



Implementing Cisco Data Center Unified Computing

DURATION: 5 DAYS

COURSE CODE: DCUCI

FORMAT: LECTURE/LAB

COURSE DESCRIPTION

The Implementing Cisco Data Center Unified Computing (DCUCI) course is designed to help students 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 (Cisco UCS) B-Series Blade Servers and Cisco 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, implementing automation for Cisco UCS, 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 Integrated Management Controller (Cisco IMC). Those preparing for professional-level data center-oriented jobs, or who wish to certify on the in-demand Cisco CCNP Data Center level, can now take the official training in self-paced format. The e-learning format of this course offers an immersive, practice-based learning experience at your own pace. Using enterprise-grade Cisco data center equipment, this hands-on training format is designed to be as effective as classroom training, with easily consumable segments of video, text, discovery labs, review questions, and graded challenges.

WHO SHOULD ATTEND

Network designers, Network administrators, Network engineer Systems engineers, Consulting systems engineers, Technical solutions architects, Cisco integrators/partners.

PREREQUISITES

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)

LEARNING OBJECTIVES

Describe Cisco UCS server form factors
Describe Cisco UCS connectivity
Configure identity abstraction
Configure service profile templates
Implement Internet Small Computer Systems Interface (iSCSI)
Implement Fibre Channel port channels
Implement Fibre Channel over Ethernet (FCoE)
Implement RBAC
Implement external authentication providers

Implementing key management
Implement Cisco UCS firmware updates
Implement Cisco UCS backups
Implement monitoring
Deploy Cisco UCS Central and use it to add a Cisco UCS Manager domain, manage resources centrally, and create all required pools and templates to deploy a service profile
Implement Cisco UCS Director and Cisco IMC Supervisor
Compare scripting options for Cisco UCS Manager

COURSE OUTLINE

1. Cisco Unified Computing System Implementation

- Describing Cisco UCS Server Form Factors
- Describing Cisco UCS Connectivity
- Configuring Identity Abstraction
- Configuring Service Profile Templates

2. SAN Storage Implementation for Cisco Unified Computing System

- Implementing iSCSI
- Implementing Fibre Channel
- Implementing FCoE

3. Security Implementation for Cisco Unified Computing System

- Implementing Role-Based Access Control
- Implementing External Authentication Providers
- Implementing Key Management

4. Operations and Maintenance for Cisco Unified Computing System

- Implementing Cisco UCS Firmware Updates
- Implementing Cisco UCS Backups
- Implementing Monitoring

5. Cisco Unified Computing System Automation

- Implementing Cisco UCS Central
- Implementing Cisco UCS Director and Cisco IMC Supervisor
- Comparing Scripting Options for Cisco UCS Manager

DISCOVERY LABS

- 1: Provision Cisco UCS Fabric Interconnect Cluster
- 2: Configure Server and Uplink Ports
- 3: Configure VLANs
- 4: Configure a Cisco UCS Service Profile Using Hardware Identities
- 5: Configure Basic Identity Pools
- 6: Configure a Cisco UCS Service Profile Using Pools
- 7: Configure a Service Profile Template
- 8: Configure an iSCSI Service Profile
- 9: Configure Pod-Specific Device Aliases
- 10: Configure Zoning
- 11: Configure VSANs in Cisco UCS Manager
- 12: Configure Unified Ports on Cisco UCS Fabric Interconnects
- 13: Install and Boot VMware ESXi on Cisco UCS C-Series Servers from SAN LUN
- 14: Install and Boot VMware ESXi on Cisco UCS B-Series Servers from SAN LUN
- 15: Configure Organizations and Locales
- 16: Configure Job-Specific Roles
- 17: Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- 18: Configure a Trusted Point and Key Ring in Cisco UCS Manager
- 19: Perform Backup and Restore Activities
- 20: Implement Syslog
- 21: Deploy and Use Cisco UCS Central
- 22: Deploy and Use Cisco IMC Supervisor
- 23: Configure Cisco UCS Manager with XML API and Cisco UCS PowerTools