DCACI - IMPLEMENTING CISCO APPLICATION CENTRIC INFRASTRUCTURE V1.2

Course Code: 100599

This course helps you prepare to take the exam, Implementing Cisco Application Centric Infrastructure (300-620 DCACI).

The Implementing Cisco Application Centric Infrastructure (DCACI) v1.2 course show you how to deploy and manage the Cisco Nexus 9000 Series Switches in Cisco Application Centric Infrastructure (Cisco ACI) mode. The course gives you the knowledge and skills to configure and manage Cisco Nexus 9000 Series Switches in ACI mode, how to connect the Cisco ACI fabric to external networks and services, and 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.

This course is eligible for 40 Continuing Education Credits (ILT & ELT Modality).

What You'll Learn

After taking this 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

This course will help you:

- Gain skills and hands-on practice implementing Cisco Nexus 9000 Series Switches in ACI mode
- Prepare for the Implementing Cisco Application Centric Infrastructure (300-620 DCACI) exam
- Qualify for professional-level and expert-level data center job roles

Who Needs to Attend

- Network Designer
- Network Administrator
- Network Engineer
- Systems Engineer
- Data Center Engineer
- Consulting Systems Engineer
- Technical Solutions Architect
- Cisco Integrators/Partners
- Field Engineer
- Server Administrator
- Network Manager
- Storage Administrator
- Cisco integrators and partners

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

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CLASSROOM LIVE	$5,851 CAD	5 Day

Classroom Live 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

Classroom Live Labs

- 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 Application Policy Infrastructure Controller (APIC) With VMware vCenter Using VMware Distributed Virtual Switch (DVS)

Each of these optional supplementary labs can be done independent of any other provided the prerequisites have been met for each lab.

These labs apply to the NterOne ACI lab environment.

The intent of these optional labs is to provide additional hands on experience within ACI beyond the formal Cisco course labs.

Discovery Lab 1:

Monitoring and Diagnosing ACI

- Configure ACI to log to a Syslog Server
- View Faults Using the Cisco APIC GUI
- View events using the Cisco APIC GUI
- Use the API Inspector

Discovery Lab 2:

Use Visore to Explore an ACI Tenant

- Use the Managed Object Browser (Visore)

Discovery Lab 3:

Configure Tenant Span

- Setup Visibility and Troubleshooting using the Cisco APIC GUI.
- Setup SPAN using the Cisco APIC GUI.
- View captured SPAN packets with Wireshark.

Discovery Lab 4:

Configure RBAC Using Local and Radius Users

- Configure a local security domain
- Configure local users and roles for your tenant security domain
- Create a RADIUS security domain and map to your tenant
- Create an AAA login domain for RADIUS authentication
- Test RADIUS authentication and authorization

Discovery Lab 5:

Configure the APIC Using the ACI Cobra SDK (Python)

- Configure the Communication Policy
- Review a Python script
- Use a Python Script to create a Tenant

Discovery Lab 6:

Configure the APIC Using the Cisco APIC REST to Python Adapter (ARYA)

- Save the configuration of an object within the APIC as an XML file
- Use ARYA to create a Python script
- Use Notepad++ to edit a Python script
- Create a new object within the APIC using the Python script

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VIRTUAL CLASSROOM LIVE	$5,851 CAD	5 Day

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Jun 2 - 6, 2025 | 8:30 AM - 4:30 PM EDT

Aug 11 - 15, 2025 | 8:30 AM - 4:30 PM EDT

Oct 20 - 24, 2025 | 8:30 AM - 4:30 PM EDT

Dec 1 - 5, 2025 | 8:30 AM - 4:30 PM EST

DCACI - IMPLEMENTING CISCO APPLICATION CENTRIC INFRASTRUCTURE V1.2

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ON-DEMAND	$1,974 CAD

On-Demand Outline

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PRIVATE GROUP TRAINING	5 Day

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.