

TITLE	DURATION
<b>VMware vCloud: Deploy and Manage the VMware Cloud</b>	32 H

**Overview** This intensive 4-day, instructor-led course demonstrates to technical personnel how to deploy VMware vCloud for a public, private, or hybrid cloud environment and manage the ongoing operation of the deployment. The course focuses on the private and public vCloud solutions but also includes information on how this approach supports a hybrid solution. This course is 40 percent lecture and 60 percent hands-on labs.

- Objectives**
- Deploy vCloud Director
  - Manage vCloud Director to satisfy private, public, and hybrid cloud business needs
  - Configure VMware vSphere® storage to enable multiple tiers in provider virtual datacenters
  - Create and manage vCloud Director organizations and vApps to satisfy business needs
  - Create and manage vCloud Director catalogs
  - Configure networking for organizations and vApps
  - Connect organizations with VPN tunnels and static routes
  - Interface vCloud Director to OpenLDAP and Microsoft Active Directory servers
  - Configure network security between vCloud Director vApps and organizations with VMware vShield Edge™ firewalls
  - Use VMware vCenter Chargeback™ to meter vCloud Director resources
  - Understand the interactions between VMware vSphere Distributed Resources Scheduler clusters and vCloud Director

- Prerequisites**
- VMware vSphere 4.1: Install, Configure, Manage or
  - VMware vSphere 5.0: Install, Configure, Manage

Other Requirements:

- VMware vCloud Director: Essentials/Fundamentals [V1.5]
- Solid understanding of TCP/IP networking VMware Certified Professional (VCP) certification is strongly recommended

**Outline**      **Module 1: Course Introduction**

- Review course goals
- Review course objectives

- Review the course outline
- Recognize VMware vCloud Director Essentials/Fundamentals course elements

### **Module 2: VMware vCloud Director Architecture and Components**

- Describe how VMware products use the cloud computing approach
- Review vCloud Director components and explain their functions
- Examine how to charge for resources
- Determine the licensing needs

### **Module 3: Installing VMware vCloud Director**

- Describe the required prerequisites for a vCloud Director installation
- Install vCloud Director

### **Module 4: VMware vCloud Director Networking**

- Describe the network types available in vCloud Director
- Discuss the organization and vApp network traffic choices
- Describe the function of network pools
- Explain how to share content between organizations and vApps
- Share content in private, public, and hybrid clouds

### **Module 5: VMware vCloud Director Providers**

- Identify storage resources for vCloud Director
- Configure and manage storage for providers
- Examine provider space allocation to an organization
- Recognize Storage vMotion issues
- Manage storage requirements for linked clones and shadow virtual machines

### **Module 6: VMware vCloud Director Organizations**

- Create and manage organizations
- Recognize resource allocations for an organization
- Create and manage catalogs

### **Module 7: Monitoring VMware vCloud Components**

- Monitor usage information at provider and organization virtual datacenters
- Analyze vCloud Director logs to monitor vCloud Director cells

### **Module 8: Cloud Connectivity**

- Configure Basic Firewalls in vCloud Director

- Describe a Network Troubleshooting Methodology
- Configure VPN Tunnels in vCloud Director
- Configure Static Routes in vCloud Director
- Describe VMware vCloud® Connector

### **Module 9: VMware vCloud Security**

- Identify authentication and authorization tasks
- Describe and configure LDAP integration
- Describe single sign-on

### **Module 10: Cost Analysis and Reporting with VMware vCenter Chargeback**

- Recognize which elements vCenter Chargeback meters for vCloud Director
- Describe how cost models are used to generate reports
- Summarize the function of each of the vCenter Chargeback architecture components
- Identify how to generate reports
- Generate different reports based on business needs

### **Module 11: Managing Cloud Resources**

- Understand and identify how vSphere fulfills vCloud Director requests
- Manage provider and organization virtual datacenters

### **Module 12: Managing vSphere Resources**

- Manage VMware vCenter Server™ instances
- Manage VMware ESXi™ hosts
- Manage vSphere datastores
- Manage stranded items
- Configure and manage resource pools at the vSphere level