

Configuring Cisco Unified Computing System (DCCUCS)

Course Summary

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: 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.

Objectives

By the end of this course, students will 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

Topics

- Implementing Cisco UCS Storage Area Network (SAN)
- Describing Cisco UCS Policies for Service Profiles
- Describing Cisco Adapter FEX and Single Root I/O Virtualization
- Implementing RBAC on Cisco UCS
- Implementing External Authentication Providers
- Implementing Key Management on Cisco UCS Manager
- Implementing Cisco UCS Director
- Implementing Cisco Intersight
- Describing the Scripting Options for Cisco UCS Manager
- Implementing Key Management on Cisco UCS Manager
- Implementing Cisco Intersight
- Describing the Scripting Options for Cisco UCS Manager
- Implementing Monitoring on Cisco UCS Manager

Audience

This course is designed for: Server Administrators, Network Engineers, Systems Engineers, Consulting Systems Engineers, Technical Solutions Architects, Network Administrators, Storage Administrators, Network Managers, Cisco Integrators and Partners.

Prerequisites

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 and server virtualization knowledge.

Duration

Three days

Configuring Cisco Unified Computing System (DCCUCS)

Course Outline

I. Implementing Cisco UCS Storage Area Network (SAN)

- A. SAN Introduction
- B. Cisco UCS Fabric Interconnect Fibre Channels modes
- C. Named VSANs
- D. Cisco UCS Fibre Channel and FCoE Storage Connectivity

II. Describing Cisco UCS Policies for Service Profiles

- A. Storage Policies and Profiles
- B. Basic Input Output System (BIOS) Policies
- C. Boot Policy
- D. Intelligent Platform Management Interface (IPMI) Policies
- E. Scrub Policies
- F. Maintenance Policies

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

- A. Cisco FEX Overview
- B. Cisco Adapter FEX
- C. Single Root I/O Virtualization

IV. Implementing RBAC on Cisco UCS

- A. RBAC in Cisco UCS
- B. Users, Roles, and Privileges
- C. Functions of Organizations and Locales
- D. Effective Rights of a User

V. Implementing External Authentication Providers

- A. Options for External Authentication Providers

VI. Implementing Key Management on Cisco UCS Manager

- A. Public Key Infrastructure

VII. Implementing Cisco UCS Director

- A. Cisco UCS Director Overview
- B. Policies, Virtual Data Centers, and Catalogs
- C. Cisco UCS Director Virtualization Support
- D. Managing Compute with Cisco UCS Director
- E. Cisco UCS Manager Orchestration
- F. Self-Service Portal
- G. Reporting and Monitoring in Cisco UCS Director

VIII. Implementing Cisco Intersight

- A. Cisco UCS Director Overview
- B. Important Features of Cisco Intersight

IX. Describing the Scripting Options for Cisco UCS Manager

- A. Cisco UCS Manager XML API
- B. Cisco UCS Management Information Tree

- C. Managed Object Browser
- D. Cisco UCS PowerTool
- E. Cisco UCS Python Software Development Kit (SDK)

X. Implementing Key Management on Cisco UCS Manager

- A. Public Key Infrastructure

XI. Implementing Cisco Intersight

- A. Cisco Intersight Overview
- B. Important Features of Cisco Intersight

XII. Describing the Scripting Options for Cisco UCS Manager

- A. Cisco UCS Manager XML API
- B. Cisco UCS Management Information Tree
- C. Managed Object Browser
- D. Cisco UCS Manager PowerTool
- E. Cisco UCS Python SDK

XIII. Implementing Monitoring on Cisco UCS Manager

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

Lab Outline

- 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