Implementing Cisco Application Centric Infrastructure-Advanced (DCACIA) v1.1

What you'll learn in this course

The **Implementing Cisco Application Centric Infrastructure–Advanced (DCACIA)** v1.1 course shows you how to integrate the capabilities of the Cisco® Nexus® 9000 Series Switches in Cisco Application Centric Infrastructure (Cisco ACI®) mode. You will learn how to configure and manage Cisco Nexus 9000 Series Switches in ACI mode providing enhanced management and policy framework, along with the protocols used in the underlying fabric. The course also covers how to use Cisco ACI as a policy-driven solution that integrates software and hardware, and how to implement Cisco ACI Multi-Pod and Nexus Dashboard Orchestrator (NDO) deployments. You will gain hands-on practice implementing advanced ACI capabilities such as Rogue Endpoint Feature, Transit Routing, VRF Route Leaking, Contracts and Zoning Rules, Policy Based Redirect to Layer 4–7 Service Node, Multi-Pod Fabric and Cisco ACI® Nexus Dashboard Orchestrator.

This course earns you 40 Continuing Education (CE) credits towards recertification.

Course duration

- Instructor-led classroom: 5 days in the classroom with hands-on lab practice
- Instructor-led virtual classroom: 5 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 5 days of instruction with videos, practice, and challenges

How you'll benefit

This course will help you:

- Learn best practices for implementing and managing Cisco Nexus 9000 Series Switches in Cisco ACI mode
- Leverage the integration software and hardware solutions to expand the capabilities of data center and cloud networks
- Maximize the benefits of an application-centric approach to deliver automation and flexibility in IT services, and automate fabric deployment and configuration
- Prepare for **300-630 DCACIA** exam which counts toward the **CCNP Data Center** certification
- Earn 40 CE credits towards recertification

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Who should enroll

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

Technology areas

- Data center

Course details

Objectives

After taking this course, you should be able to:

- Explain Cisco ACI advanced fabric packet forwarding
- Explain advanced ACI policy and tenant configuration
- Demonstrate Cisco ACI Multi-Pod deployment
- Explain the details and consideration of implementing and integrating traditional network with Cisco ACI
- Describe Cisco ACI Service Graph Policy-Based Redirect (PBR)
- Describe Cisco ACI Nexus Dashboard Orchestrator deployment

Recommended knowledge and training

To fully benefit from this course, you should have the following knowledge and skills:

- Basic understanding of Cisco ACI
- Understanding of Cisco data center architecture
- Familiarity with virtualization fundamentals

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

- **Implementing Cisco Application Centric Infrastructure (DCACI)**
- **Implementing and Administering Cisco Solutions (CCNA®)**
- **Understanding Cisco Data Center Foundations (DCFNDU)**

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How to enroll

To enroll in the DCACIA course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

Outline

- Cisco ACI Advanced Packet Forwarding
  - Packet Forwarding Between Leaf Switches
  - Endpoint Learning
- Using Advanced Cisco ACI Policy and Tenant Configuration
  - Layer 3 Outside Transit Routing
  - Using Tenant Common for Shared Services
- Implementing Traditional Network in Cisco ACI
  - Integrating Switched Network with Cisco ACI
  - Migrating Existing Switched Network to Cisco ACI
- Cisco ACI Service Graph PBR
  - Service Graph PBR Overview
  - PBR End-to-End Packet Flow
- Cisco ACI Multi-Pod Deployment
  - Cisco ACI Multi-Pod Overview
  - Inter-Pod Network Overview
- Cisco Nexus Dashboard Deployment
  - Cisco Nexus Dashboard Overview
  - Cisco Nexus Dashboard Orchestrator

Lab Outline

- Examine Local and Remote Endpoint Learning
- Verify Bounce Entries
- Validate IP Learning
- Mitigate IP and MAC Flapping with the Rogue Endpoint Feature
- Enable Transit Routing
- Implement VRF Route Leaking
- Configure VRF Route Leaking with L3Out
- Examine Contracts and Zoning Rules
- Configure Policy-Based Redirect to Layer 4–7 Service Node
- Deploy Multi-Pod Fabric
- Provision Policies with Cisco ACI Nexus Dashboard Orchestrator