

# DCACIA (IMPLEMENTING CISCO APPLICATION CENTRIC INFRASTRUCTURE ADVANCED) 1.0

## Objetivo

After taking this course, you should be able to:

- Explain Cisco ACI advanced fabric packet forwarding;
- Explain advanced ACI policy and tenant configuration;
- Describe Cisco ACI Multi-Pod deployment;
- Explain the details and consideration of implementing and integrating traditional network with Cisco ACI;
- Describe Cisco ACI Service Graph Policy-Based Redirect (PBR);
- Describe Cisco ACI Multi-Site deployment.

## Público Alvo

Professionals interested in implementing, configuring, operating and management solutions using the Cisco ACI & Nexus 9000 ACI Mode Solutions.

## Pré-Requisitos

To fully benefit from this course, you should have the following knowledge and skills:

- Basic understanding of Cisco ACI;
- Understanding of Cisco data center architecture;
- Familiarity with virtualization fundamentals.

These are the recommended Cisco learning offerings that may help you meet these prerequisites:

- Implementing Cisco Application Centric Infrastructure (DCACI) v1.0;
- Implementing and Administering Cisco Solutions (CCNA) v1.0;
- Understanding Cisco Data Center Foundations (DCFNDU) v1.0.

## Carga Horária

40 horas (5 dias).

## Conteúdo Programático

### Course Introduction

Course Outline

Course Goals & Objectives

### Cisco ACI Advanced Packet Forwarding

Packet Forwarding Between Leaf Switches

Endpoint Learning

Network Interface Card (NIC) Teaming to ACI Fabric

Endpoint Learning Optimizations

Endpoint Loop Protection

Rogue Endpoint Control

### Using Advanced Cisco ACI Policy and Tenant Configuration

Layer 3 Outside Transit Routing  
Using Tenant Common for Shared Services  
Using Virtual Routing and Forwarding (VRF) Route Leaking for Shared Services  
Using Layer 3 Outside configuration policy (L3Out) VRF Route Leaking for Shared Services  
Detailed Contract Architecture with pcTag  
Contract with vzAny  
Contract Preferred Group

### **Implementing Traditional Network in Cisco ACI**

Integrating Switched Network with Cisco ACI  
Migrating Existing Switched Network to Cisco ACI  
Network- vs. Application-Centric Deployment Models

### **Cisco ACI Service Graph PBR**

Service Graph PBR Overview  
PBR End-to-End Packet Flow  
Service Graph PBR Requirements and Topologies  
Service Graph PBR Tracking Options

### **Cisco ACI Multi-Pod Deployment**

Cisco ACI Multi-Pod Overview  
Inter-Pod Network Overview  
Multi-Pod Provisioning and Packet Flow Between Pods  
Connectivity to External L3 Networks  
Service Node Integration Considerations  
Service Graph Considerations

### **Cisco ACI Multi-Site Deployment**

Cisco ACI Multi-Site Overview  
Cisco ACI Multi-Site Orchestrator  
Inter-Site Network Overview  
Tenant Configuration Deployment from Multi-Site Orchestrator (MSO)  
Packet Flow Between Sites  
Multi-Site Stretched Components  
Multi-Site vs Multi-Pod Comparison

### **Lab outline**

Lab 1: Examine Local and Remote Endpoint Learning  
Lab 2: Verify Bounce Entries  
Lab 3: Validate IP Learning  
Lab 4: Mitigate IP and MAC Flapping with the Rogue Endpoint Feature  
Lab 5: Enable Transit Routing  
Lab 6: Implement VRF Route Leaking  
Lab 7: Configure VRF Route Leaking with L3Out  
Lab 8: Examine Contracts and Zoning Rules  
Lab 9: Configure Policy-Based Redirect to Layer 4-7 Service Node  
Lab 10: Deploy Multi-Pod Fabric  
Lab 11: Provision Policies with Cisco ACI Multi-Site Orchestrator

