Device Configuration Service

This chapter describes the Device Configuration service, which returns device statistics for WAEs and Cisco WAAS Central Managers.

This chapter contains the following sections:

Device Configuration Service Syntax

This section contains the following topics:

Device Configuration Informational URLs

This section provides informational URLs for the Device Configuration service.

- Service URL: **https://<host/ip>:8443/ws/DeviceConf**

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

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

  - **https://<host/ip>:8443/ws/DeviceConf?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/DeviceConf

    Next, send a SOAP request written in an XML format to retrieve the information. The request calls for a particular action (such as getWanInfo) and contains the WS-Security header (username and password) and the input parameter content when required.

Device Configuration Example Request

The following example shows an XML-formatted SOAP request to perform the getWANInfo action. There are no input parameters for this particular action. For more information on this action, see #unique_25 unique_25_Connect_42__1066428.

```
  <?xml version="1.0" encoding="UTF-8" ?>
- <SOAP-ENV:Envelope SOAP-ENV:encodingStyle="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/1999/XMLSchema-instance"
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsd="http://www.w3.org/1999/XMLSchema">
- <SOAP-ENV:Header xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401
-wss-wssecurity-secext-1.0.xsd">
- <wsse:Security SOAP-ENC:root="1">
- <wsse:UsernameToken>
  <wsse:Username xsi:type="xsd:string">admin</wsse:Username>
  <wsse:Password xsi:type="xsd:string">default</wsse:Password>
  </wsse:UsernameToken>
  </wsse:Security>
  </SOAP-ENV:Header>
- <SOAP-ENV:Body>
  <ns1:getWANInfo
 xmlns:ns1="http://config.ws.waas.cisco.com" SOAP-ENC:root="1" />
  </SOAP-ENV:Body>
  </SOAP-ENV:Envelope>
```

Device Configuration Example Response

The following example shows the XML response that contains the output values for the getWANInfo action, such as the hostname, IP address, location, and MAC address. For more information on this action, see #unique_27 unique_27_Connect_42__1066428.

```
  <?xml version="1.0" encoding="UTF-8" ?>
- <soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
- <soapenv:Body>
- <ns:getWANInfoResponse
 xmlns:ns="http://config.ws.waas.cisco.com" xmlns:ax22="http://io.java/xsd"
xmlns:ax23="http://config.ws.waas.cisco.com/xsd" xmlns:ax21="http://rmi.java/xsd">
- <ns:return type="com.cisco.waas.ws.config.Device">
  <ax23:hostName
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true" />
  <ax23:id
>157</ax23:id>
  <ax23:ipAddress
>2.43.153.39</ax23:ipAddress>
  <ax23:location
 />
  <ax23:macAddress
>00:14:5e:84:35:59</ax23:macAddress>
  <ax23:model
>OE612</ax23:model>
  <ax23:name
>ce-119-39</ax23:name>
  <ax23:role
>Primary</ax23:role>
  <ax23:softwareVersion
>4.1.0.b.51</ax23:softwareVersion>
  <ax23:status
```

```
>Online</ax23:status>
  <ax23:type
>CM</ax23:type>
  <ax23:uniqueId
>VMware-42 16 97 c8 a3 fa b7 14-13 64 c3 46 a6 08 de f6</ax23: uniqueId >
  <ax23:upTime
>1 hour, 40 minutes, 38 seconds.</ax23:upTime>
  </ns:return>
- <ns:return type="com.cisco.waas.ws.config.Device">
  <ax23:hostName xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true" />
  <ax23:id>872</ax23:id>
  <ax23:ipAddress>2.43.153.50</ax23:ipAddress>
  <ax23:location>ce-119-40-location</ax23:location>
  <ax23:macAddress>00:14:5e:84:34:c7</ax23:macAddress>
  <ax23:model>OE612</ax23:model>
  <ax23:name>ce-119-40</ax23:name>
  <ax23:role xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:nil="true" />
  <ax23:softwareVersion>4.1.0.b.53</ax23:softwareVersion>
  <ax23:status>Online</ax23:status>
  <ax23:type>WAE</ax23:type>
  </ns:return>
  </ns:getWANInfoResponse>
  </soapenv:Body>
  </soapenv:Envelope>
```

Device Configuration Service Actions

The Device Configuration service (DeviceConf Web Service) performs one or more of the following actions:

- getAPIVersion

- getCM

- getCMByName

- getDevice

- getDeviceByName

- getDeviceGroups

- getDevices

- getDevicesInGroup

- getDevicesInGroupByName

- getDevicesPerLocation

- getLocations getWAE

- getWAEByName

- getWAEs

- getWAEsInGroup

- getWAEsInGroupByName

- getWAEsPerLocation

- getAPIVersion

getAPIVersion

Retrieves the version of the Central Manager.

Input Parameter

None.

Return

The output parameter **String** returns a String value for the software version of the Cisco WAAS Central Manager.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getAPIVersion:ERROR:	

getCM

Retrieves information about the specified Central Manager.

Input Parameter

The keyword **id** requires a long value that contains the device name.

Return

The output parameter **Device** returns a Device value that provides device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getCM:ERROR:Invalid id=	The device ID is set to a negative integer.
RemoteException	DeviceConfService.getCM: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getCM: ERROR:Device does not exist.id=	The Central Manager ID is not found.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getCM:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getCMByName

Retrieves information about the specified Central Manager.

Input Parameter

The keyword **name** requires a string value that contains the device name.

Return

The output parameter **Device** returns a Device value that provides device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getCMByName:ERROR:Invalid id=	The device name is not set (is blank or null).
RemoteException	DeviceConfService.getCMByName: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getCMByName: ERROR:Device does not exist.id=	The Central Manager name is not found.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getCM:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getDevice

Retrieves information about the specified Device.

Input Parameter

The keyword **id** requires a long value that contains the device name.

Return

The output parameter **Device** returns a Device value that includes device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDevice:ERROR:Invalid id=	The device ID is set to a negative integer.
RemoteException	DeviceConfService.getDevice:ERROR:	Unhandled exception.

Type	String	Description
RemoteException	DeviceConfService.getDevice:ERROR:Device does not exist.id=	The device ID is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getDevice:The SOAP Body does not have all the required elements	The SOAP body does not have all the required elements.

getDeviceByName

Retrieves information about the specified device.

Input Parameter

The keyword **name** requires a string value that contains the device name.

Return

The output parameter **Device** returns a Device value that provides device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDeviceByName:ERROR:Invalid id=	The device name is not set (is blank or null).
RemoteException	DeviceConfService.getDeviceByName: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getDeviceByName: ERROR:Device does not exist.id=	The Device name does not exist on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getDeviceByName:The SOAP Body does not have all the required elements	The SOAP body does not have all the required elements.

getDeviceGroups

Retrieves all of the device groups currently defined in the Central Manager.

Input Parameter

None.

Return

The output parameter **DeviceGroup[]** returns a DeviceGroup value that provides a list of device groups that includes the group name, group type, and description.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDeviceGroups:ERROR:	Unhandled exception.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getDeviceGroups:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getDevices

Retrieves a list of specified devices.

Input Parameter

The keyword **ids** requires a long value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices and includes information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDevices: ERROR:	Unhandled exception.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.

Type	String	Description
AxisFault	getDevices:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getDevicesInGroup

Retrieves all of the devices that belong to the specified device group.

Input Parameter

The keyword **deviceGroupId** requires a long value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices belonging to the specified device group.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDevicesInGroup: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getDevicesInGroup: ERROR:Device Group Id does not exist.DeviceGroupId=	The device group ID is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getDevicesInGroup:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getDevicesInGroupByName

Retrieves all of the devices that belong to the specified device group by name.

Input Parameter

The keyword **name** requires a string value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices belonging to the specified device group.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getDevicesInGroupByName: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getDevicesInGroupByName: ERROR: Group Name does not exist.DeviceGroupName=	The device group name is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getDevicesInGroupByName:The SOAP Body does not have all the required elements	The SOAP body does not have all the required elements.

getDevicesPerLocation

Retrieves all of the device names with a location ID.

Input Parameter

The keyword **id** requires a long value that contains the location ID.

Return

The output parameter **String[]** returns a String value that provides a list of device names.

Exceptions

None.

getLocations

Retrieves all of the locations configured on the system.

Input Parameter

None.

Return

The output parameter **Location[]** returns a Location value that provides a list of locations belonging to the specified device group.

Exceptions

None.

getWANInfo

Retrieves the current Central Manager and WAE information that is available on the requested Central Manager.

Input Parameter

None.

Return

The output paramater **Device[]** returns a Device value that provides a list of device tuples, including the device name, status, and device type.

Exceptions

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

getWAE

Retrieves information about the specified WAE.

Input Parameter

The keyword **id** requires a long value that contains the device name.

Return

The output parameter **Device** returns a Device value that includes device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getWAE:ERROR:Invalid id=	The device ID is set to a negative integer.
RemoteException	DeviceConfService.getWAE:ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getWAE:ERROR:Device does not exist.id=	The WAE ID is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.

Type	String	Description
AxisFault	getWAE:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getWAEByName

Retrieves information about the specified WAE.

Input Parameter

The keyword **name** requires a string value that contains the device name.

Return

The output parameter **Device** returns a Device value that provides device information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getWAEByName:ERROR:Invalid id=	The device name is not set (is blank or null).
RemoteException	DeviceConfService.getWAEByName: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getWAEByName: ERROR:Device does not exist.id=	The WAE name does not exist on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getWAEByName:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getWAEs

Retrieves a list of specified devices.

Input Parameter

The keyword **ids** requires a long value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices and includes information such as the device name, IP address, status, device type, software version, model, and full DNS name.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getWAEs: ERROR:	Unhandled exception.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getWAEs:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getWAEsInGroup

Retrieves all of the devices that belong to the specified device group.

Input Parameter

The keyword **deviceGroupId** requires a long value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices belonging to the specified device group.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getWAEsInGroup: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getWAEsInGroup: ERROR:Device Group Id does not exist.DeviceGroupId=	The device group ID is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getWAEsInGroup:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getWAEsInGroupByName

Retrieves all of the devices that belong to the specified device group by name.

Input Parameter

The keyword **name** requires a string value that contains the device name.

Return

The output parameter **Device[]** returns a Device value that provides a list of devices belonging to the specified device group.

Exceptions

Type	String	Description
RemoteException	DeviceConfService.getWAEsInGroupByName: ERROR:	Unhandled exception.
RemoteException	DeviceConfService.getWAEsInGroupByName: ERROR: Group Name does not exist.DeviceGroupName=	The device group name is not found on the Central Manager.
AxisFault	DeviceConf:The Method Name is not supported. MethodName=	The method name is not supported for a given service.
AxisFault	DeviceConf:The SOAP Envelope Body is Null	The SOAP envelope is missing for a given service.
AxisFault	DeviceConf:The Requested WebService is not available	The service requested is not supported.
AxisFault	getWAEsInGroupByName:The SOAP Body doesn't have all the required elements	The SOAP body does not have all the required elements.

getWAEsPerLocation

Retrieves all of the device names with a location ID.

Input Parameter

The keyword **id** requires a long value that contains the location ID.

Return

The output parameter **String[]** returns a String value that provides a list of device names.

Exceptions

None.