



## **Cisco ACI Course Overview**

Application Centric Infrastructure is a Cisco SDN solution which reduces complexity and improves business agility in data centers. As the name implies ACI targets on the implementation that operate the business instead of the network outcomes.

- One of the market-leading Software Defined Networking offerings is Cisco Application Centric Infrastructure (ACI) that gives developed networking and security abilities in data centers.
- ACI deployment helps companies to safeguard their applications via apolicy enforcement, micro-segmentation and white list model.

### **About this training**

- Aspirants will learn how to configure and deploy the Cisco Nexus 9000series in ACI (Application Centric Infrastructure) mode
- Aspirants will learn how to connect the Cisco ACI Fabric to external networks and services
- You will learn how to troubleshoot the Cisco Nexus 9000 series switches platform
- You will get a brief knowledge, skills and knowledge to safeguard, scalable and policy-based management

### **Online - Weekend Classes**

- **Study Material:** Live lectures, Recorded Videos, Online Workbook, Access
- **Duration:** 32 Hours

### **What you will Learn**

- Deep understanding on how to troubleshoot Cisco Nexus 9000 series switches in ACI
- Deployment of ACI Fabric
- A configuration of the ACI controller (APIC)
- Integration of the APIC hypervisor
- Configuring of ACI L4-L7 service integration
- Implementation of ACI management
- Understanding programmability and orchestration of the ACI network
- Discuss ACI connectivity to external networks
- Different migration options with ACI

## **Requirement**

- Aspirants should have understanding of Cisco Ethernet switching products
- Aspirants must have basic understanding of data center infrastructures/architectures

## **Target Audience**

- Data center engineers
- Data center architects
- Network engineers
- Network designers
- Network consultants
- Technical solution architects

## **About the Instructor**

The instructor for this training has been delivering training for the last 7+ years. He is an expert trainer who is having CCIE Data Centre certification and 14+ years of experience in data center and routing switching domain.

## **Course Contents**

- **Module 1:**
  - ACI Overview
    - ❖ Provides a very high level overview of ACI & what to expect from the blog series
- **Module 2:**
  - Bringing up an ACI Fabric
    - ❖ Provisioning an APIC cluster & discovering the leaf and spine switching nodes in your network.
- **Module 3:**
  - Getting familiar with the ACI APIC
    - ❖ Explanation on what functionality is found under the main labs.
- **Module 4:**
  - Application Profiles, EPGs, Contracts and Filters of ACI
    - ❖ Important policy constructs on the fabric and how they are used to define application requirements.
- **Module 5:**
  - Private Networks, Bridge Domains and Subnets of ACI
    - ❖ The main networking policies and constructs within ACI and how they relate to each other.
- **Module 6:**
  - ACI Access Policies
    - ❖ Process of creating an access policy to be used for bare metal host connectivity into the fabric.

- **Module 7:**
  - Basic Connectivity of ACI
    - ❖ How to set up basic connectivity between two hosts across two EPGs.
- **Module 8:**
  - ACI VMM Integration
    - ❖ Integration between ACI and the virtual machine environment.
- **Module 9:**
  - Layer 3 External Connectivity in ACI
    - ❖ Explanation on how to configure routing from the ACI fabric to an external device.
- **Module 10:**
  - Programming the ACI Fabric
    - ❖ Programmability options available within ACI
- **Module 11:**
  - Transit Routing in ACI
    - ❖ The transit routing capability of the ACI fabric that came in with the 1.1 (1j) release.
- **Module 12:**
  - Inter VRF and Inter-Tenant Communication in ACI
    - ❖ How to configure inter-VRF
- **Module 13:**
  - ACI Service Graph Integration with ASA (unmanaged mode)
- **Module 14:**
  - ACI L2 Out Integration

### **List of Labs:**

- Lab 1: Bringing up an ACI Fabric
- Lab 2: Getting familiar with the APIC
- Lab 3: Application Profiles, EPGs, Contracts and Filters
- Lab 4: Private Networks, Bridge Domains and Subnets
- Lab 5: Access Policies
- Lab 6: Basic Connectivity
- Lab 7: VMM Integration
- Lab 8: Layer 3 External Connectivity
- Lab 9: Programming the ACI Fabric
- Lab 10: Transit Routing
- Lab 11: Inter VRF and Inter-Tenant Communication
- Lab 12: Service Graph Integration with ASA
- Lab 13: ACI L2 Out Integration

**Note: \*\*\***Most of the course topics are covered with hands-on lab exercises and others are theoretical

**Thank You**

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