

COURSE OUTLINE

1. Course Introduction

- Introductions and course logistics
- Course objectives

2. VMware Cloud Director Deployment and Configuration

- Describe VMware Cloud Director features and functions
- Describe the VMware Cloud Director architecture
- List the prerequisites for deploying VMware Cloud Director
- Recognize the design considerations when creating a cloud environment
- Describe various VMware Cloud Director deployment methods and options
- Explain the two-stage deployment of VMware Cloud Director cells
- Backup and restore a VMware Cloud Director appliance
- Describe the appliance failover methods
- Describe failover, switchover, and promote in the VMware Cloud Director appliance
- Monitor the VMware Cloud Director appliance services and cluster status

3. VMware Cloud Director Provider Configuration

- Describe the provider portal
- Define a provider VDC, an organization, and organization VDCs
- Configure VMware Cloud Director objects from the VMware Cloud Director provider portal as a system administrator
- Describe provider VDCs and their role in resource allocation
- Explain the configuration of resource pools and storage containers in a provider VDC
- Configure organizations and access the tenant portal
- Identify allocation models for organization VDCs
- Recognize the advantages and disadvantages of allocation models
- Describe how organization VDCs work

4. VMware Cloud Director User, Roles, and Quota Management

- Configure LDAP integration with Active Directory
- Enable a SAML and an OIDC identity provider
- Identify the various types of users in VMware Cloud Director
- Create and import users from the provider portal and the tenant portal

- Describe the options for managing users and groups
- Describe how role-based access control works in VMware Cloud Director
- Explain provider roles
- Recognize the function of the rights bundles
- Explain global roles and their usage in VMware Cloud Director
- Create custom tenant roles
- Explain Quota Management and its use cases
- Configure VMware Cloud Director as an OpenID Provider Proxy Server

5. VMware Cloud Director Virtual Machines and vApps

- Explain standalone VMs and VMs in a vApp
- Describe VM actions
- List the properties of a VM
- Create and manage VMs
- Explain vApp deployment methods
- Explain vApp actions and functions
- Describe VM encryption and how VMs and disks are encrypted
- Describe named disks and shared named disks
- Describe storage IOPS management in VMware Cloud Director
- Create and manage vCenter Server managed IOPS
- Create and manage VMware Cloud Director managed IOPS
- Describe Auto Scale Groups and their advantages
- Explain VM placement, VM sizing, and vGPU policies
- Describe NVIDIA vGPU and NVIDIA AI Enterprise
- Explain the NVIDIA GRID vGPU requirements
- Implement vGPU in VMware Cloud Director

6. Managing Catalogs and Templates

- Describe Content Hub and their advantages
- Create and manage VMware Marketplace Resource
- Create and manage External Helm Chart Repository Resource
- Explain the purpose and use of catalogs
- Create and manage catalogs
- Describe, how catalogs are shared between and within organizations
- Describe vApp templates and their advantages
- Create and manage the vApp template

- Create and manage the organization VDC template

7. VMware Cloud Director Networking

- Discuss the integration of VMware Cloud Director with VMware NSX
- Describe VMware Cloud Director networks
- Perform provider networking tasks
- Discuss organization VDC networks
- List the types of organization VDC networks
- Discuss vApp networks
- List the various types of vApp networks
- Describe the segment profile template

8. Edge Gateway Services and Additional Networking Features

- Identify the services offered by an edge gateway
- Configure DHCP, NAT, and firewall services on the edge gateway
- Explain distributed firewall services on an edge gateway
- Describe DNS, routing, and DHCP services on an edge gateway
- Configure and verify NAT services on the edge gateway
- Discuss VMware Cloud Director integration with VMware NSX Advanced Load Balancer
- Describe NSX Advanced Load Balancer components.
- Discuss the Data Center Group Networking in VMware Cloud Director
- Discuss VMware Cloud Director integration with VMware NSX Federation

9. Additional Features of VMware Cloud Director

- Explain the purpose and features of advisories.
- Describe the Guided Tour feature and its use cases
- Configure VMware Cloud Director branding
- Explain the Solution Add-Ons feature in VMware Cloud Director
- Briefly discuss VMware Cloud Director integration with the following solutions:
 - VMware Cloud Director Availability
 - VMware Cloud Director App Launchpad
 - VMware Cloud Director Container Service Extension
 - VMware Cloud Director Object Storage Extension

- VMware vCloud Usage Meter
- VMware Aria Operations for Logs
- VMware Aria Operations
- VMware Chargeback
- VMware Aria Automation
- VMware Cloud Director Extension for Data Solutions
- VMware Cloud Provider Lifecycle Manager
- VMware Workspace ONE