

# **Configuring Cisco Unified Computing System (DCCUCS)**

**Modality:** Virtual Classroom

**Duration:** 3 Days

**CLC:** 37 Units

## **About this course:**

The **Configuring Cisco Unified Computing System (DCCUCS)** v1.0 shows you how to deploy, secure, operate, and maintain Cisco Unified Computing System™ (Cisco UCS®) B-series blade servers, Cisco UCS C-Series, and S-Series rack servers for use in data centers. You will learn how to implement management and orchestration software for Cisco UCS. You will gain hands-on practice: configuring key features of Cisco UCS, Cisco UCS Director, and Cisco UCS Manager; implementing UCS management software including Cisco UCS Manager and Cisco Intersight™; and more.

This course will help you:

- Gain in-depth experience implementing and maintaining Cisco UCS servers to help you accelerate and provide robust UCS deployments
- Gain knowledge and skills through Cisco's unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software

## **Course Objective:**

After taking this course, you should be able to:

- Describe and implement Fibre Channel, zoning, and N-Port Virtualization (NPV) features on Cisco UCS
- Describe and implement Fibre Channel over Ethernet (FCoE) on Cisco UCS
- Describe Cisco UCS policies for service profiles
- Describe Cisco Adapter Fabric Extender (FEX) and Single Root I/O Virtualization
- Describe and implement Role-Based Access Control (RBAC) on Cisco UCS
- Describe and implement external authentication providers on Cisco UCS Manager
- Describe and implement key management on Cisco UCS Manager
- Describe Cisco UCS Director
- Describe and implement Cisco Intersight
- Describe the scripting options for Cisco UCS Manager
- Describe and implement monitoring on Cisco UCS Manager

## **Audience:**

- Server administrators
- Network engineers
- Systems engineers

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

## Prerequisite:

To fully benefit from this course, you should have the following knowledge and skills:

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

These are the recommended Cisco courses that may help you meet these prerequisites:

- **Implementing and Administering Cisco Solutions (CCNA) v1.0**
- **Understanding Cisco Data Center Foundations (DCFNDU) v1.0**
- **Implementing and Operating Cisco Data Center Core Technologies (DCCOR)**
- **Introducing Cisco Unified Computing System (DCIUCS) v1.0**
- **Introducing Cisco Data Center Networking (DCICN) v6.2**
- **Introducing Cisco Data Center Technologies (DCICT) v6.2**
- **Interconnecting Cisco Networking Devices: Accelerated (CCNAX) or Interconnecting Cisco Networking Devices Part 1 (ICND1) and Interconnecting Cisco Networking Devices Part 2 (ICND2)**

## Course Outline:

### Implementing Cisco UCS Storage Area Network (SAN)

- SAN Introduction
- Cisco UCS Fabric Interconnect Fibre Channels modes
- Named VSANs
- Cisco UCS Fibre Channel and FCoE Storage Connectivity

### Describing Cisco UCS Policies for Service Profiles

- Storage Policies and Profiles

- Basic Input Output System (BIOS) Policies
- Boot Policy
- Intelligent Platform Management Interface (IPMI) Policies
- Scrub Policies
- Maintenance Policies

## **Describing Cisco Adapter FEX and Single Root I/O Virtualization**

- Cisco FEX Overview
- Cisco Adapter FEX
- Single Root I/O Virtualization

## **Implementing RBAC on Cisco UCS**

- RBAC in Cisco UCS
- Users, Roles, and Privileges
- Functions of Organizations and Locales
- Effective Rights of a User

## **Implementing External Authentication Providers**

- Options for External Authentication Providers

## **Implementing Key Management on Cisco UCS Manager**

- Public Key Infrastructure

## **Implementing Cisco UCS Director**

- Cisco UCS Director Overview
- Policies, Virtual Data Centers, and Catalogs
- Cisco UCS Director Virtualization Support
- Managing Compute with Cisco UCS Director
- Cisco UCS Manager Orchestration
- Self-Service Portal
- Reporting and Monitoring in Cisco UCS Director

## **Implementing Cisco Intersight**

- Cisco UCS Director Overview
- Important Features of Cisco Intersight

## **Describing the Scripting Options for Cisco UCS Manager**

- Cisco UCS Manager XML API
- Cisco UCS Management Information Tree
- Managed Object Browser
- Cisco UCS PowerTool

- Cisco UCS Python Software Development Kit (SDK)

## **Implementing Key Management on Cisco UCS Manager**

- Public Key Infrastructure

## **Implementing Cisco Intersight**

- Cisco Intersight Overview
- Important Features of Cisco Intersight

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- Cisco UCS Manager XML API
- Cisco UCS Management Information Tree
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- Cisco UCS Manager PowerTool
- Cisco UCS Python SDK

## **Implementing Monitoring on Cisco UCS Manager**

- Logging Sources in Cisco UCS Manager
- Port Monitoring Capabilities of Cisco UCS Manager
- Simple Network Management Protocol (SNMP) Security Ramifications
- Cisco UCS Manager Call Home Feature

### ***Labs:***

- 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 Elastic Sky X Integrated (ESXi) on Cisco UCS from the FCoE Logical Unit Number (LUN) via FCoE
- Configure RBAC
- Configure Cisco UCS Manager to Authenticate Users via Open Lightweight Directory Access Protocol (OpenLDAP)
- Configure a Trusted Point and Key Ring in Cisco UCS Manager
- Configure Cisco UCS with Cisco Intersight
- Configure Cisco UCS Manager Using Scripting
- Implement Syslog and Call Home