

DCICT

Cisco Network Certification



Introducing Cisco Data Center Technologies v6.0

Duration

5 days

Prerequisites

The knowledge and skills that a learner must have before attending this course are:

- Good understanding of networking protocols
- Good understanding of the VMware environment

Who Should Attend

This course is targeted for:

- Learners who will perform only the more basic configuration tasks.

Benefits Realized

Upon completing this course, the learner will be able to:

- Describe and configure Cisco UCS
- Describe and configure Cisco data center virtualization
- Describe and configure Cisco data center networking
- Describe and configure Cisco automation and orchestration
- Describe and verify Cisco ACI

Course Content

This instructor-led course is to introduce learners to Cisco technologies and products that are deployed in the data center: network virtualization, network technologies, unified computing, automation and orchestration, and the Cisco Application-Centric Infrastructure (Cisco ACI). The hands on lab exercises focus on configuring features on Cisco Nexus Operating System (Cisco NX-OS), Cisco Unified Computing System (Cisco UCS), and Cisco UCS Director.

Course Outline

- **Module 1: Cisco Data Center Network Virtualization**
 - Describing Functional Planes of Cisco Nexus Switches
 - Describing Cisco Nexus Operating System VRF Contexts
 - Describing Virtual Device Contexts
 - Describing the Function of Overlays
 - Describing Virtualization
 - Describing Virtual Switches
- **Module 2: Cisco Data Center Network Technologies Configuration**
 - Describing Cisco Fabric Extender Connectivity
 - Describing Port Channels and Virtual Port Channels
 - Describing Cisco FabricPath
 - Describing Unified Port Feature of Cisco Nexus Switches
 - Describing Cisco Unified Fabric
- **Module 3: Cisco Unified Computing System**
 - Describing Data Center Server Connectivity
 - Describing Cisco IMC Supervisor
 - Describing Cisco UCS Manager Operations
 - Describing Role-Based Access Control
 - Describing Hardware Abstraction in Cisco UCS
- **Module 4: Data Center Automation and Orchestration**
 - Exploring the Utility of Application Programming
 - Introducing Cloud Computing Basic Concepts
 - Describing Cloud Attributes and Service Models
 - Describing Cisco UCS Director
 - Describing VDCs, Tenants, and Policies
 - Describing Orchestration
 - Managing Catalogs and Templates
 - Reporting in Cisco UCS Director (CloudSense)
- **Module 5: Cisco Application-Centric Infrastructure**
 - Describing Cisco ACI
 - Describing Cisco ACI Fabric
 - Programming and Orchestrating Cisco ACI
- **Labs**
 - Lab 1-1: Connect to Cisco Nexus Series Switches Using SSH
 - Lab 1-2: Configure VRFs
 - Lab 1-3: Explore the Elements of Virtual Device Contexts
 - Lab 1-4: Install VMware ESXi on UCS C-Series Rack Server
 - Lab 1-5: Install VMware vCenter Server Appliance
 - Lab 1-6: Install Cisco Virtual Switch Update Manager
 - Lab 1-7: Install Cisco Nexus 1000V with VSUM
 - Lab 1-8: Configure a Port Group in the DVS
 - Lab 2-1: Configure the Cisco Nexus 2000 Fabric Extender
 - Lab 2-2: Configure Virtual Port Channels
 - Lab 2-3: Configure Virtual Port Channels with FEX (Challenge)
 - Lab 2-4: Configure Cisco FabricPath
 - Lab 2-5: Configure Unified Ports on Cisco Nexus Switch
 - Lab 2-6: Implement FCoE
 - Lab 3-1: Install and Configure the Cisco IMC Supervisor
 - Lab 3-2: Navigate the Cisco UCS Manager GUI Interfaces
 - Lab 3-3: Configure Local RBAC
 - Lab 3-4: Configure Pools
 - Lab 3-5: Configure a Service Profile Template
 - Lab 4-1: Configure NX-OS with APIs
 - Lab 4-2: Explore the Management Information Tree of the Cisco UCS Manager XML API
 - Lab 4-3: Configure Cisco UCS Manager with the Postman REST Plugin for Google Chrome
 - Lab 4-4: Install and Configure User Accounts in Cisco UCS Director
 - Lab 4-5: Add Virtual and Physical Accounts to Cisco UCS Director
 - Lab 4-6: Customize Cisco UCS Director
 - Lab 4-7: Explore Cisco UCS Director Monitoring Capabilities
 - Lab 4-8: Create Policies and VDCs
 - Lab 4-9: Create a Catalog and Provision a VM using the Self-Service Portal
 - Lab 4-10: Explore Cisco UCS Director Built-In Reports
 - Lab 4-11: View Chargeback and Reports

