

Configuring Cisco Nexus 9000 Switches in ACI Mode (DCAC9K)

Temario:

This course is designed for engineers who implement and manage the Cisco Nexus 9000 in ACI mode. The course covers the key components and procedures required to understand how to configure and manage Cisco Nexus 9000 Switches in ACI mode , including how to connect the ACI Fabric to external networks and services.

This course features extensive hands-on labs that begin with ACI fabric discovery and include deployment of application profiles, hypervisor integration, service graphs, external network connectivity, and a brief exploration of the APIC REST API.

Dirigido a:

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

Channel Partners and Resellers

Customers

Employees

Objetivos del Curso

After completing this course you should be able to:

- Understand, design, configure, and manage Cisco Nexus 9000 Switches in ACI mode •
- Configure ACI Layer 4-to-Layer 7 service integration, and integrate the Application Policy Infrastructure Controller (APIC) hypervisor
- Configure orchestration and automation tools, protocols, and APIs
- Configure the APIC to connect and integrate ACI with external networks, implement and use management tools and services, and describe migration options with ACI

Contenido

Module 1: Course Introduction Cisco ACI Overview

- Describing the Cisco Nexus 9000 Series Switch ACI Solution
- Describing the Cisco ACI Fabric
- Describing Cisco Nexus 9000 Series Switch Hardware

Pre-requisitos

It is recommended, but not required, that students have basic knowledge of:

- Familiar with Cisco Ethernet Switching Products
- Understanding of Cisco Data Center Architecture
- Virtualization
- Understanding of networking protocols, routing, and switching
- Recommended CCNA Certification
- Recommended attendance of Cisco IP Routing Class (ROUTE)
- Recommended attendance of Cisco Switching Class (SWITCH)

Module 2: Cisco ACI Configuration and Orchestration

- Configuring Cisco APIC
- Configuring Layer 4 Through Layer 7 Services
- Configuring APIC Hypervisor Integration
- Demonstrating Cisco ACI Network Programmability
- Cisco ACI Network Orchestration

Module 3: Cisco ACI External Connectivity, Management, and Migration

- Configuring ACI Connectivity to Outside Networks
- Implementing ACI Management
- Describing Migration Options with ACI

Labs:

- Lab 1: Explore the Fabric Inventory
- Lab 2: Configure Basic Network Constructs
- Lab 3: Configure Policy Filters and Contracts
- Lab 4: Deploy a Three-Tier Application Profile
- Lab 5: Register a VMM Domain with Cisco ACI
- Lab 6: Configure VMware ESXi Hosts to Use the APIC DVS
- Lab 7: Associate an EPG to a VMware vCenter Domain

- Lab 8: Associate a VM to an EPG Port Group
- Lab 9: Deploy a Service Graph with Application Profile
- Lab 10: Configure APIC Using the REST API
- Lab 11: Exporting Contracts Between Tenants
- Lab 12: Configure Cisco APIC Using the Cisco APIC REST to Python Adapter (ARYA).
- Lab 13: Configure Cisco APIC Using the Cisco APIC Python API
- Lab 14: Configure Cisco APIC to Communicate to an External Layer 3 Network
- Lab 15: Configure APIC to Communicate to an External Layer 2 Network
- Lab 16: Configure APIC for Bare Metal to Bare Metal Communications
- Lab 17: Monitor and Troubleshoot ACI
- Lab 18: Configure APIC RBAC for Local and Remote Users