

# Implementing Cisco Application Centric Infrastructure–Advanced (DCACIA) v1.2

Duration: 5 Days (40 hours)

## Course Prerequisites

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

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

The following Cisco courses may help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA)
- Understanding Cisco Data Center Foundations (DCFNDU)

## Course Objectives

The **Implementing Cisco Application Centric Infrastructure–Advanced (DCACIA)** training 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 Multi-Site 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®Multi-Site Orchestrator.

This course will help you:

- Gain the skills and hands-on practice integrating the enhanced, automated capabilities of Cisco Nexus 9000 Series Switches in ACI mode for quicker application deployment

- Get the knowledge for protocols, solutions and designs to acquire professional-level and expert-level data center job roles
- Earn 40 CE credits toward recertification

The **300-630 DCACIA** exam certifies your knowledge of working with Cisco switches in ACI mode including configuration, implementation, and management.

After you pass **300-630 DCACIA**, you earn the **Cisco Certified Specialist – ACI Advanced Implementation** certification and you satisfy the concentration exam requirement for the CCNP Data Center certification.

After completing the course, you should be able to:

- 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

## Course Outline

1. Section 1: Describing Cisco ACI Advanced Packet Forwarding
2. Section 2: Using Advanced Cisco ACI Policy and Tenant Configuration
3. Section 3: Implementing Traditional Network in Cisco ACI
4. Section 4: Describing Cisco ACI Service Graph PBR
5. Section 5: Describing Cisco ACI Multi-Pod Deployment
6. Section 6: Describing Cisco ACI MultiSite Deployment

## Lab Outline

1. Discovery 1: Examine Local and Remote Endpoint Learning
2. Discovery 2: Verify Bounce Entries
3. Discovery 3: Validate IP Learning
4. Discovery 4: Mitigate IP and MAC Flapping with the Rogue Endpoint Feature
5. Discovery 5: Enable Transit Routing
6. Discovery 6: Implement VRF Route Leaking

## Who Should Enroll

This course is designed primarily for network and software engineers who are interested in learning about automation and programmability and hold the following job roles:

- 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