



Data Center Unified Computing Design Boot Camp

Length
4 days

Format
Lecture/lab

Track
Design

Version
3.0

Course Description

This hands-on course focuses on Cisco Unified Computing System (UCS) design and architecture. Starting with an overview of Cisco UCS key features, hardware and software components, and Unified Fabric architecture, you will learn to analyze the use cases and the quantitative benefits that Cisco UCS provides in terms of meeting customers' business, technical, and environmental objectives.

Topics covered in this course include performance characteristics, recommended reconnaissance and analysis tools, sizing, migration process, design success criteria, and ROI calculations.

This course also includes hands-on labs to allow you to become familiar with the UCS environment and key concepts.

Who Should Attend

This course provides in-depth design and architecture training for system engineers who need to design Cisco Unified Computing System solutions.

Recommended Prerequisites

- Systems engineering experience with Intel x86 deployments
- Basic knowledge of LAN and SAN concepts

For Cisco Channel Partner certification, the following pre-requisites are required:

- VMware VCDX or VCP
- CCDA
- Cisco Data Center Networking Infrastructure Design Specialist: DCNI-D
- Cisco Data Center Storage Networking Design Specialist: DCSNS

DCUCD

Accelerated Training

The original version of DCUCD is 5 days. We deliver this course in an accelerated 4-day format. We will cover all of the same topics as in the original 5-day course to maximize your return on time investment.

Learning Objectives

After you complete this course, you will be able to:

- Explain Data Center computing solutions design principles and challenges
- Describe the Cisco Data Center 3.0 architecture
- Identify Cisco Unified Computing System components and architecture
- Describe the Cisco Data Center Unified Computing solution advantages and services
- Describe the Cisco UCS server deployment and implementation model
- Identify key performance characteristics and reconnaissance and analysis tools
- Explain Cisco UCS solution design from the network, server, and storage perspective
- Identify design success criteria and ROI factors





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Course Outline

Module 1: Understanding Cisco Unified Computing Solutions

Lesson 1: The Cisco Unified Computing Solution

Lesson 2: Server Architecture

Lab 1-1: Initial Configuration

Module 2: Understanding the Cisco Unified Computing System

Lesson 1: Cisco UCS Components

Lesson 2: Cisco UCS Management

Lesson 3: Cisco UCS Connectivity

Lesson 4: Cisco UCS High Availability

Lesson 5: Designing a Cisco Unified Computing System

Lab 2-1: Exploring Cisco UCS Hardware

Case Study 2-2: Sizing the Cisco Unified Computing System

Module 3: Understanding Cisco Unified Computing System Server Deployment

Lesson 1: The Cisco UCS Server Deployment Model

Lesson 2: Cisco UCS Server Deployment

Lab 3-1: Deploying a Server with Cisco UCS

Case Study 3-2: Designing Server Deployment

Module 4: Understanding Cisco Unified Computing Management

Lesson 1: Cisco UCS Management Aspects

Lesson 2: Cisco UCS System Management

Lab 4-1: Implementing a Management Hierarchy

Module 5: Understanding Cisco Unified Computing Networking

Lesson 1: Cisco Unified Computing Networks

Lesson 2: Designing the Cisco UCS Network

Case Study 5-1: Designing a Cisco UCS Network

Module 6: Understanding the Cisco Unified Computing SAN

Lesson 1: Cisco Unified Computing SANs

Lesson 2: Designing the Cisco UCS SAN

Case Study 6-1: Designing a Cisco Unified Computing SAN

Module 7: Analyzing Existing Computing Solutions

Lesson 1: Understanding Historical Performance Characteristics

Lesson 2: Identifying Data Center Reconnaissance and Analysis Tools

Lesson 3: Determining the Aspects Affecting the Migration Plan

Module 8: Positioning the Cisco Unified Computing System

Lesson 1: Identifying Cisco UCS Deployment Scenarios

Lesson 2: Describing Cisco Data Center Unified Computing Solution Advantages

Lab 8-1: Exploring Cisco Unified Computing System Server Deployment

Module 9: Understanding Server Virtualization Networking

Lesson 1: Server Virtualization Overview

Lesson 2: Cisco Server Virtualization Networking Solutions

Lesson 3: Sizing Virtual Machines

Module 10: Evaluating Cisco Unified Computing Solutions

Lesson 1: Understanding Design Success Criteria

Lesson 2: Determining the Design ROI

Appendix A: Describing Cisco Unified Computing Solution Services

Appendix B: Understanding Policy Retention

Appendix C: Addressing Environmental Aspects



Learning Solutions