

VMware vCloud Director: Install, Configure, Manage [v10.3] Training

Duration: 5 Days

Course Content:

In this five-day course, you focus on installing, configuring, and managing VMware Cloud Director® 10.3. You learn about workload provisioning, the creation of organizations, virtual data centers (VDCs), catalog services that include predefined virtual machines, and on-demand VMware NSX-T™ Data Center networks.

This course also covers interfacing VMware Cloud Director with other systems and the integration and use of VMware vRealize® Orchestrator™ for VMware Cloud Director. You learn about different networks that a system administrator and an organization administrator can configure and use with virtual machines (VMs). This course also discusses how to monitor various VMware Cloud Director objects using VMware vRealize® Operations™.

Who should attend?

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

Prerequisites for this training

Completion of the following courses and equivalent knowledge is required: VMware vSphere: Install, Configure, Manage or equivalent knowledge. The following experience is helpful:

- Working at the Linux command line
- Substantial knowledge of general networking concepts

What you will learn

- Deploy VMware Cloud Director
- Manage VMware Cloud Director to meet the service provider needs
- Create and manage VMware Cloud Director organizations and vApps to fulfill business needs
- Create and manage VMware Cloud Director catalogs
- Transfer virtual machine workloads from VMware vSphere® into and out of VMware Cloud Director
- Configure networking for organizations and vApps with the help of VMware NSX-T™ Data Center
- Managing resources from the VMware Cloud Director console and using VMware vRealize® Operations Manager™
- Enabling VM and Named Disk Encryption
- Creating VM sizing and placement policies
- Understand vApps and VM operations and actions

Curriculum

Module 1: Course Introduction

- Introductions and course logistics
- Course objectives

Module 2: Software-Defined Data Center and VMware Validated Design

- Define software-defined data center (SDDC)
- Discuss VMware offerings for cloud-based services
- Discuss the deployment options for VMware Cloud Director
- Discuss VMware Validated Design™
- Recognize the design considerations when creating a cloud environment on the SDDC using VMware Cloud Foundation™

Module 3: VMware Cloud Director Deployment and Configuration

- Discuss the deployment options for VMware Cloud Director
- Explain the two-stage deployment of VMware Cloud Director cells
- Discuss failover mechanisms (automatic and manual) with VMware Cloud Director cells
- Define switchover, promote, and fencing options of the VMware Cloud Director appliance
- Understand the VMware Cloud Director appliance enhancements

Module 4: VMware Cloud Director Provider Configuration

- Describe how the compute resources are provided to VMware Cloud Director
- Describe how storage is provided to VMware Cloud Director
- Configure and manage storage for Virtual Datacenters (VDCs)
- Briefly discuss network pools, external networks, and Tier-0 Gateways
- Showcase VMware Cloud Director integration with vCenter Server® and NSX-T Data Center
- Describe VMware Cloud Director organizations
- Understand organization policies
- Explain how to access an organization using various portals
- Understand organization VDC
- Discuss what is Linked Clone and Fast Provisioning
- Understand the use cases of Allocation Models

Module 5: VMware Cloud Director User, Roles and Quota Management

- Discuss user-bundle
- Describe role-based access
- Explain custom roles and rights
- Describe and configure LDAP integration with Active Directory
- Discuss OIDC authentication methods
- Describe SAML identity provider

Module 6: VMware Cloud Director Virtual Machines and vApps

- Understand standalone VMs
- Discuss the VM managing operations
- Explain VM properties
- Discuss deployment methods of vApps
- Discuss the vApp managing operations
- Discuss the vApp lease policies
- Understand the vApps and VM actions
- Explain vApp and VM badges

Module 7: VMware Cloud Director Content Libraries

- Explain the purpose of catalogs and how to create a catalog organization
- Define catalog management and sharing catalogs inside and between organizations
- Explain medias in VMware Cloud Director and its usage

- Discuss vApp templates
- Understand vApp template operations
- Describe the purpose and usage of Open Virtualization Format (OVF)
- Discuss organization VDC templates

Module 8: VMware Cloud Director Networking

- Discuss organization VDC networks
- List the types of organization VDC networks
- Describe the edge gateway services
- Explore the services offered by the edge gateway
- Discuss sub-allocation IP pool and its use cases
- Discuss DHCP, NAT, load balancer, and firewall services on the edge gateway
- Discuss SNAT, DNAT, NO SNAT, and NO DNAT use cases
- Explain routing and distributed firewall services
- Discuss vApp networks
- List the various types of vApp networks
- Discuss routed, isolated, and direct vApp networks

Module 9: 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
- Describe methods of sharing the named disk
- Discuss the implications of deleting VMs that have an attached named disk
- Discuss how VMware Cloud Director VMs and disks are encrypted
- Explain the storage policy capabilities
- Demonstrate how VM sizing and placement policies are published
- 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
- Describe the storage policy supported entities

Module 10: Extensibility and UI Additional Features

- Briefly discuss enhanced CPOM through the tenant portal
- Briefly discuss VMware Cloud Availability plugin for VMware Cloud Director portal
- Integrate vRealize Orchestrator with VMware Cloud Director
- Execute VMware Cloud Director workflows using vRealize Orchestrator
- Briefly discuss Container Service Extension
- Briefly explain the main usage and purpose of the NSX migration of VMware Cloud Director tool
- Explain custom advisories, global search, guided tours, data exporter, keyboard shortcuts, and quick search
- Understand vcd-cli supported commands
- Discuss various vcd-cli tools

Module 11: VMware Cloud Director Resource Monitoring

- Identify log locations for VMware Cloud Director
- Manage vSphere and cloud resources from VMware Cloud Director
- Understand monitoring of objects from VMware Cloud Director portals
- Briefly introduce vRealize Operations Manager
- Integrate VMware Cloud Director with vRealize Operations Manager
- Configure VMware Cloud Director Management Pack
- Understand dashboard, metrics, alerts, alert definition, and reports