



NFS Statistics Service

This chapter describes the Network File System (NFS) service, which returns NFS data and statistics for individual WAEs, device groups, and for the Cisco WAAS network.

This chapter contains the following sections:

- [NFS Statistics Service Syntax, on page 1](#)
- [NFS Statistics Service Actions, on page 3](#)

NFS Statistics Service Syntax

This section contains the following topics:

NFS Statistics Informational URLs

This section provides informational URLs for the NFS Statistics service.

- Service URL: **https:// <host/ip> :8443/ws/ NfsStats**
- WSDL URL: **https:// <host/ip> :8443/ws/ NfsStats?wsdl**

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

https://<host/ip>:8443/ws/NfsStats?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/NfsStats

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

NFS Statistics Example Request

The following example shows an XML-formatted SOAP request to perform the `retrieveResponseStats` action. The request includes the input parameters for this action shown in bold.

```
<?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#PasswordText">default</wsse:Password>

  </wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
- <soapenv:Body>
- <ns3:retrieveResponseStats
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:retrieveResponseStats>
</soapenv:Body>
</soapenv:Envelope>

```

NFS Statistics Example Response

The following example shows the XML response that contains the output values for the **retrieveResponseStats** action.

```

<?xml version="1.0" encoding="utf-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope">
- <soapenv:Body>
- <ns:retrieveResponseStatsResponse xmlns:ns="http://service.stats.ws.waas.cisco.com"
xmlns:ax220="http://rmi.java/xsd" xmlns:ax223="http://stats.ws.waas.cisco.com/xsd"
xmlns:ax221="http://io.java/xsd" xmlns:ax222="http://util.ws.waas.cisco.com/xsd">
- <ns:return type="com.cisco.waas.ws.stats.NfsRespTypeStats">
  <ax223:avgLocalResp
>52</ax223:avgLocalResp>
  <ax223:avgRemoteResp
>98</ax223:avgRemoteResp>
  <ax223:endtime
>2008-04-16T18:09:28.449Z</ax223:endtime>
  <ax223:frequency
>min</ax223:frequency>
  <ax223:localResp
>36</ax223:localResp>
  <ax223:remoteResp
>77</ax223:remoteResp>
</ns:return>
</ns:retrieveResponseStatsResponse>
</soapenv:Body>
</soapenv:Envelope>

```

NFS Statistics Service Actions

The NFS service (NfsStats Web Service) performs one or more of the following actions:

- getDroppedConnCount
- getOptConnCount
- getSessionCount
- getUnaccelConnCount
- retrieveNfsTypeStats
- 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: <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 **NfsDroppedConnCount[]** returns a NfsDroppedConnCount value that provides the number of dropped connections.

Exceptions

| Type | String | Description |
|-----------------|--|--|
| RemoteException | NfsStatsService.getDroppedConnCount:ERROR:Unable to get NfsDroppedConnCount= | 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: <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 **NfsOptConnCount[]** returns a NfsOptConnCount value that provides the number of connections optimized.

Exceptions

| Type | String | Description |
|-----------------|--|--|
| RemoteException | NfsStatsService.getOptConnCount:ERROR:Unable to get NfsOptConnCount= | Unknown exception. See the logs to view the error. |

getSessionCount

Retrieves the number of NFS 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: <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 **NfsSessionCount[]** returns a NfsSessionCount value that provides the number of sessions completed.

Exceptions

| Type | String | Description |
|-----------------|--|--|
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid name= | The device name is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid objType= | The object type name is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid TimeFrame | The timeframe is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Device does not exist.DeviceName= | The device name is not found. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Device Group does not exist.DeviceGroup= | The device group name is not found. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid frequency= | The frequency is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid startTime= | The start time is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:Invalid endTime= | The end time is invalid. |
| RemoteException | NfsStatsService.getSessionCount: ERROR:startTime should be less than endTime startTime= | The start time is less than the end time. |
| AxisFault | NfsStats:The Method Name is not supported. MethodName= | The method name is not supported for a given service. |
| AxisFault | NfsStats:The SOAP Envelope Body is Null | The SOAP envelope is missing for a given service. |
| AxisFault | NfsStats: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. |

| Parameter | Description |
|------------------|--|
| 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 **NfsUnaccelConnCount[]** returns a NfsUnaccelConnCount value that provides the number of unaccelerated connections.

Exceptions

| Type | String | Description |
|-----------------|--|--|
| RemoteException | NfsStatsService.getUnaccelConnCount:ERROR:Unable to get NfsUnaccelConnCount= | Unknown exception. See the logs to view the error. |

retrieveNfsTypeStats

Retrieves the number of packets per NFS 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: <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 **NfsTypeStats[]** returns a NfsSessionCount value that provides the number of packets of the NFS version.

Exceptions

| Type | String | Description |
|-----------------|--|-----------------------------|
| RemoteException | NfsStatsService.retrieveNfsTypeStats:ERROR:Invalid name= | The device name is invalid. |

| Type | String | Description |
|-----------------|--|---|
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Invalid objType= | The object type name is invalid. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Invalid TimeFrame | The timeframe is invalid. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Device does not exist.DeviceName= | The device name is not found. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Device Group does not exist.DeviceGroup= | The device group name is not found. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Invalid frequency= | The frequency is invalid. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Invalid startTime= | The start time is invalid. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:Invalid endTime= | The end time is invalid. |
| RemoteException | NfsStatsService.retrieveNfsTypeStats: ERROR:startTime should be less than endTime startTime= | The start time is less than the end time. |
| AxisFault | NfsStats:The Method Name is not supported. MethodName= | The method name is not supported for a given service. |
| AxisFault | NfsStats:The SOAP Envelope Body is Null | The SOAP envelope is missing for a given service. |
| AxisFault | NfsStats:The Requested WebService is not available | The service requested is not supported. |
| AxisFault | retrieveNfsTypeStats:The SOAP Body doesn't have all the required elements | The SOAP body does not have all the required elements. |

retrieveRequestTypeStats

Retrieves the NFS 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. |

| Parameter | Description |
|------------------|--|
| 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 **NfsRequestTypeStats[]** returns a NfsReqTypeStats value that provides the request type statistics.

Exceptions

| Type | String | Description |
|-----------------|--|---|
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid name= | The device name is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid objType= | The object type name is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid TimeFrame | The timeframe is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Device does not exist.DeviceName= | The device name is not found. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Device Group does not exist.DeviceGroup= | The device group name is not found. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid frequency= | The frequency is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid startTime= | The start time is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:Invalid endTime= | The end time is invalid. |
| RemoteException | NfsStatsService.retrieveRequestTypeStats: ERROR:startTime should be less than endTime startTime= | The start time is less than the end time. |
| AxisFault | NfsStats:The Method Name is not supported. MethodName= | The method name is not supported for a given service. |
| AxisFault | NfsStats:The SOAP Envelope Body is Null | The SOAP envelope is missing for a given service. |

| Type | String | Description |
|-----------|---|--|
| AxisFault | NfsStats: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 NFS 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: <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 **NfsRespTypeStats[]** returns a NfsRespTypeStats 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 | NfsStatsService.retrieveResponseStats: ERROR:Invalid name= | The device name is invalid. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Invalid objType= | The object type name is invalid. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Invalid TimeFrame | The timeframe is invalid. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Device does not exist.DeviceName= | The device name is not found. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Device Group does not exist.DeviceGroup= | The device group name is not found. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Invalid frequency= | The frequency is invalid. |

| Type | String | Description |
|-----------------|---|--|
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Invalid startTime= | The start time is invalid. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:Invalid endTime= | The end time is invalid. |
| RemoteException | NfsStatsService.retrieveResponseStats: ERROR:startTime should be less than endTime startTime= | The start time is less than the end time. |
| AxisFault | NfsStats:The Method Name is not supported. MethodName= | The method name is not supported for a given service. |
| AxisFault | NfsStats:The SOAP Envelope Body is Null | The SOAP envelope is missing for a given service. |
| AxisFault | NfsStats: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. |