





# What you'll learn in this course

The Implementing Cisco HyperFlex (DCIHX) v1.3 course shows you how to deploy and use the Cisco® HyperFlex<sup>™</sup> data platform to support multicloud workloads. You will become familiar with HyperFlex components and learn how to install, design, manage, and troubleshoot Cisco HyperFlex to support highly scalable and resilient multicloud implementations. You will also gain hands-on experience focused on installation, management, maintenance, and native replication, and you will explore cluster technologies as well as Cisco Intersight<sup>™</sup>.

### Course duration

- Instructor-led training: 4 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 4 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 4 days of instruction with videos, practice, and challenges

# How you'll benefit

This class will help you use Cisco HyperFlex to

- Enable multicloud IT with an adaptive platform that powers any application anywhere with the simplicity of hyperconverged infrastructure
- Gain hands-on experience using Cisco HyperFlex





## Who should enroll

- Data center engineers
- Engineers (design, implementation, presales, post-sales)
- Product managers and sales

## Technology areas

Data Center

### Course details

#### **Objectives:**

After taking this course, you should be able to:

Describe hyperconvergence, Cisco HyperFlex, and the components of Cisco HyperFlex

Explain the Cisco Unified Computing System™ (Cisco UCS®) and what makes it valuable to business

Describe how Cisco HyperFlex Data Platform (HXDP) works

Describe the physical components of Cisco HyperFlex

Describe Cisco Intersight and introduce functionalities relevant to HyperFlex

Install standard ESXi-based vSphere Cisco HyperFlex

Manage your Cisco HyperFlex VMware ESXi-based cluster

Describe how to maintain Cisco HyperFlex

Design a Cisco HyperFlex solution

Protect the data on your Cisco HyperFlex cluster using replication and data at rest encryption

Describe a stretched cluster and how is it different from a standard cluster

Describe an Edge cluster and how is it different from a standard cluster

Perform basic troubleshooting tasks and explain Cisco Intersight

#### Recommended knowledge and training

To fully benefit from this course, you should have the following knowledge:

- Cisco CCNA®—level knowledge about data center architecture and products technologies (network, compute, storage network)
- Familiarity with VMware vCenter and ESXi
- Familiarity with public cloud offerings, primarily AWS, but also Azure and GCP

Recommended Cisco learning offerings that may help you meet these prerequisites:

- Understanding Cisco Data Center Foundations (DCFNDU)
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)
- Cisco CCNP Data Center specialization modules: DCID, DCIT, DCACI, DCMDS, DCACIA, DCAUI





#### **Outline**

- Introducing Hyperconvergence and Cisco HyperFlex
  - o Traditional Data Center Design
  - o What Is Hyperconvergence?
- Describing Cisco UCS: The Foundation of Cisco HyperFlex
  - o Cisco Server Deployment Models: Standalone Versus Managed
  - o Cisco UCS Managed Model Benefits
- Describing Cisco HyperFlex Software Components
  - Virtual Machine Hypervisor
  - Log-Structured File System
- Introducing Cisco Intersight
- Describing Cisco HyperFlex Hardware Components
  - Introducing Cisco HyperFlex Servers
  - Storage Technologies in Cisco HyperFlex
- Installing and Expanding Standard ESXi Cisco HyperFlex
  - o Installation Summary
  - Software Prerequisites
- Managing Cisco HyperFlex in vSphere Environment
  - Management Interfaces Overview
  - Cisco HyperFlex Plugin for vCenter
- Maintaining Cisco HyperFlex
  - o Cisco HyperFlex Upgrade Overview
  - o Cisco HyperFlex Online Upgrade
- Designing Cisco HyperFlex
  - o Cluster Resiliency: VM-Level
  - o Cluster Resiliency: HXDP-Level
- Protecting Your Data
  - o Disaster Recovery Overview
  - Third-Party Data Restore Solutions
- Introducing Cisco HyperFlex Stretched Deployment
  - Stretched Cluster Overview
  - o Prerequisites
- Introducing Cisco HyperFlex EDGE
  - o Cisco HyperFlex EDGE Cluster Overview
  - o Prerequisites and Recommendations
- Troubleshooting Cisco HyperFlex
  - o Troubleshooting guidelines
  - Generating tech support bundles

## How to enroll

To enroll in the DCIHX course or explore our larger catalog of courses on Cisco Digital Learning, contact us at <training@fastlane-mea.com>

#### Lab outline

- Investigate Software Components of Cisco HyperFlex
- Investigate Cisco UCS Part of HyperFlex
- Investigate Cisco Intersight
- Install Cisco HyperFlex
- Manage Cisco HyperFlex
- Protect Your HyperFlex VMs
- Investigate Stretched Group
- Install and Manage Stretched HyperFlex Group
- Investigate HyperFlex Edge



