



# VMware HCX: Management and Operations (HCXMO)

#### ID HCXMO Price 2,760.— €excl. tax) Duration 4 days

This Advanced course is delivered directly by VMware.

#### **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.

#### **Product Alignment**

• VMware HCX

#### Who should attend

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

#### **Prerequisites**

This course has the following required prerequisites:

- VMware NSX-T Data Center: Troubleshooting and Operations [V3.2] (NSXTTO32) or equivalent strong networking experience
- VMware vSphere: Install, Configure, Manage [V7] (VSICM8)
- Disaster recovery and business continuity fundamentals

#### **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™ and 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

#### **Course Content**

#### **Course Introduction**

- · Introductions and course logistics
- Course objectives

#### Introduction to VMware HCX

- Describe workload mobility challenges that VMware HCX addresses
- Recognize use cases for VMware HCX
- Identify all major Cloud providers offering and supporting VMware HCX

#### HCX Services and Deployment Types

- Describe the functions of VMware HCX components
- Recognize the services provided by VMware HCX
- Recognize when to use different deployment types for VMware HCX
- Be able to choose which components to install and





configure for a different VMware HCX service

#### **HCX Deployment**

- Identify the resource, network, and ESXi/VMware vCenter server requirements for VMware HCX
- Understand the VMware vCenter user roles and access requirements
- Describe the installation workflow
- 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 profiles
- Describe and manage the HCX Service Mesh
- Create and configure a HCX Service Mesh

#### **Network Extension**

- Describe network extension use case and benefits
- Compare the HCX-Network extension service with other solutions
- · Examine Network Extension capabilities and topology
- Create a Network Extension
- Describe network traffic packet flow
- Describe Mobility Optimized Networking
- Enable Mobility Optimized Networking
- Describe the TCP Flow Conditioning and Application path resiliency feature of VMware HCX
- Recognize the key benefits of TCP flow conditioning and Application path resiliency
- Describe WAN optimization

#### **Workload Mobility**

- Describe different migration types
- Recognize the limitation of each migration method and consideration when planning a migration
- Understand Bulk and Replication Assisted VMware HCX®
  vMotion® migration methods
- Migrate a VM using Bulk migration
- Describe cold and vMotion migration method
- Migrate a VM using HCX vMotion migration
- Examine non VMware vSphere® workload migration
- Migrate a VM using an OS assisted migration method

#### **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  $\mathsf{V}\mathsf{M}$
- Understand VMware HCX and SRM integration and value

#### **HCX Lifecycle Management**

- · Backup and restore the VMware HCX manager
- Locate and access VMware HCX logs
- Troubleshoot VMware HCX
- Plan for VMware HCX manager and component updates

#### **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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VMware

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