

DCACI - Implementing Cisco Application Centric Infrastructure (DCACI)

COURSE OVERVIEW:

The Implementing Cisco Application Centric Infrastructure (DCACI) v1.0 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 helps you prepare to take the exam, Implementing Cisco Application Centric Infrastructure (300-620 DCACI), which leads to CCNP® Data Center and Cisco Certified Specialist – Data Center ACI Implementation certifications.

WHO WILL BENEFIT FROM THIS COURSE?

- 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

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 OBJECTIVES:

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

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

Lab Outline

- 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)

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Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

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- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

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- Dedicated account manager to suggest the optimal learning path for you and your team
- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience