

# Configuring Cisco MDS 9000 Series Switches (DCMDS) v3.6

## What you'll learn in this course

The **Configuring Cisco MDS 9000 Series Switches (DCMDS) v3.6** course teaches you to implement, manage, and troubleshoot Cisco® MDS 9000 Series Switches to build highly available, scalable storage networks. Through expert instruction and extensive hands-on practice, you will learn how to deploy and utilize capabilities such as Virtual Storage Area Networks (VSANs), Role-Based Access Control (RBAC), N-Port Virtualization (NPV) fabric security, zoning, automation with NX-API, Slow Drain Analysis, SAN analytics, Fibre Channel over TCP/IP (FCIP) tunnels, and more. You will learn how to configure and implement platform features and learn troubleshooting techniques pertaining to Fibre Channel (FC) domains, firmware upgrades, zones, and zone mergers.

This course helps you prepare to take the **300-625 Implementing Cisco Storage Area Networking (DCSAN)** exam, which leads to **CCNP Data Center** and the **Certified Specialist - Data Center SAN Implementation** certifications.

## Course duration

- Instructor-led training: 4 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 4 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 4 days of instruction with hands-on lab practice

## How you'll benefit

This course will help you:

- Learn how to deploy and troubleshoot the Cisco Nexus® 9000 Series Switches to support performance, resiliency, scalability, and enhanced operations for data centers
- Gain knowledge and skills through Cisco's unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Succeed in today's demanding data center operations roles
- Earn 40 CE credits toward recertification

## What to expect in the exam

This exam certifies your knowledge of Cisco MDS 9000 Series Switches including deployment, implementation, management and monitoring, and troubleshooting.

After you pass **300-625 DCSAN**:

- You earn the **Cisco Certified Specialist - Data Center SAN Implementation** certification.
- You will have satisfied the concentration exam requirement for new **CCNP Data Center**. To complete your CCNP Data Center certification, pass the **Implementing and Operating Cisco Data Center Core Technologies (350-601 DCCOR)** exam or its equivalent.

## Who should enroll

- Technical decision makers
- Network architects
- Data center systems engineers
- Field engineers

## How to enroll

### E-learning

- To buy a single e-learning license, visit the [Cisco Learning Network Store](#).
- For more than one license, or a learning library subscription, contact us at [learning-bdm@cisco.com](mailto:learning-bdm@cisco.com).

### Instructor-led training

- Find a class at the [Cisco Learning Locator](#).
- Arrange training at your location through [Cisco Private Group Training](#).

## Technology areas

- Data center

## Course details

### Objectives

After taking this course, you should be able to:

- Discover and describe the Cisco Multilayer Director Switch (MDS) platform of multilayer switches and directors
- Provision Cisco MDS Switches
- Describe key product features of the MDS platform
- Describe and implement automation on Cisco MDS Switches
- Configure and implement the Cisco MDS switches and platform features
- Resolve issues and troubleshoot FC domains, zones and zone merges, and switch boot and firmware upgrades

### Prerequisites

To fully benefit from this course, you should have the following knowledge and skills:

- Basic understanding of data storage hardware components and protocols, including Small Computer System Interface (SCSI) and Fibre Channel
- Basic understanding of network protocols, including Ethernet and IP
- Basic routing and switching knowledge

The following courses may help you meet these prerequisites:

- **Implementing and Operating Cisco Data Center Core Technologies (DCCOR)**

## Outline

- Describing Cisco MDS Platform
- Provisioning Cisco MDS Switches
- Building the Fibre Channel Fabric with Cisco MDS Switches
- Automating Cisco MDS Fabric
- Monitoring and Reporting Cisco MDS Features
- Troubleshooting Common Cisco MDS Issues

## Lab outline

- Perform Initial MDS Configuration
- Setup Cisco DCNM
- Explore DCNM-SAN Client and DCNM Cisco Device Manager
- Configure and Use RBAC
- Configure and Use RBAC with DCNM-SAN Client and Device Manager
- Manage VSANs and Fibre Channel Domain
- Configure Interfaces
- Configure Device Aliases and Zoning
- Configure FCIP Tunnels and FCIP High Availability
- Configure IVR for SAN Extension
- Configure NPV and NPIV
- Explore and Automate with NX-API
- Monitor SAN with Cisco DCNM
- Configure SAN Analytics and SAN Telemetry Streaming
- Troubleshoot Fibre Channel Domains, Zoning, and Zone Merges
- Perform Slow-Drain Analysis with Cisco DCNM


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