
Introducing Cisco Unified Computing System

DURATION: 2 DAYS

COURSE CODE: DCIUCS

FORMAT: LECTURE/LAB

COURSE DESCRIPTION

The Introducing Cisco Unified Computing System (DCIUCS) v1.0 is an introductory course that shows you 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. You will gain hands-on practice on basic Cisco UCS server configuration and performing backup and restore activities.

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

PREREQUISITES

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

WHO SHOULD ATTEND

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

LEARNING 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

COURSE OUTLINE

1. 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

2. 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
- Ethernet End-Host Mode Compared to Switching Mode
- Cisco UCS Fabric Interconnect Uplink Pinning
- Cisco UCS C-Series Integration

3. 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

4. Configuring Cisco UCS Service Profiles

- Portability Issue with Non-abstracted Identities Cisco UCS Service Profile
- Identity Pools
- Server Pools
- IP Pools

5. Configuring Cisco UCS Service Profile Templates

- Service Profile Templates

6. Implementing iSCSI on Cisco UCS

- iSCSI Addressing
- Evolution of SCSI from DAS to SAN
- iSCSI Multipathing

7. 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

8. Implementing Cisco UCS Backups

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

DISCOVERY LABS

- 1: Explore Cisco UCS Manager GUI
- 2: Configure Server and Uplink Ports
- 3: Configure VLANs
- 4: Configure Basic Identity Pools
- 5: Configure a Cisco UCS Service Profile Using Pools
- 6: Configure a Service Profile Template
- 7: Configure an iSCSI Service Profile on Cisco UCS
- 8: Perform Backup and Restore Activities