



Preface

This preface describes the audience, organization, and conventions of the *SMI-S and Web Services Programming Guide, Cisco DCNM for SAN*. It also provides information on how to obtain related documentation.

Audience

This guide is for users who are familiar with general object-oriented programming techniques and with the following items:

- Storage Management Initiative Specification (SMI-S)
- Common Information Model (CIM)
- Managed Object Format (MOF) files
- Unified Modeling Language (UML)
- Secure Socket Layer (SSL), if increased security is desired when accessing the CIM server

Organization

This guide is organized as follows:

Chapter	Title	Description
Chapter 1	Introduction to Cisco DCNM for SAN SMI-S	Provides an overview of the support provided for CIM and other standards.
Chapter 2	Configuring and Using Cisco DCNM SMI-S Server	Provides CLI commands to configure the CIM server, and sample scenarios for using CIM to manage your SAN.
Chapter 3	Cisco DCNM SMI-S Server Support	Describes the supported profiles, indications, and Cisco-specific extensions.
Chapter 4	SMI-S Notifications	Describes the SMI-S notifications.
Chapter 5	Sample SMI-S Java Client	Provides the sample SMI-S java client and services.
Chapter 6	Managed Object Format Files for Cisco DCNM SMI-S Server	Provides the text from the MOF files for the Cisco MDS 9000 Family CIM server extensions.

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Chapter	Title	Description
Chapter 7	Introduction to Cisco DCNM for SAN Web Services	Provides application programming interfaces (APIs) that expose DCNM-SAN core software functionalities as remote procedure calls to third-party vendors.
Chapter 8	DCNM for SAN Web Services API	Describes the Cisco DCNM for SAN (DCNM-SAN) Web Services (FMWS) application program interface (API).
Chapter 9	Discovery Automation Tool	This is a tool to discover DCNM-SAN, DCNM-LAN, and vCenter.
Appendix A	Sample Client Program	Provides a sample client program using API.
Appendix B	Perl Client	Provides the Perl client installation information and some sample perl client programs.
Appendix C	Command Line Storage Dumps Tool	Provides installing and usage information of the Command Line Storage Dumps tool.

Document Conventions

Command descriptions use these conventions:

boldface font	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.
boldface screen font	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.
< >	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.

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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

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*
- *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*

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- *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 for SAN

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

Cisco DCNM

The following publications support both Cisco DCNM for LAN and DCNM for SAN, and address the new licensing model, the new installation process, and the new features of Cisco DCNM:

- *Cisco DCNM Fundamentals Guide, Release 6.x*
- *Cisco DCNM Installation Guide, Release 6.x*

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*

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Troubleshooting and Reference

- *Cisco DCNM Troubleshooting Guide*
- *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, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see [What's New in Cisco Product Documentation](#).

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the [What's New in Cisco Product Documentation RSS feed](#). The RSS feeds are a free service.

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