VMware Cloud 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 also 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 also understand how to manage multisite, cross-VDC networking for vCloud Director and configuring 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 is required:

- VMware vSphere: Install, Configure, Manage or equivalent knowledge

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
- Design 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
- Describe the use and placement of NSX edge services gateways in relation to vCloud Director
- Review routing with the distributed logical router and edge services gateway in combination with vCloud Director
- Discuss edge services like NAT, DHCP, load balancer, and firewall
- Discuss the architecture of VMware NSX-T™
- Discuss vCloud Director supported features of NSX-T
- Discuss Multisite
- Configure Cross VDC Networking

8 Resource Management and Monitoring
- Manage provider and organization VDCs
- Manage VMware vCenter Server® instances and VMware ESXi™ hosts
- Manage vSphere datastores
- Configure and manage resource pools at the vSphere level
- Monitor usage information at provider and organization VDCs
- Analyze vCloud Director logs
- Monitor vCloud Director environments with vRealize Operations Manager and vRealize Log Insight
- Managing billing and reports of vCloud Director objects using Tenant vApp

9 vCloud Extensibility
- Discuss Container Service Extension
- Explore vCD CLI
• Discuss Python SDK for vApp Deployment
• Discuss Terraform vCloud Director capabilities
• 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 implementation 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
• Navigate through vCloud Director logs
• Capture vCloud Director log bundles

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