

Implementing Cisco Data Center Unified Computing (DCUCI) v6.2

What you'll learn in this course

The **Implementing Cisco Data Center Unified Computing (DCUCI) v6.2** course helps you prepare for the Cisco CCNP® Data Center certification and for professional-level data center roles. In this course, you will master the skills and technologies you need to implement Cisco® data center unified computing infrastructure, including Cisco UCS® servers, virtualization, and networking for LAN and SAN connectivity, and to maintain, operate, automate, and secure unified computing deployments.

IT professionals with Cisco CCNP Data Center training and certification are uniquely qualified for professional-level or higher roles in enterprise-class data center environments. Cisco CCNP training and certification equips you with skills in a broad range of technologies and industry best practices to help you succeed in these in-demand roles.

Course duration

- Instructor-led training: 5 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 5 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 5 days of instruction with hands-on lab practice, videos, and challenges

How you'll benefit

This course will help you:

- Gain expertise in effectively implementing and provisioning server hardware, operating systems, hypervisors, storage, and networking
- Optimally implement, automate, and use Cisco unified computing technologies to increase efficiency and high availability, and to enable centralized management of the data center architecture
- Prepare for the Cisco CCNP Data Center certification through a combination of lessons and practice using enterprise-grade Cisco data center equipment and software
- Qualify for professional-level job roles in the high-demand area of enterprise-class data center environments

Who should enroll

IT professionals in these roles:

- Data center administrator
- Data center engineer
- Network administrator
- Network engineer
- System administrator
- Systems engineer
- Network designer
- Consulting systems engineer

- Technical solutions architect
- Cisco integrator or partner

How to enroll

- For instructor-led training, visit the [Cisco Learning Locator](#).
- For e-learning, visit the [Cisco Learning Network Store](#).
- For private group training, visit [Cisco Private Group Training](#).
- For digital library access, visit [Cisco Platinum Learning Library](#).
- For e-learning volume discounts, visit [Cisco Training on Demand](#).

Technology areas

- Data center

Course details

Objectives

After taking this course, you should be able to:

- Describe Cisco UCS server form factors
- Describe Cisco UCS connectivity
- Configure identity abstraction
- Configure service profile templates
- Implement SSCI over IP (iSCSI)
- Implement Fibre Channel port channels
- Implement Fibre Channel over Ethernet (FCoE)
- Implement Role-Based Access Control (RBAC)
- Implement external authentication providers
- Implement 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 (IMC) Supervisor
- Compare scripting options for Cisco UCS Manager

Prerequisites

We recommend (but don't require) that you have these skills and knowledge before taking this course:

- Understanding of server system design and architecture
- Familiarity with Ethernet and TCP/IP networking
- Familiarity with SANs
- Familiarity with the Fibre Channel protocol
- Understanding of Cisco enterprise data center architecture
- Familiarity with hypervisor technologies (such as VMware)

Outline

Cisco Unified Computing System Implementation

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

SAN Storage Implementation for Cisco Unified Computing System

- Implementing iSCSI
- Implementing Fibre Channel
- Implementing FCoE

Security Implementation for Cisco Unified Computing System

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

Operations and Maintenance for Cisco Unified Computing System

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

Cisco Unified Computing System Automation

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

Lab outline

- Provision Cisco UCS Fabric Interconnect Cluster
- Configure Server and Uplink Ports
- Configure VLANs
- Configure a Cisco UCS Service Profile Using Hardware Identities
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure a Service Profile Template
- Configure an iSCSI Service Profile
- Configure Pod-Specific Device Aliases
- Configure Zoning
- Configure VSANs in Cisco UCS Manager
- Configure Unified Ports on Cisco UCS Fabric Interconnects
- Install and Boot VMware ESXi on Cisco UCS C-Series Servers from SAN LUN
- Install and Boot VMware ESXi on Cisco UCS B-Series Servers from SAN LUN
- Configure Organizations and Locales
- Configure Job-Specific Roles
- Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Configure a Trusted Point and Key Ring in Cisco UCS Manager
- Perform Backup and Restore Activities
- Implement Syslog
- Deploy and Use Cisco UCS Central
- Deploy and Use Cisco IMC Supervisor
- Configure Cisco UCS Manager with XML API and Cisco UCS PowerTool



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