

Introducing Cisco MDS 9000 Series Switches (DCIMDS) v1.1 - On Demand

Modality: On Demand

Duration: 40 Hours

CLC: 8 Units

Course Information

About this course:

This course will provide you the skills to use Cisco MDS 9000 Series Multilayer Switches. You will learn about the platform architecture, in-depth software knowledge, and management capabilities around it.

The course will introduce the key features that contribute to flexibility, availability, high performance, operational simplicity and investment protection. 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.

With the help of hands-on labs, you'll be practically configuring a Multilayer Director Switch (MDS) SAN fabric using Cisco Data Center Network Manager (DCNM) and CLI commands; device aliases and zoning; SAN analytics and SAN telemetry streaming; and more.

Course Objective:

After taking this course, you should be able to:

- Describe SAN management with Cisco DCNM
- Initialize a Cisco MDS switch and add it to DCNM
- Describe key value-add features that distinguish Cisco MDS Series switches
- Configure basic Cisco MDS features and interfaces using DCNM
- 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

Audience:

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

- Network architects
- Systems engineers

Prerequisite:

You should have the following knowledge and skills to fully benefit from this course:

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

Course Outline:

Describing Cisco MDS Platform

Introduction and Advantages of Cisco MDS

Fixed Platforms

Modular Platforms

Describing Cisco MDS Architecture

Store-and-Forward Architecture

High Availability

Redundancy

Describing Storage Technologies

Fibre Channel

Non-Volatile Memory Express (NVMe) Over Fibre Channel

Fibre Channel Over IP

Fibre Channel Over Ethernet

Managing Cisco MDS Switches

Cisco Data Center Network Manager

Cisco NX-OS CLI

Cisco NX-API

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

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

Zoning

Smart Zoning

SAN Analytics and Telemetry Streaming

Diagnostics Toolbox
SAN Extension
Other Differentiator Features