

Implementing Cisco Application Centric Infrastructure

Course Code DCACI
Duration 5 days

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.

Audience

The course will help you to gain skills and hands-on practice implementing Cisco Nexus 9000 Series Switches in ACI mode, to prepare for the Implementing Cisco Application Centric Infrastructure (300-620 DCACI) exam, and to qualify for the professional-level and expert-level data center job roles.

Learning Objectives

By actively participating in this course, you will learn about the following:

- ▶ Describing Cisco ACI Fabric Infrastructure and basic Cisco ACI concepts.
 - ▶ Describing Cisco ACI policy model logical constructs.
 - ▶ Describing Cisco ACI basic packet forwarding.
 - ▶ Describing external network connectivity.
 - ▶ Describing VMM Integration.
 - ▶ Describing Layer 4 to Layer 7 integrations.
 - ▶ Explaining Cisco ACI management features.
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Pre-Requisites

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

Recommended courses:

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



Course Contents

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



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)

Exam Details

This course leads to the 300-620 - Implementing Cisco Application Centric Infrastructure (DCACI) exam.

Successful completion of this exam will earn you the Cisco Certified Specialist – Data Center ACI Implementation certification and will satisfy the concentration exam requirement for new CCNP Data Center certification. To complete CCNP Data Center, you also need to pass the Implementing and Operating Cisco Data Center Core Technologies (350-601 DCCOR) exam or its equivalent.

Further Information

For more information or to book this course, please contact our Course Enquiries Team on **01752 227330** (Option 2) or email us at enquiries@skilltec.co.uk.