

# VMware HCX: Deploy, Configure, Manage

**Course Duration:24 Hours**

**Course code: VMHCXDCM**

## 1. Course Overview

This two-day course builds your skills in resolving common issues that occur in a VMware Horizon® environment. Students will participate in a series of lab exercises designed to resolve existing environment issues. These exercises replicate real-world troubleshooting scenarios, providing learners with the knowledge and practical skills needed to address common challenges faced by virtual desktop administrators and operators.

## 2. What you'll learn?

**By the end of the course, you should be able to meet the following objectives:**

- Describe the workload mobility challenges that VMware HCX addresses.
- Recognize uses cases for VMware HCX.
- Describe the HCX management plane and data plane components.
- Describe the services provided by HCX and recognize the HCX appliances deployed to support each service.
- Deploy HCX Cloud and HCX Connector and configure site-pairing.
- Use network and compute profiles to deploy the HCX Service Mesh.
- Describe and configure HCX Network Extension.
- Describe the Traffic Engineering and WAN Optimization capabilities of HCX.
- Differentiate between HCX migration types and their use cases.
- Use VMware HCX to implement a business continuity strategy.
- Manage the lifecycle of VMware HCX.

### 3. Target Audience

System administrators, system engineers, migration engineers, and migration architects.

### 4. Pre-Requisites

**The course has the following required prerequisites:**

- VMware NSX: Install, Configure, Manage [V4.0] or equivalent strong networking experience.
- VMware vSphere: Install, Configure, Manage [V8]
- Disaster recovery and business continuity fundamentals.

### 5. Course content

#### Module 1: Course Introduction

- Introductions and course logistics
- Course objectives

#### Module 2: Introduction to VMware HCX

- Describe the workload mobility challenges that VMware HCX addresses
- Recognize use cases for VMware HCX
- Describe the VMware HCX use cases related to application migration, upgrades or re-platforms, workload rebalancing, and business continuity and protection

#### Module 3: HCX Architecture

- Describe the HCX management plane and data plane components
- Distinguish between the types of HCX Manager deployments
- Explain the role of HCX Cloud and HCX Connector
- Describe site pairing at the management plane level
- Describe the services provided by HCX
- Recognize the HCX appliances deployed to support each HCX service
- Explain HCX Service Mesh and its benefits

## Module 4: HCX Deployment

- Identify the type of environments that can be interconnected in HCX
- Explain the different deployment topologies for HCX
- Deploy HCX Cloud on SDDC and on the public cloud
- Deploy HCX Connector on-premises
- Establish site pairing between the source and destination sites
- Troubleshoot common HCX Manager Deployment and site pairing problems

## Module 5: Service Mesh Deployment

- Use network and compute profiles to deploy the HCX Service Mesh
- Recognize different types of Service Mesh topologies
- Identify and troubleshoot common issues with Service Mesh deployments

## Module 6: HCX Network Extension

- Explain the functionality, benefits, and use cases of HCX Network Extension
- Compare HCX Network Extension with other L2 extension solutions
- Distinguish between HCX Network Extension topologies
- Describe the benefits of HCX Network Extension High Availability
- Create a network extension and validate its configuration
- Describe the benefits of Mobility Optimized Networking (MON)
- Configure an HCX Network Extension with MON
- Identify and troubleshoot common issues with HCX Network Extension and MON

## Module 7: Traffic Engineering and WAN Optimization

- Describe the benefits and use cases of Traffic Engineering and WAN Optimization
- Configure Traffic Engineering and WAN Optimization

## Module 8: Workload Mobility

- Identify the different phases of an HCX migration
- Differentiate between HCX migration types and their use cases
- Describe the workflow for HCX Cold and vMotion migrations
- Explain the considerations and limitations of HCX Cold and vMotion migrations
- Perform HCX Cold and vMotion migrations
- Describe the workflow for Bulk Migrations and Replication Assisted vMotion migrations
- Explain the considerations and limitations of Bulk Migrations and Replication Assisted vMotion migrations
- Perform Bulk Migrations and Replication Assisted vMotion migrations
- Describe the workflow for HCX OS Assisted migrations
- Explain the considerations and limitations of HCX OS Assisted migrations
- Perform HCX OS Assisted migrations