

Implementing Cisco Data Center Network Infrastructure 2 (DCNI-2) v3



Cisco® Data Center Networking Infrastructure-2 (DCNI-2) v3.0 is a 5-day hands-on training course that teaches you how to implement an enterprise data center architecture with the next-generation Cisco Nexus™ product family. DCNI-2 v3.0 includes an overview of Fibre Channel over Ethernet (FCoE). This course provides a technical overview of the Cisco Nexus platform architecture, deployment, and operations, including virtual device contexts, Layer 2 and Layer 3 features, quality of service (QoS), and security. A solution based approach is applied to multiple Nexus products in the lab. You will explore the features of NX-OS and the Cisco Nexus platform by performing hands-on labs. This course can be used to prepare for the DCNIS-2 exam that is part of the Cisco Data Center Networking Infrastructure Support Specialist certification program.

Duration

Five days.

Target Audience

This course is for technical professionals who have responsibilities installing, configuring, and operating Cisco Nexus 7000, 5000, and 2000 products in data center environments:

- Cisco channel resellers (pre-sales and post-sales)
- System engineers
- End users and Cisco customers
- Individuals studying for the Cisco Data Center Network Support Specialist certification

Course Objectives

Upon completion of this course, you should be able to:

- Describe the primary features of the Cisco Nexus 7010 chassis
- Describe supervisor engine and line-card module features
- Describe the primary features of the Cisco Nexus 7010 power supplies and fan cooling system

- Describe the Connectivity Management Processor
- Describe the basic architecture of NX-OS
- Explain NX-OS process recovery
- Explain NX-OS supervisor redundancy
- Explain how the Cisco Nexus 5000 and Cisco Nexus 2000 function within SAN and LAN environments
- Describe the FCoE protocol

Course Prerequisites

Following are the Recommended prerequisites for this course:

- Interconnecting Cisco Networking Devices (ICND1) or equivalent
- Interconnecting Cisco Networking Devices (ICND2) or equivalent
- Building Cisco Multilayer Switched Networks (BCMSN) or equivalent

To locate Cisco courses that cover the listed prerequisites, go to the Cisco Training and Events webpage at www.cisco.com/web/learning/index.html.

Course Outline

The course outline is as follows:

- Module 1: Using the Cisco Nexus 7000 in Data Center Networks
 - Lesson 1: Understanding the Cisco Nexus 7000 Series Switches
 - Lesson 2: Overview of the Cisco Nexus 7000/
 - Lesson 3: Introducing the Virtual Device Contexts in the Cisco Nexus 7000
 - Lesson 4: Managing the Cisco Nexus 7000
 - Lesson 5: Cisco Nexus 7000 and NX-OS Layer 2 Protocols and Features
 - Lesson 6: Cisco Nexus 7000 and NX-OS Layer 3 Protocols and Features
 - Lesson 7: Cisco Nexus 7000 and Cisco NX-OS Quality of Service
 - Lesson 8: Cisco Nexus 7000 and Cisco NX-OS Security
 - Lesson 9: Troubleshooting
- Module 2: Using the Cisco Nexus 5000 and 2000 in Data Center Networks
 - Lesson 1: Overview of the Cisco Nexus 5000 and 2000
 - Lesson 2: Understanding Fibre Channel
 - Lesson 3: Implementing an FCoE Network Using Cisco Nexus 5000 Switches

Lab Outline

The lab outline is as follows:

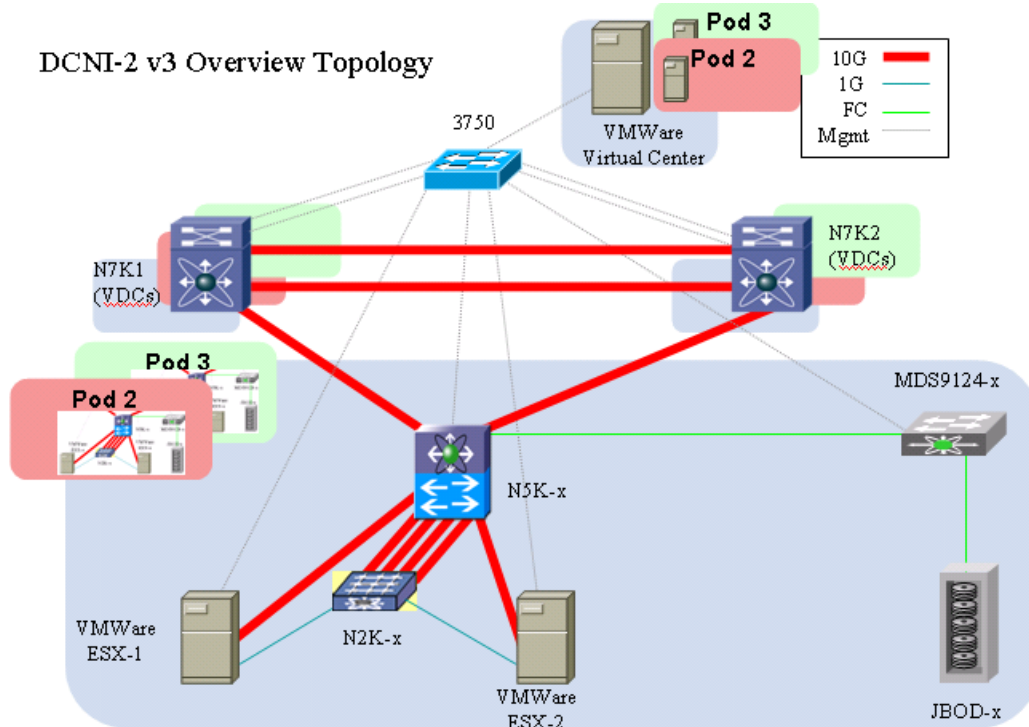
- Lab 1: Cisco Nexus 7000 Hardware Platform
- Lab 2: Managing System Configuration
- Lab 3: Creating Virtual Device Contexts
- Lab 4: Layer 2 Switching
- Lab 5: First-Hop Redundancy Protocols
- Lab 6: Configuring Routing Protocols

- Lab 7: Quality of Service (QoS)
- Lab 8: Cisco Nexus 7000 Security Features
- Lab 9: Data Center Network Manager (DCNM)
- Lab 10: Troubleshooting Using Ethalyzer and RSPAN
- Lab 11: Cisco Nexus 5000 Hardware Platform
- Lab 12: Configuring FcoE and the Nexus 2148 Fabric Extender
- Lab 13: Configuring the VMWare ESX Server and Converged Network Adapter
- Lab 14: Conifguring N-Port virtualization (NPV) on the Cisco Nexus 5020 Switch
- Lab 15: Cisco Nexus Product Family Solution Example

Lab Topology

Figure 1 shows the lab topology that is used in this course.

Figure 1. Lab Topology of Implementing Cisco Data Center Network Infrastructure 2





Registration Information

For more information about schedules and registration for this course, contact

aeskt_registration@cisco.com.

For More Information

For more information about Advanced Services Education course offerings, including custom training options, as well as Advanced Services Curriculum Planning Services and the Advanced Services Technical Knowledge Library (TKL), refer to the Advanced Services Education Website at

www.cisco.com/go/ase.



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