



CHAPTER 6

HTTP Statistics Service

This chapter describes the HTTP Statistics service, which returns HTTP connection information and statistics for individual WAEs, device groups, and for the WAAS network.

The HTTP service (HttpStats Web Service) performs one or more of the following actions:

- [getOptConnCount](#)
- [getTotalConnCount](#)
- [getMaxConnReuseCount](#)
- [getConnOptRate](#)
- [retrieveStats](#)

Syntax

Service URL: `https://<host/ip>:8443/ws/HttpStats`

WSDL URL: `https://<host/ip>:8443/ws/HttpStats?wsdl`

To obtain a description of all the operations and parameters for the HttpStats Web Service, submit a URL to the service with the suffix **?wsdl** as follows:

```
https://<host/ip>:8443/ws/HttpStats?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/HttpStats
```

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

The following example shows an XML-formatted SOAP request perform the [getOptConnCount](#) action. The request includes the input parameters for this particular action shown in bold. The next example shows the XML response that contains the output values for this action.

Example Request

```
<?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>

```

Example Response

```

<?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.HttpOptConnCount">
  <ax219:endtime>2008-04-16T17:39:17.818Z</ax219:endtime>
  <ax219:fastConnectionSetupsCount>31</ax219:fastConnectionSetupsCount>
  <ax219:frequency>min</ax219:frequency>
</ns:return>
- <ns:return type="com.cisco.waas.ws.stats.HttpOptConnCount">
  <ax219:endtime>2008-04-16T17:44:18.703Z</ax219:endtime>
  <ax219:fastConnectionSetupsCount>23</ax219:fastConnectionSetupsCount>
  <ax219:frequency>min</ax219:frequency>
</ns:return>
</ns:getOptConnCountResponse>
</soapenv:Body>
</soapenv:Envelope>

```

getOptConnCount

Retrieves the number of optimized HTTP connections for a WAE, WAE group, or all WAEs system wide. If you specify a time interval, the timeframe is divided into time segments. The connection count is calculated for each segment of time.

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: <ul style="list-style-type: none"> • wae • waegroup • system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **HttpOptConnCount[]** returns a [HttpOptConnCount](#) value that provides an array of HTTP traffic optimized connection statistics.

Exceptions

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

AxisFault	HttpStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	HttpStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	HttpStats: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 HTTP connections for a WAE, WAE group, or all WAEs system wide. If you specify a time interval, the timeframe is divided into time segments. The connection count is calculated for each segment of time.

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: <ul style="list-style-type: none"> wae waegroup system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **HttpTotalConnCount[]** returns a [HttpTotalConnCount](#) value that provides an array of HTTP traffic total connection statistics.

Exceptions

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

AxisFault	HttpStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	HttpStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	HttpStats: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.

getMaxConnReuseCount

Retrieves the maximum reuse count of a single connection.

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: <ul style="list-style-type: none"> wae waegroup system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **HttpMaxConnReuseCount[]** returns a [HttpMaxConnReuseCount](#) value that provides the maximum reuse count of a single connection.

Exceptions

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

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

getConnOptRate

Retrieves an estimate of the connection setup time saved by HTTP AO as a function of the connection reuse and round-trip time (RTT) for establishing the original connection.

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: <ul style="list-style-type: none"> • wae • waegroup • system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **HttpConnOptRate[]** returns a [HttpConnOptRate](#) value that provides the percentage that the optimized connection time saved.

Exceptions

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

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

retrieveStats

Retrieves the HTTP connection statistics, such as response times and counts per operation.

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: <ul style="list-style-type: none"> wae waegroup system
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **HttpConnStats[]** returns a [HttpConnStats](#) value that provides the response time, counter per operation, and other statistics.

Exceptions

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

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