Cisco Nexus 9000 Design and Configuration (DCINX9K)

Course ID#: 1575-909-ZZ-W

Hours: 14

Course Content

Course Description:

In this course, you will learn about the next-generation Cisco Nexus 9000 Series Switches, which are highly programmable and high density. In fact, 1/10/40G Ethernet switches offer the highest performance and extensibility to 100GE switching and lowest cost-per-port. They offer extremely high flexibility and programmability for next-generation automation and orchestration. Cisco Nexus 9000 Series Switches build on existing NX-OS technology to bring two new data center network deployment options to customers.

Prerequisites:

Experience with Cisco NX-OS Understanding of Cisco Data Center network architecture Knowledge of the Nexus 5000, 6000, or 7000 platforms is highly recommended

Topics:

Module 1:
Cisco Nexus 9000 Solution Overview
- Data Center Trends
- Nexus 9000 Overview
- NX-OS Enhancements

Module 2:
Hardware Overview
- Nexus 9500 Chassis
- Line Card Modules
- Supervisors
- Fabric Modules
- Power Supplies
- System Controllers
- Nexus 9300 Switches
- FEX Support
- 40G and 100GE Networking
- Supported Optics

Module 3:
Hardware Architecture
- 9500 Architecture
- Line Card Architecture
- 9300 Architecture
- Packet Forwarding

Module 4:
Nexus 9000 NX-OS Enhancements
- Nexus 9000 NX-OS Feature Overview
- High Availability
- Management

Module 5:
VXLAN
- Overlay Networks
- VXLAN Overview
- VXLAN Control Plane
- VXLAN Forwarding Plane
- Configuring VXLAN

Module 6:
Programmability and Automation
- Programming Features
- Automation Features
- Visibility and Monitoring Features

Module 7:
Nexus 9000 Topology Designs
- Traditional Data Center
- Topologies Spine and Leaf Topologies
- Overlay Topologies