Course Outline
Cisco Application Centric Infrastructure (ACI)

Instructor Led Live Virtual Class
Duration: 6-8 Day (20-30 hours) | Course Number: Cisco ACI 300

Introduction

This course helps to understand Cisco ACI technologies and solutions. Cisco ACI is the ONLY industry-leading SDN solution that automates network and security for workloads within and across heterogeneous domains; i.e., physical (bare-metal) servers, virtual machines, containers, or public cloud. With Cisco ACI Reduce network complexity and improve business agility in your data center. Our suite of Cisco Application Centric Infrastructure training course will help you realize the potential of your data center. Through improved systems capabilities, you will learn how to reduce operating costs, automate IT tasks, and accelerate data center application deployments.

Goals

Upon successful completion of the course, it will enable participants to design scalable multicloud networks with a consistent policy model, and gain the flexibility to move applications seamlessly to any location or any cloud while maintaining security and high availability.

Prerequisites

Participants should:

- Have taken at least an undergraduate-level networking course.
- Have programming experience in Python.
- Be able to write a simple client-server program in Python.
- Proficiency with basic networking concepts and facility with configuring networking in Linux environments.
- Experience with virtual machines and other virtual networking environments may also be useful.

Supplemental Resources

- Adam Raffe's 12 part Learning ACI tutorial
- Cisco's Official ACI documentation

You may find the additional reading useful for introductory material:
- Introduction to Computer Networking
- Introduction to Python
- Familiarity with Software Defined Networking and Network Function Virtualization
- Open Networking Foundation: For recent OpenFlow specifications, etc.

Significant Features of the course

- An understanding of Cisco ACI technologies
- An insight into Cisco ACI features
- ACI connectivity to external networks
- An understanding of ACI integration with VMware
- Cisco ACI fabric management and Automation
- Exploring Cisco ACI security and Monitoring features
- Experience with Cisco ACI troubleshoot tools

Discovery Lab Modules and Detailed Weekly Schedule

This course will cover 7 modules	
Module 1: Cisco ACI Overview	
Discovery Lab 1	Explore the Cisco ACI Fabric Inventory
Discovery Lab 2	Implement Cisco ACI Fabric Connectivity
Discovery Lab 3	Configure Cisco ACI Logical Constructs
Module 2: Cisco ACI Codes, Delta Releases and Features	
Virtualization, Container, and Third-Party Integration Features	
Discovery Lab 4	Integrate Cisco ACI with VMware Using Native DVS
Discovery Lab 5	Cisco AVE Configuration and Micro-segmentation
Module 3: Security and Monitoring Features	
Discovery Lab 6	Guided Lab 6: Integrate Cisco ASAv with Cisco APIC
Discovery Lab 7	Configure Role-Based Access Control
Discovery Lab 8	Explore Cisco ACI Monitoring and Net-flow
Module 4: Cisco ACI External Networking	
Discovery Lab 9	Enable Connectivity to External L3 Networks
Discovery Lab 10	Enable Connectivity to External L2 Networks
Module 5: Cisco ACI Fabric Extensions and Interconnections	
Discovery Lab 11	Configure Cisco APIC Using REST API
Module 6: Fabric Management and Automation	
Discovery Lab 12	Configure Cisco APIC Using Python Scripts
Discovery Lab 13	Explore Cisco ACI App Center and Cisco ACI Optimize Feature
Module 7: Common Troubleshooting Scenarios	
Discovery Lab 14	Explore Cisco ACI Troubleshooting Tools
Discovery Lab 15	Export TechSupport