



MAPI Statistics Service

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

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- [MAPI Statistics Service Syntax](#)
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MAPI Statistics Service Syntax

This section contains the following topics:

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

MAPI Statistics Informational URLs

This section provides informational URLs for the MAPI Statistics service.

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

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

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

MAPI Statistics Example Request

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

```
<?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:retrieveDataReadStats 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">2008-01-31T08:00:00.000Z</ns1:startTime>
  <ns1:timezone xmlns:ns1="http://util.ws.waas.cisco.com/xsd">UTC</ns1:timezone>
</ns2:timeframe>
</ns2:retrieveDataReadStats>
</soapenv:Body>
</soapenv:Envelope>
```

MAPI Statistics Example Response

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

```
<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Body>
- <ns:retrieveDataReadStatsResponse 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.MapiDataReadStats">
  <ax227:avgReadAhead>39</ax227:avgReadAhead>
  <ax227:avgReadStream>97</ax227:avgReadStream>
  <ax227:avgSyncGetBuffer>29</ax227:avgSyncGetBuffer>
  <ax227:endtime>2008-04-16T17:59:26.628Z</ax227:endtime>
  <ax227:frequency>min</ax227:frequency>
  <ax227:maxReadAhead>69</ax227:maxReadAhead>
  <ax227:maxReadStream>21</ax227:maxReadStream>
  <ax227:maxSyncGetBuffer>31</ax227:maxSyncGetBuffer>
  <ax227:minReadAhead>67</ax227:minReadAhead>
  <ax227:minReadStream>36</ax227:minReadStream>
```

```
<ax227:minSyncGetBuffer>92</ax227:minSyncGetBuffer>
</ns:return>
</ns:retrieveDataReadStatsResponse>
</soapenv:Body>
</soapenv:Envelope>
```

MAPI Statistics Service Actions

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

- [getDroppedConnCount](#)
- [getOptConnCount](#)
- [getSessionCount](#)
- [getUnaccelConnCount](#)
- [retrieveClientConnCount](#)
- [retrieveClientSecuredConnCount](#)
- [retrieveDataReadStats](#)
- [retrieveEncAndNonEncResponseStats](#)
- [retrieveEncryptedAndNonEncryptedOptimizedConnCount](#)
- [retrieveRequestTypeStats](#)
- [retrieveResponseStats](#)

getDroppedConnCount

Retrieves a list of dropped connection counts.

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 **MapiDroppedConnCount[]** returns a [MapiDroppedConnCount](#) value that provides dropped connection counts.

Exceptions

Type	String	Description
RemoteException	MapiStatsService.getDroppedConnCount: ERROR:Unable to get MapiDroppedConnCount=	Unknown exception. See the logs to view the error.

getOptConnCount

Retrieves a list of optimized connection counts.

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 **MapiOptConnCount[]** returns a [MapiClientSecuredConnCount](#) value that provides optimized connection counts.

Exceptions

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

getSessionCount

Retrieves the number of MAPI sessions completed 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 **MapiSessionCount[]** returns a [HttpsStats](#) value that provides the number of sessions completed.

Exceptions

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

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

getUnaccelConnCount

Retrieves a list of unaccelerated connection counts.

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 **MapiUnaccelConnCount[]** returns a [MapiUnaccelConnCount](#) value that provides unaccelerated connection counts.

Exceptions

Type	String	Description
RemoteException	MapiStatsService.getUnaccelConnCount: ERROR:Unable to get MapiUnaccelConnCount=	Unknown exception. See the logs to view the error.

retrieveClientConnCount

Retrieves the number of past connections from each client type 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 **MapiClientConnCount[]** returns a [MapiClientConnCount](#) value that provides the number of past connections from each client type.

Exceptions

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

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

retrieveClientSecuredConnCount

Retrieves the number of secured client connections from each Outlook version 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 **MapiClientSecuredConnCount[]** returns [MapiClientSecuredConnCount](#) value that provides the count of encrypted client connections for each version of Outlook.

Exceptions

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

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

retrieveDataReadStats

Retrieves the MAPI date read 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 **MapiDataReadStats[]** returns a [MapiDataReadStats](#) value that provides the minimum, maximum, and average size of the SynchronizationGetBuffer, the ReadStream, and the accumulated read ahead.

Exceptions

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

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

retrieveEncAndNonEncResponseStats

Retrieves encrypted and unencrypted connection count and response time information.

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 **MAPIEncAndNonEncResponseStats[]** returns a [MapiEncAndNonEncResponseStats](#) value that specifies the number of encrypted and unencrypted connections, along with the average local and response times for encrypted and unencrypted connections.

Exceptions

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

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

retrieveEncryptedAndNonEncryptedOptimizedConnCount

Retrieves counts of the encrypted and unencrypted connections optimized by the MAPI Application Optimizer.

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 **MAPIEncAndNonEncOptimizedConnCount[]** returns a [MapiEncAndNonEncOptimizedConnCount](#) value that provides the number of encrypted and unencrypted connections that have been optimized by the MAPI AO.

Exceptions

Type	String	Description
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Invalid name=	The device name is invalid.
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Device does not exist.DeviceName=	The device name is not found.
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Device Group does not exist.DeviceGroup=	The device group name is not found.
RemoteException	MapiStatsService.retrieveEncryptedAndNonEncryptedOptimizedConnCount: ERROR:Invalid frequency=	The frequency is invalid.

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

retrieveRequestTypeStats

Retrieves the MAPI request type 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 **MapiRequestTypeStats[]** returns a [MapiRequestTypeStats](#) value that provides the request type statistics.

Exceptions

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

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

retrieveResponseStats

Retrieves the MAPI response 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 **MapiResponseStats[]** returns a [MapiResponseStats](#) value that provides the number of local and remote responses, the average local response time, and the average remote response time.

Exceptions

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

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