

Course Outline

Implementing Cisco NX-OS Switches and Fabrics in the Data Center Course DCNX: 5 days Instructor Led

About this course

The Implementing Cisco NX-OS Switches and Fabrics in the Data Center (DCNX) 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.

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

Prerequisites:

The knowledge and skills the learner should have before attending this course is as follows:

- Students should be familiar with Cisco data center technologies
- Students should understand networking protocols, routing, and switching

Course Objectives:

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe the platforms that make the Cisco Nexus 9000, 7000, 3000, and 2000 product families
- Describe Cisco Nexus platform implementations
- Explain Cisco Nexus platform management
- Describe Port Channels and Virtual Port Channels
- Configure First Hop Redundancy protocols
- Configure security features of Cisco Nexus devices
- Describe the Cisco Nexus devices routing and forwarding
- Describe Virtual Extensible LAN (VXLAN)
- Describe Quality of Service (QoS) on Cisco Nexus Devices
- Explain system management and monitoring processes
- Describe Cisco NX-OS programmability
- Describe Cisco Nexus storage services
- Configure device aliases and zoning
- Configure FCoE
- Configure NPIV and NPV modes

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- Describing Cisco Nexus Series Switches
- Describing Cisco Nexus Platforms Implementation
- Describing Cisco Nexus Platforms Management
- Describing Port Channels and Virtual Port Channels
- Configuring First Hop Redundancy Protocols
- Configuring Cisco Nexus Security Features
- Describing Cisco NX-OS Routing and Forwarding
- Describing Virtual Extensible LAN
- Describing QoS on Cisco Nexus Devices
- Configuring System Management and Monitoring
- Describing Cisco NX-OS Programmability
- Describing Cisco Nexus Storage Services
- Configuring Fibre Channel Over Ethernet
- Describing Device Aliases and Zoning
- Configuring NPIV and NPV Modes

Lab Outline:

Labs are designed to assure learners a whole practical experience, through the following practical activities:

- Test Cisco Nexus Platforms
- Configure User Management
- Configure vPC
- Configure First Hop Redundancy Protocol (FHRP) Protocols
- Configure Cisco Nexus Security Features
- Configure Open Shortest Path First (OSPF)
- Configure VXLAN
- Configure QoS
- Configure System Management
- Configure Cisco NX-OS On-Box Programmability
- Configure Containers on Cisco NX-OS
- Configure Cisco NX-OS Using Ansible
- Configure Basic Fibre Channel Features
- Configure FCoE
- Configure Fiber Channel Device Aliases and Zoning
- Configure NPV

Who Should Attend:

The primary audience for this course is as follows:

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