



CHAPTER 5

AppNav Statistics Service

This chapter describes the AppNav Statistics service, which returns AppNav data and statistics for AppNav controllers and clusters.

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

- [retrieveAppNavPassthroughStats](#)
- [retrieveAppNavPolicyStats](#)
- [retrieveOverallAppNavPolicyStats](#)
- [retrieveWNGDistributionStats](#)

Note that you can request statistics for multiple clusters/controller in any of the above requests.

Syntax

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

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

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

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

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

The following example shows an XML-formatted SOAP request to perform the `retrieveAppNavPolicyStats` 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

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ser="http://service.stats.ws.waas.cisco.com"
xmlns:xsd="http://util.ws.waas.cisco.com/xsd">
<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>default</wsse:Password>
</wsse:UsernameToken>
</wsse:Security>
</soapenv:Header>
  <soapenv:Body>
    <ser:retrieveOverallAppNavPolicyStats>
      <!--Zero or more repetitions:-->
      <ser:name>one</ser:name>
      <!--Optional:-->
      <ser:objType>cluster</ser:objType>
      <!--Optional:-->
      <ser:timeframe>
        <!--Optional:-->
        <xsd:endTime>2012-05-23T09:40:00.000Z</xsd:endTime>
        <!--Optional:-->
        <xsd:frequency>lasthour</xsd:frequency>
        <!--Optional:-->
        <xsd:startTime>2012-05-23T08:45:00.000Z</xsd:startTime>
        <!--Optional:-->
        <xsd:timezone>UTC</xsd:timezone>
      </ser:timeframe>
    </ser:retrieveOverallAppNavPolicyStats>
  </soapenv:Body>
</soapenv:Envelope>

```

Example Response

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Body>
    <ns:retrieveOverallAppNavPolicyStatsResponse
xmlns:ns="http://service.stats.ws.waas.cisco.com" xmlns:ax246="http://rmi.java/xsd"
xmlns:ax248="http://util.ws.waas.cisco.com/xsd" xmlns:ax247="http://io.java/xsd"
xmlns:ax249="http://stats.ws.waas.cisco.com/xsd">
      <ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
        <ax249:endtime>2012-05-23T08:55:00.000Z</ax249:endtime>
        <ax249:frequency>min</ax249:frequency>
        <ax249:interceptedTraffic>143510</ax249:interceptedTraffic>
        <ax249:name>one</ax249:name>
        <ax249:passthroughTraffic>56653</ax249:passthroughTraffic>
        <ax249:redirectedTraffic>86857</ax249:redirectedTraffic>
        <ax249:starttime>2012-05-23T08:50:00.000Z</ax249:starttime>
      </ns:return>
      <ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
        <ax249:endtime>2012-05-23T09:00:00.000Z</ax249:endtime>
        <ax249:frequency>min</ax249:frequency>
        <ax249:interceptedTraffic>136555</ax249:interceptedTraffic>
        <ax249:name>one</ax249:name>
        <ax249:passthroughTraffic>56524</ax249:passthroughTraffic>
        <ax249:redirectedTraffic>80031</ax249:redirectedTraffic>
        <ax249:starttime>2012-05-23T08:55:00.000Z</ax249:starttime>
      </ns:return>
      <ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
        <ax249:endtime>2012-05-23T09:05:00.000Z</ax249:endtime>
        <ax249:frequency>min</ax249:frequency>
        <ax249:interceptedTraffic>164320</ax249:interceptedTraffic>
        <ax249:name>one</ax249:name>
        <ax249:passthroughTraffic>67784</ax249:passthroughTraffic>
        <ax249:redirectedTraffic>96536</ax249:redirectedTraffic>
        <ax249:starttime>2012-05-23T09:00:00.000Z</ax249:starttime>
      </ns:return>
      <ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
        <ax249:endtime>2012-05-23T09:10:00.000Z</ax249:endtime>
        <ax249:frequency>min</ax249:frequency>

```

```

    <ax249:interceptedTraffic>151656</ax249:interceptedTraffic>
    <ax249:name>one</ax249:name>
    <ax249:passthroughTraffic>50856</ax249:passthroughTraffic>
    <ax249:redirectionTraffic>100800</ax249:redirectionTraffic>
    <ax249:starttime>2012-05-23T09:05:00.000Z</ax249:starttime>
  </ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:15:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>169249</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>70901</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>98348</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:10:00.000Z</ax249:starttime>
</ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:20:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>160204</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>67593</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>92611</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:15:00.000Z</ax249:starttime>
</ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:25:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>161264</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>71680</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>89584</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:20:00.000Z</ax249:starttime>
</ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:30:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>100226</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>39049</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>61177</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:25:00.000Z</ax249:starttime>
</ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:35:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>143822</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>56865</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>86957</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:30:00.000Z</ax249:starttime>
</ns:return>
<ns:return type="com.cisco.waas.ws.stats.AppNavOverallStats">
  <ax249:endtime>2012-05-23T09:40:00.000Z</ax249:endtime>
  <ax249:frequency>min</ax249:frequency>
  <ax249:interceptedTraffic>109224</ax249:interceptedTraffic>
  <ax249:name>one</ax249:name>
  <ax249:passthroughTraffic>49786</ax249:passthroughTraffic>
  <ax249:redirectionTraffic>59438</ax249:redirectionTraffic>
  <ax249:starttime>2012-05-23T09:35:00.000Z</ax249:starttime>
</ns:return>
</ns:retrieveOverallAppNavPolicyStatsResponse>
</soapenv:Body>
</soapenv:Envelope>

```

retrieveAppNavPassthroughStats

Retrieves the pass-through statistics collected on an AppNav controller or cluster.

Input Parameters

Parameter	Description
name	An array of ser:name elements, each of which is a string that describes the name of the AppNav controller or cluster.
objType	An array of ser:objType elements, each of which is a string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> controller cluster
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **appNavPTStats[]** returns a [AppNavPTStats](#) value that provides pass-through statistics.

Exceptions

Type	String	Description
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Invalid name=	The controller or cluster name is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Device does not exist.DeviceName=	The controller name is not found.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Cluster does not exist.Cluster=	The cluster name is not found.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPassthroughStats: ERROR:Invalid startTime=	The start time is invalid.

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

retrieveAppNavPolicyStats

Retrieves the AppNav controller or cluster statistics for a specified policy map/class map pair, including the intercepted, distributed, and pass-through traffic for the default policy for that pair.

Input Parameters

Parameter	Description
name	An array of ser:name elements, each of which is a string that describes the name of the AppNav controller or cluster.
objType	An array of ser:objType elements, each of which is a string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> controller cluster
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.
policyMapName	A string that describes the name of the policy map.
classMapName	A string that describes the name of the class map.

Return

The output parameter **AppNavStats[]** returns a [AppNavStats](#) value that provides information about the intercepted traffic, pass-through traffic, and redirected traffic for the specified policy map/class map pair.

Exceptions

Type	String	Description
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid name=	The controller or cluster name is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Device does not exist.DeviceName=	The controller name is not found.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Cluster does not exist.Cluster=	The cluster name is not found.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid startTime=	The start time is invalid.
RemoteException	AppNavStatsService.retrieveAppNavPolicyStats: ERROR:Invalid endTime=	The end time is invalid.

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

retrieveOverallAppNavPolicyStats

Retrieves the overall AppNav controller or cluster statistics, including the intercepted, distributed, and pass-through traffic for the default policy.

Input Parameters

Parameter	Description
name	An array of ser:name elements, each of which is a string that describes the name of the AppNav controller or cluster.
objType	An array of ser:objType elements, each of which is a string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> controller cluster
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.

Return

The output parameter **AppNavOverallStats[]** returns a [AppNavOverallStats](#) value that provides overall traffic information for the controller or cluster.

Type	String	Description
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Invalid name=	The controller or cluster name is invalid.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Device does not exist.DeviceName=	The controller name is not found.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Cluster does not exist.Cluster=	The cluster name is not found.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Invalid frequency=	The frequency is invalid.
RemoteException	AppNavStatsService.retrieveOverallAppNavPolicyStats: ERROR:Invalid startTime=	The start time is invalid.

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

retrieveWNGDistributionStats

Retrieves AppNav controller received and redirected data statistics for a specified WAAS Node Group.

Input Parameters

Parameter	Description
name	An array of ser:name elements, each of which is a string that describes the name of the AppNav controller or cluster.
objType	An array of ser:objType elements, each of which is a string that describes the object type. Valid values include the following: <ul style="list-style-type: none"> controller cluster
timeframe	A TimeFrameFilter value that includes the time interval, time zone, and frequency.
wngName	A string that describes the name of the WAAS Node Group.

Return

The output parameter **AppNavRedStats[]** returns a [AppNavRedStats](#) value that provides information about the number of received and redirected bytes for the specified WAAS Node Group.

Exceptions

Type	String	Description
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Invalid name=	The controller, cluster, or WNG name is invalid.
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Invalid objType=	The object type name is invalid.
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Invalid TimeFrame	The timeframe is invalid.
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Device does not exist.DeviceName=	The controller name is not found.
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Cluster does not exist.Cluster=	The cluster name is not found.
RemoteException	AppNavStatsService.retrieveWNGDistributionStats: ERROR:Invalid frequency=	The frequency is invalid.

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

