



Cisco Training – HD Telepresence

DCACIT: Troubleshooting Cisco Application Centric Infrastructure

\$3,500.00

- 3 Days

Upcoming Dates

Course Description

This course teaches you the key components and procedures that you need to know to manage, monitor, and troubleshoot Cisco® Nexus® 9000 Series Switches in Application Centric Infrastructure (ACI) mode, a solution to simplify, optimize, and accelerate infrastructure deployment and governance. This course is for advanced engineers who have installed and managed existing fabrics or for those who have completed the Implementing Cisco Application Centric Infrastructure-Advanced (DCACI) course.

Course Outline

Cisco ACI Day-2 Operations

- Management Information Tree
- Cisco ACI APIC and Built-In Tools

Day-2 Operational Challenges

- Day-2 Challenges and Solutions

Introducing Cisco Network Assurance Engine (NAE)

- Overview of Cisco Network Assurance Engine
- Components of Cisco NAE

Introducing Cisco Network Insights

- Introducing Cisco Network Insights Advisor
- Introducing Cisco Network Insights Resources

Cisco ACI Fabric Operation and Forwarding

- Virtual Extensible LAN Basics
- Cisco ACI Initial Configuration Overview

Cisco ACI Troubleshooting Methodology

- Review of Logical Model
- Review of Concrete Model

Troubleshooting the Logical Model

- Troubleshooting Logical Model Methodology

Troubleshooting the Concrete Model

- Troubleshooting Concrete Model Methodology

Troubleshooting Virtual Machine Manager (VMM) Integration

- Troubleshooting VMware
- Verifying Blade Chassis

Troubleshooting Layer 4-7 Service Insertion

- Layer 4-7 Service Graph Overview
- Device Packages

Troubleshooting Layer 2

- VLAN and Virtual Extensible LAN (VXLAN) Mapping
- Traffic Flow

Troubleshooting Layer 3 Routing

- Troubleshooting Routing
- Layer 3 Transit Routing

Troubleshooting Contracts and Route Leaking

- Virtual Routing and Forwarding (VRF)-VRF Contracts and Route Leaking

Cisco ACI Best Practices

- Cisco ACI Naming Conventions
- Day-0 Configuration

Lab outline

- Designing Enterprise Connectivity

- Designing an Enterprise Network with BGP Internet Connectivity
- Designing an Enterprise Campus LAN
- Designing Resilient Enterprise WAN
- Designing QoS in an Enterprise Network
- Designing an Enterprise IPv6 Network

Audience

Network engineers

Prerequisites

You should have the following knowledge and skills before attending this course:

- Completion of Cisco ACI Field Engineer Essentials course
- Familiarity with data center infrastructure operations
- Familiarity with the management of Cisco data center switches
- Basic programming
- Basic network troubleshooting
- System or network administration (Linux or Windows)
- Datacenter operations

The following Cisco courses may help you meet these prerequisites:

- Implementing Cisco Application Centric Infrastructure-Advanced (DCACI)
- Cisco Application Centric Infrastructure Operations and Troubleshooting (DCACIO)

What You Will Learn

After taking this course, you should be able to:

- Review and verify basic connectivity to the Cisco Application Policy Infrastructure Controller (APIC)
- Explain Cisco APIC and its monitoring, management, and troubleshooting aspects
- Describe Cisco Network Assurance and Cisco Network Insights and how to use them to improve operational efficiency
- Avoid common mistakes and recognize common symptoms