

Implementing Cisco Application Centric Infrastructure (DCACI) v1.0 - On Demand

Modality: On Demand

Duration: 40 Hours

CLC: 15 Units

Course Information

About this course:

This course will teach you how to deploy and manage the Cisco Nexus® 9000 Series Switches in Cisco Application Centric Infrastructure (Cisco ACI®) mode. You will get the knowledge and skills to connect the Cisco ACI fabric to external networks and services, configure and manage Cisco Nexus 9000 Series Switches in ACI mode, along with providing the fundamentals of Virtual Machine Manager (VMM) integration. We will take you through hands-on practice implementing key capabilities such as fabric discovery, policies, connectivity, VMM integration, and more.

Upon completion of this course you will be fully prepared to take the Implementing Cisco Application Centric Infrastructure (300-620 DCACI) exam, passing which will lead to CCNP Data Center and Cisco Certified Specialist – Data Center ACI Implementation certifications.

Course Objective:

After taking this course, you should be able to:

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

Audience:

- Technical solutions architects
- Field engineers
- Server administrators
- Network designers, administrators, engineers, and managers
- Systems engineers
- Data Center engineers
- Consulting systems engineers
- Storage administrators
- Cisco integrators and partners

Prerequisite:

Having the following knowledge and skills will make your learning journey easy:

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

These are the recommended Cisco learning offerings that may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA) v1.0
- Understanding Cisco Data Center Foundations (DCFNDU) v1.0
- Introducing Cisco Data Center Networking (DCICN) v6.2
- Introducing Cisco Data Center Technologies (DCICT) v6.2
- Interconnecting Cisco Networking Devices: Accelerated (CCNAX) **or** Interconnecting Cisco Networking Devices Part 1 (ICND1) and Interconnecting Cisco Networking Devices Part 2 (ICND2)

Course Outline:

Introducing Cisco ACI Fabric Infrastructure and Basic Concepts

What Is Cisco ACI?
 Cisco ACI Topology and Hardware
 Cisco ACI Object Model
 Faults, Event Record, and Audit Log
 Cisco ACI Fabric Discovery
 Cisco ACI Access Policies

Describing Cisco ACI Policy Model Logical Constructs

Cisco ACI Logical Constructs
 Tenant
 Virtual Routing and Forwarding
 Bridge Domain
 Endpoint Group
 Application Profile
 Tenant Components Review
 Adding Bare-Metal Servers to Endpoint Groups
 Contracts

Describing Cisco ACI Basic Packet Forwarding

Endpoint Learning
 Basic Bridge Domain Configuration ****

Introducing External Network Connectivity

Cisco ACI External Connectivity Options
External Layer 2 Network Connectivity
External Layer 3 Network Connectivity

Introducing VMM Integration

VMware vCenter VDS Integration
Resolution Immediacy in VMM
Alternative VMM Integrations

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
Service Graph Configuration Workflow
Service Graph PBR Introduction

Explaining Cisco ACI Management

Out-of-Band Management
In-Band Management
Syslog
Simple Network Management Protocol
Configuration Backup
Authentication, Authorization, and Accounting
Role-Based Access Control
Cisco ACI Upgrade
Collect Tech Support