vmware Learning

VMware HCX: Deploy, Configure, Manage

Course Overview

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 components 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 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.

Target Audience

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

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.

Course Delivery Options

- Classroom
- Live Online
- Private Training

Product Alignment

- VMware HCX 4.7
- VMware vSphere 8.x
- VMware NSX 4.x



Course Modules

1 Course Introduction

- · Introductions and course logistics
- · Course objectives

2 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.

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 used 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.

vmware^s

VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com
© 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed.

© 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at http://www.vmware.com/download/patents.html. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.

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.

Contact

If you have questions or need help registering for this course, click here.



trademarks of their respective companies.

VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com
© 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at https://www.vmware.com/download/patents.html. VMware is a registered trademark or VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware (Vworkshop Materials*). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.