

## Course Outline

### The Implementing Cisco HyperFlex Course DCIHX: 4 days Instructor Led

*All Cisco courses are delivered by a Cisco Authorized Platinum Learning Partner*

#### About this course

The **Implementing Cisco HyperFlex** (DCIHX) v1.3 course shows you how to deploy and use the Cisco® HyperFlex™ 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™.

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

#### Audience profile

The primary audience for this course is as follows:

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

#### At course completion

After completing this course, students will 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 it is different from a standard cluster
- Describe an Edge cluster and how it is different from a standard cluster
- Perform basic troubleshooting tasks and explain Cisco Intersight

#### Course Outline

Introducing Hyperconvergence and Cisco HyperFlex

## Course Outline

- Traditional Data Center Design
- What Is Hyperconvergence?

### Describing Cisco UCS: The Foundation of Cisco HyperFlex

- Cisco Server Deployment Models: Standalone Versus Managed
- 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

- Installation Summary
- Software Prerequisites

### Managing Cisco HyperFlex in vSphere Environment

- Management Interfaces Overview
- Cisco HyperFlex Plugin for vCenter

### Maintaining Cisco HyperFlex

- Cisco HyperFlex Upgrade Overview
- Cisco HyperFlex Online Upgrade

### Designing Cisco HyperFlex

- Cluster Resiliency: VM-Level
- Cluster Resiliency: HXDP-Level

### Protecting Your Data

- Disaster Recovery Overview
- Third-Party Data Restore Solutions

### Introducing Cisco HyperFlex Stretched Deployment

## Course Outline

- Stretched Cluster Overview
- Prerequisites

### Introducing Cisco HyperFlex EDGE

- Cisco HyperFlex EDGE Cluster Overview
- Prerequisites and Recommendations

### Troubleshooting Cisco HyperFlex

- Troubleshooting guidelines
- Generating tech support bundles