



Configuring Cisco Nexus 7000 Switches v3.0 (DCNX7K)

Course ID#: 1575-912-ZZ-W

Hours: 35

Course Content

Course Description:

In this course, you will cover the key components and procedures needed to install, configure, manage, and troubleshoot the Cisco Nexus 7000 Switch. Through hands-on labs using NX-OS version 6.2(6b) code, you will gain an understanding of the day-to-day operation of the switches, including key features and functions.

Additionally, we have enhanced the standard Cisco labs to include more in-depth exploration of sought-after technologies including FabricPath, OTV, LISP, vPC, FCOE QOS, and troubleshooting. All configurations are performed on the Nexus 7000, with the latest version of the NX-OS code, 6.2(6b).

Prerequisites:

- CCNA certification or equivalent knowledge Recommended:
- ROUTE - Implementing Cisco IP Routing v2.0
- SWITCH - Implementing Cisco IP Switched Networks v2.0

Topics:

Module 1: Cisco Nexus Product Family Overview

- Cisco Unified Fabric
- Cisco Nexus Product Family
- Data Center Requirements Addressed by the Cisco Nexus 7000 Switch

Module 2: Cisco Nexus 7000 Series Switch NXOS Overview

- Deployment Models
- 7000 and 7700 Series Switch Chassis
- Supervisor Modules, I/O Modules, and Fabric Modules
- Switch Forwarding and Packet Flow

Module 3: Cisco Nexus 2000 Series Fabric Extender

- Hardware
- Support on Nexus 7000 Series Switch

Module 4: Cisco Nexus 7000 Series Switch Hardware

- Hardware Installation
- Hardware Installation Verification

Module 5: Cisco NX-OS Architecture, Key Features, and Capabilities Lesson6: Cisco Nexus 7000 Series Switch Management

- Management Interfaces and Setup Utilities
- User Management
- System Management Features

Module 7: Troubleshooting Nexus 7000 Series

- Processes and Tools
- Memory Issues
- Packet Flow Issues
- Series Network Analysis Module



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Module 8: Remote Integrated Service Engine

Module 9: Cisco Prime DCNM Overview

Module 10: Cisco Dynamic Fabric Automation Overview

Module 11: Virtual Device Contexts

- Overviews
- Management Settings

Module 12: Layer 2 Switching Features on Cisco Nexus 7000 Series Switches

- Interface Configuration
- Configuration of Cisco Nexus 2000 Series Fabric Extender on Nexus 7000 Series
- Switch
- VLANs and Advanced VLAN Features Configuration
- STP and STP Extensions Configuration
- Q-in-Q Configuration
- Troubleshooting Layer 2

Module 13: Port Channels and Virtual Port Channels on the Cisco Nexus 7000 Series Switches

- Port Channel Overview
- Virtual Port Channel Overview
- VPC Configuration
- vPC Troubleshooting

Module 14: FabricPath on Cisco Nexus 7000 Series Switches

- Cisco FabricPath Architecture
- Cisco FabricPath Configuration
- Troubleshooting Cisco FabricPath

Module 15: Layer 3 Switching Features on Cisco Nexus 7000 Series Switches

- Cisco NX-OS Forwarding Architecture
- Routing Protocols Configuration
- Route Policy Manager and Policy Based Routing
- Layer 3 Virtualization Configuration
- FHRP Protocols Configuration
- Bidirectional Forwarding Detection
- Multicast Configuration
- Layer 3 Troubleshooting
- BFD Configuration

Module 16: MPLS on Cisco Nexus 7000 Series Switches

- MPLS Overview
- MPLS Configuration on the Cisco Nexus 7000 Switch
- MPLS Layer 3 VPNs Configuration
- MPLS Layer 2 VPNs Configuration
- MPLS TE Configuration

Module 17: OTV on Cisco Nexus 7000 Series Switches

- Cisco OTV Overview
- Basic OTV Configuration
- Lesson 18: LISP on Cisco Nexus 7000 Series Switches
- LISP
- LISP Configuration on Cisco Nexus 7000 Series Switch