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## Configuring Cisco Nexus 9000 in NX-OS Mode

DURATION: 3-4 DAYS

COURSE CODE: C9KNX

FORMAT: LIVE/VIRTUAL

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### COURSE DESCRIPTION

The Configuring Cisco Nexus 9000 in NX-OS Mode (C9KNX) v1.2 course shows you how to implement Cisco Nexus® 9000 Series Switches for data centers running in traditional or NX-OS mode. Through expert instruction and hands-on labs, you'll learn about the hardware and software architecture of the Cisco® Nexus 9000 Series data center switches including the Cisco Nexus 9300 fixed-configuration and Cisco Nexus 9500 modular platforms, programmability and automation features built into these devices, and how to perform management, maintenance, and monitoring activities on Cisco Nexus 9000 Series switch platforms, and more.

### WHO SHOULD ATTEND

Data center engineers  
Systems engineers  
Technical architects  
Product specialists in data center technical roles

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### PREREQUISITES

Familiarity with Cisco Ethernet switching products  
Understand Cisco Data Center architecture

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### LEARNING OBJECTIVES

Explain the design, operation, and features of the Cisco NX-OS operating system

Describe the operation of the Cisco Nexus 9000 Series of switches

Configure, troubleshoot, and deploy the Cisco Nexus 9000 Series of switches

Describe and configure the various automation features of the Cisco Nexus 9000 Series of switches

Explain and perform maintenance, monitoring, and operations tasks on the Cisco Nexus 9000 series of switches

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## COURSE OUTLINE

### 1. Cisco NX-OS Architecture, Design, and Operation

- Cisco NX-OS Software Architecture
- Cisco NX-OS Platform-Specific Features
- Cisco NX-OS and Cisco Internetwork Operating System (Cisco IOS®) Software Comparison

### 2. Cisco Nexus 9000 Series Switches for the Data Center

- Cisco Nexus 9000 Series Hardware Architecture
- Cisco Nexus 9000 Series Packet Forwarding
- Troubleshooting Cisco Nexus 9000 Series Switches
- Cisco Nexus 9000 Series Deployment Considerations
- Cisco Nexus 9000 Series NX-OS Features
- Configuring Virtual Extensible LAN (VXLAN)/Ethernet VPN (EVPN) on the Cisco Nexus 9000 Series Switches

### 3. Cisco Nexus 9000 Series Programmability, Automation, and Monitoring

- Cisco Nexus Programmability Basics
- Cisco Nexus 9000 Series Automation and Orchestration

### 4. Cisco Nexus 9000 Series Visibility and Monitoring

## DISCOVERY LABS

- 1: Managing Cisco Nexus Hardware and Software
- 2: Configuring Cisco NX-OS Layer 2 Features
- 3: Configuring Cisco NX-OS Layer 3 Features
- 4: Configuring Cisco NX-OS High Availability
- 5: Cisco Nexus 9000 Series Device Management
- 6: Cisco Nexus 9000 Series Troubleshooting
- 7: Configuring VXLAN/EVPN
- 8: Cisco Nexus Programmability
- 9: Discovering Cisco Data Center Network Manager (DCNM)