

Implementing Cisco HyperFlex (DCIHX) v1.3

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™ 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.™

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, pre-sales, post-sales)
- Product managers and sales

How to enroll

Instructor-led training

- For instructor-led training, visit the [Cisco Learning Locator](#)
- Arrange training at your location through [Cisco Private Group Training](#)

E-learning

- For e-learning, visit the [Cisco Learning Network Store](#)
- For more than one license, or a learning library subscription, contact us at learning-bdm@cisco.com.

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

Prerequisites

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
 - 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
- Describing Cisco HyperFlex Hardware Components
 - Introducing Cisco HyperFlex Servers
 - Storage Technologies in Cisco HyperFlex
- Introducing Cisco Intersight
- 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
 - 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

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

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)