

VMware HCX: Deploy, Configure, Manage

Duration 3 Days

COURSE DESCRIPTION

This three-day training course provides you with the knowledge, skills, and abilities to achieve competence with VMware HCX. This course teaches you how to deploy the different architectural component of HCX, and perform the tasks required to migrate and rebalance workloads across data centers and clouds.

COURSE OBJECTIVES

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 computer 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 life cycle of VMware HCX.

COURSE OUTLINE

Course Introduction

- Introductions and course logistics
- Course objectives

Introduction to VMware HCX

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

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.

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.

Service Mesh Deployment

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

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 a HCX Network Extension with MON.
- Identify and troubleshoot common issues with HCX Network Extension and MON.

Traffic Engineering and WAN Optimization

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

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.
- Identify and troubleshoot common issues with HCX migrations.

Business Continuity and Disaster Recovery

- Explain disaster recovery concepts and considerations.
- Use VMware HCX to implement a business continuity strategy.
- Identify and troubleshoot common issues with HCX Disaster Recovery

HCX Lifecycle Management

- Backup and restore the HCX Manager.
- Upgrade HCX components.

WHO SHOULD ATTEND

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

PREREQUISITES

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.