

Purpose of the Cisco FXOS MIBs

This chapter describes the purpose of the Cisco FXOS MIBs.

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Purpose of the Cisco FXOS MIBs

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

Table 1: MIB Purposes

| MIB | Purpose |
|-------------------------|---|
| CISCO-FIREPOWER-AAA-MIB | This package contains data about configuring and monitoring the AAA operation within FXOS. |
| | 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 FXOS users. |
| | • Local users |
| | User roles and locales |
| | Mappings between users, roles, and locales |
| | Prelogin banner configuration |
| | Audit logs |
| | AAA policies, such as password policies |

| MIB | Purpose |
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| CISCO-FIREPOWER-ADAPTOR-MIB | This package contains configuration and statistics information that reflect the state of physical network adapters within a Firepower 4100/9300 chassis. |
| | It includes the following information: |
| | Ethernet and Ethernet port channel Interfaces |
| | Network statistics per adapter |
| CISCO-FIREPOWER-BIOS-MIB | This package contains configuration objects for BIOS settings. |
| | It includes the following information: |
| | Boot order parameters for the Firepower 4100/9300 chassis. |
| | Policy-based BIOS parameters that can be applied to service profiles |
| CISCO-FIREPOWER-BMC-MIB | This package reports Power-On Self Test (POST) statistics. |
| CISCO-FIREPOWER-CALLHOME-MIB | This package contains configuration objects for the Call Home feature. |
| | It includes the following information: |
| | Contact information |
| | Customer ID and contract ID |
| | • Email address |
| | • SMTP servers |
| | Call Home profiles and policies |
| | System inventory |
| CISCO-FIREPOWER-CAPABILITY-MIB | This package contains configuration objects for the capability catalog. This catalog contains the characteristics of various physical components in the Firepower 4100/9300 chassis including fabric interconnect (supervisor), network adapters, security modules, chassis, network modules, CPUs, memory units, fan modules, local disks, power supply modules, and storage controllers. |
| | FXOS 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 |
| | |

| MIB | Purpose |
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| CISCO-FIREPOWER-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 REST API over HTTP and HTTPS |
| | NTP management |
| | Shell access configuration |
| | SNMP management |
| | Telnet management |
| CISCO-FIREPOWER-COMPUTE-MIB | This package contains configuration, inventory, and statistics objects for computing resources. |
| | It includes the following information: |
| | • Inventory objects for security modules and components |
| | Chassis connectivity policies |
| | Security module discovery and autoconfiguration policies |
| | • Pool objects |
| CISCO-FIREPOWER-DCX-MIB | This package contains operational information about virtual interfaces and circuits. |
| | It includes the following information: |
| | Virtual interfaces configured for each security module network adapter |
| | Virtual circuits configured for each security module adapter, chassis, or network module |
| CISCO-FIREPOWER-DHCP-MIB | This package contains DHCP subsystem details. |
| | It includes information on DHCP leases obtained by the Firepower 4100/9300 chassis subcomponents. |
| CISCO-FIREPOWER-DIAG-MIB | This package contains diagnostics information about Firepower 4100/9300 chassis subcomponents. |
| | Diagnostic policies |
| | Network test objects |
| | Diagnostic results |

| MIB | Purpose |
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| CISCO-FIREPOWER-DOMAIN-MIB | This package contains details about the Firepower 4100/9300 chassis and security module storage media. |
| CISCO-FIREPOWER-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 |
| CISCO-FIREPOWER-EQUIPMENT-MIB | This package contains details about the Firepower 4100/9300 chassis 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 |
| | • Firepower 4100/9300 chassis |
| | • Fan |
| | • SSD |
| | • IO card |
| | Memory unit |
| | Power supply module |
| CISCO-FIREPOWER-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 |

| is any significant occurrence in FXOS that may require user 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 event that need to be maintained in the event log and the ever retention policy. CISCO-FIREPOWER-EXTMGMT-MIB This package contains details about management interfaces It includes the following information: Management interfaces Gateway ping policy Interface monitoring policy ARP targets CISCO-FIREPOWER-EXTPOL-MIB This package contains details about external clients that are connected to chassis manager or the FXOS CLI. CISCO-FIREPOWER-EXTVMM-MIB This package contains information about certificate and privately stores. CISCO-FIREPOWER-FABRIC-MIB This package contains information about the configuration and policies on the Firepower 4100/9300 chassis fabric (supervisor). The Firepower 4100/9300 chassis fabric (supervisor). The Firepower 4100/9300 chassis fabric define Ethernet, storage, port configuration, and VLANs. It includes the following information: VLANs | MIB | Purpose |
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| channels | | • VLANs |
| VLAN port membership | | Required Ethernet configuration for uplink ports and port channels |
| | | VLAN port membership |
| • VCON policies | | VCON policies |

| MIB | Purpose |
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| CISCO-FIREPOWER-FAULT-MIB | This package provides information about FXOS 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-FIREPOWER-FIRMWARE-MIB | This package contains details about the firmware management of the Firepower 4100/9300 chassis 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 |
| CISCO-FIREPOWER-FLOWCTRL-MIB | This package contains the network flow control policy details. |
| CISCO-FIREPOWER-IPPOOL-MIB | This package contains details about pools of IP addresses that are reserved for internal use. |
| CISCO-FIREPOWER-LLDP-MIB | This package contains details about the Link Layer Discovery Protocol (LLDP) object. |
| | It includes information on the objects that provide inventory information about peer links through LLDP. |
| CISCO-FIREPOWER-LS-MIB | This package contains the top-level objects for FXOS service profiles. |
| | It includes the following information: |
| | FXOS service profile |
| | Binding between a service profile and a security module/engine |
| | Requirements that a physical security module must satisfy to be associated with a service profile |

| MIB | Purpose |
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| CISCO-FIREPOWER-LSBOOT-MIB | This package contains information about the boot objects for FXOS service profiles. |
| | It contains the following information: |
| | Service profile boot policy |
| | Boot images |
| | Virtual Media |
| CISCO-FIREPOWER-LSMAINT-MIB | This package contains details about FXOS service profile maintenance policy. |
| | The FXOS service profile maintenance policy specifies what you can do when a requested change requires a reboot. |
| CISCO-FIREPOWER-MACPOOL-MIB | 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 |
| | MAC addresses that can be assigned to service profile vNICs |
| CISCO-FIREPOWER-MAPPINGS-MIB | This package contains information about the relationships between the FXOS Managed Objects. |
| | It includes the following information: |
| | The cfprMappingsMoContainmentTable provides containment information to navigate from a parent-managed object to the child-managed objects. |
| | The cfprMappingsMoInverseContainmentTable provides information to navigate from a child-managed object to the parent-managed object. |
| | The cfprMappingsDnToOidTable provides a mapping from the Managed Object Distinguished Name to the SNMP OID. |

| MIB | Purpose |
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| CISCO-FIREPOWER-MEMORY-MIB | This package contains details about memory units that are installed in security modules. |
| | It includes the following information: |
| | Memory arrays |
| | Memory units |
| | Memory qualification |
| | • Statistics |
| CISCO-FIREPOWER-MGMT-MIB | This package contains FXOS provisioning details. |
| | It includes the following information: |
| | Objects to perform backups and imports of chassis manager configuration |
| | Access policies |
| | Process Monitor entries |
| CISCO-FIREPOWER-MIB | This package defines the top-level FXOS Managed Object. |
| CISCO-FIREPOWER-NETWORK-MIB | This package provides information about Firepower 4100/9300 chassis fabric interconnect (supervisor). |
| | It includes the following information: |
| | Objects to specify the IP addresses of the Firepower 4100/9300 chassis fabric interconnect |
| | Network statistics |
| CISCO-FIREPOWER-NOTIFS-MIB | This MIB contains the definitions of the SNMP notifications that are supported by FXOS. |
| | The following notifications are defined: |
| | FXOS fault raised |
| | FXOS fault cleared |
| CISCO-FIREPOWER-NWCTRL-MIB | This package provides information about network control policies. |
| CISCO-FIREPOWER-ORG-MIB | This package provides information about the organizational hierarchy in the FXOS Management Information Tree. |

| MIB | Purpose |
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| CISCO-FIREPOWER-OS-MIB | This package contains guest OS agent details. |
| | It includes the following information: |
| | Guest OS instance |
| | Guest OS agent |
| CISCO-FIREPOWER-PCI-MIB | This package contains details about inventory PCI cards. |
| | It includes the following information: |
| | Inventory PCI card |
| | • Equipment slot |
| CISCO-FIREPOWER-PKI-MIB | This package contains details about Public Key Infrastructure (PKI) objects. |
| | It includes the following information: |
| | Certificate requests |
| | • Key ring |
| CISCO-FIREPOWER-PORT-MIB | This package provides information about physical ports on the fabric interconnect (supervisor) and the port groups on the fabric interconnect. |
| | It includes the following information: |
| | Port groups |
| | Abstract objects for physical ports on the fabric interconnect (supervisor) |
| | Port trust mode |
| CISCO-FIREPOWER-POWER-MIB | This package contains details about chassis power capping policies and statistics. |
| | It includes the following information: |
| | Chassis power capping |
| | Chassis power statistics |
| CISCO-FIREPOWER-PROC-MIB | This package contains details about the internal components of FXOS. |
| | It includes the following information: |
| | Statistics about Cisco FXOS transactions |
| | Information about Cisco FXOS processes |

| MIB | Purpose |
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| CISCO-FIREPOWER-PROCESSOR-MIB | This package provides information about Central Processing Units that can be installed on the Firepower 4100/9300 chassis. |
| | It includes the following information: |
| | CPU characteristics |
| | CPU statistics |
| CISCO-FIREPOWER-QOSCLASS-MIB | This package provides information about QoS classes. |
| CISCO-FIREPOWER-SM-MIB | This package contains monitoring data for the security modules in the system. |
| | It includes the following information: |
| | Application software version |
| | Memory usage |
| | Disk usage |
| | CPU utilization |
| CISCO-FIREPOWER-STATS-MIB | This package contains details about statistics. |
| | It includes the following information: |
| | Objects to specify statistics collection |
| | Objects to specify threshold policies |
| CISCO-FIREPOWER-STORAGE-MIB | This package contains details about storage elements that can be installed or accessed from a Firepower 4100/9300 chassis. |
| | It includes following information: |
| | • Local disks |
| | Storage controllers |
| | Storage enclosures |
| CISCO-FIREPOWER-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 |
| | VLAN membership |
| | • Ethernet ports |

| MIB | Purpose |
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| CISCO-FIREPOWER-SYSDEBUG-MIB | This package provides information to help troubleshoot FXOS. |
| | It includes the following information: |
| | Objects for accessing and exporting core files |
| | Backup behavior |
| | • Log policies |
| | Tech support file repository |
| CISCO-FIREPOWER-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 FXOS files. |
| CISCO-FIREPOWER-TC-MIB | This MIB contains all the SNMP textual conventions that are used in other FXOS MIBs. |
| CISCO-FIREPOWER-TOP-MIB | This package contains the definition of the root object in the FXOS management information tree. |
| CISCO-FIREPOWER-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 |
| CISCO-FIREPOWER-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-FIREPOWER-VERSION-MIB | This package reports the FXOS software version. |
| CISCO-FIREPOWER-VM-MIB | This package contains details specific to the inventory and monitoring of virtual machines. FXOS keeps track of virtual machines if the VM vNIC is provided. |

| MIB | Purpose |
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| CISCO-FIREPOWER-VNIC-MIB | This package contains details about Firepower 4100/9300 chassis network adapters, including Ethernet vNICs. |
| | It includes the following information: |
| | Objects to model a Service Profile Ethernet vNIC |
| | Policies that control the behavior of vNICs |
| | Policies for dynamic vNICSs |
| | Boot targets |
| | |