

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

**Modality: Virtual Classroom**

**Duration: 3 Days**

**CLC: 26 Units**

## **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