



## SMB Statistics Service

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This chapter describes the SMB Statistics service, which returns SMB accelerator data and statistics for individual WAEs, device groups, and for the WAAS network.

This chapter contains the following sections:

- [SMB Statistics Syntax](#)
- [SMB Statistics Service Actions](#)

### SMB Statistics Syntax

This section contains the following topics:

- [SMB Statistics Informational URLs](#)
- [SMB Statistics Example Request](#)
- [SMB Statistics Example Response](#)

### SMB Statistics Informational URLs

This section provides informational URLs for the SMB Statistics service.

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

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

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

## SMB Statistics Example Request

The following example shows an XML-formatted SOAP request to perform the **getConnOptRate** action. The request includes the input parameters for this particular action shown in bold. For more information on this action, see [getConnOptRate](#).

```
<?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>
- <ns2:getConnOptRate xmlns:ns2="http://service.stats.ws.waas.cisco.com">
  <ns2:name>ce-119-40</ns2:name>
  <ns2:objType>wae</ns2:objType>
- <ns2:timeframe>
  <ns1:endTime
xmlns:ns1="http://util.ws.waas.cisco.com/xsd">2008-01-30T08:00:00.000Z</ns1:endTime>
  <ns1:frequency xmlns:ns1="http://util.ws.waas.cisco.com/xsd">lasthour</ns1:frequency>
  <ns1:startTime
xmlns:ns1="http://util.ws.waas.cisco.com/xsd">2012-04-16T17:59:24.000Z</ns1:startTime>
  <ns1:timezone xmlns:ns1="http://util.ws.waas.cisco.com/xsd">UTC</ns1:timezone>
</ns2:timeframe>
</ns2:getConnOptRate>
</soapenv:Body>
</soapenv:Envelope>
```

## SMB Statistics Example Response

The following example shows the XML response that contains the output values for the **getConnOptRate** action. For more information on this action, see [getConnOptRate](#).

```
<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Body>
- <ns:getConnOptRateResponse xmlns:ns="http://service.stats.ws.waas.cisco.com"
xmlns:ax225="http://io.java/xsd" xmlns:ax227="http://stats.ws.waas.cisco.com/xsd"
xmlns:ax226="http://util.ws.waas.cisco.com/xsd" xmlns:ax224="http://rmi.java/xsd">
- <ns:return type="com.cisco.waas.ws.stats.SmbConnOptRate">
  <ax227:averageTimeSaved>69</ax227:averageTimeSaved>
  <ax227:deviceName>someName</ax227:deviceName>
  <ax227:endTime>2012-04-16T17:59:26.628Z</ax227:endtime>
  <ax227:frequency>min</ax227:frequency>
</ns:return>
</ns:getConnOptRateResponse>
</soapenv:Body>
</soapenv:Envelope>
```

# SMB Statistics Service Actions

The SMB Statistics (SMB Web Service) performs one or more of the following actions:

- [getConnOptCount](#)
- [getConnOptRate](#)
- [getConnOptSavingsByType](#)
- [getRequestOptStats](#)
- [getTotalConnCount](#)
- [retrieveStats](#)

# getConnOptCount

Retrieves a count of the number of SMB optimized connections.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbOptConnCount[]** returns a [SmbOptConnCount](#) value that provides the total number of optimized connections.

## Exceptions

Type	String	Description
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SmbStatsService.getConnOptCount: ERROR:Invalid endTime=	The end time is invalid.

RemoteException	SmbStatsService.getConnOptCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getConnOptCount:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

# getConnOptRate

Retrieves the average amount of time saved due to SMB AO optimizations.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbConnOptRate[]** returns a [SmbConnOptRate](#) value that provides the average amount of time saved.

## Exceptions

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

RemoteException	SmbStatsService.getConnOptRate: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats: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.

# getConnOptSavingsByType

Retrieves information about how much time was saved for different types of data optimizations.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbConnOptSavings[]** returns a [SmbConnOptSavings](#) value that provides information about the amount of time saved for different operation types, including meta data, named pipe, MS Office, and read-ahead traffic.

## Exceptions

Type	String	Description
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid name=	The device name is invalid.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:Invalid endTime=	The end time is invalid.



RemoteException	SmbStatsService.getConnOptSavingsByType: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getConnOptSavingsByType:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

# getRequestOptStats

Retrieves statistics about the SMB optimization rates for various SMB optimization techniques.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbRequestOptStats[]** returns a [SmbRequestOptStats](#) value that provides optimization rates for metadata, read-ahead, write, and other requests.

## Exceptions

Type	String	Description
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid name=	The device name is invalid.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	SmbStatsService.getRequestOptStats: ERROR:Invalid endTime=	The end time is invalid.

RemoteException	SmbStatsService.getRequestOptStats: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats:The Requested WebService is not available	The service requested is not supported.
AxisFault	getRequestOptStats:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

# getTotalConnCount

Retrieves a count of the number of SMB LAN connections.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbTotalConnCount[]** returns a [SmbTotalConnCount](#) value that provides the total number of LAN connections.

## Exceptions

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

RemoteException	SmbStatsService.getTotalConnCount: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats: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.

# retrieveStats

Retrieves SMB connection statistics collected on either a WAE device, WAEs within a device group, or all WAEs system wide.

## Input Parameters

Parameter	Description
<b>name</b>	A string that describes the name of the WAE, WAE group, or system.
<b>objType</b>	A string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> <li>• wae</li> <li>• waegroup</li> <li>• device</li> <li>• devicegroup</li> <li>• system</li> </ul>
<b>timeframe</b>	A <a href="#">TimeFrameFilter</a> value that includes the time interval, time zone, and frequency.

## Return

The output parameter **SmbConnStats[]** returns a [SmbConnStats](#) value that provides statistics including the number of currently active connections, and the total number of dropped, handled, and optimized connections.

## Exceptions

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

RemoteException	SmbStatsService.retrieveStats: ERROR:startTime should be less than endTime startTime=	The start time is less than the end time.
AxisFault	SmbStats:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	SmbStats:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	SmbStats: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.

