



Deploying Security in Cisco ACI

DURATION: 4 DAYS

COURSE CODE: DSACI

FORMAT: LECTURE/LAB

COURSE DESCRIPTION

Deploying Security in Cisco® ACI1 You learn a brief overview of Cisco ACI architecture, including an examination of the Cisco Nexus 9000 Series Switches for data centers. Also, you have the opportunity to discover how to implement security mechanisms in the operational infrastructure with the Cisco ACI environment. You also explore the process for provisioning security services in Cisco ACI, including external Cisco Adaptive Security Appliance (ASA), Adaptive Security Virtual Appliance (ASAv) instances, and Cisco Firepower capabilities is an instructor-led, lab-based, hands-on course offered by Cisco Learning Services. The course describes the how to implement secure Cisco Application Centric Infrastructure (ACI) operation, as well as how to integrate security services with the Cisco ACI Fabric.

This course combines lecture materials and hands-on labs throughout to make sure you are able to successfully deploy, configure, and maintain Cisco ACI security.

WHO SHOULD ATTEND

This course is designed for security-focused engineers, as well as traditional network and data center engineers tasked with security roles in a Cisco networking environment. Targeted roles include:

- Data center engineers
- Technical support personnel
- Network engineers
- Security specialists

PREREQUISITES

Cisco recommends that you have the following prerequisite knowledge and skills:

- Complete knowledge of Cisco networking
- Data center and virtualization knowledge
- Network and data center security skills

TASKS AND FEATURES COVERED

Basic Cisco ACI architecture and operation

Tenant security

Security domains

Secure fabric operation

Authentication, authorization, and accounting (AAA) integration

Microsegmentation

L4-L7 service graphs

Function profiles

External ASA device integration

ASAv appliance integration

Cisco Firepower Next-Generation Intrusion Prevention System (NGIPS) integration

COURSE OUTLINE

1. Basics of Cisco ACI

- Cisco APIC Architecture and Operation
- Cisco ACI Logical Elements

2. Security Built In to Cisco ACI

- Inherent Cisco ACI Security Mechanisms
- Securing the Cisco ACI Environment from Threats

3. Security Services in Cisco ACI

- L4-L7 Services Key Concepts
- Security Appliances in Cisco ACI
- Deploying Cisco ASA in Cisco ACI
- Deploying Cisco ASA in Cisco ACI
- Deploying Cisco FirePOWER NGIPS in Cisco ACI

DISCOVERY LABS

- 1: Exploring the Cisco ACI Fabric
- 2: Exploring the Cisco APIC
- 3: Configuring Cisco Secure Access Control System (ACS) Terminal Access Controller Access Control System+ (TACACS+) Integration
- 4: Configuring Cisco ACI L4-L7 Service Insertion
- 5: Configuring a Firewall High-Availability Pair
- 6: Configuring and Inserting a Firewall High-Availability Pair in Routed Mode
- 7: Configuring and Inserting an ASA in Transparent Mode
- 8: Configuring and Inserting a Virtual Cisco Firepower NGIPS in Inline Mode