

VMware vCloud: Architecting the VMware Cloud

Delivery Methods

- Instructor-led training
- Onsite training

Course Duration

- Three days of instructor-led training
- 45% lecture, 55% hands-on lab

Target Audience

Sales partners, customers, consultants, and sales engineers responsible for designing private cloud architectures with VMware products.

Prerequisites

Students must have VCP-level vSphere knowledge. They must also have general-purpose vSphere design experience, with special emphasis on networking and storage. Exposure to the product features and functionality of vCloud Director, vSphere, vShield Edge, and vCenter Chargeback is required.

Pricing

Contact your VMware representative or a VMware Authorized Training Center for pricing information.

More Information

Courses are conveniently scheduled around the world. Go to www.vmware.com/education to find the class that is right for you.

Onsite training is also available for customers who prefer to bring a VMware Certified Instructor to their own facilities. For additional information about onsite classes, including facility requirements, go to www.vmware.com/education.

Course Overview

This course is designed to guide students through the decision points and policy choices available for designing and implementing a VMware vCloud™ environment. Students will learn to appreciate the effects of design choices in VMware vSphere™ 4, VMware vCloud Director, VMware vCenter™ Chargeback, and the VMware® vShield Edge functionality that is included with vCloud Director. The course culminates in a comprehensive workshop about VMware cloud design.

Course Objectives

At the end of the course, you should have an understanding of the VMware cloud and be able to:

- Install vCloud Director in an environment which the new cloud must co-exist with an existing vSphere environment
- Evaluate and design a multi-tenant environment to address the needs of private cloud Customers
- Configure vCloud providers that can accommodate homogenous server, storage, and network resources
- Design a network infrastructure optimized for vCloud
- Integrate vCloud Director security with existing LDAP systems and design appropriate security hierarchies with security roles
- Design a vCenter Chargeback implementation

Course Modules

<p>1 Course Introduction</p> <ul style="list-style-type: none"> • Introductions and course logistics • Course objectives 	<p>6 Designing Storage</p> <ul style="list-style-type: none"> • Segmenting storage based on speed • Combining iSCSI and NFS • Organizational quotas • Thin provisioning • Limitations and considerations
<p>2 What Is a Cloud?</p> <ul style="list-style-type: none"> • Defining the VMware cloud and virtualization • Infrastructure as a Service (IaaS) • Platform as a Service (PaaS) • Software as a Service (SaaS) • Attributes of cloud computing • Cloud computing considerations 	<p>7 Designing Providers</p> <ul style="list-style-type: none"> • Consumable resources • Provider virtual datacenters • Resource pools • Storage • VLANs
<p>3 VMware vCloud Director</p> <ul style="list-style-type: none"> • vCloud Director prerequisites • Components of VMware cloud infrastructure • Logical constructs in vCloud Director • Cloud architecture fundamentals 	<p>8 Designing Organizations</p> <ul style="list-style-type: none"> • Organization creation and resource pools in the provider virtual datacenters • Accessing multiple provider virtual datacenters from one organization • Organization administrator rights and responsibilities • vApps • Catalogs • Organization networks and external networks
<p>4 Cloud Architecture Models</p> <ul style="list-style-type: none"> • Service provider (public cloud) model • Enterprise (private cloud) model • Hybrid model • Considerations when upgrading a vSphere environment • Load balancing • vCloud API use cases • Management cluster • vCloud resource groups 	<p>9 Designing Security</p> <ul style="list-style-type: none"> • Authentication and authorization • Role-based access controls • Creating providers and organizations • Organization administrators • vApp owner • Custom roles
<p>5 Designing Networks</p> <ul style="list-style-type: none"> • DNS architecture • Types of vCloud Director networks • Network management • Network mapping 	<p>10 Designing Chargeback</p> <ul style="list-style-type: none"> • Modules of consumption • vCenter Chargeback metrics • vCenter Chargeback server configuration • vCenter Chargeback data collectors



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