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
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
- On Demand

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