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Learning Style: Virtual Classroom

Technology: Cisco

Difficulty: Intermediate

Course Duration: 3 Days

Cisco Nexus 9000 Design and Configuration v2.0 (DCINX9K)



About this course:

The *DCINX9K - Introducing Cisco Nexus 9000 Switches in NX-OS Mode v2.0* course shows you how to implement, manage, and troubleshoot Cisco Nexus 9000 Series Switches in Cisco NX-OS mode. Through expert instruction and

extensive hands-on learning, you will learn how to deploy capabilities including Virtual Extensible LAN (VXLAN), Multiprotocol Label Switching (MPLS), high availability features, Intelligent Traffic Director, troubleshooting tools and techniques, NX-OS programmability features, and open interface technologies. The course also provides an introduction to Cisco Data Center Network Manager (DCNM) for management.

Course Objective:

- Deploy and troubleshoot Cisco Nexus 9000 Series Switches in NX-OS mode to support performance, resiliency, scalability, and enhanced operations for data centers
- Use programmability features to configure and manage Cisco Nexus 9000 Series Switches, helping your IT organization meet high-priority business needs, save time, and reduce errors due to manual processes
- Gain knowledge and skills through a unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Succeed in today's demanding data center operations roles

Audience:

- Data Center Engineers
- Data Center Architects
- Network Designers
- Network Administrators
- Network Engineers
- Systems Engineers
- Consulting Systems Engineers
- Technical Solutions Architects
- Field Engineers
- Cisco Integrators and Partners

Prerequisite:

It is recommended to have the following skills and knowledge before attending this course:

- A good understanding of networking protocols, routing, and switching
- An understanding of Cisco data center architectures
- Experience configuring advanced routing and switching technologies such as Border Gateway Protocol (BGP) and Open Shortest Path First (OSPF)

Course Outline:

Section 1: Describing Cisco Nexus 9000 NX-OS Solution

Section 2: Implementing VXLAN in Data Center

Section 3: Implementing MPLS in Data Center

Section 4: Configuration Management, Automation, and Programmability

Section 5: Cisco Nexus 9000 Topology Options

Section 6: Troubleshooting Cisco Nexus 9000 Switches

Section 7: Managing Cisco Nexus 9000 Switches with Cisco DCNM

Labs:

- Discovery 1: Provision Baseline Connectivity with Ansible
- Discovery 2: Implement VXLAN with BGP eVPN Signaling
- Discovery 3: Manage Switch Over Cisco NX-API
- Discovery 4: Program Switch with Python
- Discovery 5: Configure Intelligent Traffic Director
- Discovery 6: Troubleshoot and Manage Switches Using Bash and Guest Shell
- Discovery 7: Provision VXLAN and Manage Switch with Cisco DCNM