DCACI

Course Name:	Implementing Cisco Application Centric Infrastructure (DCACI)
Course Duration:	5 days (30 hours)
Requirements:	Understanding of networking protocols, routing, and switching Familiarity with Cisco Ethernet switching products Understanding of Cisco data center architecture Familiarity with virtualization fundamentals **Recommendation:** • Implementing and Administering Cisco Solutions (CCNA) v1.0 • Understanding Cisco Data Center Foundations (DCFNDU) v1.0
Who should take this Course:	Network Designers Network Administrators Network Engineers Systems Engineers Data Center Engineers Consulting Systems Engineers Technical Solutions Architects Cisco Integrators/Partners Field Engineers Server Administrators Network Managers Storage Administrators Cisco integrators and partners

Syllabus Course

Outline:

- Introducing Cisco ACI Fabric Infrastructure and Basic Concepts
  - What Is Cisco ACI?
  - Cisco ACI Topology and Hardware
  - Cisco ACI Object Model
  - Faults, Event Record, and Audit Log
  - Cisco ACI Fabric Discovery
  - Cisco ACI Access Policies

- Describing Cisco ACI Policy Model Logical Constructs
  - Cisco ACI Logical Constructs
  - Tenant
  - Virtual Routing and Forwarding
  - Bridge Domain
  - Endpoint Group
  - Application Profile
  - Tenant Components Review
  - Adding Bare-Metal Servers to Endpoint Groups
  - Contracts
- Describing Cisco ACI Basic Packet Forwarding
  - Endpoint Learning
  - Basic Bridge Domain Configuration Knob
- Introducing External Network Connectivity
  - Cisco ACI External Connectivity Options
  - External Layer 2 Network Connectivity
  - External Layer 3 Network Connectivity
- Introducing VMM Integration
  - VMware vCenter VDS Integration
  - Resolution Immediacy in VMM
  - Alternative VMM Integrations
- Describing Layer 4 to Layer 7 Integrations
  - Service Appliance Insertion Without ACI L4-L7 Service Graph
  - Service Appliance Insertion via ACI L4-L7 Service Graph
  - Service Graph Configuration Workflow
  - Service Graph PBR Introduction
- Explaining Cisco ACI Management
  - Out-of-Band Management
  - In-Band Management
  - Syslog
  - Simple Network Management Protocol
  - Configuration Backup
  - Authentication, Authorization, and Accounting
  - Role-Based Access Control
  - Cisco ACI Upgrade
  - Collect Tech Support

Lab outline:

- Validate Fabric Discovery
- Configure Network Time Protocol (NTP)
- Create Access Policies and Virtual Port Channel (vPC)
- Enable Layer 2 Connectivity in the Same Endpoint Group (EPG)

- Enable Inter-EPG Layer 2 Connectivity
- Enable Inter-EPG Layer 3 Connectivity
- Compare Traffic Forwarding Methods in a Bridge Domain
- Configure External Layer 2 (L2Out) Connection
- Configure External Layer 3 (L3Out) Connection
- Integrate Application Policy Infrastructure Controller(APIC) With VMware vCenter Using VMware Distributed Virtual Switch (DVS)