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

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.