported.

Parameters:
HashMap
IMediaTransportObject

Returns:
HashMap

setProperties

```
public abstract void setProperties(WMSPProperties props)
```

When the object is created a WMSPProperties holder is created. This can be changed by setting it with this call. All attributes should be stored within a WMSPProperties object

Parameters:
WMSPProperties

getProperties

```
public abstract WMSPProperties getProperties()
```

Get the WMSPProperties holder.

Returns:
WMSPProperties

setIsReady

```
public abstract void setIsReady(boolean ready)
```

Set if this configuration object is ready. It should be set after init() is called and therefore after any attributes have been set.

Parameters:
boolean

isReady

```
public abstract boolean isReady()
```

Get the ready flag for this configuration object.

Returns:
boolean

(continued from last page)

setDebug

```
public abstract void setDebug(boolean debug)
```

Set the debug flag for this configuration object.

Parameters:

boolean

getDebug

```
public abstract boolean getDebug()
```

Get the debug flag for this configuration object.

Returns:

boolean

com.wowza.wms.transport.media Interface IMediaTransportProviderListener

public interface **IMediaTransportProviderListener**
extends

IMediaTransportProviderListener This listener provides a callback for the status of the transport object status

Method Summary

abstract void	onTransportObjectStatus (int count, IMediaTransportResponse responseObject, String transportProviderName) This is called when an object has been attempted to be transported by a transport provider.
---------------	--

Methods

onTransportObjectStatus

```
public abstract void onTransportObjectStatus(int count,  
    IMediaTransportResponse responseObject,  
    String transportProviderName)
```

This is called when an object has been attempted to be transported by a transport provider. The attempt number is provided
The responseObject should contain the status of the transport attempt The transport provider used for this attempt

Parameters:

- int
- IMediaTransportResponse
- String

com.wowza.wms.transport.media Interface IMediaTransportResponse

public interface **IMediaTransportResponse**
extends

IMediaTransportResponse This object is provided as part of the **IMediaTransportProviderListener** callback. This is an internal object/class.

Field Summary

public static final	<u>RESPONSE_DATA</u> Value: responseData
public static final	<u>RESPONSE_HEADERS</u> Value: responseHeaders
public static final	<u>RESPONSE_INDICATOR</u> Value: responseIndicator

Method Summary

abstract void	<u>addSuccessData</u> (String key, byte[] data) In order to provide as much flexibility as possible it is possible to add 'success' data to the response object in the form of a key and a byte array.
abstract String	<u>getBasicMessage</u> () Get the basic message for the response object.
abstract String	<u>getCommand</u> () Get the command for the response object.
abstract String	<u>getContentType</u> () Get the content type for the response object.
abstract String	<u>getPath</u> () Get the path for the response object.
abstract boolean	<u>getSuccess</u> () Get the success flag from the response object.
abstract byte[]	<u>getSuccessData</u> (String key) Get the success data available
abstract java.util.List	<u>getSuccessKeyList</u> () Get the list of keys that the success data contains.
abstract String	<u>getUUID</u> () Get the UUID of the object.
abstract void	<u>setbasicMessage</u> (String basicMessage) Set a basic message for the response object.

abstract void	<code>setCommand</code> (String command) Set the command type for the response object.
abstract void	<code>setContentType</code> (String contenttype) Set the content type for the response object.
abstract void	<code>setPath</code> (String path) Set the path for the response object.
abstract void	<code>setSuccess</code> (boolean success) Set the success flag for the response object.
abstract void	<code>setUUID</code> (String id) Sets the UUID of the response object.

Fields

RESPONSE_HEADERS

```
public static final java.lang.String RESPONSE_HEADERS
```

Constant value: **responseHeaders**

RESPONSE_INDICATOR

```
public static final java.lang.String RESPONSE_INDICATOR
```

Constant value: **responseIndicator**

RESPONSE_DATA

```
public static final java.lang.String RESPONSE_DATA
```

Constant value: **responseData**

Methods

setUUID

```
public abstract void setUUID(String id)
```

Sets the UUID of the response object. This should match the IMediaTransportDataObject UUID created when it was initialised.

Parameters:
String

getUUID

```
public abstract String getUUID()
```

Get the UUID of the object.

Returns:

(continued from last page)

String

setPath

```
public abstract void setPath(String path)
```

Set the path for the response object. This should match the IMediaTransportDataObject path setting.

Parameters:

String

getPath

```
public abstract String getPath()
```

Get the path for the response object.

Returns:

String

setContentType

```
public abstract void setContentType(String contenttype)
```

Set the content type for the response object. This should match the IMediaTransportDataObject content type setting.

Parameters:

String

getContentType

```
public abstract String getContentType()
```

Get the content type for the response object.

Returns:

String

setCommand

```
public abstract void setCommand(String command)
```

Set the command type for the response object. This should match the IMediaTransportDataObject command setting.

Parameters:

String

getCommand

```
public abstract String getCommand()
```

Get the command for the response object.

Returns:

String

(continued from last page)

setbasicMessage

```
public abstract void setbasicMessage(String basicMessage)
```

Set a basic message for the response object. This allows basic string messages for state to be available in the IMediaTransportProviderListener callback. A common message would be SUCCESS or FAILED.

Parameters:

String

getBasicMessage

```
public abstract String getBasicMessage()
```

Get the basic message for the response object.

Returns:

String

setSuccess

```
public abstract void setSuccess(boolean success)
```

Set the success flag for the response object. If the transport was successful then it should be set to true.

Parameters:

boolean

getSuccess

```
public abstract boolean getSuccess()
```

Get the success flag from the response object.

Returns:

boolean

addSuccessData

```
public abstract void addSuccessData(String key,  
                                     byte[] data)
```

In order to provide as much flexibility as possible it is possible to add 'success' data to the response object in the form of a key and a byte array. An example would be as follows `MediaTransportConfiguration.HTTP.RESPONSE_INDICATOR, String.valueOf("200").getBytes());` This is done within the `MediaTransportProviderhHTTP` and allows the response code 200 to be added into the success data. There are 3 defined responses, although you can add any you wish

- `IMediaTransportProviderConfiguration.RESPONSE_INDICATOR`
- `IMediaTransportProviderConfiguration.RESPONSE_HEADERS`
- `IMediaTransportProviderConfiguration.RESPONSE_DATA`

Parameters:

key

data

getSuccessData

```
public abstract byte[] getSuccessData(String key)
```

Get the success data available

(continued from last page)

Parameters:

String

Returns:

byte[]

getSuccessKeyList

```
public abstract java.util.List getSuccessKeyList()
```

Get the list of keys that the success data contains.

Returns:

List

com.wowza.wms.transport.media

Class MediaTransportConfigurationAmazonS3

java.lang.Object

└-com.wowza.wms.transport.media.MediaTransportConfigurationBase

└-com.wowza.wms.transport.media.MediaTransportConfigurationAmazonS3

All Implemented Interfaces:

[IMediaTransportProviderConfiguration](#)

```
public class MediaTransportConfigurationAmazonS3  
extends MediaTransportConfigurationBase
```

This is a base configuration object for AmazonS3 for the MediaTransport System //Example use

```
//Create a main transport object

MediaTransport transport = new MediaTransport();

//Create an Amazon Transport Provider
MediaTransportProviderAmazonS3 amazonTransport = new MediaTransportProviderAmazonS3();

//Create an Amazon Configuration Object
MediaTransportConfigurationAmazonS3 amazonConfig = new MediaTransportConfigurationAmazonS3();

//Configure the Amazon object with the required parameters
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_BUCKET,
"mybucketName");
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_REGION,
"bucketRegionName");
amazonConfig.setAttributeBoolean(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_REGION_ENABLED, true);
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_ACCESSID,
"myAmazonAccessKey");
amazonConfig.setAttributeString(MediaTransportConfigurationAmazonS3.AMZ_CONFIG_SECRETACCESSKEY, "myAmazonSecretKey");

//Add the configuration item to the provider
amazonTransport.setTransportProviderConfiguration(amazonConfig);

//Set the type of processing to occur, the default is ASYNC, set to SYNC
//Async will use a thread pool to handle transports, SYNC will block and do them in the order
//they are provided
amazonTransport.setTransportProcessType(IMediaTransportProvider.TRANSPORT_PROVIDER_PROCESS_SYNC);

//Initialize the provider
amazonTransport.init();

//Add the transport provided to the media transport system
transport.addTransportProvider(amazonTransport);

//You can add multiple transport providers

//To push a data block into the transport system the following example should be followed

//Lets assume you have a byte array, say from loading a file into this array.
byte[] fileBytes = getBytesFromFile(uploadFile);

//Create a data object and set up various settings.
MediaTransportDataObject transportDataObject = new MediaTransportDataObject();
transportDataObject.setPath("/"+filename);
transportDataObject.setContentType("video/mp4");
transportDataObject.setData(fileBytes);
transportDataObject.setCommand("PUT");
```

```
//Put the object into the transport system
transport.addTransportDataObject(transportDataObject);

// There are several listeners you can use to determine if the transport provider was added
// and the return status of the object presented to the system.
```

Field Summary

public static final	AMZ_CONFIG_ACCESSID Value: accessID
public static final	AMZ_CONFIG_BUCKET Value: bucketName
public static final	AMZ_CONFIG_DOMAIN_SUFFIX Value: domainSuffix
public static final	AMZ_CONFIG_FULLPATH Value: fullPathURI
public static final	AMZ_CONFIG_PREFIX Value: prefixType
public static final	AMZ_CONFIG_REGION Value: region
public static final	AMZ_CONFIG_REGION_ENABLED Value: regionEnabled
public static final	AMZ_CONFIG_REQUEST_TYPE Value: requestType
public static final	AMZ_CONFIG_SECRETACCESSKEY Value: secretAccessKey
public static final	AMZ_CONFIG_SERVICETYPE Value: serviceType
public static final	AMZ_OBJECT_HEADER_ACCESS_LIST Value: x-amz-acl
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE Value: x-amz-copy-source

public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH Value: x-amz-copy-source-if-match
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE Value: x-amz-copy-source-if-modified-since
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH Value: x-amz-copy-source-if-none-match
public static final	AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE Value: x-amz-copy-source-if-unmodified-since
public static final	AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL Value: x-amz-grant-full-control
public static final	AMZ_OBJECT_HEADER_GRANT_READ Value: x-amz-grant-read
public static final	AMZ_OBJECT_HEADER_GRANT_READ_ACP Value: x-amz-grant-read-acp
public static final	AMZ_OBJECT_HEADER_GRANT_WRITE Value: x-amz-grant-write
public static final	AMZ_OBJECT_HEADER_GRANT_WRITE_ACP Value: x-amz-grant-write-acp
public static final	AMZ_OBJECT_HEADER_META_DIRECTIVE Value: x-amz-metadata-directive
public static final	AMZ_OBJECT_HEADER_SECURITY_TOKEN Value: x-amz-security-token
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT Value: x-amz-server-side-encryption
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT Value: x-amz-server-side-encryption-context
public static final	AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID Value: x-amz-server-side-encryption-aws-kms-key-id
public static final	AMZ_OBJECT_HEADER_STORAGE_CLASS Value: x-amz-storage-class
public static final	AMZ_OBJECT_OPTION_BUCKET Value: bucketName

public static final	AMZ_OBJECT_OPTION_REGION Value: region
public static final	AMZ_OBJECT_OPTION_REGION_ENABLED Value: regionEnabled
public static	AMZ_SIGNATURE_EXPIRE_TIME

Fields inherited from class `com.wowza.wms.transport.media.MediaTransportConfigurationBase`

BASE_AUTHENTICATION, BASE_HOST, BASE_MAX_ATTEMPTS, BASE_METHOD, BASE_PATH, BASE_PORT, BASE_RETRY_TIME, BASE_TIMEOUT_CONNECTION, BASE_TIMEOUT_READ, BASE_TIMEOUT_WRITE, BASE_USER_AGENT

Constructor Summary

public	MediaTransportConfigurationAmazonS3()
--------	---

Method Summary

java.util.HashMap	getTransportHeaderOutput (java.util.HashMap dynamictransportinformation, IMediaTransportObject transportObject)
void	init ()

Methods inherited from class `com.wowza.wms.transport.media.MediaTransportConfigurationBase`

addCustomHeader, getAttributeBoolean, getAttributeInt, getAttributeLong, getAttributeNames, getAttributeString, getAttributeString, getConfigurationName, getCustomHeaders, getDebug, getProperties, getTransportHeaderOutput, httpDateHeader, init, isReady, removeCustomHeader, setAttributeBoolean, setAttributeInt, setAttributeLong, setAttributeString, setConfigurationName, setDebug, setIsReady, setProperties

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.transport.media.IMediaTransportProviderConfiguration](#)

[addCustomHeader](#), [getAttributeBoolean](#), [getAttributeInt](#), [getAttributeLong](#), [getAttributeNames](#), [getAttributeString](#), [getConfigurationName](#), [getCustomHeaders](#), [getDebug](#), [getProperties](#), [getTransportHeaderOutput](#), [init](#), [isReady](#), [removeCustomHeader](#), [setAttributeBoolean](#), [setAttributeInt](#), [setAttributeLong](#), [setAttributeString](#), [setConfigurationName](#), [setDebug](#), [setIsReady](#), [setProperties](#)

Fields

(continued from last page)

AMZ_OBJECT_HEADER_STORAGE_CLASS

```
public static final java.lang.String AMZ_OBJECT_HEADER_STORAGE_CLASS
```

Constant value: **x-amz-storage-class**

AMZ_OBJECT_HEADER_ACCESS_LIST

```
public static final java.lang.String AMZ_OBJECT_HEADER_ACCESS_LIST
```

Constant value: **x-amz-acl**

AMZ_OBJECT_HEADER_SECURITY_TOKEN

```
public static final java.lang.String AMZ_OBJECT_HEADER_SECURITY_TOKEN
```

Constant value: **x-amz-security-token**

AMZ_OBJECT_HEADER_COPY_SOURCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE
```

Constant value: **x-amz-copy-source**

AMZ_OBJECT_HEADER_META_DIRECTIVE

```
public static final java.lang.String AMZ_OBJECT_HEADER_META_DIRECTIVE
```

Constant value: **x-amz-metadata-directive**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MATCH
```

Constant value: **x-amz-copy-source-if-match**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH
```

Constant value: **x-amz-copy-source-if-none-match**

AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE
```

Constant value: **x-amz-copy-source-if-unmodified-since**

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AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE

```
public static final java.lang.String AMZ_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE
```

Constant value: **x-amz-copy-source-if-modified-since**

AMZ_OBJECT_HEADER_GRANT_READ

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_READ
```

Constant value: **x-amz-grant-read**

AMZ_OBJECT_HEADER_GRANT_WRITE

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_WRITE
```

Constant value: **x-amz-grant-write**

AMZ_OBJECT_HEADER_GRANT_READ_ACP

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_READ_ACP
```

Constant value: **x-amz-grant-read-acp**

AMZ_OBJECT_HEADER_GRANT_WRITE_ACP

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_WRITE_ACP
```

Constant value: **x-amz-grant-write-acp**

AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL

```
public static final java.lang.String AMZ_OBJECT_HEADER_GRANT_FULL_CONTROL
```

Constant value: **x-amz-grant-full-control**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT
```

Constant value: **x-amz-server-side-encryption**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT_KEY_ID
```

Constant value: **x-amz-server-side-encryption-aws-kms-key-id**

AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT

```
public static final java.lang.String AMZ_OBJECT_HEADER_SERVER_ENCRYPT_CONTEXT
```

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Constant value: **x-amz-server-side-encryption-context**

AMZ_OBJECT_OPTION_BUCKET

```
public static final java.lang.String AMZ_OBJECT_OPTION_BUCKET
```

Constant value: **bucketName**

AMZ_OBJECT_OPTION_REGION

```
public static final java.lang.String AMZ_OBJECT_OPTION_REGION
```

Constant value: **region**

AMZ_OBJECT_OPTION_REGION_ENABLED

```
public static final java.lang.String AMZ_OBJECT_OPTION_REGION_ENABLED
```

Constant value: **regionEnabled**

AMZ_CONFIG_FULLPATH

```
public static final java.lang.String AMZ_CONFIG_FULLPATH
```

Constant value: **fullPathURI**

AMZ_CONFIG_BUCKET

```
public static final java.lang.String AMZ_CONFIG_BUCKET
```

Constant value: **bucketName**

AMZ_CONFIG_REGION

```
public static final java.lang.String AMZ_CONFIG_REGION
```

Constant value: **region**

AMZ_CONFIG_REGION_ENABLED

```
public static final java.lang.String AMZ_CONFIG_REGION_ENABLED
```

Constant value: **regionEnabled**

AMZ_CONFIG_SECRETACCESSKEY

```
public static final java.lang.String AMZ_CONFIG_SECRETACCESSKEY
```

Constant value: **secretAccessKey**

AMZ_CONFIG_ACCESSID

```
public static final java.lang.String AMZ_CONFIG_ACCESSID
```

Constant value: **accessID**

AMZ_CONFIG_SERVICETYPE

```
public static final java.lang.String AMZ_CONFIG_SERVICETYPE
```

Constant value: **serviceType**

AMZ_CONFIG_DOMAIN_SUFFIX

```
public static final java.lang.String AMZ_CONFIG_DOMAIN_SUFFIX
```

Constant value: **domainSuffix**

AMZ_CONFIG_REQUEST_TYPE

```
public static final java.lang.String AMZ_CONFIG_REQUEST_TYPE
```

Constant value: **requestType**

AMZ_CONFIG_PREFIX

```
public static final java.lang.String AMZ_CONFIG_PREFIX
```

Constant value: **prefixType**

AMZ_SIGNATURE_EXPIRE_TIME

```
public static long AMZ_SIGNATURE_EXPIRE_TIME
```

Constructors

MediaTransportConfigurationAmazonS3

```
public MediaTransportConfigurationAmazonS3()
```

Methods

init

```
public void init()
```

(continued from last page)

getTransportHeaderOutput

```
public java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
IMediaTransportObject transportObject)
```

com.wowza.wms.transport.media

Class MediaTransportConfigurationGoogleCloud

java.lang.Object

└-com.wowza.wms.transport.media.MediaTransportConfigurationBase

└-com.wowza.wms.transport.media.MediaTransportConfigurationGoogleCloud

All Implemented Interfaces:

[IMediaTransportProviderConfiguration](#)

```
public class MediaTransportConfigurationGoogleCloud  
extends MediaTransportConfigurationBase
```

This is a base configuration object for Google Cloud Storage for the MediaTransport System //Example use


```
//Create a main transport object

MediaTransport transport = new MediaTransport();

//Create an Amazon Transport Provider
MediaTransportProviderGoogleCloud googleTransport = new MediaTransportProviderGoogleCloud();

//Create an Amazon Configuration Object
MediaTransportConfigurationGoogleCloud googleConfig = new
MediaTransportConfigurationGoogleCloud();

//Configure the Amazon object with the required parameters
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_BUCKET,
this.bucketName);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_SECRETACCESS
KEY, this.secretKey);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_SERVICEID,
this.serviceID);
googleConfig.setAttributeString(MediaTransportConfigurationGoogleCloud.GC_CONFIG_PROJECT_ID,
this.projectID);

//Add the configuration item to the provider
googleTransport.setTransportProviderConfiguration(googleConfig);

//Set the type of processing to occur, the default is ASYNC, set to SYNC
//Async will use a thread pool to handle transports, SYNC will block and do them in the order
//they are provided
googleTransport.setTransportProcessType(IMediaTransportProvider.TRANSPORT_PROVIDER_PROCESS_SY
NC);

//Initialize the provider
googleTransport.init();

//Add the transport provided to the media transport system
transport.addTransportProvider(googleTransport);

//You can add multiple transport providers

//To push a data block into the transport system the following example should be followed

//Lets assume you have a byte array, say from loading a file into this array.
byte[] fileBytes = getBytesFromFile(uploadFile);

//Create a data object and set up various settings.
MediaTransportDataObject transportDataObject = new MediaTransportDataObject();
transportDataObject.setPath("/"+filename);
transportDataObject.setContentType("video/mp4");
transportDataObject.setData(fileBytes);
transportDataObject.setCommand("PUT");
```

```
//Put the object into the transport system
transport.addTransportDataObject(transportDataObject);

// There are several listeners you can use to determine if the transport provider was added
// and the return status of the object presented to the system.
```

Field Summary

public static final	GC_CONFIG_AUTHENTICATION_TYPE Value: authenticationType
public static final	GC_CONFIG_BUCKET Value: bucketName
public static final	GC_CONFIG_DOMAIN_SUFFIX Value: domainSuffix
public static final	GC_CONFIG_FULLPATH Value: fullPathURI
public static final	GC_CONFIG_MD5_ENABLE Value: md5Enable
public static final	GC_CONFIG_PROJECT_ID Value: projectID
public static final	GC_CONFIG_SCOPE Value: scope
public static final	GC_CONFIG_SECRETACCESS_FILE Value: authenticationFile
public static final	GC_CONFIG_SECRETACCESSKEY Value: secretAccessKey
public static final	GC_CONFIG_SERVICEID Value: serviceID
public static final	GC_CONFIG_STORAGE_CLASS Value: storageClass
public static final	GC_MD5_ENABLED_FALSE Value: false
public static final	GC_MD5_ENABLED_TRUE Value: true

public static final	GC_OBJECT_HEADER_ACCESS_LIST Value: x-goog-acl
public static final	GC_OBJECT_HEADER_COPY_SOURCE Value: x-goog-copy-source
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH Value: x-goog-copy-source-if-match
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE Value: x-goog-copy-source-if-modified-since
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH Value: x-goog-copy-source-if-none-match
public static final	GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE Value: x-goog-copy-source-if-unmodified-since
public static final	GC_OBJECT_HEADER_META_DIRECTIVE Value: x-goog-metadata-directive
public static final	GC_OBJECT_HEADER_SERVER_ENCRYPT Value: x-goog-encryption-algorithm
public static final	GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256 Value: x-goog-encryption-key-sha256
public static final	GC_OBJECT_HEADER_STORAGE_CLASS Value: x-goog-storage-class
public static final	GC_OBJECT_OPTION_BUCKET Value: bucketName
public static final	GC_OBJECT_OPTION_MD5_ENABLE Value: md5Enable
public static final	GC_OBJECT_OPTION_PROJECT_ID Value: projectID
public static final	GC_OBJECT_OPTION_SCOPE Value: scope
public static final	GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ Value: authenticated-read
public static final	GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL Value: bucket-owner-full-control

public static final	GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ Value: bucket-owner-read
public static final	GC_OBJECT_SERVICE_ACL_PRIVATE Value: private
public static final	GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE Value: project-private
public static final	GC_OBJECT_SERVICE_ACL_PUBLIC_READ Value: public-read
public static final	GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE Value: public-read-write
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE Value: COLDLINE
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL Value: MULTI_REGIONAL
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE Value: NEARLINE
public static final	GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL Value: REGIONAL
public static final	GC_SERVICE_AUTHENTICATION_JSON_SECRET Value: JSON
public static final	GC_SERVICE_AUTHENTICATION_PKCS12 Value: PKCS12
public static final	GC_SERVICE_SCOPE_FULL_CONTROL Value: full_control
public static final	GC_SERVICE_SCOPE_READ_ONLY Value: read_only
public static final	GC_SERVICE_SCOPE_READ_WRITE Value: read_write

Fields inherited from class `com.wowza.wms.transport.media.MediaTransportConfigurationBase`

BASE_AUTHENTICATION, BASE_HOST, BASE_MAX_ATTEMPTS, BASE_METHOD, BASE_PATH, BASE_PORT, BASE_RETRY_TIME, BASE_TIMEOUT_CONNECTION, BASE_TIMEOUT_READ, BASE_TIMEOUT_WRITE, BASE_USER_AGENT

Constructor Summary

public	MediaTransportConfigurationGoogleCloud()
--------	--

Method Summary

void	getAuthToken (String scope)
String	getGoogleCloudToken (String type)
java.util.HashMap	getTransportHeaderOutput (java.util.HashMap dynamictransportinformation, IMediaTransportObject transportObject)
void	init ()

Methods inherited from class com.wowza.wms.transport.media.MediaTransportConfigurationBase

addCustomHeader, getAttributeBoolean, getAttributeInt, getAttributeLong, getAttributeNames, getAttributeString, getAttributeString, getConfigurationName, getCustomHeaders, getDebug, getProperties, getTransportHeaderOutput, httpDateHeader, init, isReady, removeCustomHeader, setAttributeBoolean, setAttributeInt, setAttributeLong, setAttributeString, setConfigurationName, setDebug, setIsReady, setProperties

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface

[com.wowza.wms.transport.media.IMediaTransportProviderConfiguration](#)

[addCustomHeader](#), [getAttributeBoolean](#), [getAttributeInt](#), [getAttributeLong](#), [getAttributeNames](#), [getAttributeString](#), [getConfigurationName](#), [getCustomHeaders](#), [getDebug](#), [getProperties](#), [getTransportHeaderOutput](#), [init](#), [isReady](#), [removeCustomHeader](#), [setAttributeBoolean](#), [setAttributeInt](#), [setAttributeLong](#), [setAttributeString](#), [setConfigurationName](#), [setDebug](#), [setIsReady](#), [setProperties](#)

Fields

GC_SERVICE_SCOPE_READ_ONLY

public static final java.lang.String **GC_SERVICE_SCOPE_READ_ONLY**

Constant value: **read_only**

GC_SERVICE_SCOPE_READ_WRITE

public static final java.lang.String **GC_SERVICE_SCOPE_READ_WRITE**

Constant value: **read_write**

(continued from last page)

GC_SERVICE_SCOPE_FULL_CONTROL

```
public static final java.lang.String GC_SERVICE_SCOPE_FULL_CONTROL
```

Constant value: **full_control**

GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_MULTIREGIONAL
```

Constant value: **MULTI_REGIONAL**

GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_REGIONAL
```

Constant value: **REGIONAL**

GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_NEARLINE
```

Constant value: **NEARLINE**

GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE

```
public static final java.lang.String GC_OBJECT_SERVICE_STORAGE_CLASS_COLDLINE
```

Constant value: **COLDLINE**

GC_SERVICE_AUTHENTICATION_JSON_SECRET

```
public static final java.lang.String GC_SERVICE_AUTHENTICATION_JSON_SECRET
```

Constant value: **JSON**

GC_SERVICE_AUTHENTICATION_PKCS12

```
public static final java.lang.String GC_SERVICE_AUTHENTICATION_PKCS12
```

Constant value: **PKCS12**

GC_OBJECT_SERVICE_ACL_PRIVATE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PRIVATE
```

Constant value: **private**

GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_READ
```

(continued from last page)

Constant value: **bucket-owner-read**

GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_BUCKET_OWNER_FULL_CONTROL
```

Constant value: **bucket-owner-full-control**

GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PROJECT_PRIVATE
```

Constant value: **project-private**

GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_AUTHENTICATED_READ
```

Constant value: **authenticated-read**

GC_OBJECT_SERVICE_ACL_PUBLIC_READ

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PUBLIC_READ
```

Constant value: **public-read**

GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE

```
public static final java.lang.String GC_OBJECT_SERVICE_ACL_PUBLIC_READ_WRITE
```

Constant value: **public-read-write**

GC_MD5_ENABLED_TRUE

```
public static final java.lang.String GC_MD5_ENABLED_TRUE
```

Constant value: **true**

GC_MD5_ENABLED_FALSE

```
public static final java.lang.String GC_MD5_ENABLED_FALSE
```

Constant value: **false**

GC_OBJECT_HEADER_STORAGE_CLASS

```
public static final java.lang.String GC_OBJECT_HEADER_STORAGE_CLASS
```

Constant value: **x-goog-storage-class**

GC_OBJECT_HEADER_ACCESS_LIST

```
public static final java.lang.String GC_OBJECT_HEADER_ACCESS_LIST
```

Constant value: **x-goog-acl**

GC_OBJECT_HEADER_COPY_SOURCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE
```

Constant value: **x-goog-copy-source**

GC_OBJECT_HEADER_META_DIRECTIVE

```
public static final java.lang.String GC_OBJECT_HEADER_META_DIRECTIVE
```

Constant value: **x-goog-metadata-directive**

GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_MATCH
```

Constant value: **x-goog-copy-source-if-match**

GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_NONE_MATCH
```

Constant value: **x-goog-copy-source-if-none-match**

GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_UNMODIFIED_SINCE
```

Constant value: **x-goog-copy-source-if-unmodified-since**

GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE

```
public static final java.lang.String GC_OBJECT_HEADER_COPY_SOURCE_IF_MODIFIED_SINCE
```

Constant value: **x-goog-copy-source-if-modified-since**

GC_OBJECT_HEADER_SERVER_ENCRYPT

```
public static final java.lang.String GC_OBJECT_HEADER_SERVER_ENCRYPT
```

Constant value: **x-goog-encryption-algorithm**

(continued from last page)

GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256

```
public static final java.lang.String GC_OBJECT_HEADER_SERVER_ENCRYPT_KEY_SHA256
```

Constant value: **x-goog-encryption-key-sha256**

GC_OBJECT_OPTION_PROJECT_ID

```
public static final java.lang.String GC_OBJECT_OPTION_PROJECT_ID
```

Constant value: **projectID**

GC_OBJECT_OPTION_SCOPE

```
public static final java.lang.String GC_OBJECT_OPTION_SCOPE
```

Constant value: **scope**

GC_OBJECT_OPTION_BUCKET

```
public static final java.lang.String GC_OBJECT_OPTION_BUCKET
```

Constant value: **bucketName**

GC_OBJECT_OPTION_MD5_ENABLE

```
public static final java.lang.String GC_OBJECT_OPTION_MD5_ENABLE
```

Constant value: **md5Enable**

GC_CONFIG_FULLPATH

```
public static final java.lang.String GC_CONFIG_FULLPATH
```

Constant value: **fullPathURI**

GC_CONFIG_DOMAIN_SUFFIX

```
public static final java.lang.String GC_CONFIG_DOMAIN_SUFFIX
```

Constant value: **domainSuffix**

GC_CONFIG_BUCKET

```
public static final java.lang.String GC_CONFIG_BUCKET
```

Constant value: **bucketName**

GC_CONFIG_SECRETACCESSKEY

```
public static final java.lang.String GC_CONFIG_SECRETACCESSKEY
```

(continued from last page)

Constant value: **secretAccessKey**

GC_CONFIG_SERVICEID

```
public static final java.lang.String GC_CONFIG_SERVICEID
```

Constant value: **serviceID**

GC_CONFIG_STORAGE_CLASS

```
public static final java.lang.String GC_CONFIG_STORAGE_CLASS
```

Constant value: **storageClass**

GC_CONFIG_PROJECT_ID

```
public static final java.lang.String GC_CONFIG_PROJECT_ID
```

Constant value: **projectID**

GC_CONFIG_AUTHENTICATION_TYPE

```
public static final java.lang.String GC_CONFIG_AUTHENTICATION_TYPE
```

Constant value: **authenticationType**

GC_CONFIG_SECRETACCESS_FILE

```
public static final java.lang.String GC_CONFIG_SECRETACCESS_FILE
```

Constant value: **authenticationFile**

GC_CONFIG_MD5_ENABLE

```
public static final java.lang.String GC_CONFIG_MD5_ENABLE
```

Constant value: **md5Enable**

GC_CONFIG_SCOPE

```
public static final java.lang.String GC_CONFIG_SCOPE
```

Constant value: **scope**

Constructors

MediaTransportConfigurationGoogleCloud

```
public MediaTransportConfigurationGoogleCloud()
```

Methods

init

```
public void init()
```

getTransportHeaderOutput

```
public java.util.HashMap getTransportHeaderOutput( java.util.HashMap  
dynamictransportinformation,  
    IMediaTransportObject transportObject)
```

getAuthToken

```
public void getAuthToken(String scope)
```

getGoogleCloudToken

```
public String getGoogleCloudToken(String type)
```

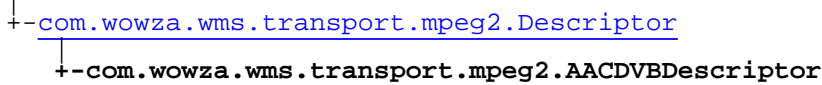
Package

com.wowza.wms.transport.mpeg2

com.wowza.wms.transport.mpeg2

Class AACDVBDescrptor

java.lang.Object



public class AACDVBDescrptor
extends [Descriptor](#)

Field Summary

public	AACType
public	AACTypeFlag
public	additionalData
public	profileAndLevel

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	AACDVBDescrptor ()
public	AACDVBDescrptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
------	---

String	toString()
--------	----------------------------

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Fields

profileAndLevel

```
public int profileAndLevel
```

AACTypeFlag

```
public boolean AACTypeFlag
```

AACType

```
public int AACType
```

additionalData

```
public byte additionalData
```

Constructors

AACDVBDescrptor

```
public AACDVBDescrptor()
```

AACDVBDescrptor

```
public AACDVBDescrptor(java.nio.ByteBuffer descriptorData)
```

Methods

(continued from last page)

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

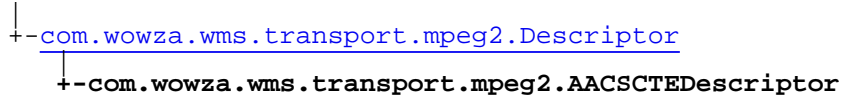
Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class AACSCTEDescriptor

java.lang.Object



public class AACSCTEDescriptor
extends [Descriptor](#)

Field Summary

public	aacExtensionDataConfig
public	aacExtensionFlag
public	aacServiceType
public	ascvFlag
public	asvc
public	channelConfig
public	channelServiceFlag
public	componentNameFlag
public	componentNameTextChars
public	hasExtendedData
public	language
public	languageFlag
public	level
public	mainId
public	mainIdFlag
public	mixInfoExists
public	profile

public static final	PROFILE_HE_ADTS Value: 1
public static final	PROFILE_HE_V2 Value: 2
public static final	PROFILE_LC_ADTS Value: 0
public	receiverMixRequired

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	AACSCTEDescriptor() Instantiates a new AAC descriptor.
public	AACSCTEDescriptor(java.nio.ByteBuffer descriptorData) Instantiates a new AAC descriptor.

Method Summary

void	decodeDescriptorData(java.nio.ByteBuffer descriptorData)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

profile

```
public int profile
```

level

```
public int level
```

hasExtendedData

```
public boolean hasExtendedData
```

channelServiceFlag

```
public boolean channelServiceFlag
```

mainIdFlag

```
public boolean mainIdFlag
```

ascvFlag

```
public boolean ascvFlag
```

languageFlag

```
public boolean languageFlag
```

componentNameFlag

```
public boolean componentNameFlag
```

aacExtensionFlag

```
public boolean aacExtensionFlag
```

mixInfoExists

```
public boolean mixInfoExists
```

channelConfig

```
public int channelConfig
```

aacServiceType

```
public int aacServiceType
```

receiverMixRequired

```
public boolean receiverMixRequired
```

mainId

```
public int mainId
```

asvc

```
public int asvc
```

language

```
public byte language
```

componentNameTextChars

```
public char componentNameTextChars
```

aacExtensionDataConfig

```
public byte aacExtensionDataConfig
```

PROFILE_LC_ADTS

```
public static final int PROFILE_LC_ADTS
```

(continued from last page)

Constant value: **0**

PROFILE_HE_ADTS

```
public static final int PROFILE_HE_ADTS
```

Constant value: **1**

PROFILE_HE_V2

```
public static final int PROFILE_HE_V2
```

Constant value: **2**

Constructors

AACSCTEDescriptor

```
public AACSCTEDescriptor()
```

Instantiates a new AAC descriptor.

AACSCTEDescriptor

```
public AACSCTEDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new AAC descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class AC3Descriptor

java.lang.Object



Direct Known Subclasses:

[EnhancedAC3Descriptor](#)

public class **AC3Descriptor**
extends [Descriptor](#)

Field Summary

public	asvc
public	asvcFlag
public	bsid
public	bsidFlag
public	componentType
public	componentTypeFlag
public	mainId
public	mainIdFlag

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	<code>AC3Descriptor()</code> Instantiates a new AC3 descriptor.
public	<code>AC3Descriptor(java.nio.ByteBuffer descriptorData)</code> Instantiates a new AC3 descriptor.

Method Summary

void	<code>decodeDescriptorData(java.nio.ByteBuffer descriptorData)</code>
int	<code>readData(java.nio.ByteBuffer descriptorData)</code>
byte	<code>readFlags(java.nio.ByteBuffer descriptorData)</code>
String	<code>toString()</code>
void	<code>toStringAddData(StringBuilder sb)</code>
void	<code>toStringAddFlags(StringBuilder sb)</code>

Methods inherited from class [`com.wowza.wms.transport.mpeg2.Descriptor`](#)

[`binarySize`](#), [`decodeDescriptor`](#), [`decodeDescriptorData`](#), [`getDataAsBase64`](#),
[`getDescriptorName`](#), [`getShortClassName`](#), [`serializeAMF`](#), [`toBin`](#), [`toDebugString`](#), [`toString`](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`,
`wait`

Fields

`componentTypeFlag`

public boolean **componentTypeFlag**

`bsidFlag`

public boolean **bsidFlag**

`mainIdFlag`

public boolean **mainIdFlag**

asvcFlag

```
public boolean asvcFlag
```

componentType

```
public int componentType
```

bsid

```
public int bsid
```

mainId

```
public int mainId
```

asvc

```
public int asvc
```

Constructors

AC3Descriptor

```
public AC3Descriptor()
```

Instantiates a new AC3 descriptor.

AC3Descriptor

```
public AC3Descriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new AC3 descriptor.

Parameters:

descriptorData - the descriptor data

Methods

readFlags

```
protected byte readFlags(java.nio.ByteBuffer descriptorData)
```

(continued from last page)

readData

```
protected int readData(java.nio.ByteBuffer descriptorData)
```

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toStringAddFlags

```
protected void toStringAddFlags(StringBuilder sb)
```

toStringAddData

```
protected void toStringAddData(StringBuilder sb)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2

Class AdaptationField

java.lang.Object

└─com.wowza.wms.transport.mpeg2.AdaptationField

public class **AdaptationField**
extends Object

The Class AdaptationField.

Field Summary

public	<u>discontinuity</u> The discontinuity.
public	<u>dtsNextAU</u> The DTS next au.
public	<u>extension</u> The extension.
public	<u>ltwFlag</u> The ltw flag.
public	<u>ltwOffset</u> The ltw offset.
public	<u>ltwValidFlag</u> The ltw valid flag.
public	<u>opcrClock27</u> The OPCR clock27.
public	<u>opcrClock90</u> The OPCR clock90.
public	<u>opcrFlag</u> The OPCR flag.
public	<u>pcrClock27</u> The PCR clock27.
public	<u>pcrClock90</u> The PCR clock90.
public	<u>pcrFlag</u> The PCR flag.
public	<u>piecewiseRate</u> The piecewise rate.
public	<u>piecewiseRateFlag</u> The piecewise rate flag.

public	<u>privateData</u> The private data.
public	<u>privateDataFlag</u> The private data flag.
public	<u>privateDataLength</u> The private data length.
public	<u>randomAccess</u> The random access.
public	<u>seemlessSpliceFlag</u> The seamless splice flag.
public	<u>spliceCountdown</u> The splic countdown.
public	<u>spliceType</u> The splice type.
public	<u>splicingPoint</u> The splicing point.
public	<u>streamPriority</u> The stream priority.

Constructor Summary

public	<u>AdaptationField()</u>
--------	--

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

discontinuity

public boolean **discontinuity**

The discontinuity.

randomAccess

public boolean **randomAccess**

The random access.

streamPriority

public boolean **streamPriority**

The stream priority.

pcrFlag

public boolean **pcrFlag**

The PCR flag.

opcrFlag

public boolean **opcrFlag**

The OPCR flag.

splicingPoint

public boolean **splicingPoint**

The splicing point.

privateDataFlag

public boolean **privateDataFlag**

The private data flag.

extension

public boolean **extension**

The extension.

pcrClock90

public long **pcrClock90**

The PCR clock90.

pcrClock27

public long **pcrClock27**

The PCR clock27.

opcrClock90

public long **opcrClock90**

The OPCR clock90.

opcrClock27

public long **opcrClock27**

The OPCR clock27.

splicCountdown

public int **splicCountdown**

(continued from last page)

The splic countdown.

privateDataLength

public int **privateDataLength**

The private data length.

privateData

public byte **privateData**

The private data.

ltwFlag

public boolean **ltwFlag**

The ltw flag.

piecewiseRateFlag

public boolean **piecewiseRateFlag**

The piecewise rate flag.

seemlessSpliceFlag

public boolean **seemlessSpliceFlag**

The seemless splice flag.

ltwValidFlag

public boolean **ltwValidFlag**

The ltw valid flag.

ltwOffset

public int **ltwOffset**

The ltw offset.

piecewiseRate

public int **piecewiseRate**

The piecewise rate.

spliceType

public int **spliceType**

The splice type.

(continued from last page)

dtsNextAU

public long **dtsNextAU**

The DTS next au.

Constructors

AdaptationField

public **AdaptationField**()

com.wowza.wms.transport.mpeg2

Class AncillaryDataDescriptor

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.Descriptor
    |
    +--com.wowza.wms.transport.mpeg2.AncillaryDataDescriptor
  
```

public class **AncillaryDataDescriptor**
 extends [Descriptor](#)

Field Summary

public	AnnouncementSwitchingData
public	DABAncillaryData
public	DVDVideoAncillaryData
public	ExtendedAncillaryData
public	MPEG4ancillarydata
public	RDSviaUECP
public	rfu
public	ScaleFactorErrorCheck

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	AncillaryDataDescriptor()
public	AncillaryDataDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

DVDVideoAncillaryData

```
public boolean DVDVideoAncillaryData
```

ExtendedAncillaryData

```
public boolean ExtendedAncillaryData
```

AnnouncementSwitchingData

```
public boolean AnnouncementSwitchingData
```

DABAncillaryData

```
public boolean DABAncillaryData
```

ScaleFactorErrorCheck

```
public boolean ScaleFactorErrorCheck
```

(continued from last page)

MPEG4ancillarydata

```
public boolean MPEG4ancillarydata
```

RDSviaUECP

```
public boolean RDSviaUECP
```

rfu

```
public boolean rfu
```

Constructors

AncillaryDataDescriptor

```
public AncillaryDataDescriptor()
```

AncillaryDataDescriptor

```
public AncillaryDataDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

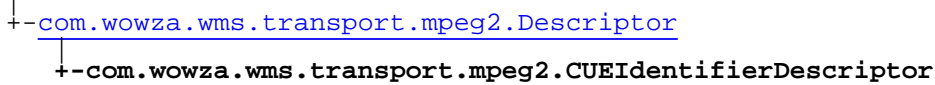
Decode descriptor data.

toString

```
public String toString()
```


com.wowza.wms.transport.mpeg2 Class CUEIdentifierDescriptor

java.lang.Object



```
public class CUEIdentifierDescriptor
extends Descriptor
```

The Class CUEIdentifierDescriptor. The cue_identifier_descriptor may be used in the PMT to label PIDs that carry splice commands so that they can be differentiated as to the type or level of splice commands they carry. The cue_identifier_descriptor, when present, shall be located in the elementary descriptor loop. If the cue_identifier_descriptor is not utilized, the stream may carry any valid command in this specification.

Field Summary

public static final	CUE_STREAM_TYPE_ALL_COMMANDS The Constant CUE_STREAM_TYPE_ALL_COMMANDS. Value: 1
public static final	CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE The Constant CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE. Value: 0
public static final	CUE_STREAM_TYPE_SEGMENTATION The Constant CUE_STREAM_TYPE_SEGMENTATION. Value: 2
public static final	CUE_STREAM_TYPE_TIERED_SEGMENTATION The Constant CUE_STREAM_TYPE_TIERED_SEGMENTATION. Value: 4
public static final	CUE_STREAM_TYPE_TIERED_SPLICING The Constant CUE_STREAM_TYPE_TIERED_SPLICING. Value: 3
public	cueStreamType The CUE stream type.

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	CUEIdentifierDescriptor() Instantiates a new CUE identifier descriptor
public	CUEIdentifierDescriptor(java.nio.ByteBuffer descriptorData) Instantiates a new CUE identifier descriptor.

Method Summary

int	binarySize() How big is the descriptor in binary
void	decodeDescriptorData(java.nio.ByteBuffer descriptorData)
void	toBin(java.nio.ByteBuffer buffer) Encodes the descriptor into binary format for us in transport
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE

public static final int **CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE**

The Constant CUE_STREAM_TYPE_INSERT_NULL_SCHEDULE.
Constant value: 0

CUE_STREAM_TYPE_ALL_COMMANDS

```
public static final int CUE_STREAM_TYPE_ALL_COMMANDS
```

The Constant CUE_STREAM_TYPE_ALL_COMMANDS.
Constant value: **1**

CUE_STREAM_TYPE_SEGMENTATION

```
public static final int CUE_STREAM_TYPE_SEGMENTATION
```

The Constant CUE_STREAM_TYPE_SEGMENTATION.
Constant value: **2**

CUE_STREAM_TYPE_TIERED_SPLICING

```
public static final int CUE_STREAM_TYPE_TIERED_SPLICING
```

The Constant CUE_STREAM_TYPE_TIERED_SPLICING.
Constant value: **3**

CUE_STREAM_TYPE_TIERED_SEGMENTATION

```
public static final int CUE_STREAM_TYPE_TIERED_SEGMENTATION
```

The Constant CUE_STREAM_TYPE_TIERED_SEGMENTATION.
Constant value: **4**

cueStreamType

```
public int cueStreamType
```

The CUE stream type.

Constructors

CUEIdentifierDescriptor

```
public CUEIdentifierDescriptor()
```

Instantiates a new CUE identifier descriptor

CUEIdentifierDescriptor

```
public CUEIdentifierDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new CUE identifier descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for us in transport

Parameters:

`buffer` - a ByteBuffer to put the descriptor binary data into

binarySize

```
public int binarySize()
```

How big is the descriptor in binary

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class Descriptor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.Descriptor

Direct Known Subclasses:

[SpliceSegmentationDescriptor](#), [SpliceDTMFDescriptor](#), [SpliceAvailDescriptor](#), [VideoStreamDescriptor](#), [StreamIdentifierDescriptor](#), [RegistrationDescriptor](#), [MetadataSTDDescriptor](#), [MetadataDescriptor](#), [MetaDataPointerDescriptor](#), [MP4AudioExtensionLOAS](#), [MP4AudioDescriptor](#), [LanguageDescriptor](#), [ExtensionDVBDescriptor](#), [CUEIdentifierDescriptor](#), [AncillaryDataDescriptor](#), [AC3Descriptor](#), [AACSCTEDescriptor](#), [AACDVBDescriptor](#)

public class **Descriptor**
extends Object

The Class Descriptor.

Field Summary

public	data The data.
public static final	DESCRIPTOR_TAG_AAC_DVB The Constant DESCRIPTOR_TAG_AAC_DVB Value: 124
public static final	DESCRIPTOR_TAG_AAC_SCTE The Constant DESCRIPTOR_TAG_AAC_SCTE. Value: 234
public static final	DESCRIPTOR_TAG_AC3 The Constant DESCRIPTOR_TAG_AC3. Value: 106
public static final	DESCRIPTOR_TAG_ANCILLARY The Constant DESCRIPTOR_TAG_ANCILLARY Value: 107
public static final	DESCRIPTOR_TAG_AUDIO The Constant DESCRIPTOR_TAG_AUDIO. Value: 3
public static final	DESCRIPTOR_TAG_CA The Constant DESCRIPTOR_TAG_CA. Value: 9
public static final	DESCRIPTOR_TAG_COPYRIGHT The Constant DESCRIPTOR_TAG_COPYRIGHT. Value: 13
public static final	DESCRIPTOR_TAG_CUE_IDENTIFIER The Constant DESCRIPTOR_TAG_CUE_IDENTIFIER. Value: 138

public static final	<u>DESCRIPTOR_TAG_DATA_STREAM_ALIGN</u> The Constant DESCRIPTOR_TAG_DATA_STREAM_ALIGN. Value: 6
public static final	<u>DESCRIPTOR_TAG_DVBTELETEXT</u> The Constant DESCRIPTOR_TAG_DVBTELETEXT. Value: 86
public static final	<u>DESCRIPTOR_TAG_ENHANCED_AC3</u> The Constant DESCRIPTOR_TAG_ENHANCED_AC3. Value: 122
public static final	<u>DESCRIPTOR_TAG_EXT_ES_ID</u> The Constant DESCRIPTOR_TAG_EXT_ES_ID. Value: 32
public static final	<u>DESCRIPTOR_TAG_EXTENSION_DVB</u> The Constant DESCRIPTOR_TAG_EXTENSION_DVB Value: 127
public static final	<u>DESCRIPTOR_TAG_EXTENSION_MP4_LOAS</u> The Constant DESCRIPTOR_TAG_MP4_LOAS Value: 46
public static final	<u>DESCRIPTOR_TAG_FLEX_MUX_TIMING</u> The Constant DESCRIPTOR_TAG_FLEX_MUX_TIMING. Value: 36
public static final	<u>DESCRIPTOR_TAG_FMC</u> The Constant DESCRIPTOR_TAG_FMC. Value: 31
public static final	<u>DESCRIPTOR_TAG_FMX_BUFSIZE</u> The Constant DESCRIPTOR_TAG_FMX_BUFSIZE. Value: 34
public static final	<u>DESCRIPTOR_TAG_HIERARCHY</u> The Constant DESCRIPTOR_TAG_HIERARCHY. Value: 4
public static final	<u>DESCRIPTOR_TAG_IBP</u> The Constant DESCRIPTOR_TAG_IBP. Value: 18
public static final	<u>DESCRIPTOR_TAG_IOD</u> The Constant DESCRIPTOR_TAG_IOD. Value: 29
public static final	<u>DESCRIPTOR_TAG_ISO_639_LANG</u> The Constant DESCRIPTOR_TAG_ISO_639_LANG. Value: 10
public static final	<u>DESCRIPTOR_TAG_MAX_BITRATE</u> The Constant DESCRIPTOR_TAG_MAX_BITRATE. Value: 14

public static final	<u>DESCRIPTOR_TAG_METADATA</u> The Constant DESCRIPTOR_TAG_METADATA. Value: 38
public static final	<u>DESCRIPTOR_TAG_METADATA_POINTER</u> The Constant DESCRIPTOR_TAG_METADATA_POINTER_DESCRIPTOR. Value: 37
public static final	<u>DESCRIPTOR_TAG_METADATA_STD</u> The Constant DESCRIPTOR_TAG_METADATA_STD. Value: 39
public static final	<u>DESCRIPTOR_TAG_MP4_AUDIO</u> The Constant DESCRIPTOR_TAG_MP4_AUDIO. Value: 28
public static final	<u>DESCRIPTOR_TAG_MP4_VIDEO</u> The Constant DESCRIPTOR_TAG_MP4_VIDEO. Value: 27
public static final	<u>DESCRIPTOR_TAG_MULTIPLE_BUF</u> The Constant DESCRIPTOR_TAG_MULTIPLE_BUF. Value: 35
public static final	<u>DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL</u> The Constant DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL. Value: 12
public static final	<u>DESCRIPTOR_TAG_MUXCODE</u> The Constant DESCRIPTOR_TAG_MUXCODE. Value: 33
public static final	<u>DESCRIPTOR_TAG_PRIVATE_DATA</u> The Constant DESCRIPTOR_TAG_PRIVATE_DATA. Value: 15
public static final	<u>DESCRIPTOR_TAG_REGISTRATION</u> The Constant DESCRIPTOR_TAG_REGISTRATION. Value: 5
public static final	<u>DESCRIPTOR_TAG_SL</u> The Constant DESCRIPTOR_TAG_SL. Value: 30
public static final	<u>DESCRIPTOR_TAG_SMOOTHING_BUF</u> The Constant DESCRIPTOR_TAG_SMOOTHING_BUF. Value: 16
public static final	<u>DESCRIPTOR_TAG_STD</u> The Constant DESCRIPTOR_TAG_STD. Value: 17
public static final	<u>DESCRIPTOR_TAG_STREAM_IDENTIFIER</u> The Constant DESCRIPTOR_TAG_STREAM_IDENTIFIER. Value: 82

public static final	DESCRIPTOR_TAG_SYSTEM_CLOCK The Constant DESCRIPTOR_TAG_SYSTEM_CLOCK. Value: 11
public static final	DESCRIPTOR_TAG_TGT_BACKGRD_GRID The Constant DESCRIPTOR_TAG_TGT_BACKGRD_GRID. Value: 7
public static final	DESCRIPTOR_TAG_VIDEO The Constant DESCRIPTOR_TAG_VIDEO. Value: 2
public static final	DESCRIPTOR_TAG_VIDEO_WINDOWS The Constant DESCRIPTOR_TAG_VIDEO_WINDOWS. Value: 8
public	length The length.
public	tag The tag.

Constructor Summary

public	Descriptor () Instantiates a new descriptor.
public	Descriptor (java.nio.ByteBuffer descriptorData) Instantiates a new descriptor.

Method Summary

int	binarySize () How big is the descriptor in binary.
static Descriptor	decodeDescriptor (java.nio.ByteBuffer descriptorData) Decode descriptor.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData) Decode descriptor data.
String	getDataAsBase64 ()
static String	getDescriptorName (int tag)
String	getShortClassName () getShortClassName returns just the class name instead of the com.wms.xxx.xx.className
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
void	toBin (java.nio.ByteBuffer buffer) Encodes the descriptor into binary format for use in a transport
String	toDebugString ()

String	toString()
--------	----------------------------

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields

DESCRIPTOR_TAG_VIDEO

```
public static final int DESCRIPTOR_TAG_VIDEO
```

The Constant `DESCRIPTOR_TAG_VIDEO`.
Constant value: **2**

DESCRIPTOR_TAG_AUDIO

```
public static final int DESCRIPTOR_TAG_AUDIO
```

The Constant `DESCRIPTOR_TAG_AUDIO`.
Constant value: **3**

DESCRIPTOR_TAG_HIERARCHY

```
public static final int DESCRIPTOR_TAG_HIERARCHY
```

The Constant `DESCRIPTOR_TAG_HIERARCHY`.
Constant value: **4**

DESCRIPTOR_TAG_REGISTRATION

```
public static final int DESCRIPTOR_TAG_REGISTRATION
```

The Constant `DESCRIPTOR_TAG_REGISTRATION`.
Constant value: **5**

DESCRIPTOR_TAG_DATA_STREAM_ALIGN

```
public static final int DESCRIPTOR_TAG_DATA_STREAM_ALIGN
```

The Constant `DESCRIPTOR_TAG_DATA_STREAM_ALIGN`.
Constant value: **6**

DESCRIPTOR_TAG_TGT_BACKGRD_GRID

```
public static final int DESCRIPTOR_TAG_TGT_BACKGRD_GRID
```

The Constant `DESCRIPTOR_TAG_TGT_BACKGRD_GRID`.
Constant value: **7**

DESCRIPTOR_TAG_VIDEO_WINDOWS

```
public static final int DESCRIPTOR_TAG_VIDEO_WINDOWS
```

The Constant `DESCRIPTOR_TAG_VIDEO_WINDOWS`.

(continued from last page)

Constant value: **8**

DESCRIPTOR_TAG_CA

```
public static final int DESCRIPTOR_TAG_CA
```

The Constant DESCRIPTOR_TAG_CA.
Constant value: **9**

DESCRIPTOR_TAG_ISO_639_LANG

```
public static final int DESCRIPTOR_TAG_ISO_639_LANG
```

The Constant DESCRIPTOR_TAG_ISO_639_LANG.
Constant value: **10**

DESCRIPTOR_TAG_SYSTEM_CLOCK

```
public static final int DESCRIPTOR_TAG_SYSTEM_CLOCK
```

The Constant DESCRIPTOR_TAG_SYSTEM_CLOCK.
Constant value: **11**

DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL

```
public static final int DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL
```

The Constant DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL.
Constant value: **12**

DESCRIPTOR_TAG_COPYRIGHT

```
public static final int DESCRIPTOR_TAG_COPYRIGHT
```

The Constant DESCRIPTOR_TAG_COPYRIGHT.
Constant value: **13**

DESCRIPTOR_TAG_MAX_BITRATE

```
public static final int DESCRIPTOR_TAG_MAX_BITRATE
```

The Constant DESCRIPTOR_TAG_MAX_BITRATE.
Constant value: **14**

DESCRIPTOR_TAG_PRIVATE_DATA

```
public static final int DESCRIPTOR_TAG_PRIVATE_DATA
```

The Constant DESCRIPTOR_TAG_PRIVATE_DATA.
Constant value: **15**

DESCRIPTOR_TAG_SMOOTHING_BUF

```
public static final int DESCRIPTOR_TAG_SMOOTHING_BUF
```

The Constant DESCRIPTOR_TAG_SMOOTHING_BUF.
Constant value: **16**

(continued from last page)

DESCRIPTOR_TAG_STD

```
public static final int DESCRIPTOR_TAG_STD
```

The Constant DESCRIPTOR_TAG_STD.
Constant value: **17**

DESCRIPTOR_TAG_IBP

```
public static final int DESCRIPTOR_TAG_IBP
```

The Constant DESCRIPTOR_TAG_IBP.
Constant value: **18**

DESCRIPTOR_TAG_MP4_VIDEO

```
public static final int DESCRIPTOR_TAG_MP4_VIDEO
```

The Constant DESCRIPTOR_TAG_MP4_VIDEO.
Constant value: **27**

DESCRIPTOR_TAG_MP4_AUDIO

```
public static final int DESCRIPTOR_TAG_MP4_AUDIO
```

The Constant DESCRIPTOR_TAG_MP4_AUDIO.
Constant value: **28**

DESCRIPTOR_TAG_IOD

```
public static final int DESCRIPTOR_TAG_IOD
```

The Constant DESCRIPTOR_TAG_IOD.
Constant value: **29**

DESCRIPTOR_TAG_SL

```
public static final int DESCRIPTOR_TAG_SL
```

The Constant DESCRIPTOR_TAG_SL.
Constant value: **30**

DESCRIPTOR_TAG_FMC

```
public static final int DESCRIPTOR_TAG_FMC
```

The Constant DESCRIPTOR_TAG_FMC.
Constant value: **31**

DESCRIPTOR_TAG_EXT_ES_ID

```
public static final int DESCRIPTOR_TAG_EXT_ES_ID
```

The Constant DESCRIPTOR_TAG_EXT_ES_ID.
Constant value: **32**

DESCRIPTOR_TAG_MUXCODE

```
public static final int DESCRIPTOR_TAG_MUXCODE
```

(continued from last page)

The Constant `DESCRIPTOR_TAG_MUXCODE`.
Constant value: **33**

DESCRIPTOR_TAG_FMX_BUFSIZE

`public static final int` **DESCRIPTOR_TAG_FMX_BUFSIZE**

The Constant `DESCRIPTOR_TAG_FMX_BUFSIZE`.
Constant value: **34**

DESCRIPTOR_TAG_MULTIPLE_BUF

`public static final int` **DESCRIPTOR_TAG_MULTIPLE_BUF**

The Constant `DESCRIPTOR_TAG_MULTIPLE_BUF`.
Constant value: **35**

DESCRIPTOR_TAG_FLEX_MUX_TIMING

`public static final int` **DESCRIPTOR_TAG_FLEX_MUX_TIMING**

The Constant `DESCRIPTOR_TAG_FLEX_MUX_TIMING`.
Constant value: **36**

DESCRIPTOR_TAG_METADATA_POINTER

`public static final int` **DESCRIPTOR_TAG_METADATA_POINTER**

The Constant `DESCRIPTOR_TAG_METADATA_POINTER_DESCRIPTOR`.
Constant value: **37**

DESCRIPTOR_TAG_METADATA

`public static final int` **DESCRIPTOR_TAG_METADATA**

The Constant `DESCRIPTOR_TAG_METADATA`.
Constant value: **38**

DESCRIPTOR_TAG_METADATA_STD

`public static final int` **DESCRIPTOR_TAG_METADATA_STD**

The Constant `DESCRIPTOR_TAG_METADATA_STD`.
Constant value: **39**

DESCRIPTOR_TAG_EXTENSION_MP4_LOAS

`public static final int` **DESCRIPTOR_TAG_EXTENSION_MP4_LOAS**

The Constant `DESCRIPTOR_TAG_MP4_LOAS`.
Constant value: **46**

DESCRIPTOR_TAG_STREAM_IDENTIFIER

`public static final int` **DESCRIPTOR_TAG_STREAM_IDENTIFIER**

The Constant `DESCRIPTOR_TAG_STREAM_IDENTIFIER`.
Constant value: **82**

DESCRIPTOR_TAG_DVBTELETEXT

public static final int **DESCRIPTOR_TAG_DVBTELETEXT**

The Constant DESCRIPTOR_TAG_DVBTELETEXT.
Constant value: **86**

DESCRIPTOR_TAG_AC3

public static final int **DESCRIPTOR_TAG_AC3**

The Constant DESCRIPTOR_TAG_AC3.
Constant value: **106**

DESCRIPTOR_TAG Ancillary

public static final int **DESCRIPTOR_TAG_Ancillary**

The Constant DESCRIPTOR_TAG_Ancillary
Constant value: **107**

DESCRIPTOR_TAG_ENHANCED_AC3

public static final int **DESCRIPTOR_TAG_ENHANCED_AC3**

The Constant DESCRIPTOR_TAG_ENHANCED_AC3.
Constant value: **122**

DESCRIPTOR_TAG_AAC_DVB

public static final int **DESCRIPTOR_TAG_AAC_DVB**

The Constant DESCRIPTOR_TAG_AAC_DVB
Constant value: **124**

DESCRIPTOR_TAG_EXTENSION_DVB

public static final int **DESCRIPTOR_TAG_EXTENSION_DVB**

The Constant DESCRIPTOR_TAG_EXTENSION_DVB
Constant value: **127**

DESCRIPTOR_TAG_CUE_IDENTIFIER

public static final int **DESCRIPTOR_TAG_CUE_IDENTIFIER**

The Constant DESCRIPTOR_TAG_CUE_IDENTIFIER.
Constant value: **138**

DESCRIPTOR_TAG_AAC_SCTE

public static final int **DESCRIPTOR_TAG_AAC_SCTE**

The Constant DESCRIPTOR_TAG_AAC_SCTE.
Constant value: **234**

(continued from last page)

tag

```
public int tag
```

The tag.

length

```
public int length
```

The length.

data

```
public byte data
```

The data.

Constructors

Descriptor

```
public Descriptor()
```

Instantiates a new descriptor.

Descriptor

```
public Descriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

Parameters:

descriptorData - the descriptor data

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

Parameters:

buffer - a ByteBuffer to put the descriptor binary data into

(continued from last page)

binarySize

```
public int binarySize()
```

How big is the descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

decodeDescriptor

```
public static Descriptor decodeDescriptor( java.nio.ByteBuffer descriptorData)
```

Decode descriptor.

Parameters:

descriptorData - the descriptor data

Returns:

the descriptor

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

getDescriptorName

```
public static String getDescriptorName(int tag)
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

getDataAsBase64

```
public String getDataAsBase64()
```

toDebugString

```
public String toDebugString()
```

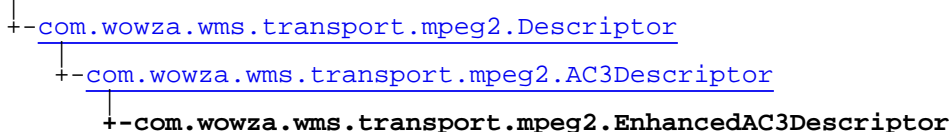
toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2

Class EnhancedAC3Descriptor

java.lang.Object



public class **EnhancedAC3Descriptor**
 extends [AC3Descriptor](#)

Field Summary

public	mixInfoExistsFlag
public	subStream1
public	substream1Flag
public	subStream2
public	substream2Flag
public	subStream3
public	substream3Flag

Fields inherited from class [com.wowza.wms.transport.mpeg2.AC3Descriptor](#)

[asvc](#), [asvcFlag](#), [bsid](#), [bsidFlag](#), [componentType](#), [componentTypeFlag](#), [mainId](#), [mainIdFlag](#)

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	EnhancedAC3Descriptor()
public	EnhancedAC3Descriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
int	readData (java.nio.ByteBuffer descriptorData)
byte	readFlags (java.nio.ByteBuffer descriptorData)
String	toString ()
void	toStringAddData (StringBuilder sb)
void	toStringAddFlags (StringBuilder sb)

Methods inherited from class [com.wowza.wms.transport.mpeg2.AC3Descriptor](#)

[decodeDescriptorData](#), [readData](#), [readFlags](#), [toString](#), [toStringAddData](#), [toStringAddFlags](#)

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

mixInfoExistsFlag

public boolean **mixInfoExistsFlag**

substream1Flag

public boolean **substream1Flag**

(continued from last page)

substream2Flag

```
public boolean substream2Flag
```

substream3Flag

```
public boolean substream3Flag
```

subStream1

```
public int subStream1
```

subStream2

```
public int subStream2
```

subStream3

```
public int subStream3
```

Constructors

EnhancedAC3Descriptor

```
public EnhancedAC3Descriptor()
```

EnhancedAC3Descriptor

```
public EnhancedAC3Descriptor(java.nio.ByteBuffer descriptorData)
```

Methods

readFlags

```
protected byte readFlags(java.nio.ByteBuffer descriptorData)
```

readData

```
protected int readData(java.nio.ByteBuffer descriptorData)
```

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toStringAddFlags

```
protected void toStringAddFlags(StringBuilder sb)
```

toStringAddData

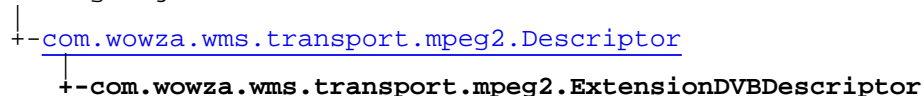
```
protected void toStringAddData(StringBuilder sb)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDescrptor

java.lang.Object



```

public class ExtensionDVBDescrptor
extends Descriptor
  
```

Nested Class Summary

class	ExtensionDVBDescrptor.CPEExtendedDescriptor ExtensionDVBDescrptor.CPEExtendedDescriptor
class	ExtensionDVBDescrptor.DefaultExtendedDescriptor ExtensionDVBDescrptor.DefaultExtendedDescriptor
class	ExtensionDVBDescrptor.ExtendedDescriptor ExtensionDVBDescrptor.ExtendedDescriptor
class	ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor ExtensionDVBDescrptor.SupplementalAudioExtendedDescriptor
class	ExtensionDVBDescrptor.T2MIExtendedDescriptor ExtensionDVBDescrptor.T2MIExtendedDescriptor
class	ExtensionDVBDescrptor.URILinkageExtendedDescriptor ExtensionDVBDescrptor.URILinkageExtendedDescriptor

Field Summary

public	extendedDescriptor
public	extensionTag
public static final	TAG_EXTENSION_CP_DESCRIPTOR Value: 2
public static final	TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTOR Value: 14
public static final	TAG_EXTENSION_DTS_NEURAL_DESCRIPTOR Value: 15
public static final	TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTOR Value: 6

public static final	TAG_EXTENSION_T2MI_DESCRIPTOR Value: 17
public static final	TAG_EXTENSION_URI_LINKAGE_DESCRIPTOR Value: 19

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	ExtensionDVBDescrptor ()
public	ExtensionDVBDescrptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

TAG_EXTENSION_CP_DESCRIPTOR

public static final int **TAG_EXTENSION_CP_DESCRIPTOR**

(continued from last page)

Constant value: **2**

TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTOR

```
public static final int TAG_EXTENSION_SUPPLEMENTAL_AUDIO_DESCRIPTOR
```

Constant value: **6**

TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTOR

```
public static final int TAG_EXTENSION_DTS_HD_AUDIO_STREAM_DESCRIPTOR
```

Constant value: **14**

TAG_EXTENSION_DTS_NEURAL_DESCRIPTOR

```
public static final int TAG_EXTENSION_DTS_NEURAL_DESCRIPTOR
```

Constant value: **15**

TAG_EXTENSION_T2MI_DESCRIPTOR

```
public static final int TAG_EXTENSION_T2MI_DESCRIPTOR
```

Constant value: **17**

TAG_EXTENSION_URI_LINKAGE_DESCRIPTOR

```
public static final int TAG_EXTENSION_URI_LINKAGE_DESCRIPTOR
```

Constant value: **19**

extensionTag

```
public int extensionTag
```

extendedDescriptor

```
public com.wowza.wms.transport.mpeg2.ExtensionDVBDescrptor.ExtendedDescriptor  
extendedDescriptor
```

Constructors

ExtensionDVBDescrptor

```
public ExtensionDVBDescrptor()
```

ExtensionDVBDescrptor

```
public ExtensionDVBDescrptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.ExtendedDescriptor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor

Direct Known Subclasses:

[URLLinkageExtendedDescriptor](#), [T2MIExtendedDescriptor](#), [SupplementalAudioExtendedDescriptor](#),
[CPEExtendedDescriptor](#), [DefaultExtendedDescriptor](#)

public abstract class **ExtensionDVBDDescriptor.ExtendedDescriptor**
extends Object

Field Summary

public	ancillaryData
--------	-------------------------------

Constructor Summary

public	ExtendedDescriptor()
--------	--------------------------------------

Method Summary

int	consumeAncillaryData (int bytesRead, java.nio.ByteBuffer descriptorData)
abstract int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString()
abstract void	toString (StringBuilder sb)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

ancillaryData

public byte **ancillaryData**

Constructors

(continued from last page)

ExtendedDescriptor

```
public ExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public abstract int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public abstract void toString(StringBuilder sb)
```

toString

```
public String toString()
```

consumeAncillaryData

```
protected int consumeAncillaryData(int bytesRead,  
    java.nio.ByteBuffer descriptorData)
```

com.wowza.wms.transport.mpeg2

Class ExtensionDVBDDescriptor.DefaultExtendedDescriptor

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor
    |
    +--com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.DefaultExtendedDescriptor
  
```

```

public class ExtensionDVBDDescriptor.DefaultExtendedDescriptor
extends ExtensionDVBDDescriptor.ExtendedDescriptor
  
```

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	DefaultExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
-----	---

void	toString (StringBuilder sb)
------	---

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

DefaultExtendedDescriptor

```
public DefaultExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

(continued from last page)

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.CPEExtendedDescriptor

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor
    +--com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.CPEExtendedDescriptor
  
```

public class **ExtensionDVBDDescriptor.CPEExtendedDescriptor**
extends [ExtensionDVBDDescriptor.ExtendedDescriptor](#)

Field Summary

public	CPPid
public	CPSystemId

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	CPEExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

CPSystemId

public int **CPSystemId**

(continued from last page)

CPPid

```
public int CPPid
```

Constructors

CPEExtendedDescriptor

```
public CPEExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.SupplementalAudioExtendedDescriptor

java.lang.Object

└─ [com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

└─

com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.SupplementalAudioExtendedDescriptor

public class **ExtensionDVBDDescriptor.SupplementalAudioExtendedDescriptor**
extends [ExtensionDVBDDescriptor.ExtendedDescriptor](#)

Field Summary

public	editoriaClassification
public	languageCode
public	languageCodePresent
public	mixType

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	SupplementalAudioExtendedDescriptor()
--------	---

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Fields

mixType

```
public boolean mixType
```

editoriaClassification

```
public int editoriaClassification
```

languageCodePresent

```
public boolean languageCodePresent
```

languageCode

```
public byte languageCode
```

Constructors

SupplementalAudioExtendedDescriptor

```
public SupplementalAudioExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2

Class ExtensionDVBDDescriptor.T2MIExtendedDescriptor

java.lang.Object

```

  |
+-com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor
  |
+-com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.T2MIExtendedDescriptor

```

public class **ExtensionDVBDDescriptor.T2MIExtendedDescriptor**
 extends [ExtensionDVBDDescriptor.ExtendedDescriptor](#)

Field Summary

public	numT2MIStreamsMinusOne
public	pcrIscrCommonClockFlag
public	t2miStreamId

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	T2MIExtendedDescriptor()
--------	--

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

t2miStreamId

```
public int t2miStreamId
```

numT2MIStreamsMinusOne

```
public int numT2MIStreamsMinusOne
```

pcrIscrCommonClockFlag

```
public boolean pcrIscrCommonClockFlag
```

Constructors

T2MIEExtendedDescriptor

```
public T2MIEExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Class ExtensionDVBDDescriptor.URILinkageExtendedDescriptor

java.lang.Object

└─ [com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

└─

com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.URILinkageExtendedDescriptor

public class **ExtensionDVBDDescriptor.URILinkageExtendedDescriptor**
extends [ExtensionDVBDDescriptor.ExtendedDescriptor](#)

Field Summary

public	minPollingInterval
public	uri
public	uriLength
public	uriLinkageType

Fields inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[ancillaryData](#)

Constructor Summary

public	URILinkageExtendedDescriptor()
--------	--

Method Summary

int	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toString (StringBuilder sb)

Methods inherited from class

[com.wowza.wms.transport.mpeg2.ExtensionDVBDDescriptor.ExtendedDescriptor](#)

[consumeAncillaryData](#), [decodeDescriptorData](#), [toString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

uriLinkageType

```
public int uriLinkageType
```

uriLength

```
public int uriLength
```

uri

```
public java.lang.String uri
```

minPollingInterval

```
public int minPollingInterval
```

Constructors

URILinkageExtendedDescriptor

```
public URILinkageExtendedDescriptor()
```

Methods

decodeDescriptorData

```
public int decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

toString

```
public void toString(StringBuilder sb)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2PacketProcessor

All Known Implementing Classes:

[MPEG2SectionAssembler](#), [MPEG2RawPacketProcessor](#), [MPEG2RawAssembler](#), [MPEG2PESPacketProcessor](#)

public interface **IMPEG2PacketProcessor**
extends

The Interface Impeg2PacketProcessor.

Method Summary

abstract void	notifyAdaptationHeaders (boolean notify) Notify adaptation headers.
abstract void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count) Process mpeg2 raw buffer.
abstract void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet) Process mpeg2 packet.

Methods

notifyAdaptationHeaders

public abstract void **notifyAdaptationHeaders**(boolean notify)

Notify adaptation headers.

Parameters:

notify - the notify

processMpeg2Packet

public abstract void **processMpeg2Packet**([MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet](#) packet)
throws java.io.IOException

Process mpeg2 packet.

Parameters:

packet - the packet

Throws:

IOException - Signals that an I/O exception has occurred.

processMpeg2Buffer

public abstract void **processMpeg2Buffer**(int pid,
byte[] bytes,
int offset,
int count)

(continued from last page)

Process mpeg2 raw buffer.

Parameters:

bytes
offset
count

com.wowza.wms.transport.mpeg2 Interface IMPEG2PESListener

All Known Implementing Classes:
[PESAssembler](#)

public interface **IMPEG2PESListener**
extends

Method Summary

abstract void	pesDataAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header)
---------------	---

Methods

pesDataAvailable

public abstract void **pesDataAvailable**([MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet](#) packet, int length, [MPEG2PESPacket.PESHeader](#) header)

com.wowza.wms.transport.mpeg2 Interface IMPEG2RawListener

All Known Implementing Classes:

[RawAssembler](#)

public interface **IMPEG2RawListener**
extends

Method Summary

abstract void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
---------------	---

Methods

processMpeg2Buffer

```
public abstract void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2SectionListener

All Known Implementing Classes:

[SectionAssembler](#), [SITAssembler](#), [MPEG2TableAssembler](#)

public interface **IMPEG2SectionListener**
extends

The listener interface for receiving impeg2Section events. The class that is interested in processing a impeg2Section event implements this interface, and the object created with that class is registered with a component using the component's addImpeg2SectionListener method. When the impeg2Section event occurs, that object's appropriate method is invoked.

See Also:

[Impeg2SectionEvent](#)

Field Summary

public static final	<u>INVALID</u> The Constant INVALID. Value: -1
---------------------	---

Method Summary

abstract void	<u>adaptationHeader</u> (<u>AdaptationField</u> field) Adaptation header.
abstract boolean	<u>headerNotify</u> (<u>MPEG2Section</u> section) Header notify.
abstract void	<u>logDebug</u> (String comment)
abstract void	<u>logError</u> (String comment)
abstract void	<u>logError</u> (String comment, Exception e)
abstract void	<u>logFatal</u> (String comment)
abstract void	<u>logInfo</u> (String comment)
abstract boolean	<u>logThrottleDoLog</u> ()
abstract void	<u>logWarn</u> (String comment)
abstract void	<u>sectionNotify</u> (<u>MPEG2Section</u> section, boolean continuityError) Section notify.

Fields

(continued from last page)

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

Methods

adaptationHeader

```
public abstract void adaptationHeader(AdaptationField field)
```

Adaptation header.

Parameters:

field - the field

headerNotify

```
public abstract boolean headerNotify(MPEG2Section section)
```

Header notify.

Parameters:

section - the section

Returns:

true, if successful

sectionNotify

```
public abstract void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

Section notify.

Parameters:

section - the section

continuityError - the continuity error

logThrottleDoLog

```
public abstract boolean logThrottleDoLog()
```

logFatal

```
public abstract void logFatal(String comment)
```

logError

```
public abstract void logError(String comment)
```

logError

```
public abstract void logError(String comment,  
                               Exception e)
```

logWarn

```
public abstract void logWarn(String comment)
```

logInfo

```
public abstract void logInfo(String comment)
```

logDebug

```
public abstract void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2StreamListener

public interface **IMPEG2StreamListener**
extends

The listener interface for receiving mpeg2Stream events. The class that is interested in processing a mpeg2Stream event implements this interface, and the object created with that class is registered with a component using the component's addImpeg2StreamListener method. When the mpeg2Stream event occurs, that object's appropriate method is invoked.

See Also:

IMPEG2StreamEvent

Method Summary

abstract void	adaptationFieldAvailable (AdaptationField newAdapationField) Adaptation field available.
abstract void	audioAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header) Audio available.
abstract void	logDebug (String comment)
abstract void	logError (String comment)
abstract void	logError (String comment, Exception e)
abstract void	logFatal (String comment)
abstract void	logInfo (String comment)
abstract boolean	logThrottleDoLog ()
abstract void	logWarn (String comment)
abstract void	patAvailable (ProgramAssociationTable newPAT) PAT available.
abstract void	pmtAvailable (ProgramMapTable newPMT) PMT available.
abstract void	sitAvailable (SpliceInformationTable newSIT) SIT available.
abstract void	videoAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header) Video available.

Methods

(continued from last page)

patAvailable

```
public abstract void patAvailable(ProgramAssociationTable newPAT)
```

PAT available.

Parameters:

newPAT - the new pat

pmtAvailable

```
public abstract void pmtAvailable(ProgramMapTable newPMT)
```

PMT available.

Parameters:

newPMT - the new pmt

sitAvailable

```
public abstract void sitAvailable(SpliceInformationTable newSIT)
```

SIT available.

Parameters:

newSIT - the new sit

adaptationFieldAvailable

```
public abstract void adaptationFieldAvailable(AdaptationField newAdapationField)
```

Adaptation field available.

Parameters:

newAdapationField - the new adapation field

videoAvailable

```
public abstract void videoAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

Video available.

Parameters:

packet - the packet
length - the length
header - the header

audioAvailable

```
public abstract void audioAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

Audio available.

Parameters:

(continued from last page)

packet - the packet
length - the length
header - the header

logThrottleDoLog

```
public abstract boolean logThrottleDoLog()
```

logFatal

```
public abstract void logFatal(String comment)
```

logError

```
public abstract void logError(String comment)
```

logError

```
public abstract void logError(String comment,  
                               Exception e)
```

logWarn

```
public abstract void logWarn(String comment)
```

logInfo

```
public abstract void logInfo(String comment)
```

logDebug

```
public abstract void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorNotifyBase

All Subinterfaces:

[IMPEG2UserMonitorSectionNotify](#), [IMPEG2UserMonitorRawNotify](#), [IMPEG2UserMonitorPESNotify](#)

public interface **IMPEG2UserMonitorNotifyBase**
extends

Method Summary

abstract void	onMonitorStart()
abstract void	onMonitorStop()

Methods

onMonitorStart

public abstract void **onMonitorStart()**

onMonitorStop

public abstract void **onMonitorStop()**

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorPESNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorPESNotify**

extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

abstract void	onDataPES (int pid, MPEG2PESPacket.PESHeader header, byte[] buffer, int offset, int len)
---------------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

Methods

onDataPES

```
public abstract void onDataPES(int pid,  
    MPEG2PESPacket.PESHeader header,  
    byte[] buffer,  
    int offset,  
    int len)
```

com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorRawNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorRawNotify**

extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

abstract void	onDataRaw (int pid, byte[] bytes, int offset, int count)
---------------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

Methods

onDataRaw

```
public abstract void onDataRaw(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```


com.wowza.wms.transport.mpeg2 Interface IMPEG2UserMonitorSectionNotify

All Superinterfaces:

[IMPEG2UserMonitorNotifyBase](#)

public interface **IMPEG2UserMonitorSectionNotify**

extends [IMPEG2UserMonitorNotifyBase](#)

Method Summary

abstract void	onDataSection (int pid, AdaptationField field, MPEG2Section section)
---------------	--

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorNotifyBase](#)

[onMonitorStart](#), [onMonitorStop](#)

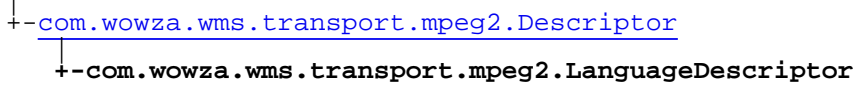
Methods

onDataSection

```
public abstract void onDataSection(int pid,  
    AdaptationField field,  
    MPEG2Section section)
```

com.wowza.wms.transport.mpeg2 Class LanguageDescriptor

java.lang.Object



public class **LanguageDescriptor**
extends [Descriptor](#)

The Class LanguageDescriptor. The language descriptor is used to specify the language of the associated program element

Nested Class Summary

class	LanguageDescriptor.LanguageCode LanguageDescriptor.LanguageCode
-------	--

Field Summary

public	codes The codes.
--------	-------------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	LanguageDescriptor() Instantiates a new language descriptor.
public	LanguageDescriptor(java.nio.ByteBuffer descriptorData) Instantiates a new language descriptor.

Method Summary

int	binarySize() How big is the language descriptor in binary.
-----	---

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the Language descriptor into binary form for use in transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

codes

```
public java.util.Map codes
```

The codes.

Constructors

LanguageDescriptor

```
public LanguageDescriptor()
```

Instantiates a new language descriptor.

LanguageDescriptor

```
public LanguageDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new language descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

(continued from last page)

Encodes the Language descriptor into binary form for use in transport

Parameters:

buffer - ByteBuffer to put the binary data

binarySize

```
public int binarySize()
```

How big is the language descriptor in binary.

Returns:

the total size of the language descriptor in binary form, includes tag and length fields

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class LanguageDescriptor.LanguageCode

java.lang.Object

└─com.wowza.wms.transport.mpeg2.LanguageDescriptor.LanguageCode

public class **LanguageDescriptor.LanguageCode**
extends Object

The Class LanguageCode.

Field Summary

public	<u>code</u> ISO-639~language-code - Identifies the language or languages used by the associated program element.
public	<u>type</u> The audio type specifies the associated stream using the table below 0x00 Undefined 0x01 Clean Effects 0x02 Hearing Impaired 0x03 Visual Impaired commentary 0x04 - 0xFF reserved

Constructor Summary

public	<u>LanguageCode()</u>
--------	---------------------------------------

Method Summary

int	<u>binarySize()</u> How big is the language code in binary.
void	<u>toBin()</u> (java.nio.ByteBuffer buffer) Encodes the Language code into binary form for use in transport
String	<u>toString()</u>

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

code

public java.lang.String **code**

ISO-639~language-code - Identifies the language or languages used by the associated program element. The ISO-639-language-code contains a 3-character code as specified by ISO 639, Part 2. Each character is coded into 8 bits according to ISO 8859-1 and inserted in order into this 24-bit field. In the case of multilingual audio streams the sequence of ISO-639-language-code fields shall reflect the content of the audio stream.

type

```
public int type
```

The audio type specifies the associated stream using the table below 0x00 Undefined 0x01 Clean Effects 0x02 Hearing Impaired 0x03 Visual Impaired commentary 0x04 - 0xFF reserved

Constructors

LanguageCode

```
public LanguageCode()
```

Methods

binarySize

```
public int binarySize()
```

How big is the language code in binary.

Returns:

the total size of the language code in binary form

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the Language code into binary form for use in transport

Parameters:

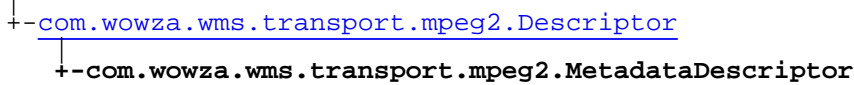
buffer - ByteBuffer to put the binary data

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class MetadataDescriptor

java.lang.Object



public class **MetadataDescriptor**
extends [Descriptor](#)

Field Summary

public	decoderConfigFlags
public	DSMCCFlag
public	metadataApplicationFormat
public	metadataFormat
public	metadataFormatIdentifier
public	metadataServiceId

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	MetadataDescriptor()
public	MetadataDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

metadataApplicationFormat

```
public int metadataApplicationFormat
```

metadataFormat

```
public int metadataFormat
```

metadataFormatIdentifier

```
public int metadataFormatIdentifier
```

metadataServiceId

```
public int metadataServiceId
```

decoderConfigFlags

```
public int decoderConfigFlags
```


(continued from last page)

DSMCCFlag

```
public int DSMCCFlag
```

Constructors

MetadataDescriptor

```
public MetadataDescriptor()
```

MetadataDescriptor

```
public MetadataDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

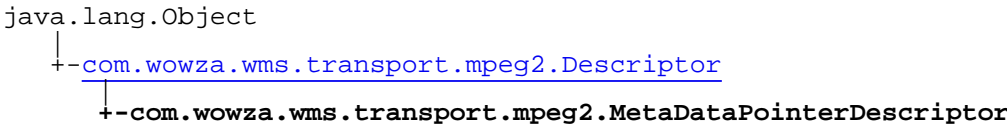
```
public int binarySize()
```

How big is the descriptor in binary.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2
Class MetadataPointerDescriptor



```
public class MetadataPointerDescriptor
extends Descriptor
```

Field Summary	
public static final	METADATA_APPLICATION_FORMAT_APPLE Value: 65535
public static final	METADATA_FORMAT_IDENTIFIER_APPLE Value: 1229206304
public	metadataApplicationFormat
public	metadataFormat
public	metadataFormatIdentifier
public	metadataLocatorRecordFlag
public	metadataServiceId
public	MPEGCarriageFlags
public	programNumber
Fields inherited from class com.wowza.wms.transport.mpeg2.Descriptor	

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	MetadataPointerDescriptor()
public	MetadataPointerDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

METADATA_APPLICATION_FORMAT_APPLE

public static final int **METADATA_APPLICATION_FORMAT_APPLE**

Constant value: **65535**

(continued from last page)

METADATA_FORMAT_IDENTIFIER_APPLE

public static final int **METADATA_FORMAT_IDENTIFIER_APPLE**

Constant value: **1229206304**

metadataApplicationFormat

public int **metadataApplicationFormat**

metadataFormat

public int **metadataFormat**

metadataFormatIdentifier

public int **metadataFormatIdentifier**

metadataServiceId

public int **metadataServiceId**

metadataLocatorRecordFlag

public boolean **metadataLocatorRecordFlag**

MPEGCarriageFlags

public int **MPEGCarriageFlags**

programNumber

public int **programNumber**

Constructors

MetadataPointerDescriptor

public **MetadataPointerDescriptor**()

(continued from last page)

MetadataPointerDescriptor

```
public MetadataPointerDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

```
public int binarySize()
```

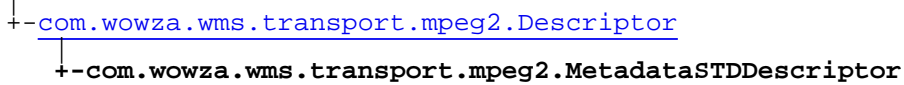
How big is the descriptor in binary.

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class MetadataSTDDescriptor

java.lang.Object



public class **MetadataSTDDescriptor**
extends [Descriptor](#)

Field Summary

public	metadataBufferSize
public	metadataInputLeakRate
public	metadataOutputLeakRate

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	MetadataSTDDescriptor()
public	MetadataSTDDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

int	binarySize()
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)

String	toString()
--------	----------------------------

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

metadataInputLeakRate

```
public int metadataInputLeakRate
```

metadataBufferSize

```
public int metadataBufferSize
```

metadataOutputLeakRate

```
public int metadataOutputLeakRate
```

Constructors

MetadataSTDDescriptor

```
public MetadataSTDDescriptor()
```

MetadataSTDDescriptor

```
public MetadataSTDDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

(continued from last page)

binarySize

```
public int binarySize()
```

How big is the descriptor in binary.

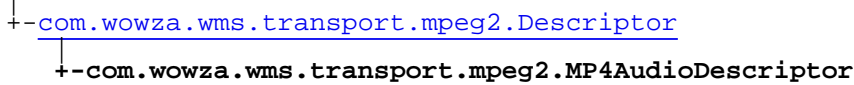
toString

```
public String toString()
```


com.wowza.wms.transport.mpeg2

Class MP4AudioDescriptor

java.lang.Object



public class **MP4AudioDescriptor**
 extends [Descriptor](#)

Field Summary

public	audioType
--------	---------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	MP4AudioDescriptor()
public	MP4AudioDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields**audioType**

`public int audioType`

Constructors**MP4AudioDescriptor**

`public MP4AudioDescriptor()`

MP4AudioDescriptor

`public MP4AudioDescriptor(java.nio.ByteBuffer descriptorData)`

Methods**decodeDescriptorData**

`public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)`

Decode descriptor data.

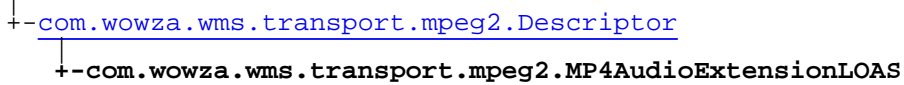
toString

`public String toString()`

com.wowza.wms.transport.mpeg2

Class MP4AudioExtensionLOAS

java.lang.Object



public class **MP4AudioExtensionLOAS**
 extends [Descriptor](#)

Field Summary

public	classification
public	extensionType
public	language_code_present
public	mix_type
public	reserved

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	MP4AudioExtensionLOAS()
public	MP4AudioExtensionLOAS (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

extensionType

```
public int extensionType
```

mix_type

```
public int mix_type
```

classification

```
public int classification
```

reserved

```
public int reserved
```

language_code_present

```
public boolean language_code_present
```

Constructors

MP4AudioExtensionLOAS

```
public MP4AudioExtensionLOAS()
```

MP4AudioExtensionLOAS

```
public MP4AudioExtensionLOAS(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

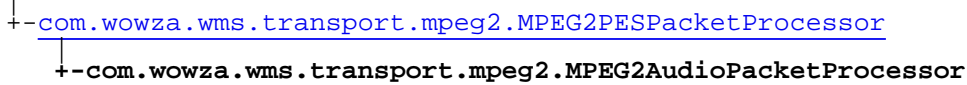
toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2

Class MPEG2AudioPacketProcessor

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

public class **MPEG2AudioPacketProcessor**
 extends [MPEG2PESPacketProcessor](#)

The Class MPEG2AudioPacketProcessor.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2AudioPacketProcessor (int PID, IMPEG2StreamListener listener) Instantiates a new MPEG2 audio packet processor.
--------	--

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2AudioPacketProcessor

public **MPEG2AudioPacketProcessor**(int PID,
[IMPEG2StreamListener](#) listener)

Instantiates a new MPEG2 audio packet processor.

(continued from last page)

Parameters:

PID - the pid

listener - the listener

Methods

handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2 Class MPEG2MPTS

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2MPTS

public class **MPEG2MPTS**
extends Object

The Class mpeg2MPTS.

Nested Class Summary

class	MPEG2MPTS.MPEG2MPTSBuffer MPEG2MPTS.MPEG2MPTSBuffer
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	packetCount The packet count.
public static final	PID_DATATYPE_PES Value: 1
public static final	PID_DATATYPE_RAW Value: 3
public static final	PID_DATATYPE_SECTION Value: 2
public static final	PID_DATATYPE_UNKNOWN Value: 0
public static final	TS_PACKETLEN The Constant TS_PACKETLEN. Value: 188
public static final	TS_SYNCBYTE The Constant TS_SYNCBYTE. Value: 71

Constructor Summary

public	MPEG2MPTS()
--------	-----------------------------

Method Summary

boolean	<u>getHasM2TSTimeCodes</u> ()
int	<u>getPCRPid</u> () Gets the pCR pid.
String	<u>getShortClassName</u> () getShortClassName returns just the class name instead of the com.wms.xxx.xx.className
void	<u>listen</u> (<u>IMPEG2StreamListener</u> who) Listen.
void	<u>processNewBuffer</u> (byte[] bytes, int offset, int count) Process new buffer.
void	<u>setHasM2TSTimeCodes</u> (boolean hasM2TSTimeCodes)
void	<u>setPCRPid</u> (int PID) Sets the pcr pid.
void	<u>startStream</u> (int PID, <u>IMPEG2PacketProcessor</u> parser) Start stream.
void	<u>startStreamAudio</u> (int PID, int codec) Start stream audio.
void	<u>startStreamPAT</u> () Start stream pat.
void	<u>startStreamPMT</u> (<u>ProgramAssociationTable.ProgramEntry</u> program) Start stream pmt.
void	<u>startStreamSCTE</u> (int PID) Start stream scte.
void	<u>startStreamVideo</u> (int PID, int codec) Start stream video.
void	<u>startUserMonitorPES</u> (int PID, <u>IMPEG2UserMonitorPESNotify</u> monitor)
void	<u>startUserMonitorRaw</u> (int PID, <u>IMPEG2UserMonitorRawNotify</u> monitor)
void	<u>startUserMonitorSection</u> (int PID, <u>IMPEG2UserMonitorSectionNotify</u> monitor)
void	<u>stopStream</u> (int PID) Stop stream.
void	<u>stopStreamPMT</u> (<u>ProgramAssociationTable.ProgramEntry</u> program) Stop stream pmt.
void	<u>stopStreamSCTE</u> (int PID) Stop stream scte.

Methods inherited from class `java.lang.Object`

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Fields

PID_DATATYPE_UNKNOWN

```
public static final int PID_DATATYPE_UNKNOWN
```

Constant value: **0**

PID_DATATYPE_PES

```
public static final int PID_DATATYPE_PES
```

Constant value: **1**

PID_DATATYPE_SECTION

```
public static final int PID_DATATYPE_SECTION
```

Constant value: **2**

PID_DATATYPE_RAW

```
public static final int PID_DATATYPE_RAW
```

Constant value: **3**

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

TS_PACKETLEN

```
public static final int TS_PACKETLEN
```

The Constant TS_PACKETLEN.
Constant value: **188**

TS_SYNCBYTE

```
public static final byte TS_SYNCBYTE
```

The Constant TS_SYNCBYTE.
Constant value: **71**

(continued from last page)

packetCount

```
public long packetCount
```

The packet count.

Constructors

MPEG2MPTS

```
public MPEG2MPTS()
```

Methods

getHasM2TSTimeCodes

```
public boolean getHasM2TSTimeCodes()
```

setHasM2TSTimeCodes

```
public void setHasM2TSTimeCodes(boolean hasM2TSTimeCodes)
```

listen

```
public void listen(IMPEG2StreamListener who)
```

Listen.

Parameters:

who - the who

startStreamPAT

```
public void startStreamPAT()
```

Start stream pat.

startStreamPMT

```
public void startStreamPMT(ProgramAssociationTable.ProgramEntry program)
```

Start stream pmt.

Parameters:

program - the program

stopStreamPMT

```
public void stopStreamPMT(ProgramAssociationTable.ProgramEntry program)
```

Stop stream pmt.

(continued from last page)

Parameters:program - the program

startStreamVideo

```
public void startStreamVideo(int PID,  
                             int codec)
```

Start stream video.

Parameters:PID - the pid

startStreamAudio

```
public void startStreamAudio(int PID,  
                             int codec)
```

Start stream audio.

Parameters:PID - the pid

setPCRPid

```
public void setPCRPid(int PID)
```

Sets the pcr pid.

Parameters:PID - the pid

getPCRPid

```
public int getPCRPid()
```

Gets the pCR pid.

Returns:the pCR pid

startStreamSCTE

```
public void startStreamSCTE(int PID)
```

Start stream scte.

Parameters:PID - the pid

startUserMonitorPES

```
public void startUserMonitorPES(int PID,  
                                IMPEG2UserMonitorPESNotify monitor)
```

(continued from last page)

startUserMonitorRaw

```
public void startUserMonitorRaw(int PID,  
    IMPEG2UserMonitorRawNotify monitor)
```

startUserMonitorSection

```
public void startUserMonitorSection(int PID,  
    IMPEG2UserMonitorSectionNotify monitor)
```

stopStreamSCTE

```
public void stopStreamSCTE(int PID)
```

Stop stream scte.

Parameters:

PID - the pid

startStream

```
public void startStream(int PID,  
    IMPEG2PacketProcessor parser)
```

Start stream.

Parameters:

PID - the pid

parser - the parser

stopStream

```
public void stopStream(int PID)
```

Stop stream.

Parameters:

PID - the pid

processNewBuffer

```
public void processNewBuffer(byte[] bytes,  
    int offset,  
    int count)  
throws java.io.IOException
```

Process new buffer.

Parameters:

bytes - the bytes

offset - the offset

count - the count

Throws:

IOException - Signals that an I/O exception has occurred.

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

com.wowza.wms.transport.mpeg2 Class MPEG2MPTS.MPEG2MPTSBuffer

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSBuffer

public class **MPEG2MPTS.MPEG2MPTSBuffer**
extends Object

The Class MPEG2MPTSBuffer.

Nested Class Summary

class	MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet
-------	--

Constructor Summary

public	MPEG2MPTSBuffer (byte[] buf, int offset, int length) Instantiates a new MPEG2 mpts buffer.
--------	---

Method Summary

MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet	readPacket() Read packet.
---	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

MPEG2MPTSBuffer

```
public MPEG2MPTSBuffer(byte[] buf,  
                        int offset,  
                        int length)
```

Instantiates a new MPEG2 mpts buffer.

Parameters:

buf - the buf
offset - the offset
length - the length

Methods

(continued from last page)

readPacket

```
public MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet readPacket()  
    throws IllegalArgumentException
```

Read packet.

Returns:

the MPEG2 packet

Throws:

[IllegalArgumentException](#) - the illegal argument exception

com.wowza.wms.transport.mpeg2

Class MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet

public class **MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet**
extends Object

The Class MPEG2Packet.

Field Summary

public static final	ADAPTATION_CONTROL_ADAPATION_ONLY The Constant ADAPTATION_CONTROL_ADAPATION_ONLY. Value: 2
public static final	ADAPTATION_CONTROL_BOTH The Constant ADAPTATION_CONTROL_BOTH. Value: 3
public static final	ADAPTATION_CONTROL_PAYLOAD_ONLY The Constant ADAPTATION_CONTROL_PAYLOAD_ONLY. Value: 1
public static final	ADAPTATION_FIELD_PRESENT_MASK The Constant ADAPTATION_FIELD_PRESENT_MASK. Value: 2
public	adaptationFieldControl The adaptation field control.
public	continuityCounter The continuity counter.
public static final	PAYLOAD_PRESENT_MASK The Constant PAYLOAD_PRESENT_MASK. Value: 1
public	PID The pid.
public	PUSI The pusi.
public	transportError The transport error.
public	transportPriority The transport priority.
public	transportScrambling The transport scrambling.

Constructor Summary

public	MPEG2Packet()
--------	-------------------------------

Method Summary

AdaptationField	adaptationFieldRead() Adaptation field read.
void	clear() Clear.
String	dumpPacket (String contextStr) Dump packet.
boolean	LoadPacketData() Load packet data.
int	payloadAvailable() Payload available.
void	payloadMark() Payload mark.
int	payloadRead() Payload read.
boolean	payloadRead (byte[] bytes, int offset, int length) Payload read.
PacketFragment	payloadReadFragment (int length)
int	payloadReadInt (int count, int mask) Payload read int.
void	payloadReset() Payload reset.
boolean	payloadSkip (int count) Payload skip.
String	toString()
String	toString (int count) To string.
String	toString (int count, String contextStr)
String	toString (String contextStr)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

(continued from last page)

Fields

ADAPTATION_CONTROL_PAYLOAD_ONLY

```
public static final byte ADAPTATION_CONTROL_PAYLOAD_ONLY
```

The Constant ADAPTATION_CONTROL_PAYLOAD_ONLY.
Constant value: **1**

ADAPTATION_CONTROL_ADAPATION_ONLY

```
public static final byte ADAPTATION_CONTROL_ADAPATION_ONLY
```

The Constant ADAPTATION_CONTROL_ADAPATION_ONLY.
Constant value: **2**

ADAPTATION_CONTROL_BOTH

```
public static final byte ADAPTATION_CONTROL_BOTH
```

The Constant ADAPTATION_CONTROL_BOTH.
Constant value: **3**

ADAPTATION_FIELD_PRESENT_MASK

```
public static final byte ADAPTATION_FIELD_PRESENT_MASK
```

The Constant ADAPTATION_FIELD_PRESENT_MASK.
Constant value: **2**

PAYLOAD_PRESENT_MASK

```
public static final byte PAYLOAD_PRESENT_MASK
```

The Constant PAYLOAD_PRESENT_MASK.
Constant value: **1**

transportError

```
public boolean transportError
```

The transport error.

PUSI

```
public boolean PUSI
```

The pusi.

transportPriority

```
public boolean transportPriority
```

The transport priority.

PID

```
public int PID
```

(continued from last page)

The pid.

transportScrambling

public byte **transportScrambling**

The transport scrambling.

adaptationFieldControl

public byte **adaptationFieldControl**

The adaptation field control.

continuityCounter

public byte **continuityCounter**

The continuity counter.

Constructors

MPEG2Packet

public **MPEG2Packet**()

Methods

clear

public void **clear**()

Clear.

LoadPacketData

public boolean **LoadPacketData**()
throws `IllegalArgumentException`

Load packet data.

Returns:

true, if successful

Throws:

`IllegalArgumentException` - the illegal argument exception

adaptationFieldRead

public [AdaptationField](#) **adaptationFieldRead**()

Adaptation field read.

Returns:

the adaptation field

payloadRead

```
public int payloadRead()
```

Payload read.

Returns:
the int

payloadRead

```
public boolean payloadRead(byte[] bytes,  
    int offset,  
    int length)
```

Payload read.

Parameters:
bytes - the bytes
offset - the offset
length - the length

Returns:
the int

payloadReadFragment

```
public PacketFragment payloadReadFragment(int length)
```

payloadReadInt

```
public int payloadReadInt(int count,  
    int mask)
```

Payload read int.

Parameters:
count - the count
mask - the mask

Returns:
the int

payloadSkip

```
public boolean payloadSkip(int count)
```

Payload skip.

Parameters:
count - the count

Returns:
the int

(continued from last page)

payloadAvailable

```
public int payloadAvailable()
```

Payload available.

Returns:

the int

payloadMark

```
public void payloadMark()
```

Payload mark.

payloadReset

```
public void payloadReset()
```

Payload reset.

toString

```
public String toString()
```

toString

```
public String toString(String contextStr)
```

toString

```
public String toString(int count)
```

To string.

Parameters:

count - the count

Returns:

the string

toString

```
public String toString(int count,  
    String contextStr)
```

dumpPacket

```
public String dumpPacket(String contextStr)
```

Dump packet.

com.wowza.wms.transport.mpeg2 Class MPEG2PATAssembler

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.MPEG2TableAssembler
    +--com.wowza.wms.transport.mpeg2.MPEG2PATAssembler
  
```

All Implemented Interfaces:

[IMPEG2SectionListener](#)

public class **MPEG2PATAssembler**
extends [MPEG2TableAssembler](#)

The Class mpeg2PATAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listeners The listeners.
public	PAT The pat.
public static final	PAT_PID The Constant PAT_PID. Value: 0

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[currentVersion](#), [deliver](#), [INVALID](#), [sections](#)

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2PATAssembler()
--------	-------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
void	buildTable()
boolean	headerNotify (MPEG2Section section)

void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop (IMPEG2StreamListener listener) Monitor stop.
boolean	tableExist ()
int	tableVersion ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[adaptationHeader](#), [buildTable](#), [getShortClassName](#), [headerNotify](#), [sectionNotify](#), [tableExist](#), [tableVersion](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

PAT_PID

```
public static final int PAT_PID
```

The Constant PAT_PID.
Constant value: **0**

PAT

```
public com.wowza.wms.transport.mpeg2.ProgramAssociationTable PAT
```


(continued from last page)

The pat.

listeners

```
public java.util.List listeners
```

The listeners.

deliverSection

```
protected boolean deliverSection
```

The deliver section.

Constructors

MPEG2PATAssembler

```
public MPEG2PATAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

tableExist

```
public boolean tableExist()
```

Table exist.

tableVersion

```
public int tableVersion()
```

Table version.

buildTable

```
public void buildTable()
```

Builds the table.

monitorStart

```
public void monitorStart(IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

(continued from last page)

Monitor start.

Parameters:

listener - the listener
stream - the stream

monitorStop

```
public void monitorStop(IMPEG2StreamListener listener)
```

Monitor stop.

Parameters:

listener - the listener

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
                     Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

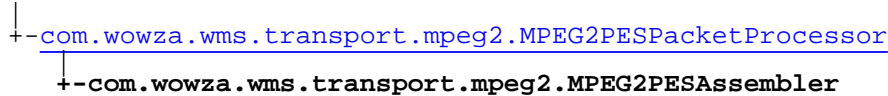
logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2

Class MPEG2PESAssembler

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

public class **MPEG2PESAssembler**
 extends [MPEG2PESPacketProcessor](#)

Field Summary

public	listeners The listeners.
--------	---

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2PESAssembler()
--------	-------------------------------------

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

(continued from last page)

listeners

```
public java.util.List listeners
```

The listeners.

Constructors

MPEG2PESAssembler

```
public MPEG2PESAssembler()
```

Methods

handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2

Class MPEG2PESPacket

java.lang.Object

```

  |
+-com.wowza.wms.rtp.depaketizer.RTPPacket
  |
+-com.wowza.wms.transport.mpeg2.MPEG2PESPacket

```

```

public class MPEG2PESPacket
extends com.wowza.wms.rtp.depaketizer.RTPPacket

```

Nested Class Summary

class	MPEG2PESPacket.PESHeader MPEG2PESPacket.PESHeader
-------	--

Field Summary

public	bufferPos
public	continuityCounter
public	continuityCouterError
public static final	INVALID Value: -1
public	packetStarted

Fields inherited from class com.wowza.wms.rtp.depaketizer.RTPPacket

codec, debugLog, fixH264VideoNALLenStartcodeMix, fixH264WrappingProblems, fragments, frameType, getProperties, isAllISliceKey, isISliceKey, isRTPPacketDebug, nalUnitFilter, sendCodecConfigChanges, seq, size, timecode, timecodeMillis, timeoffset, type

Constructor Summary

public	MPEG2PESPacket()
public	MPEG2PESPacket(long seq, long timecode)

Method Summary

void	addFragment (PacketFragment fragment)
void	clear()

java.util.Map

[findPESHeaders\(\)](#)**Methods inherited from class** com.wowza.wms.rtp.depaketizer.RTPPacket

```
addFragment, addFragment, clearFragments, clone, decodeAud, decodeAudNALUnit,
getBytes, getCodec, getFirstFragment, getFragments, getFrameType,
getH264CodecConfigInfo, getH265CodecConfigInfo, getLastFragment, getSeq, getSize,
getTimecode, getTimecodeMillis, getTimeoffset, getType, h264StartCodesToLengths,
h265StartCodesToLengths, incSize, isDebugLog, isFixH264WrappingProblems, setCodec,
setDebugLog, setFixH264WrappingProblems, setFrameType, setSeq, setSize, setTimecode,
setTimecodeMillis, setTimeoffset, setType, toArray, write, write
```

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait
```

Fields

INVALID

```
public static final int INVALID
```

Constant value: **-1**

continuityCounter

```
public int continuityCounter
```

continuityCouterError

```
public boolean continuityCouterError
```

bufferPos

```
public int bufferPos
```

packetStarted

```
public boolean packetStarted
```

Constructors

(continued from last page)

MPEG2PESPacket

```
public MPEG2PESPacket()
```

MPEG2PESPacket

```
public MPEG2PESPacket(long seq,  
                       long timecode)
```

Methods

clear

```
public void clear()
```

addFragment

```
public void addFragment(PacketFragment fragment)
```

findPESHeaders

```
public java.util.Map findPESHeaders()
```

com.wowza.wms.transport.mpeg2 Class MPEG2PESPacket.PESHeader

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2PESPacket.PESHeader

public class **MPEG2PESPacket.PESHeader**
extends Object

The Class PESHeader.

Field Summary

public	additionalCopyInfoFlag The pes additional copy info flag.
public	copyright The pes copyright.
public	CRCFlag The pes pescrc flag.
public	dataAlignment The pes data alignment.
public	DSMTrickMode The pes dsm trick mode.
public	DTS The pes dts.
public	ESCRBase The pes escr base.
public	escrBuf The escr buf.
public	ESCRExt The pes escr ext.
public	ESCRFlag The pes escr flag.
public	ESRate The pes es rate.
public	ESRateFlag The pes es rate flag.
public	extFlag The pes pes ext flag.
public	length The pes packet len.

public	<u>originalStuffLen</u>
public	<u>originalOrCopy</u> The pes original or copy.
public	<u>packetDataBytes</u> The pes packet data byte.
public	<u>packetHeaderBytes</u>
public	<u>packHeaderFieldFlag</u> The pes pack header field flag.
public static final	<u>PES_DSMCC_STREAM</u> The Constant PES_DSMCC_STREAM. Value: 242
public static final	<u>PES_ECM_STREAM</u> The Constant PES_ECM_STREAM. Value: 240
public static final	<u>PES_EMM_STREAM</u> The Constant PES_EMM_STREAM. Value: 241
public static final	<u>PES_EXTENSION</u> The Constant PES_EXTENSION. Value: 181
public static final	<u>PES_GROUP</u> The Constant PES_GROUP. Value: 184
public static final	<u>PES_H222_TYPE_A</u> The Constant PES_H222_TYPE_A. Value: 244
public static final	<u>PES_H222_TYPE_B</u> The Constant PES_H222_TYPE_B. Value: 245
public static final	<u>PES_H222_TYPE_C</u> The Constant PES_H222_TYPE_C. Value: 246
public static final	<u>PES_H222_TYPE_D</u> The Constant PES_H222_TYPE_D. Value: 247
public static final	<u>PES_H222_TYPE_E</u> The Constant PES_H222_TYPE_E. Value: 248
public static final	<u>PES_PADDING_STREAM</u> The Constant PES_PADDING_STREAM. Value: 190

public static final	<u>PES_PICTURE_START</u> The Constant PES_PICTURE_START. Value: 0
public static final	<u>PES_PRIVATE_STREAM_1</u> The Constant PES_PRIVATE_STREAM_1. Value: 189
public static final	<u>PES_PRIVATE_STREAM_2</u> The Constant PES_PRIVATE_STREAM_2. Value: 191
public static final	<u>PES_PROGRAM_MAP</u> The Constant PES_PROGRAM_MAP. Value: 188
public static final	<u>PES_PROGRAM_STREAM_DIRECTORY</u> The Constant PES_PROGRAM_STREAM_DIRECTORY. Value: 255
public static final	<u>PES_SEQUENCE_END</u> The Constant PES_SEQUENCE_END. Value: 183
public static final	<u>PES_SEQUENCE_ERROR</u> The Constant PES_SEQUENCE_ERROR. Value: 180
public static final	<u>PES_SEQUENCE_HEADER</u> The Constant PES_SEQUENCE_HEADER. Value: 179
public static final	<u>PES_USER_DATA</u> The Constant PES_USER_DATA. Value: 178
public	<u>PES2ExtFlag</u> The pes pe s2 ext flag.
public	<u>PESExt2Data</u> The pes pes ext2 data.
public	<u>previousPacketCRC</u> The previous packet crc.
public	<u>priority</u> The pes priority.
public	<u>privateData</u> The pes private data.
public	<u>privateDataFlag</u> The pes private data flag.
public	<u>programPacketSeqCounterFlag</u> The pes program packet seq counter flag.

public	programPacketSequenceCounter The pes program packet sequence counter.
public	PSTDBufferFlag The pes pstd buffer flag.
public	PSTDBufferSize The PSTD buffer size.
public	PTS The pes pts.
public	PTSPTSFlags The pes ptsdts flags.
public	scramblingControl The pes scrambling control.
public	startCodePrefix The pes start code.
public	streamId The pes stream id.

Constructor Summary

public	PESHeader ()
public	PESHeader (java.nio.ByteBuffer buffer)

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

PES_PICTURE_START

public static final int **PES_PICTURE_START**

The Constant PES_PICTURE_START.
Constant value: **0**

PES_USER_DATA

public static final int **PES_USER_DATA**

The Constant PES_USER_DATA.
Constant value: **178**

PES_SEQUENCE_HEADER

public static final int **PES_SEQUENCE_HEADER**

(continued from last page)

The Constant PES_SEQUENCE_HEADER.
Constant value: **179**

PES_SEQUENCE_ERROR

public static final int **PES_SEQUENCE_ERROR**

The Constant PES_SEQUENCE_ERROR.
Constant value: **180**

PES_EXTENSION

public static final int **PES_EXTENSION**

The Constant PES_EXTENSION.
Constant value: **181**

PES_SEQUENCE_END

public static final int **PES_SEQUENCE_END**

The Constant PES_SEQUENCE_END.
Constant value: **183**

PES_GROUP

public static final int **PES_GROUP**

The Constant PES_GROUP.
Constant value: **184**

PES_PROGRAM_MAP

public static final int **PES_PROGRAM_MAP**

The Constant PES_PROGRAM_MAP.
Constant value: **188**

PES_PRIVATE_STREAM_1

public static final int **PES_PRIVATE_STREAM_1**

The Constant PES_PRIVATE_STREAM_1.
Constant value: **189**

PES_PADDING_STREAM

public static final int **PES_PADDING_STREAM**

The Constant PES_PADDING_STREAM.
Constant value: **190**

PES_PRIVATE_STREAM_2

public static final int **PES_PRIVATE_STREAM_2**

The Constant PES_PRIVATE_STREAM_2.
Constant value: **191**

(continued from last page)

PES_ECM_STREAM

```
public static final int PES_ECM_STREAM
```

The Constant PES_ECM_STREAM.
Constant value: **240**

PES_EMM_STREAM

```
public static final int PES_EMM_STREAM
```

The Constant PES_EMM_STREAM.
Constant value: **241**

PES_DSMCC_STREAM

```
public static final int PES_DSMCC_STREAM
```

The Constant PES_DSMCC_STREAM.
Constant value: **242**

PES_H222_TYPE_A

```
public static final int PES_H222_TYPE_A
```

The Constant PES_H222_TYPE_A.
Constant value: **244**

PES_H222_TYPE_B

```
public static final int PES_H222_TYPE_B
```

The Constant PES_H222_TYPE_B.
Constant value: **245**

PES_H222_TYPE_C

```
public static final int PES_H222_TYPE_C
```

The Constant PES_H222_TYPE_C.
Constant value: **246**

PES_H222_TYPE_D

```
public static final int PES_H222_TYPE_D
```

The Constant PES_H222_TYPE_D.
Constant value: **247**

PES_H222_TYPE_E

```
public static final int PES_H222_TYPE_E
```

The Constant PES_H222_TYPE_E.
Constant value: **248**

PES_PROGRAM_STREAM_DIRECTORY

```
public static final int PES_PROGRAM_STREAM_DIRECTORY
```

(continued from last page)

The Constant PES_PROGRAM_STREAM_DIRECTORY.
Constant value: **255**

startCodePrefix

public int **startCodePrefix**

The pes start code.

streamId

public int **streamId**

The pes stream id.

length

public int **length**

The pes packet len.

scramblingControl

public int **scramblingControl**

The pes scrambling control.

priority

public boolean **priority**

The pes priority.

dataAlignment

public boolean **dataAlignment**

The pes data alignment.

copyright

public boolean **copyright**

The pes copyright.

originalOrCopy

public boolean **originalOrCopy**

The pes original or copy.

PTSDTSFlags

public int **PTSDTSFlags**

The pes ptsdts flags.

(continued from last page)

ESCRFlag

public boolean **ESCRFlag**

The pes escr flag.

ESRateFlag

public boolean **ESRateFlag**

The pes es rate flag.

DSMTrickMode

public boolean **DSMTrickMode**

The pes dsm trick mode.

additionalCopyInfoFlag

public boolean **additionalCopyInfoFlag**

The pes additional copy info flag.

CRCFlag

public boolean **CRCFlag**

The pes pescrc flag.

extFlag

public boolean **extFlag**

The pes pes ext flag.

PTS

public long **PTS**

The pes pts.

DTS

public long **DTS**

The pes dts.

ESCRBase

public int **ESCRBase**

The pes escr base.

ESCRExt

public int **ESCRExt**

(continued from last page)

The pes escr ext.

escrBuf

public byte **escrBuf**

The escr buf.

ESRate

public int **ESRate**

The pes es rate.

previousPacketCRC

public int **previousPacketCRC**

The previous packet crc.

privateDataFlag

public boolean **privateDataFlag**

The pes private data flag.

packHeaderFieldFlag

public boolean **packHeaderFieldFlag**

The pes pack header field flag.

programPacketSeqCounterFlag

public boolean **programPacketSeqCounterFlag**

The pes program packet seq counter flag.

orginalStuffLen

public int **orginalStuffLen**

PSTDBufferFlag

public boolean **PSTDBufferFlag**

The pes pstd buffer flag.

PES2ExtFlag

public boolean **PES2ExtFlag**

The pes pe s2 ext flag.

(continued from last page)

privateData

public byte **privateData**

The pes private data.

packetHeaderBytes

public byte **packetHeaderBytes**

programPacketSequenceCounter

public int **programPacketSequenceCounter**

The pes program packet sequence counter.

PSTDBufferSize

public int **PSTDBufferSize**

The PSTD buffer size.

PESExt2Data

public byte **PESExt2Data**

The pes pes ext2 data.

packetDataBytes

public byte **packetDataBytes**

The pes packet data byte.

Constructors

PESHeader

public **PESHeader**()

PESHeader

public **PESHeader**(java.nio.ByteBuffer buffer)

com.wowza.wms.transport.mpeg2 Class MPEG2PESPacketProcessor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

Direct Known Subclasses:

[MPEG2VideoPacketProcessor](#), [MPEG2PESAssembler](#), [MPEG2AudioPacketProcessor](#)

public abstract class **MPEG2PESPacketProcessor**

extends Object

implements [IMPEG2PacketProcessor](#)

The Class mpeg2PESPacketProcessor.

Field Summary

public	continuityCounter The continuity counter.
public	continuityError The continuity error.
protected	currentPacket The current packet.
public static final	INVALID The Constant INVALID. Value: -1
protected	listener The listener.
protected	pesPacket
public	PID The pid.

Constructor Summary

public	MPEG2PESPacketProcessor ()
--------	---

Method Summary

void	checkContinuity () Check continuity.
int	findPESHeader () Find pes header.

int	<code>getCodec()</code>
abstract void	<code>handlePESData</code> (int length, <code>MPEG2PESPacket.PESHeader</code> header) Handle pes data.
void	<code>notifyAdaptationHeaders</code> (boolean deliver)
void	<code>processMpeg2Buffer</code> (int pid, byte[] bytes, int offset, int count)
void	<code>processMpeg2Packet</code> (<code>MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet</code> packet)
<code>MPEG2PESPacket.PESHeader</code>	<code>processPESHeader</code> () Process pes header.
void	<code>setCodec</code> (int codec)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [`com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor`](#)

[`notifyAdaptationHeaders`](#), [`processMpeg2Buffer`](#), [`processMpeg2Packet`](#)

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.

Constant value: **-1**

PID

public int **PID**

The pid.

continuityCounter

public int **continuityCounter**

The continuity counter.

continuityError

public boolean **continuityError**

The continuity error.

(continued from last page)

listener

protected com.wowza.wms.transport.mpeg2.IMPEG2StreamListener **listener**

The listener.

pesPacket

protected com.wowza.wms.transport.mpeg2.MPEG2PESPacket **pesPacket**

currentPacket

protected com.wowza.wms.transport.mpeg2.MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet
currentPacket

The current packet.

Constructors

MPEG2PESPacketProcessor

public **MPEG2PESPacketProcessor**()

Methods

notifyAdaptationHeaders

public void **notifyAdaptationHeaders**(boolean deliver)

setCodec

public void **setCodec**(int codec)

getCodec

public int **getCodec**()

handlePESData

public abstract void **handlePESData**(int length,
[MPEG2PESPacket.PESHeader](#) header)

Handle pes data.

Parameters:

length - the length
header - the header

checkContinuity

```
public void checkContinuity()
```

Check continuity.

findPESHeader

```
public int findPESHeader()
```

Find pes header.

Returns:

the int

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

processMpeg2Packet

```
public final void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)  
    throws java.io.IOException
```

processPESHeader

```
public MPEG2PESPacket.PESHeader processPESHeader()
```

Process pes header.

Returns:

the pES header

com.wowza.wms.transport.mpeg2 Class MPEG2PMTAssembler

java.lang.Object

```

  |
+-com.wowza.wms.transport.mpeg2.MPEG2TableAssembler
  |
  +-com.wowza.wms.transport.mpeg2.MPEG2PMTAssembler

```

All Implemented Interfaces:

[IMPEG2SectionListener](#)

public class **MPEG2PMTAssembler**
extends [MPEG2TableAssembler](#)

The Class mpeg2PMTAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listener The listener.
public	PID The pid.
public	PMT The pmt.
public	programNo The program no.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[currentVersion](#), [deliver](#), [INVALID](#), [sections](#)

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2PMTAssembler()
--------	-------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
void	buildTable ()
boolean	headerNotify (MPEG2Section section)

void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (ProgramAssociationTable.ProgramEntry program, IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop () Monitor stop.
boolean	tableExist ()
int	tableVersion ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2TableAssembler](#)

[adaptationHeader](#), [buildTable](#), [getShortClassName](#), [headerNotify](#), [sectionNotify](#), [tableExist](#), [tableVersion](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

PMT

public com.wowza.wms.transport.mpeg2.ProgramMapTable **PMT**

The pmt.

PID

public int **PID**

(continued from last page)

The pid.

programNo

```
public int programNo
```

The program no.

listener

```
public com.wowza.wms.transport.mpeg2.IMPEG2StreamListener listener
```

The listener.

deliverSection

```
protected boolean deliverSection
```

The deliver section.

Constructors

MPEG2PMTAssembler

```
public MPEG2PMTAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

tableExist

```
public boolean tableExist()
```

Table exist.

tableVersion

```
public int tableVersion()
```

Table version.

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

buildTable

```
public void buildTable()
```


(continued from last page)

Builds the table.

monitorStart

```
public void monitorStart(ProgramAssociationTable.ProgramEntry program,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

Monitor start.

Parameters:

program - the program
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

(continued from last page)

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class MPEG2RawAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2RawAssembler

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

public class **MPEG2RawAssembler**
extends Object
implements [IMPEG2PacketProcessor](#)

Field Summary

public	listeners
--------	---------------------------

Constructor Summary

public	MPEG2RawAssembler()
--------	-------------------------------------

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

listeners

public java.util.List **listeners**

Constructors

(continued from last page)

MPEG2RawAssembler

```
public MPEG2RawAssembler()
```

Methods

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,
    byte[] bytes,
    int offset,
    int count)
```

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean notify)
```

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)
    throws java.io.IOException
```

com.wowza.wms.transport.mpeg2

Class MPEG2RawPacketProcessor

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2RawPacketProcessor

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

public class **MPEG2RawPacketProcessor**
 extends Object
 implements [IMPEG2PacketProcessor](#)

Constructor Summary

public	MPEG2RawPacketProcessor ()
--------	--

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2RawPacketProcessor

public **MPEG2RawPacketProcessor**()

Methods

notifyAdaptationHeaders

public void **notifyAdaptationHeaders**(boolean notify)

(continued from last page)

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)
    throws java.io.IOException
```

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,
    byte[] bytes,
    int offset,
    int count)
```

com.wowza.wms.transport.mpeg2

Class MPEG2Section

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2Section

public class **MPEG2Section**
extends Object

The Class mpeg2Section.

Field Summary

protected	<u>continuityCounter</u> The continuity counter.
protected static final	<u>CURNEXT_MASK</u> The Constant CURNEXT_MASK. Value: 1
protected static final	<u>CURNEXT_OFFSET</u> The Constant CURNEXT_OFFSET. Value: 5
protected static final	<u>LAST_SECTION_OFFSET</u> The Constant LAST_SECTION_OFFSET. Value: 7
protected static final	<u>LENGHT_HIGH_BYTE_MASK</u> The Constant LENGHT_HIGH_BYTE_MASK. Value: 3
protected static final	<u>LENGTH_OFFSET</u> The Constant LENGTH_OFFSET. Value: 1
protected static final	<u>LENGTH_SIZE</u> The Constant LENGTH_SIZE. Value: 2
protected static final	<u>SECTION_OFFSET</u> The Constant SECTION_OFFSET. Value: 6
protected static final	<u>TABLE_ID_EXT LENGHT</u> The Constant TABLE_ID_EXT_LENGHT. Value: 2
protected static final	<u>TABLE_ID_EXT_OFFSET</u> The Constant TABLE_ID_EXT_OFFSET. Value: 3

protected static final	VERSION_MASK The Constant VERSION_MASK. Value: 62
protected static final	VERSION_OFFSET The Constant VERSION_OFFSET. Value: 5

Constructor Summary

public	MPEG2Section ()
--------	----------------------------------

Method Summary

int	bytesWritten () Bytes written.
boolean	CRCIsValid () CRC is valid.
String	dumpSection (String contextStr) Dump section.
int	getAvailableData () Gets the available data.
int	getLastSectionNo () Gets the last section no.
int	getSectionLength () Gets the section length.
int	getSectionNo () Gets the section no.
int	getTableID () Gets the table id.
int	getTableIDExtension () Gets the table id extension.
int	getVersion () Gets the version.
boolean	isCurrent () Checks if is current.
int	read () Read.
int	readBytes (byte[] buf, int offset, int count) Read bytes.
int	readInt ()
int	readInt (int count, int mask) Read int.

void	rewind() Rewind.
void	skip(int count) Skip.
String	toString()
int	write(byte[] bytes) Write.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

continuityCounter

protected int **continuityCounter**

The continuity counter.

LENGTH_OFFSET

protected static final int **LENGTH_OFFSET**

The Constant LENGTH_OFFSET.
Constant value: **1**

LENGTH_SIZE

protected static final int **LENGTH_SIZE**

The Constant LENGTH_SIZE.
Constant value: **2**

LENGHT_HIGH_BYTE_MASK

protected static final byte **LENGHT_HIGH_BYTE_MASK**

The Constant LENGHT_HIGH_BYTE_MASK.
Constant value: **3**

TABLE_ID_EXT_OFFSET

protected static final int **TABLE_ID_EXT_OFFSET**

The Constant TABLE_ID_EXT_OFFSET.
Constant value: **3**

TABLE_ID_EXT LENGHT

protected static final int **TABLE_ID_EXT LENGHT**

(continued from last page)

The Constant `TABLE_ID_EXT_LENGTH`.
Constant value: **2**

VERSION_OFFSET

protected static final int **VERSION_OFFSET**

The Constant `VERSION_OFFSET`.
Constant value: **5**

VERSION_MASK

protected static final byte **VERSION_MASK**

The Constant `VERSION_MASK`.
Constant value: **62**

CURNEXT_OFFSET

protected static final int **CURNEXT_OFFSET**

The Constant `CURNEXT_OFFSET`.
Constant value: **5**

CURNEXT_MASK

protected static final byte **CURNEXT_MASK**

The Constant `CURNEXT_MASK`.
Constant value: **1**

SECTION_OFFSET

protected static final int **SECTION_OFFSET**

The Constant `SECTION_OFFSET`.
Constant value: **6**

LAST_SECTION_OFFSET

protected static final int **LAST_SECTION_OFFSET**

The Constant `LAST_SECTION_OFFSET`.
Constant value: **7**

Constructors

MPEG2Section

public **MPEG2Section**()

Methods

write

public int **write**(byte[] bytes)
throws java.io.IOException

(continued from last page)

Write.

Parameters:

bytes - the bytes

Returns:

the int

Throws:

`IOException` - Signals that an I/O exception has occurred.

bytesWritten

```
public int bytesWritten()
```

Bytes written.

Returns:

the int

getTableID

```
public int getTableID()
```

Gets the table id.

Returns:

the table id

getSectionLength

```
public int getSectionLength()
```

Gets the section length.

Returns:

the section length

getTableIDExtension

```
public int getTableIDExtension()
```

Gets the table id extension.

Returns:

the table id extension

getVersion

```
public int getVersion()
```

Gets the version.

Returns:

the version

(continued from last page)

isCurrent

```
public boolean isCurrent()
```

Checks if is current.

Returns:

true, if is current

getSectionNo

```
public int getSectionNo()
```

Gets the section no.

Returns:

the section no

getLastSectionNo

```
public int getLastSectionNo()
```

Gets the last section no.

Returns:

the last section no

getAvailableData

```
public int getAvailableData()
```

Gets the available data.

Returns:

the available data

CRCIsValid

```
public boolean CRCIsValid()
```

CRC is valid.

Returns:

true, if successful

rewind

```
public void rewind()
```

Rewind.

read

```
public int read()
```

Read.

Returns:

(continued from last page)

the int

readBytes

```
public int readBytes(byte[] buf,  
    int offset,  
    int count)
```

Read bytes.

Parameters:

buf - the buf
offset - the offset
count - the count

Returns:

the int

readInt

```
public int readInt(int count,  
    int mask)
```

Read int.

Parameters:

count - the count
mask - the mask

Returns:

the int

readInt

```
public int readInt()
```

skip

```
public void skip(int count)
```

Skip.

Parameters:

count - the count

toString

```
public String toString()
```

dumpSection

```
public String dumpSection(String contextStr)
```

Dump section.

com.wowza.wms.transport.mpeg2 Class MPEG2SectionAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2SectionAssembler

All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

public class **MPEG2SectionAssembler**
extends Object
implements [IMPEG2PacketProcessor](#)

The Class MPEG2SectionAssembler.

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	listeners The listeners.

Constructor Summary

public	MPEG2SectionAssembler ()
--------	--

Method Summary

void	notifyAdaptationHeaders (boolean notify)
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)
void	processMpeg2Packet (MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)
void	setHeaderLengthMin (int size) Sets the header length min.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Fields

(continued from last page)

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

listeners

```
public java.util.List listeners
```

The listeners.

Constructors

MPEG2SectionAssembler

```
public MPEG2SectionAssembler()
```

Methods

setHeaderLengthMin

```
public void setHeaderLengthMin(int size)
```

Sets the header length min.

Parameters:

size - the new header length min

notifyAdaptationHeaders

```
public void notifyAdaptationHeaders(boolean notify)
```

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,  
    byte[] bytes,  
    int offset,  
    int count)
```

processMpeg2Packet

```
public void processMpeg2Packet(MPEG2MPTS.MPEG2MPTSTBuffer.MPEG2Packet packet)  
    throws java.io.IOException
```

com.wowza.wms.transport.mpeg2 Class MPEG2TableAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.MPEG2TableAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

Direct Known Subclasses:

[MPEG2PMTAssembler](#), [MPEG2PATAssembler](#)

public abstract class **MPEG2TableAssembler**

extends Object

implements [IMPEG2SectionListener](#)

The Class mpeg2TableAssembler.

Field Summary

public	currentVersion The current version.
public	deliver The deliver.
public static final	INVALID The Constant INVALID. Value: -1
protected	sections The sections.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	MPEG2TableAssembler()
--------	---------------------------------------

Method Summary

abstract void	adaptationHeader (AdaptationField field)
abstract void	buildTable () Builds the table.
String	getShortClassName () getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

boolean	headerNotify (MPEG2Section section)
void	sectionNotify (MPEG2Section section, boolean continuityError)
abstract boolean	tableExist () Table exist.
abstract int	tableVersion () Table version.

Methods inherited from class java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface com.wowza.wms.transport.mpeg2.IMPEG2SectionListener
adaptationHeader , headerNotify , logDebug , logError , logError , logFatal , logInfo , logThrottleDoLog , logWarn , sectionNotify

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.
Constant value: **-1**

deliver

public boolean **deliver**

The deliver.

sections

protected java.util.Map **sections**

The sections.

currentVersion

public int **currentVersion**

The current version.

Constructors

MPEG2TableAssembler

public **MPEG2TableAssembler**()

(continued from last page)

Methods

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

getShortClassName

```
public String getShortClassName()
```

getShortClassName returns just the class name instead of the com.wms.xxx.xx.className

adaptationHeader

```
public abstract void adaptationHeader(AdaptationField field)
```

tableExist

```
public abstract boolean tableExist()
```

Table exist.

Returns:

true, if successful

tableVersion

```
public abstract int tableVersion()
```

Table version.

Returns:

the int

buildTable

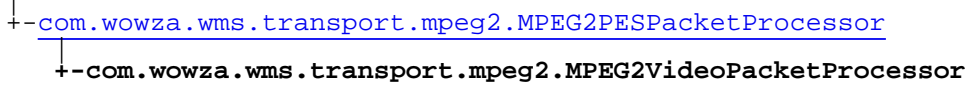
```
public abstract void buildTable()
```

Builds the table.

com.wowza.wms.transport.mpeg2

Class MPEG2VideoPacketProcessor

java.lang.Object



All Implemented Interfaces:

[IMPEG2PacketProcessor](#)

```

public class MPEG2VideoPacketProcessor
extends MPEG2PESPacketProcessor
  
```

The Class mpeg2VideoPacketProcessor.

Fields inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[continuityCounter](#), [continuityError](#), [currentPacket](#), [INVALID](#), [listener](#), [pesPacket](#), [PID](#)

Constructor Summary

public	MPEG2VideoPacketProcessor (int PID, IMPEG2StreamListener listener)
	Instantiates a new mpeg2 video packet processor.

Method Summary

void	handlePESData (int length, MPEG2PESPacket.PESHeader header)
------	---

Methods inherited from class [com.wowza.wms.transport.mpeg2.MPEG2PESPacketProcessor](#)

[checkContinuity](#), [findPESHeader](#), [getCodec](#), [handlePESData](#), [notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#), [processPESHeader](#), [setCodec](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PacketProcessor](#)

[notifyAdaptationHeaders](#), [processMpeg2Buffer](#), [processMpeg2Packet](#)

Constructors

MPEG2VideoPacketProcessor

```

public MPEG2VideoPacketProcessor(int PID,
                                IMPEG2StreamListener listener)
  
```

Instantiates a new mpeg2 video packet processor.

(continued from last page)

Parameters:

PID - the pid

listener - the listener

Methods

handlePESData

```
public void handlePESData(int length,  
    MPEG2PESPacket.PESHeader header)
```

Handle pes data.

com.wowza.wms.transport.mpeg2

Class PESAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.PESAssembler

All Implemented Interfaces:

[IMPEG2PESListener](#)

public class **PESAssembler**

extends Object

implements [IMPEG2PESListener](#)

Constructor Summary

public	PESAssembler()
--------	--------------------------------

Method Summary

void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorPESNotify monitor) Monitor start.
void	monitorStop() Monitor stop.
void	pesDataAvailable (MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet, int length, MPEG2PESPacket.PESHeader header)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2PESListener](#)

[pesDataAvailable](#)

Constructors

PESAssembler

public **PESAssembler()**

Methods

(continued from last page)

pesDataAvailable

```
public void pesDataAvailable(MPEG2MPTS.MPEG2MPTSBuffer.MPEG2Packet packet,  
    int length,  
    MPEG2PESPacket.PESHeader header)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream,  
    IMPEG2UserMonitorPESNotify monitor)
```

Monitor start.

Parameters:

PID - the pid
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

com.wowza.wms.transport.mpeg2 Class ProgramAssociationTable

java.lang.Object

└─com.wowza.wms.transport.mpeg2.ProgramAssociationTable

public class **ProgramAssociationTable**
extends Object

The Class ProgramAssociationTable.

Nested Class Summary

class	ProgramAssociationTable.ProgramEntry ProgramAssociationTable.ProgramEntry
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public static final	PAT_TABLE_ID The Constant PAT_TABLE_ID. Value: 0
public	programs The programs.
public	version The version.

Constructor Summary

public	ProgramAssociationTable (java.util.Map sections) Instantiates a new program association table.
--------	---

Method Summary

boolean	equals (Object obj)
int	hashCode ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

INVALID

```
public static final int INVALID
```

The Constant INVALID.

Constant value: **-1**

PAT_TABLE_ID

```
public static final int PAT_TABLE_ID
```

The Constant PAT_TABLE_ID.

Constant value: **0**

version

```
public int version
```

The version.

programs

```
public java.util.Map programs
```

The programs.

Constructors

ProgramAssociationTable

```
public ProgramAssociationTable(java.util.Map sections)
```

Instantiates a new program association table.

Parameters:

sections - the sections

Methods

toString

```
public String toString()
```

hashCode

```
public int hashCode()
```

equals

```
public boolean equals(Object obj)
```


(continued from last page)

com.wowza.wms.transport.mpeg2 Class ProgramAssociationTable.ProgramEntry

java.lang.Object

└─com.wowza.wms.transport.mpeg2.ProgramAssociationTable.ProgramEntry

```
public class ProgramAssociationTable.ProgramEntry
extends Object
```

The Class ProgramEntry.

Field Summary

public	pmtPID The pmt pid.
public	programNo The program no.

Method Summary

boolean	equals (Object obj)
int	hashCode ()
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

programNo

```
public int programNo
```

The program no.

pmtPID

```
public int pmtPID
```

The pmt pid.

Methods

(continued from last page)

toString

```
public String toString()
```

equals

```
public boolean equals(Object obj)
```

hashCode

```
public int hashCode()
```

com.wowza.wms.transport.mpeg2 Class ProgramMapTable

java.lang.Object

└-com.wowza.wms.transport.mpeg2.ProgramMapTable

public class **ProgramMapTable**
extends Object

The Class ProgramMapTable.

Nested Class Summary

class	ProgramMapTable.StreamInfo ProgramMapTable.StreamInfo
-------	--

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public static final	NO_PCR_PID The Constant NO_PCR_PID. Value: 131071
public	PCR_PID The pcr pid.
public static final	PMT_TABLE_ID The Constant PMT_TABLE_ID. Value: 2
public	programDescriptors The program descriptors.
public	programNo The program no.
public	streams The streams.
public	version The version.

Constructor Summary

public	ProgramMapTable() Instantiates a new program map table.
public	ProgramMapTable(java.util.Map sections) Instantiates a new program map table.

Method Summary

int	<code>binarySize()</code> calculates the binary size of the Stream Info structure
void	<code>toBin(java.nio.ByteBuffer buffer)</code> converts the Program map table to binary for use in a transport form
String	<code>toString()</code>

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

INVALID

public static final int **INVALID**

The Constant INVALID.
Constant value: **-1**

PMT_TABLE_ID

public static final int **PMT_TABLE_ID**

The Constant PMT_TABLE_ID.
Constant value: **2**

NO_PCR_PID

public static final int **NO_PCR_PID**

The Constant NO_PCR_PID.
Constant value: **131071**

programNo

public int **programNo**

The program no.

version

public int **version**

The version.

PCR_PID

public int **PCR_PID**

The pcr pid.

programDescriptors

```
public com.wowza.util.MultiMap programDescriptors
```

The program descriptors.

streams

```
public java.util.Map streams
```

The streams.

Constructors

ProgramMapTable

```
public ProgramMapTable()
```

Instantiates a new program map table.

ProgramMapTable

```
public ProgramMapTable(java.util.Map sections)
```

Instantiates a new program map table.

Parameters:

sections - the sections

Methods

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

converts the Program map table to binary for use in a transport form

Parameters:

buffer - a ByteBuffer to put the binary data.

binarySize

```
public int binarySize()
```

calculates the binary size of the Stream Info structure

Returns:

includes the size of all descriptors included in the stream

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2 Class ProgramMapTable.StreamInfo

java.lang.Object

└─com.wowza.wms.transport.mpeg2.ProgramMapTable.StreamInfo

public class **ProgramMapTable.StreamInfo**
extends Object

The Class StreamInfo.

Field Summary

public	descriptors The descriptors.
public	PID The pid.
public	streamType The stream type.
public static final	STREAMTYPE_AUDIO_AAC_LOAS Value: 17
public static final	STREAMTYPE_AUDIO_AC3_ATSC Value: 129
public static final	STREAMTYPE_AUDIO_ADTS_AAC Value: 15
public static final	STREAMTYPE_AUDIO_EAC3_ATSC Value: 135
public static final	STREAMTYPE_AUDIO_MP3_1 Value: 3
public static final	STREAMTYPE_AUDIO_MP3_2 Value: 4
public static final	STREAMTYPE_CUEI Value: 134
public static final	STREAMTYPE_VIDEO_H264 Value: 27
public static final	STREAMTYPE_VIDEO_HEVC Value: 36

public static final	STREAMTYPE_VIDEO_MPEG4 Value: 16
public static final	STREAMTYPE_VIDEO1_MPEG2 Value: 2
public static final	STREAMTYPE_VIDEO2_MPEG2 Value: 128

Constructor Summary

public	StreamInfo() Instantiates a new stream info.
public	StreamInfo(MPEG2Section section) Instantiates a new stream info.

Method Summary

int	binarySize() calculates the binary size of the Stream Info structure
int	getAudioCodec()
int	getVideoCodec()
boolean	isAudioStreamType() Checks if is audio stream type.
boolean	isVideoStreamType() Checks if is video stream type.
String	toString()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

STREAMTYPE_VIDEO_H264

public static final int **STREAMTYPE_VIDEO_H264**

Constant value: **27**

STREAMTYPE_VIDEO1_MPEG2

public static final int **STREAMTYPE_VIDEO1_MPEG2**

(continued from last page)

Constant value: **2**

STREAMTYPE_VIDEO2_MPEG2

```
public static final int STREAMTYPE_VIDEO2_MPEG2
```

Constant value: **128**

STREAMTYPE_VIDEO_MPEG4

```
public static final int STREAMTYPE_VIDEO_MPEG4
```

Constant value: **16**

STREAMTYPE_VIDEO_HEVC

```
public static final int STREAMTYPE_VIDEO_HEVC
```

Constant value: **36**

STREAMTYPE_AUDIO_ADTS_AAC

```
public static final int STREAMTYPE_AUDIO_ADTS_AAC
```

Constant value: **15**

STREAMTYPE_AUDIO_AAC_LOAS

```
public static final int STREAMTYPE_AUDIO_AAC_LOAS
```

Constant value: **17**

STREAMTYPE_AUDIO_MP3_1

```
public static final int STREAMTYPE_AUDIO_MP3_1
```

Constant value: **3**

STREAMTYPE_AUDIO_MP3_2

```
public static final int STREAMTYPE_AUDIO_MP3_2
```

Constant value: **4**

STREAMTYPE_AUDIO_AC3_ATSC

```
public static final int STREAMTYPE_AUDIO_AC3_ATSC
```

Constant value: **129**

(continued from last page)

STREAMTYPE_AUDIO_EAC3_ATSC

```
public static final int STREAMTYPE_AUDIO_EAC3_ATSC
```

Constant value: **135**

STREAMTYPE_CUEI

```
public static final int STREAMTYPE_CUEI
```

Constant value: **134**

streamType

```
public int streamType
```

The stream type.

PID

```
public int PID
```

The pid.

descriptors

```
public com.wowza.util.MultiMap descriptors
```

The descriptors.

Constructors

StreamInfo

```
public StreamInfo()
```

Instantiates a new stream info.

StreamInfo

```
public StreamInfo(MPEG2Section section)
```

Instantiates a new stream info.

Parameters:

section - the section

Methods

isAudioStreamType

```
public boolean isAudioStreamType()
```

Checks if is audio stream type.

Returns:

(continued from last page)

true, if is audio stream type

getAudioCodec

```
public int getAudioCodec()
```

isVideoStreamType

```
public boolean isVideoStreamType()
```

Checks if is video stream type.

Returns:

true, if is video stream type

getVideoCodec

```
public int getVideoCodec()
```

toString

```
public String toString()
```

binarySize

```
public int binarySize()
```

calculates the binary size of the Stream Info structure

Returns:

includes the size of all descriptors included in the stream

com.wowza.wms.transport.mpeg2 Class RawAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.RawAssembler

All Implemented Interfaces:

[IMPEG2RawListener](#)

public class **RawAssembler**

extends Object

implements [IMPEG2RawListener](#)

Constructor Summary

public	RawAssembler ()
--------	---------------------------------

Method Summary

void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorRawNotify monitor)
void	monitorStop () Monitor stop.
void	processMpeg2Buffer (int pid, byte[] bytes, int offset, int count)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2RawListener](#)

[processMpeg2Buffer](#)

Constructors

RawAssembler

public **RawAssembler**()

Methods

(continued from last page)

processMpeg2Buffer

```
public void processMpeg2Buffer(int pid,
    byte[] bytes,
    int offset,
    int count)
```

monitorStart

```
public void monitorStart(int PID,
    IMPEG2StreamListener listener,
    MPEG2MPTS stream,
    IMPEG2UserMonitorRawNotify monitor)
```

monitorStop

```
public void monitorStop()
```

Monitor stop.

com.wowza.wms.transport.mpeg2 Class RegistrationDescriptor

java.lang.Object

└─ [com.wowza.wms.transport.mpeg2.Descriptor](#)
 └─ **com.wowza.wms.transport.mpeg2.RegistrationDescriptor**

public class **RegistrationDescriptor**
extends [Descriptor](#)

The Class RegistrationDescriptor.

Field Summary

public	additionalIdentificationData The additional identification data.
public	formatIdentifier The format identifier.
public static final	REG_IDENTIFICATION_HEVC Value: 1212503619
public static final	REG_IDENTIFICATION_KLV Value: 1263294017
public static final	REG_IDENTIFICATION_SCTE_SPLICE_FORMAT The Constant REG_IDENTIFICATION_SCTE_SPLICE_FORMAT. Value: 1129661769

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#),
[DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#),
[DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#),
[DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#),
[DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#),
[DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#),
[DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#),
[DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#),
[DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#),
[DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#),
[DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#),
[DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#),
[DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#),
[DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#),
[length](#), [tag](#)

Constructor Summary

public	RegistrationDescriptor () Instantiates a new registration descriptor.
--------	--

public	RegistrationDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new registration descriptor from the provided byte buffer
--------	--

Method Summary

int	binarySize () How big is the registration descriptor in binary.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the registration descriptor into binary format for use in a transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,
wait

Fields

REG_IDENTIFICATION_SCTE_SPLICE_FORMAT

```
public static final int REG_IDENTIFICATION_SCTE_SPLICE_FORMAT
```

The Constant REG_IDENTIFICATION_SCTE_SPLICE_FORMAT.
Constant value: **1129661769**

REG_IDENTIFICATION_HEVC

```
public static final int REG_IDENTIFICATION_HEVC
```

Constant value: **1212503619**

REG_IDENTIFICATION_KLV

```
public static final int REG_IDENTIFICATION_KLV
```

Constant value: **1263294017**

formatIdentifier

```
public int formatIdentifier
```

The format identifier.

(continued from last page)

additionalIdentificationData

```
public byte additionalIdentificationData
```

The additional identification data.

Constructors

RegistrationDescriptor

```
public RegistrationDescriptor()
```

Instantiates a new registration descriptor.

RegistrationDescriptor

```
public RegistrationDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new registration descriptor from the provided byte buffer

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the registration descriptor into binary format for use in a transport

Parameters:

buffer - a ByteBuffer to put the descriptor binary data into

binarySize

```
public int binarySize()
```

How big is the registration descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

```
public String toString()
```


com.wowza.wms.transport.mpeg2 Class SectionAssembler

java.lang.Object

└─com.wowza.wms.transport.mpeg2.SectionAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

public class **SectionAssembler**
 extends Object
 implements [IMPEG2SectionListener](#)

Field Summary

protected	deliverSection The deliver section.
protected	field
public	listener The listener.
public	monitor
public	sit The sit.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	SectionAssembler()
--------	------------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
boolean	headerNotify (MPEG2Section section)
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)

void	logFatal (String comment)
void	logInfo (String comment)
boolean	logThrottleDoLog ()
void	logWarn (String comment)
void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream, IMPEG2UserMonitorSectionNotify monitor) Monitor start.
void	monitorStop () Monitor stop.
void	sectionNotify (MPEG2Section section, boolean continuityError)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

deliverSection

protected boolean **deliverSection**

The deliver section.

listener

public com.wowza.wms.transport.mpeg2.IMPEG2StreamListener **listener**

The listener.

monitor

public com.wowza.wms.transport.mpeg2.IMPEG2UserMonitorSectionNotify **monitor**

sit

public com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable **sit**

The sit.

(continued from last page)

field

protected com.wowza.wms.transport.mpeg2.AdaptationField **field**

Constructors

SectionAssembler

```
public SectionAssembler()
```

Methods

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream,  
    IMPEG2UserMonitorSectionNotify monitor)
```

Monitor start.

Parameters:

PID - the pid
listener - the listener
stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

(continued from last page)

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class SITAssembler

java.lang.Object

└-com.wowza.wms.transport.mpeg2.SITAssembler

All Implemented Interfaces:

[IMPEG2SectionListener](#)

public class **SITAssembler**
 extends Object
 implements [IMPEG2SectionListener](#)

The Class SITAssembler.

Field Summary

protected	deliverSection The deliver section.
public	listener The listener.
public	sit The sit.

Fields inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[INVALID](#)

Constructor Summary

public	SITAssembler ()
--------	---------------------------------

Method Summary

void	adaptationHeader (AdaptationField field)
boolean	headerNotify (MPEG2Section section)
void	logDebug (String comment)
void	logError (String comment)
void	logError (String comment, Exception e)
void	logFatal (String comment)
void	logInfo (String comment)

boolean	logThrottleDoLog()
void	logWarn (String comment)
void	monitorStart (int PID, IMPEG2StreamListener listener, MPEG2MPTS stream) Monitor start.
void	monitorStop () Monitor stop.
void	sectionNotify (MPEG2Section section, boolean continuityError)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Methods inherited from interface [com.wowza.wms.transport.mpeg2.IMPEG2SectionListener](#)

[adaptationHeader](#), [headerNotify](#), [logDebug](#), [logError](#), [logError](#), [logFatal](#), [logInfo](#), [logThrottleDoLog](#), [logWarn](#), [sectionNotify](#)

Fields

deliverSection

protected boolean **deliverSection**

The deliver section.

listener

public `com.wowza.wms.transport.mpeg2.IMPEG2StreamListener` **listener**

The listener.

sit

public `com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable` **sit**

The sit.

Constructors

SITAssembler

public **SITAssembler**()

Methods

(continued from last page)

adaptationHeader

```
public void adaptationHeader(AdaptationField field)
```

headerNotify

```
public boolean headerNotify(MPEG2Section section)
```

sectionNotify

```
public void sectionNotify(MPEG2Section section,  
    boolean continuityError)
```

monitorStart

```
public void monitorStart(int PID,  
    IMPEG2StreamListener listener,  
    MPEG2MPTS stream)
```

Monitor start.

Parameters:

PID - the pid

listener - the listener

stream - the stream

monitorStop

```
public void monitorStop()
```

Monitor stop.

logThrottleDoLog

```
public boolean logThrottleDoLog()
```

logFatal

```
public void logFatal(String comment)
```

logError

```
public void logError(String comment)
```

(continued from last page)

logError

```
public void logError(String comment,  
                    Exception e)
```

logWarn

```
public void logWarn(String comment)
```

logInfo

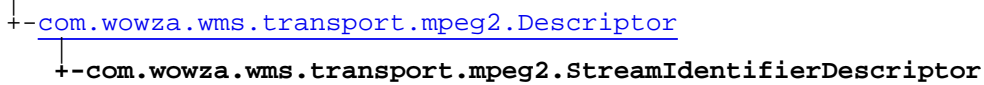
```
public void logInfo(String comment)
```

logDebug

```
public void logDebug(String comment)
```

com.wowza.wms.transport.mpeg2 Class StreamIdentifierDescriptor

java.lang.Object



public class **StreamIdentifierDescriptor**
extends [Descriptor](#)

The Class StreamIdentifierDescriptor. The stream identifier descriptor may be used in the PMT to label component streams of a service so that they can be differentiated. The stream identifier descriptor shall be located in the elementary descriptor loop following the relevant ES_info_length field. The stream identifier descriptor shall be used if either the program_splice_flag or the program_segmentation_flag is zero. If stream identifier descriptors are used, a stream identifier descriptor shall be present in each occurrence of the elementary stream loop within the PMT and shall have a unique component tag within the given program.

Field Summary

public	componentTag The component tag.
--------	--

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	StreamIdentifierDescriptor() Instantiates a new stream identifier descriptor.
public	StreamIdentifierDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new stream identifier descriptor.

Method Summary

int	binarySize() How big is the Stream Identifier descriptor in binary.
-----	--

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
int	getComponentTag ()
void	toBin (java.nio.ByteBuffer buffer)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

componentTag

public int **componentTag**

The component tag.

Constructors

StreamIdentifierDescriptor

public **StreamIdentifierDescriptor**()

Instantiates a new stream identifier descriptor.

StreamIdentifierDescriptor

public **StreamIdentifierDescriptor**(java.nio.ByteBuffer descriptorData)

Instantiates a new stream identifier descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

public void **decodeDescriptorData**(java.nio.ByteBuffer descriptorData)

Decode descriptor data.

(continued from last page)

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the descriptor into binary format for use in a transport

binarySize

```
public int binarySize()
```

How big is the Stream Identifier descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

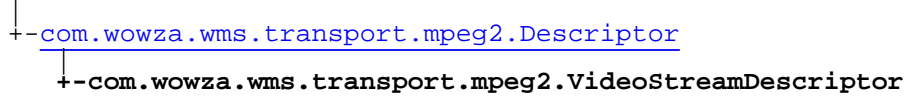
```
public String toString()
```

getComponentTag

```
public int getComponentTag()
```

com.wowza.wms.transport.mpeg2 Class VideoStreamDescriptor

java.lang.Object



```

public class VideoStreamDescriptor
extends Descriptor
  
```

The Class VideoStreamDescriptor. The video stream descriptor provides basic information which identifies the coding parameters of a video elementary stream as described in ITU-T Rec. H.262 I ISO/IEC 13818-2 or ISO/IEC 11172-2.

Field Summary

public	constrainedParameter The constrained parameter.
public static final	FRAME_RATE_23_976 The Constant FRAME_RATE_23_976. Value: 1
public static final	FRAME_RATE_24 The Constant FRAME_RATE_24. Value: 2
public static final	FRAME_RATE_25 The Constant FRAME_RATE_25. Value: 3
public static final	FRAME_RATE_29_97 The Constant FRAME_RATE_29_97. Value: 4
public static final	FRAME_RATE_30 The Constant FRAME_RATE_30. Value: 5
public static final	FRAME_RATE_50 The Constant FRAME_RATE_50. Value: 6
public static final	FRAME_RATE_59_94 The Constant FRAME_RATE_59_94. Value: 7
public static final	FRAME_RATE_60 The Constant FRAME_RATE_60. Value: 8
public	frameRateCode The frame rate code.

public	mpeg1ChromaFormat The mpeg1 chroma format.
public	mpeg1FrameRateExt The mpeg1 frame rate ext.
public	mpeg1Only The mpeg1 only.
public	mpeg1ProfileLevel The mpeg1 profile level.
public	multipleFrameRate The multiple frame rate.
public	stillPicture The still picture.

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	VideoStreamDescriptor () Instantiates a new video stream descriptor.
public	VideoStreamDescriptor (java.nio.ByteBuffer descriptorData) Instantiates a new video stream descriptor.

Method Summary

int	binarySize () How big is the video stream descriptor in binary.
void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
void	toBin (java.nio.ByteBuffer buffer) Encodes the Video stream descriptor into binary form for use in transport
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#),
[getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

FRAME_RATE_23_976

```
public static final int FRAME_RATE_23_976
```

The Constant FRAME_RATE_23_976.
Constant value: **1**

FRAME_RATE_24

```
public static final int FRAME_RATE_24
```

The Constant FRAME_RATE_24.
Constant value: **2**

FRAME_RATE_25

```
public static final int FRAME_RATE_25
```

The Constant FRAME_RATE_25.
Constant value: **3**

FRAME_RATE_29_97

```
public static final int FRAME_RATE_29_97
```

The Constant FRAME_RATE_29_97.
Constant value: **4**

FRAME_RATE_30

```
public static final int FRAME_RATE_30
```

The Constant FRAME_RATE_30.
Constant value: **5**

FRAME_RATE_50

```
public static final int FRAME_RATE_50
```

The Constant FRAME_RATE_50.
Constant value: **6**

FRAME_RATE_59_94

```
public static final int FRAME_RATE_59_94
```

(continued from last page)

The Constant FRAME_RATE_59_94.
Constant value: **7**

FRAME_RATE_60

public static final int **FRAME_RATE_60**

The Constant FRAME_RATE_60.
Constant value: **8**

multipleFrameRate

public boolean **multipleFrameRate**

The multiple frame rate.

frameRateCode

public int **frameRateCode**

The frame rate code.

mpeg1Only

public boolean **mpeg1Only**

The mpeg1 only.

constrainedParameter

public boolean **constrainedParameter**

The constrained parameter.

stillPicture

public boolean **stillPicture**

The still picture.

mpeg1ProfileLevel

public int **mpeg1ProfileLevel**

The mpeg1 profile level.

mpeg1ChromaFormat

public int **mpeg1ChromaFormat**

The mpeg1 chroma format.

mpeg1FrameRateExt

public boolean **mpeg1FrameRateExt**

The mpeg1 frame rate ext.

(continued from last page)

Constructors

VideoStreamDescriptor

```
public VideoStreamDescriptor()
```

Instantiates a new video stream descriptor.

VideoStreamDescriptor

```
public VideoStreamDescriptor(java.nio.ByteBuffer descriptorData)
```

Instantiates a new video stream descriptor.

Parameters:

descriptorData - the descriptor data

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toBin

```
public void toBin(java.nio.ByteBuffer buffer)
```

Encodes the Video stream descriptor into binary form for use in transport

Parameters:

buffer - ByteBuffer to put the binary data

binarySize

```
public int binarySize()
```

How big is the video stream descriptor in binary.

Returns:

the total size of the descriptor in binary form, includes tag and length fields

toString

```
public String toString()
```

Package

**com.wowza.wms.transport.mpeg2.section.cu
e**

com.wowza.wms.transport.mpeg2.section.cue Class SpliceAvailDescriptor

java.lang.Object

```

    |
    +-- com.wowza.wms.transport.mpeg2.Descriptor
         |
         +-- com.wowza.wms.transport.mpeg2.section.cue.SpliceAvailDescriptor
  
```

public class **SpliceAvailDescriptor**
extends [Descriptor](#)

Field Summary

public	identifier
public	providerAvailId

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceAvailDescriptor()
public	SpliceAvailDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toDebugString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

identifier

```
public int identifier
```

providerAvailId

```
public long providerAvailId
```

Constructors

SpliceAvailDescriptor

```
public SpliceAvailDescriptor()
```

SpliceAvailDescriptor

```
public SpliceAvailDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

(continued from last page)

com.wowza.wms.transport.mpeg2.section.cue Class SpliceBandwidthReservationCommand

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand
    +--com.wowza.wms.transport.mpeg2.section.cue.SpliceBandwidthReservationCommand
  
```

public class **SpliceBandwidthReservationCommand**
extends [SpliceCommand](#)

The Class SpliceBandwidthReservationCommand.

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceBandwidthReservationCommand() Instantiates a new splice bandwidth reservation command.
--------	---

Method Summary

AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SpliceBandwidthReservationCommand

public **SpliceBandwidthReservationCommand()**

Instantiates a new splice bandwidth reservation command.

Methods

(continued from last page)

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceCommand

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand

Direct Known Subclasses:

[SpliceTimeSignalCommand](#), [SpliceScheduleCommand](#), [SpliceNullCommand](#), [SpliceInsertCommand](#),
[SpliceBandwidthReservationCommand](#)

```
public class SpliceCommand
extends Object
```

The Class SpliceCommand.

Field Summary

public static final	INVALID The Constant INVALID. Value: -1
public	name The name.
public static final	SPLICE_COMMAND_BANDWIDTH_RES The Constant SPLICE_COMMAND_BANDWIDTH_RES. Value: 7
public static final	SPLICE_COMMAND_INSERT The Constant SPLICE_COMMAND_INSERT. Value: 5
public static final	SPLICE_COMMAND_NULL The Constant SPLICE_COMMAND_NULL. Value: 0
public static final	SPLICE_COMMAND_SCHEDULE The Constant SPLICE_COMMAND_SCHEDULE. Value: 4
public static final	SPLICE_COMMAND_TIME_SIGNAL The Constant SPLICE_COMMAND_TIME_SIGNAL. Value: 6
public	type The type.

Constructor Summary

public	SpliceCommand()
--------	---------------------------------

Method Summary

String	getName()
int	getType()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

SPLICE_COMMAND_NULL

```
public static final byte SPLICE_COMMAND_NULL
```

The Constant SPLICE_COMMAND_NULL.
Constant value: **0**

SPLICE_COMMAND_SCHEDULE

```
public static final byte SPLICE_COMMAND_SCHEDULE
```

The Constant SPLICE_COMMAND_SCHEDULE.
Constant value: **4**

SPLICE_COMMAND_INSERT

```
public static final byte SPLICE_COMMAND_INSERT
```

The Constant SPLICE_COMMAND_INSERT.
Constant value: **5**

SPLICE_COMMAND_TIME_SIGNAL

```
public static final byte SPLICE_COMMAND_TIME_SIGNAL
```

The Constant SPLICE_COMMAND_TIME_SIGNAL.
Constant value: **6**

SPLICE_COMMAND_BANDWIDTH_RES

```
public static final byte SPLICE_COMMAND_BANDWIDTH_RES
```

The Constant SPLICE_COMMAND_BANDWIDTH_RES.

(continued from last page)

Constant value: **7**

type

```
public int type
```

The type.

name

```
public java.lang.String name
```

The name.

Constructors

SpliceCommand

```
public SpliceCommand()
```

Methods

getType

```
public int getType()
```

getName

```
public String getName()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceDTMFDescriptor

java.lang.Object

```

+--com.wowza.wms.transport.mpeg2.Descriptor
    |
    +--com.wowza.wms.transport.mpeg2.section.cue.SpliceDTMFDescriptor
  
```

public class **SpliceDTMFDescriptor**
extends [Descriptor](#)

Field Summary

public	dtmfBytes
public	dtmfCount
public	identifier
public	preroll

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG_ANCILLARY](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceDTMFDescriptor()
public	SpliceDTMFDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
------	---

String	getDTMFBytesAsBase64()
AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toDebugString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class [java.lang.Object](#)

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

identifier

```
public int identifier
```

preroll

```
public int preroll
```

dtmfCount

```
public int dtmfCount
```

dtmfBytes

```
public byte dtmfBytes
```

Constructors

SpliceDTMFDescriptor

```
public SpliceDTMFDescriptor()
```

SpliceDTMFDescriptor

```
public SpliceDTMFDescriptor(java.nio.ByteBuffer descriptorData)
```

(continued from last page)

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

getDTMFBytesAsBase64

```
public String getDTMFBytesAsBase64()
```

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent

public class **SpliceEvent**
extends Object

The Class SpliceEvent.

Nested Class Summary

class	SpliceEvent.BreakDuration SpliceEvent.BreakDuration
class	SpliceEvent.ComponentSpliceTime SpliceEvent.ComponentSpliceTime

Field Summary

public	availNum The avail num.
public	availsExpected The avails expected.
public	breakDuration The break duration.
public	cancel The cancel.
public	componentSplices The component splices.
public	durationFlag The duration flag.
public	eventID The event id.
public	outOfNetwork The out of network.
public	programID The program id.
public	programSplice The program splice.
public	spliceImmediate The splice immediate.

public	<u>spliceTime</u> The splice time.
--------	---

Constructor Summary

public	<u>SpliceEvent</u> (<u>MPEG2Section</u> data, boolean fromInsertCmd) Instantiates a new splice event.
--------	---

Method Summary

int	<u>getAvailNum</u> ()
int	<u>getAvailsExpected</u> ()
<u>SpliceEvent.BreakDuration</u>	<u>getBreakDuration</u> ()
java.util.Map	<u>getComponentSplices</u> ()
int	<u>getEventID</u> ()
int	<u>getProgramID</u> ()
<u>SpliceTime</u>	<u>getSpliceTime</u> ()
boolean	<u>isCancel</u> ()
boolean	<u>isDurationFlag</u> ()
boolean	<u>isOutOfNetwork</u> ()
boolean	<u>isProgramSplice</u> ()
boolean	<u>isSpliceImmediate</u> ()
<u>AMFDataObj</u>	<u>serializeAMF</u> (<u>SpliceInformationTableSerializeAMFContext</u> context)
String	<u>toString</u> ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

eventID

public int **eventID**

(continued from last page)

The event id.

cancel

public boolean **cancel**

The cancel.

outOfNetwork

public boolean **outOfNetwork**

The out of network.

programSplice

public boolean **programSplice**

The program splice.

durationFlag

public boolean **durationFlag**

The duration flag.

spliceImmediate

public boolean **spliceImmediate**

The splice immediate.

spliceTime

public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime **spliceTime**

The splice time.

componentSplices

public java.util.Map **componentSplices**

The component splices.

breakDuration

public com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.BreakDuration
breakDuration

The break duration.

programID

public int **programID**

The program id.

(continued from last page)

availNum

```
public int availNum
```

The avail num.

availsExpected

```
public int availsExpected
```

The avails expected.

Constructors

SpliceEvent

```
public SpliceEvent(MPEG2Section data,  
                   boolean fromInsertCmd)
```

Instantiates a new splice event.

Parameters:

data - the data

fromInsertCmd - the from insert cmd

Methods

getEventID

```
public int getEventID()
```

isCancel

```
public boolean isCancel()
```

isOutOfNetwork

```
public boolean isOutOfNetwork()
```

isProgramSplice

```
public boolean isProgramSplice()
```

isDurationFlag

```
public boolean isDurationFlag()
```

(continued from last page)

isSpliceImmediate

```
public boolean isSpliceImmediate()
```

getSpliceTime

```
public SpliceTime getSpliceTime()
```

getComponentSplices

```
public java.util.Map getComponentSplices()
```

getBreakDuration

```
public SpliceEvent.BreakDuration getBreakDuration()
```

getProgramID

```
public int getProgramID()
```

getAvailNum

```
public int getAvailNum()
```

getAvailsExpected

```
public int getAvailsExpected()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent.BreakDuration

java.lang.Object

└--com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.BreakDuration

```
public class SpliceEvent.BreakDuration
    extends Object
```

The Class BreakDuration.

Field Summary

public	autoReturn The auto return.
public	duration The duration.

Constructor Summary

public	BreakDuration (MPEG2Section data) Instantiates a new break duration.
--------	--

Method Summary

long	getDuration ()
boolean	isAutoReturn ()
void	setAutoReturn (boolean autoReturn)
void	setDuration (long duration)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

autoReturn

```
public boolean autoReturn
```

The auto return.

duration

public long **duration**

The duration.

Constructors

BreakDuration

public **BreakDuration**([MPEG2Section](#) data)

Instantiates a new break duration.

Parameters:

data - the data

Methods

isAutoReturn

public boolean **isAutoReturn**()

setAutoReturn

public void **setAutoReturn**(boolean autoReturn)

getDuration

public long **getDuration**()

setDuration

public void **setDuration**(long duration)

toString

public String **toString**()

com.wowza.wms.transport.mpeg2.section.cue Class SpliceEvent.ComponentSpliceTime

java.lang.Object

└─com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent.ComponentSpliceTime

```
public class SpliceEvent.ComponentSpliceTime
    extends Object
```

The Class ComponentSpliceTime.

Field Summary

public	componentTag The component tag.
public	spliceTime The splice time.

Constructor Summary

public	ComponentSpliceTime (MPEG2Section data, boolean fromInsertCommand) Instantiates a new component splice time.
--------	--

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

componentTag

```
public int componentTag
```

The component tag.

spliceTime

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime spliceTime
```

The splice time.

Constructors

ComponentSpliceTime

```
public ComponentSpliceTime(MPEG2Section data,
                           boolean fromInsertCommand)
```

Instantiates a new component splice time.

(continued from last page)

Parameters:

data - the data

fromInsertCommand - the from insert command

com.wowza.wms.transport.mpeg2.section.cue Class SpliceInformationTable

```
java.lang.Object
```

```
└--com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTable
```

```
public class SpliceInformationTable
extends Object
```

The Class SpliceInformationTable.

Field Summary

public static final	<u>AMF_VERSION</u> Value: 1
public	<u>command</u> The command.
public	<u>cwIndex</u> The CW index.
public	<u>encryptedCRC</u> The encrypted crc.
public	<u>encryptedPacket</u> The encrypted packet.
public	<u>encryptionAlgorithm</u> The encryption algorithm.
public static final	<u>INVALID</u> The Constant INVALID. Value: -1
public	<u>protocolVersion</u> The protocol version.
public	<u>ptsAdjustment</u> The PTS adjustment.
public static final	<u>SIT_TABLE_ID</u> The Constant SIT_TABLE_ID. Value: 252
public	<u>spliceDescriptors</u> The splice descriptors.

Constructor Summary

public	<u>SpliceInformationTable</u> (<u>MPEG2Section</u> section) Instantiates a new splice information table.
--------	--

Method Summary

<u>SpliceCommand</u>	<u>getCommand()</u>
int	<u>getCwIndex()</u>
int	<u>getEncryptedCRC()</u>
int	<u>getEncryptionAlgorithm()</u>
int	<u>getProtocolVersion()</u>
long	<u>getPtsAdjustment()</u>
java.util.List	<u>getSpliceDescriptors()</u>
boolean	<u>isEncryptedPacket()</u>
<u>AMFDataObj</u>	<u>serializeAMF()</u> (<u>SpliceInformationTableSerializeAMFContext</u> context)
String	<u>toString()</u>

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

AMF_VERSION

```
public static final int AMF_VERSION
```

Constant value: **1**

INVALID

```
public static final int INVALID
```

The Constant INVALID.
Constant value: **-1**

SIT_TABLE_ID

```
public static final int SIT_TABLE_ID
```

The Constant SIT_TABLE_ID.
Constant value: **252**

(continued from last page)

protocolVersion

```
public int protocolVersion
```

The protocol version.

encryptedPacket

```
public boolean encryptedPacket
```

The encrypted packet.

encryptionAlgorithm

```
public int encryptionAlgorithm
```

The encryption algorithm.

ptsAdjustment

```
public long ptsAdjustment
```

The PTS adjustment.

cwIndex

```
public int cwIndex
```

The CW index.

command

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand command
```

The command.

spliceDescriptors

```
public java.util.List spliceDescriptors
```

The splice descriptors.

encryptedCRC

```
public int encryptedCRC
```

The encrypted crc.

Constructors

SpliceInformationTable

```
public SpliceInformationTable(MPEG2Section section)
```

Instantiates a new splice information table.

Parameters:

section - the section

Methods

getProtocolVersion

```
public int getProtocolVersion()
```

isEncryptedPacket

```
public boolean isEncryptedPacket()
```

getEncryptionAlgorithm

```
public int getEncryptionAlgorithm()
```

getPtsAdjustment

```
public long getPtsAdjustment()
```

getCwIndex

```
public int getCwIndex()
```

getCommand

```
public SpliceCommand getCommand()
```

getSpliceDescriptors

```
public java.util.List getSpliceDescriptors()
```

getEncryptedCRC

```
public int getEncryptedCRC()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

(continued from last page)

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue
Class SpliceInformationTableSerializeAMFContext

java.lang.Object
└─
com.wowza.wms.transport.mpeg2.section.cue.SpliceInformationTableSerializeAMFContext

public class SpliceInformationTableSerializeAMFContext
extends Object

Field Summary		
	public	rtpTrack
	public	timeReference

Constructor Summary		
	public	SpliceInformationTableSerializeAMFContext()

Methods inherited from class java.lang.Object		
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait		

Fields

timeReference
public com.wowza.util.RolloverLong **timeReference**

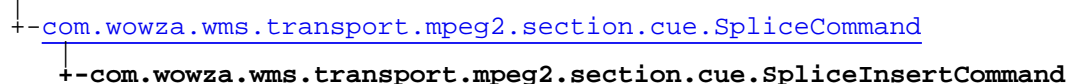
rtpTrack
public com.wowza.wms.rtp.model.RTPTrack **rtpTrack**

Constructors

SpliceInformationTableSerializeAMFContext
public **SpliceInformationTableSerializeAMFContext()**

com.wowza.wms.transport.mpeg2.section.cue Class SpliceInsertCommand

java.lang.Object



public class **SpliceInsertCommand**
extends [SpliceCommand](#)

The Class SpliceInsertCommand.

Field Summary

public	event The event.
--------	-------------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceInsertCommand (MPEG2Section data) Instantiates a new splice insert command.
--------	---

Method Summary

SpliceEvent	getEvent ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

event

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceEvent event
```

The event.

Constructors

SpliceInsertCommand

```
public SpliceInsertCommand(MPEG2Section data)
```

Instantiates a new splice insert command.

Parameters:

data - the data

Methods

getEvent

```
public SpliceEvent getEvent()
```

serializeAMF

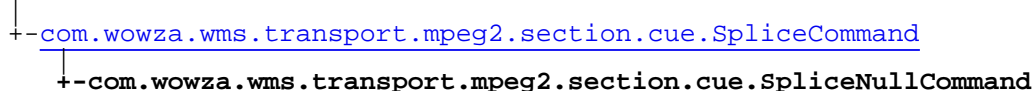
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceNullCommand

java.lang.Object



public class **SpliceNullCommand**
extends [SpliceCommand](#)

The Class SpliceNullCommand.

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceNullCommand() Instantiates a new splice null command.
--------	--

Method Summary

AMFDataObj	serializeAMF(SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Constructors

SpliceNullCommand

public **SpliceNullCommand()**

Instantiates a new splice null command.

Methods

(continued from last page)

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceScheduleCommand

java.lang.Object

└- [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)
└- [com.wowza.wms.transport.mpeg2.section.cue.SpliceScheduleCommand](#)

public class **SpliceScheduleCommand**
extends [SpliceCommand](#)

The Class SpliceScheduleCommand.

Field Summary

public	spliceEvents The splice events.
--------	--

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceScheduleCommand (MPEG2Section data) Instantiates a new splice schedule command.
--------	---

Method Summary

java.util.List	getSpliceEvents ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

(continued from last page)

spliceEvents

```
public java.util.List spliceEvents
```

The splice events.

Constructors

SpliceScheduleCommand

```
public SpliceScheduleCommand(MPEG2Section data)
```

Instantiates a new splice schedule command.

Parameters:

data - the data

Methods

getSpliceEvents

```
public java.util.List getSpliceEvents()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceSegmentationDescriptor

```
java.lang.Object
```

```
├-com.wowza.wms.transport.mpeg2.Descriptor
│   └-com.wowza.wms.transport.mpeg2.section.cue.SpliceSegmentationDescriptor
```

```
public class SpliceSegmentationDescriptor
extends Descriptor
```

Nested Class Summary

class	SpliceSegmentationDescriptor.ComponentInfo SpliceSegmentationDescriptor.ComponentInfo
-------	--

Field Summary

public	archiveAllowedFlag
public	componentCount
public	components
public	deliveryNotRestrictedFlag
public	deviceRestrictions
public	identifier
public	noRegionalBlackoutFlag
public	programSegmentationFlag
public	segmentationDurationFlag
public	segmentationEventCancelIndicator
public	segmentationEventId
public	segmentationTypeId
public	segmentationUPID
public	segmentationUPIDLength
public	segmentationUPIDType

public	segmentDuration
public	segmentNum
public	segmentsExpected
public	webDeliveryAllowedFlag

Fields inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[data](#), [DESCRIPTOR_TAG_AAC_DVB](#), [DESCRIPTOR_TAG_AAC_SCTE](#), [DESCRIPTOR_TAG_AC3](#), [DESCRIPTOR_TAG Ancillary](#), [DESCRIPTOR_TAG_AUDIO](#), [DESCRIPTOR_TAG_CA](#), [DESCRIPTOR_TAG_COPYRIGHT](#), [DESCRIPTOR_TAG_CUE_IDENTIFIER](#), [DESCRIPTOR_TAG_DATA_STREAM_ALIGN](#), [DESCRIPTOR_TAG_DVBTELETEXT](#), [DESCRIPTOR_TAG_ENHANCED_AC3](#), [DESCRIPTOR_TAG_EXT_ES_ID](#), [DESCRIPTOR_TAG_EXTENSION_DVB](#), [DESCRIPTOR_TAG_EXTENSION_MP4_LOAS](#), [DESCRIPTOR_TAG_FLEX_MUX_TIMING](#), [DESCRIPTOR_TAG_FMC](#), [DESCRIPTOR_TAG_FMX_BUFSIZE](#), [DESCRIPTOR_TAG_HIERARCHY](#), [DESCRIPTOR_TAG_IBP](#), [DESCRIPTOR_TAG_IOD](#), [DESCRIPTOR_TAG_ISO_639_LANG](#), [DESCRIPTOR_TAG_MAX_BITRATE](#), [DESCRIPTOR_TAG_METADATA](#), [DESCRIPTOR_TAG_METADATA_POINTER](#), [DESCRIPTOR_TAG_METADATA_STD](#), [DESCRIPTOR_TAG_MP4_AUDIO](#), [DESCRIPTOR_TAG_MP4_VIDEO](#), [DESCRIPTOR_TAG_MULTIPLE_BUF](#), [DESCRIPTOR_TAG_MULTIPLEX_BUF_UTIL](#), [DESCRIPTOR_TAG_MUXCODE](#), [DESCRIPTOR_TAG_PRIVATE_DATA](#), [DESCRIPTOR_TAG_REGISTRATION](#), [DESCRIPTOR_TAG_SL](#), [DESCRIPTOR_TAG_SMOOTHING_BUF](#), [DESCRIPTOR_TAG_STD](#), [DESCRIPTOR_TAG_STREAM_IDENTIFIER](#), [DESCRIPTOR_TAG_SYSTEM_CLOCK](#), [DESCRIPTOR_TAG_TGT_BACKGRD_GRID](#), [DESCRIPTOR_TAG_VIDEO](#), [DESCRIPTOR_TAG_VIDEO_WINDOWS](#), [length](#), [tag](#)

Constructor Summary

public	SpliceSegmentationDescriptor ()
public	SpliceSegmentationDescriptor (java.nio.ByteBuffer descriptorData)

Method Summary

void	decodeDescriptorData (java.nio.ByteBuffer descriptorData)
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toDebugString ()

Methods inherited from class [com.wowza.wms.transport.mpeg2.Descriptor](#)

[binarySize](#), [decodeDescriptor](#), [decodeDescriptorData](#), [getDataAsBase64](#), [getDescriptorName](#), [getShortClassName](#), [serializeAMF](#), [toBin](#), [toDebugString](#), [toString](#)

Methods inherited from class java.lang.Object

[clone](#), [equals](#), [finalize](#), [getClass](#), [hashCode](#), [notify](#), [notifyAll](#), [toString](#), [wait](#), [wait](#), [wait](#)

Fields

(continued from last page)

identifier

```
public int identifier
```

segmentationEventId

```
public long segmentationEventId
```

segmentationEventCancelIndicator

```
public int segmentationEventCancelIndicator
```

programSegmentationFlag

```
public int programSegmentationFlag
```

segmentationDurationFlag

```
public int segmentationDurationFlag
```

deliveryNotRestrictedFlag

```
public int deliveryNotRestrictedFlag
```

webDeliveryAllowedFlag

```
public int webDeliveryAllowedFlag
```

noRegionalBlackoutFlag

```
public int noRegionalBlackoutFlag
```

archiveAllowedFlag

```
public int archiveAllowedFlag
```

deviceRestrictions

```
public int deviceRestrictions
```

(continued from last page)

componentCount

```
public int componentCount
```

components

```
public  
com.wowza.wms.transport.mpeg2.section.cue.SpliceSegmentationDescriptor.ComponentInfo  
components
```

segmentDuration

```
public long segmentDuration
```

segmentationUPIDType

```
public int segmentationUPIDType
```

segmentationUPIDLength

```
public int segmentationUPIDLength
```

segmentationUPID

```
public byte segmentationUPID
```

segmentationTypeId

```
public int segmentationTypeId
```

segmentNum

```
public int segmentNum
```

segmentsExpected

```
public int segmentsExpected
```

(continued from last page)

Constructors

SpliceSegmentationDescriptor

```
public SpliceSegmentationDescriptor()
```

SpliceSegmentationDescriptor

```
public SpliceSegmentationDescriptor(java.nio.ByteBuffer descriptorData)
```

Methods

decodeDescriptorData

```
public void decodeDescriptorData(java.nio.ByteBuffer descriptorData)
```

Decode descriptor data.

toDebugString

```
public String toDebugString()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceSegmentationDescriptor.ComponentInfo

java.lang.Object



com.wowza.wms.transport.mpeg2.section.cue.SpliceSegmentationDescriptor.ComponentInfo

```
public class SpliceSegmentationDescriptor.ComponentInfo
extends Object
```

Field Summary

public	componentTag
public	ptsOffset

Constructor Summary

public	ComponentInfo()
--------	---------------------------------

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

componentTag

```
public int componentTag
```

ptsOffset

```
public long ptsOffset
```

Constructors

ComponentInfo

```
public ComponentInfo()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceTime

java.lang.Object

└--com.wowza.wms.transport.mpeg2.section.cue.SpliceTime

public class **SpliceTime**
extends Object

The Class SpliceTime.

Constructor Summary

public	SpliceTime (int spliceTime) Instantiates a new splice time.
public	SpliceTime (MPEG2Section data) Instantiates a new splice time.

Method Summary

long	getSpliceTime ()
boolean	isSpecified ()
boolean	isUTC ()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString ()

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

SpliceTime

public **SpliceTime**(int spliceTime)

Instantiates a new splice time.

Parameters:

spliceTime - the splice time

(continued from last page)

SpliceTime

```
public SpliceTime(MPEG2Section data)
```

Instantiates a new splice time.

Parameters:

data - the data

Methods

isSpecified

```
public boolean isSpecified()
```

isUTC

```
public boolean isUTC()
```

getSpliceTime

```
public long getSpliceTime()
```

serializeAMF

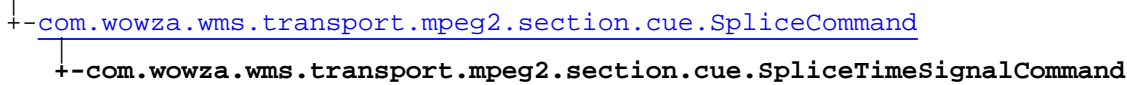
```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

com.wowza.wms.transport.mpeg2.section.cue Class SpliceTimeSignalCommand

java.lang.Object



public class **SpliceTimeSignalCommand**
extends [SpliceCommand](#)

The Class SpliceTimeSignalCommand.

Field Summary

public	time The time.
--------	-----------------------------------

Fields inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[INVALID](#), [name](#), [SPLICE_COMMAND_BANDWIDTH_RES](#), [SPLICE_COMMAND_INSERT](#), [SPLICE_COMMAND_NULL](#), [SPLICE_COMMAND_SCHEDULE](#), [SPLICE_COMMAND_TIME_SIGNAL](#), [type](#)

Constructor Summary

public	SpliceTimeSignalCommand (MPEG2Section data) Instantiates a new splice time signal command.
--------	--

Method Summary

SpliceTime	getTime()
AMFDataObj	serializeAMF (SpliceInformationTableSerializeAMFContext context)
String	toString()

Methods inherited from class [com.wowza.wms.transport.mpeg2.section.cue.SpliceCommand](#)

[getName](#), [getType](#), [serializeAMF](#), [toString](#)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Fields

(continued from last page)

time

```
public com.wowza.wms.transport.mpeg2.section.cue.SpliceTime time
```

The time.

Constructors

SpliceTimeSignalCommand

```
public SpliceTimeSignalCommand(MPEG2Section data)
```

Instantiates a new splice time signal command.

Parameters:

data - the data

Methods

getTime

```
public SpliceTime getTime()
```

serializeAMF

```
public AMFDataObj serializeAMF(SpliceInformationTableSerializeAMFContext context)
```

toString

```
public String toString()
```

Package

com.wowza.wms.util

com.wowza.wms.util

Class RTPUtils

```
java.lang.Object
```

```
└-com.wowza.wms.util.RTPUtils
```

```
public class RTPUtils
extends Object
```

Constructor Summary

public	RTPUtils()
--------	----------------------------

Method Summary

static double[]	decodeRangeHeader (String rangeStr) Decode RTP range header, Internal use.
static RTPStream	decodeStreamInfo (IApplicationInstance appInstance, RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static RTPStream	decodeStreamInfo (IApplicationInstance appInstance, RTPStreamContext rtpStreamContext, RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static RTPStream	decodeStreamInfo (RTPContext context, String streamId, String streamInfo) Decode SDP info and create RTP stream
static byte[]	formatH264CodecConfig (byte[] sps, java.util.List ppss, byte[] profileLevel) Format codec config info, Internal use.
static byte[]	formatH264CodecConfigPacket (byte[] sps, java.util.List ppss, byte[] profileLevel) Format codec config info, Internal use.
static boolean	loadConfigFile (RTPContext rtpContext, String fileURL) Load config file, Internal use.
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int streamPort) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int streamPort, boolean isRTPWrapped) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int audioPort, int videoPort) Start pushing an RTP stream

static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, boolean streamPacketizer, String ipAddress, int audioPort, int videoPort, boolean isRTPWrapped) Start pushing an RTP stream
static RTPPushPublishSession	startRTPPull (IApplicationInstance appInstance, String streamName, RTPDestination rtpDestination) Start pushing an RTP stream
static void	stopRTPPull (RTPPushPublishSession rtpPushPublishSession) Stop pushing an RTP stream
static String	updateSDPDestination (RTPDestination rtpDestination, String sdpData) Update SDP data information with RTP destination information
static void	writeCodecConfig (RTPTrack rtpTrack, int codecId, long adjTimecode, byte[] codecConfig)
static void	writeCodecConfig (RTPTrack rtpTrack, long adjTimecode, byte[] codecConfig) Write codec config information, Internal use.
static void	writeCodecConfig (RTPTrack rtpTrack, long adjTimecode, byte[] codecConfig, int codec)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

RTPUtils

```
public RTPUtils()
```

Methods

updateSDPDestination

```
public static String updateSDPDestination(RTPDestination rtpDestination, String sdpData)
```

Update SDP data information with RTP destination information

Parameters:

rtpDestination - RTP destination

sdpData - SDP data

Returns:

modified SDP data

(continued from last page)

decodeRangeHeader

```
public static double[] decodeRangeHeader(String rangeStr)
```

Decode RTP range header, Internal use.

Parameters:

rangeStr

Returns:

range values

stopRTPPull

```
public static void stopRTPPull(RTPPushPublishSession rtpPushPublishSession)
```

Stop pushing an RTP stream

Parameters:

rtpPushPublishSession - RTP push session

startRTPPull

```
public static RTPPushPublishSession startRTPPull(IApplicationInstance appInstance,  
String streamName,  
boolean streamPacketizer,  
String ipAddress,  
int streamPort,  
boolean isRTPWrapped)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
streamPort - stream port
isRTPWrapped - is RTP wrapped

Returns:

RTP push session

startRTPPull

```
public static RTPPushPublishSession startRTPPull(IApplicationInstance appInstance,  
String streamName,  
boolean streamPacketizer,  
String ipAddress,  
int streamPort)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
streamPort - stream port

(continued from last page)

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    boolean streamPacketizer,  
    String ipAddress,  
    int audioPort,  
    int videoPort)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
audioPort - audio port
videoPort - video port

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    boolean streamPacketizer,  
    String ipAddress,  
    int audioPort,  
    int videoPort,  
    boolean isRTPWrapped)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
streamPacketizer - stream packetizer
ipAddress - IP address
audioPort - audio port
videoPort - video port
isRTPWrapped - is RTP wrapped

Returns:

RTP push session

startRTPPull

```
public static RTTPushPublishSession startRTPPull(IApplicationInstance appInstance,  
    String streamName,  
    RTPDestination rtpDestination)
```

Start pushing an RTP stream

Parameters:

appInstance - application instance
streamName - stream name
rtpDestination - RTP destination

(continued from last page)

Returns:

RTP push session

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,  
    int codecId,  
    long adjTimecode,  
    byte[] codecConfig)
```

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,  
    long adjTimecode,  
    byte[] codecConfig)
```

Write codec config information, Internal use.

Parameters:

rtpTrack - RTP track
adjTimecode - timecode (milliseconds)
codecConfig - codec config

writeCodecConfig

```
public static void writeCodecConfig(RTPTrack rtpTrack,  
    long adjTimecode,  
    byte[] codecConfig,  
    int codec)
```

loadConfigFile

```
public static boolean loadConfigFile(RTPContext rtpContext,  
    String fileURL)
```

Load config file, Internal use.

Parameters:

rtpContext
fileURL

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(RTPContext context,  
    String streamId,  
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

context - RTP context
streamId - stream id
streamInfo - SDP data

Returns:

(continued from last page)

RTP stream

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(IApplicationInstance appInstance,  
    RTPContext context,  
    String streamId,  
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

appInstance - app instance
context - rtp context
streamId - stream id
streamInfo - stream info (SDP data)

Returns:

rtp stream

decodeStreamInfo

```
public static RTPStream decodeStreamInfo(IApplicationInstance appInstance,  
    RTPStreamContext rtpStreamContext,  
    RTPContext context,  
    String streamId,  
    String streamInfo)
```

Decode SDP info and create RTP stream

Parameters:

appInstance - app instance
rtpStreamContext - rtp stream context
context - rtp context
streamId - stream id
streamInfo - stream info (SDP data)

Returns:

rtp stream

formatH264CodecConfigPacket

```
public static byte[] formatH264CodecConfigPacket(byte[] sps,  
    java.util.List ppss,  
    byte[] profileLevel)
```

Format codec config info, Internal use.

Parameters:

sps
ppss
profileLevel

Returns:

bytes

(continued from last page)

formatH264CodecConfig

```
public static byte[] formatH264CodecConfig(byte[] sps,  
      java.util.List ppss,  
      byte[] profileLevel)
```

Format codec config info, Internal use.

Parameters:

- sps
- ppss
- profileLevel

Returns:

- bytes

com.wowza.wms.util Class StreamUtils

java.lang.Object

└─com.wowza.wms.util.StreamUtils

public class **StreamUtils**
extends Object

Constructor Summary

public	StreamUtils()
--------	-------------------------------

Method Summary

static int	directOutput (byte[] dataBuffer, int[] headerValues, boolean isAbsTimecode, int src, java.io.OutputStream out, AMFObj wmsObj, byte[] workBuffer, int chunkSize) Direct output, Internal use.
static double	getStreamBitrate (IApplicationInstance appInstance, String streamName)
static double	getStreamBitrate (IMediaStream stream) Get the approximate bitrate of a media file in bits/per-second.
static double	getStreamLength (IApplicationInstance appInstance, String streamName) Get the duration of a media file in seconds.
static double	getStreamLength (IMediaStream stream) Get the duration of a media file in seconds.
static boolean	loadConfigFile (StreamList streamDefs, String fileURL) Load Streams.xml, Internal use.
static int	packetOutput (java.io.OutputStream out, IMediaStream stream, AMFPacket packet, long timecode, AMFObj wmsObj, byte[] workBuffer, int chunkSize) Packet output.
static int	packetOutput (java.io.OutputStream out, IMediaStream stream, AMFPacket packet, long timecode, AMFObj wmsObj, byte[] workBuffer, int chunkSize, boolean referenceWrite) Packet output.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

(continued from last page)

StreamUtils

```
public StreamUtils()
```

Methods

getStreamLength

```
public static double getStreamLength(IMediaStream stream)
```

Get the duration of a media file in seconds. This will work correctly with all RandomAccessReaders and caching technology

Parameters:

stream - stream

Returns:

duration in seconds

getStreamBitrate

```
public static double getStreamBitrate(IMediaStream stream)
```

Get the approximate bitrate of a media file in bits/per-second. This will work correctly with all RandomAccessReaders and caching technology.

Parameters:

stream - stream

Returns:

bitrate in bits/per-second

getStreamLength

```
public static double getStreamLength(IApplicationInstance appInstance,  
String streamName)
```

Get the duration of a media file in seconds. This will work correctly with all RandomAccessReaders and caching technology

Parameters:

appInstance - application instance
streamName - stream name

Returns:

duration in seconds

getStreamBitrate

```
public static double getStreamBitrate(IApplicationInstance appInstance,  
String streamName)
```

(continued from last page)

directOutput

```
public static int directOutput(byte[] dataBuffer,  
    int[] headerValues,  
    boolean isAbsTimecode,  
    int src,  
    java.io.OutputStream out,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize)
```

Direct output. Internal use.

Parameters:

dataBuffer
headerValues
isAbsTimecode
src
out
wmsObj
workBuffer
chunkSize

Returns:

c

packetOutput

```
public static int packetOutput(java.io.OutputStream out,  
    IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize)
```

Packet output. Internal use.

Parameters:

out
stream
packet
timecode
wmsObj
workBuffer
chunkSize

Returns:

bytes

packetOutput

```
public static int packetOutput(java.io.OutputStream out,  
    IMediaStream stream,  
    AMFPacket packet,  
    long timecode,  
    AMFObj wmsObj,  
    byte[] workBuffer,  
    int chunkSize,  
    boolean referenceWrite)
```

Packet output. Internal use.

(continued from last page)

Parameters:

out
stream
packet
timecode
wmsObj
workBuffer
chunkSize
referenceWrite

Returns:

bytes

loadConfigFile

```
public static boolean loadConfigFile(StreamList streamDefs,  
    String fileURL)
```

Load Streams.xml, Internal use.

Parameters:

streamDefs
fileURL

Package

com.wowza.wms.util.crontab

com.wowza.wms.util.crontab Class CrontabEvent

java.lang.Object

└─com.wowza.wms.util.crontab.CrontabEvent

All Implemented Interfaces:

Comparable

public class **CrontabEvent**
extends Object
implements Comparable

Holds an event's schedule and is responsible for calculating event activation.

Field Summary

public static final	DAY Value: 2
public static	DT_FORMAT
public static final	HOUR Value: 1
public static final	MINUTE Value: 0
public static final	MONTH Value: 3
public static final	WEEKDAY Value: 5
public static final	YEAR Value: 4

Constructor Summary

public	CrontabEvent ()
--------	----------------------------------

Method Summary

int	compareTo (CrontabEvent o) Allows CronEvents to be sorted via Java Sort Class.
void	dump () dumps this event's information to the console

String	<u>getError()</u>
int	<u>getErrorField()</u>
<u>ICrontabEventHandler</u>	<u>getEventHandler()</u>
String	<u>getEventStr()</u>
CrontabField	<u>getField()</u> (int whichField)
org.joda.time.MutableDateTime	<u>getLastRun()</u>
org.joda.time.MutableDateTime	<u>getNextRun()</u>
String	<u>getTarget()</u>
boolean	<u>isDebugEnabled()</u>
boolean	<u>isExpired()</u> Indicates whether or not all execution dates for this event occur in the past
boolean	<u>isMatch()</u> (org.joda.time.MutableDateTime date) Determines if this event will fire on the date passed in
void	<u>setDebug()</u> (boolean debug) turns on/off debug logging
void	<u>setError()</u> (String error)
void	<u>setErrorField()</u> (int errorField)
void	<u>setEventHandler()</u> (<u>ICrontabEventHandler</u> handler)
void	<u>setEventStr()</u> (String entry)
void	<u>setField()</u> (int whichField, CrontabField field)
void	<u>setLastRun()</u> Sets the last run time to now
void	<u>setLastRun()</u> (org.joda.time.MutableDateTime date)
void	<u>setTarget()</u> (String target)
boolean	<u>start()</u> Starts this events timer
void	<u>stop()</u> stops this events timer

Methods inherited from class java.lang.Object

```
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
```

Methods inherited from interface `java.lang.Comparable`

```
compareTo
```

Fields

DT_FORMAT

```
public static org.joda.time.format.DateTimeFormatter DT_FORMAT
```

MINUTE

```
public static final int MINUTE
```

Constant value: **0**

HOURL

```
public static final int HOUR
```

Constant value: **1**

DAY

```
public static final int DAY
```

Constant value: **2**

MONTH

```
public static final int MONTH
```

Constant value: **3**

YEAR

```
public static final int YEAR
```

Constant value: **4**

WEEKDAY

```
public static final int WEEKDAY
```

Constant value: **5**

Constructors

CrontabEvent

```
public CrontabEvent()
```

Methods

start

```
public boolean start()
```

Starts this events timer

Returns:

true - if timer is started, else false

stop

```
public void stop()
```

stops this events timer

isMatch

```
public boolean isMatch(org.joda.time.MutableDateTime date)
```

Determines if this event will fire on the date passed in

Parameters:

date

Returns:

boolean

setField

```
public void setField(int whichField,  
    CrontabField field)
```

getField

```
public CrontabField getField(int whichField)
```

setTarget

```
public void setTarget(String target)
```

(continued from last page)

getTarget

```
public String getTarget()
```

setEventStr

```
public void setEventStr(String entry)
```

getEventStr

```
public String getEventStr()
```

getNextRun

```
public org.joda.time.MutableDateTime getNextRun()
```

getLastRun

```
public org.joda.time.MutableDateTime getLastRun()
```

setLastRun

```
public void setLastRun(org.joda.time.MutableDateTime date)
```

getError

```
public String getError()
```

setError

```
public void setError(String error)
```

getErrorField

```
public int getErrorField()
```

setErrorField

```
public void setErrorField(int errorField)
```

(continued from last page)

setLastRun

```
public void setLastRun()
```

Sets the last run time to now

setDebug

```
public void setDebug(boolean debug)
```

turns on/off debug logging

Parameters:

debug - - true/false

isDebugEnabled

```
public boolean isDebugEnabled()
```

setEventHandler

```
public void setEventHandler(ICrontabEventHandler handler)
```

getEventHandler

```
public ICrontabEventHandler getEventHandler()
```

isExpired

```
public boolean isExpired()
```

Indicates whether or not all execution dates for this event occur in the past

Returns:

true/false

compareTo

```
public int compareTo(CrontabEvent o)
```

Allows CronEvents to be sorted via Java Sort Class. Compares nextRun dates of two CronEvents where earlier events are considered "less" than later events, (e.g. today < tomorrow) and nulls are "greater" than events with dates (e.g. tomorrow < null) This provides the logic to sort events by soonest to latest with nulls at the end

Parameters:

o - - CronEvent to compare this event to

Returns:

-1,0,1 - if equal, if this event is greater than

(continued from last page)

dump

```
public void dump()
```

 dumps this event's information to the console

com.wowza.wms.util.crontab Interface ICrontabEventHandler

public interface **ICrontabEventHandler**
extends

EventHandler functions are called from a Java timer task context and therefore should execute very quickly so as not to delay execution of subsequent timers. If there is heavy processing which needs to take place, the implementation for these functions should spawn a thread to do it.

Method Summary

abstract void	onCronEvent (CrontabEvent event)
---------------	---

Methods

onCronEvent

public abstract void **onCronEvent**([CrontabEvent](#) event)

Package

com.wowza.wms.vhost

com.wowza.wms.vhost Class HostPort

java.lang.Object

└─com.wowza.wms.vhost.HostPort

public class **HostPort**
extends Object

HostPort: data object that describes a socket connection. The address can be defined by ipAddress or by domainName. It can also contain a reference to an SSLFactory class that can be used to create a secure connection to the server.

Field Summary

public static final	TYPE_ADMIN Value: Admin
public static final	TYPE_STREAMING Value: Streaming

Constructor Summary

public	HostPort() Create an empty HostPort object
--------	---

Method Summary

void	addHttpProvider() (IHTTPProvider httpProvider)
void	addHttpProvider() (IHTTPProvider2 httpProvider)
void	addHttpProvider() (int index, IHTTPProvider2 httpProvider)
void	addHTTPStreamerAdapterID() (String ID)
void	configureSocketAcceptor() (org.apache.mina.transport.socket.nio.SocketAcceptorConfig socketConfig) Configure a socketAcceport
java.net.InetAddress	getAddress() Get the ipAddress as an InetAddress object
String	getAddressRawStr()
String	getAddressStr() Get a String representation of the address
HostPortConfig	getConfiguration() Get the socket configuration

String	<u>getHTTPIdent2Response()</u>
String	<u>getHTTPIdentResponse()</u>
java.util.List	<u>getHttpProviders()</u>
java.util.List	<u>getHTTPStreamerAdapterIDs()</u>
String	<u>getName()</u>
int	<u>getPort()</u> Get port
int	<u>getProcessorCount()</u> Get the number of threads to use to service this incoming port
<u>HostPortSSLConfig</u>	<u>getSSLConfig()</u>
String	<u>getSslFactoryClass()</u> Get full class name or SSLFactory class
String	<u>getTypeStr()</u>
boolean	<u>isAdmin()</u>
boolean	<u>isSecure()</u>
boolean	<u>isStreaming()</u>
boolean	<u>isSuspended()</u>
void	<u>setDomainName()</u> (String domainName) Set domainName.
void	<u>setHTTPIdent2Response()</u> (String httpIdent2Response)
void	<u>setHTTPIdentResponse()</u> (String httpIdentResponse)
void	<u>setIpAddress()</u> (String ipAddress) Set ipAddress for object.
void	<u>setName()</u> (String name)
void	<u>setPort()</u> (int port) Set port
void	<u>setProcessorCount()</u> (int processorCount) Set the number of threads to use to service this incoming port
void	<u>setSSLConfig()</u> (<u>HostPortSSLConfig</u> sslConfig)

void	<code>setSslFactoryClass</code> (String sslFactoryClass) Set full class name of SSLFactory class
void	<code>setSuspended</code> (boolean isSuspended)
void	<code>setTypeStr</code> (String typeStr)
int	<code>size</code> (int index, <code>IHTTPProvider2</code> httpProvider)
String	<code>toString</code> () Return object as formatted string
String	<code>toString</code> (boolean mBeanSafe) Return object as formatted string

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

TYPE_ADMIN

```
public static final java.lang.String TYPE_ADMIN
```

Constant value: **Admin**

TYPE_STREAMING

```
public static final java.lang.String TYPE_STREAMING
```

Constant value: **Streaming**

Constructors

HostPort

```
public HostPort()
```

Create an empty HostPort object

Methods

setDomainName

```
public void setDomainName(String domainName)
```

Set domainName. A domainName of * defines a local connection.

Parameters:

domainName - domainName like www.mycompany.com or * for local

getAddress

```
public java.net.InetAddress getAddress()
```

Get the ipAddress as an InetAddress object

Returns:

ipAddress as an InetAddress object. At this point the domainName (if specified) will be resolved.

getAddressStr

```
public String getAddressStr()
```

Get a String representation of the address

Returns:

String representation of the address/domainName. If * it will return [any]

getAddressRawStr

```
public String getAddressRawStr()
```

setIpAddress

```
public void setIpAddress(String ipAddress)
```

Set ipAddress for object. A ipAddress of * defines a local connection.

Parameters:

ipAddress - ipAddress like 127.0.0.1 or * for local

getPort

```
public int getPort()
```

Get port

Returns:

port

setPort

```
public void setPort(int port)
```

Set port

Parameters:

port - port

getSslFactoryClass

```
public String getSslFactoryClass()
```

Get full class name or SSLFactory class

(continued from last page)

Returns:full class name or SSLFactory or "" if not specified

setSslFactoryClass

```
public void setSslFactoryClass(String sslFactoryClass)
```

Set full class name of SSLFactory class

Parameters:sslFactoryClass - full class name or SSLFactory or "" if not specified

getProcessorCount

```
public int getProcessorCount()
```

Get the number of threads to use to service this incoming port

Returns:number of processor threads

setProcessorCount

```
public void setProcessorCount(int processorCount)
```

Set the number of threads to use to service this incoming port

Parameters:processorCount - number of processor threads

toString

```
public String toString(boolean mBeanSafe)
```

Return object as formatted string

Parameters:

mBeanSafe - make the name safe for JMX management interface

Returns:formmatted string

toString

```
public String toString()
```

Return object as formatted string

Returns:formmatted string

getConfiguration

```
public HostPortConfig getConfiguration()
```

Get the socket configuration

Returns:

(continued from last page)

socket configuration

configureSocketAcceptor

```
public void  
configureSocketAcceptor(org.apache.mina.transport.socket.nio.SocketAcceptorConfig  
socketConfig)
```

Configure a socketAcceptor

Parameters:

socketConfig - socket acceptor

getHttpProviders

```
public java.util.List getHttpProviders()
```

addHttpProvider

```
public void addHttpProvider(IHTTPProvider httpProvider)
```

addHttpProvider

```
public void addHttpProvider(IHTTPProvider2 httpProvider)
```

addHttpProvider

```
public void addHttpProvider(int index,  
    IHTTPProvider2 httpProvider)
```

size

```
public int size(int index,  
    IHTTPProvider2 httpProvider)
```

isSuspended

```
public boolean isSuspended()
```

setSuspended

```
public void setSuspended(boolean isSuspended)
```

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getHTTPStreamerAdapterIDs

```
public java.util.List getHTTPStreamerAdapterIDs()
```

addHTTPStreamerAdapterID

```
public void addHTTPStreamerAdapterID(String ID)
```

isSecure

```
public boolean isSecure()
```

getSSLConfig

```
public HostPortSSLConfig getSSLConfig()
```

setSSLConfig

```
public void setSSLConfig(HostPortSSLConfig sslConfig)
```

getHTTPIdentResponse

```
public String getHTTPIdentResponse()
```

setHTTPIdentResponse

```
public void setHTTPIdentResponse(String httpIdentResponse)
```

getHTTPIdent2Response

```
public String getHTTPIdent2Response()
```

setHTTPIdent2Response

```
public void setHTTPIdent2Response(String httpIdent2Response)
```

getTypeStr

```
public String getTypeStr()
```

(continued from last page)

setTypeStr

```
public void setTypeStr(String typeStr)
```

getName

```
public String getName()
```

setName

```
public void setName(String name)
```

isAdmin

```
public boolean isAdmin()
```

isStreaming

```
public boolean isStreaming()
```

com.wowza.wms.vhost Class HostPortConfig

java.lang.Object

```

  |
  +--org.apache.mina.common.support.BaseIoSessionConfig
      |
      +--org.apache.mina.transport.socket.nio.SocketSessionConfigImpl
          |
          +--com.wowza.wms.vhost.HostPortConfig
  
```

All Implemented Interfaces:

Cloneable, org.apache.mina.common.IoSessionConfig, org.apache.mina.transport.socket.nio.SocketSessionConfig

public class **HostPortConfig**

extends org.apache.mina.transport.socket.nio.SocketSessionConfigImpl

Constructor Summary

public	HostPortConfig()
--------	----------------------------------

Method Summary

void	configureSocketAcceptor (org.apache.mina.transport.socket.nio.SocketAcceptorConfig socketConfig)
void	configureSocketConnector (org.apache.mina.transport.socket.nio.SocketConnectorConfig socketConfig)
int	getAcceptorBackLog ()
int	getConnectionTimeout ()
int	getReadBufferSize ()
void	setAcceptorBackLog (int acceptorBackLog)
void	setConnectionTimeout (int connectionTimeout)
void	setReadBufferSize (int readBufferSize)

Methods inherited from class org.apache.mina.transport.socket.nio.SocketSessionConfigImpl

getReadBufferSize, getReceiveBufferSize, getSendBufferSize, getSoLinger, getTrafficClass, isGetTrafficClassAvailable, isKeepAlive, isOobInline, isReuseAddress, isSetReceiveBufferSizeAvailable, isSetSendBufferSizeAvailable, isSetTrafficClassAvailable, isTcpNoDelay, setKeepAlive, setOobInline, setReadBufferSize, setReceiveBufferSize, setReuseAddress, setSendBufferSize, setSoLinger, setTcpNoDelay, setTrafficClass

Methods inherited from class org.apache.mina.common.support.BaseIoSessionConfig

clone

Methods inherited from class `java.lang.Object`

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface `org.apache.mina.common.SessionConfig`

clone

Methods inherited from interface `org.apache.mina.transport.socket.nio.SocketSessionConfig`

getReadBufferSize, getReceiveBufferSize, getSendBufferSize, getSoLinger, getTrafficClass, isKeepAlive, isOobInline, isReuseAddress, isTcpNoDelay, setKeepAlive, setOobInline, setReadBufferSize, setReceiveBufferSize, setReuseAddress, setSendBufferSize, setSoLinger, setTcpNoDelay, setTrafficClass

Methods inherited from interface `org.apache.mina.common.SessionConfig`

clone

Constructors

HostPortConfig

```
public HostPortConfig()
```

Methods

configureSocketConnector

```
public void  
configureSocketConnector(org.apache.mina.transport.socket.nio.SocketConnectorConfig  
socketConfig)
```

configureSocketAcceptor

```
public void  
configureSocketAcceptor(org.apache.mina.transport.socket.nio.SocketAcceptorConfig  
socketConfig)
```

getAcceptorBackLog

```
public int getAcceptorBackLog()
```

(continued from last page)

setAcceptorBackLog

```
public void setAcceptorBackLog(int acceptorBackLog)
```

getConnectionTimeout

```
public int getConnectionTimeout()
```

setConnectionTimeout

```
public void setConnectionTimeout(int connectionTimeout)
```

getReadBufferSize

```
public int getReadBufferSize()
```

setReadBufferSize

```
public void setReadBufferSize(int readBufferSize)
```

com.wowza.wms.vhost Class HostPortList

java.lang.Object

└--com.wowza.wms.vhost.HostPortList

```
public class HostPortList
extends Object
```

HostPortList: data object that contains a collection of HostPort objects.

Constructor Summary

public	HostPortList() Create empty HostPortList
--------	---

Method Summary

void	add(HostPort hostPort) Add HostPort object
HostPort	get(int index) Get HostPort object at index, null if out of bounds
int	size() Get number of HostPort objects

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

HostPortList

```
public HostPortList()
```

Create empty HostPortList

Methods

add

```
public void add(HostPort hostPort)
```

Add HostPort object

Parameters:

hostPort

size

```
public int size()
```

Get number of HostPort objects

Returns:

number of HostPort objects

get

```
public HostPort get(int index)
```

Get HostPort object at index, null if out of bounds

Parameters:

index - index

Returns:

HostPort object at index, null if out of bounds

com.wowza.wms.vhost Class HostPortSSLCertificateConfig

java.lang.Object

└─com.wowza.wms.vhost.HostPortSSLCertificateConfig

public class **HostPortSSLCertificateConfig**
extends Object

Field Summary

protected	keyStoreAlias
protected	keyStorePass
protected	keyStorePath
protected	keyStoreType

Constructor Summary

public	HostPortSSLCertificateConfig()
public	HostPortSSLCertificateConfig (String keyStorePath, String keyStorePass, String keyStoreType)
public	HostPortSSLCertificateConfig (HostPortSSLCertificateConfig hostPortSSLCertificateConfig, IVHost vhost)

Method Summary

HostPortSSLCertificateConfig	clone()
String	getKeyStoreAlias()
String	getKeyStorePass()
String	getKeyStorePath()
String	getKeyStoreType()
void	setKeyStoreAlias (String keyStoreAlias)
void	setKeyStorePass (String keyStorePass)
void	setKeyStorePath (String keyStorePath)

void	setKeyStoreType (String keyStoreType)
String	toString ()

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait`

Fields

keyStorePath

protected `java.lang.String` **keyStorePath**

keyStorePass

protected `java.lang.String` **keyStorePass**

keyStoreAlias

protected `java.lang.String` **keyStoreAlias**

keyStoreType

protected `java.lang.String` **keyStoreType**

Constructors

HostPortSSLCertificateConfig

public **HostPortSSLCertificateConfig**()

HostPortSSLCertificateConfig

public **HostPortSSLCertificateConfig**(String keyStorePath,
String keyStorePass,
String keyStoreType)

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HostPortSSLCertificateConfig

```
public HostPortSSLCertificateConfig(HostPortSSLCertificateConfig  
hostPortSSLCertificateConfig,  
                                IVHost vhost)
```

Methods

clone

```
public HostPortSSLCertificateConfig clone()
```

getKeyStorePath

```
public String getKeyStorePath()
```

setKeyStorePath

```
public void setKeyStorePath(String keyStorePath)
```

getKeyStorePass

```
public String getKeyStorePass()
```

setKeyStorePass

```
public void setKeyStorePass(String keyStorePass)
```

getKeyStoreType

```
public String getKeyStoreType()
```

setKeyStoreType

```
public void setKeyStoreType(String keyStoreType)
```

getKeyStoreAlias

```
public String getKeyStoreAlias()
```

setKeyStoreAlias

```
public void setKeyStoreAlias(String keyStoreAlias)
```

toString

```
public String toString()
```

com.wowza.wms.vhost Class HostPortSSLConfig

java.lang.Object

└─com.wowza.wms.vhost.HostPortSSLConfig

public class **HostPortSSLConfig**
extends Object

Constructor Summary

public	HostPortSSLConfig()
--------	-------------------------------------

Method Summary

HostPortSSLConfig	clone()
boolean	doesAllowHttp2()
String	getAlgorithm()
HostPortSSLCertificateConfig	getCertificateConfig()
String[]	getCipherSuites()
String	getDomainToKeyStoreMapPathStr()
String	getKeyStorePass()
String	getKeyStorePath()
String	getKeyStoreType()
String[]	getProtocols()
String	getSSLProtocol()
String	getUniqueId()
void	setAlgorithm(String algorithm)
void	setAllowHttp2(Boolean valueOf)
void	setCipherSuites(String[] cipherSuites)

void	setDomainToKeyStoreMapPathStr (String domainToKeyStoreMapPathStr)
void	setKeyStorePass (String keystorePass)
void	setKeyStorePath (String keyStorePath)
void	setKeyStoreType (String keystoreType)
void	setProtocols (String[] protocols)
void	setSSLProtocol (String sslProtocol)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

HostPortSSLConfig

```
public HostPortSSLConfig()
```

Methods

clone

```
public HostPortSSLConfig clone()
```

getUniqueId

```
public String getUniqueId()
```

getKeyStorePath

```
public String getKeyStorePath()
```

setKeyStorePath

```
public void setKeyStorePath(String keyStorePath)
```

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getKeyStorePass

```
public String getKeyStorePass()
```

setKeyStorePass

```
public void setKeyStorePass(String keystorePass)
```

getKeyStoreType

```
public String getKeyStoreType()
```

setKeyStoreType

```
public void setKeyStoreType(String keystoreType)
```

getSSLProtocol

```
public String getSSLProtocol()
```

setSSLProtocol

```
public void setSSLProtocol(String sslProtocol)
```

getAlgorithm

```
public String getAlgorithm()
```

setAlgorithm

```
public void setAlgorithm(String algorithm)
```

getCipherSuites

```
public String[] getCipherSuites()
```

setCipherSuites

```
public void setCipherSuites(String[] cipherSuites)
```

(continued from last page)

getProtocols

```
public String[] getProtocols()
```

setProtocols

```
public void setProtocols(String[] protocols)
```

getCertificateConfig

```
public HostPortSSLCertificateConfig getCertificateConfig()
```

getDomainToKeyStoreMapPathStr

```
public String getDomainToKeyStoreMapPathStr()
```

setDomainToKeyStoreMapPathStr

```
public void setDomainToKeyStoreMapPathStr(String domainToKeyStoreMapPathStr)
```

doesAllowHttp2

```
public boolean doesAllowHttp2()
```

setAllowHttp2

```
public void setAllowHttp2(Boolean valueOf)
```

com.wowza.wms.vhost Interface IAcceptorNotify

public interface **IAcceptorNotify**
extends

IAcceptorNotify: listener interface used by IVHost addAcceptorListener

Method Summary

abstract void	onAcceptorCreate (HostPort hostPort, java.util.Map acceptorMap) Triggered when a new acceptor is created
abstract void	onAcceptorDestroy (HostPort hostPort, java.util.Map acceptorMap) Triggered when a new acceptor is deleted

Methods

onAcceptorCreate

```
public abstract void onAcceptorCreate(HostPort hostPort,  
    java.util.Map acceptorMap)
```

Triggered when a new acceptor is created

Parameters:

hostPort - HostPort object

acceptorMap - Map of acceptors

onAcceptorDestroy

```
public abstract void onAcceptorDestroy(HostPort hostPort,  
    java.util.Map acceptorMap)
```

Triggered when a new acceptor is deleted

Parameters:

hostPort - HostPort object

acceptorMap - Map of acceptors

com.wowza.wms.vhost Interface IVHost

public interface **IVHost**
extends

IVHost: public interface to VHost object.

Field Summary

public static final	ACCEPTORS_ACCEPTOR Acceptor types: acceptor Value: acceptor
public static final	ACCEPTORS_HANDLERADAPTER Acceptor types: handler Value: handlerAdapter
public static final	CODEC_AUDIO_AAC Value: 10
public static final	CODEC_AUDIO_AC3 Value: 1
public static final	CODEC_AUDIO_ALS Value: 13
public static final	CODEC_AUDIO_G711_ALAW Value: 7
public static final	CODEC_AUDIO_G711_MULAW Value: 8
public static final	CODEC_AUDIO_MP3 Value: 2
public static final	CODEC_AUDIO_MP3_8 Value: 15
public static final	CODEC_AUDIO_NELLYMOSER Value: 6
public static final	CODEC_AUDIO_NELLYMOSER_16MONO Value: 4
public static final	CODEC_AUDIO_NELLYMOSER_8MONO Value: 5

public static final	CODEC_AUDIO_OPUS Value: 12
public static final	CODEC_AUDIO_PCM_BE Value: 0
public static final	CODEC_AUDIO_PCM_LE Value: 3
public static final	CODEC_AUDIO_PCM_SWF Value: 1
public static final	CODEC_AUDIO_RESERVED Value: 9
public static final	CODEC_AUDIO_SPEEX Value: 11
public static final	CODEC_AUDIO_UNKNOWN Value: -1
public static final	CODEC_AUDIO_VORBIS Value: 9
public static final	CODEC_STREAM_MP2T Value: 0
public static final	CODEC_STREAM_UNKNOWN Value: -1
public static final	CODEC_VIDEO_H263 Value: 9
public static final	CODEC_VIDEO_H264 Value: 7
public static final	CODEC_VIDEO_H265 Value: 12
public static final	CODEC_VIDEO_MPEG2 Value: 11
public static final	CODEC_VIDEO_MPEG4 Value: 10
public static final	CODEC_VIDEO_SCREEN Value: 3

public static final	CODEC_VIDEO_SCREEN2 Value: 6
public static final	CODEC_VIDEO_SPARK Value: 2
public static final	CODEC_VIDEO_UNKNOWN Value: -1
public static final	CODEC_VIDEO_VERSION_DEFAULT Value: 0
public static final	CODEC_VIDEO_VERSION_VPX_VP8 Value: 8
public static final	CODEC_VIDEO_VERSION_VPX_VP9 Value: 9
public static final	CODEC_VIDEO_VP6 Value: 4
public static final	CODEC_VIDEO_VP6A Value: 5
public static final	CODEC_VIDEO_VP8 Value: 8
public static final	CODEC_VIDEO_VPX Value: 8
public static final	CONTENTTYPE_ACKBANDWIDTH AMF Content type: set acknowledge bandwidth size Value: 5
public static final	CONTENTTYPE_AUDIO AMF Content type: audio packet Value: 8
public static final	CONTENTTYPE_BUFFERSIZE AMF Content type: set buffer size Value: 4
public static final	CONTENTTYPE_DATA AMF Content type: data packet Value: 18
public static final	CONTENTTYPE_DATA0 AMF Content type: data packet (AMF0) Value: 18

public static final	CONTENTTYPE_DATA3 AMF Content type: data packet (AMF3) Value: 15
public static final	CONTENTTYPE_FUNCTION AMF Content type: function data (AMF0) Value: 20
public static final	CONTENTTYPE_FUNCTION0 AMF Content type: function data (AMF0) Value: 20
public static final	CONTENTTYPE_FUNCTION3 AMF Content type: function data (AMF3) Value: 17
public static final	CONTENTTYPE_MEDIACHUNK AMF Content type: media chunk Value: 22
public static final	CONTENTTYPE_PLAYCALLBACK AMF Content type: play callback Value: 127
public static final	CONTENTTYPE_SETBANDWIDTH AMF Content type: set bandwidth size Value: 6
public static final	CONTENTTYPE_SETCHUNKSIZE AMF Content type: set packet chunk size Value: 1
public static final	CONTENTTYPE_SHAREDOBJECTS AMF Content type: shared object packet (AMF0) Value: 19
public static final	CONTENTTYPE_SHAREDOBJECTS0 AMF Content type: shared object packet (AMF0) Value: 19
public static final	CONTENTTYPE_SHAREDOBJECTS3 AMF Content type: shared object packet (AMF3) Value: 16
public static final	CONTENTTYPE_UNKNOWN AMF Content type: unknown Value: 0
public static final	CONTENTTYPE_VIDEO AMF Content type: video packet Value: 9
public static final	CONTENTTYPE_WATCHDOG AMF Content type: watch dog Value: 3

public static final	<u>COUNTER_HTTPCUPERTINO</u> Value: 2
public static final	<u>COUNTER_HTTPDVRCHUNKS</u> Value: 7
public static final	<u>COUNTER_HTTPMPEGDASH</u> Value: 6
public static final	<u>COUNTER_HTTPSANJOSE</u> Value: 4
public static final	<u>COUNTER_HTTPSMOOTH</u> Value: 3
public static final	<u>COUNTER_HTTPPTS</u> Value: 8
public static final	<u>COUNTER_HTTPWEBM</u> Value: 5
public static final	<u>COUNTER_RTMP</u> Value: 0
public static final	<u>COUNTER_RTP</u> Value: 1
public static final	<u>COUNTER_TOTAL</u> Value: 10
public static final	<u>COUNTER_WEBRTC</u> Value: 9
public static final	<u>DEFAULT_WEBRTC_IDLEFREQUENCY</u> Value: 25
public static final	<u>FILEFORMAT_FLV</u> Value: 1
public static final	<u>FILEFORMAT_MP4</u> Value: 2
public static final	<u>FILEFORMAT_UNKNOWN</u> Value: -1
public static final	<u>LICENSECOUNTER_DRM_BUYDRM_LIVE</u> Value: 9

public static final	<u>LICENSECOUNTER_DRM_BUYDRM_VOD</u> Value: 10
public static final	<u>LICENSECOUNTER_DRM_EZDRM_LIVE</u> Value: 4
public static final	<u>LICENSECOUNTER_DRM_EZDRM_VOD</u> Value: 5
public static final	<u>LICENSECOUNTER_DRM_VERIMATRIX_LIVE</u> Value: 6
public static final	<u>LICENSECOUNTER_DRM_VERIMATRIX_VOD</u> Value: 7
public static final	<u>LICENSECOUNTER_NDVR</u> Value: 3
public static final	<u>LICENSECOUNTER_PUBLISHER</u> Value: 0
public static final	<u>LICENSECOUNTER_PUBLISHERTRANSCODER</u> Value: 8
public static final	<u>LICENSECOUNTER_TOTAL</u> Value: 20
public static final	<u>LICENSECOUNTER_TRANSCODE_DECODE</u> Value: 1
public static final	<u>LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIO</u> Value: 14
public static final	<u>LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEO</u> Value: 16
public static final	<u>LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEO</u> Value: 15
public static final	<u>LICENSECOUNTER_TRANSCODE_DECODEPOLLING</u> Value: 11
public static final	<u>LICENSECOUNTER_TRANSCODE_ENCODE</u> Value: 2
public static final	<u>LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIO</u> Value: 17

public static final	LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO Value: 19
public static final	LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEO Value: 18
public static final	LICENSECOUNTER_TRANSCODE_ENCODEPOLLING Value: 12
public static final	LICENSECOUNTER_TRANSCODE_STREAMNAMES Value: 13
public static final	LICENSECOUNTERS_DRM
public static final	VHOST_DEFAULT Value: _defaultVHost_
public static final	VHOST_DEFAULT_HTTP_PERSISTENT Value: false

Method Summary

abstract void	addAcceptorListener (IAcceptorNotify acceptorListener) Add acceptor listener.
abstract void	addApplicationListener (IApplicationNotify applicationListener) Add application listener.
abstract void	addIdleWorkerListener (IIdleWorkerNotify idleWorkerListener) Add idleWorker listener.
abstract void	addStartupStream (StartupStream startupStream) Add a stream to the list of streams to start and virtual host startup
abstract boolean	applicationExists (String name) Return true if an application folder exists for this application name
abstract void	closeHostPort (HostPort hostPort, boolean isSuspend) Close an individual HostPort
abstract IApplication	getApplication (String applicationName) Get application by name.
abstract java.util.List	getApplicationFolderNames () Get a list of application folder names
abstract edu.emory.mathcs.back port.java.util.concur rent.locks.WMSReadWri teLock	getApplicationLock () Get the object used in synchronized statements to lock and application.
abstract java.util.List	getApplicationNames () Get a list of application names

abstract int	<u>getApplicationTimeout()</u> Get application time out (milliseconds).
abstract AuthenticationList	<u>getAuthenticationList()</u> Get the list of available authentication methods
abstract CEACaptionConversionContext	<u>getCEACaptionConversionContext()</u> Get CEACaptionConversionContextMP3 tag map attached to vHost (CEACaptionConversion.xml).
abstract IClient	<u>getClient(int clientId)</u> Get client by client id.
abstract IClient	<u>getClient(int clientId, boolean create)</u> Get client by client id and create if does not exist.
abstract int	<u>getClientCount()</u> Get number of clients connected to this vHost.
abstract int	<u>getClientIdleFrequency()</u> Get default client idle frequency (milliseconds)
abstract int	<u>getClientTimeout()</u> Get client timeout.
abstract ConnectionCounter	<u>getConnectionCounter()</u> Get vHost connection counter.
abstract ConnectionCounterSimple	<u>getConnectionCounter(int counterIndex)</u> Get vHost connection counter for a specific technology (see IVHost.COUNTER_*)
abstract int	<u>getConnectionLimit()</u> Get vHost connection limit.
abstract int	<u>getCoreHandlerPoolSize()</u> Get the handler core thread pool size.
abstract int	<u>getCoreTransportPoolSize()</u> Get the transport core thread pool size.
abstract String	<u>getDateStarted()</u> Get date and time the server was started.
abstract DomainToKeyStoreMapList	<u>getDomainToKeyStoreMapList()</u> Get the SSL certificate map list.
abstract DvrRecorderList	<u>getDvrRecorderList()</u> Get the DvrRecorderList
abstract DvrStoreList	<u>getDvrStoreList()</u> Get the list of DVR Stores
abstract java.util.Properties	<u>getDynamicLogProperties()</u> Get the dynamic log properties defined at the vhost level in conf/log4j.properties
abstract int	<u>getFileIOPoolSize()</u> Get the default file io pool size.

abstract ThreadPool	getHandlerThreadPool() Get the VHost handler thread pool.
abstract String	getHomePath() Get vHost configuration path.
abstract HostPortList	getHostPortsList() Get list of host port definitions for vHost.
abstract boolean	getHTTTPersistentRejectInvalid() Get HTTTPersistent rejection status.
abstract HTTPProviderContext	getHTTPProviderContext() Get the HTTPProvider Context
abstract IHTTPStreamerAdapter	getHTTPStreamerAdapter(String ID) Get an HTTPStreamerAdapter by ID
abstract java.util.List	getHTTPStreamerAdapterIDs() Get a list of HTTPStreamerAdapter IDs
abstract HTTPStreamerContext	getHTTPStreamerContext() Get the HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context
abstract HTTPStreamerList	getHTTPStreamerList() Get the list of HTTPStreamers
abstract int	getHTTPStreamerMaxPathLen() Get the max HTTP streamer path length
abstract IVHostHTTPStreamerRequestValidator	getHTTPStreamerRequestValidator() Get the HTTP streamer request validator
abstract int	getIdleCheckFrequency() Get idle check frequency (milliseconds)
abstract int	getIdleMinimumWaitTime() Get the minimum time (milliseconds) the idle worker thread will sleep before generating idle events
abstract int	getIdleWorkerCount() Get number of threads used to generate idle events
abstract IdleWorkersUtil	getIdleWorkers() Get the idle worker utility
abstract IOPerformanceCounter	getIoPerformanceCounter() Get vHost IO performance counter.
abstract IOPerformanceCounter	getIoPerformanceCounter(int counterIndex) Get vHost IO performance counter for a specific technology (see IVHost.COUNTER_*)
abstract IOScheduler	getIOScheduler() Get IO scheduler for vHost.
abstract int	getKeepAliveTimeout() Get the RTMPT connection keep alive timeout

abstract LiveStreamPacketizerList	<u>getLiveStreamPacketizerList()</u> Get the LiveStreamPacketizerList
abstract <u>ILiveStreamRecordManager</u>	<u>getLiveStreamRecordManager()</u> Returns the LiveStreamRecordManager associated with this vhost This object contains the active LiveStreamRecorders
abstract LiveStreamTranscoderList	<u>getLiveStreamTranscoderList()</u> Get the LiveStreamTranscoderList
abstract long	<u>getLiveStreamTranscoderSessionCount()</u> Get the current number of live stream transcoder sessions.
abstract <u>WMSProperties</u>	<u>getManagerProperties()</u> Get VHost's manager's properties collection
abstract int	<u>getMaximumPendingReadBytes()</u> Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
abstract int	<u>getMaximumPendingWriteBytes()</u> Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
abstract int	<u>getMaximumSetBufferTime()</u> Get maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
abstract <u>MediaCasterList</u>	<u>getMediaCasterList()</u> Get the list of media caster definitions (MediaCaster.xml)
abstract <u>MediaCasterSettings</u>	<u>getMediaCasterSettings()</u> Get the media caster settings
abstract int	<u>getMediaReaderContentType()</u> (String mediaType) Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)
abstract MediaReaderList	<u>getMediaReaders()</u> Get the media readers attached to vHost (MediaReaders.xml).
abstract MediaWriterList	<u>getMediaWriters()</u> Get the media writers attached to vHost (MediaWriters.xml).
abstract java.util.Map	<u>getMp3TagMap()</u> Get MP3 tag map attached to vHost (MP3Tags.xml).
abstract java.util.Map	<u>getMp4TagMap()</u> Get MP4 tag map attached to vHost (MP4Tags.xml).
abstract String	<u>getName()</u> Get vHost name
abstract <u>HostPortConfig</u>	<u>getNetConnectionHostPortConfig()</u> Get the socket configuration for server to server connections
abstract int	<u>getNetConnectionIdleFrequency()</u> Get server to server idle frequency (milliseconds)
abstract int	<u>getNetConnectionProcessorCount()</u> Get net connection processor count.

abstract int	<u>getNextNetConnectionId()</u> Get next connection id.
abstract int	<u>getPingTimeout()</u> Get ping timeout (milliseconds)
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get properties attached to this vHost.
abstract String	<u>getProperty(String key)</u> Get virtual host property.
abstract void	<u>getProtocolUsage(boolean[] protocolsInUse)</u> Get the protocols in use by this application instance (see IApplicationInstance.PROTOCOLUSAGE_*)
abstract <u>PushPublishContext</u>	<u>getPushPublishContext()</u> Get the push publish context
abstract com.wowza.wms.pushpublish.manager.IPushPublishManager	<u>getPushPublishManager()</u> Returns the PushPbulishManager associated with this vhost This object provides access to PushPublbers associated with
abstract <u>RTPContext</u>	<u>getRTPContext()</u> Get the RTP (real time protocol) virtual host context
abstract RTPUDPDatagramConfig	<u>getRTPDatagramConfigIncoming()</u> Get the RTP Datagram Socket configuration
abstract RTPUDPDatagramConfig	<u>getRTPDatagramConfigOutgoing()</u> Get the RTP Datagram Socket configuration
abstract int	<u>getRTPIidleFrequency()</u> Get default RTP idle frequency (milliseconds)
abstract int	<u>getRTSPMaxPathLen()</u> Get the max RTSP stream path length
abstract <u>IVHostRTSPRequestValidator</u>	<u>getRTSPRequestValidator()</u> Get the RTSP request validator
abstract java.util.List	<u>getStartupStreams()</u> Get the list of streams to start at virtual host startup
abstract int	<u>getStartupStreamsDelayTime()</u> Get startup streams delay time (milliseconds).
abstract <u>StreamList</u>	<u>getStreamTypes()</u> Get default stream type.
abstract <u>ThreadPool</u>	<u>getThreadPool()</u> Get the VHost handler thread pool.
abstract com.wowza.wms.transcoder.thumbnailer.ThumbnailerContext	<u>getThumbnailerContext()</u> Get the VOD transcoder context

abstract TimedTextProviderConfiguration	<u>getTimedTextProviderConfig()</u> Get the config of TimedTextProviders
abstract String	<u>getTimeRunning()</u> Get the time vHost has been running.
abstract double	<u>getTimeRunningSeconds()</u> Get time running in seconds
abstract com.wowza.wms.transcoder.vod.TranscoderVODContext	<u>getTranscoderVODContext()</u> Get the VOD transcoder context
abstract <u>ThreadPool</u>	<u>getTransportThreadPool()</u> Get the VHost transport thread pool.
abstract UDPTransportManager	<u>getUDPTransportManager()</u> Get the UDP transport manager.
abstract int	<u>getUnidentifiedSessionTimeout()</u> Get the unidentified session timeout (TCP session that we are not able to identify)
abstract int	<u>getValidationFrequency()</u> Get time between validation pings (milliseconds)
abstract com.wowza.wms.webrtc.model.WebRTCContext	<u>getWebRTCContext()</u> Get the WebRTC virtual host context
abstract int	<u>getWebRTCIdleFrequency()</u> Get default WebRTC idle frequency (milliseconds)
abstract com.wowza.wms.webrtc.tcpsession.IWebRTCTCPSessionFactory	<u>getWebRTCSessionFactory()</u> Get WebRTC session factory
abstract <u>WebSocketContext</u>	<u>getWebSocketContext()</u> Get the WebSocket Context
abstract int	<u>getWebSocketSessionCount()</u> Get the total number of WebSocket sessions
abstract java.util.List	<u>getWebSocketSessions()</u> Get a list of active WebSocket sessions
abstract void	<u>init()</u> (String basePath) Initialize vHost.
abstract boolean	<u>isApplicationLoaded()</u> (String applicationName) Return true is the application is loaded
abstract boolean	<u>isShuttingDown()</u> Is the VHost shutting down
abstract boolean	<u>isStartStarupStreams()</u> Returns true if the startup streams are to start and vhost startup
abstract boolean	<u>isSuspended()</u> Returns true is all HostPorts connected to this VHost are suspended

abstract boolean	<u>isWebRTCSessionFactory()</u> Is WebRTC enabled for this virtual host
abstract void	<u>killClient</u> (int clientId) Remove client from vHost and send disconnect message.
abstract void	<u>killRTSPSession</u> (String rtspSessionId) Kill an RTSP connection by the RTSP session id
abstract void	<u>putHTTPStreamerAdapter</u> (String ID, <u>IHTTPStreamerAdapter</u> adapter) Add an HTTPStreamerAdapter
abstract void	<u>removeAcceptorListener</u> (<u>IAcceptorNotify</u> acceptorListener) Remove acceptor listener.
abstract void	<u>removeApplicationListener</u> (<u>IApplicationNotify</u> applicationListener) Remove applation listener.
abstract void	<u>removeClient</u> (int clientId) Remove client from vHost.
abstract void	<u>removeIdleWorkerListener</u> (<u>IIIdleWorkerNotify</u> idleWorkerListener) Remove idleWorker listener
abstract void	<u>reparentClient</u> (<u>IClient</u> client) Move a client object to a new vhost.
abstract void	<u>setAdminInterfaceHostPort</u> (<u>HostPort</u> adminInterfaceHostPort) Set admin interface host port (not used)
abstract void	<u>setApplicationTimeout</u> (int applicationTimeout) Set application time out (milliseconds).
abstract void	<u>setClientIdleFrequency</u> (int clientIdleFrequency) Set default client idle frequency (milliseconds)
abstract void	<u>setClientTimeout</u> (int clientTimeout) Set client timeout.
abstract void	<u>setCoreHandlerPoolSize</u> (int corePoolSize) Set the handler core thread pool size.
abstract void	<u>setCoreTransportPoolSize</u> (int corePoolSize) Set the transport core thread pool size.
abstract void	<u>setDynamicLogProperties</u> (java.util.Properties dynamicLogProperties) Set the dynamic log properties set at the vhost level
abstract void	<u>setFileIOPoolSize</u> (int fileIOPoolSize) Set default file io thread pool size.
abstract void	<u>setHTTPPersistentRejectInvalid</u> (boolean flag) Set if invalid HTTP requests should be rejected when using persistent connections
abstract void	<u>setHTTPStreamerMaxPathLen</u> (int httpStreamerMaxPathLen) Set the max HTTP streamer path length
abstract void	<u>setHTTPStreamerRequestValidator</u> (<u>IVHostHTTPStreamerRequestValidator</u> httpRequestValidator) Set the HTTP streamer request validator

abstract void	<u>setIdleCheckFrequency</u> (int idleCheckFrequency) Set idle check frequency (milliseconds)
abstract void	<u>setIdleMinimumWaitTime</u> (int idleMinimumWaitTime) Set the minimum time (milliseconds) the idle worker thread will sleep before generating idle events
abstract void	<u>setIdleWorkerCount</u> (int idleWorkerCount) Set number of threads used to generate idle events
abstract void	<u>setKeepAliveTimeout</u> (int keepAliveTimeout) Set the RTMPT connection keep alive timeout
abstract void	<u>setMaximumPendingReadBytes</u> (int maximumPendingReaderBytes) Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated.
abstract void	<u>setMaximumPendingWriteBytes</u> (int maximumPendingWriteBytes) Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated.
abstract void	<u>setMaximumSetBufferTime</u> (int maximumSetBufferTime) Set maximum number of milliseconds allowed for the NetStream.setBufferTime(secs) call.
abstract void	<u>setNetConnectionIdleFrequency</u> (int netConnectionIdleFrequency) Set the server to server idle frequency (milliseconds)
abstract void	<u>setNetConnectionProcessorCount</u> (int netConnectionProcessorCount) Set net connection processor count.
abstract void	<u>setPingTimeout</u> (int pingTimeout) Set ping timeout (milliseconds)
abstract void	<u>setRTPIidleFrequency</u> (int rtpIdleFrequency) Set default RTP idle frequency (milliseconds)
abstract void	<u>setRTSPMaxPathLen</u> (int rtspStreamerMaxPathLen) Set the max RTSP stream path length
abstract void	<u>setRTSPRequestValidator</u> (<u>IVHostRTSPRequestValidator</u> rtspRequestValidator) Set the RTSP request validator
abstract void	<u>setShuttingDown</u> (boolean shuttingDown) Set VHost shutting down flag
abstract void	<u>setStartStarupStreams</u> (boolean startStarupStreams) Set to true to startup startup stream as vhost startup
abstract void	<u>setStartupStreamsDelayTime</u> (int startupStreamsDelayTime) Set startup streams delay time (milliseconds).
abstract void	<u>setUnidentifiedSessionTimeout</u> (int unidentifiedSessionTimeout) Set the unidentified session timeout (TCP session that we are not able to identify)
abstract void	<u>setValidationFrequency</u> (int validationFrequency) Set time between validation pings (milliseconds)
abstract void	<u>setWebRTCIdleFrequency</u> (int webrtcIdleFrequency) Set default WebRTC idle frequency (milliseconds)

abstract void	<code>shutdown()</code> Shutdown.
abstract void	<code>shutdownApplication(String appName)</code> Shutdown an application by name.
abstract void	<code>shutdownApplication(String appName, boolean deleteFolder)</code> Shutdown an application by name.
abstract boolean	<code>startApplicationInstance(String appName)</code> Start an application instance.
abstract boolean	<code>startApplicationInstance(String appName, String appInstanceName)</code> Start an application instance.
abstract void	<code>startStartupStreams()</code> Method to start startup streams
abstract void	<code>stopStartupStreams()</code> Method to stop startup streams
abstract void	<code>suspendAllHostPorts()</code> Suspend all HostPorts from accepting new connections.
abstract boolean	<code>touchApplicationInstance(String appName)</code> Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.
abstract boolean	<code>touchApplicationInstance(String appName, String appInstanceName)</code> Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.
abstract void	<code>unbindAllHostPorts()</code> Unbind all HostPorts and drop all connections
abstract void	<code>updateLoggingDuration()</code> Internal: update the internal logging values.

Fields

VHOST_DEFAULT

```
public static final java.lang.String VHOST_DEFAULT
```

Constant value: `_defaultVHost_`

VHOST_DEFAULT_HTTP_PERSISTENT

```
public static final boolean VHOST_DEFAULT_HTTP_PERSISTENT
```

Constant value: `false`

LICENSECOUNTER_PUBLISHER

```
public static final int LICENSECOUNTER_PUBLISHER
```

(continued from last page)

Constant value: **0**

LICENSECOUNTER_TRANSCODE_DECODE

```
public static final int LICENSECOUNTER_TRANSCODE_DECODE
```

Constant value: **1**

LICENSECOUNTER_TRANSCODE_ENCODE

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODE
```

Constant value: **2**

LICENSECOUNTER_NDVR

```
public static final int LICENSECOUNTER_NDVR
```

Constant value: **3**

LICENSECOUNTER_DRM_EZDRM_LIVE

```
public static final int LICENSECOUNTER_DRM_EZDRM_LIVE
```

Constant value: **4**

LICENSECOUNTER_DRM_EZDRM_VOD

```
public static final int LICENSECOUNTER_DRM_EZDRM_VOD
```

Constant value: **5**

LICENSECOUNTER_DRM_VERIMATRIX_LIVE

```
public static final int LICENSECOUNTER_DRM_VERIMATRIX_LIVE
```

Constant value: **6**

LICENSECOUNTER_DRM_VERIMATRIX_VOD

```
public static final int LICENSECOUNTER_DRM_VERIMATRIX_VOD
```

Constant value: **7**

LICENSECOUNTER_PUBLISHERTRANSCODER

```
public static final int LICENSECOUNTER_PUBLISHERTRANSCODER
```

Constant value: **8**

LICENSECOUNTER_DRM_BUYDRM_LIVE

```
public static final int LICENSECOUNTER_DRM_BUYDRM_LIVE
```

Constant value: **9**

LICENSECOUNTER_DRM_BUYDRM_VOD

```
public static final int LICENSECOUNTER_DRM_BUYDRM_VOD
```

Constant value: **10**

LICENSECOUNTER_TRANSCODE_DECODEPOLLING

```
public static final int LICENSECOUNTER_TRANSCODE_DECODEPOLLING
```

Constant value: **11**

LICENSECOUNTER_TRANSCODE_ENCODEPOLLING

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODEPOLLING
```

Constant value: **12**

LICENSECOUNTER_TRANSCODE_STREAMNAMES

```
public static final int LICENSECOUNTER_TRANSCODE_STREAMNAMES
```

Constant value: **13**

LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIO

```
public static final int LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIO
```

Constant value: **14**

LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEO

```
public static final int LICENSECOUNTER_TRANSCODE_DECODECOUNTVIDEO
```

Constant value: **15**

LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEO

```
public static final int LICENSECOUNTER_TRANSCODE_DECODECOUNTAUDIOVIDEO
```

Constant value: **16**

(continued from last page)

LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIO

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIO
```

Constant value: **17**

LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEO

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODECOUNTVIDEO
```

Constant value: **18**

LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO

```
public static final int LICENSECOUNTER_TRANSCODE_ENCODECOUNTAUDIOVIDEO
```

Constant value: **19**

LICENSECOUNTER_TOTAL

```
public static final int LICENSECOUNTER_TOTAL
```

Constant value: **20**

LICENSECOUNTERS_DRM

```
public static final int LICENSECOUNTERS_DRM
```

COUNTER_RTMP

```
public static final int COUNTER_RTMP
```

Constant value: **0**

COUNTER_RTP

```
public static final int COUNTER_RTP
```

Constant value: **1**

COUNTER_HTTPCUPERTINO

```
public static final int COUNTER_HTTPCUPERTINO
```

Constant value: **2**

COUNTER_HTTPSMOOTH

```
public static final int COUNTER_HTTPSMOOTH
```

(continued from last page)

Constant value: **3**

COUNTER_HTTPSANJOSE

```
public static final int COUNTER_HTTPSANJOSE
```

Constant value: **4**

COUNTER_HTTPWEBM

```
public static final int COUNTER_HTTPWEBM
```

Constant value: **5**

COUNTER_HTTPMPEGDASH

```
public static final int COUNTER_HTTPMPEGDASH
```

Constant value: **6**

COUNTER_HTTPDVRCHUNKS

```
public static final int COUNTER_HTTPDVRCHUNKS
```

Constant value: **7**

COUNTER_HTTPPTS

```
public static final int COUNTER_HTTPPTS
```

Constant value: **8**

COUNTER_WEBRTC

```
public static final int COUNTER_WEBRTC
```

Constant value: **9**

COUNTER_TOTAL

```
public static final int COUNTER_TOTAL
```

Constant value: **10**

CODEC_VIDEO_UNKNOWN

```
public static final int CODEC_VIDEO_UNKNOWN
```

Constant value: **-1**

(continued from last page)

CODEC_VIDEO_SPARK

```
public static final int CODEC_VIDEO_SPARK
```

Constant value: **2**

CODEC_VIDEO_SCREEN

```
public static final int CODEC_VIDEO_SCREEN
```

Constant value: **3**

CODEC_VIDEO_VP6

```
public static final int CODEC_VIDEO_VP6
```

Constant value: **4**

CODEC_VIDEO_VP6A

```
public static final int CODEC_VIDEO_VP6A
```

Constant value: **5**

CODEC_VIDEO_SCREEN2

```
public static final int CODEC_VIDEO_SCREEN2
```

Constant value: **6**

CODEC_VIDEO_H264

```
public static final int CODEC_VIDEO_H264
```

Constant value: **7**

CODEC_VIDEO_VPX

```
public static final int CODEC_VIDEO_VPX
```

Constant value: **8**

CODEC_VIDEO_VP8

```
public static final int CODEC_VIDEO_VP8
```

Constant value: **8**

CODEC_VIDEO_H263

```
public static final int CODEC_VIDEO_H263
```

(continued from last page)

Constant value: **9**

CODEC_VIDEO_MPEG4

```
public static final int CODEC_VIDEO_MPEG4
```

Constant value: **10**

CODEC_VIDEO_MPEG2

```
public static final int CODEC_VIDEO_MPEG2
```

Constant value: **11**

CODEC_VIDEO_H265

```
public static final int CODEC_VIDEO_H265
```

Constant value: **12**

CODEC_VIDEO_VERSION_DEFAULT

```
public static final int CODEC_VIDEO_VERSION_DEFAULT
```

Constant value: **0**

CODEC_VIDEO_VERSION_VPX_VP8

```
public static final int CODEC_VIDEO_VERSION_VPX_VP8
```

Constant value: **8**

CODEC_VIDEO_VERSION_VPX_VP9

```
public static final int CODEC_VIDEO_VERSION_VPX_VP9
```

Constant value: **9**

CODEC_AUDIO_UNKNOWN

```
public static final int CODEC_AUDIO_UNKNOWN
```

Constant value: **-1**

CODEC_AUDIO_PCM_BE

```
public static final int CODEC_AUDIO_PCM_BE
```

Constant value: **0**

CODEC_AUDIO_PCM_SWF

```
public static final int CODEC_AUDIO_PCM_SWF
```

Constant value: **1**

CODEC_AUDIO_AC3

```
public static final int CODEC_AUDIO_AC3
```

Constant value: **1**

CODEC_AUDIO_MP3

```
public static final int CODEC_AUDIO_MP3
```

Constant value: **2**

CODEC_AUDIO_PCM_LE

```
public static final int CODEC_AUDIO_PCM_LE
```

Constant value: **3**

CODEC_AUDIO_NELLYMOSER_16MONO

```
public static final int CODEC_AUDIO_NELLYMOSER_16MONO
```

Constant value: **4**

CODEC_AUDIO_NELLYMOSER_8MONO

```
public static final int CODEC_AUDIO_NELLYMOSER_8MONO
```

Constant value: **5**

CODEC_AUDIO_NELLYMOSER

```
public static final int CODEC_AUDIO_NELLYMOSER
```

Constant value: **6**

CODEC_AUDIO_G711_ALAW

```
public static final int CODEC_AUDIO_G711_ALAW
```

Constant value: **7**

(continued from last page)

CODEC_AUDIO_G711_MULAW

```
public static final int CODEC_AUDIO_G711_MULAW
```

Constant value: **8**

CODEC_AUDIO_RESERVED

```
public static final int CODEC_AUDIO_RESERVED
```

Constant value: **9**

CODEC_AUDIO_VORBIS

```
public static final int CODEC_AUDIO_VORBIS
```

Constant value: **9**

CODEC_AUDIO_AAC

```
public static final int CODEC_AUDIO_AAC
```

Constant value: **10**

CODEC_AUDIO_SPEEX

```
public static final int CODEC_AUDIO_SPEEX
```

Constant value: **11**

CODEC_AUDIO_OPUS

```
public static final int CODEC_AUDIO_OPUS
```

Constant value: **12**

CODEC_AUDIO_ALS

```
public static final int CODEC_AUDIO_ALS
```

Constant value: **13**

CODEC_AUDIO_MP3_8

```
public static final int CODEC_AUDIO_MP3_8
```

Constant value: **15**

CODEC_STREAM_UNKNOWN

```
public static final int CODEC_STREAM_UNKNOWN
```

(continued from last page)

Constant value: **-1**

CODEC_STREAM_MP2T

```
public static final int CODEC_STREAM_MP2T
```

Constant value: **0**

FILEFORMAT_UNKNOWN

```
public static final int FILEFORMAT_UNKNOWN
```

Constant value: **-1**

FILEFORMAT_FLV

```
public static final int FILEFORMAT_FLV
```

Constant value: **1**

FILEFORMAT_MP4

```
public static final int FILEFORMAT_MP4
```

Constant value: **2**

CONTENTTYPE_UNKNOWN

```
public static final byte CONTENTTYPE_UNKNOWN
```

AMF Content type: unknown
Constant value: **0**

CONTENTTYPE_SETCHUNKSIZE

```
public static final byte CONTENTTYPE_SETCHUNKSIZE
```

AMF Content type: set packet chunk size
Constant value: **1**

CONTENTTYPE_WATCHDOG

```
public static final byte CONTENTTYPE_WATCHDOG
```

AMF Content type: watch dog
Constant value: **3**

CONTENTTYPE_BUFFERSIZE

```
public static final byte CONTENTTYPE_BUFFERSIZE
```

AMF Content type: set buffer size
Constant value: **4**

CONTENTTYPE_ACKBANDWIDTH

public static final byte **CONTENTTYPE_ACKBANDWIDTH**

AMF Content type: set acknowledge bandwidth size
Constant value: **5**

CONTENTTYPE_SETBANDWIDTH

public static final byte **CONTENTTYPE_SETBANDWIDTH**

AMF Content type: set bandwidth size
Constant value: **6**

CONTENTTYPE_AUDIO

public static final byte **CONTENTTYPE_AUDIO**

AMF Content type: audio packet
Constant value: **8**

CONTENTTYPE_VIDEO

public static final byte **CONTENTTYPE_VIDEO**

AMF Content type: video packet
Constant value: **9**

CONTENTTYPE_DATA

public static final byte **CONTENTTYPE_DATA**

AMF Content type: data packet
Constant value: **18**

CONTENTTYPE_DATA0

public static final byte **CONTENTTYPE_DATA0**

AMF Content type: data packet (AMF0)
Constant value: **18**

CONTENTTYPE_DATA3

public static final byte **CONTENTTYPE_DATA3**

AMF Content type: data packet (AMF3)
Constant value: **15**

CONTENTTYPE_SHAREDOBJECTS

public static final byte **CONTENTTYPE_SHAREDOBJECTS**

AMF Content type: shared object packet (AMF0)
Constant value: **19**

(continued from last page)

CONTENTTYPE_SHAREDOBJECTS0

```
public static final byte CONTENTTYPE_SHAREDOBJECTS0
```

AMF Content type: shared object packet (AMF0)
Constant value: **19**

CONTENTTYPE_SHAREDOBJECTS3

```
public static final byte CONTENTTYPE_SHAREDOBJECTS3
```

AMF Content type: shared object packet (AMF3)
Constant value: **16**

CONTENTTYPE_FUNCTION

```
public static final byte CONTENTTYPE_FUNCTION
```

AMF Content type: function data (AMF0)
Constant value: **20**

CONTENTTYPE_FUNCTION0

```
public static final byte CONTENTTYPE_FUNCTION0
```

AMF Content type: function data (AMF0)
Constant value: **20**

CONTENTTYPE_MEDIACHUNK

```
public static final byte CONTENTTYPE_MEDIACHUNK
```

AMF Content type: media chunk
Constant value: **22**

CONTENTTYPE_FUNCTION3

```
public static final byte CONTENTTYPE_FUNCTION3
```

AMF Content type: function data (AMF3)
Constant value: **17**

CONTENTTYPE_PLAYCALLBACK

```
public static final byte CONTENTTYPE_PLAYCALLBACK
```

AMF Content type: play callback
Constant value: **127**

ACCEPTORS_ACCEPTOR

```
public static final java.lang.String ACCEPTORS_ACCEPTOR
```

Acceptor types: acceptor
Constant value: **acceptor**

ACCEPTORS_HANDLERADAPTER

```
public static final java.lang.String ACCEPTORS_HANDLERADAPTER
```

(continued from last page)

Acceptor types: handler
Constant value: **handlerAdapter**

DEFAULT_WEBRTC_IDLEFREQUENCY

public static final int **DEFAULT_WEBRTC_IDLEFREQUENCY**

Constant value: **25**

Methods

init

public abstract void **init**(String basePath)

Initialize vHost.

Parameters:

basePath - base path to configuration files

shutdown

public abstract void **shutdown**()

Shutdown.

getStreamTypes

public abstract [StreamList](#) **getStreamTypes**()

Get default stream type.

Returns:

default stream type

getProperty

public abstract String **getProperty**(String key)

Get virtual host property.

Parameters:

key - key

Returns:

property value or null if does not exist

getClientTimeout

public abstract int **getClientTimeout**()

Get client timeout.

Returns:

client timeout

(continued from last page)

getNextNetConnectionId

```
public abstract int getNextNetConnectionId()
```

Get next connection id.

Returns:

next connection id

getClient

```
public abstract IClient getClient(int clientId)
```

Get client by client id.

Parameters:

clientId - client id

Returns:

client

getClient

```
public abstract IClient getClient(int clientId,  
    boolean create)
```

Get client by client id and create if does not exist.

Parameters:

clientId - client id

create - create if does not exist

Returns:

client

removeClient

```
public abstract void removeClient(int clientId)
```

Remove client from vHost.

Parameters:

clientId - client id

killClient

```
public abstract void killClient(int clientId)
```

Remove client from vHost and send disconnect message.

Parameters:

clientId - client id

killRTSPSession

```
public abstract void killRTSPSession(String rtspSessionId)
```

Kill an RTSP connection by the RTSP session id

(continued from last page)

Parameters:

rtspSessionId - RTSP session id

getApplication

```
public abstract IApplication getApplication(String applicationName)
```

Get application by name.

Parameters:

applicationName - application name

Returns:

application

isApplicationLoaded

```
public abstract boolean isApplicationLoaded(String applicationName)
```

Return true is the application is loaded

Parameters:

applicationName - application name

Returns:

true if application is loaded

getHomePath

```
public abstract String getHomePath()
```

Get vHost configuration path.

Returns:

configuration path

getProperties

```
public abstract WMSProperties getProperties()
```

Get properties attached to this vHost.

Returns:

properties attached to this vHost

getManagerProperties

```
public abstract WMSProperties getManagerProperties()
```

Get VHost's manager's properties collection

Returns:

manager's property collection

getCoreTransportPoolSize

```
public abstract int getCoreTransportPoolSize()
```

(continued from last page)

Get the transport core thread pool size.

Returns:

default core thread pool size

setCoreTransportPoolSize

```
public abstract void setCoreTransportPoolSize(int corePoolSize)
```

Set the transport core thread pool size.

Parameters:

corePoolSize - core thread pool size

getCoreHandlerPoolSize

```
public abstract int getCoreHandlerPoolSize()
```

Get the handler core thread pool size.

Returns:

default core thread pool size

setCoreHandlerPoolSize

```
public abstract void setCoreHandlerPoolSize(int corePoolSize)
```

Set the handler core thread pool size.

Parameters:

corePoolSize - core thread pool size

getFileIOPoolSize

```
public abstract int getFileIOPoolSize()
```

Get the default file io pool size.

Returns:

default file io pool size

setFileIOPoolSize

```
public abstract void setFileIOPoolSize(int fileIOPoolSize)
```

Set default file io thread pool size.

Parameters:

fileIOPoolSize - default file io thread pool size

setClientTimeout

```
public abstract void setClientTimeout(int clientTimeout)
```

Set client timeout. An inactive client connected by RTMPT protocol will be deleted after this timeout.

Parameters:

clientTimeout - client timeout

getHostPortsList

```
public abstract HostPortList getHostPortsList()
```

Get list of host port definitions for vHost.

Returns:

list of host port definitions for vHost

getThreadPool

```
public abstract ThreadPool getThreadPool()
```

Get the VHost handler thread pool. Same as getHandlerThreadPool.

Returns:

VHost handler thread pool

getTransportThreadPool

```
public abstract ThreadPool getTransportThreadPool()
```

Get the VHost transport thread pool. This thread pool is used to read/write data from the transports sockets.

Returns:

VHost transport thread pool

getHandlerThreadPool

```
public abstract ThreadPool getHandlerThreadPool()
```

Get the VHost handler thread pool. This thread pool is used to process the incoming events.

Returns:

VHost handler thread pool

getName

```
public abstract String getName()
```

Get vHost name

Returns:

vHost name

setAdminInterfaceHostPort

```
public abstract void setAdminInterfaceHostPort(HostPort adminInterfaceHostPort)
```

Set admin interface host port (not used)

Parameters:

adminInterfaceHostPort - admin interface host port

getClientCount

```
public abstract int getClientCount()
```

(continued from last page)

Get number of clients connected to this vHost.

Returns:

number of clients connected to this vHost

getNetConnectionProcessorCount

```
public abstract int getNetConnectionProcessorCount()
```

Get net connection processor count. Number of threads used for server to server communication (not finished).

Returns:

net connection processor count

setNetConnectionProcessorCount

```
public abstract void setNetConnectionProcessorCount(int netConnectionProcessorCount)
```

Set net connection processor count. Number of threads used for server to server communication (not finished).

Parameters:

netConnectionProcessorCount - net connection processor count

addApplicationListener

```
public abstract void addApplicationListener(IApplicationNotify applicationListener)
```

Add application listener. An application listener will receive the following events: onApplicationCreate, onApplicationDestroy.

Parameters:

applicationListener - application listener

removeApplicationListener

```
public abstract void removeApplicationListener(IApplicationNotify applicationListener)
```

Remove applation listener.

Parameters:

applicationListener - applation listener

addAcceptorListener

```
public abstract void addAcceptorListener(IAcceptorNotify acceptorListener)
```

Add acceptor listener. Acceptor listeners will receive the following events: onAcceptorCreate, onAcceptorDestroy.

Parameters:

acceptorListener - acceptor listener

removeAcceptorListener

```
public abstract void removeAcceptorListener(IAcceptorNotify acceptorListener)
```

Remove acceptor listener.

Parameters:

acceptorListener - acceptor listener

getIOScheduler

```
public abstract IOScheduler getIOScheduler()
```

Get IO scheduler for vHost. IO scheduler is used to schedule reads from the disk to increase server throughput for static flv serving.

Returns:

IO scheduler for vHost

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter()
```

Get vHost IO performance counter.

Returns:

io performance counter

getIoPerformanceCounter

```
public abstract IoPerformanceCounter getIoPerformanceCounter(int counterIndex)
```

Get vHost IO performance counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

io performance counter

getConnectionCounter

```
public abstract ConnectionCounter getConnectionCounter()
```

Get vHost connection counter.

Returns:

connection counter

getConnectionCounter

```
public abstract ConnectionCounterSimple getConnectionCounter(int counterIndex)
```

Get vHost connection counter for a specific technology (see IVHost.COUNTER_*)

Parameters:

counterIndex - counter index (see IVHost.COUNTER_*)

Returns:

connection counter

getDateStarted

```
public abstract String getDateStarted()
```

Get date and time the server was started.

(continued from last page)

Returns:

date and time the server was started

getTimeRunning

```
public abstract String getTimeRunning()
```

Get the time vHost has been running.

Returns:

formatted string with vHost uptime

getTimeRunningSeconds

```
public abstract double getTimeRunningSeconds()
```

Get time running in seconds

Returns:

time running in seconds

getConnectionLimit

```
public abstract int getConnectionLimit()
```

Get vHost connection limit.

Returns:

vHost connection limit

getMediaReaders

```
public abstract MediaReaderList getMediaReaders()
```

Get the media readers attached to vHost (MediaReaders.xml).

Returns:

media readers attached to vHost

getMediaWriters

```
public abstract MediaWriterList getMediaWriters()
```

Get the media writers attached to vHost (MediaWriters.xml).

Returns:

media writers attached to vHost

getMp3TagMap

```
public abstract java.util.Map getMp3TagMap()
```

Get MP3 tag map attached to vHost (MP3Tags.xml).

Returns:

MP3 tag map attached to vHost

(continued from last page)

getMp4TagMap

```
public abstract java.util.Map getMp4TagMap()
```

Get MP4 tag map attached to vHost (MP4Tags.xml).

Returns:

MP4 tag map attached to vHost

getCEACaptionConversionContext

```
public abstract CEACaptionConversionContext getCEACaptionConversionContext()
```

Get CEACaptionConversionContextMP3 tag map attached to vHost (CEACaptionConversion.xml).

Returns:

MP3 tag map attached to vHost

updateLoggingDuration

```
public abstract void updateLoggingDuration()
```

Internal: update the internal logging values.

getApplicationTimeout

```
public abstract int getApplicationTimeout()
```

Get application time out (milliseconds). Time from last client disconnect to application destruction.

Returns:

application time out (milliseconds)

setApplicationTimeout

```
public abstract void setApplicationTimeout(int applicationTimeout)
```

Set application time out (milliseconds).

Parameters:

applicationTimeout - application time out (milliseconds)

getPingTimeout

```
public abstract int getPingTimeout()
```

Get ping timeout (milliseconds)

Returns:

ping timeout (milliseconds)

setPingTimeout

```
public abstract void setPingTimeout(int pingTimeout)
```

Set ping timeout (milliseconds)

Parameters:

(continued from last page)

pingTimeout - ping timeout (milliseconds)

getValidationFrequency

```
public abstract int getValidationFrequency()
```

Get time between validation pings (milliseconds)

Returns:

time between validation pings (milliseconds)

setValidationFrequency

```
public abstract void setValidationFrequency(int validationFrequency)
```

Set time between validation pings (milliseconds)

Parameters:

validationFrequency - time between validation pings (milliseconds)

getMaximumPendingWriteBytes

```
public abstract int getMaximumPendingWriteBytes()
```

Get maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Returns:

maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

setMaximumPendingWriteBytes

```
public abstract void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set maximum number a bytes a client connection can have waiting to be sent before the connection is terminated. If set to zero this feature is turned off.

Parameters:

maximumPendingWriteBytes - maximum number a bytes a client connection can have waiting to be sent before the connection is terminated

getMaximumPendingReadBytes

```
public abstract int getMaximumPendingReadBytes()
```

Set maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Returns:

maximum number of bytes a client connection can have waiting to be written before the connection is terminated

setMaximumPendingReadBytes

```
public abstract void setMaximumPendingReadBytes(int maximumPendingReaderBytes)
```

Get maximum number of bytes a client connection can have waiting to be written before the connection is terminated. If set to zero this feature is off.

Parameters:

(continued from last page)

`maximumPendingReaderBytes` - maximum number of bytes a client connection can have waiting to be written before the connection is terminated

getMaximumSetBufferTime

```
public abstract int getMaximumSetBufferTime()
```

Get maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call. If set to zero this feature is turned off.

Returns:

maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call

setMaximumSetBufferTime

```
public abstract void setMaximumSetBufferTime(int maximumSetBufferTime)
```

Set maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call. If set to zero this feature is turned off.

Parameters:

`maximumSetBufferTime` - maximum number of milliseconds allowed for the `NetStream.setBufferTime(secs)` call

getApplicationLock

```
public abstract edu.emory.mathcs.backport.java.util.concurrent.locks.WMSReadWriteLock  
getApplicationLock()
```

Get the object used in synchronized statements to lock and application.

Returns:

object used in synchronized statements to lock and application

getClientIdleFrequency

```
public abstract int getClientIdleFrequency()
```

Get default client idle frequency (milliseconds)

Returns:

default client idle frequency (milliseconds)

setClientIdleFrequency

```
public abstract void setClientIdleFrequency(int clientIdleFrequency)
```

Set default client idle frequency (milliseconds)

Parameters:

`clientIdleFrequency` - default client idle frequency (milliseconds)

getRTPIdeFrequency

```
public abstract int getRTPIdeFrequency()
```

Get default RTP idle frequency (milliseconds)

Returns:

default RTP idle frequency (milliseconds)

setRTPIdleFrequency

```
public abstract void setRTPIdleFrequency(int rtpIdleFrequency)
```

Set default RTP idle frequency (milliseconds)

Parameters:

rtpIdleFrequency - RTP default client idle frequency (milliseconds)

getWebRTCIdleFrequency

```
public abstract int getWebRTCIdleFrequency()
```

Get default WebRTC idle frequency (milliseconds)

Returns:

default WebRTC idle frequency (milliseconds)

setWebRTCIdleFrequency

```
public abstract void setWebRTCIdleFrequency(int webrtcIdleFrequency)
```

Set default WebRTC idle frequency (milliseconds)

Parameters:

webrtcIdleFrequency - default WebRTC idle frequency (milliseconds)

getNetConnectionIdleFrequency

```
public abstract int getNetConnectionIdleFrequency()
```

Get server to server idle frequency (milliseconds)

Returns:

server to server idle frequency (milliseconds)

setNetConnectionIdleFrequency

```
public abstract void setNetConnectionIdleFrequency(int netConnectionIdleFrequency)
```

Set the server to server idle frequency (milliseconds)

Parameters:

netConnectionIdleFrequency - server to server idle frequency (milliseconds)

getIdleCheckFrequency

```
public abstract int getIdleCheckFrequency()
```

Get idle check frequency (milliseconds)

Returns:

idle check frequency (milliseconds)

setIdleCheckFrequency

```
public abstract void setIdleCheckFrequency(int idleCheckFrequency)
```

(continued from last page)

Set idle check frequency (milliseconds)

Parameters:

idleCheckFrequency - idle check frequency (milliseconds)

getIdleWorkerCount

```
public abstract int getIdleWorkerCount()
```

Get number of threads used to generate idle events

Returns:

number of threads used to generate idle events

setIdleWorkerCount

```
public abstract void setIdleWorkerCount(int idleWorkerCount)
```

Set number of threads used to generate idle events

Parameters:

idleWorkerCount - number of threads used to generate idle events

getKeepAliveTimeout

```
public abstract int getKeepAliveTimeout()
```

Get the RTMPT connection keep alive timeout

Returns:

RTMPT connection keep alive timeout

setKeepAliveTimeout

```
public abstract void setKeepAliveTimeout(int keepAliveTimeout)
```

Set the RTMPT connection keep alive timeout

Parameters:

keepAliveTimeout - RTMPT connection keep alive timeout

addIdleWorkerListener

```
public abstract void addIdleWorkerListener(IIdleWorkerNotify idleWorkerListener)
```

Add idleWorker listener. An idleWorker listener will receive the following events: onIdleWorkerCreate, onIdleWorkerDestroy.

Parameters:

idleWorkerListener - idleWorker listener

removeIdleWorkerListener

```
public abstract void removeIdleWorkerListener(IIdleWorkerNotify idleWorkerListener)
```

Remove idleWorker listener

Parameters:

idleWorkerListener - idleWorker listener

getNetConnectionHostPortConfig

```
public abstract HostPortConfig getNetConnectionHostPortConfig()
```

Get the socket configuration for server to server connections

Returns:

socket configuration for server to server connections

getMediaCasterSettings

```
public abstract MediaCasterSettings getMediaCasterSettings()
```

Get the media caster settings

Returns:

media caster settings

getMediaCasterList

```
public abstract MediaCasterList getMediaCasterList()
```

Get the list of media caster definitions (MediaCaster.xml)

Returns:

list of media caster definitions

getApplicationNames

```
public abstract java.util.List getApplicationNames()
```

Get a list of application names

Returns:

list of application names

getApplicationFolderNames

```
public abstract java.util.List getApplicationFolderNames()
```

Get a list of application folder names

Returns:

list of application folder names

applicationExists

```
public abstract boolean applicationExists(String name)
```

Return true if an application folder exists for this application name

Parameters:

name - application name

Returns:

true if an application folder exists for this application name

getRTPContext

```
public abstract RTPContext getRTPContext()
```

Get the RTP (real time protocol) virtual host context

Returns:

RTP (real time protocol) virtual host context

getWebRTCContext

```
public abstract com.wowza.wms.webrtc.model.WebRTCContext getWebRTCContext()
```

Get the WebRTC virtual host context

Returns:

WebRTC virtual host context

getHTTPStreamerContext

```
public abstract HTTPStreamerContext getHTTPStreamerContext()
```

Get the HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context

Returns:

HTTPStreamer (Cupertino Streaming and Silverlight Smooth Streaming) host context

getRTPDatagramConfigIncoming

```
public abstract RTPUDPDatagramConfig getRTPDatagramConfigIncoming()
```

Get the RTP Datagram Socket configuration

Returns:

RTP Datagram Socket configuration

getRTPDatagramConfigOutgoing

```
public abstract RTPUDPDatagramConfig getRTPDatagramConfigOutgoing()
```

Get the RTP Datagram Socket configuration

Returns:

RTP Datagram Socket configuration

getAuthenticationList

```
public abstract AuthenticationList getAuthenticationList()
```

Get the list of available authentication methods

Returns:

list of available authentication methods

getIdleMinimumWaitTime

```
public abstract int getIdleMinimumWaitTime()
```


(continued from last page)

Get the minimum time (milliseconds) the idle worker thread will sleep before generating idle events

Returns:

minimum time (milliseconds) the idle worker thread will sleep before generating idle events

setIdleMinimumWaitTime

```
public abstract void setIdleMinimumWaitTime(int idleMinimumWaitTime)
```

Set the minimum time (milliseconds) the idle worker thread will sleep before generating idle events

Parameters:

idleMinimumWaitTime - minimum time (milliseconds) the idle worker thread will sleep before generating idle events

getIdleWorkers

```
public abstract IdleWorkersUtil getIdleWorkers()
```

Get the idle worker utility

Returns:

idle worker utility

isShuttingDown

```
public abstract boolean isShuttingDown()
```

Is the VHost shutting down

Returns:

true if the vhost is shutting down

setShuttingDown

```
public abstract void setShuttingDown(boolean shuttingDown)
```

Set VHost shutting down flag

Parameters:

shuttingDown - true if the vhost is shutting down

reparentClient

```
public abstract void reparentClient(IClient client)
```

Move a client object to a new vhost. This can only be done right after the handshake process has completed. See `IVHostNotify.onVHostClientConnect`.

Parameters:

client - client object to move

getDynamicLogProperties

```
public abstract java.util.Properties getDynamicLogProperties()
```

Get the dynamic log properties defined at the vhost level in `conf/log4j.properties`

Returns:

(continued from last page)

dynamic log properties defined at the vhost level

setDynamicLogProperties

```
public abstract void setDynamicLogProperties( java.util.Properties  
dynamicLogProperties )
```

Set the dynamic log properties set at the vhost level

Parameters:

`dynamicLogProperties` - dynamic log properties defined at the vhost level

shutdownApplication

```
public abstract void shutdownApplication(String appName)
```

Shutdown an application by name. This will disconnect all clients connected to all child application instances.

Parameters:

`appName` - application name

shutdownApplication

```
public abstract void shutdownApplication(String appName,  
boolean deleteFolder)
```

Shutdown an application by name. This will disconnect all clients connected to all child application instances.

Parameters:

`appName` - application name

`deleteFolder` - delete the application folder

unbindAllHostPorts

```
public abstract void unbindAllHostPorts()
```

Unbind all HostPorts and drop all connections

suspendAllHostPorts

```
public abstract void suspendAllHostPorts()
```

Suspend all HostPorts from accepting new connections. Current connections will continue to be serviced

closeHostPort

```
public abstract void closeHostPort(HostPort hostPort,  
boolean isSuspend)
```

Close an individual HostPort

Parameters:

`hostPort` - host port to close

`isSuspend` - if true will just suspend the HostPort from accepting new connections, if false will unbind and drop all connections

isSuspended

```
public abstract boolean isSuspended()
```

(continued from last page)

Returns true is all HostPorts connected to this VHost are suspended

touchApplicationInstance

```
public abstract boolean touchApplicationInstance(String appName)
```

Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds.

Parameters:

appName - application name

Returns:

true is successful

touchApplicationInstance

```
public abstract boolean touchApplicationInstance(String appName,  
String appInstanceName)
```

Start an application instance if it is not already started then touch it so it stays loaded for at least 3 seconds. The default appInstanceName _definst_ will be used.

Parameters:

appName - application name

appInstanceName - app instance name

Returns:

true is successful

startApplicationInstance

```
public abstract boolean startApplicationInstance(String appName)
```

Start an application instance. The default appInstanceName _definst_ will be used.

Parameters:

appName - application name

Returns:

true is successful

startApplicationInstance

```
public abstract boolean startApplicationInstance(String appName,  
String appInstanceName)
```

Start an application instance.

Parameters:

appName - application name

appInstanceName - app instance name

Returns:

true is successful

getUDPTransportManager

```
public abstract UDPTransportManager getUDPTransportManager()
```

(continued from last page)

Get the UDP transport manager.

Returns:

UDP transport manager

getHTTPStreamerList

```
public abstract HTTPStreamerList getHTTPStreamerList()
```

Get the list of HTTPStreamers

Returns:

list of HTTPStreamers

getHTTPStreamerAdapter

```
public abstract IHTTPStreamerAdapter getHTTPStreamerAdapter(String ID)
```

Get an HTTPStreamerAdapter by ID

Parameters:

ID - HTTPStreamerAdapter ID

Returns:

HTTPStreamerAdapter

putHTTPStreamerAdapter

```
public abstract void putHTTPStreamerAdapter(String ID,  
    IHTTPStreamerAdapter adapter)
```

Add an HTTPStreamerAdapter

Parameters:

ID - HTTPStreamerAdapter ID

adapter - HTTPStreamerAdapter

getHTTPStreamerAdapterIDs

```
public abstract java.util.List getHTTPStreamerAdapterIDs()
```

Get a list of HTTPStreamerAdapter IDs

Returns:

list of HTTPStreamerAdapter IDs

getLiveStreamPacketizerList

```
public abstract LiveStreamPacketizerList getLiveStreamPacketizerList()
```

Get the LiveStreamPacketizerList

Returns:

LiveStreamPacketizerList

getLiveStreamTranscoderList

```
public abstract LiveStreamTranscoderList getLiveStreamTranscoderList()
```

(continued from last page)

Get the LiveStreamTranscoderList

Returns:

LiveStreamTranscoderList

getTimedTextProviderConfig

```
public abstract TimedTextProviderConfiguration getTimedTextProviderConfig()
```

Get the config of TimedTextProviders

Returns:

TimedTextProviders config

getStartupStreams

```
public abstract java.util.List getStartupStreams()
```

Get the list of streams to start at virtual host startup

Returns:

list of streams to start at virtual host startup

addStartupStream

```
public abstract void addStartupStream(StartupStream startupStream)
```

Add a stream to the list of streams to start and virtual host startup

Parameters:

startupStream - startup stream

isStartStarupStreams

```
public abstract boolean isStartStarupStreams()
```

Returns true if the startup streams are to start and vhost startup

Returns:

true if the startup streams are to start and vhost startup

setStartStarupStreams

```
public abstract void setStartStarupStreams(boolean startStarupStreams)
```

Set to true to startup startup stream as vhost startup

Parameters:

startStarupStreams - true if the startup streams are to start and vhost startup

startStartupStreams

```
public abstract void startStartupStreams()
```

Method to start startup streams

(continued from last page)

stopStartupStreams

```
public abstract void stopStartupStreams()
```

Method to stop startup streams

getDvrRecorderList

```
public abstract DvrRecorderList getDvrRecorderList()
```

Get the DvrRecorderList

Returns:

list of DVR Recorders

getDvrStoreList

```
public abstract DvrStoreList getDvrStoreList()
```

Get the list of DVR Stores

Returns:

list of DVR Stores

getLiveStreamRecordManager

```
public abstract ILiveStreamRecordManager getLiveStreamRecordManager()
```

Returns the LiveStreamRecordManager associated with this vhost This object contains the active LiveStreamRecorders

Returns:

ILiveStreamRecordManager associated with this vhost

getPushPublishManager

```
public abstract com.wowza.wms.pushpublish.manager.IPushPublishManager  
getPushPublishManager()
```

Returns the PushPbulishManager associated with this vhost This object provides access to PushPublbers associated with

Returns:

IPushPublishManager associated with this vhost

getMediaReaderContentType

```
public abstract int getMediaReaderContentType(String mediaType)
```

Get the content type of a media stream name prefix (see IMediaReader.CONTENTTYPE_*)

Parameters:

mediaType - mediaType (such as flv or smil)

Returns:

content type (see IMediaReader.CONTENTTYPE_*)

getProtocolUsage

```
public abstract void getProtocolUsage(boolean[] protocolsInUse)
```

(continued from last page)

Get the protocols in use by this application instance (see `IApplicationInstance.PROTOCOLUSAGE_*`)

getTranscoderVODContext

```
public abstract com.wowza.wms.transcoder.vod.TranscoderVODContext  
getTranscoderVODContext()
```

Get the VOD transcoder context

Returns:

VOD transcoder context

getThumbnailerContext

```
public abstract com.wowza.wms.transcoder.thumbnailer.ThumbnailerContext  
getThumbnailerContext()
```

Get the VOD transcoder context

Returns:

VOD transcoder context

getHTTPStreamerRequestValidator

```
public abstract IVHostHTTPStreamerRequestValidator getHTTPStreamerRequestValidator()
```

Get the HTTP streamer request validator

Returns:

HTTP streamer request validator

setHTTPStreamerRequestValidator

```
public abstract void  
setHTTPStreamerRequestValidator(IVHostHTTPStreamerRequestValidator  
httpRequestValidator)
```

Set the HTTP streamer request validator

Parameters:

httpRequestValidator - HTTP streamer request validator

getHTTPStreamerMaxPathLen

```
public abstract int getHTTPStreamerMaxPathLen()
```

Get the max HTTP streamer path length

Returns:

max HTTP streamer path length

setHTTPStreamerMaxPathLen

```
public abstract void setHTTPStreamerMaxPathLen(int httpStreamerMaxPathLen)
```

Set the max HTTP streamer path length

Parameters:

httpStreamerMaxPathLen - max HTTP streamer path length

getRTSPRequestValidator

```
public abstract IVHostRTSPRequestValidator getRTSPRequestValidator()
```

Get the RTSP request validator

Returns:

RTSP request validator

setRTSPRequestValidator

```
public abstract void setRTSPRequestValidator(IVHostRTSPRequestValidator  
rtspRequestValidator)
```

Set the RTSP request validator

Parameters:

rtspRequestValidator - RTSP request validator

getRTSPMaxPathLen

```
public abstract int getRTSPMaxPathLen()
```

Get the max RTSP stream path length

Returns:

max RTSP stream path length

setRTSPMaxPathLen

```
public abstract void setRTSPMaxPathLen(int rtspStreamerMaxPathLen)
```

Set the max RTSP stream path length

Parameters:

rtspStreamerMaxPathLen - max RTSP stream path length

getLiveStreamTranscoderSessionCount

```
public abstract long getLiveStreamTranscoderSessionCount()
```

Get the current number of live stream transcoder sessions.

Returns:

current number of live stream transcoder sessions

getPushPublishContext

```
public abstract PushPublishContext getPushPublishContext()
```

Get the push publish context

Returns:

push publish context

(continued from last page)

getUnidentifiedSessionTimeout

```
public abstract int getUnidentifiedSessionTimeout()
```

Get the unidentified session timeout (TCP session that we are not able to identify)

Returns:

timeout in milliseconds

setUnidentifiedSessionTimeout

```
public abstract void setUnidentifiedSessionTimeout(int unidentifiedSessionTimeout)
```

Set the unidentified session timeout (TCP session that we are not able to identify)

Parameters:

unidentifiedSessionTimeout - timeout in milliseconds

getStartupStreamsDelayTime

```
public abstract int getStartupStreamsDelayTime()
```

Get startup streams delay time (milliseconds). Time between items started in StartupStreams.xml.

Returns:

delay time

setStartupStreamsDelayTime

```
public abstract void setStartupStreamsDelayTime(int startupStreamsDelayTime)
```

Set startup streams delay time (milliseconds). Time between items started in StartupStreams.xml.

Parameters:

startupStreamsDelayTime - delay time

getHTTTPersistentRejectInvalid

```
public abstract boolean getHTTTPersistentRejectInvalid()
```

Get HTTTPersistent rejection status. Default is false.

Returns:

status

setHTTTPersistentRejectInvalid

```
public abstract void setHTTTPersistentRejectInvalid(boolean flag)
```

Set if invalid HTTP requests should be rejected when using persistent connections

Parameters:

flag - enable/disable

isWebRTCSessionFactory

```
public abstract boolean isWebRTCSessionFactory()
```

(continued from last page)

Is WebRTC enabled for this virtual host

Returns:

true if WebRTC is enabled

getWebRTCSessionFactory

```
public abstract com.wowza.wms.webrtc.tcpsession.IWebRTCTCPSessionFactory  
getWebRTCSessionFactory()
```

Get WebRTC session factory

Returns:

WebRTC session factory

getWebSocketContext

```
public abstract WebSocketContext getWebSocketContext()
```

Get the WebSocket Context

Returns:

WebSocket Context

getHTTPProviderContext

```
public abstract HTTPProviderContext getHTTPProviderContext()
```

Get the HTTPProvider Context

Returns:

HTTPProvider Context

getWebSocketSessions

```
public abstract java.util.List getWebSocketSessions()
```

Get a list of active WebSocket sessions

Returns:

list of active WebSocket sessions

getWebSocketSessionCount

```
public abstract int getWebSocketSessionCount()
```

Get the total number of WebSocket sessions

Returns:

total number of WebSocket sessions

getDomainToKeyStoreMapList

```
public abstract DomainToKeyStoreMapList getDomainToKeyStoreMapList()
```

Get the SSL certificate map list. It is a list of maps that map domain names to SSL certificates.

Returns:

SSL certificate map list

com.wowza.wms.vhost Interface IVHostHTTPStreamerRequestValidator

public interface IVHostHTTPStreamerRequestValidator
extends

Method Summary

abstract boolean	validateHTTPStreamerRequest (RtmpRequestMessage request, HostPort hostPort, String path)
------------------	--

Methods

validateHTTPStreamerRequest

```
public abstract boolean validateHTTPStreamerRequest(RtmpRequestMessage request,  
    HostPort hostPort,  
    String path)
```

com.wowza.wms.vhost Interface IVHostItemNotify

public interface **IVHostItemNotify**
extends

IVHostItemNotify: listener interface used by VHostList addVHostItemListener

VHostList is the list vHost definitions in VHosts.xml not the vHosts themselves. With this listener interface you can monitor the vHost definition changes.

Method Summary

abstract void	onVHostItemCreate (VHostItem vhostItem) Triggered when vHostItem created
abstract void	onVHostItemDestroy (VHostItem vhostItem) Triggered when vHostItem destroyed
abstract void	onVHostItemUpdate (VHostItem vhostItem) Triggered when vHostItem updated

Methods

onVHostItemCreate

public abstract void **onVHostItemCreate**([VHostItem](#) vhostItem)

Triggered when vHostItem created

Parameters:

vhostItem - vhostItem

onVHostItemUpdate

public abstract void **onVHostItemUpdate**([VHostItem](#) vhostItem)

Triggered when vHostItem updated

Parameters:

vhostItem - vhostItem

onVHostItemDestroy

public abstract void **onVHostItemDestroy**([VHostItem](#) vhostItem)

Triggered when vHostItem destroyed

Parameters:

vhostItem - vhostItem

com.wowza.wms.vhost Interface IVHostNotify

All Known Implementing Classes:

[VHostNotifyBase](#), [ServerListenerStreamDemoPublisher](#)

public interface **IVHostNotify**
extends

IVHostNotify: listener interface used by VHostSingleton addVHostListener

Method Summary

abstract void	onVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params) Triggered before a client connects to this virtual host.
abstract void	onVHostCreate (IVHost vhost) Triggered when vHost created
abstract void	onVHostInit (IVHost vhost) Triggered when vHost initialized
abstract void	onVHostShutdownComplete (IVHost vhost) Triggered at the end of vhost shutdown
abstract void	onVHostShutdownStart (IVHost vhost) Triggered at the beginning of vhost shutdown

Methods

onVHostCreate

public abstract void **onVHostCreate**([IVHost](#) vhost)

Triggered when vHost created

Parameters:

vhost

onVHostInit

public abstract void **onVHostInit**([IVHost](#) vhost)

Triggered when vHost initialized

Parameters:

vhost - vhost

onVHostShutdownStart

public abstract void **onVHostShutdownStart**([IVHost](#) vhost)

(continued from last page)

Triggered at the beginning of vhost shutdown

Parameters:

vhost - vhost

onVHostShutdownComplete

```
public abstract void onVHostShutdownComplete(IVHost vhost)
```

Triggered at the end of vhost shutdown

Parameters:

vhost - vhost

onVHostClientConnect

```
public abstract void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

Triggered before a client connects to this virtual host. Provides an opportunity to rewrite the information that is being used to connect.

Parameters:

vhost

inClient - client object of the connection

function - function

params - parameters

com.wowza.wms.vhost Interface IVHostRTSPRequestValidator

public interface IVHostRTSPRequestValidator
extends

Method Summary

abstract boolean	validateRTSPRequest (com.wowza.wms.rtsp.RTSPRequestMessage req)
------------------	---

Methods

validateRTSPRequest

public abstract boolean **validateRTSPRequest**(com.wowza.wms.rtsp.RTSPRequestMessage req)

com.wowza.wms.vhost Interface IWorkerThreadClear

public interface **IWorkerThreadClear**
extends

IWorkerThreadClear: Internal use.

Method Summary

abstract void	clear()
abstract void	reset()

Methods

reset

public abstract void **reset()**

clear

public abstract void **clear()**

com.wowza.wms.vhost Class StreamItem

java.lang.Object

└─com.wowza.wms.vhost.StreamItem

public class **StreamItem**
extends Object

StreamItem: data object that defines a streamType.

Constructor Summary

public	StreamItem (String name, String baseClass, String playClass) Create a new streamItem
--------	---

Method Summary

void	clearProperty (String name) Clear property.
String	getBaseClass () Get base class path.
String	getDescription () Get streamType description.
String	getName () Get streamType name.
String	getPlayClass () Get play class path.
WMSProperties	getProperties () Get properties.
String	getProperty (String name) Get property by name.
void	setBaseClass (String baseClass) Set base class path.
void	setDescription (String description) Set streamType description.
void	setName (String name) Set streamType name.
void	setPlayClass (String playClass) Set play class path.
void	setProperty (String name, String value) Set property value.

String	toString()
--------	----------------------------

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

StreamItem

```
public StreamItem(String name,  
                  String baseClass,  
                  String playClass)
```

Create a new streamItem

Parameters:

`name` - streamType name
`baseClass` - base class path
`playClass` - play class path

Methods

getBaseClass

```
public String getBaseClass()
```

Get base class path.

Returns:

base clas path

setBaseClass

```
public void setBaseClass(String baseClass)
```

Set base class path.

Parameters:

`baseClass` - base class path

getName

```
public String getName()
```

Get streamType name.

Returns:

streamType name

setName

```
public void setName(String name)
```

(continued from last page)

Set streamType name.

Parameters:

name - streamType name

getPlayClass

```
public String getPlayClass()
```

Get play class path.

Returns:

play class path

setPlayClass

```
public void setPlayClass(String playClass)
```

Set play class path.

Parameters:

playClass - play class path

setProperty

```
public void setProperty(String name,  
    String value)
```

Set property value.

Parameters:

name - property name

value - property value

clearProperty

```
public void clearProperty(String name)
```

Clear property.

Parameters:

name - property name

getProperty

```
public String getProperty(String name)
```

Get property by name.

Parameters:

name - property name

Returns:

property value

getProperties

```
public WMSProperties getProperties()
```

(continued from last page)

Get properties.

Returns:

properties

getDescription

```
public String getDescription()
```

Get streamType description.

Returns:

streamType description

setDescription

```
public void setDescription(String description)
```

Set streamType description.

Parameters:

description - streamType description

toString

```
public String toString()
```

com.wowza.wms.vhost Class StreamList

java.lang.Object

└--com.wowza.wms.vhost.StreamList

```
public class StreamList
    extends Object
```

StreamList: collection of StreamItems

Constructor Summary

public	StreamList() Create empty StreamList
--------	---

Method Summary

StreamItem	getStreamDef(String name) Get streamItem by streamType name.
java.util.Map	getStreamDefs() Get Map of streamItems (by streamType names).
java.util.List	getStreamTypeNames() Get list of streamType names.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

StreamList

```
public StreamList()
```

Create empty StreamList

Methods

getStreamDefs

```
public java.util.Map getStreamDefs()
```

Get Map of streamItems (by streamType names).

Returns:

Map of streamItems

getStreamTypeNames

```
public java.util.List getStreamTypeNames()
```

Get list of streamType names. Returns shallow copy of list.

Returns:

list of streamType names

getStreamDef

```
public StreamItem getStreamDef(String name)
```

Get streamItem by streamType name.

Parameters:

name - streamType name

Returns:

streamItem

com.wowza.wms.vhost Class ThreadPool

java.lang.Object

└─com.wowza.wms.vhost.ThreadPool

public class **ThreadPool**
extends Object

ThreadPool: class for managing a pool of threads.

Constructor Summary

public	ThreadPool (IVHost vhost, String name) Create a new thread pool attached to a vHost.
--------	--

Method Summary

void	execute (Runnable command) Execute a runnable object.
int	getActiveCount () Get number of active threads.
java.util.concurrent. Executor	getExecutor () Get the underlying Executor pool.
int	getQueueSize () Get the number of command objects in the LinkedBlockingQueue.
void	init (int corePoolSize) Initialize threadPool.
void	terminate () Terminate all threads and cleanup threadPool.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

ThreadPool

public **ThreadPool**([IVHost](#) vhost,
[String](#) name)

Create a new thread pool attached to a vHost.

Parameters:

(continued from last page)

vhost - vHost

Methods

init

```
public void init(int corePoolSize)
```

Initialize threadPool.

Parameters:

corePoolSize - core pool size

terminate

```
public void terminate()
```

Terminate all threads and cleanup threadPool.

execute

```
public void execute(Runnable command)
```

Execute a runnable object. If the threadPool is at the corePool size, the object will be added to a LinkedBlockingQueue in the order it was received.

Parameters:

command

getExecutor

```
public java.util.concurrent.Executor getExecutor()
```

Get the underlying Executor pool.

Returns:

Executor pool

getActiveCount

```
public int getActiveCount()
```

Get number of active threads.

Returns:

number of active threads

getQueueSize

```
public int getQueueSize()
```

Get the number of command objects in the LinkedBlockingQueue.

Returns:

number of command objects in the LinkedBlockingQueue

com.wowza.wms.vhost Class VHostItem

java.lang.Object

└─com.wowza.wms.vhost.VHostItem

public class **VHostItem**
extends Object

VHostItem: data class that hold definition of a virtual host.

Constructor Summary

public	<u>VHostItem()</u> Create empty vHostItem
--------	--

Method Summary

String	<u>getConfigDir()</u> Get configuration path for vHost.
int	<u>getConnectionLimit()</u> Get connection limit of this vHost item.
String	<u>getName()</u> Get vHost name
<u>WMSProperties</u>	<u>getProperties()</u> Get properties
boolean	<u>isVisited()</u> Has this vHostItem been visited during load of VHosts.xml file.
void	<u>reset()</u> Reset vHostItem to empty state
void	<u>setConfigDir</u> (String configDir) Set configuration path for vHost.
void	<u>setConnectionLimit</u> (int connectionLimit) Set connection limit of this vHost item.
void	<u>setName</u> (String name) Set vHost name
void	<u>setProperties</u> (<u>WMSProperties</u> properties) Set properties
void	<u>setVisited</u> (boolean visited) Set is visited.
String	<u>toString()</u> Format vHost item

Methods inherited from class `java.lang.Object`

`clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait,`
`wait`

Constructors

VHostItem

```
public VHostItem()
```

Create empty vHostItem

Methods

reset

```
public void reset()
```

Reset vHostItem to empty state

getConfigDir

```
public String getConfigDir()
```

Get configuration path for vHost.

Returns:

configuration path for vHost

setConfigDir

```
public void setConfigDir(String configDir)
```

Set configuration path for vHost.

Parameters:

configDir - configuration path for vHost

getName

```
public String getName()
```

Get vHost name

Returns:

vHost name

setName

```
public void setName(String name)
```

Set vHost name

Parameters:

(continued from last page)

name - vHost name

getProperties

```
public WMSPProperties getProperties()
```

Get properties

Returns:

properties

setProperties

```
public void setProperties(WMSPProperties properties)
```

Set properties

Parameters:

properties - properties

isVisited

```
public boolean isVisited()
```

Has this vHostItem been visited during load of VHosts.xml file. Internally used to track and delete vHost definitions on reload of VHosts.xml.

Returns:

Has this vHostItem been visited during load

setVisited

```
public void setVisited(boolean visited)
```

Set is visited.

Parameters:

visited - is visited

getConnectionLimit

```
public int getConnectionLimit()
```

Get connection limit of this vHost item.

Returns:

connection limit of this vHost item

setConnectionLimit

```
public void setConnectionLimit(int connectionLimit)
```

Set connection limit of this vHost item.

Parameters:

connectionLimit - connection limit of this vHost item

(continued from last page)

toString

```
public String toString()
```

Format vHost item

com.wowza.wms.vhost Class VHostList

java.lang.Object

└─com.wowza.wms.vhost.VHostList

public class **VHostList**
extends Object

VHostList: list of VHost items. Result of parsing VHosts.xml at server startup or VHosts.xml reload. This interface can keep track of reloads and carefully mark items for deletion.

Constructor Summary

public	<u>VHostList()</u> Create empty vHostList
--------	--

Method Summary

void	<u>addVHostItemListener()</u> (<u>IVHostItemNotify</u> vHostItemListener) Add vHostItem listener.
java.util.List	<u>getVHostItems()</u> Get a list of vHostItems.
java.util.Map	<u>getVHostMap()</u> Get the Map of vHostItem definitions.
java.util.List	<u>getVHostNames()</u> Get a list of vHost names.
void	<u>loadConfig()</u>
void	<u>notifyVHostItemCreate()</u> (<u>VHostItem</u> vhostItem) Notify vHostItem listener of item create.
void	<u>notifyVHostItemDestroy()</u> (<u>VHostItem</u> vhostItem) Notify vHostItem listener of item destroy.
void	<u>notifyVHostItemUpdate()</u> (<u>VHostItem</u> vhostItem) Notify vHostItem listener of item update.
void	<u>reloadConfig()</u> Reload VHosts.xml file.
void	<u>removeVHostItemListener()</u> (<u>IVHostItemNotify</u> vHostItemListener) Remove vHostItem listener.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Constructors

VHostList

```
public VHostList()
```

Create empty vHostList

Methods

loadConfig

```
public void loadConfig()
```

reloadConfig

```
public void reloadConfig()
```

Reload VHosts.xml file.

getVHostMap

```
public java.util.Map getVHostMap()
```

Get the Map of vHostItem defintions.

Returns:

Map of vHostItem defintions

addVHostItemListener

```
public void addVHostItemListener(IVHostItemNotify vHostItemListener)
```

Add vHostItem listener. vHostItem listeners will receive the following events: onVHostItemCreate, onVHostItemUpdate, onVHostItemDestroy.

Parameters:

vHostItemListener - vHostItem listener

removeVHostItemListener

```
public void removeVHostItemListener(IVHostItemNotify vHostItemListener)
```

Remove vHostItem listener.

Parameters:

vHostItemListener - vHostItem listener

notifyVHostItemCreate

```
public void notifyVHostItemCreate(VHostItem vhostItem)
```

Notify vHostItem listener of item create.

(continued from last page)

Parameters:

vhostItem - vHostItem

notifyVHostItemUpdate

```
public void notifyVHostItemUpdate(VHostItem vhostItem)
```

Notify vHostItem listener of item update.

Parameters:

vhostItem - vHostItem

notifyVHostItemDestroy

```
public void notifyVHostItemDestroy(VHostItem vhostItem)
```

Notify vHostItem listener of item destroy.

Parameters:

vhostItem - vHostItem

getVHostNames

```
public java.util.List getVHostNames()
```

Get a list of vHost names. Creates a copy of list.

Returns:

list of vHost names

getVHostItems

```
public java.util.List getVHostItems()
```

Get a list of vHostItems. Create a shallow copy of list.

Returns:

list of vHostItems

com.wowza.wms.vhost Class VHostNotifyBase

java.lang.Object

└─com.wowza.wms.vhost.VHostNotifyBase

All Implemented Interfaces:

[IVHostNotify](#)

public class **VHostNotifyBase**
extends Object
implements [IVHostNotify](#)

Constructor Summary

public	VHostNotifyBase()
--------	-----------------------------------

Method Summary

void	onVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params)
void	onVHostCreate (IVHost vhost)
void	onVHostInit (IVHost vhost)
void	onVHostShutdownComplete (IVHost vhost)
void	onVHostShutdownStart (IVHost vhost)

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.vhost.IVHostNotify](#)

[onVHostClientConnect](#), [onVHostCreate](#), [onVHostInit](#), [onVHostShutdownComplete](#), [onVHostShutdownStart](#)

Constructors

VHostNotifyBase

public **VHostNotifyBase()**

(continued from last page)

Methods

onVHostCreate

```
public void onVHostCreate(IVHost vhost)
```

onVHostInit

```
public void onVHostInit(IVHost vhost)
```

onVHostShutdownStart

```
public void onVHostShutdownStart(IVHost vhost)
```

onVHostShutdownComplete

```
public void onVHostShutdownComplete(IVHost vhost)
```

onVHostClientConnect

```
public void onVHostClientConnect(IVHost vhost,  
    IClient inClient,  
    com.wowza.wms.request.RequestFunction function,  
    AMFDataList params)
```

com.wowza.wms.vhost Class VHostSingleton

java.lang.Object

└─com.wowza.wms.vhost.VHostSingleton

public class **VHostSingleton**
extends Object

VHostSingleton: singleton that provide access to running vHosts.

Constructor Summary

public	VHostSingleton()
--------	----------------------------------

Method Summary

static void	addVHostListener (IVHostNotify vhostListener) Add a vHost listener.
static IVHost	getInstance (String vhostName) Get vHost by name.
static IVHost	getInstance (String vhostName, boolean doCreate) Get vHost by name.
static java.util.List	getVHostNames () Get a list of vHost names.
static void	init (String vhostName, String configHome) Initialize vhost by name.
static void	notifyVHostClientConnect (IVHost vhost, IClient inClient, com.wowza.wms.request.RequestFunction function, AMFDataList params) Notify vhost client connect
static void	notifyVHostCreate (IVHost vhost) Notify vHost listener of create.
static void	notifyVHostInit (IVHost vhost) Notify vHost listener of ini.
static void	notifyVHostShutdownComplete (IVHost vhost) Notify vHost listener of destruction.
static void	notifyVHostShutdownStart (IVHost vhost) Notify vHost listener of destruction.
static void	remove (String vhostName) Remove a vHost from list of running vHosts.
static void	removeApplicationListener (IVHostNotify vhostListener) Remove vHost listener

static void	setServer (IServer server) Set a reference to the current running server.
static void	shutdown (String vhostName) Shutdown a vHost by name.

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Constructors

VHostSingleton

```
public VHostSingleton()
```

Methods

getInstance

```
public static IVHost getInstance(String vhostName)
```

Get vHost by name. Do NOT create if does not exist.

Parameters:

vhostName - vHost name

Returns:

vHost

getInstance

```
public static IVHost getInstance(String vhostName,  
    boolean doCreate)
```

Get vHost by name. Create if does not exist.

Parameters:

vhostName - vhost name

doCreate - if true, create if does not exist

Returns:

vHost

init

```
public static void init(String vhostName,  
    String configHome)
```

Initialize vhost by name.

Parameters:

vhostName - vHost name

(continued from last page)

configHome - configuration path, path to VHost.xml

setServer

```
public static void setServer(IServer server)
```

Set a reference to the current running server.

Parameters:

server - server

shutdown

```
public static void shutdown(String vhostName)
```

Shutdown a vHost by name.

Parameters:

vhostName - vhost name

getVHostNames

```
public static java.util.List getVHostNames()
```

Get a list of vHost names. Return copy of list.

Returns:

vHost names

remove

```
public static void remove(String vhostName)
```

Remove a vHost from list of running vHosts.

Parameters:

vhostName - vhost name

addVHostListener

```
public static void addVHostListener(IVHostNotify vhostListener)
```

Add a vHost listener. A vHost listener receives the following events: onVHostCreate, onVHostInit, onVHostDestroy

Parameters:

vhostListener - vHost listener

removeApplicationListener

```
public static void removeApplicationListener(IVHostNotify vhostListener)
```

Remove vHost listener

Parameters:

vhostListener - vHost listener

(continued from last page)

notifyVHostClientConnect

```
public static void notifyVHostClientConnect(IVHost vhost,  
      IClient inClient,  
      com.wowza.wms.request.RequestFunction function,  
      AMFDataList params)
```

Notify vhost client connect

Parameters:

vhost - vHost
inClient - client
function - function
params - parameters

notifyVHostCreate

```
public static void notifyVHostCreate(IVHost vhost)
```

Notify vHost listener of create.

Parameters:

vhost - vHost

notifyVHostInit

```
public static void notifyVHostInit(IVHost vhost)
```

Notify vHost listener of ini.

Parameters:

vhost - vHost

notifyVHostShutdownStart

```
public static void notifyVHostShutdownStart(IVHost vhost)
```

Notify vHost listener of destruction.

Parameters:

vhost - vHost

notifyVHostShutdownComplete

```
public static void notifyVHostShutdownComplete(IVHost vhost)
```

Notify vHost listener of destruction.

Parameters:

vhost - vHost

Package

com.wowza.wms.websocket.model

com.wowza.wms.websocket.model Interface IWebSocketEventNotify

All Subinterfaces:

[IWebSocketEventNotify2](#)

public interface **IWebSocketEventNotify**
extends

Method Summary

abstract void	onCreate (IWebSocketSession webSocketSession) Trigger when WebSocket session is created
abstract void	onDestroy (IWebSocketSession webSocketSession) Triggered when WebSocket session is destroyed
abstract void	onMessage (IWebSocketSession webSocketSession, WebSocketMessage message) Triggered when WebSocket message (binary or text) is received (control messages are not included).

Methods

onCreate

public abstract void **onCreate**([IWebSocketSession](#) webSocketSession)

Trigger when WebSocket session is created

Parameters:

webSocketSession - WebSocket session

onDestroy

public abstract void **onDestroy**([IWebSocketSession](#) webSocketSession)

Triggered when WebSocket session is destroyed

Parameters:

webSocketSession - WebSocket session

onMessage

public abstract void **onMessage**([IWebSocketSession](#) webSocketSession,
[WebSocketMessage](#) message)

Triggered when WebSocket message (binary or text) is received (control messages are not included).

Parameters:

webSocketSession - WebSocket session

message - WebSocket message

com.wowza.wms.websocket.model Interface IWebSocketEventNotify2

All Superinterfaces:

[IWebSocketEventNotify](#)

All Known Implementing Classes:

[WebSocketEventNotifyBase](#)

public interface **IWebSocketEventNotify2**
extends [IWebSocketEventNotify](#)

Method Summary

abstract void	onIdle (IWebSocketSession websocketSession)
---------------	--

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify](#)

[onCreate](#), [onDestroy](#), [onMessage](#)

Methods

onIdle

public abstract void **onIdle**([IWebSocketSession](#) websocketSession)

com.wowza.wms.websocket.model Interface IWebSocketPingResult

public interface **IWebSocketPingResult**
extends

Method Summary

abstract void	onResult(IWebSocketSession webSocketSession, long pingTime, long pingId, boolean result) Triggered when WebSocket pong is received or pong is not received within ping timeout
---------------	---

Methods

onResult

```
public abstract void onResult(IWebSocketSession webSocketSession,  
    long pingTime,  
    long pingId,  
    boolean result)
```

Triggered when WebSocket pong is received or pong is not received within ping timeout

Parameters:

[webSocketSession](#) - WebSocket session
[pingTime](#) - elapsed time for ping response
[pingId](#) - ping ID
[result](#) - true, if pong received, false if timeout

com.wowza.wms.websocket.model Interface IWebSocketSession

public interface **IWebSocketSession**
extends

Field Summary

public static final	<u>CHARENCODING</u> Value: UTF-8
public static final	<u>CLOSECODE_ABNORMAL</u> Value: 1006
public static final	<u>CLOSECODE_GOINGAWAY</u> Value: 1001
public static final	<u>CLOSECODE_INTERNALSERVER</u> Value: 1011
public static final	<u>CLOSECODE_INVALIDFRAME</u> Value: 1007
public static final	<u>CLOSECODE_MANDATORYEXT</u> Value: 1010
public static final	<u>CLOSECODE_MESSAGE_TOO_BIG</u> Value: 1009
public static final	<u>CLOSECODE_NORMAL</u> Value: 1000
public static final	<u>CLOSECODE_NO_STATUS_RECEIVED</u> Value: 1005
public static final	<u>CLOSECODE_POLICY_VIOLATION</u> Value: 1008
public static final	<u>CLOSECODE_PROTOCOL_ERROR</u> Value: 1002
public static final	<u>CLOSECODE_RESERVED</u> Value: 1004
public static final	<u>CLOSECODE_TLS_HANDSHAKE</u> Value: 1015

public static final	CLOSECODE_UNSUPPORTEDDATA Value: 1003
public static final	CLOSESTR_ABNORMAL Value: Abnormal Closure
public static final	CLOSESTR_GOINGAWAY Value: Going Away
public static final	CLOSESTR_INTERNALSERVER Value: Internal Server Error
public static final	CLOSESTR_INVALIDFRAME Value: Invalid frame
public static final	CLOSESTR_MANDATORYEXT Value: Mandatory Ext.
public static final	CLOSESTR_MESSAGETOOBIG Value: Message Too Big
public static final	CLOSESTR_NORMAL Value: Normal Closure
public static final	CLOSESTR_NOSTATUSRECEIVED Value: No Status Rcvd
public static final	CLOSESTR_POLICYVIOLATION Value: Policy Violation
public static final	CLOSESTR_PROTOCOLERROR Value: Protocol error
public static final	CLOSESTR_RESERVED Value: Reserved
public static final	CLOSESTR_TLSHANDSHAKE Value: TLS handshake
public static final	CLOSESTR_UNSUPPORTEDDATA Value: Unsupported Data
public static final	CLOSETIMEOUT Value: 1500
public static final	HTTPHEADER_NAME Value: websocket

public static final	HTTPHEADER_SECACCEPT Value: Sec-WebSocket-Accept
public static final	HTTPHEADER_SECKEY Value: Sec-WebSocket-Key
public static final	PINGWOWZAID Value: 1464817498
public static final	SECURITY_DIGEST_ALGORITHM Value: SHA-1
public static final	SECURITY_GUID Value: 258EAF5-E914-47DA-95CA-C5AB0DC85B11

Method Summary

abstract void	close (boolean immediately, int reasonCode, String reasonStr) Close the WebSocket session
abstract String	getContextStr () Get context string for logging
abstract ElapsedTimer	getElapsedTime () Get the time the WebSocket session has been alive
abstract IWebSocketEventNotify	getEventListener () Get the listener object that receives WebSockets events
abstract java.util.Map	getHeaderMap () Get map of HTTP headers from original upgrade HTTP request
abstract IHTTPProvider	getHTTPProvider () Get the HTTPProvider that is the parent of this WebSocket session
abstract HTTPRequest	getHTTPRequest () Get HTTPRequest object
abstract int	getIdleFrequency () Get time in milliseconds between idle events
abstract IOPerformanceCounter	getIOPerformanceCounter () Get IO performance counter that tracks incoming and outgoing TCP traffic
abstract org.apache.mina.commo n.IoSession	getIoSession () Get the low level IoSession for this websocket
abstract Object	getLock () Get the internal synchronization lock for this session
abstract long	getMaximumMessageSize () Get the maximum WebSocket message size for a single message (0 = no limit)

abstract int	<u>getMaximumPendingWriteBytes()</u> Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
abstract long	<u>getPacketFragmentationSize()</u> Not being used currently
abstract java.util.Map	<u>getParameterMap()</u> Get map of HTTP parameters from original upgrade HTTP request
abstract int	<u>getPingTimeout()</u> Get the timeout (milliseconds) that we wait for a response (pong) to a ping message
abstract <u>WMSProperties</u>	<u>getProperties()</u> Get user properties
abstract String	<u>getQueryString()</u> Get query string from original upgrade HTTP request
abstract String	<u>getRemoteHost()</u> Get remote host
abstract String	<u>getRemoteIpAddress()</u> Get the remote Ip address
abstract String	<u>getRequestedDomainName()</u>
abstract String	<u>getReqURI()</u> Get request URI from original upgrade HTTP request
abstract String	<u>getReqURL()</u> Get request URL from original upgrade HTTP request
abstract int	<u>getSessionId()</u> Get WebSocket session Id
abstract int	<u>getValidationFrequency()</u> Get time in milliseconds between validation messages (ping from server to client).
abstract boolean	<u>isActive()</u> True if WebSocket session is still active, false if close has been called but session is still connected (waiting to close)
abstract boolean	<u>isMaskOutgoingMessages()</u> Should outgoing messages be masked (many browsers do not support masked outgoing messages)
abstract void	<u>ping(IWebSocketPingResult pingResult)</u> Send a ping message from server to client
abstract void	<u>sendMessage(WebSocketMessage message)</u> Send a WebSocket message from server to client
abstract void	<u>setHttpRequest(HttpServletRequest httpRequest)</u> Set HttpRequest object
abstract void	<u>setIdleFrequency(int idleFrequency)</u> Set time in milliseconds between idle events

abstract void	<code>setMaskOutgoingMessages</code> (boolean maskOutgoingMessages) Should outgoing messages be masked (many browsers do not support masked outgoing messages)
abstract void	<code>setMaximumMessageSize</code> (long maxMessageSize) Set the maximum WebSocket message size for a single message (0 = no limit)
abstract void	<code>setMaximumPendingWriteBytes</code> (int maximumPendingWriteBytes) Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
abstract void	<code>setPacketFragmentationSize</code> (long packetFragmentationSize) Not being used currently
abstract void	<code>setPingTimeout</code> (int pingTimeout) Set the timeout (milliseconds) that we wait for a response (pong) to a ping message
abstract void	<code>setRemoteHost</code> (String remoteHost) Set remote host
abstract void	<code>setRemoteIpAddress</code> (String remoteIpAddress) Set remote Ip address
abstract void	<code>setValidationFrequency</code> (int validationFrequency) Set time in milliseconds between validation messages (ping from server to client).

Fields

SECURITY_GUID

```
public static final java.lang.String SECURITY_GUID
```

Constant value: **258EAF5-E914-47DA-95CA-C5AB0DC85B11**

SECURITY_DIGEST_ALGORITHM

```
public static final java.lang.String SECURITY_DIGEST_ALGORITHM
```

Constant value: **SHA-1**

CHARENCODING

```
public static final java.lang.String CHARENCODING
```

Constant value: **UTF-8**

PINGWOWZAID

```
public static final int PINGWOWZAID
```

Constant value: **1464817498**

(continued from last page)

CLOSETIMEOUT

```
public static final int CLOSETIMEOUT
```

Constant value: **1500**

HTTPHEADER_NAME

```
public static final java.lang.String HTTPHEADER_NAME
```

Constant value: **websocket**

HTTPHEADER_SECKEY

```
public static final java.lang.String HTTPHEADER_SECKEY
```

Constant value: **Sec-WebSocket-Key**

HTTPHEADER_SECACCEPT

```
public static final java.lang.String HTTPHEADER_SECACCEPT
```

Constant value: **Sec-WebSocket-Accept**

CLOSECODE_NORMAL

```
public static final int CLOSECODE_NORMAL
```

Constant value: **1000**

CLOSESTR_NORMAL

```
public static final java.lang.String CLOSESTR_NORMAL
```

Constant value: **Normal Closure**

CLOSECODE_GOINGAWAY

```
public static final int CLOSECODE_GOINGAWAY
```

Constant value: **1001**

CLOSESTR_GOINGAWAY

```
public static final java.lang.String CLOSESTR_GOINGAWAY
```

Constant value: **Going Away**

CLOSECODE_PROTOCOLERROR

```
public static final int CLOSECODE_PROTOCOLERROR
```

(continued from last page)

Constant value: **1002**

CLOSESTR_PROTOCOLERROR

```
public static final java.lang.String CLOSESTR_PROTOCOLERROR
```

Constant value: **Protocol error**

CLOSECODE_UNSUPPORTEDDATA

```
public static final int CLOSECODE_UNSUPPORTEDDATA
```

Constant value: **1003**

CLOSESTR_UNSUPPORTEDDATA

```
public static final java.lang.String CLOSESTR_UNSUPPORTEDDATA
```

Constant value: **Unsupported Data**

CLOSECODE_RESERVED

```
public static final int CLOSECODE_RESERVED
```

Constant value: **1004**

CLOSESTR_RESERVED

```
public static final java.lang.String CLOSESTR_RESERVED
```

Constant value: **Reserved**

CLOSECODE_NOSTATUSRECEIVED

```
public static final int CLOSECODE_NOSTATUSRECEIVED
```

Constant value: **1005**

CLOSESTR_NOSTATUSRECEIVED

```
public static final java.lang.String CLOSESTR_NOSTATUSRECEIVED
```

Constant value: **No Status Rcvd**

CLOSECODE_ABNORMAL

```
public static final int CLOSECODE_ABNORMAL
```

Constant value: **1006**

CLOSESTR_ABNORMAL

```
public static final java.lang.String CLOSESTR_ABNORMAL
```

Constant value: **Abnormal Closure**

CLOSECODE_INVALIDFRAME

```
public static final int CLOSECODE_INVALIDFRAME
```

Constant value: **1007**

CLOSESTR_INVALIDFRAME

```
public static final java.lang.String CLOSESTR_INVALIDFRAME
```

Constant value: **Invalid frame**

CLOSECODE_POLICYVIOLATION

```
public static final int CLOSECODE_POLICYVIOLATION
```

Constant value: **1008**

CLOSESTR_POLICYVIOLATION

```
public static final java.lang.String CLOSESTR_POLICYVIOLATION
```

Constant value: **Policy Violation**

CLOSECODE_MESSAGE_TOO_BIG

```
public static final int CLOSECODE_MESSAGE_TOO_BIG
```

Constant value: **1009**

CLOSESTR_MESSAGE_TOO_BIG

```
public static final java.lang.String CLOSESTR_MESSAGE_TOO_BIG
```

Constant value: **Message Too Big**

CLOSECODE_MANDATORYEXT

```
public static final int CLOSECODE_MANDATORYEXT
```

Constant value: **1010**

(continued from last page)

CLOSESTR_MANDATORYEXT

```
public static final java.lang.String CLOSESTR_MANDATORYEXT
```

Constant value: **Mandatory Ext.**

CLOSECODE_INTERNALSERVER

```
public static final int CLOSECODE_INTERNALSERVER
```

Constant value: **1011**

CLOSESTR_INTERNALSERVER

```
public static final java.lang.String CLOSESTR_INTERNALSERVER
```

Constant value: **Internal Server Error**

CLOSECODE_TLSHANDSHAKE

```
public static final int CLOSECODE_TLSHANDSHAKE
```

Constant value: **1015**

CLOSESTR_TLSHANDSHAKE

```
public static final java.lang.String CLOSESTR_TLSHANDSHAKE
```

Constant value: **TLS handshake**

Methods

getContextStr

```
public abstract String getContextStr()
```

Get context string for logging

Returns:

context string for logging

close

```
public abstract void close(boolean immediately,  
                           int reasonCode,  
                           String reasonStr)
```

Close the WebSocket session

Parameters:

`immediately` - if true, session will be terminated immediately by closing TCP connection, if false close command will be sent

`reasonCode` - reason for close, see CLOSECODE_*

`reasonStr` - reason string for close, see CLOSESTR_*

getHeaderMap

```
public abstract java.util.Map getHeaderMap()
```

Get map of HTTP headers from original upgrade HTTP request

Returns:

HTTP headers

getParameterMap

```
public abstract java.util.Map getParameterMap()
```

Get map of HTTP parameters from original upgrade HTTP request

Returns:

HTTP parameters

getQueryString

```
public abstract String getQueryString()
```

Get query string from original upgrade HTTP request

Returns:

query string

getReqURI

```
public abstract String getReqURI()
```

Get request URI from original upgrade HTTP request

Returns:

request URI

getReqURL

```
public abstract String getReqURL()
```

Get request URL from original upgrade HTTP request

Returns:

request URL

getMaximumMessageSize

```
public abstract long getMaximumMessageSize()
```

Get the maximum WebSocket message size for a single message (0 = no limit)

Returns:

maximum WebSocket message size

setMaximumMessageSize

```
public abstract void setMaximumMessageSize(long maxMessageSize)
```

(continued from last page)

Set the maximum WebSocket message size for a single message (0 = no limit)

Parameters:

maxMessageSize - maximum WebSocket message size

isMaskOutgoingMessages

```
public abstract boolean isMaskOutgoingMessages()
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Returns:

true, if messages are masked

setMaskOutgoingMessages

```
public abstract void setMaskOutgoingMessages(boolean maskOutgoingMessages)
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Parameters:

maskOutgoingMessages - true, if messages are masked

isActive

```
public abstract boolean isActive()
```

True if WebSocket session is still active, false if close has been called but session is still connected (waiting to close)

Returns:

true if WebSocket session is still active

getPacketFragmentationSize

```
public abstract long getPacketFragmentationSize()
```

Not being used currently

Returns:

not being used

setPacketFragmentationSize

```
public abstract void setPacketFragmentationSize(long packetFragmentationSize)
```

Not being used currently

Parameters:

packetFragmentationSize - not being used

getIdleFrequency

```
public abstract int getIdleFrequency()
```

Get time in milliseconds between idle events

Returns:

idle time (milliseconds)

setIdleFrequency

```
public abstract void setIdleFrequency(int idleFrequency)
```

Set time in milliseconds between idle events

Parameters:

idleFrequency - idle time (milliseconds)

sendMessage

```
public abstract void sendMessage(WebSocketMessage message)
```

Send a WebSocket message from server to client

Parameters:

message - WebSocket message

getValidationFrequency

```
public abstract int getValidationFrequency()
```

Get time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Returns:

validation time (milliseconds)

setValidationFrequency

```
public abstract void setValidationFrequency(int validationFrequency)
```

Set time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Parameters:

validationFrequency - validation time (milliseconds)

getMaximumPendingWriteBytes

```
public abstract int getMaximumPendingWriteBytes()
```

Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Returns:

number of bytes that can be pending waiting

setMaximumPendingWriteBytes

```
public abstract void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Parameters:

maximumPendingWriteBytes - number of bytes that can be pending waiting

ping

```
public abstract void ping(IWebSocketPingResult pingResult)
```

(continued from last page)

Send a ping message from server to client

Parameters:

pingResult - callback object when pong messages is received or ping message timesout

getLock

```
public abstract Object getLock()
```

Get the internal synchronization lock for this session

Returns:

internal synchronization lock

getEventListener

```
public abstract IWebSocketEventNotify getEventListener()
```

Get the listener object that receives WebSockets events

Returns:

listener object

getSessionId

```
public abstract int getSessionId()
```

Get WebSocket session Id

Returns:

WebSocket session Id

getHTTPProvider

```
public abstract IHTTPProvider getHTTPProvider()
```

Get the HTTPProvider that is the parent of this WebSocket session

Returns:

HTTPProvider

getIOPerformanceCounter

```
public abstract IOPerformanceCounter getIOPerformanceCounter()
```

Get IO performance counter that tracks incoming and outgoing TCP traffic

Returns:

IO performance counter

getElapsedTime

```
public abstract ElapsedTimer getElapsedTime()
```

Get the time the WebSocket session has been alive

Returns:

time the WebSocket session has been alive

getPingTimeout

```
public abstract int getPingTimeout()
```

Get the timeout (milliseconds) that we wait for a response (pong) to a ping message

Returns:

timeout (milliseconds)

setPingTimeout

```
public abstract void setPingTimeout(int pingTimeout)
```

Set the timeout (milliseconds) that we wait for a response (pong) to a ping message

Parameters:

pingTimeout - timeout (milliseconds)

getProperties

```
public abstract WMSProperties getProperties()
```

Get user properties

Returns:

user properties

getRemoteIpAddress

```
public abstract String getRemoteIpAddress()
```

Get the remote Ip address

Returns:

remote Ip address

setRemoteIpAddress

```
public abstract void setRemoteIpAddress(String remoteIpAddress)
```

Set remote Ip address

Parameters:

remoteIpAddress - remote Ip address

setHTTPRequest

```
public abstract void setHTTPRequest(HttpRequest httpRequest)
```

Set HTTPRequest object

Parameters:

HttpRequest

getHTTPRequest

```
public abstract HttpRequest getHTTPRequest()
```

(continued from last page)

Get HTTPRequest object

Returns:

getRemoteHost

```
public abstract String getRemoteHost()
```

Get remote host

Returns:

remote host

setRemoteHost

```
public abstract void setRemoteHost(String remoteHost)
```

Set remote host

Parameters:

remoteHost - remote host

getIoSession

```
public abstract org.apache.mina.common.Session getIoSession()
```

Get the low level IoSession for this websocket

Returns:

low level IoSession

getRequestedDomainName

```
public abstract String getRequestedDomainName()
```


com.wowza.wms.websocket.model Class WebSocketContext

java.lang.Object

└─com.wowza.wms.websocket.model.WebSocketContext

public class **WebSocketContext**
extends Object

Field Summary

public static final	<u>DEFAULT_IDLEFREQUENCY</u> Value: 250
public static final	<u>DEFAULT_MASKOUTGOINGMESSAGES</u> Value: false
public static final	<u>DEFAULT_MAXIMUMPENDINGWRITEBYTES</u> Value: 0
public static final	<u>DEFAULT_MAXMESSAGE_SIZE</u> Value: 524288
public static final	<u>DEFAULT_PACKETFRAGMENTATIONSIZE</u> Value: 0
public static final	<u>DEFAULT_PINGTIMEOUT</u> Value: 12000
public static final	<u>DEFAULT_VALIDATIONFREQUENCY</u> Value: 20000

Constructor Summary

public	<u>WebSocketContext</u> ()
--------	---

Method Summary

int	<u>getIdleFrequency</u> () Get time in milliseconds between idle events
long	<u>getMaximumMessageSize</u> () Get the maximum WebSocket message size for a single message (0 = no limit)
int	<u>getMaximumPendingWriteBytes</u> () Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

long	<code>getPacketFragmentationSize()</code> Not being used currently
int	<code>getPingTimeout()</code> Get the timeout (milliseconds) that we wait for a response (pong) to a ping message
int	<code>getValidationFrequency()</code> Get time in milliseconds between validation messages (ping from server to client).
boolean	<code>isMaskOutgoingMessages()</code> Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	<code>setIdleFrequency(int idleFrequency)</code> Set time in milliseconds between idle events
void	<code>setMaskOutgoingMessages(boolean maskOutgoingMessages)</code> Should outgoing messages be masked (many browsers do not support masked outgoing messages)
void	<code>setMaximumMessageSize(long maxMessageSize)</code> Set the maximum WebSocket message size for a single message (0 = no limit)
void	<code>setMaximumPendingWriteBytes(int maximumPendingWriteBytes)</code> Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)
void	<code>setPacketFragmentationSize(long packetFragmentationSize)</code> Not being used currently
void	<code>setPingTimeout(int pingTimeout)</code> Set the timeout (milliseconds) that we wait for a response (pong) to a ping message
void	<code>setValidationFrequency(int validationFrequency)</code> Set time in milliseconds between validation messages (ping from server to client).

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

DEFAULT_MAXMESSAGE_SIZE

```
public static final long DEFAULT_MAXMESSAGE_SIZE
```

Constant value: **524288**

DEFAULT_PACKETFRAGMENTATIONSIZE

```
public static final long DEFAULT_PACKETFRAGMENTATIONSIZE
```

Constant value: **0**

DEFAULT_IDLEFREQUENCY

```
public static final int DEFAULT_IDLEFREQUENCY
```

Constant value: **250**

DEFAULT_VALIDATIONFREQUENCY

```
public static final int DEFAULT_VALIDATIONFREQUENCY
```

Constant value: **20000**

DEFAULT_MASKOUTGOINGMESSAGES

```
public static final boolean DEFAULT_MASKOUTGOINGMESSAGES
```

Constant value: **false**

DEFAULT_MAXIMUMPENDINGWRITEBYTES

```
public static final int DEFAULT_MAXIMUMPENDINGWRITEBYTES
```

Constant value: **0**

DEFAULT_PINGTIMEOUT

```
public static final int DEFAULT_PINGTIMEOUT
```

Constant value: **12000**

Constructors

WebSocketContext

```
public WebSocketContext()
```

Methods

getMaximumMessageSize

```
public long getMaximumMessageSize()
```

Get the maximum WebSocket message size for a single message (0 = no limit)

Returns:

maximum WebSocket message size

setMaximumMessageSize

```
public void setMaximumMessageSize(long maxMessageSize)
```

Set the maximum WebSocket message size for a single message (0 = no limit)

(continued from last page)

Parameters:

maxMessageSize - maximum WebSocket message size

isMaskOutgoingMessages

```
public boolean isMaskOutgoingMessages()
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Returns:

true, if messages are masked

setMaskOutgoingMessages

```
public void setMaskOutgoingMessages(boolean maskOutgoingMessages)
```

Should outgoing messages be masked (many browsers do not support masked outgoing messages)

Parameters:

maskOutgoingMessages - true, if messages are masked

getIdleFrequency

```
public int getIdleFrequency()
```

Get time in milliseconds between idle events

Returns:

idle time (milliseconds)

setIdleFrequency

```
public void setIdleFrequency(int idleFrequency)
```

Set time in milliseconds between idle events

Parameters:

idleFrequency - idle time (milliseconds)

getPacketFragmentationSize

```
public long getPacketFragmentationSize()
```

Not being used currently

Returns:

not being used

setPacketFragmentationSize

```
public void setPacketFragmentationSize(long packetFragmentationSize)
```

Not being used currently

Parameters:

packetFragmentationSize - not being used

getValidationFrequency

```
public int getValidationFrequency()
```

Get time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Returns:

validation time (milliseconds)

setValidationFrequency

```
public void setValidationFrequency(int validationFrequency)
```

Set time in milliseconds between validation messages (ping from server to client). Value of zero turns off validation.

Parameters:

validationFrequency - validation time (milliseconds)

getMaximumPendingWriteBytes

```
public int getMaximumPendingWriteBytes()
```

Get the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Returns:

number of bytes that can be pending waiting

setMaximumPendingWriteBytes

```
public void setMaximumPendingWriteBytes(int maximumPendingWriteBytes)
```

Set the number of bytes that can be pending waiting to be sent before messages are no longer send (0 turns off this feature)

Parameters:

maximumPendingWriteBytes - number of bytes that can be pending waiting

getPingTimeout

```
public int getPingTimeout()
```

Get the timeout (milliseconds) that we wait for a response (pong) to a ping message

Returns:

timeout (milliseconds)

setPingTimeout

```
public void setPingTimeout(int pingTimeout)
```

Set the timeout (milliseconds) that we wait for a response (pong) to a ping message

Parameters:

pingTimeout - timeout (milliseconds)

com.wowza.wms.websocket.model Class WebSocketEventNotifyBase

java.lang.Object

└-com.wowza.wms.websocket.model.WebSocketEventNotifyBase

All Implemented Interfaces:

[IWebSocketEventNotify2](#)

public class **WebSocketEventNotifyBase**
extends Object
implements [IWebSocketEventNotify2](#)

Constructor Summary

public	WebSocketEventNotifyBase()
--------	--

Method Summary

void	onCreate (IWebSocketSession webSocketSession) Trigger when WebSocket session is created
void	onDestroy (IWebSocketSession webSocketSession) Triggered when WebSocket session is destroyed
void	onIdle (IWebSocketSession webSocketSession) Triggered for idle events
void	onMessage (IWebSocketSession webSocketSession, WebSocketMessage message) Triggered when WebSocket message (binary or text) is received (control messages are not included).

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify2](#)

[onIdle](#)

Methods inherited from interface [com.wowza.wms.websocket.model.IWebSocketEventNotify](#)

[onCreate](#), [onDestroy](#), [onMessage](#)

Constructors

(continued from last page)

WebSocketEventNotifyBase

```
public WebSocketEventNotifyBase()
```

Methods

onCreate

```
public void onCreate(IWebSocketSession websocketSession)
```

Trigger when WebSocket session is created

Parameters:

websocketSession - WebSocket session

onDestroy

```
public void onDestroy(IWebSocketSession websocketSession)
```

Triggered when WebSocket session is destroyed

Parameters:

websocketSession - WebSocket session

onMessage

```
public void onMessage(IWebSocketSession websocketSession,  
    WebSocketMessage message)
```

Triggered when WebSocket message (binary or text) is received (control messages are not included).

Parameters:

websocketSession - WebSocket session

message - WebSocket message

onIdle

```
public void onIdle(IWebSocketSession websocketSession)
```

Triggered for idle events

Parameters:

websocketSession - WebSocket session

com.wowza.wms.websocket.model Class WebSocketMessage

java.lang.Object

└-com.wowza.wms.websocket.model.WebSocketMessage

public class **WebSocketMessage**
extends Object

Field Summary

public static final	<u>DEFAULT_CLOSE_REASON</u> Value: unknown
public static final	<u>HEADER_SIZE_CONTROLFRAME</u> Value: 2
public static final	<u>MASK_SIZE</u> Value: 4
public static final	<u>OPCODE_BINARY</u> Value: 2
public static final	<u>OPCODE_CLOSE</u> Value: 8
public static final	<u>OPCODE_CONTINUATION</u> Value: 0
public static final	<u>OPCODE_PING</u> Value: 9
public static final	<u>OPCODE_PONG</u> Value: 10
public static final	<u>OPCODE_TEXT</u> Value: 1
public static final	<u>OPCODE_UNKNOWN</u> Value: -1

Constructor Summary

public	<u>WebSocketMessage</u> ()
public	<u>WebSocketMessage</u> (int type)

public	WebSocketMessage (int type, boolean bufferIncludesHeader, byte[] buffer)
public	WebSocketMessage (int type, boolean bufferIncludesHeader, byte[] buffer, int offset, int len)

Method Summary

void	addBuffer (byte[] buffer, int offset, int len, boolean fragmented) Used internally to add read TCP bytes into current pending message
static WebSocketMessage	createMessageBinary (boolean mask, byte[] buffer) Create binary message
static WebSocketMessage	createMessageBinary (boolean mask, byte[] buffer, int offset, int len) Create binary message
static WebSocketMessage	createMessageBinary (boolean mask, IFasterByteArrayOutputStream buffer, int offset, int len) Create binary message
static WebSocketMessage	createMessageClose (boolean mask, int reasonCode, String reasonStr) Create a close message
static WebSocketMessage	createMessagePing (boolean mask) Create a ping message (body will be 8-byte UTC in milliseconds)
static WebSocketMessage	createMessagePing (boolean mask, byte[] body) Create ping message
static WebSocketMessage	createMessagePong (boolean mask, WebSocketMessage messagePing) Create pong message
static WebSocketMessage	createMessageText (boolean mask, String messageStr) Create text message
byte[]	getBuffer () Get the raw binary message data (also need offset and len)
int	getCloseReason () If close message, get the close reason
String	getCloseReasonStr () If close message, get the close reason str
int	getLen () Get len of message buffer data
int	getOffset () Get offset into message buffer
int	getType () Get message type, see OP*_
String	getValueString () If text message, get body as string
boolean	isBinary () Is binary message

boolean	<code>isControlMessage()</code> Is message a control message
boolean	<code>isText()</code> Is message text message
long	<code>sendMessage(IFasterByteArrayWriteReference out)</code> Internal method to send message over TCP connection
void	<code>setType(int type)</code> Set message type, see OPCODE_*
String	<code>toString()</code> Get message as a string (use <code>getValueString()</code> to get the body value of text messages)

Methods inherited from class `java.lang.Object`

`clone`, `equals`, `finalize`, `getClass`, `hashCode`, `notify`, `notifyAll`, `toString`, `wait`, `wait`, `wait`

Fields

DEFAULT_CLOSE_REASON

```
public static final java.lang.String DEFAULT_CLOSE_REASON
```

Constant value: **unknown**

HEADER_SIZE_CONTROLFRAME

```
public static final int HEADER_SIZE_CONTROLFRAME
```

Constant value: **2**

MASK_SIZE

```
public static final int MASK_SIZE
```

Constant value: **4**

OPCODE_UNKNOWN

```
public static final int OPCODE_UNKNOWN
```

Constant value: **-1**

OPCODE_CONTINUATION

```
public static final int OPCODE_CONTINUATION
```

Constant value: **0**

OPCODE_TEXT

```
public static final int OPCODE_TEXT
```

Constant value: **1**

OPCODE_BINARY

```
public static final int OPCODE_BINARY
```

Constant value: **2**

OPCODE_CLOSE

```
public static final int OPCODE_CLOSE
```

Constant value: **8**

OPCODE_PING

```
public static final int OPCODE_PING
```

Constant value: **9**

OPCODE_PONG

```
public static final int OPCODE_PONG
```

Constant value: **10**

Constructors

WebSocketMessage

```
public WebSocketMessage()
```

WebSocketMessage

```
public WebSocketMessage(int type)
```

WebSocketMessage

```
public WebSocketMessage(int type,  
                        boolean bufferIncludesHeader,  
                        byte[] buffer)
```

(continued from last page)

WebSocketMessage

```
public WebSocketMessage(int type,  
                        boolean bufferIncludesHeader,  
                        byte[] buffer,  
                        int offset,  
                        int len)
```

Methods

createMessagePing

```
public static WebSocketMessage createMessagePing(boolean mask)
```

Create a ping message (body will be 8-byte UTC in milliseconds)

Parameters:

mask - true, to mask message

Returns:

WebSocketMessage

createMessagePing

```
public static WebSocketMessage createMessagePing(boolean mask,  
                                                  byte[] body)
```

Create ping message

Parameters:

mask - true, to mask message

body - bytes to include as body of message

Returns:

WebSocketMessage

createMessagePong

```
public static WebSocketMessage createMessagePong(boolean mask,  
                                                  WebSocketMessage messagePing)
```

Create pong message

Parameters:

mask - true, to mask message

messagePing - ping message that is source of pong (body copied to pong message)

Returns:

WebSocketMessage

createMessageClose

```
public static WebSocketMessage createMessageClose(boolean mask,  
                                                  int reasonCode,  
                                                  String reasonStr)
```

Create a close message

(continued from last page)

Parameters:

mask - true, to mask message
reasonCode - reason code, see IWebSocketSession.CLOSECODE_*
reasonStr - reason string, see IWebSocketSession.CLOSESTR_*

Returns:

WebSocketMessage

createMessageText

```
public static WebSocketMessage createMessageText(boolean mask,  
String messageStr)
```

Create text message

Parameters:

mask - true, to mask message
messageStr - string data

Returns:

WebSocketMessage

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
byte[] buffer,  
int offset,  
int len)
```

Create binary message

Parameters:

mask - true, to mask message
buffer - body buffer
offset - offset into body buffer
len - len of message

Returns:

WebSocketMessage

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
IFasterByteArrayOutputStream buffer,  
int offset,  
int len)
```

Create binary message

Parameters:

mask - true, to mask message
buffer - body buffer
offset - offset into body buffer
len - len of message

Returns:

WebSocketMessage

(continued from last page)

createMessageBinary

```
public static WebSocketMessage createMessageBinary(boolean mask,  
byte[] buffer)
```

Create binary message

Parameters:

mask - true, to mask message

buffer - body buffer

Returns:

WebSocketMessage

isControlMessage

```
public boolean isControlMessage()
```

Is message a control message

Returns:

true if control message (ping, ping, close...)

addBuffer

```
public void addBuffer(byte[] buffer,  
int offset,  
int len,  
boolean fragmented)
```

Used internally to add read TCP bytes into current pending message

Parameters:

buffer - buffer

offset - offset

len - len

fragmented - true, if fragmented

getType

```
public int getType()
```

Get message type, see OPCODE_*

Returns:

message type

isText

```
public boolean isText()
```

Is message text message

Returns:

true if text message

isBinary

```
public boolean isBinary()
```

(continued from last page)

Is binary message

Returns:

true if binary message

getCloseReason

```
public int getCloseReason()
```

If close message, get the close reason

Returns:

close reason (-1 if not close message or no reason)

getCloseReasonStr

```
public String getCloseReasonStr()
```

If close message, get the close reason str

Returns:

close reason str (null if not close message or no reason)

getValueString

```
public String getValueString()
```

If text message, get body as string

Returns:

get body as string

getBuffer

```
public byte[] getBuffer()
```

Get the raw binary message data (also need offset and len)

Returns:

raw binary message data

getOffset

```
public int getOffset()
```

Get offset into message buffer

Returns:

offset into message buffer

getLen

```
public int getLen()
```

Get len of message buffer data

Returns:

len of message buffer data

setType

```
public void setType(int type)
```

Set message type, see OPCODE_*

Parameters:

type - message type

sendMessage

```
public long sendMessage(IFasterByteArrayWriteReference out)
```

Internal method to send message over TCP connection

Parameters:

out - writer

Returns:

number of bytes written

toString

```
public String toString()
```

Get message as a string (use getValueString() to get the body value of text messages)

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