

VMware vCloud NFV with vCloud Director

Course Overview

In this five-day course, you will focus on configuring, managing, and operating VMware vCloud Director® 8.20 for a VMware vCloud® NFV™ environment. 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™.

Course Objectives

By the end of the course, you should be able to meet the following objectives:

- Describe the vCloud NFV architecture
- Describe the vCloud Director architecture and its role as Virtualized Infrastructure Manager (VIM)
- Secure deployment of multivendor virtualized network functions (VNFs) on the vCloud NFV platform
- Manage vCloud Director to support network functions virtualization (NFV) workloads in a secure multitenant environment
- Configure vSAN to enable multiple tiers in provider VDCs
- Create and manage vCloud Director organizations and VNF vApps to satisfy business needs
- Create and manage vCloud Director catalogs
- Use vCloud Director to configure basic and advanced NSX networking services

Target Audience

Service provider architects, engineers, and administrators with experience in a telco and NFV environment

Prerequisites

This course requires completion of the following prerequisite:

- vCloud NFV Foundations with vCloud Director eLearning course

Certifications

No certifications are tied to this course.

Course Delivery Options

- Classroom
- Live Online
- [Onsite](#)

Product Alignment

- vCloud Director 8.20
- vSAN 6.2 and later
- NSX 6.2 and later
- VMware vSphere® 6.x

Course Modules

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 vCloud NFV

- Describe the benefits of vCloud NFV
- Demonstrate what a vCloud NFV sample solution looks like
- Describe the vCloud NFV architecture

3 NFV Infrastructure

- Describe the NFV infrastructure (NFVI) components
- Explain how vSphere interacts with compute resources (CPU and memory), as well as network and storage resources
- Describe the vSAN storage architecture
- Explain network virtualization with NSX

4 Virtualized Infrastructure Manager

- Describe the VMware products for the VIM layer
- Explain vCloud Director basic concepts
- Create vSAN storage policies for use by vCloud Director
- Describe the vCloud Director architecture
- Create resource pools for use by vCloud Director
- Configure a basic vCloud Director instance

5 vCloud Providers

- Explain how compute and storage resources are provided to vCloud Director
- Describe provider VDC requirements and best practices
- Create provider VDCs

6 vCloud Director Organizations

- Create and manage vCloud Director organizations
- Create and manage organization VDCs
- Configure and manage organization VDC networking
- Create and manage organization catalogs
- Deploy, manage, and access organization vApps

7 vCloud Networking with NSX

- Describe the components in the NSX planes

- Describe the network types available in vCloud Director (external, organization, vApp)
- Examine the function of network pools

8 Advanced Networking Services

- Describe VMware NSX® Edge™ services gateway features
- Describe advanced edge services gateway network functions
- Configure the edge services gateway for inbound and outbound network address translation
- Configure load balancing in a vApp
- Configure VPN services between organizations
- Configure dynamic routing on the edge services gateway
- Configure firewall services on the edge services gateway
- Configure the distributed firewall

9 vCloud Director Security

- Describe role-based access control in vCloud Director
- Create and manage security roles

10 Managing and Monitoring Cloud Resources

- Manage provider and organization VDCs in vCloud Director
- Manage external networks and edge services gateways
- Manage vCenter Server systems and resource pools

11 NFVI Operations Management (FCAPS)

- Describe the NFVI operations management components: VMware vRealize® Operations Manager™, VMware vRealize® Log Insight™, VMware vRealize® Network Insight™, VMware Site Recovery Manager™, and VMware vRealize® Orchestrator™

12 Day 2 vCloud NFV Operations

- Describe the upgrade process from vCloud Director 5.5 to 8.x
- Explain how the vCloud NFV platform provides carrier-grade service
- Describe the VNF onboarding process



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Contact

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