

Course Outline

Configuring Cisco Unified Computing System Course DCCUCS: 3 days Instructor Led

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About this course

In this three-day course, Configuring Cisco Unified Computing System (DCCUCS) v1.0, students will learn 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. Students will learn how to implement management and orchestration software for Cisco UCS. Students will gain hands-on practice with:

- Configuring key features of Cisco UCS, Cisco UCS Director, and Cisco UCS Manager
- Implementing UCS management software including Cisco UCS Manager and Cisco Intersight

Audience profile

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

At course completion

After completing this course, students will be able to:

- 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
- 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

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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

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- 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

Describing the Scripting Options for Cisco UCS Manager

- Cisco UCS Manager XML API

Cisco UCS Management Information Tree

- Managed Object Browser
- 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

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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 ESXi on Cisco UCS from the 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