



## **Recommended Releases for Cisco MDS 9000 Series Switches**

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Revised: April 7, 2022

# Recommended Releases for Cisco MDS 9000 Series Switches

## Change History

Date	Description
April 6, 2022	Updated the document with Cisco MDS NX-OS Release 9.2(2) as the recommend releases.
March 22, 2022	Updated the document with Cisco MDS NX-OS Release 8.4(2d) as the recommend releases.
September 8, 2021	Updated the recommend release for Cisco DCNM to release 11.5(1).
August 25, 2021	Added the Cisco MDS 48-Port 64-Gbps Fibre Channel Switching Module and updated its recommended release.
July 16, 2021	Updated the document with Cisco MDS NX-OS Release 8.4(2c) as the recommend releases.
May 27, 2021	Updated the document with Cisco MDS NX-OS Release 6.2(33) as the recommend releases.
March 22, 2021	Added recommended release information for Cisco MDS 9220i switch.
November 24, 2020	Updated the recommended release to Cisco MDS NX-OS Release 8.4(2a).
June 15, 2020	Added the MSM-18/4 or SSN-16 Module information for Cisco MDS 9506 and 9513.  Removed the following modules because of their end-of-life: <ul data-bbox="834 1419 1482 1650" style="list-style-type: none"><li>• Cisco MDS 9000 48-Port 8-Gbps Fibre Channel Switching Module (DS-X9248-96K9)</li><li>• Cisco MDS 9000 4/44-Port Host-Optimized 8-Gbps Fibre Channel Switching Module (DS-X9248-48K9)</li><li>• Cisco MDS 9000 Series 4-Port 10-Gbps Fibre Channel Switching Module (DS-X9704)</li></ul>
May 21, 2020	Removed Cisco MDS 9222i and Cisco MDS 9000 Series 18/4-Port Multiservice Module (DS-X9304-18K9) information because of their end-of-support.

Date	Description
May 1, 2020	Updated the recommended release for IOA to Cisco MDS NX-OS Release 8.4(2).
April 1, 2020	Updated the document with Cisco MDS NX-OS Release 6.2(29) and Release 8.4(1a) as the recommend releases.

This document lists the recommended Cisco MDS NX-OS software release for use with Cisco MDS 9000 Series switches for both new deployments and existing deployments. These are Cisco release recommendations based on important software fixes and hence we recommend that you upgrade to these releases at a minimum, if permitted by your current deployment and SAN design. These recommendations are general and should not replace environment-specific design review efforts. Customers can alternatively deploy more recent software releases to take advantage of newer hardware and software capabilities.

## General Recommendation for New Deployments

We recommend that customers with new Cisco MDS 9000 Series deployments choose from the following releases:

Director Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9718	Cisco MDS 48-Port 64-Gbps Fibre Channel Switching Module (DS-X9748-3072K9)	—	—	—	9.2(2)
	Cisco MDS 9700 Series Supervisor-1E (DS-X97-SF1E-K9)	—	—	8.4(2d)	—
	Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module (DS-X9648-1536K9)	—	—	8.4(2d)	—
	Cisco MDS 48-Port 10-Gbps Fibre Channel over Ethernet (FCoE) Module (DS-X9848-480K9)	—	—	8.4(2d)	—
	Cisco MDS 9000 48-port 16-Gbps Fibre Switching Module (DS-X9448-768K9)	—	—	8.4(2d)	—
	Crossbar Fabric Switching Module (DS-X9718-FAB1)	—	—	8.4(2d)	—
	Cisco MDS 40-Gbps 24-Port FCoE Module (DS-X9824-960K9)	—	—	8.4(2d)	—
	Cisco MDS 24/10 Port SAN Extension Module (DS-X9334-K9)	—	—	8.4(2d)	—

Director Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9710	Cisco MDS 48-Port 64-Gbps Fibre Channel Switching Module (DS-X9748-3072K9)	—	—	—	9.2(2)
	Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9)	—	—	8.4(2d)	—
	Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module (DS-X9648-1536K)	—	—	8.4(2d)	—
	Crossbar Fabric Switching Module (DS-X9710-FAB3)	—	—	8.4(2d)	—
	Cisco MDS 24/10 Port SAN Extension Module (DS-X9334-K9)	—	—	8.4(2d)	—
	Cisco MDS 40-Gbps 24-Port FCoE Module (DS-X9824-960K9)	—	—	8.4(2d)	—
	Cisco MDS 9700 Series Supervisor-1 Module (DS-X97-SF1-K9)	—	6.2(33)	8.4(2d)	—
	Cisco MDS 9000 48-port 16-Gbps Fibre Switching Module (DS-X9448-768K9)	—	6.2(33)	8.4(2d)	—
	Cisco MDS 9000 48-Port 10-Gbps FCoE Module (DS-X9848-480K9)	—	6.2(33)	8.4(2d)	—
	Crossbar Fabric Switching Module (DS-X9710-FAB1)	—	6.2(33)	8.4(2d)	—

Director Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9706	Cisco MDS 48-Port 64-Gbps Fibre Channel Switching Module (DS-X9748-3072K9)	—	—	—	9.2(2)
	Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9)	—	—	8.4(2d)	—
	Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module (DS-X9648-1536K)	—	—	8.4(2d)	—
	Crossbar Fabric Switching Module (DS-X9706-FAB3)	—	—	8.4(2d)	—
	Cisco MDS 24/10 Port SAN Extension Module (DS-X9334-K9)	—	—	8.4(2d)	—
	Cisco MDS 40-Gbps 24-Port FCoE Module (DS-X9824-960K9)	—	—	8.4(2d)	—
	Cisco MDS 9700 Series Supervisor-1 Module (DS-X97-SF1-K9)	—	6.2(33)	8.4(2d)	—
	Cisco MDS 9000 48-port 16-Gbps Fibre Switching Module (DS-X9448-768K9)	—	6.2(33)	8.4(2d)	—
	Cisco MDS 9000 48-Port 10-Gbps FCoE Module (DS-X9848-480K9)	—	6.2(33)	8.4(2d)	—
	Crossbar Fabric Switching Module (DS-X9706-FAB1)	—	6.2(33)	8.4(2d)	—

Director Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9506 and 9513	Cisco MDS 9500 Series Supervisor-2A Module (DS-X9530-SF2AK9)	5.2(8h)	6.2(33)	—	—
	Cisco MDS 9000 8-port 10-Gbps Fibre Channel over Ethernet (FCoE) Module (DS-X9708-K9)	5.2(8h)	6.2(33)	—	—
	Cisco MDS 9000 32-port 8-Gbps Advanced Fibre Channel Switching Module (DS-X9232-256K9)	5.2(8h)	6.2(33)	—	—
	Cisco MDS 9000 48-port 8-Gbps Advanced Fibre Channel Switching Module (DS-X9248-256K9)	5.2(8h)	6.2(33)	—	—
	MSM-18/4 or SSN-16 Module	5.2(8h)	6.2(33)	—	—



**Note** We recommend that you use Cisco MDS NX-OS Release 8.x for Cisco switches and modules instead of Cisco MDS NX-OS Release 7.3(x).



**Note** The recommended software release for Cisco MDS NX-OS Release 5.x is Cisco MDS NX-OS Release 5.2(8h). However, we recommend that you upgrade to a Cisco MDS NX-OS Release 6.2(x) which has the latest security updates.

Fabric Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9396T 32-Gbps 96-Port Fibre Channel Switch	None (fixed configuration)	—	—	8.4(2d)	—

Fabric Switches	Supported Modules	Recommended Software Release			
		5.x	6.x	8.x	9.x
Cisco MDS 9396S 16G Multilayer Fabric Switch	—	—	6.2(33)	8.4(2d)	—
Cisco MDS 9220i Fabric Switch	—	—	—	8.5(1)	—
Cisco MDS 9250i Multiservice Fabric Switch	—	—	6.2(33)	8.4(2d)	—
Cisco MDS 9148T 32-Gbps 48-Port Fibre Channel Switch	—	—	—	8.4(2d)	—
Cisco MDS 9148 Multilayer Fabric Switch	—	5.2(8h)	6.2(33)	—	—
Cisco MDS 9148S 16G Multilayer Fabric Switch	—	—	6.2(33)	8.4(2d)	—
Cisco MDS 9132T 32-Gbps 32-Port Fibre Channel Switch	—	—	—	8.4(2d)	—
Cisco MDS 8-Gb Fabric Switch for HP c-Class Blade System	—	5.2(8h)	6.2(33)	—	—

### Recommendation for SAN Analytics

The initial support for SAN Analytics and SAN Telemetry Streaming was introduced in Cisco MDS NX-OS Release 8.2(1). However, Cisco has found that SAN Analytics and Telemetry perform best when running Cisco MDS NX-OS Release 8.4(1a) and later releases. If you are using SAN Analytics and SAN Telemetry Streaming, we recommend that you upgrade the switch's NX-OS version to Cisco MDS NX-OS Release 8.4(1a) or later releases. See the Cisco MDS NX-OS Release 8.4(1a) or later release notes for nondisruptive upgrade procedure. Before upgrading from Cisco MDS NX-OS Release 8.2(x) or 8.3(x) to 8.4(1a) or later releases, ensure that you disable the SAN Analytics feature using the **feature analytics** command before upgrading and this is a one time requirement.

## Recommendation for FICON Environments

We recommend that customers choose from the following releases qualified by IBM for use in FICON environments:



Director Switches	Supported Modules	Recommended Software Release
Cisco MDS 9710 and 9706	Cisco MDS 9700 Series Supervisor-1 Module (DS-X97-SF1-K9)	8.4(2b)
	Cisco MDS 9700 48-Port 32-Gbps Fibre Channel Switching Module (DS-X9648-1536K9)	8.4(2b)
	Cisco MDS 9700 48-Port 16-Gbps Fibre Switching Module (DS-X9448-768K9)	8.4(2b)
	Crossbar Fabric Switching Module (DS-X9706-FAB1)	8.4(2b)
	Cisco MDS 9700 Series Supervisor-4 Module (DS-X97-SF4-K9)	8.4(2b)
	Cisco MDS 9710 Crossbar Fabric-3 Switching Module (DS-X9710-FAB3)	8.4(2b)
	Cisco MDS 9706 Crossbar Fabric-3 Switching Module (DS-X9706-FAB3)	8.4(2b)
Cisco MDS 9506 and 9513	Cisco MDS 9000 32-Port 8-Gbps Advanced Fibre Channel Switching Module (DS-X9232-256K9)	6.2(11e)
	Cisco MDS 9000 48-Port 8-Gbps Advanced Fibre Channel Switching Module (DS-X9248-256K9)	6.2(11e)
Fabric Switches	Supported Modules	Recommended Software Release
MDS 9250i	—	8.4(2b)

## Recommendation for Cisco DCNM

We recommend that customers choose Cisco DCNM Release 11.5(1) for Cisco DCNM software.

## Recommendation for Cisco MDS 9000 Series Intelligent Applications

We recommend that customers choose from the following **Cisco MDS 9000 Series Intelligent Applications** recommended releases:

Intelligent Application	Recommended Software Release
I/O Accelerator (IOA)	8.4(2)
Data Mobility Manager (DMM)	6.2(33)
Storage Media Encryption (SME) — Tape	6.2(27)
FICON Tape Acceleration (FTA)	8.4(2b)
XRC Acceleration (XRCA)	6.2(11e)

### Release Notes

See <https://www.cisco.com/c/en/us/support/storage-networking/mds-9000-nx-os-san-os-software/products-release-notes-list.html>.

### **Existing Deployments That Use Software Earlier Than One of the Recommended Releases**

To the extent possible, we recommend upgrading to one of the NX-OS releases listed previously. If that is not possible, we recommend that you review the [Cisco MDS NX-OS Release Notes](#) for the earlier release and the Bug Tool Kit to determine the impact of any open caveats.

### **Documentation and Software**

For additional information, see the [Cisco MDS 9000 Series Switches](#) product documentation page.

For software, see the [Download Software](#) page.

### **Obtaining Documentation and Submitting a Service Request**

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

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