vmware EDUCATION SERVICES

VMware vCloud Director: Install, Configure, Manage

Course Overview

In this five-day course, you focus on installing, configuring, and managing VMware vCloud Director® for Service Providers 9.x. You learn about self-service provisioning, the creation of organizations, virtual data centers (VDCs), catalog services that include predefined virtual machines, and on-demand VMware NSX® networks.

This course covers interfacing VMware vCloud Director® with other systems using various APIs and the integration and use of VMware vCloud® Availability for vCloud Director®. You will understand how to manage multisite, cross-VDC networking for vCloud Director. You will also understand how to configure Central Point of Management (CPOM) to define a Software-defined Datacenter (SDDC) for tenant and provider users of vCloud Director. This course also discusses how to monitor various vCloud Director objects using VMware vRealize® Operations™, Tenant vApp, and VMware vRealize® Log Insight™.

Course Objectives

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

- Deploy vCloud Director
- Manage vCloud Director to satisfy service provider needs
- Create and manage vCloud Director organizations and vApps to satisfy business needs
- Create and manage vCloud Director catalogs
- Transfer virtual machine workloads from VMware vSphere® into and out of vCloud Director
- Configure networking for organizations and vApps with the help of NSX
- Use NSX to create hybrid cloud connectivity between public clouds and private clouds
- Discuss various customer onboarding scenarios involving vCloud Director
- Configure the integration with VMware vCloud® Availability for vCloud Director®
- Use VMware vCloud® Availability for hybrid cloud setup and onboarding

Target Audience

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

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Prerequisites

Completion of the following course or equivalent knowledge is required:

- VMware vSphere: Install, Configure, Manage [V6.x]

Completion of the following eLearning courses is recommended:

- VMware vCloud Director: Fundamentals [V8.x]
- VMware vSAN and HCI Fundamentals
- VMware Network Virtualization Fundamentals

Substantial knowledge of TCP/IP networking is helpful.

Course Delivery Options

- Classroom
- Live Online
- Onsite

Product Alignment

- vCloud Director 9.x
- vCloud Availability for vCloud Director 3.0
- vSphere 6.x and later
- NSX 6.x and later

Course Modules

1 Course Introduction
- Introductions and course logistics
- Course objectives

2 vCloud Director Deployment and Configuration
- Define Software Defined Datacenter
- Discuss VMware offerings for Cloud-Based Services
- Understand the prerequisite to install vCloud Director
- Discuss the deployment options for vCloud Director
- Differentiate different deployment options, benefits, and disadvantages
- Discuss VMware Validated Design

3 vCloud Director Provider and Organization
- Configure and manage provider VDCs
- Identify storage, compute, and network resources for vCloud Director
- Create and manage organizations, including vCloud Director organization VDCs
- Discuss vCloud Director HTML5 UI
- Discuss HTML5-based Provider Portal and Tenant Portal

4 vCloud Director Organization VDC
- Organization VDC allocation models
- Recognize resource allocations for an organization
- Describe the network types available in vCloud Director (external, organization, and vApp)
- Discuss the organization and vApp network traffic choices
- Examine the function of network pools
- Discuss Compute Profiles

5 vApps and Catalogs
- Discuss the use of virtual machines
- Create and manage vApps
- Create and manage catalogs
- Manage vApp templates
- Create and manage vApp Networks
- Discuss vApp Network Traffic Choices

6 Users and Role-based Access
- Describe role-based access
- Create custom security roles
- Describe and configure LDAP integration with Active Directory
- Describe single sign-on
- Enable a SAML identity provider
- Describe two-factor authentication
- Discuss User bundle and role-based access control

7 vCloud Director Networking
- Identify key components in the architecture of VMware NSX® Data Center for vSphere®
- Describe how logical switches and distributed logical routers work
- Discuss edge services like NAT, DHCP, load balancer, and firewall
- Discuss the architecture of NSX- T™ Data Center
- Discuss vCloud Director supported features of NSX-T Data Center
- Discuss Multisite
- Configure Cross VDC Networking.

8 Resource Management and Monitoring
- Manage and monitor vSphere resources
- Manage and monitor Cloud resources
- Monitor vCloud Director environment using VMware vRealize® Operations Manager™
- Monitor vCloud Director environments with vRealize Operations Manager and vRealize Log Insight
- Manage billing and reports of vCloud Director objects using Tenant vApp

9 vCloud Extensibility
- Discuss Container Service Extension
- Explore vCD, CLI, and Container Service Extension
- Discuss Python SDK for vApp Deployment
- Discuss Terraform and vCloud Director
- Discuss VMware vRealize® Orchestrator™ Plug-in for vCloud Director

10   vCloud Director APIs

- Describe access to vCD objects using REST API calls
- Describe tools to access the API of vCloud Director objects
- Discuss different third-party API client tools
- Describe access to vCloud Director using Postman, Curl
- Describe access to vCloud Director using OpenAPI
- Create and update metadata on objects
- Access different vCloud objects using vCloud API

11   Customer Onboarding and Hybrid Cloud

- Discuss architecture for vCloud Availability for vCloud Director
- Review prerequisites of vCloud Availability for vCloud Director
- Discuss vCloud Availability for vCloud Director portal
- Review fail-over Virtual Machine options
- Discuss Virtual Machine replication to the Cloud
- Discuss On-Prem-to-Cloud migration

12   vCloud Director Troubleshooting

- Identify log locations for vCloud Director
- List the key services in vCloud Director
- Navigate through vCloud Director logs
- Capture vCloud Director log bundles
- Describe the troubleshooting approach for common vCloud Director issues

Contact

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