

Introducing Cisco Unified Computing System v1.0 (DCIUCS)

Modality: Virtual Classroom

Duration: 2 Days

CLC: 22 Units

About this course:

In this 2-day introductory course, Introducing Cisco Unified Computing System (DCIUCS) v1.0, students will learn how to deploy, secure, operate and maintain the Cisco Unified Computing system (Cisco UCS) B-Series blade server, Cisco UCS C-Series and S-Series rack servers, and Cisco HyperFlex product family, for use in data centers.

This course can be used to prepare for the new CCNP Data Center and CCIE Data Center certifications.

Course Objective:

Upon completing this course, the learner will be able to meet the following overall objectives:

- Describe Cisco UCS server hardware
- Describe Cisco UCS connectivity
- Describe the Cisco HyperFlex Data Platform, its data writing and reading processes, and data optimization
- Describe and configure Cisco UCS service profiles
- Describe and configure Cisco UCS service profile templates
- Describe and implement iSCSI on Cisco UCS
- Describe and implement Cisco UCS firmware updates
- Describe and implement Cisco UCS backups

Audience:

The primary audience for this course are as follows:

- Server administrators
- Network engineers
- Systems engineers
- Consulting systems engineers
- Technical solutions architects
- Network administrators
- Storage administrators
- Network managers
- Cisco integrators and partners

Prerequisite:

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

- General knowledge of servers
- Routing and switching
- Storage area networking
- Server virtualization

These Cisco courses are recommended to help you meet these prerequisites:

- Understanding Cisco Data Center Foundations (DCFNDU)
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)

Course Outline:

Describing Cisco UCS Server Hardware

- Cisco UCS B-Series Blade Servers
- Cisco UCS C-Series Rack Servers
- Cisco UCS S-Series Rack Servers
- Cisco Virtual Interface Cards
- Hyperconvergence Overview
- Cisco HyperFlex HX-Series Servers

Describing Cisco UCS Connectivity

- Cisco UCS Fabric Interconnect
- Cisco UCS B-Series Connectivity
- Cisco UCS C-Series Connectivity
- Cisco UCS S-Series Connectivity
- Cisco HyperFlex Connectivity Architecture
- Cisco HyperFlex Edge Connectivity
- Cisco UCS Fabric Interconnect Ethernet End-Host Mode Compared to Switching Mode
- Cisco UCS Fabric Interconnect Uplink Pinning
- Cisco UCS C-Series Integration

Describing the Cisco HyperFlex HX Data Platform

- Cisco HyperFlex HX Data Platform Software
- Writing Data to Cisco HyperFlex HX Data Platform
- Reading Data from Cisco HyperFlex HX Data Platform
- Data Optimization in Cisco HyperFlex HX Data Platform

Configuring Cisco UCS Service Profiles

- Portability Issue with Nonabstracted Identities
- Cisco UCS Service Profile
- Identity Pools
- Server Pools

- IP Pools

Configuring Cisco UCS Service Profile Templates

- Service Profile Templates

Implementing iSCSI on Cisco UCS

- iSCSI Addressing
- iSCSI Support in Cisco UCS

Implementing Cisco UCS Firmware Updates

- Update Cisco UCS C-Series Server Firmware
- Download Tasks for the Infrastructure Image
- Download Tasks for Cisco UCS B-Series Firmware Packages
- Best Practices for Updating Firmware in Cisco UCS Manager
- Firmware Upgrades Using Auto Install
- Capability Catalog Updates
- Host Firmware Packages
- Driver Updates for Operating Systems and Hypervisors

Implementing Cisco UCS Backups

- Compare Backup Options in Cisco UCS Manager
- Compare Two Import Types
- Policy Backup

Lab Outline:

- Explore Cisco UCS Manager GUI
- Configure Server and Uplink Ports
- Configure VLANs
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure a Service Profile Template
- Configure an iSCSI Service Profile on Cisco UCS
- Perform Backup and Restore Activities