

# Implementing Cisco Application Centric Infrastructure (DCACI)

# **Description**

This course shows you how to deploy and manage the Cisco<sup>®</sup> Nexus<sup>®</sup> 9000 Series Switches in Cisco Application Centric Infrastructure (Cisco ACI<sup>®</sup>) mode. You will learn how to configure and manage Cisco<sup>®</sup> Nexus <sup>®</sup> 9000 Series Switches in ACI mode, how to connect the Cisco ACI fabric to external networks and services, and the fundamentals of Virtual Machine Manager (VMM) integration. You will gain hands-on practice implementing key capabilities such as fabric discovery, policies, connectivity, VMM integration, and more.

#### **Course Content**

### Module 1: Introducing Cisco ACI Fabric Infrastructure and Basic Concepts

- What Is Cisco ACI?
- Cisco ACI Topology and Hardware

### Module 2: Describing Cisco ACI Policy Model Logical Constructs

- Cisco ACI Logical Constructs
- Tenant

### Module 3: Describing Cisco ACI Basic Packet Forwarding

- Endpoint Learning
- Basic Bridge Domain Configuration Knob

### **Module 4: Introducing External Network Connectivity**

- Cisco ACI External Connectivity Options
- External Layer 2 Network Connectivity

### **Module 5: Introducing VMM Integration**

- VMware vCenter VDS Integration
- Resolution Immediacy in VMM

### Module 6: Describing Layer 4 to Layer 7 Integrations

- Service Appliance Insertion Without ACI L4-L7 Service Graph
- Service Appliance Insertion via ACI L4-L7 Service Graph

# **Module 7: Explaining Cisco ACI Management**

- · Out-of-Band Management
- In-Band Management

#### Lab / Exercises

- Validate Fabric Discovery
- Configure Network Time Protocol (NTP)
- Create Access Policies and Virtual Port Channel (vPC)
- Enable Layer 2 Connectivity in the Same Endpoint Group (EPG)
- Enable Inter-EPG Layer 2 Connectivity
- Enable Inter-EPG Layer 3 Connectivity
- Compare Traffic Forwarding Methods in a Bridge Domain
- Configure External Layer 2 (L2Out) Connection
- Configure External Layer 3 (L3Out) Connection
- Integrate Cisco Application Policy Infrastructure Controller (APIC) With VMware vCenter Using VMware Distributed Virtual Switch (DVS)

# **Documentation**

• Digital courseware included

#### **Exam**

This course prepares you to the certification: Cisco Certified Network Professional Data Center

# **Participant profiles**

- Network Designers
- Network Administrators
- Network Engineers
- Systems Engineers
- Data Center Engineers
- Consulting Systems Engineers
- Technical Solutions Architects
- Cisco Integrators/Partners
- Field Engineers
- Server Administrators
- Network Managers
- Storage Administrators
- · Cisco Integrators and Partners

### **Prerequisites**

- Understanding of networking protocols, routing, and switching
- Familiarity with Cisco Ethernet switching products
- Understanding of Cisco data center architecture
- Familiarity with virtualization fundamentals

 Participants should have followed or have knowledge covered by: <u>Implementing and Administering Cisco</u> Solutions

# **Objectives**

- Describe Cisco ACI Fabric Infrastructure and basic Cisco ACI concepts
- Describe Cisco ACI policy model logical constructs
- Describe Cisco ACI basic packet forwarding
- Describe external network connectivity
- Describe VMM Integration
- Describe Layer 4 to Layer 7 integrations
- Explain Cisco ACI management features

#### Niveau

Intermédiaire

**Classroom Registration Price (CHF)** 

4350

**Virtual Classroom Registration Price (CHF)** 

4090

**Duration (in Days)** 

5

Reference

CIS-DCACI