Cisco ACI in the Cisco Nexus Data Center (CACND) v4.0

What you'll learn in this course

The **Configuring Cisco ACI in the Cisco Nexus Data Center** (CACND) v4.0 course shows you how to deploy, operate, and maintain the Cisco® Application Centric Infrastructure (Cisco ACI®) in a data center using the Cisco Nexus® 9000 Series Switches. You will gain hands-on experience configuring and operating the Cisco ACI environment, configuring virtual port channels, connecting phycial endpoints, practicing troubleshooting, and more.

Course duration

● Instructor-led training: 4 days in the classroom with hands-on lab practice

● Virtual instructor-led training: 5 days of web-based classes with hands-on lab practice

How you'll benefit

This course will help you:
● Build your skills the using the Application Policy Infrastructure Controller (APIC) to manage the policy on Cisco Nexus 9000 Series Switches in the ACI fabric

● Gain hands-on practice using Cisco ACI

Who should enroll

● Data center engineers

● Technical support personnel

● Cisco integrators and partners

Technology areas

● Data Center

Objectives

After taking this course, you should be able to:
● Describe the philosophy behind the Cisco ACI Model

● Describe and configure the Cisco Nexus 9000 series of switches

● Configure basic tasks using the Cisco APIC

● Configure advanced tasks using the Cisco APIC

● Configure Cisco ACI to work with VMware

Prerequisites

To fully benefit from this course, you should have the following knowledge and skills:
● Complete knowledge of traditional networking

● Data center and virtualization

Outline

- Introduction to Cisco ACI
  - Examining Cisco ACI Components
  - Examining Cisco ACI Operations
- Cisco ACI Component Architecture
  - Examining the Operation of the Cisco ACI Fabric
  - Exploring the Cisco Nexus 9000 Series Switches
  - Examining the Cisco APIC
  - Managing Cisco ACI
- Cisco ACI Configuration and Operation
  - Configuring the Cisco APIC from the GUI
  - Configuring the Cisco APIC from the Command Line Interface (CLI)
  - Configuring the Cisco APIC from the API
  - Configuring Fabric Access
  - Configuring Virtual Port Channels
  - Configuring ACI Connectivity to External Networks
  - Troubleshooting Cisco ACI
- Cisco ACI Hypervisor Integration
  - Configuring ACI Integration with VMware
- Cisco ACI Advanced Features Configuration
  - Configuring Microsegmentation and Intra-EPG Isolation
  - Examining Transit Routing

Lab outline

- Exploring the Cisco ACI Fabric
- Exploring the Cisco APIC
- Operational Element Configuration from the GUI
- Operational Element Configuration from the CLI
- Operational Element Configuration from the API
- Endpoint Physical Connectivity
- Configuring Virtual Port ChannelsConfiguring ACI Integration with VMware
- Cisco ACI External Connectivity Transit Routing Cisco ACI Troubleshooting