

VMware Cloud Director : Install, Configure, Manage (V10.4)

Course Outline

1. Course Introduction

- Introductions and course logistics
- Course objectives

2. Software-Defined Data Center and VMware Validated Solution

- Discuss VMware Validated Solution
- Define software-defined data center (SDDC)
- Discuss multitenancy with VMware Cloud Director
- Recognize design considerations when creating a cloud environment on the SDDC using VMware Cloud Foundation™

3. VMware Cloud Director Deployment and Configuration

- Describe the VMware Cloud Director cell and server group
- Explain the two-stage deployment of VMware Cloud Director cells
- Demonstrate backing up and restoring a VMware Cloud Director appliance
- Discuss VMware Cloud Director Appliance Clustering
- Discuss failover mechanisms (automatic and manual) with VMware Cloud Director cells
- Define the switchover and promote options of the VMware Cloud Director appliance

4. VMware Cloud Director Provider Configuration

- Showcase VMware Cloud Director integration with VMware vCenter Server® and VMware NSX
- Describe how compute resources are provided to VMware Cloud Director
- Describe how storage is provided to VMware Cloud Director
- Configure and manage storage for Virtual Data Centers (VDCs)
- Discuss network pools, external networks, and provider gateways
- Describe VMware Cloud Director organizations
- Understand organization policies
- Explain how to access an organization using various portals
- Understand the use cases of Allocation Models
- Understand organization VDC
- Discuss Linked Clone and Fast Provisioning

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

- Discuss rights bundles
- Describe role-based access
- Explain custom roles and rights
- Describe and configure LDAP integration with Active Directory
- Discuss OIDC integration with VMware Cloud Director
- Discuss configuring the SAML identity provider in VMware Cloud Director
- Discuss API Access Token and Service Accounts

- Explain Quota Management and its use cases

6. VMware Cloud Director Virtual Machines and vApps

- Understand standalone VMs
- Discuss deployment methods of virtual machines
- Explain VM properties
- Discuss deployment methods of vApps
- Discuss the vApp lease policies
- Understand vApps and VM actions
- Explain vApp and VM badges
- Demonstrate auto-scaling groups

7. VMware Cloud Director Content Libraries

- Explain the purpose of catalogs and how to create a catalog
- Discuss catalog management and sharing catalogs
- Understand media files in VMware Cloud Director and their usage
- Discuss vApp templates
- Understand vApp template operations
- Discuss organization VDC templates
- Discuss Fast Cross vCenter Server vApp Instantiation Utilizing Shared Storage

8. VMware Cloud Director Networking

- Discuss provider gateway and external networks
- Describe edge gateway
- Discuss organization VDC networks
- List the types of organization VDC networks
- Discuss vApp networks
- List various types of vApp networks

9. Edge Gateway Services and Additional Networking Features

- List the edge gateway services
- Discuss DHCP, NAT, and firewall services on the edge gateway
- Discuss SNAT, DNAT, NO SNAT, and NO DNAT use cases
- Explain routing and distributed firewall services
- Understand IP space and its types
- Showcase VMware Cloud Director integration with VMware NSX Advanced Load Balancer
- Describe the segment profile template

10. VMware Cloud Director Storage and Compute

- Describe named disks and shared named disks
- Demonstrate how to attach and detach a named disk and a shared named disk
- Discuss how VMware Cloud Director VMs and disks are encrypted
- Discuss vCenter Server and VMware Cloud Director IOPS storage policies usage
- Discuss how to enable and use the storage IOPS limitation in VMware Cloud Director
- Demonstrate VM sizing and placement in VMware Cloud Director

- Discuss vGPU implementation in VMware Cloud Director

11. Additional Features of VMware Cloud Director

- Describe the usage and functionality of advisories
- Demonstrate quick search
- Discuss guided tours and use cases
- Discuss Transfer Server Storage Monitoring
- Demonstrate the VMware Cloud Director branding themes
- Explain the Solution Add-Ons feature in VMware Cloud Director

12. VMware Cloud Director Integrated Solutions

- 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
 - Terraform
 - VMware Workspace ONE