

# Data Center Application Centric Infrastructure Fundamentals (DCACIF V2.0)

Course: **00039**

Filter: **Beginner**

Duration: **2 days**

Category:: **Software Engineering**

Price: **2800,00 €**

## About Course

DCACIF (Data Center Application Centric Infrastructure Fundamentals) is a 5-day Instructor-led training course that is designed for systems & field engineers who install & implement the Cisco Nexus 9000 Switches in ACI mode using the updated 2.0(x) version & updated Cisco Nexus 9000 hardware platform. The course covers the key components & procedures you need to know to understand, configure, manage Cisco Nexus 9000 Switches in ACI mode utilizing the updated 2.0(x) version, & how to connect the ACI Fabric to external networks & services. Cisco ACI Release 2.0(x) offers many new features. The main new features introduced with the 2.0 version are: ; ACI vCenter Plugin for VMware vSphere Web Client ; AVS Health Status ; Contact Permit Logging ; COOP Authentication ; Digital Optical Monitoring ; Layer 3 Multicast Support ; Added OSPF Inbound Route Controls ; Policy-Based Redirect for Provisions Service Appliances ; EPG Deployment Through AEP ; FCoE N-Port Virtualization Support ; Layer 3 EVPN Service over WAN Fabric ; Port-Security ; Support for Multiple vCenters per Fabric. All lab exercises included in this training course will utilize Cisco ACI Release 2.0(x) version. The lab does not necessarily show all new feature uses.

## What you'll learn

- Describe the Cisco Nexus 9000 Series Switch ACI
- Describe the ACI fabric
- Describe the Cisco Nexus 9000 Series Switch hardware
- Describe the Cisco Nexus 9300-EX Series Switch hardware
- Configure the ACI controller (APIC)
- Understand the Cisco Cloud Based APIC

- Describe VXLAN Bridging, Gateway, and Routing
- Configure VDS and ADS microsegmentation
- Configure ACI L4L7 service integration
- Integrate the APIC hypervisor
- Understand the programmability & orchestration of the ACI network
- Discuss ACI connectivity to outside networks
- Implement ACI management

## **Pre-requisites**

- Students should be familiar with Cisco Ethernet switching products
- Students should understand Cisco data center architecture
- Students should be familiar with virtualization
- Recommended CCNA Certification
- Recommended attendance of Cisco IP Routing Class (ROUTE)
- Recommended attendance of Cisco Switching Class (SWITCH)

## **Curriculum**

### **Module 1: Cisco ACI Overview**

- What problems are we trying to fix?
- Hardware Overview
- Software Overview
- Fabric Transport

### **Module 2: Cisco ACI - Configuring Basic Constructs**

- GUI & CLI Overview
- Configuring Tenants & Contracts

### **Module 3: Cisco ACI External Connectivity, Management, & Migration**

- Policy Coordination with VM Managers

- Hypervisors & Bare Metal
- Vmm Domains
- Microsegmentation in the New Data Center

#### **Module 4: Cisco ACI - Configuring ACI Connectivity to Outside Networks**

- Overview of External Connectivity
- Layer 3 Outside Connectivity & Configuration

#### **Module 5: Cisco ACI - L4-L7 Services**

- Service Insertion Concepts
- Configuring L4-L7 Devices

#### **Module 6: Cisco ACI - Administration & Troubleshooting Tools**

- Administration & Troubleshooting Tools
- Troubleshooting, Faults & Monitoring

#### **Module 7: Cisco ACI - Demonstrating ACI Network Programmability & Orchestration**

- Need for Programming
- JSON & XML
- Programmability with REST API
- Orchestration

#### **Module 8: Cisco ACI - Practical Review**

- Attaching Appliances to the Fabric
- Policy & Application Mapping