VMware vCloud Director

VMware Cloud Director: Install, Configure, Manage [V10.1]

✦ Course Overview:

In this 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 Outline:

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

Prerequisites:

➢ VMware vSphere: Install, Configure, Manage or equivalent knowledge
➢ Substantial knowledge of TCP/IP networking is helpful.

Who Should Attend:

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

Number of Hours: 40hrs

Key Features:

➢ One to One Training
➢ Online Training
➢ Fastrack & Normal Track
➢ Resume Modification
➢ Mock Interviews
➢ Video Tutorials
➢ Materials
➢ Real Time Projects
➢ Virtual Live Experience
➢ Preparing for Certification