Implementing Cisco Data Center Unified Computing

ID CI-DCUCI  Price US$ 4,395  Duration 5 days

Who should attend

- Network Designer
- Server Administrator
- Network Engineer
- Systems Engineer
- Consulting Systems Engineer
- Technical Solutions Architect
- Cisco Integrators and Partners
- Network Administrator
- Storage Administrator
- Network Manager

networking
- Familiarity with SANs
- Familiarity with Fibre Channel protocol
- Understanding of Cisco Enterprise Data Center Architecture
- Familiarity with hypervisor technologies (such as VMware)

Course Objectives

Upon completion of this course, you will be able to:

- Describe Cisco UCS server form factors
- Describe Cisco UCS connectivity
- Configure identity abstraction
- Configure service profile templates
- Implement iSCSI
- Implement Fibre Channel port channels
- Implement FCoE
- Implement role-based access control (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 Integrated Management Controller (Cisco IMC) Supervisor
- Compare scripting options for Cisco UCS Manager

Prerequisites

Students considered for this training should have attended the following classes or obtained equivalent level of knowledge:

- Introducing Cisco Data Center Networking (DCICN)
- Introducing Cisco Data Center Technologies (DCICT)
- Interconnecting Cisco Network Devices: Accelerated (CCNAX) or Interconnecting Cisco Network Devices Part 1 (ICND1) and Interconnecting Cisco Network Devices Part 2 (ICND2)

The knowledge, skills, and attitudes that a learner is expected to have before attending this course are as follows:

- Understanding of server system design and architecture
- Familiarity with Ethernet and TCP/IP
Course Content

The Implementing Cisco Data Center Unified Computing (DCUCI) v6.2 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 (UCS) B-Series Blade Servers 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, 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 (IMC).

You’ll master the professional-level skills and technologies needed to implement Cisco data center unified computing infrastructure, including unified computing implementation maintenance and operations, automation, security and storage.

Detailed Course Outline

Module 1: Cisco Unified Computing System Implementation

- Lesson 1: Describing Cisco UCS Server Form Factors
- Lesson 2: Describing Cisco UCS Connectivity
- Lesson 3: Configuring Identity Abstraction
- Lesson 4: Configuring Service Profile

Module 2: SAN Storage Implementation for Cisco Unified Computing System

- Lesson 1: Implementing iSCSI
- Lesson 2: Implementing Fibre Channel
- Lesson 3: Implementing FCoE

Module 3: Security Implementation for Cisco Unified Computing System

- Lesson 1: Implementing Role-Based Access Control
- Lesson 2: Implementing External Authentication Providers
- Lesson 3: Implementing Key Management

Module 4: Operations and Maintenance for Cisco Unified Computing System

- Lesson 1: Implementing Cisco UCS Firmware Updates
- Lesson 2: Implementing Cisco UCS Backups
- Lesson 3: Implementing Monitoring

Module 5: Cisco Unified Computing System Automation

- Lesson 1: Implementing Cisco UCS Central
- Lesson 2: Implementing Cisco UCS Director and Cisco IMC Supervisor
- Lesson 3: Comparing Scripting Options for Cisco UCS Manager

Lab Outline

- Guided Lab 1: Provision Cisco UCS Fabric Interconnect Cluster
- Guided Lab 2: Configure Server and Uplink Ports
- Guided Lab 3: Configure VLANs
- Guided Lab 4: Configure a Cisco UCS
DELIVERY METHODS

ILT – Instructor-Led Classroom Training
ILT sessions are conducted in a physical classroom environment.

ILO – Instructor-Led Online Training
ILO sessions are conducted via WebEx in a VoIP environment

FLEX Classroom™ – Combined ILT & ILO
FLEX Classroom sessions are delivered via ILT and ILO giving you the ultimate flexibility.

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