**vm**ware Learning

# VMware HCX: Management and Operations

## Course Overview

This four-day course gives you knowledge and practical exercises sufficient to manage VMware HCX® and to migrate virtual machines using VMware HCX. The course focuses on configuration and management of VMware HCX. The course equips system administrators with the knowledge, skills, and abilities to achieve competence in migrating virtual machines.

# Course Objectives

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

- Describe core VMware HCX use cases and common triggers for mobility
- Describe the core components and features of VMware HCX
- Describe a real-life example of a VMware HCX project
- Identify all major Cloud Providers offering and supporting VMware HCX
- Describe the features of VMware HCX Services
- Explain the different deployment types for VMware HCX and choose the correct components to deploy for a particular use-case
- Understand the resource, network, and VMware ESXi™ / VMware vCenter® requirements for VMware HCX
- Install and configure VMware HCX
- Understand, deploy, and manage the HCX Service Mesh
- Understand Network Extension and Traffic Engineering
- Create Network Extension and enable Mobility Optimized Networking
- Understand WAN Optimization
- Understand the different migration types and be able to choose the best one for different applications and workloads
- Incorporate VMware HCX into a disaster recovery strategy
- Design a VMware HCX deployment for different use-cases
- Manage the lifecycle of VMware HCX

# Target Audience

- System administrators
- System engineers
- Migration engineers
- Migration architects



# Prerequisites

This course has the following required prerequisites:

- VMware NSX-T: Install, Configure, Manage [V3.0] or equivalent strong networking experience
- VMware vSphere: Install, Configure, Manage [V7]
- Disaster recovery and business continuity fundamentals

# Course Delivery Options

- Classroom
- Live Online
- Onsite

# **Product Alignment**

VMware HCX





#### Course Modules

#### 1 Course Introduction

- Introductions and course logistics
- Course objectives

#### 2 Introduction to VMware HCX

- Describe core VMware HCX use cases and common triggers for mobility
- Describe the core components and features of VMware HCX
- Describe the key use cases for utilizing VMware HCX
- Describe a real-life example of using VMware HCX
- Identify all major Cloud providers offering and supporting VMware HCX

### 3 HCX Services and Deployment Types

- Describe the individual components of VMware HCX and their functions
- Describe the features of VMware HCX services
- Explain the different deployment types for VMware HCY
- Be able to choose which components to install and configure for a particular use case

#### 4 HCX Deployment

- Understand the resource, network, and ESXi/VMware vCenter requirements for VMware HCX
- Understand the VMware vCenter user roles and access requirements
- Differentiate installation workflows
- Install, activate, and configure VMware HCX manager
- Understand the compute and network profile requirements for VMware HCX and its services
- Create site pair, compute, and network profile
- Describe and manage the Service Mesh
- Create and configure a Service Mesh

#### 5 Network Extension

- Describe network extension
- Describe traffic engineering
- Examine Network Extension capabilities and topology
- Create a network extension
- Describe network traffic packet flow
- Describe Mobility Optimized Networking
- Examine traffic engineering
- Enable Mobility Optimized Networking
- Describe WAN optimization

#### 6 Workload Mobility

- Describe different migration types
- Understand Bulk and VMware HCX® vMotion®
- Migrate a VM using Bulk and HCX Replication Assisted vMotion migration
- Describe cold and vMotion migration
- Migrate a VM using cold and vMotion migration
- Examine non vSphere workload migration
- Migrate a VM using an OS assisted migration

#### 7 Business Continuity and Disaster Recovery

- Examine disaster recovery concepts
- Describe disaster recovery networks
- Plan and create disaster recovery networks
- Describe VM protection operations
- Protect, recover, and test recovery and reverse replication of a VM
- Understand VMware HCX and SRM integration and value

## 8 Customer Design Scenarios

- Design a VMware HCX deployment
- Choose workload mobility methods for the migration
- Discuss customer requirements and proposed design
- Discuss components, services, and migration methods for the scenario



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## 9 HCX Lifecycle Management

- Plan for VMware HCX manager and component updates
- Backup and restore the VMware HCX manager
- General administration of the VMware HCX manager
- Locate and Access VMware HCX logs

# Contact

If you have questions or need help registering for this course, click <u>here</u>.





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