Implementing Cisco Application Centric Infrastructure (DCACI)

Cisco

- **Nível:** Avançado
- **Duração:** 35h

Sobre o curso

The **Implementing Cisco Application Centric Infrastructure** (DCACI) 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 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

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

Destinatários

Individuals who need to understand how to configure and manage a data center network environment with the Cisco Nexus 9000 Switch operating in ACI Mode.

Condições

Após a formação, é possível adquirir, o exame de certificação do parceiro oficial com 10% de desconto. Oferta válida até 6 meses após a conclusão do curso.

Pré-requisitos

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

Metodologia

Instructor-led classroom: 5 days in the classroom with hands-on lab practice.

Programa

- Introducing Cisco ACI Fabric Infrastructure and Basic Concepts
- Describing Cisco ACI Policy Model Logical Constructs
- Describing Cisco ACI Basic Packet Forwarding
- Introducing External Network Connectivity
- Introducing VMM Integration
- Describing Layer 4 to Layer 7 Integrations
- Explaining Cisco ACI Management

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)