

VMware Cloud Director: Advanced Workshop

Course Overview

This five-day, hands-on training course provides you with the advanced knowledge, skills, and tools to design and utilize a cloud solution based on VMware Cloud Director™. Besides learning about an advanced cloud architecture, you learn about the integration of VMware Cloud Director with the products VMware Cloud Director Availability™, VMware vRealize® Orchestrator™, VMware vRealize® Operations™ (including the Tenant App), VMware NSX-T® Data Center and VMware NSX® Advanced Load Balancer™ (Avi Networks).

This course covers the migration from VMware NSX® for vSphere® (NSX-V) to VMware NSX-T® Data Center in a VMware Cloud Director environment. You learn about how the NSX Advanced Load Balancer can be used and integrated in a service provider environment. Besides the advanced know-how of the vRealize Operations Tenant App and Cloud Availability, the course also discusses the extensibility and orchestration of workflows in Cloud Director. For all the topics covered in the class, intensive hands-on labs will be taken by the students to provide proper insights into all the products.

Course Objectives

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

- Describe the advanced architecture of a VMware Cloud Director environment
- Design Cloud Director Federation
- Explain use cases for CPOM
- Explain basic concepts of NSX-V and NSX-T design with VMware Cloud Director
- Discuss the integration of AVI Load Balancer Services
- Explain use of migration tools from NSX-V to NSX-T Data Center
- Explain the integration of Advanced Load Balancer with NSX
- Discuss the use cases for NSX Advanced Load Balancer
- Describe the architecture of VMware vCloud® Availability for vCloud Director®
- Discuss the use cases for migration with vCloud Availability
- Describe the architecture of vRealize Operations in a Service Provider Environment
- Explain the use cases for vRealize Operations Tenant App
- Explain VMware Cloud Director orchestration and extensibility
- Explain use cases for XaaS Integration
- Discuss UI customization for Service Provider and Tenants

Target Audience

Customers, cloud architects, systems engineers, data center administrators, and cloud administrators with experience in managed services or managing a service provider environment

Prerequisites

Completion of the following course or equivalent knowledge is required:

- [VMware NSX-T Data Center: Install, Configure, Manage](#)
- [VMware vRealize Automation: Orchestration and Extensibility](#)
- [VMware vCloud Director: Install, Configure, Manage](#)

Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

Product Alignment

- VMware Cloud Director 10.1
- VMware vCloud Availability 4.0
- VMware NSX® for vSphere® 6.4
- VMware NSX-T 2.5
- VMware vRealize® Operations Manager™ 8.1
- VMware vRealize Operations Tenant App for vCloud Director 2.4
- VMware NSX Advanced Load Balancer 18.2

Course Modules

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Advanced VMware Cloud Director Architecture

- Explain the basic concepts and terminologies in a VMware Cloud Director environment
- Describe the basic architecture of a VMware Cloud Director environment
- Follow a proven process to design and deploy a cloud solution
- Gather and analyze business and application requirements
- Document design requirements, constraints, assumptions, and risks
- Use a systematic method to evaluate and document design decisions
- Explain the differences between conceptual, logical, and physical designs
- Describe the concepts of Provider SLAs
- Discuss the advantages of standardized and flexible cloud platforms
- Explain how you can use a building-block design approach with VMware products to architect a flexible but standardized cloud environment
- Impact on Monetization of service definitions
- Discuss the design and implications of a vSphere Design for the Cloud Platform
- Explain the use of Single vs. Stretched vs. Multi-Site deployments
- Design Cloud Director Federation
- Explain use cases for CPOM

3 NSX for vSphere vs. NSX-T and Migration

- Describe the NSX Management cluster architecture, components, and communication channels
- Identify the workflows involved in configuring the NSX Management cluster
- Validate and troubleshoot the NSX Management cluster formation
- Explain basic concepts of NSX-V and NSX-T design with VMware Cloud Director

- Discuss the use cases for Edge Services
- Discuss the use cases for Distributed Network Services
- Discuss the features available in NSX-V vs. NSX-T
- Explain the integration of external networks (such as MPLS, DirectConnect)
- Explain the integration of 3rd party network services (NON-VMware Edge Services, WAF)
- Discuss the integration of AVI Load Balancer Services
- Discuss different migration scenarios
- Explain pre-requisites for migration from NSX-V to NSX-T
- Explain use of migration tools from NSX-V to NSX-T

4 NSX Advanced Load Balancer

- Explain basic concepts of NSX Advanced Load Balancer
- Explain the integration of NSX Advanced Load Balancer with NSX
- Discuss the use cases for NSX Advanced Load Balancer

5 VMware vCloud Availability

- Describe the architecture of VMware vCloud Availability for vCloud Director
- Explain the prerequisites of vCloud Availability for Cloud Director
- Discuss the implementation of vCloud Availability for Cloud Director
- Discuss the use cases for migration with vCloud Availability
- Explain setup of data seeds for vCloud Availability
- Discuss the use cases for Disaster Recover as a Service with vCloud Availability
- Explain connectivity for vCloud Availability to Cloud use cases
- Understand requirements for vCloud Availability OnPrem to Cloud failover and failback



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

© 2020 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.

6 vRealize Operations Tenant App / Chargeback

- Describe the architecture of vRealize Operations in a Service Provider
- Describe the architecture of vRealize Operations Tenant App
- Explain the use cases for vRealize Operations Tenant App
- Explain use cases for vRealize Operations Manager in Service Provider environments
- Discuss vRealize Operations Manager Management Packs
- Explain advanced troubleshooting in service provider environments with vRealize Operations Manager
- Discuss architecture and integration of vRealize Operations Manager Tenant App
- Explain connectivity of the vRealize Operations Manager Tenant App
- Discuss user and role management of the vRealize Operations Manager Tenant App
- Describe billing policy definition in the vRealize Operations Manager Tenant App

7 VMware Cloud Director Orchestration

- Explain VMware Cloud Director orchestration
- Explain vRealize Orchestrator use cases
- Describe the architecture of vRealize Orchestrator in a Service Provider environment
- Explain use cases for VMware Cloud Director blocking tasks
- Explain use cases for XaaS Integration
- Design workflows, objects
- Discuss UI customization for Service Provider and Tenants
- Explain integration of custom elements in VMware Cloud Director
- Explain use cases for Extensibility SDK

Contact

If you have questions or need help registering for this course, click [here](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com
© 2020 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.