Video Streaming Statistics Service

This chapter describes the Video Streaming Statistics service, which returns video streaming statistics for individual WAEs, device groups, and for the WAAS network.

Note The video application accelerator is used only for WAAS Versions 5.5.1 and earlier.

This chapter contains the following sections:

- Video Streaming Statistics Service Syntax
- VIdeo Streaming Statistics Service Actions

Video Streaming Statistics Service Syntax

This section contains the following topics:

- Video Streaming Statistics Informational URLs
- Video Streaming Statistics Example Request
- Video Streaming Statistics Example Response

Video Streaming Statistics Informational URLs

This section provides informational URLs for the Video Streaming Statistics service.

- Service URL—https://<host/ip>:8443/ws/VideoStats
- WSDL URL—https://<host/ip>:8443/ws/VideoStats?wsdl
- To obtain a description of all the operations and parameters for the VideoStats Web Service, submit a URL to the service with the suffix **?wsdl** as follows:

  `https://<host/ip>:8443/ws/VideoStats?wsdl`

- To obtain management information using the Central Manager monitoring API, first call the service by using the service URL for this service as follows:

  `https://<host/ip>:8443/ws/VideoStats`

  Next, submit a SOAP request written in an XML format to retrieve the information.

Video Streaming Statistics Example Request

The following example shows an XML-formatted SOAP request to perform the **retrieveHistoricalStats** action. The request includes the input parameters for this particular action shown in bold. For more information, see retrieveHistoricalStats.

```
<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Header>
- <wsse:Security
xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.
xsd">
- <wsse:UsernameToken>
  <wsse:Username>admin</wsse:Username>
  <wsse:Password
Type="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-username-token-profile-1.0#P
asswordText">default</wsse:Password>
  </wsse:UsernameToken>
  </wsse:Security>
  </soapenv:Header>
- <soapenv:Body>
- <ns1:retrieveHistoricalStats xmlns:ns1="http://service.stats.ws.waas.cisco.com">
  <ns1:name>ce-119-40</ns1:name>
  <ns1:objType>wae</ns1:objType>
- <ns1:timeframe>
  <ns5:endTime
xmlns:ns5="http://util.ws.waas.cisco.com/xsd">2008-01-25T08:00:00.000Z</ns5:endTime>
  <ns5:frequency xmlns:ns5="http://util.ws.waas.cisco.com/xsd">lasthour</ns5:frequency>
  <ns5:startTime
xmlns:ns5="http://util.ws.waas.cisco.com/xsd">2008-01-24T08:00:00.000Z</ns5:startTime>
  <ns5:timezone xmlns:ns5="http://util.ws.waas.cisco.com/xsd">UTC</ns5:timezone>
  </ns1:timeframe>
  </ns1:retrieveHistoricalStats>
  </soapenv:Body>
  </soapenv:Envelope>
```

Video Streaming Statistics Example Response

The following example shows the XML response that contains the output values for the **retrieveHistoricalStats** action. For more information, see retrieveHistoricalStats.

```
<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Body>
- <ns:retrieveHistoricalStatsResponse xmlns:ns="http://service.stats.ws.waas.cisco.com"
xmlns:ax212="http://rmi.java/xsd" xmlns:ax213="http://io.java/xsd"
xmlns:ax215="http://stats.ws.waas.cisco.com/xsd"
xmlns:ax214="http://util.ws.waas.cisco.com/xsd">
- <ns:return type="com.cisco.waas.ws.stats.VideoStats">
  <ax215:acceleratedconnections>30</ax215:acceleratedconnections>
  <ax215:errorconnections>19</ax215:errorconnections>
  <ax215:frequency>min</ax215:frequency>
  <ax215:incomingbytesttotal>44</ax215:incomingbytesttotal>
  <ax215:outgoingbytestotal>29</ax215:outgoingbytestotal>
  <ax215:receivedconnections>84</ax215:receivedconnections>
  <ax215:savedpercent>51.0</ax215:savedpercent>
  <ax215:timestamp>2008-04-16T21:15:35.284Z</ax215:timestamp>
  <ax215:unacceleratedconnections>9</ax215:unacceleratedconnections>
```

```
            </ns:return>
          </ns:retrieveHistoricalStatsResponse>
        </soapenv:Body>
      </soapenv:Envelope>
```

VIdeo Streaming Statistics Service Actions

The Video Streaming Statistics service (VideoStats Web Service) performs one or more of the following actions:

- getAccelerationBypassReasons
- getActiveConnCount
- retrieveCurrentStats
- retrieveHistoricalStats

getAccelerationBypassReasons

Retrieves the overall acceleration bypass reason statistics.

Input Parameters

Parameter	Description
name	A string that describes the name of the WAE, WAE group, or system.
objType	A string that describes the object type. Valid values include the following: • wae • waegroup • system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **VideoAccelBypassReasons[]** returns a VideoAccelBypassReasons value that provides a list of video statistics.

Exceptions

Type	String	Description
RemoteException	VideoStatsService.getAccelerationBypassReasons: ERROR:Invalid name=	Unknown exception. See the logs to view the error.

getActiveConnCount

Retrieves the overall video active connection statistics collected.

Input Parameters

Parameter	Description
name	A string that describes the name of the WAE, WAE group, or system.
objType	A string that describes the object type. Valid values include the following: • wae • waegroup • system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter VideoActiveConnCount[] returns a VideoActiveConnCount value that provides a list of video active connection statistics.

Exceptions

Type	String	Description
RemoteException	VideoStatsService.getActiveConnCount: ERROR:Invalid name=	Unknown exception. See the logs to view the error.

retrieveCurrentStats

Retrieves the current video statistics collected for a stream which is specified by the URL on a WAE.

Input Parameters

Parameter	Description
name	A string that describes the name of the WAE.
objType	A string that describes the object type. Valid values include the following: • wae
url	A string that contains the URL of the stream for which statistics are requested. Wild cards are applicable.

Return

The output parameter **videostreamstats[]** returns a VideoStreamStats value that provides a list of URL stream statistics.

Exceptions

Type	String	Description
RemoteException	VideoStatsService.retrieveCurrentStats: ERROR:Invalid name=	The device name is invalid.
RemoteException	VideoStatsService.retrieveCurrentStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	VideoStatsService.retrieveCurrentStats: ERROR:Invalid URL	The URL is invalid.
AxisFault	VideoStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	VideoStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	VideoStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	retrieveCurrentStats:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.
RemoteException	VideoStatsService.retrieveCurrentStats: ERROR:Invalid url=	The UFL is blank or not specified in the filter.

retrieveHistoricalStats

Retrieves the overall video statistics collected on either a WAE device, WAEs within a device group, or all WAEs system wide.

Input Parameters

Parameter	Description
name	A string that describes the name of the WAE, WAE group, or system.
objType	A string that describes the object type. Valid values include the following: • wae • waegroup • system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **videostats[]** returns a VideoStats value that provides a list of video statistics.

Exceptions

Type	String	Description
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:Invalid name=	The device name is invalid.
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	VideoStatsService.retrieveHistoricalSta ts: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	VideoStatsService.retrieveHistorical Stats: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	VideoStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	VideoStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.

■ retrieveHistoricalStats

AxisFault	VideoStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	retrieveHistoricalStats:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.