



Introducing Cisco MDS 9000 Series Switches

DURATION: 2 DAYS

COURSE CODE: DCIMDS

FORMAT: LECTURE/LAB

COURSE DESCRIPTION

The Introducing Cisco MDS 9000 Series Switches (DCIMDS) v1.0 course gives you an overview of Cisco® MDS 9000 Series Multilayer Switches, including platform architecture, software, and management capabilities. You will learn the key features that contribute to high performance and availability, flexibility, and operational simplicity and investment protection. During hands-on lab time, you'll configure a Multilayer Director Switch (MDS) SAN fabric using Cisco Data Center Network Manager (DCNM) and Command Line Interface (CLI) commands. You'll gain a technical understanding of how to build highly available, scalable storage networks using the robust, flexible hardware architecture with network and storage management intelligence.

WHO SHOULD ATTEND

Technical decision makers and professionals who architect, implement, or manage data center SAN environments, including:

- Solutions architects
 - Data center architects
 - Network architects
 - Systems engineers
 - Data center engineers
 - Network engineers
 - Technical decision makers
 - Cisco integrators and partners
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PREREQUISITES

- Experience managing data center deployments
 - Knowledge of the fundamentals of SAN technologies
 - Understanding of business and application requirements
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LEARNING OBJECTIVES

This course will help you:

- Gain a technical understanding of the Cisco MDS 9000 Series Switches capabilities through Cisco's unique combination of lessons and hands-on practice
- Be the technical consultant on deployment options
- Prepare to give technical demonstrations on the MDS 9000 Series

After taking this course, you should be able to:

- Describe Cisco MDS SAN features and advantages

- Describe fixed and modular platforms
- Describe Cisco MDS architecture and high-availability mechanisms
- Describe technologies used in modern SANs
- Describe SAN management with Cisco DCNM
- Describe key value-add features that distinguish Cisco MDS switches
- Configure basic Cisco MDS features and interfaces using DCNM

COURSE OUTLINE

1. Describing Cisco MDS Platform

Introduction and Advantages of Cisco MDS

Fixed Platforms

Modular Platforms

2. Describing Cisco MDS Architecture

Store-and-Forward Architecture

High Availability

Redundancy

3. Describing Storage Technologies

Fibre Channel

Non-Volatile Memory Express (NVMe) Over Fibre Channel

Fibre Channel Over IP

Fibre Channel Over Ethernet

4. Managing Cisco MDS Switches

Cisco Data Center Network Manager

Cisco NX-OS CLI

Cisco NX-API

5. Describing and Using Cisco MDS Key Features

Virtual Storage Area Networks (VSANs)

Inter-VSAN Routing

Port Channels

Slow-Drain Device and Path Analysis Using Congestion Control Mechanisms

SAN Telemetry Streaming

Cisco DCNM SAN Insights for SAN Analytics

N Port Virtualization (NPV) and N-Port Identifier Virtualization (NPIV)

Zoning

Smart Zoning

Diagnostics Toolbox

SAN Extension

Other Differentiator Features

DISCOVERY LABS

1: Perform Initial MDS Configuration

2: Set Up DCNM

3: Configure VSANs and Interfaces in Cisco DCNM

4: Configure Port Channels in Cisco DCNM

5: Configure Device Aliases and Zoning

6: Use CLI for Basic Monitoring