

DCIHX - Implementing Cisco HyperFlex 1.3

Duration: 3 Days

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)
- Introducing Cisco Data Center Technologies (DCICT)
- Cisco CCNP Data Center specialization modules: DCID, DCIT, DCACI, DCSAN, DCACIA, DCAUTO.

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

Target Audience:

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

Course Description:

The Implementing Cisco Hyperflex (DCIHX) v1.3 course shows you how to deploy and use the Cisco® Hyperflex™ data platform to support multi-cloud 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 multi-cloud 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 Inter sight.

Course Outlines:

> Introducing Hyperconvergence and Cisco HyperFlex

- o Traditional Data Center Design
- o 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
- o Cisco HyperFlex Plugin for vCenter

Maintaining Cisco HyperFlex

- Cisco HyperFlex Upgrade Overview
- Cisco HyperFlex Online Upgrade

Designing Cisco HyperFlex

- o 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