



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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CODE:	LENGTH:	PRICE:
VMW_VCICM9	40 Hours (5 dage)	kr 25,662.00

## 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™.

### Product Alignment

- 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

	Introductions and course logistics		
Course Introduction	Course objectives	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 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		Organization VDC	
Organization VDC allocation models			
Recognize resource allocations for an organization			
Describe the network types available in vCloud Director (external, organization, vApp)			
Discuss the organization and vApp network traffic choices			
Examine the function of network pools			Virtual Machines and vApps
Discuss the use of virtual machines		Create and manage catalogs	
Design and manage vApps	Catalog	Manage vApp templates	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		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			

## 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	
	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
Customer Onboarding and Hybrid Cloud	Use vCloud Director Extender for hybrid cloud setup and onboarding
	Architecture for vCloud Availability for vCloud Director
	Prerequisites of vCloud Availability for vCloud Director
vCloud Availability for vCloud Director	Implementation of vCloud Availability for vCloud Director
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	
	Describe tools to access the API of vCloud Director
	Use of REST API in VMware vRealize® Orchestrator™
	Describe access to vCloud Director using VMware PowerCLI™
vCloud Director API and Metadata	Create and update metadata on objects
	vCloud Director upgrade overview
	Upgrade prerequisites
	NSX requirements
	Additional information
(Optional) vCloud Director Upgrade	Best practice for upgrades

## 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

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 a public cloud and a private cloud
- Discuss various customer onboarding scenarios with vCloud Director
- Configure the integration with vCloud Availability for vCloud Director
- Use vCloud Director Extender for hybrid cloud setup and onboarding

## Session Dates

På anmodning. [Kontakt os venligst](#)

## Yderligere Information

Denne træning er også tilgængelig som træning på stedet. Kontakt os for at finde ud af mere.