CHAPTER **12**

SSL Statistics Service

This chapter describes the SSL service (SslStats Web Service) and the actions it performs. The SSL service returns SSL connection information and statistics for individual WAEs, device groups, and for the WAAS network as a whole.

This chapter contains the following sections:

- SSL Statistics Service Syntax
- SSL Statistics Service Actions

SSL Statistics Service Syntax

This section contains the following topics:

- SSL Statistics Informational URLs
- SSL Statistics Example Request
- SSL Statistics Example Response

SSL Statistics Informational URLs

This section provides informational URLs for the SSL Statistics service.

- Service URL—https://<host/ip>:8443/ws/SslStats
- WSDL URL—https://<host/ip>:8443/ws/SslStats?wsdl
- To obtain a description all of the operations and parameters for the SslStats service, submit a URL to the service with the suffix "?wsdl". For example:

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

- To obtain management information using the WAAS Central Manager Monitoring API, first call the service by using the service URL for this service. For example:

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

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

SSL Statistics Example Request

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

```
<?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>
- <ns3:getOptConnCount xmlns:ns3="http://service.stats.ws.waas.cisco.com">
  <ns3:name>ce-119-40</ns3:name>
  <ns3:objType>wae</ns3:objType>
- <ns3:timeframe>
  <ns2:endTime
xmlns:ns2="http://util.ws.waas.cisco.com/xsd">2008-01-30T08:00:00.000Z</ns2:endTime>
  <ns2:frequency xmlns:ns2="http://util.ws.waas.cisco.com/xsd">lasthour</ns2:frequency>
  <ns2:startTime
xmlns:ns2="http://util.ws.waas.cisco.com/xsd">2008-01-01T08:00:00.000Z</ns2:startTime>
  <ns2:timezone xmlns:ns2="http://util.ws.waas.cisco.com/xsd">UTC</ns2:timezone>
  </ns3:timeframe>
  </ns3:getOptConnCount>
  </soapenv:Body>
  </soapenv:Envelope>
```

SSL Statistics Example Response

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

```
<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Body>
- <ns:getOptConnCountResponse xmlns:ns="http://service.stats.ws.waas.cisco.com"
xmlns:ax218="http://util.ws.waas.cisco.com/xsd" xmlns:ax216="http://rmi.java/xsd"
xmlns:ax219="http://stats.ws.waas.cisco.com/xsd" xmlns:ax217="http://io.java/xsd">
- <ns:return type="com.cisco.waas.ws.stats.SSLOptConnCount">
  <ax219:endtime>2008-04-16T17:39:17.818Z</ax219:endtime>
  <ax219:optimized_connections>31</ax219:optimized_connections >
  <ax219:frequency>min</ax219:frequency>
  </ns:return>
- <ns:return type="com.cisco.waas.ws.stats.SSLOptConnCount">
  <ax219:endtime>2008-04-16T17:44:18.703Z</ax219:endtime>
  <ax219:optimized_connections >23</ax219:optimized_connections >
  <ax219:frequency>min</ax219:frequency>
  </ns:return>
  </ns:getOptConnCountResponse>
  </soapenv:Body>
```

```
</soapenv:Envelope>
```

SSL Statistics Service Actions

The SSL Statistics service (SslStats Web Service) performs one or more of the following actions:

- getActiveConnCount
- getBytesCount
- getErrorConnCount
- getOptConnCount
- getTotalConnCount
- getUnAccelConnCount

getActiveConnCount

Retrieves the overall SSL active connection 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 **SSLActiveConnCount []** returns an SSLActiveConnCount value that provides an array of SSL traffic dropped connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getActiveConnCount: ERROR:Unable to get SSLActiveConnCount=	Unknown exception. See the logs to view the error.

getBytesCount

Retrieves the total number of bytes read/written out on LAN and WAN. If a time interval is specified, the time frame will be divided into time slices. In each of the time slices, the connection count is calculated.

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 **SSLBytesCount []** returns an SSLBytesCount value that provides an array of SSL traffic dropped connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SSLStatsService.getBytesCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	SSLStatsService.getBytesCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.

getBytesCount

AxisFault	SSLStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SSLStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SSLStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getBytesCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getErrorConnCount

Retrieves the total number of dropped SSL connections. If a time interval is specified, the time frame will be divided into time slices. In each of the time slices, the connection count is calculated.

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 **SSLErrorConnCount []** returns an SSLErrorConnCount value that provides an array of SSL traffic dropped connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	SSLStatsService.getErrorConnCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.

■ **getErrorConnCount**

AxisFault	SSLStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SSLStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SSLStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getErrorConnCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getOptConnCount

Retrieves the number of optimized SSL connections. If a time interval is specified, the time frame will be divided into time slices. In each time slice, the connection count is calculated.

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 **SSLOptConnCount []** returns an SSLOptConnCount value that provides an array of SSL traffic optimized connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	SSLStatsService.getOptConnCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.

■ **getOptConnCount**

AxisFault	SSLStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SSLStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SSLStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getOptConnCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getTotalConnCount

Retrieves the total number of SSL connections. If a time interval is specified, the time frame will be divided into time slices. In each of the time slices, the connection count is calculated.

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 **SSLTotalConnCount []** returns an SSLTotalConnCount value that provides an array of SSL traffic total connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	SSLStatsService.getTotalConnCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.

AxisFault	SSLStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SSLStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SSLStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getTotalConnCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getUnAccelConnCount

Retrieves the number of unaccelerated SSL connections. If a time interval is specified, the time frame will be divided into time slices. In each of the time slices, the connection count is calculated.

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 **SSLUnAccelConnCount []** returns an SSLUnAccelConnCount value that provides an array of SSL traffic unaccelerated connection statistics.

Exceptions

Type	String	Description
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:Invalid endTime=	The end time is invalid.
RemoteException	SSLStatsService.getUnAccelConnCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.

getUnAccelConnCount

AxisFault	SSLStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SSLStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SSLStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getUnAccelConnCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.