

Configuring Cisco MDS 9000 Switches

Kurs DCMDS

Configuring Cisco MDS 9000 Series Switches (DCMDS) v2.0 is an instructor-led course presented by Cisco Learning Partners to their end-user customers. This course is a five-day product training course that is designed as a comprehensive hands-on experience to familiarize data center systems engineers, field engineers, architects, and Cisco partners who implement storage-networking solutions with the Cisco MDS 9000 Series switch platform.

This course covers features on each of the MDS 9000 Series product family of switches including the 9100, 9200, 9500, and 9700 models and the Fibre Channel, Fibre Channel over Ethernet (FCoE), and service modules supported. Fundamental topics include 8-Gbps Fibre Channel, 16-Gbps Fibre Channel, Fibre Channel over IP (FCIP), multihop FCoE, upgrading the Cisco NX-OS, and the common management tool Cisco Prime Data Center Network Manager (DCNM). The course provides comprehensive SAN configuration for features such as interface configuration, Cisco N-Port Virtualizer (NPV), N-Port ID Virtualization (NPIV), virtual SAN (VSAN) and domain setup, SAN zoning, and SAN extension using FCIP and Inter-VSAN Routing (IVR). Topics introduced also include centralized SAN services using the Cisco MDS 9222i Multiservice Modular Switch and Cisco MDS 9250i Multiservice Fabric Switch for Cisco I/O Acceleration (IOA) and Cisco Data Mobility Manager (DMM), management security and role-based access control (RBAC) topics. The goal of this course is to help students understand how to apply these new technologies to optimize the scalability, agility, performance, and operational efficiency of the SAN.

Zielgruppe

The primary audience for this course is as follows:

- Data center engineers, data center administrators, and system engineers

The secondary audience for this course is as follows:

- Data center managers, network engineers, and consulting system engineers

Voraussetzung

The knowledge and skills that a learner must have before attending this course are as follows:

- Basic understanding of data storage hardware components and protocols, including Small Computer Systems Interface (SCSI) and Fibre Channel
- Basic understanding of network protocols, including Ethernet and IP
 - Recommended: Cisco CCNA® certification

Bemerkungen

Kursunterlagen und -setup: Englisch

Kurssprache: Deutsch

Dauer

5 Tage

Module**Module 1: Cisco MDS 9000 Series Switch Platform**

- 1.1: Introducing the Cisco MDS 9000 Series Switch Platform
- 1.2: Implementing Integrated Management

Module 2: System Installation and Initial Configuration

- 2.1: Performing the Initial Switch Configuration
- 2.2: Installing and Licensing Cisco NX-OS Software

Module 3: Building a SAN Fabric

- 3.1: Using FLOGI and FCNS Databases
- 3.2: Configuring Interfaces
- 3.3: Configuring Port Channels
- 3.4: Configuring Cisco NPV and NPIV
- 3.5: Configuring VSANs
- 3.6: Managing Domains
- 3.7: Configuring Distributed Device Aliases
- 3.8: Implementing Zoning

Module 4: Intelligent SAN Fabric Services

- 4.1: Implementing Cisco MDS Data MobilityManager
- 4.2: Monitoring Traffic Flow

Module 5: Fibre Channel over Ethernet Implementation

- 5.1: Describing FCoE
- 5.2: Configuring FCoE on the MDS 9500 and 9700 Series Multilayer Devices

Module 6: Security Implementation

- 6.1: Improving Management Security
- 6.2: Configuring AAA Services
- 6.3: Implementing Port and Fabric Security
- 6.4: Configuring FC-SP
- 6.5: Implementing Link Encryption

Module 7: Implementing FCIP

- 7.1: Creating an FCIP Tunnel
- 7.2: Configuring FCIP High Availability
- 7.3: Implementing IVR for SAN Extension
- 7.4: Tuning FCIP Performance

Course Labs

- Lab 2-1: Initial Setup
- Lab 2-2: Upgrading Switch Software
- Lab 2-3: Install Cisco DCNM Release 6.2(3)
- Lab 3-1: Configuring Interfaces
- Lab 3-2: Configure Port Channels
- Lab 3-3: Configuring NPV and NPIV
- Lab 3-4: Configure VSANs, Domain Management, and Persistent FCIDs
- Lab 3-5: Configure Device Aliases
- Lab 3-6: Configure Zoning
- Lab 4-1: Implement Cisco DMM
- Lab 6-1: Configure RBAC and AAA Services
- Lab 6-2: Implement Port and Fabric Security
- Lab 7-1: Configure FCIP Tunnels and FCIP High Availability with Port Channels
- Lab 7-2: Implementing IVR for SAN Extension
- Lab 7-4: Tune FCIP Performance