

## Cisco Fabric Manager Server Package

### Package Description

The standard Cisco® Fabric Manager software that is included at no charge with the Cisco MDS 9000 Family and Cisco Nexus 5000 Family switches provides basic switch configuration and troubleshooting capabilities. The Cisco Fabric Manager Server (FMS) package extends standard Cisco Fabric Manager by providing historical performance monitoring for network traffic hotspot analysis, centralized management services, and advanced application integration. All standard Cisco Fabric Manager features and functions are fully integrated with the Cisco FMS capabilities.

### Historical Performance Monitoring

The Cisco FMS package historical performance monitoring includes the following features:

- **Fibre Channel Statistics Monitoring**—Performance statistics for Inter-Switch Links (ISLs), host and storage device connections, and traffic between specific Fibre Channel sources and destinations (flows) are monitored continuously with Cisco FMS.
- **Performance Thresholds**—Up to two different event thresholds can be set for each throughput statistic monitored by Cisco FMS. Threshold values can be set with user-specified levels or with baseline values automatically calculated from performance history.
- **Reporting and Graphing**—Historical performance reports and graphs over daily, weekly, monthly, and yearly intervals are available for network hotspot analysis. Top 10 and daily summary reports for all ISLs, hosts, storage connections, and flows provide fabricwide statistics.
- **Intelligent Setup**—Wizards are provided to quickly select information to monitor, set up flows, and estimate performance-database storage requirements. To further simplify use, statistics are associated with host and storage devices, allowing physical connections to switches to be changed without losing historical statistics.
- **Performance Database**—The compact, integrated Round Robin Database (RRD) maintains a constant size by rolling up information to reduce the number of discrete samples for the oldest data points; hence, it requires no manual storage-space maintenance.

### Centralized Management Services

The Cisco FMS package centralized management services include the following features:

- **Management Server**—A server can be set up to continuously run Cisco Fabric Manager services. Up to 16 remote Cisco Fabric Manager user interface clients can access this management server concurrently.
- **Web-Based Operational View**—Historical performance statistics, storage-area-network (SAN) inventory, and fabric event information needed for day-to-day operations are accessible remotely through a Web-browser interface.

- **Multiple-Fabrics Management**—Multiple Fibre Channel fabrics can be monitored by each management server, facilitating rapid access to configuration parameters and topology maps for multiple fabrics.
- **Continuous Health Monitoring**—Cisco switch device health is monitored continuously by Cisco FMS using Simple Network Management Protocol (SNMP) traps and polling, instead of only while the application user interface is open.
- **Common Discovery**—With Cisco FMS, Fibre Channel host bus adapter (HBA), storage device, and Fibre Channel switch discovery occurs as a background process in a centralized location for fast, efficient initialization of the Cisco Fabric Manager client-user interface.
- **Roaming User Profiles**—User preference settings and topology-map layout changes are applied whenever the Cisco Fabric Manager client is opened, maintaining a consistent interface regardless of which computer is used for management.
- **FMS Proxy Services**—The FMS proxy services help isolate a private IP network used for Cisco MDS management from the LAN or WAN used for remote connectivity, and these services enhance resiliency by transporting management traffic between the Cisco Fabric Manager client and server over TCP/IP.

### Advanced Application Integration

The Cisco FMS package offers the following advanced application-integration features:

- **Cisco Traffic Analyzer Integration**—In-context application launch of Cisco Traffic Analyzer with Fibre Channel device-naming information passing provides transparent drilldown to Small Computer System Interface (SCSI) I/O or Fibre Channel frame-level details.

### Software Release

The performance thresholds and Web-based operational view require Cisco Fabric Manager Release 2.0(1). The FMS proxy services require Cisco Fabric Manager Release 2.1(1).

### License Information

Cisco Systems<sup>®</sup> licenses this package per switch. Licensing a single switch per Fibre Channel fabric only enables centralized management services and advanced application integration for the fabric. Historical performance monitoring features are restricted to licensed switches; every switch in a fabric must be licensed to fully utilize these features. Licensing policy will be enforced by Cisco FMS.

### Ordering Information

The product identification numbers for ordering are listed in Table 1.

**Table 1.** Ordering Information

Part Number	Description
<b>M9500FMS1K9</b>	Cisco FMS package for one Cisco MDS 9500 Series Multilayer Director
<b>M9500FMS1K9=</b>	Cisco FMS package for one Cisco MDS 9500 Series Multilayer Director; Spare
<b>M9200FMS1K9</b>	Cisco FMS package for one Cisco MDS 9200 Series Multilayer Fabric Switch
<b>M9200FMS1K9=</b>	Cisco FMS package for one Cisco MDS 9200 Series Multilayer Fabric Switch; Spare
<b>M9100FMS1K9</b>	Cisco FMS package for one Cisco MDS 9100 Series Multilayer Fabric Switch

Part Number	Description
<b>M9100FMS1K9=</b>	Cisco FMS package for one Cisco MDS 9100 Series Multilayer Fabric Switch; Spare
<b>N5000FMS1K9</b>	Cisco FMS package for one Cisco Nexus 5000 Family switch
<b>N5000FMS1K9=</b>	Cisco FMS package for one Cisco Nexus 5000 Family switch; Spare

### Additional References

For more information, refer to the Cisco Fabric Manager data sheet at

[http://www.cisco.com/en/US/products/hw/ps4159/ps4358/products\\_data\\_sheet09186a00800c4656.html](http://www.cisco.com/en/US/products/hw/ps4159/ps4358/products_data_sheet09186a00800c4656.html).

Refer also to the Cisco MDS 9000 Family SAN-OS data sheet at

[http://www.cisco.com/en/US/products/hw/ps4159/ps4358/products\\_data\\_sheet09186a00801bcfd8.html](http://www.cisco.com/en/US/products/hw/ps4159/ps4358/products_data_sheet09186a00801bcfd8.html).

Refer also to the Cisco Nexus 5000 Family data sheet at

[http://www.cisco.com/en/US/prod/collateral/switches/ps9441/ps9670/data\\_sheet\\_c78-461802.html](http://www.cisco.com/en/US/prod/collateral/switches/ps9441/ps9670/data_sheet_c78-461802.html).



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San Jose, CA

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