

DCUCI

Cisco Network Certification



Implementing Cisco Data Center Unified Computing v6.0

Duration

5 days

Prerequisites

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

- Understanding of server system design and architecture
- Familiarity with Ethernet and TCP/IP networking
- Familiarity with SANs
- Familiarity with Fibre Channel protocol
- Understanding of Cisco Enterprise Data Center Architecture
- Familiarity with hypervisor technologies (such as VMware)

Who Should Attend

This course is targeted for:

- Learners who are preparing for Cisco CCNP Data Center certification and those in professional-level data center roles.

Benefits Realized

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

- Install the UCS B-Series system out of the box and deploy service profiles using pooled identities and service profile templates
- Configure the UCS B-Series system for deployments using iSCSI and configure B- and C-Series systems for deployments using Fibre Channel for regular data access and booting
- Configure and implement security mechanisms such as RBAC with Organizations and Locales, LDAP integration, trusted points, and key rings
- Configure and implement monitoring with syslog and Call Home
- Manage UCS Manager domains with UCS Central, manage multiple C-Series servers with Cisco IMC Supervisor, and interact with the UCS Manager XML API

Course Content

This instructor-led course is designed to help learners prepare for the Cisco CCNP® Data Center certification and for professional level data center roles. The focus of this skills-building course is on deploying, securing, operating, and maintaining the Cisco Unified Computing System (UCS) and UCS C-Series Rack Servers for use in data centers. The extensively hands-on course covers configuring and managing Cisco UCS servers using unified I/O networking for LAN and SAN connectivity, virtualizing server hardware identifiers to enable rapid recovery of server operating system images, automating UCS deployments using UCS Central Software and Cisco Integrated Management Controller (IMC) Supervisor, configuring fault tolerance, implementing role based access control (RBAC), backing up and restoring system configurations, and using the monitoring and troubleshooting tools in Cisco UCS Manager and Cisco IMC.

Course Outline

- **Module 1: Cisco Unified Computing System Implementation**
 - Describing Cisco UCS Server Form Factors
 - Describing Cisco Unified Computing System Connectivity
 - Configuring Identity Abstraction
 - Configuring Service Profile Templates
- **Module 2: SAN Storage Implementation for Cisco Unified Computing System**
 - Implementing iSCSI
 - Implementing Fibre Channel Port Channels
 - Implementing FCoE
- **Module 3: Security Implementation for Cisco Unified Computing System**
 - Implementing Role Based Access Control
 - Implementing External Authentication Providers
 - Implementing Key Management
- **Module 4: Operations and Maintenance for Cisco Unified Computing System**
 - Implementing UCS Firmware Updates
 - Implementing UCS Backups
 - Implementing Monitoring
- **Module 5: Cisco Unified Computing System Automation**
 - Implementing Cisco UCS Central
 - Implementing Cisco UCS Director
 - Comparing Scripting Options for Cisco UCS Manager
- **Labs**
 - Lab 1-1: Accessing the Remote Lab Environment
 - Lab 1-2: Provision Cisco UCS Fabric Interconnect Cluster
 - Lab 1-3: Configure Server and Uplink Ports
 - Lab 1-4: Configure VLANs
 - Lab 1-5: Configure a UCS Service Profile Using Hardware Identities
 - Lab 1-6: Configure Basic Identity Pools
 - Lab 1-7: Configure a UCS Service Profile Using Pools
 - Lab 1-8: Configure a Service Profile Template

 - Lab 2-1: Configure an iSCSI Service Profile
 - Lab 2-2: Configure Pod-Specific Device-Aliases
 - Lab 2-3: Configure Zoning
 - Lab 2-4: Configure VSANs in UCS Manager
 - Lab 2-5: Configure Unified Ports on UCS Fabric Interconnects
 - Lab 2-6: Install and Boot VMware ESXi on Cisco UCS C-Series Servers from SAN LUN

 - Lab 2-7: Install and Boot VMware ESXi on Cisco UCS B-Series Servers from SAN LUN

 - Lab 3-1: Configure Organizations and Locales
 - Lab 3-2: Configure Job-Specific Roles
 - Lab 3-3: Configure UCS Manager to Authenticate Users with Microsoft Active Directory
 - Lab 3-4: Configure a Trusted Point and Key Ring in UCS Manager

 - Lab 4-1: Perform Backup and Restore Activities
 - Lab 4-2: Implement Syslog and CallHome

 - Lab 5-1: Deploy and Use Cisco UCS Central
 - Lab 5-2: Deploy and Use Cisco IMC Supervisor
 - Lab 5-3: Configure UCS Manager with XML API and UCS PowerTools

