

Implementing Cisco HyperFlex

Duration: 4 Days **Course Code: DCIHX** **Version: 1.3**

Overview:

The Implementing Cisco HyperFlex 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, and manage HyperFlex to support highly scalable and resilient multicloud implementations. Hands-on labs provide experience with installation, management, and native replication, cluster technologies as well as Cisco Intersight.™ are explored.

Target Audience:

Data Center engineers involved in the implementation of a Hyperflex multicloud solution.

Objectives:

- **After completing 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:

Attendees should meet the following prerequisites:

- 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
- CCNA - Implementing and Administering Cisco Solutions
- DCFNDU - Understanding Cisco Data Center Foundations
- VSICM - VMware vSphere: Install, Configure, Manage

Testing and Certification

Recommended as preparation for the following exams:

- **700-905 - CHXSE** - Cisco HyperFlex for Systems Engineers

Content:

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

Labs

- Lab 1: Investigate Software Components of HyperFlex
- Lab 2: Investigate Cisco UCS Part of HyperFlex
- Lab 3: Investigate Cisco Intersight
- Lab 4: Install Cisco HyperFlex
- Lab 5: Manage Cisco HyperFlex
- Lab 6: Protect Your HyperFlex VMs
- Lab 7: Investigate Stretched Group
- Lab 8: Install and Manage Stretched HyperFlex Group
- Lab 9: Investigate Hyperflex Edge

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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