

# Delivery Type: Classroom Duration: 3 days

#### **Overview**

In this course, you will learn how to implement Access Layer infrastructures using next-generation Cisco Nexus 5000 series switches.

The course materials also cover the Nexus 6000, 4000, 3000, and Nexus 2000 Fabric Extenders, and explain the differences between the different series and their use cases. This course provides a technical overview with focus on the Nexus 5000 platform design guidelines, deployment and features. operations, including Fibre Channel over Ethernet, Layer 2, Layer 3, QoS, and security. You will explore the features of NX-OS up to rel 6.0(2) of the Nexus platform by performing handson labs using real Nexus 5500 and Nexus 2000 labs. Labs include basic FCoE configuration, NPV mode deployment, FEX and Virtual PortChannels configuration, security features and monitoring, DCNM installation, and configuring Cisco Adapter- FEX and FabricPath.

### **Pre-Requisites**

You will gain the most from this course if you have a basic understanding of the following topics: ability to configure advanced Layer 2 Ethernet services; basic working knowledge of Fibre Channel and Storage Networking; and understanding of Cisco data center architecture.

#### **Objectives**

- Identify the architecture, features, and benefits provided by Cisco Nexus 5000 Switches how it differs from the Nexus 6000, 4000, and 3000 series in the most common user situations
- Identify the benefits and features provided by the different models of the Cisco Nexus 2000 Fabric Extenders in the most common user situations, and explain how the switch works to provide these benefits
- ✓ Describe Fibre Channel networks, frames, flow control, and the various protocols used with Fibre Channel, and identify the standard fabric services and their well-known addresses
- ✓ Describe how FCoE operates within SAN and LAN environments, identify the hardware components of an FCoE implementation, and explain the options available
- Discuss the L2, L3, and Virtualization Networking Features and capabilities of the Nexus 5000 series switches
- ✓ Identify the configuration options provided on Cisco Nexus 5000 Switches and explain how to provision, move, add, and change Fibre Channel and Ethernet ports
- ✓ Describe network design and switch configuration options for minimizing latency and improving network performance for common applications
- Describe network design and switch configuration options for reducing network threats and preventing unauthorized changes in configuration



- ✓ Describe the key management features of Cisco NX-OS on the Cisco Nexus 5000 and upgrading/downgrading system software
- ✓ Explain how to use FCoE and Ethernet features and management tools for identifying switch and network problems.

## **Target Audience**

This course is designed for experienced data center engineers who are familiar with Cisco Catalyst or MDS switching products.

## **Further Information**

The Following Courses are recommended for further study:

- ✓ Implementing Cisco Storage Networking Solutions (ICSNS)
- ✓ Implementing and Configuring Cisco Nexus 7000 (ICNX7)

