



# Cisco ACI Insight Series

[REGISTER](#)

ACI-INSIGHT 6-Part Series

Format: Lecture/Lab

## Course Description

This Firefly Cisco Application-Centric Infrastructure (ACI) Insight Webinar Series consist of six 2-hour, highly interactive Webex whiteboard sessions with demos.

This series dives deeper into the Cisco ACI architecture for next-generation networks. As an ACI Professional, it is critical that you have a clear understanding of the ACI model and how it can help you address challenges with virtualized and cloud computing architectures.

In the demo labs that are included in this course, you will see how to configure the ACI fabric, tenants, and contracts that underlie the ACI policy-driven architecture and optionally explore other features such as inter-tenant communications, explore the APIC troubleshooting tools, and get introduced to the API CLI.

## Prerequisites

IT professionals who already possess a strong working knowledge of Data Center networks will gain the most from this course.

## Who Should Attend

This course is tailored for end-user network and Data Center architects and engineers, as well as senior IT personnel who are evaluating the suitability of ACI for their environment.

## Learning Objectives

- Understanding ACI logical constructs
- Understanding fabric forwarding
- Understanding the available options to deploying an ACI fabric
- Understanding how ACI connects to a legacy environment
- Understanding the migration process

**Important Note:** *These sessions are not formal ACI classes with takeaway labs and books, they are live interactive sessions that give an overview of the key topic areas that you need to know for ACI.*



# Cisco ACI Insight Series

## Outline

### Fabric Forwarding

In this webinar, we will discuss the way ACI forwards L2 and L3 traffic within the fabric. To understand fabric forwarding, you need to understand ACI's logical constructs.

Understanding fabric forwarding is key to manage and troubleshoot an ACI fabric.

*Duration: 2 hours*

VxLAN refresher

Understanding

Bridge Domains

- Bridge Domain as a layer 2 boundary
- Difference between VLANs and Bridge Domains
- Bridge Domain configuration knobs
  - Limit Learning to IP subnet
- Encapsulation and multicast group

Coop

- Oracles and Citizens
- Endpoint tables
- Lookup process

Layer 2 and Layer 3 forwarding

- ARP handling packet walk
- L2 packet walk
- L3 packet walk
- BUM traffic packet walk
- VxLAN Encapsulations

### ACI Logical Constructs

In this webinar, we will discuss ACI the fundamental building blocks of ACI, and how they relate to one another. We will cover Tenants, VRFs, Bridge Domains, App Profiles, EPGs, and contracts.

Understanding ACI logical constructs are one of the first topics that need to be understood in order to effectively deploy and manage ACI.

*Duration: 2 hours*

- Tenants
- VRFs
- Bridge Domains
- Application Profiles
- EPGs and Endpoint Security Groups
  - VMM and Physical Domains
- Intro to Contracts



# Cisco ACI Insight Series

## External Connectivity - Layer 2

In this webinar, we will discuss how ACI connect to legacy networks for Layer 2 traffic.

Understanding how ACI connects to a legacy environment is something critical for anyone designing or migrating to ACI.

*Duration: 2 hours*

- Understanding VLANs on ACI
- Understanding L2Outs
- Understanding EPG extensions
- Unicast Routing option on Bridge Domain for migration
- Dual homing Layer 2 connectivity

## External Connectivity - Layer 3

In this webinar, we will discuss how ACI connect to legacy networks for Layer 3 traffic.

Understanding how ACI connects to a legacy environment is something critical for anyone designing or migrating to ACI.

*Duration: 2 hours*

### Layer 3 Connectivity

- L3Out Building Blocks
- Single L3Outs with Multiple Node Profiles vs Multiple
- L3Outs with single Node Profile
  - Traffic Shaping and traffic flow
- Understanding Subnet options for Ext-EPG
- Advertising routes
  - Mapping L3Out to Bridge Domain
  - Using Route Maps
- Shared L3Outs
  - VRF Leaking overview and verification
  - Shared L3Out on Common Tenant
  - Shared L3Out on different tenants



# Cisco ACI Insight Series

## Deployment Models

In this webinar, we will cover the different options on how we can deploy App Profiles, EPGs, and BDs, and how they relate to VLANs and Subnets on legacy environments.

This webinar will provide a solid understanding the available options to deploying an ACI fabric, with an explanation of benefits and drawbacks for each model.

*Duration: 2 hours*

- Naming Convention
- App Centric and Network Centric
  - EPG to Bridge Domain to VLAN and Subnet relationship
  - Generic VLAN/Subnet to App Driven VLAN/Subnet
- Whitelisting, Blacklisting and Graylisting
- Benefits and Drawbacks

## Migration Strategy

In this webinar, we will cover the different options on how we can migrate to ACI.

This webinar will provide a solid understanding of the migration process and the most relevant choices we need to make.

*Duration: 2 hours*

- Integrating ACI to legacy environments
- Migration Steps
- Migration considerations
- FW Considerations
  - Where do we place the GWs?
  - Designing based on Zones
  - To Service Graph or not to Service Grpah
  - DMZ inside of ACI vs DMZ outside
  - Understanding inbound and outbound traffic flow for multi DC solutions
  - Multicloud considerations
- LB considerations
  - Single or Multihop
  - GSLB/GTM requirements for multi DC solutions