

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

## Description

The **Implementing Cisco NX-OS Switches and Fabrics in the Data Center (DCNX)** training gives you a detailed understanding of the Cisco® Nexus switch platform and teaches 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) mode.

This training also earns you 40 Continuing Education (CE) credits toward recertification.

## How you'll benefit

This training 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
- Earn 40 CE credits toward recertification

## Who should enroll

- Data Center Systems Engineers
- Field Engineers
- Architects
- Cisco partners using Cisco Nexus Series switch platforms

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## Technology areas

- Data Center

## 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

## Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

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

These skills can be found in the following Cisco Learning Offerings:

- [Implementing and Administering Cisco Solutions \(CCNA\)](#)
- [Understanding Cisco Data Center Foundations \(DCFNDU\)](#)
- [Implementing and Operating Cisco Data Center Core Technologies \(DCCOR\)](#)

## Outline

- 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

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- Configuring Fibre Channel Over Ethernet
  - Describing Device Aliases and Zoning
  - Configuring NPIV and NPV Modes

## Lab Outline

- 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

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## Links

- [Cisco U. Learning Path](#)
- [Cisco Learning Network Store](#)
- [Cisco Learning Locator](#)