

# Implementing Cisco Nexus 9000 Switches in NX-OS Mode – Advanced (DCNXA)

## Description

The **Implementing Cisco Nexus 9000 Switches in NX-OS Mode–Advanced (DCNXA)** training provides advanced training in applying and managing the Cisco Nexus® 9000 Series Switches in NX-OS mode. The Cisco® NX-OS platform deploys Virtual Extensible LAN (VXLAN) and Ethernet VPN (EVPN) using Cisco Data Center Network Manager (DCNM), implements Multi-Site VXLAN EVPN, and integrates L4-L7 services into the fabric providing external connectivity, utilizing advanced tenant features. You will also learn how to implement Cisco NX-OS Enhanced Policy-Based Redirect (ePBR) and Intelligent Traffic Director (ITD) features.

This training also earns 32 Continuing Education (CE) credits toward recertification.

## How you'll benefit

This training will help you:

- Learn how you can integrate Cisco Nexus 9000 Switches in NX-OS mode to manage your enterprise IT environment
- Understand the common platform architecture and key features of the Cisco Nexus 9000 Series in NX-OS mode to provide a consistent set of provisioning, management, and diagnostic capabilities for applications
- Earn 32 CE credits toward recertification

## Who should enroll

- Data Center Engineers
- Field Engineers
- Network Designers
- Network Administrators
- Network Engineers
- Systems Engineers

- Technical Solutions Architects

## Technology areas

- Data Center

## Objectives

- Configure VXLAN EVPN in a single site using Cisco DCNM
- Configure a Multi-Site VXLAN EVPN
- Configure L4-L7 service redirection
- Configure external connectivity from a VXLAN EVPN
- Configure tenant-level features and Tenant-Routed Multicast (TRM) in VXLAN EVPN
- Configure Cisco NX-OS Enhanced Policy-Based Redirect (ePBR) and Intelligent Traffic Director (ITD)

## Prerequisites

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

- Networking protocols, routing, and switching
- General Cisco data center technologies
- Virtualization fundamentals
- Cisco Nexus platform management

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 \(DCCOR\)](#)
- [Implementing Cisco Nexus 9000 Switches in NX-OS Mode \(DCNX\)](#)

## Outline

- Describing VXLAN EVPN in Single Site
- Describing Multi-Site VXLAN EVPN
- Describing Layer 4-Layer 7 Service Redirection
- Describing External Connectivity from VXLAN EVPN
- Describing VXLAN EVPN Functionality Enhancements
- Describing Cisco NX-OS Enhanced Policy-Based Redirect and Intelligent Traffic Director

## Lab Outline

- Import an Existing VXLAN Border Gateway Protocol (BGP) EVPN Fabric into Cisco DCNM
- Configure vPC and Layer 3 Connectivity
- Configure Multi-Site VXLAN EVPN
- Configure Routed Firewall Integration into VXLAN EVPN Using PBR
- Configure External VRF Lite Connectivity and Endpoint Locator
- Configure Tenant DHCP Relay
- Configure Tenant-Routed Multicast

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- Configure Enhanced Policy-Based Redirect
  - Configure Traffic Load-Balancing Using the ITD

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## Links

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