

NXTD-7K

Why Firefly



The material from this course is based on up-to-date documentation on products and features available from Cisco and uniquely combined to provide both an introduction to the Cisco Nexus product range and its implementation, and a deeper dive into the implementation and design of unified network infrastructure based on the Cisco Nexus 7000 series.

Length:
2 Days

Format:
Lecture/Lab

Course Version:
2.5

Product Version:
Nexus 7000
NX-OS version
5.2(1)



www.fireflycom.net
sales@fireflycom.net

ATLANTA
LONDON
SINGAPORE

Course Description

The Cisco Nexus family of switches is designed for the next-generation virtualized Data Center. The Nexus family introduces several key features that will be critical for implementing next-gen, virtualized, and cloud computing architectures. This course covers the entire Nexus product family including the 7000, 5000, 4000, 3000, 2000 and 1000V, but focuses on implementing aggregation and core-layer architectures with the Cisco Nexus 7000. The goal of this course is to help you understand how you can apply these new technologies to optimize the scalability, agility, performance, and operational efficiency of your data center. This course includes hands-on labs in which you will configure routed network utilizing Virtual Device Contexts (VDCs) on the Nexus 7000.

Who Should Attend

This course provides an introduction to the Cisco Nexus product portfolio, with an emphasis on the Cisco Nexus 7000, for Data Center network architects.

Prerequisites

You will gain the most from this seminar if you have at least CCNA-level knowledge of routing and switching. Some understanding of storage networking would be useful but is not mandatory.

Learning Objectives

- Identify the different switches in the Nexus product family
- Describe the architecture of the NX-OS operating system
- Describe the Nexus 7000 switch platform and modules
- Discuss aggregation and core-layer architecture design guidelines
- Explain the function of VDCs
- Configure VDCs
- Describe the Nexus 5000 switch in a Unified Fabric environment
- Describe the Nexus 2000 Fabric Extender
- Describe Virtual PortChannels
- Describe the Nexus 1000v virtual switch and its role in VMware deployments
- Describe a data center virtual network architecture using the Nexus family
- Architect a data center network based on the Nexus product family

Lesson 1: The Cisco Nexus Product Family

- Nexus 7000
- Nexus 5000
- Nexus 5500
- Nexus 4000
- Nexus 2000
- Nexus 3000
- Nexus 1000V
- NX-OS
- DCNM
- Cisco Nexus Virtual Networking
- Nexus Switching Deployments

Lesson 2: The Nexus 7000 Core Switch

- Nexus 7000 Chassis and Modules
- Fabric Modules
- Supervisor Redundancy
- Licensing
- Virtual Device Contexts
- VDC Design Examples
- Virtual PortChannels
- FabricPath (Layer 2 Multi-Pathing)
- Overlay Transport Virtualization
- Data Center Services

Lesson 3: The Nexus 5000 Series Switch

- Challenges in the Datacenter
- Nexus 5x00 Switch Products
- Nexus 55xx L3 Switching Engine
- Nexus 5x00 Licensing
- I/O Consolidation
- Nexus 5000 and 5500 Architecture Overview
- FCoE Server Adapters
- Nexus 5000 Management

Lesson 4: The Cisco Nexus 2000 Fabric Extender

- Nexus 2000 Model comparison
- Nexus 2000 Access Layer Design
- Describe Nexus 2000 forwarding

Lesson 5: The Cisco Nexus 1000V Virtual Switch

- Virtual Environment Overview
- VN-Link
- Coordinated VM Provisioning

Lesson 6: Nexus Data Center Architecture

- Access Layer Designs
- Cisco Nexus Data Center Design

Lesson 7: Configuring the Cisco Nexus 7000 in Switch Mode

- Switch Configuration Overview
- Configuring Basic Connectivity and Administrative Access
- VDC Configuration
- Configuring Nexus 7K Interfaces
- Routing Protocol Configuration

Lab 1: Exploring the Nexus 7000 Platform

Lab 2: Configuring VDCs

Lab 3: Configuring Routing Protocols