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# Configuring Cisco Unified Computing System

DURATION: 3 DAYS

COURSE CODE: DCCUCS

FORMAT: LECTURE/LAB

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## COURSE DESCRIPTION

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 on: configuring key features of Cisco UCS, Cisco UCS Director, and Cisco UCS Manager; implementing UCS management software including Cisco UCS Director, Cisco UCS Manager, and Cisco Intersight; and more.

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

## WHO SHOULD ATTEND

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

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## PREREQUISITES

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

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## LEARNING OBJECTIVES

Describe and implement Fibre Channel, zoning, and NPV features on Cisco UCS  
Describe and implement FCoE on Cisco UCS

Describe Cisco UCS policies for service profiles

Describe Cisco Adapter FEX and Single Root I/O Virtualization

Describe and implement RBAC on Cisco UCS

Describe and implement external authentication providers on Cisco UCS Manager  
Describe and implement key management on Cisco UCS Manager

Describe and implement Cisco UCS Director

Describe and implement Cisco Intersight

Describe the scripting options for Cisco UCS Manager

Describe and implement monitoring on Cisco UCS Manager

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## COURSE OUTLINE

### 1. Implementing Fibre Channel on Cisco UCS

- Fibre Channel Port Channel Functionality
- Purpose of Zoning
- Cisco NPV and Fibre Channel Switching Mode

### 2. Implementing FCoE on Cisco UCS

- FCoE Topologies
- FCoE Initialization Protocol
- FCoE Communication
- Cisco Data Center Bridging
- SAN Boot Requirements

### 3. Describing Cisco UCS Policies for Service Profiles

- Storage Policies BIOS Policies
- Boot Policy
- IPMI Policies
- Scrub Policies Maintenance Policies

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

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

### 5. Implementing RBAC on Cisco UCS

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

### 6. Implementing External Authentication Providers

- Options for External Authentication Providers

### 7. Implementing Key Management on Cisco UCS Manager

- Public Key Infrastructure

### 8. Implementing Cisco UCS Director

- Cisco UCS Director Overview
- Install Cisco UCS Director
- Virtual and Physical Accounts
- Policies, Virtual Data Centers, and Catalogs
- Self-Service Portal
- Cisco UCS Director with VMware
- Managing VMs
- Compute Management with Cisco UCS Director
- Reporting and Monitoring in Cisco UCS Director

### 9. Implementing Cisco Intersight

- Cisco Intersight Overview
- Key Features of Cisco Intersight

### 10. Describing the Scripting Options for Cisco UCS

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

### 11. Implementing Monitoring on Cisco UCS Manager

- Logging Sources in Cisco UCS Manager
- Port Monitoring Capabilities of Cisco UCS Manager
- SNMP Security Ramifications
- Cisco UCS Manager Call Home Feature
- Describe the Cisco UCS Manager Call Home feature

## DISCOVERY LABS

- 1: Configure Pod-Specific Device Aliases
- 2: Configure Zoning
- 3: Configure VSANs in Cisco UCS Manager
- 4: Configure Unified Ports on Cisco UCS Fabric Interconnects
- 5: Install and Boot VMware ESXi on Cisco UCS from the FCoE LUN
- 6: Configure RBAC
- 7: Configure Cisco UCS Manager to Authenticate Users via OpenLDAP
- 8: Configure a Trusted Point and Key Ring in Cisco UCS Manager
- 9: Install Cisco UCS Director
- 10: Configure Cisco UCS Director
- 11: Discover Infrastructure with Cisco UCS Director
- 12: Examine the Cisco UCS Director GUI
- 13: Design Services in Cisco UCS Director
- 14: Configure Cisco UCS with Cisco Intersight
- 15: Configure Cisco UCS Manager Using Scripting
- 16: Implement Syslog and Call Home