



## Preface

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This preface describes the audience, organization, and conventions of the *Fabric Configuration Guide, Cisco DCNM for SAN*. It also provides information on how to obtain related documentation.

## Audience

This guide is for experienced network administrators who are responsible for configuring and maintaining the Cisco MDS 9000 Family of multilayer directors and fabric switches.

## Organization

The *Cisco MDS 9000 Family NX-OS Fabric Configuration Guide* is organized as follows:

Chapter	Title	Description
<a href="#">Chapter 3</a>	<a href="#">Fabric Overview</a>	Provides an overview of features described in this guide.
<a href="#">Chapter 4</a>	<a href="#">Configuring and Managing VSANs</a>	Describes how virtual SANs (VSANs) work, explains the concept of default VSANs, isolated VSANs, VSAN IDs, and attributes, and provides details on how to create, delete, and view VSANs.
<a href="#">Chapter 5</a>	<a href="#">Configuring SAN Device Virtualization</a>	Describes how to configure virtual devices to represent physical end devices for switches as of Cisco MDS SAN-OS Release 3.1(2) and NX-OS Release 4.1(1).
<a href="#">Chapter 6</a>	<a href="#">Creating Dynamic VSANs</a>	Defines the Dynamic Port VSAN Membership (DPVM) feature that is used to maintain fabric topology when a host or storage device connection is moved between two Cisco MDS switches.
<a href="#">Chapter 7</a>	<a href="#">Configuring and Managing Zones</a>	Defines various zoning concepts and provides details on configuring a zone set and zone management features.

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Chapter	Title	Description
Chapter 8	<a href="#">Distributing Device Alias Services</a>	Describes the use of the Distributed Device Alias Services (device alias) to distribute device alias names on a fabric-wide basis.
Chapter 10	<a href="#">Configuring Fibre Channel Routing Services and Protocols</a>	Provides details and configuration information on Fibre Channel routing services and protocols.
Chapter 11	<a href="#">Configuring Dense Wavelength Division Multiplexing</a>	Dense Wavelength-Division Multiplexing (DWDM) multiplexes multiple optical carrier signals on a single optical fiber. DWDM uses different wavelengths to carry various signals.
Chapter 12	<a href="#">Managing FLOGI, Name Server, FDMI, and RSCN Databases</a>	Provides name server and fabric login details required to manage storage devices and display registered state change notification (RSCN) databases.
Chapter 13	<a href="#">Discovering SCSI Targets</a>	Describes how the SCSI LUN discovery feature is started and displayed.
Chapter 14	<a href="#">Configuring FICON</a>	Provides details on the Fibre Channel (FICON) interface, fabric binding, and the Registered Link Incident Report (RLIR) capabilities in Cisco MDS switches.
Chapter 15	<a href="#">Configuring Advanced Fabric Features</a>	Describes the advanced configuration features—time out values, fctrace, fabric analyzer, world wide names, flat FC IDs, loop monitoring, and interoperating switches.

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Chapter 5	<a href="#">Configuring SAN Device Virtualization</a>	Describes how to configure virtual devices to represent physical end devices for switches running Cisco MDS SAN-OS Release 3.1(2) and NX-OS Release 4.1(1a).
Chapter 6	<a href="#">Creating Dynamic VSANs</a>	Defines the Dynamic Port VSAN Membership (DPVM) feature that is used to maintain fabric topology when a host or storage device connection is moved between two Cisco MDS Family switches.
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Chapter	Title	Description
Chapter 8	<a href="#">Distributing Device Alias Services</a>	Describes the use of the Distributed Device Alias Services (device alias) to distribute device alias names on a fabric-wide basis.
Chapter 9	<a href="#">Configuring FCoE</a>	Describes how to configure Fibre Channel over Ethernet (FCoE) on a Cisco Nexus 5000 Series, Nexus 7000 Series, and MDS 9000 Family switch.
Chapter 10	<a href="#">Configuring Fibre Channel Routing Services and Protocols</a>	Provides details and configuration information on Fibre Channel routing services and protocols.
Chapter 11	<a href="#">Configuring Dense Wavelength Division Multiplexing</a>	Dense Wavelength-Division Multiplexing (DWDM) multiplexes multiple optical carrier signals on a single optical fiber. DWDM uses different wavelengths to carry various signals.
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## Document Conventions

Command descriptions use these conventions:

<b>boldface font</b>	Commands and keywords are in boldface.
<i>italic font</i>	Arguments for which you supply values are in italics.
[ ]	Elements in square brackets are optional.
[ x   y   z ]	Optional alternative keywords are grouped in brackets and separated by vertical bars.

Screen examples use these conventions:

<code>screen font</code>	Terminal sessions and information the switch displays are in screen font.
<b>boldface screen font</b>	Information you must enter is in boldface screen font.
<i>italic screen font</i>	Arguments for which you supply values are in italic screen font.

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< >	Nonprinting characters, such as passwords, are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (!) or a pound sign (#) at the beginning of a line of code indicates a comment line.

This document uses the following conventions:



**Note**

Means reader *take note*. Notes contain helpful suggestions or references to material not covered in the manual.



**Caution**

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

## Related Documentation

The documentation set for the Cisco MDS 9000 Family includes the following documents. To find a document online, use the Cisco MDS NX-OS Documentation Locator at:

[http://www.cisco.com/en/US/docs/storage/san\\_switches/mds9000/roadmaps/doclocator.htm](http://www.cisco.com/en/US/docs/storage/san_switches/mds9000/roadmaps/doclocator.htm)

## Release Notes

- *Cisco MDS 9000 Family Release Notes for Cisco MDS NX-OS Releases*
- *Cisco MDS 9000 Family Release Notes for MDS SAN-OS Releases*
- *Cisco MDS 9000 Family Release Notes for Cisco MDS 9000 EPLD Images*
- *Cisco DCNM Release Notes*

## Regulatory Compliance and Safety Information

- *Regulatory Compliance and Safety Information for the Cisco MDS 9000 Family*

## Compatibility Information

- *Cisco Data Center Interoperability Support Matrix*
- *Cisco MDS 9000 NX-OS Hardware and Software Compatibility Information and Feature Lists*
- *Cisco MDS 9000 Family Switch-to-Switch Interoperability Configuration Guide*

## Hardware Installation

- *Cisco MDS 9500 Series Hardware Installation Guide*

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- *Cisco MDS 9200 Series Hardware Installation Guide*
- *Cisco MDS 9100 Series Hardware Installation Guide*
- *Cisco MDS 9124 and Cisco MDS 9134 Multilayer Fabric Switch Quick Start Guide*

## Software Installation and Upgrade

- *Cisco MDS 9000 NX-OS Software Upgrade and Downgrade Guide*

## Cisco NX-OS

- *Cisco MDS 9000 Family NX-OS Licensing Guide*
- *Cisco MDS 9000 Family NX-OS Fundamentals Configuration Guide*
- *Cisco MDS 9000 Family NX-OS System Management Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Interfaces Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Fabric Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Quality of Service Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Security Configuration Guide*
- *Cisco MDS 9000 Family NX-OS IP Services Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Intelligent Storage Services Configuration Guide*
- *Cisco MDS 9000 Family NX-OS High Availability and Redundancy Configuration Guide*
- *Cisco MDS 9000 Family NX-OS Inter-VSAN Routing Configuration Guide*
- *Cisco MDS 9000 Family Cookbook for Cisco MDS SAN-OS*

## Cisco DCNM-SAN

- *Cisco DCNM Fundamentals Guide, Release 6.x*
- *System Management Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Interfaces Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Fabric Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Quality of Service Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Security Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *IP Services Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Intelligent Storage Services Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *High Availability and Redundancy Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *Inter-VSAN Routing Configuration Guide, Cisco DCNM for SAN, Release 6.x*
- *SMI-S and Web Services Programming Guide, Cisco DCNM for SAN, Release 5.x*

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## Command-Line Interface

- *Cisco MDS 9000 Family Command Reference*

## Intelligent Storage Networking Services Configuration Guides

- *Cisco MDS 9000 Family I/O Acceleration Configuration Guide*
- *Cisco MDS 9000 Family SANTap Deployment Guide*
- *Cisco MDS 9000 Family Data Mobility Manager Configuration Guide*
- *Cisco MDS 9000 Family Storage Media Encryption Configuration Guide*

## Troubleshooting and Reference

- *Cisco MDS 9000 Family and Nexus 7000 Series System Messages Reference*
- *Cisco MDS 9000 Family SAN-OS Troubleshooting Guide*
- *Cisco MDS 9000 Family NX-OS MIB Quick Reference*
- *Cisco DCNM for SAN Database Schema Reference*

## 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:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

- Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.