



Cisco MDS 9000 Family 8-Gbps Fibre Channel Switching Modules Hardware Release Notes

For Installation in a Sun™ Storage Area Network

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Cisco MDS 9000 Family 8-Gbps Fibre Channel Switching Modules Hardware Release Notes

Read this document so that you are aware of the requirements and issues that can affect the installation and operation of the Cisco MDS 9000 Family 8-Gbps Fibre Channel switching modules in a Sun storage area network (SAN).

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Features

The Cisco MDS 9000 Family 8-Gbps Fibre Channel switching modules deliver up to 528, 8-Gbps ports and twice the bandwidth of previous generation Cisco MDS Fibre Channel switching modules. All module configurations have the following features:

- Auto-sensing 1- 2- 4- and 8-Gbps capability (1-Gbps port speed is not available with 8-Gbps small form-factor pluggable (SFP) transceivers)
- High-performance inter-switch link (ISL) capability
- Support for virtual storage area networks (VSANs), access control lists (ACLs), and quality of service (QoS)
- Advanced Fiber Connectivity (FICON) services

Note – Cisco MDS 9000 Family 8-Gbps Fibre Channel switching modules are not usable as stand-alone switches.

Port Configurations

Cisco MDS 9000 Family 8-Gbps Fibre Channel switching modules are available in three port configurations. They are installed into an existing Cisco MDS 9500 Series Multilayer Director or Cisco MDS 9222i Multiservice Modular Switch chassis, depending on the chosen module configuration.

The following sections describe each available configuration:

- [“Cisco MDS 9000 Family 24-Port 8-Gbps Fibre Channel Switching Module” on page 3](#)
- [“Cisco MDS 9000 Family 48-Port 8-Gbps Fibre Channel Switching Module” on page 3](#)
- [“Cisco MDS 9000 Family 4/44-Port 8-Gbps Host-Optimized Fibre Channel Switching Module” on page 4](#)

Cisco MDS 9000 Family 24-Port 8-Gbps Fibre Channel Switching Module

The 24-port module has the following specifications:

- 24 8-Gbps ports supporting 4-Gbps SFPs and 8-Gbps SFPs
- 192 Gbps of full-duplex bandwidth
- Installable only in a Cisco MDS 9500 Series Multilayer Director

Note – The Cisco MDS 9513 Multilayer Director requires the MDS 9513 Fabric 2 Modules to support the Cisco MDS 9000 Family 24-Port 8-Gbps Fibre Channel Switching Module. The MDS 9513 Fabric 2 Modules allow the Cisco MDS 9000 Family 24-Port 8-Gbps Fibre Channel Switching Module to achieve maximum bandwidth.

Cisco MDS 9000 Family 48-Port 8-Gbps Fibre Channel Switching Module

The 48-port module has the following specifications:

- 48 8-Gbps ports supporting 4-Gbps SFPs and 8-Gbps SFPs
- 192 Gbps of full-duplex bandwidth
- Installable only in a Cisco MDS 9500 Series Multilayer Director

Note – The Cisco MDS 9513 Multilayer Director requires the MDS 9513 Fabric 2 Modules to support the Cisco MDS 9000 Family 48-Port 8-Gbps Fibre Channel Switching Module. The MDS 9513 Fabric 2 Modules allow the Cisco MDS 9000 Family 48-Port 8-Gbps Fibre Channel Switching Module to achieve maximum bandwidth.

Cisco MDS 9000 Family 4/44-Port 8-Gbps Host-Optimized Fibre Channel Switching Module

The 4/44-port module has the following specifications:

- Four 8-Gbps ports and 44 4-Gbps ports
- 96 Gbps of full-duplex bandwidth
- Installable in both a Cisco MDS 9500 Series Multilayer Director or Cisco MDS 9222i Multiservice Modular Switch

Note – The Cisco MDS 9513 Multilayer Director does NOT require the MDS 9513 Fabric 2 Modules to support the Cisco MDS 9000 Family 4/44-Port 8-Gbps Host-Optimized Fibre Channel Switching Module.

Firmware Requirements

The Cisco MDS 9000 Family 8-Gbps Fibre Channel switching modules require Cisco MDS 9000 NX-OS Software revision 4.1(1b) (minimum) be installed on the Cisco MDS 9000 Family director or switch into which the module is installed. Use [TABLE 1](#) to determine the correct patch ID for your equipment. The -xx suffix indicates the latest patch revision number.

TABLE 1 Patch IDs for Cisco MDS 9000 NX-OS Software

	Cisco MDS 9000 NX-OS Software Revision	Sun Patch ID
Cisco MDS 9222i Multiservice Modular Switch	4.1(1b)	140044-xx
Cisco MDS 9500 Series Multilayer Director	4.1(1b)	140045-xx

For further information, see [“Downloading and Installing Patches”](#) on page 5.

Note – The switch or director into which these modules are installed might have specific firmware, hardware, or software requirements. Be sure to check the available documentation for your equipment for important compatibility information.

Downloading and Installing Patches

The following task provides instructions for downloading and installing patches for a Cisco MDS 9000 Family director or switch. See [“Firmware Requirements” on page 4](#) for the required or recommended firmware versions and associated patch IDs.

1. **Access the SunSolveSM web site at:**

`http://sunsolve.sun.com`

2. **Read and accept the terms and conditions of the License Agreement.**

3. **From the Support category, select Patches and Updates.**

4. **Under PatchFinder, type the patch ID and click Find Patch.**

Do not type the -xx revision number. PatchFinder automatically finds the latest patch.

5. **Verify you have retrieved the correct patch.**

6. **Print the page.**

Printing this page also prints the patch README file, which contains installation instructions, special instructions, special guidelines, and notes.

7. **Download the patch by clicking on either HTTP or FTP as shown in the following line:**

Download Patch (*nn,nnn,nnn* bytes) HTTP FTP.

8. **Click PatchFinder and repeat the process from Step 4 for each patch.**

9. **Install the patches.**

When you have finished downloading all patches, install the patches by following the instructions in each patch README file.

Related Documentation

Cisco documentation is equipment-specific and can be obtained directly from Cisco's web site.

- For documentation related to Cisco Storage Networking Modules:

http://cisco.com/en/US/products/ps5991/tsd_products_support_series_home.html

- For documentation related to Cisco MDS 9200 Series Multilayer Switches:

http://cisco.com/en/US/products/ps5988/tsd_products_support_series_home.html

- For documentation related to Cisco MDS 9500 Series Multilayer Directors:

http://cisco.com/en/US/products/ps5990/tsd_products_support_series_home.html

Service Contact Information

If you need help installing or using this product in the United States, call 1-800-USA-4SUN, or go to:

<http://www.sun.com/service/contacting/index.xml>