



CHAPTER 4

Troubleshooting Problems

This chapter describes how to troubleshoot problems with Cisco Application Networking Manager (ANM) and includes the following sections:

- [SOAP Message Traffic and Time Taken to Invoke an API, page 4-1](#)
- [Custom Application Errors, page 4-2](#)
- [Modifying the Number of Concurrent Sessions Allowed, page 4-3](#)

SOAP Message Traffic and Time Taken to Invoke an API

To see the SOAP messages passed to and from the ANM, enable the debug feature for ANM Web Services and check the corresponding logs. Enabling the debug feature creates a log file named *webservices.log* under the */var/lib/anm/logs* directory. This file contains details of both inbound and outbound SOAP messages.

Procedure

- Step 1** Enable the debug feature as follows:
- ANM Server—Open the `/opt/CSCOanm/etc/cs-config.properties` file in a text editor and change the value of `ws.debug` to “true” as follows:
`ws.debug=true`
 - ANM Virtual Appliance—Enter the following command:
`anm-property set ws.debug true`
- To disable the debug feature at any time, set the attribute value to **false**.
- Step 2** Restart ANM as follows:
- ANM Server—Enter the following command:
`/opt/CSCOanm/bin/anm-tool restart`
 - ANM Virtual Appliance—Enter the following command:
`anm-tool restart`
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Custom Application Errors

Workarounds for the errors you may encounter are as follows:

- *DeviceType is set as deviceTypeValue, but mandatory field 'fieldName' is set as null or empty*.
Cause: The mandatory attributes are not set for the DeviceID. For each device type, a certain set of attributes are mandatory to uniquely identify the device on the ANM.
Solution: Set the mandatory fields for each device type in the DeviceID. See the [“DeviceID” section on page 2-2](#) for the complete list of mandatory fields for each device type.
- *Maximum session limit [configured_limit] reached for WS*
Cause: The number of open Web Service sessions permitted on ANM has reached the configured maximum value (default = 10).
Solution1: Close the session by invoking the following API:
 OperationManager: logout(sessionToken)


Note You can modify the number of concurrent sessions permitted (see the [“Modifying the Number of Concurrent Sessions Allowed” section on page 4-3](#)).

Solution2: Wait until the sessions are automatically logged out from the ANM. By default, the sessions are logged out after an idle period of 30 minutes.
- *Session ID is in use and the operation has not been completed. Please try again later once the operation has completed*
Cause: The session token used to invoke the API is already used to invoke some other API that is still engaged. Once a session token is used to invoke an API, the session token cannot be used unless the previously invoked API completes its operation.
Solution: Wait until the previously invoked API completes its operation.
- *Invalid ‘Session ID’*
Cause: The session token being used in the API has timed out or some unknown session ID is in use.
Solution: None. Use login() API to create a session ID and use the new session ID.
- *Unsupported Device Type: “[Device Type]”*
Cause: The API is supported only for a certain device type. This system message appears if an API is invoked with an unsupported device type.
Solution: Use the API only for the supported device type. The complete list of supported device type for each API is displayed in the [Mapping Table, page 2-1](#).
- *Given ACE module does not exist in the chassis: “Chassis Ip address”*
Cause: The incorrect slot information is given in the DeviceID.
Solution: Check and correct the slot number or chassis IP address configured in the DeviceID.
- *Given ACE module is not yet imported in ANM*
Cause: The ACE module with the given slot is available but it is not yet imported in ANM.
Solution: Correct the slot number in the DeviceID or log in to ANM and import the ACE module.
- *Given Virtual context name “[VCName]” does not exist in the ACE Devices*
Cause: The incorrect or non-existent Virtual Context is given in the DeviceID.

Solution: Check that the VC given in the DeviceID exists in the ACE module or ACE appliance.

- Given '*<device model>*' does not exist in ANM

Cause: The specified device is not yet imported into the ANM.

Solution: Check if the correct IP address is configured in the DeviceID. Or log in to ANM and import the corresponding device.

Modifying the Number of Concurrent Sessions Allowed

By default, ANM supports up to 10 concurrent sessions for web services and any session that is left idle for 30 minutes will time out. You can modify the maximum number of concurrent sessions allowed.



Note

Having more than 10 sessions open at the same time can slow the performance of ANM.

Procedure

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- Step 1** Open the following properties file in a text editor:
`/opt/CSCOanm/etc/cs-config.properties`
- Step 2** From the text editor, add the following line to the `cs-config.properties` file:
`ws.max.concurrentsessions=number`
where *number* is the maximum number of concurrent connections allowed.
- Step 3** Save the modified `cs-config.properties` file.
- Step 4** Restart the ANM services by entering the following command
`/opt/CSCOanm/bin/anm-tool restart-services`
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