

## **Purpose of the Cisco UCS MIBs**

This chapter describes the purpose of the Cisco UCS MIBs.

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## **Purpose of the Cisco UCS MIBs**

The following table describes the purpose of each Cisco UCS MIB.

## Table 1: MIB Purposes

МІВ	Purpose
CISCO-UNIFIED-COMPUTING-AAA-MIB	This package contains data about configuring and monitoring the AAA operation within Cisco UCS.
	It includes the following information:
	• Identities of external AAA servers such as LDAP, TACACS, and RADIUS. These servers are used as authoritative repositories to authenticate UCS users.
	Local Cisco UCS users
	• User Roles and locales
	• Mappings between users, roles and locales
	Pre-login banner configuration
	• Audit Logs
	AAA policies, such as password policies

МІВ	Purpose
CISCO-UNIFIED-COMPUTING-ADAPTOR-MIB	This package contains configuration and statistics information that reflect the state of physical network adapters within Cisco UCS.
	It includes the following information:
	• Ethernet and Ethernet port channel Interfaces
	• FC and FC port channel Interfaces
	• Network statistics per adapter
CISCO-UNIFIED-COMPUTING-BIOS-MIB	This package contains configuration objects for BIOS settings.
	It includes the following information:
	Boot order parameters for the Cisco UCS Servers
	• Policy based BIOS parameters that can be applied to service profiles
CISCO-UNIFIED-COMPUTING-BMC-MIB	This package contains configuration objects for capability catalog entries for BMC. Currently, this package contains a single object for the System Event Log (SEL) characteristics.
CISCO-UNIFIED-COMPUTING-CALLHOME-MIB	This package contains configuration objects for the Call Home feature.
	It includes the following information:
	Contact information
	Customer ID and contract ID
	• E-mail address
	• SMTP servers
	Call Home profiles and policies
	System Inventory

MIB	Purpose
CISCO-UNIFIED-COMPUTING-CAPABILITY-MIB	This package contains configuration objects for the capability catalog. This catalog contains the characteristics of various physical components in Cisco UCS, including fabric interconnect, network adapters, blade servers, rack-mount servers, chassis, IO Modules, CPUs, memory units, FAN modules, local disks, power supply units, and storage controllers.
	Cisco UCS is designed to support new hardware by uploading a new capability catalog that includes the following information:
	Capability catalog objects
	• Objects to manage the capability catalog, such as uploading a new catalog to an existing system
CISCO-UNIFIED-COMPUTING-COMM-MIB	This package contains configuration objects that control global configurations, such as DNS, HTTP, and SNMP.
	It includes the following information:
	• Date and time management
	DNS management
	Configuration of XML API over HTTP and HTTPS
	NTP management
	Shell access configuration
	SNMP management
	Telnet management
CISCO-UNIFIED-COMPUTING-COMPUTE-MIB	This package contains configuration, inventory, and statistics objects for computing resources, including blade and rack servers.
	It includes the following information:
	• Inventory objects for blade servers and components
	• Inventory objects for rack servers and components
	Chassis connectivity policies
	Compute discovery and auto-configuration policies
	Compute pool objects

МІВ	Purpose
CISCO-UNIFIED-COMPUTING-CONFORM-MIB	This package contains SNMP MIB compliance groups. These compliance statements provide a systematic method to describe a group of managed objects that must be implemented for conformance to a standard.
CISCO-UNIFIED-COMPUTING-DCX-MIB	This package contains operational information about virtual interfaces and circuits.
	It includes the following information:
	• Virtual interfaces configured for each server network adapter
	• Virtual circuits configured for each server adapter, chassis, IO module, or FEX
CISCO-UNIFIED-COMPUTING-DHCP-MIB	This package contains DHCP subsystem details.
	It includes information on DHCP leases obtained by the Cisco UCS subcomponents such as, BMC, blade, and mount servers.
CISCO-UNIFIED-COMPUTING-DIAG-MIB	This package contains diagnostics information about Cisco UCS sub-components.
	Diagnostic policies
	Network test objects
	Diagnostic results
CISCO-UNIFIED-COMPUTING-DPSEC-MIB	This package contains objects that specify the MAC security policy.
	It includes details about the MAC security policy, which is a part of the network control policy. This policy specifies whether to allow or deny packets with forged MAC addresses.
CISCO-UNIFIED-COMPUTING-EPQOS-MIB	This package contains details about network Quality of Service (QoS).
	It includes the following information:
	Egress QoS policy
	Internal object to manage the network QoS

MIB	Purpose
CISCO-UNIFIED-COMPUTING-EQUIPMENT-MIB	This package contains details about the Cisco UCS inventory. Objects in this package are defined to model the physical components.
	It includes the following information:
	• Network adapters
	Beacon LEDs
	Board controllers
	Fabric Interconnect fixed and extension modules
	Cisco UCS chassis
	• FAN
	• FEX
	• Hard drive
	• IO card
	• Memory unit
	Power supply unit
CISCO-UNIFIED-COMPUTING-ETHER-MIB	This package contains details about the Ethernet port inventory and statistics about the Ethernet ports.
	It includes the following information:
	Objects that represent inventoried Ethernet ports and port channels
	Statistics about Ethernet ports
CISCO-UNIFIED-COMPUTING-EVENT-MIB	This package contains details about the event log. An event is any significant occurrence in the Cisco UCS that may require users to be notified. Events can help users identify and diagnose the source of problems.
	It includes the following information:
	• Object to model the event log
	• Object to model an entry in the event log
	• Event log policy, which specifies the number of events that need to be maintained in the event log and the event retention policy.

Purpose
This package contains details about management interfaces.
It includes the following information:
Management interfaces
Gateway ping policy
• Interface monitoring policy
• ARP targets
This package contains details about external clients that are connected to Cisco UCS Manager
This package contains information about certificate and private key stores.
This package contains information about the configuration and policies on the Cisco UCS fabric. The Cisco UCS fabric defines Ethernet, storage, Fibre Channel and FCoE policies, desired port configuration, VLANs, and VSANs.
It includes the following information:
• VLANs
• VSANs
• Required Ethernet configuration for uplink ports, port channels, server ports, NAS storage ports, FCoE ports, and SPAN ports
• Required Fibre Channel configuration for FC uplink ports, FC port channels, FC direct attach storage ports, and FC span ports
VLAN and VSAN port membership
• Ethernet Pin groups
Fibre Channel pin groups
VCON policies

MIB	Purpose
CISCO-UNIFIED-COMPUTING-FAULT-MIB	This package provides information about Cisco UCS faults. A fault is an abnormal condition or defect at the component, equipment, or subsystem level, which may lead to a failure as defined in ISO/CD 10303-226.
	Each managed object in the management tree may have one or more faults that indicate a particular problem with this object.
	It includes the following information:
	• Fault objects
	• Fault policy, including fault retention, flapping, and clear action
CISCO-UNIFIED-COMPUTING-FC-MIB	This package contains data about the Fibre Channel statistics and FC interface configuration.
	It includes the following information:
	Fibre Channel statistics
	• Fibre Channel interface configuration
CISCO-UNIFIED-COMPUTING-FCPOOL-MIB	This package contains information about Fibre Channel pools of WWNs. Service profiles VHBAs can be assigned as virtualized WWNs, which help to ensure portability of the service profile.
	It includes the following information:
	Fibre Channel pool of WWNs
	Block of WWNs
	• WWNs, which can be assigned to service profile vHBAs
CISCO-UNIFIED-COMPUTING-FIRMWARE-MIB	This package contains details about the firmware management of the Cisco UCS components. This includes objects to download firmware packages, manage firmware images and firmware packages, firmware packs, and to control firmware upgrades or downgrades.
	It includes the following information:
	Downloader object to download firmware packages
	Objects to model firmware and firmware packages
	• Firmware packs
	• Control of firmware upgrades and downgrades

<ul> <li>This package contains the network flow control policy details.</li> <li>This package contains the host images policy details.</li> <li>It includes the following information: <ul> <li>Host image policy</li> <li>Host image targets</li> </ul> </li> <li>This packages contains the image provider policy details.</li> <li>This package contains details about the image security keys.</li> <li>This package contains details about pools of IP addresses.</li> </ul>
It includes the following information: • Host image policy • Host image targets This packages contains the image provider policy details. This package contains details about the image security keys.
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Host image targets This packages contains the image provider policy details. This package contains details about the image security keys.
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This package contains details about the image security keys.
This package contains details about pools of ID addresses
Pools of IP addresses are used to assign IP addresses to the BMC interfaces
It includes the following information:
Pool of IP addresses
Block of IP addresses
• IP addresses which can be assigned to KVMs
This package contains details about pools of IQN addresses.
It includes the following information:
Pools of IQN addresses
Block of IQN addresses
• IQN addresses
This package contains details about iSCSI objects.
It includes the following information:
iSCSI authentication profile
iSCSI protocol profile
This package contains the licensing information.
It includes the following information:
Port licensing
• Licenses
Objects to download and install licenses

This package contains details about the Link Layer Discovery Protocol object.
It includes information on the objects that provide inventory information about peer links through LLDP.
This package contains the top-level objects for Cisco UCS service profiles.
It includes the following information:
Cisco UCS service profile
• Binding between a service profile and a blade or rack mount server
• Requirements that a physical server must satisfy in order to be associated with a service profile
This package contains information about the boot objects for Cisco UCS service profiles.
It contains the following information:
Service profile boot policy
• SAN and LAN boot images
Virtual Media
• iSCSI boot policy
This package contains details aboutCisco UCS service profile maintenance policy.
It includes information about the Cisco UCS service profile maintenance policy, which specifies what you can do whan a requested change requires a server reboot.
This package contains details about pools of MAC addresses. Pools of MAC addresses are used to assign virtual MAC addresses to service profile vNICs.
It includes the following information:
Pools of MAC addresses
Pools of MAC addresses
• MAC addresses which can be assigned to service profile vNICs
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MIB	Purpose
CISCO-UNIFIED-COMPUTING-MAPPINGS-MIB	This package contains information about the relationships between the Cisco UCS Manager Managed Objects.
	It includes the following information:
	• The cucsMappingsMoContainmentTable provides containment information to navigate from a parent managed object to the child managed objects.
	• The cucsMappingsMoInverseContainmentTable provides information to navigate from a child managed object to the parent managed object.
	• The cucsMappingsDnToOidTable provides a mapping from the Managed Object Distinguised Name to the SNMP OID.
CISCO-UNIFIED-COMPUTING-MEMORY-MIB	This package contains details about memory units that are installed in blade and rack-mount servers.
	It includes the following information:
	• Memory arrays
	• Memory units
	Memory qualification
	• Statistics
CISCO-UNIFIED-COMPUTING-MGMT-MIB	This package contains Cisco UCS provisioning details.
	It includes the following information:
	<ul> <li>Objects to perform backups and imports of Cisco UCS Management configuration</li> </ul>
	Access policies
	Process Monitor entries
CISCO-UNIFIED-COMPUTING-MIB	This package defines the Cisco UCS Manager Managed Object
CISCO-UNIFIED-COMPUTING-NETWORK-MIB	This package provides information about Cisco UCS fabric interconnects. It includes the following information:
	• Objects to specify the IP addresses of the Cisco UCS fabric interconnects
	Network statistics

MIB	Purpose
CISCO-UNIFIED-COMPUTING-NOTIFS-MIB	This MIB contains the definitions of the SNMP notifications that are supported byCisco UCS Manager.
	The following notifications are defined:
	UCS Manager Fault raised
	UCS Manager Fault cleared
CISCO-UNIFIED-COMPUTING-NWCTRL-MIB	This package provides information about network control policies.
CISCO-UNIFIED-COMPUTING-ORG-MIB	This package provides information about the organizational hierarchy in the Cisco UCS Manager Management Information Tree.
CISCO-UNIFIED-COMPUTING-OS-MIB	This package contains guest OS agent details.
	It includes the following information:
	Guest OS instance
	• Guest OS agent
CISCO-UNIFIED-COMPUTING-PCI-MIB	This package contains details about inventory PCI cards.
	It includes the following information:
	Inventory PCI card
	• Equipment slot
CISCO-UNIFIED-COMPUTING-PKI-MIB	This package contains details about Public Key Infrastructure (PKI) objects.
	It includes the following information:
	Certificate Requests
	• Key Ring
CISCO-UNIFIED-COMPUTING-PORT-MIB	This package provides information about physical ports on a fabric interconnect and the port groups on the fabric interconnect.
	It includes the following information:
	Port groups
	• Abstract objects for physical ports on a fabric interconnect
	• Port Trust mode

This package contains details about chassis power capping policies and statistics.
policies and statistics.
It includes the following information:
Chassis power capping
Chassis power statistics
This package contains details about the internal components of Cisco UCS Manager.
It includes the following information:
Statistics about Cisco Cisco UCS Manager transactions
Information about Cisco Cisco UCS Manager processes
This package provides information about Central Processing Units (CPUs) that can be installed on Cisco UCS servers.
It includes the following information:
• CPU characteristics
CPU statistics
This package provides information about QoS classes.
This package provides information about the Serial Over LAN (SOL) policies.
This package contains details about statistics.
It includes the following information:
Objects to specify statistics collection
Objects to specify threshold policies
This package contains details about storage elements that can be installed or accessed from a Cisco UCS server.
It includes following information:
• Local disks
Storage controllers
Storage enclosures
• LUNs
• RAID batteries

МІВ	Purpose
CISCO-UNIFIED-COMPUTING-SW-MIB	This package contains details about how the system should be configured. Objects in this package are created implicitly by the system based on user-specified data from the "fabric" package. For example, the "fabric" package may specify high-level fabric policies, and the "sw" package may specify individual VLAN membership for each physical port.
	It includes the following information:
	• VLANs
	• VSANs
	• VLAN membership
	Ethernet and Fibre Channel ports
CISCO-UNIFIED-COMPUTING-SYSDEBUG-MIB	This package provides information to help troubleshoot Cisco UCS.
	It includes the following information:
	• Objects for accessing and exporting core files
	Backup behavior
	• Log policies
	• Tech support file repository
CISCO-UNIFIED-COMPUTING-SYSFILE-MIB	This package provides information to manage the import or export of system files.
	It includes abstract classes that support the import and export of Cisco UCS Manager files.
CISCO-UNIFIED-COMPUTING-TC-MIB	This MIB contains all the SNMP textual conventions that are used in other Cisco UCS Manager MIBs.
CISCO-UNIFIED-COMPUTING-TOP-MIB	This package contains the definition of the root object in the Cisco UCS management information tree.
	It includes the definition of the Cisco UCS root objects in the Manager Information Tree.
CISCO-UNIFIED-COMPUTING-TRIG-MIB	This package contains information to manage scheduled and triggered activities.
	It includes the following objects:
	Objects to schedule activities
	• Objects to monitor activities that have been scheduled
	• Objects to track activities that require user acknowledgment

МІВ	Purpose
CISCO-UNIFIED-COMPUTING-UUIDPOOL-MIB	This package contains details about the pools of UUID identifiers. Pools of UUID identifiers are used to assign virtual UUIDs to service profiles.
	It includes the following information:
	• Pools of UUID identifiers
	Block of UUID identifiers
	• UUID identifiers, which can be assigned to service profiles
CISCO-UNIFIED-COMPUTING-VM-MIB	This package contains details specific to the inventory and monitoring of virtual machines. Cisco UCS Manager keeps track of virtual machines if the VM vNIC is provided by UCS.
	It includes the following information:
	Virtual machines
	Virtual machines NICs
CISCO-UNIFIED-COMPUTING-VNIC-MIB	This package contains details about Cisco UCS network adapters, including Ethernet vNICs and Fibre Channel vHBAs.
	It includes the following information:
	Objects to model a Service Profile Ethernet vNIC
	Objects to model a Service Profile Fibre Ethernet cHBA
	Objects to model a Service Profile iSCSI NIC
	<ul> <li>Policies that control the behavior of vNICs, iSCSI NICs and vHBAs.</li> </ul>
	Policies for dynamic vNICSs
	Boot targets