



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# VMware vCloud Director: Install, Configure, Manage [V9.1]

CODE:	LENGTH:	PRICE:
VM-VCD-ICM-V9.1	40 Hours (5 days)	\$4,250.00

## Description

In this five-day course, you will focus on installing, configuring, and managing VMware vCloud Director® 9.x for service providers. You will learn about self-service provisioning, the creation of organizations, virtual data centers (VDCs), and catalog services that include predefined virtual machines, and on-demand VMware NSX® networks, as well as the integrated use of VMware vSAN™. This course also covers interfacing vCloud Director with other systems through the use of various APIs and the integration and use of VMware vCloud® Availability for vCloud Director® and VMware vCloud® Director Extender™.

- vCloud Director 9.x
- vCloud Availability for vCloud Director 2.0
- vCloud Director Extender 1.0
- vSphere 6.x and later
- NSX 6.x and later

## 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 vCloud Availability for vCloud Director
- Use vCloud Director Extender for hybrid cloud setup and onboarding

## Audience

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

## Prerequisites

This course requires completion of the following course:

- VMware vSphere: Install, Configure, Manage [V6.x] or equivalent knowledge

Completion of the following eLearning courses is recommended:

- VMware vCloud Director: Fundamentals [V8.x]
- VMware Virtual SAN: Fundamentals [V6.x]
- VMware Network Virtualization Fundamentals

Substantial knowledge of TCP/IP networking is helpful.

## Programme

- 2 Software-Defined Data Center
  - Describe the evolution of the software-defined data center
  - Cloud computing overview
  - Characteristics of cloud services
  - Categories of cloud computing
  - Describe the VMware product stack for the software-defined data center
- 1 Course Introduction
  - Introductions and course logistics
  - Course objectives
- 3 vCloud Director Concepts
  - Explain vCloud Director concepts
  - Configure and manage provider VDCs
  - Identify storage, compute, and network resources for vCloud Director
  - Create and manage organizations
  - vCloud Director organization VDCs
- 4 Organization VDCs
  - 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
- 5 Virtual Machines and vApps
  - Discuss the use of virtual machines
  - Design and manage vApps
- 7 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
- 6 Catalogs
  - Create and manage catalogs
  - Manage vApp templates
  - Enable a SAML identity provider
  - Describe two-factor authentication
- 8 Advanced 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 gateways in combination with vCloud Director
  - Firewall management in vCloud Director with edge services gateways and the distributed firewall
- 9 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 VMware vRealize® Operations Manager™ and VMware vRealize® Log Insight™
  - Use VMware vRealize® Business™ for cost management
- 10 Customer Onboarding and Hybrid Cloud
  - Tenant layer 2 VPN access
  - Tenant SSL VPN access
  - Review options for external connectivity with VPN
  - Import existing infrastructure managed by vCenter Server into vCloud Director
  - Use vCloud Director Extender for hybrid cloud setup and onboarding
- 11 vCloud Availability for vCloud Director
  - Architecture for vCloud Availability for vCloud Director
  - Prerequisites of vCloud Availability for vCloud Director
  - Implementation of vCloud Availability for vCloud Director
- 12 vCloud Director Installation
  - vCloud Director network, hardware, and software requirements
  - vCloud Director setup overview
  - vCloud Director cell design
  - Install and configure the vCloud Director database (Microsoft SQL Server, Oracle database, or PostgreSQL)
  - Create SSL certificates
  - Configure VMware NSX® Manager™ for a new vCloud Director installation
  - Install and configure an AMQP broker
  - Download and install the VMware public key
  - Use and set up vCloud Director federation
- 13 vCloud Director API and Metadata
  - Describe tools to access the API of vCloud Director API
  - Use of REST API in VMware vRealize® Orchestrator™
  - Describe access to vCloud Director using VMware PowerCLI™
  - Create and update metadata on objects

## Session Dates

On request. Please [Contact Us](#)

## Additional Information

This training is also available as onsite training. Please [contact us](#) to find out more.