Loading Cisco UCS MIBs Into a Network Management System

This chapter includes the following sections:

Load Cisco UCS Standalone C-Series MIBs

Before loading Cisco UCS Standlone C-Series server MIBs into an NMS, you must first load the prerequisite MIBs into the NMS. This enables you to receive the Cisco UCS Fault Traps in the NMS.

Prerequisite MIBs

The MIBs in this section are required for all use cases and need to be loaded before other Cisco MIBs are loaded.

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Important You should load the MIBs in the order listed to eliminate most of the load-order issues.

The following is a list of MIBs from which many other MIBs import definitions:

- SNMPv2-SMI.my

- SNMPv2-TC.my

- SNMP-FRAMEWORK-MIB.my

- CISCO-SMI.my

- INET-ADDRESS-MIB

- CISCO.TC.my

- CISCO-UNIFIED-COMPUTING-ADAPTOR-MIB

- CISCO-UNIFIED-COMPUTING-EQUIPMENT-MIB
- CISCO-UNIFIED-COMPUTING-MGMT-MIB
- CISCO-UNIFIED-COMPUTING-FAULT-MIB
- CISCO-UNIFIED-COMPUTING-MIB
- CISCO-UNIFIED-COMPUTING-NOTIFS-MIB
- CISCO-UNIFIED-COMPUTING-STORAGE-MIB
- CISCO-UNIFIED-COMPUTING-TC-MIB
- CISCO-UNIFIED-COMPUTING-MEMORY-MIB
- CISCO-UNIFIED-COMPUTING-PROCESSOR-MIB
- CISCO-UNIFIED-COMPUTING-COMPUTE-MIB

Note   The CISCO-SMI MIB defines the iso.org.dod.internet.private.enterprise.cisco.ciscoMgmt object (1.3.6.1.4.9.9), which is the parent node of all Cisco UCS Standalone C-Series MIBs. Several MIBs, including the CISCO-SMI MIB, must be loaded before other Cisco UCS Standalone C-Series MIBs. Attempting to load other Cisco UCS Standalone C-Series MIBs before the CISCO-SMI MIB generally results in a MIB compiler error stating that a MIB node has no parent node.

MIB Loading Order

Most of the MIB use definitions are defined in other MIBs. These definitions are listed in the IMPORTS section near the top of the MIB.

For example, if MIB B imports a definition from MIB A, some MIB compilers require you to load MIB A prior to loading MIB B. If you get the MIB loading order wrong, you might get an error message that a MIB is undefined or not listed in IMPORTS. If you receive an error message, look at the loading order of MIBs defined in the IMPORTS section. Ensure that you have the appropriate load order.

Order for Loading MIBs in Cisco UCS

Cisco UCS Standalone C-Series software release 1.3 and later supports network MIBs and a series of MIBs to access all of the objects stored in the Cisco UCS Manager Standalone C-Series Management Information Tree.

All managed objects that can be accessed through the Cisco UCS Standalone C-Series XML API can also be retrieved through read-only SNMP GET operations.

Important   You should load the MIBs in the order listed to eliminate most of the load-order issues.

If you want to receive Cisco UCS traps in your NMS, first load the prerequisite MIBs (see), then load the following Cisco MIBs:

- CISCO-UNIFIED-COMPUTING-MIB.my

- CISCO-UNIFIED-COMPUTING-TC-MIB.my

- CISCO-UNIFIED-COMPUTING-FAULT-MIB.my

- CISCO-UNIFIED-COMPUTING-NOTIFS-MIB.my

If you want to retrieve Cisco UCS managed objects using read-only SNMP GET operations, you need to load all additional Cisco UCS Standalone C-Series MIBs. The additional Cisco UCS Standalone C-Series MIBs are generally used to retrieve inventory and configuration information using SNMP GET operations. To learn more about all of the Cisco UCS Standalone C-Series MIBs, see Purpose of the MIBs.

Note In environments running multiple versions of Cisco UCS Standalone C-Series servers, load the latest Cisco UCS Standalone C-Series MIBs in the NMS, because all Cisco UCS Standalone C-Series MIBs are developed to be backward-compatible with previous versions of Cisco UCS Standalone C-Series servers that support SNMP.