COURSE OVERVIEW – VMWARE VCLOUD DIRECTOR: ICM 9.7

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

o Classroom
o Live Online
o Onsite

PRODUCT ALIGNMENT

o vCloud Director 9.x

o vCloud Availability for vCloud Director 3.0

o vSphere 6.x and later

o 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^{TM} 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^{TM}
• 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^{TM} 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