Configuring Cisco NX-OS Switches and Fabrics in the Data Center (DCCNX)

Live Online oder Präsenz

Dauer : 3 Tage (18 Stunden)

Nr. : 59628

Preis : 2.390,00 € netto
2.844,10 € inkl. 19 % MwSt.

Inhouse-Paket : Auf Anfrage

Objective

The Implementing Cisco NX-OS Switches and Fabrics in the Data Center (DCNX) v1.0 course gives you a detailed understanding of the Cisco® Nexus switch platform and teach you how to install, configure, and manage Cisco Nexus® switch platforms in a scalable, highly available environment. Through a combination of lectures and hands-on labs, you will learn how to describe various aspects of the Cisco Nexus product families and platforms, including implementation, management, security, programmability and storage. Additionally, you will learn how to configure device aliases and zoning, Fibre Channel over Ethernet (FCoE), and N-Port Identifier Virtualization (NPIV), and N-Port Virtualization (NPV) modes.

How you'll benefit

This course will help you:

- Describe, implement, configure, and manage Cisco Nexus product families and platforms, including redundancy protocols and security features, in a scalable environment
- Gain valuable hands-on experience with Cisco Nexus products in a lab setting
- Develop expertise with the Cisco Nexus product families and platforms

Wer sollte teilnehmen:

Zielgruppe

- Data center systems engineers
- Field engineers
- Architects
- Cisco partners using Cisco Nexus Series switch platforms

Voraussetzungen

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

- Familiarity with Cisco data center technologies
- Understand networking protocols, routing, and switching

These are the recommended Cisco courses that may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA)
- Understanding Cisco Data Center Foundations (DCFNDU)
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)
- Introducing Cisco NX-OS Switches and Fabrics in the Data Center (DCINX)

Trainingsprogramm

Outline

Describing the Cisco NX-OS Routing and Forwarding

- Routing Overview
- Multicast Routing
- Cisco NX-OS Routing and Forwarding
- Unicast and Multicast RIB and FIB

Describing Overlay Transport Virtualization

- Cisco OTV Overview
- Cisco OTV Control and Data Planes
- Failure Isolation
- Cisco OTV Features
- Optimizing Cisco OTV

Describing Virtual Extensible LAN

- VXLAN Benefits over VLAN
- Layer 2 and Layer 3 VXLAN Overlay
- VXLAN MP-BGP EVPN Control Plane
- VXLAN Data Plane

Describing Locator/ID Separation Protocol

- Locator/ID Separation Protocol
- LISP VM Mobility
- LISP ESM Multihop Mobility
- LISP VPN Virtualization

Cisco Nexus Security Features

- ACLs
- Port Security
- DCHP Snooping
- Dynamic ARP Inspection
- IP Source Guard
- Unicast RPF
- Traffic Storm Control
- CoPP

Cisco Intelligent Traffic Director

- Cisco ITD Overview
- Cisco ITD Deployment Models

- Cisco ITD Configuration and Verification

Describing QoS on Cisco Nexus Devices

- QoS on Cisco Nexus Devices
- Configure QoS on Nexus
- Monitor QoS Statistics

Introducing Cisco Nexus Storage Services

- Fibre Channel
- Fibre Channel Flow Control
- Fibre Channel Domain Initialization
- Fibre Channel Addressing
- FSPF Protocol

Configuring Device Aliases and Zoning

- Distributed Device Alias Services Overview
- Zoning Overview
- Merge Zones Without Disruption
- Recover from Zone Merge Failures
- Enhanced Zoning

Configuring Fibre Channel Over Ethernet

- Fibre Channel Over Ethernet
- FCoE Requirements
- Data Center Bridging
- FCoE Addressing Scheme
- FCoE Initialization Protocol
- FCoE Port Types
- Storage VDC

Configuring NPIV and NPV Modes

- Cisco NPV Mode
- N-Port ID Virtualization

Managing Automation and Programmability of Cisco Nexus Devices

- Cisco NX-OS RESTful API
- Network Orchestration
- Programming Cisco NX-OS with Python

Configuring System Management and Monitoring

- System Management Overview
- System Monitoring Tools

Troubleshooting Cisco Nexus Switches

- Cisco Nexus Troubleshooting Tools
- Shell Access and Linux Containers
- Memory and Packet Issues

Schulungsmethode

presentation, discussion, hands-on exercises, demonstrations on the system.