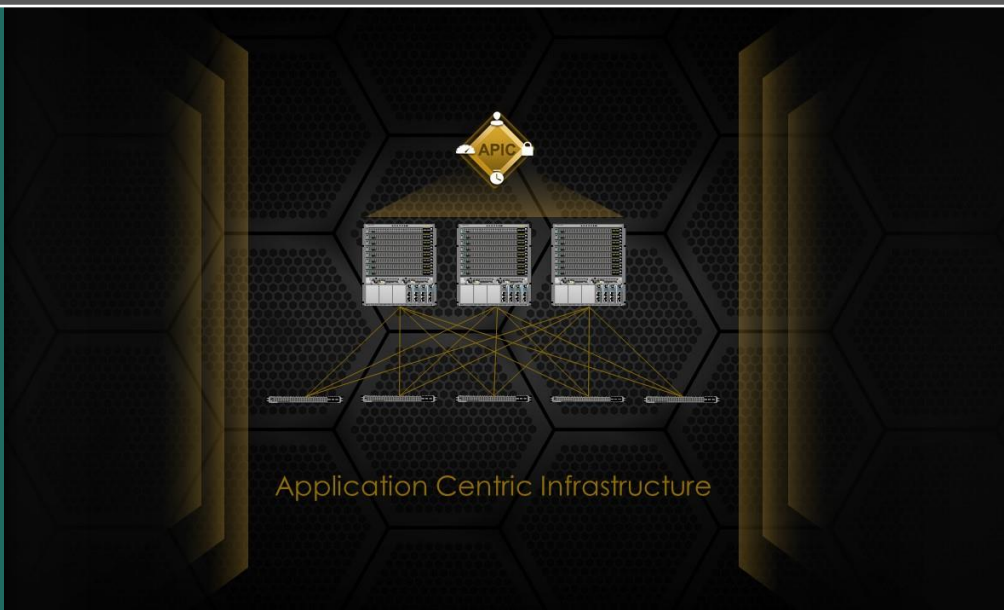


Course Catalog

Application Centric Infrastructure Engineer (ACIE)

v 1.0

Cisco Technologies



Engineered Training



Developed by

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Technology

Datacenter Networking
Datacenter SDN

Duration

40 Hours

Vendor

Cisco

Audience

System/Presales Engineers
Solution Architects
Implementation Engineers
Operation Engineers
Network Developers

Delivery

Offsite Classroom
Onsite Classroom

Course Overview

The Application Centric Infrastructure (ACIE) is a Cisco Technologies course that is developed for whom seeking to understand Cisco ACI SDN Solution in Datacenters. The course validates the ability to design, configure, and operate Cisco ACI fabric in Single Datacenter and across Datacenters. The course is recommended for Datacenter Networking Specialists, Datacenter Networking Admins, and Datacenter Networking Designers.

This course is part of our Engineered Training Services that deliver value-added courses which cover the concerned technologies from all aspects as well as other related fundamentals or technologies from zero level to the expert level incorporating case studies and real-life scenarios that benefit participants in their actual work environment.

Course Related Certifications

This course is not aligned to any Cisco exam. The Course is custom developed for Cisco ACI Technology and can be recommended for all who seeks to take:

- CCNA Datacenter Certification
- CCNP Datacenter Certification
- CCIE Datacenter Certification.

Course Prerequisites

Below requirements should be fulfilled before applying to the ACIE course:

- Solid understanding of the below technologies:
 - Cisco vPC.
 - Cisco FabricPath.
 - VXLAN.
 - VXLAN-EVPN.
 - IPv4 Multicast PIM and MP-BGP protocols.
- Recommended to have at least 1 – 3 years of networking experience.
- Recommended to have a laptop in Lab sessions.



Course Added Values

- Delivering the optimum technical knowledge reflecting experience and real-life scenarios in the class.
- Understanding Best practice designs, configurations and recommendations.
- Consolidating Cisco ACI fundamentals, architecture, Data plane, Control plane, and configurations in one course delivering a complete vision of how datacenters networking can be designed, configured and operated.
- Delivering the latest architectures, technologies and devices models ensuring transferring up-to-date knowledge compared with regular certificate courses.

Course Objectives

- Understanding Cisco ACI solution including architecture, key features, and configurations.
- Understanding ACI Nexus 9000 hardware architecture designed for Cisco ACI solution.
- Understanding and configuring ACI policy model, fabric policies, access policies, L2/L3 connectivity, and L4-L7 device insertion.
- Understanding Cisco ACI Virtual Machine Networking for Virtualized Environments.
- Ability to size and design Cisco ACI solution for given data center networking requirements.
- Understanding ACI deployments across datacenters with single point of control.
- Engineers to be engaged in Network DevOps and to turn into DevOps Engineers.

Course Tools and Materials

- Animated Presentation Slides
- Labs (Simulators/Real Gears)
- Student Book – Printed Copy
- Lab Guide - PDF

Course Outline

The course is divided into 4 Modules. Each Module is sub-divided into sections. Course blueprint is listed below:

- **Module 1: Understanding ACI Fundamentals**
 - ACI Overview
 - ACI Building Blocks
 - ACI Architecture
 - ACI Policy-Driven Model



- **Module 2: Understanding ACI Fabric Connectivity**
 - ACI Fabric Policies
 - ACI Access Policies
 - ACI Virtual Portchannels
 - ACI Virtual Machine Networking
 - ACI L2 External Networking
 - ACI L3 External Networking
 - ACI L4-L7 Service Insertion

- **Module 3: Understanding ACI Fabric Operation**
 - ACI Fabric discovery
 - ACI Data Plane forwarding
 - ACI ARP Traffic Handling
 - ACI Endpoint Learning
 - ACI Policy Identification and Enforcement
 - ACI Loop Prevention

- **Module 4: Understanding ACI Extensions Across Datacenters**
 - ACI Fabric Extension Overview
 - ACI Multipod
 - ACI Remote Leaf

Course Schedule

The course consists of 5 sessions, each session 8 Hours (Total of 40 hours). Session Details are listed below:

Session	Session Content	LAB Session
Session 1	Module 1: Understanding ACI Fundamentals	
Session 2	Module 2: Understanding ACI Fabric Connectivity	
Session 3	Module 2: Understanding ACI Fabric Connectivity (Cont.) Module 3: Understanding ACI Fabric Operation	
Session 4	Module 3: Understanding ACI Fabric Operation (Cont.) Module 4: Understanding ACI Extensions Across Datacenters	
Session 5	Module 4: Understanding ACI Extensions Across Datacenters (Cont.) Lab: Full ACI Lab (standalone)	LAB

***Note:** Session hours can be minimized to 4 hours, with total of 20 session or as per client desire.