

Implementing and Configuring a Cisco Data Centre Networks (ICDCN)

Vendor Course Code: ICDCN

Course Length: 5 Days

Overview: This 5-day hands-on course provides a comprehensive technical overview of the Cisco Nexus platform architecture, including the Nexus7000, 5000, 2000, and 1000V platforms. You will learn about design guidelines as well as deployment and operations, including Fibre Channel over Ethernet, the Virtual Access Layer, Virtual Device Contexts, Layer 2 and Layer 3 features, QoS, and security. You will explore the features of Cisco NX-OS and the Cisco Nexus platform by performing hands-on labs using Cisco Nexus 7000, 5000, 2000, and 1000V labs.

Skills Gained:

After completing this course, you will be able to:

- Describe the features and components of the Cisco Nexus 7000, 5000, and 2000 hardware platforms
- Describe the architecture of NX-OS
- Design and configure virtual access layer topologies using the Nexus 5000, 2000, and 1000V
- Implement high-availability configurations including Virtual Port Channel (vPC) and Multi-Chassis EtherChannel (MCEC) deployments
- Configure Virtual Device Contexts–VDC
- Configure Layer 2 and Layer 3 services Overview FabricPath, and OTV
- Describe and configure Data Center Bridging (DCB) and Fibre Channel over Ethernet (FCoE)
- Describe Quality of Service Operation
- Configure traffic integrity and security features
- Configure switch management features like Call Home, AAA, and RBAC
- Use configuration checkpoints and rollbacks
- Monitor network traffic using tools such as SPAN and Ethalyzer
- Configure Nexus 1000V within a VMware environment

Key Topics:

Module 1: Nexus 7000
Lesson 1: Overview of Nexus 7000 Hardware
Lesson 2: Overview of NX-OS
Lesson 3: Virtual Device Contexts
Lesson 4: Managing the Cisco Nexus 7000
Lesson 5: Layer 2 Protocols and Features
Lesson 6: Layer 3 Protocols and Features
Lesson 7: Security Features
Lesson 8: Troubleshooting

Module 2: Nexus 5000 and 2000
Lesson 1: Overview of the Cisco Nexus 5000
Lesson 2: Overview of the Cisco Nexus 2000
Lesson 3: Fibre Channel Primer
Lesson 4: Understanding the FCoE Protocol
Lesson 5: Understanding Ethernet Enhancements
Lesson 6: Configuring Switch Mode
Lesson 7: Configuring NPV Mode
Lesson 8: Managing Traffic Flow

Module 3: Nexus 1000V
Lesson 1: Introduction to Cisco Nexus 1000V
Lesson 2: VMware Networking
Lesson 3: Cisco Nexus 1000V Architecture
Lesson 4: Design Considerations
Lesson 5: Virtual Services
Lesson 6: Installing and Configuring the Cisco Nexus 1000V
Lesson 7: Configuring Port Profiles
Lesson 8: Managing Security

Target Audience: This course is designed for experienced Network Field Engineers, VMware Engineers, and Data Center Architects with a strong knowledge of Cisco switching products.

Prerequisites:

You will gain the most from this course if you have the following skills and knowledge: Designing and/ or managing Cisco IOS network devices; L2 switching and advanced L2 services such as QoS and ACLs; Working knowledge of Fibre Channel and Storage Networking; Basic familiarity with VMware deployment and administration.

BCMSN or SWITCH.