

VMware HCX : Deploy, Configure, Manage

Course Outline

1. Course Introduction

- Introductions and course logistics
- Course objectives

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 replatforms, workload rebalancing, and business continuity and protection.

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.

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.

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.

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

7. Traffic Engineering and WAN Optimization

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

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.
- Identify and troubleshoot common issues with HCX migrations.

9. 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.

10. HCX Lifecycle Management

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