

Cisco Nexus 7000 to Configuring Cisco Nexus 7000 Switches

Längd: 5 Days Kurskod: DCNX7K Version: 3.0

Sammanfattning:

This is a 5-day course designed for systems and field engineers who install and implement the Cisco Nexus 7000 switch. This course covers the key components and procedures you need to know to configure, manage, and troubleshoot the Cisco Nexus 7000 switch platform.

Målgrupp:

Network Engineers involved in the installation and maintenance of Nexus 7000 switches.

Målsättning:

- **After you complete this course you will be able to:**
- Identify the specific products that make up the Cisco Nexus product families and provide a high level overview of their features and common deployment models
- Provide an overview of the Cisco Nexus 2000 hardware and support of the Cisco Nexus 2000 with Cisco Nexus 7000 Series
- Describe how to perform hardware installation, verify and troubleshoot system hardware of the Cisco Nexus 7000 Series Switches
- Understand the architecture, usage, high availability, and licensing features of the Cisco NX-OS Software
- Describe Cisco Prime DCNM management tool that can be implemented to manage Cisco Nexus 7000 Series Switches in a consolidated network environment
- Describe the concept of Cisco Dynamic Fabric and how it is used on Cisco Nexus 7000 Series Switches
- Describe the purpose, architecture, and use of VDCs on the Cisco Nexus 7000 Series Switch; configure and verify its operation
- Describe the port channel configuration, the concept of vPC and how to configure and troubleshoot vPCs on the Cisco Nexus 7000 Series Switch
- Describe and configure the Layer 3 switching features on the Cisco Nexus 7000 Series Switch, and how to manage the routes and IP traffic through the use of the Route Policy Manager and policy-based routing
- Describe MPLS features that are available on Cisco Nexus 7000 Series Switches and configure MPLS, MPLS Layer 2 and Layer 3 Virtual Private Networks (VPNs) and MPLS Traffic Engineering (TE)
- Describe basic and advanced Cisco OTV features on the Cisco Nexus 7000 Series Switch. Configure the OTV and some of the advanced OTV features that are available on the Cisco Nexus 7000 Series Switches
- Describe the concept, use, and configuration of the Locator ID Separation Protocol (LISP) on the Cisco Nexus 7000 Switch
- Describe FCoE and FCoE features on the Cisco Nexus 7000 Series Switch; configure and verify their operation
- Describe the QoS and security features that are available on the Cisco Nexus 7000 Series Switch; configure and verify their operation

Förkunskaper:

Attendees should meet the following prerequisites:

A Good understanding of Data Center Technologies, networking protocols and routing and switching are required. Attendance of the following courses are recommended.

- DCICT and DCICN or CCNADCBC
- ROUTE and SWITCH

Test och certifiering

Recommended preparation for exam(s):

- There are no exams currently aligned to this course

Innehåll:

Cisco Nexus 7000 Series Switches

- Describing the Cisco Nexus Product Family
- Describing the Cisco Nexus 7000 Series Switch Deployment Models

Cisco Nexus 7000 Series Switch Hardware

- Describing the Cisco Nexus 7000 and 7700 Series Switch Chassis
- Describing Cisco Nexus 7000 Series Switch Supervisor, I/O, and Fabric Modules
- Describing Cisco Nexus 7000 Series Switch Forwarding and Packet Flow

Cisco Nexus 2000 Series Fabric Extender

- Describing Cisco Nexus 2000 Series Fabric Extender Hardware
- Describing Cisco Nexus 2000 Series Fabric Extender Support on Cisco Nexus 7000 Series Switches

Cisco NX-OS Software

- Describing Cisco NX-OS Architecture, Key Features, and Capabilities
- Describing the Cisco Nexus 7000 Series Licensing Model

Cisco Nexus 7000 Series Switch Administration, Management, and Troubleshooting

- Using Cisco Nexus 7000 Series Switch Management Interfaces and Setup Utilities
- Managing Cisco Nexus 7000 Series Switch User Access with Cisco NX-OS
- Configuring Cisco Nexus 7000 Series Switch System Management Features
- Using Troubleshooting Processes and Tools
- Troubleshooting Memory and Packet Flow Issues
- Describing the Cisco Nexus 7000 Series NAM-NX1
- Describing Cisco RISE

Cisco Prime DCNM

- Describing Cisco Prime DCNM

Virtual Device Contexts on Cisco Nexus 7000 Series Switches

- Describing Virtual Device Contexts
- Configuring VDCs
- Describing Management Settings for VDCs

Layer 2 Switching Features on Cisco Nexus 7000 Series Switches

- Describing and Configuring Security Features
- Configuring Cisco Nexus 2000 Series Fabric Extenders
- Configuring VLANs and Advanced VLAN Features
- Configuring STP and STP Extensions
- Configuring Q-in-Q

Port Channels and Virtual Port Channels on Cisco Nexus 7000 Series Switches

- Describing Port Channels
- Describing vPCs
- Configuring vPCs
- Troubleshooting vPC

Cisco FabricPath on Cisco Nexus 7000 Series Switches

- Describing Cisco FabricPath Architecture
- Configuring Cisco FabricPath
- Troubleshooting Cisco FabricPath

Cisco DFA

- Describing Cisco DFA Architecture

Layer 3 Switching Features on Cisco Nexus 7000 Series Switches

- Describing the Cisco NX-OS Forwarding Architecture
- Configuring Routing Protocols
- Describing and Configuring Route Policy Manager and PBR
- Configuring Layer 3 Virtualization
- Configuring FHRP Protocols
- Describing and Configuring BFD
- Configuring Multicast

MPLS on Cisco Nexus 7000 Series Switches

- Describing MPLS
- Configuring MPLS on Cisco Nexus 7000 Switches
- Configuring MPLS Layer 3 VPNs
- Configuring MPLS Layer 2 VPNs
- Configuring MPLS TE

Cisco OTV on Cisco Nexus 7000 Series Switches

- Describing Cisco OTV
- Configuring Basic Cisco OTV
- Configuring Cisco OTV Advanced Features

LISP on Cisco Nexus 7000 Series Switches

- Describing LISP
- Configuring LISP on Cisco Nexus 7000 Series Switches

FCoE on Cisco Nexus 7000 Series Switches

- Describing FCoE
- Describing FCoE Support on Cisco Nexus 7000 Series Switches
- Configuring FCoE on Cisco Nexus 7000 Series Switches

Security Features on Cisco Nexus 7000 Series Switches

- Describing and Configuring Security Features
- Describing and Configuring Cisco TrustSec on Cisco Nexus 7000 Series Switches

QoS on Cisco Nexus 7000 Series Switches

- Describing QoS in the Data Center
- Configuring QoS on the Cisco Nexus 7000 Series Switches

Cisco ITD on Cisco Nexus 7000 Series Switches

- Describing Cisco ITD
- Configuring Cisco ITD

Labs

- Challenge Lab 1: Cisco Nexus 7000 Platform Discovery
- Challenge Lab 2: Configuring User Management
- Challenge Lab 3: Configuring System Management
- Challenge Lab 4: Configuring Troubleshooting Features
- Challenge Lab 5: Configuring Layer 2 Switching
- Challenge Lab 6: Configuring Virtual Port Channels
- Challenge Lab 7: Configuring Cisco FabricPath
- Challenge Lab 8: Troubleshooting vPCs and Cisco FabricPath
- Challenge Lab 9: Configuring Layer 3 Switching
- Challenge Lab 10: Configuring FHRP
- Challenge Lab 11: Configuring MPLS
- Challenge Lab 12: Configuring Cisco OTV
- Challenge Lab 13: Configuring LISP
- Challenge Lab 14: Configuring FCoE
- Challenge Lab 15: Configuring Security Features
- Challenge Lab 16: Configuring QoS

Additional Information:

*Delegates requiring knowledge of both the Nexus 5K and 7K switches, or those looking to achieve Channel Partner Certifications should consider the **DCUFI** course .*

Övrig information:

För mer information eller kursbokning, vänligen kontakta oss på telefon. 020-73 73 73

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