# Configuring Cisco Unified Computing System (DCCUCS) v1.0

# What you'll learn in this course

The **Configuring Cisco Unified Computing System (DCCUCS)** v1.0 shows you how to deploy, secure, operate, and maintain Cisco Unified Computing System<sup>™</sup> (Cisco UCS<sup>®</sup>) 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 and implementing key features of Cisco UCS, Cisco UCS Director, Cisco UCS Manager and Cisco Intersight<sup>™</sup>.

## **Course duration**

- · Instructor-led training: 3 days in the classroom with hands-on lab practice
- · Virtual instructor-led training: 3 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 3 days of content with videos, hands-on practice, and challenges

# How you'll benefit

This course will help you:

- Acquire 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

# Who should enroll

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

# How to enroll

#### E-learning

- To buy a single e-learning license, visit the Cisco Learning Network Store.
- · For more than one license, or a learning library subscription, contact us at learning-bdm@cisco.com.

#### **Instructor-led training**

- Find a class at the Cisco Learning Locator.
- Arrange training at your location through <u>Cisco Private Group Training</u>.

## **Technology areas**

Data center

## **Course details**

# **Objectives**

After taking this course, you should be able to:

- Describe and implement SAN on Cisco UCS
- Describe Cisco UCS policies for service profiles
- 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

#### **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
- Server virtualization knowledge

The following courses are recommended to help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA)
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)
- Introducing Cisco Unified Computing System (DCIUCS)
- Understanding Cisco Data Center Foundations (DCFNDU)

#### 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
- 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)
- · 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

#### 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 Manager Using Scripting
- Implement Syslog and Call Home



Americas Headquarters Cisco Systems, Inc. San Jose, CA Asia Pacific Headquarters Cisco Systems (USA) Pte. Ltd. Singapore Europe Headquarters Cisco Systems International BV Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: https://www.cisco.com/go/trademarks. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Course content is dynamic and subject to change without notice.

© 2020 Cisco and/or its affiliates. All rights reserved.