



#### **Overview**

This course gives you the skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. This course builds your skills in installing, configuring, and managing VMware Horizon® 7 through a combination of lecture and hands-on labs. You will learn how to configure and deploy pools of virtual machines, how to manage the access and security of the machines, and how to provide a customized desktop environment to end users.

This course is also available in an On Demand format. For more information, select this link: VMware Horizon 7: Install, Configure, Manage [V7.3] - On Demand.

**Product Alignment** 

VMware Horizon 7.3

#### **Duration**

40 hs

## **Objectives**

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

- Identify VMware Horizon components
- Install and configure View Connection Server
- Install and configure virtual desktops
- Configure and manage VMware Horizon® Client™ systems
- Configure and manage pools of physical and virtual machines
- Configure and manage automated pools of full virtual machines
- Configure and manage pools of linked-clone desktops
- Configure and manage automated pools of instant clones
- Configure and manage Remote Desktop Services (RDS) pools of desktops and applications
- Use Horizon Administrator to configure the VMware Horizon environment
- Configure secure access to virtual desktops







- Use VMware User Environment Manager<sup>™</sup> to manage user personalization and application configurations
- Describe steps to deploy profile management
- Use VMware App Volumes<sup>™</sup> to provision and manage applications
- Manage the performance and scalability of a VMware Horizon deployment

### Certifications

This course prepares you for the following certification:

• VMware Certified Professional 7 – Desktop and Mobility (VCP7-DTM)

### **Intended Audience**

Technical personnel who work in the IT departments of end-customer companies and people who are responsible for the delivery of remote or virtual desktop services

### **Prerequisites**

Customers attending this course should have, at a minimum, the following VMware infrastructure skills:

- Use VMware vSphere® Web Client to view the state of virtual machines, datastores, and networks
- Open a virtual machine console on VMware vCenter Server® and access the guest operating system
- Create snapshots of virtual machines
- Configure guest customization specifications
- Modify virtual machine properties
- Convert a virtual machine into a template
- Deploy a virtual machine from a template

Attendees should also have the following Microsoft Windows system administration experience:

- Configure Active Directory services, including DNS, DHCP, and time synchronization
- Restrict users' activities by implementing Group Policy objects







- Configure Windows systems to enable Remote Desktop Connections
- · Build an ODBC connection to an SQL Server database

## **Outline**

### **Course Introduction**

Review course goals
Review course objectives
Review the course outline
Find additional resources after this course

#### **Introduction to VMware Horizon**

Recognize the features and benefits of VMware Horizon Identify the major function of each VMware Horizon component Define a use case for your virtual desktop and application infrastructure

#### **View Connection Server**

Identify the VMware vSphere® requirements for a connection server Describe the network and firewall configurations for View Connection Server License VMware Horizon components Configure View Connection Server

### **VMware Horizon Desktops**

Outline the process and choices in setting up VMware Horizon virtual machines Compare the remote display protocols that are available in VMware Horizon List the ports that must be opened in the machine's firewall for VMware Horizon operations

Outline the configuration choices when installing Horizon Agent

### **VMware Horizon Desktop Pools**

Identify the steps to set up a template for desktop pool deployment List the steps to add desktops to the View Connection Server inventory Define desktop entitlement

Describe how information on the Users and Groups page can be used to control and monitor View users

Explain the hierarchy of global policies, pool-level policies, and user-level policies







List the View Group Policy administrative template files

## **Horizon Client Options**

Describe the requirements for a Horizon Client installation
Explain USB redirection and options
Describe the power states for desktops
Define and compare a thin client with a system running Horizon Client
Discuss the benefits of Virtual Printing
Explain the Virtual Printing architecture
Describe the configuration options for Virtual Printing
Explain the location-based printing feature

## **Creating Automated Pools of Full Virtual Machines**

Recognize how an automated pool operates Compare dedicated-assignment and floating-assignment pools Outline the steps to create an automated pool Examine the entitlement of desktops in automated pools

## **Creating and Managing Linked-Clone Desktop Pools**

Describe the VMware linked-clone technology

Explain why both a parent virtual machine and a snapshot must be used to create linked clones

Outline the system requirements for View Composer

Describe the relationship between a persistent disk and the system disk

Outline the steps necessary to set up a desktop pool that uses linked clones

Compare the purpose of the parent and the replica virtual machines

Compare the linked-clone management operations

Describe the management operations for persistent disks

## **Creating and Managing Instant-Clone Desktop Pools**

Identify the advantages of instant clones
Distinguish View Composer clones from instant clones
Identify the requirements of instant clones
Describe the types of instant-clone virtual machines
Explain how folders are used to delegate pool administration
Outline the steps to set up an automated pool that uses instant clones







Describe instant-clone limitations in VMware Horizon Describe the creation of instant clones Set up an automated pool of instant clones

### **VMware Horizon Authentication**

Compare the authentication options that View Connection Server supports Explain the purpose of roles and privileges in VMware Horizon Outline the steps to create a Horizon administrator and a custom role List some of the best practices for configuring Horizon administrators

## **Managing VMware Horizon Security**

Compare tunnels and direct connections for client access to desktops Compare the benefits of using VMware Unified Access Gateway™ in the DMZ Explain a direct connection

List the advantages of direct connections

Discuss the benefits of using Unified Access Gateway

Compare how Unified Access Gateway and the security server are deployed List the two-factor authentication options that are supported by Unified Access Gateway

Describe the situations in which you might deploy Unified Access Gateway with one, two, or three network interfaces

### **Profile Management Using User Environment Manager**

Identify the User Environment Manager functional areas and their benefits List User Environment Manager components
Describe User Environment Manager and its architecture
Identify User Environment Manager profile management and its features
Describe User Environment Manager smart policies

## **Creating RDS Desktop and Application Pools**

Explain the difference between an RDS desktop pool and an automated pool Describe how a user can access a single application by using the RDS application pool Describe the relationship between an RDS host, a farm, and an application pool Create an RDS desktop pool and an application pool

Explain how the View Composer linked-clone technology can automate the build-out of RDS server farms







Use View Composer linked-clone technology and instant-clone technology to automate the build-out of RDSH farms

Describe the default and alternative load-balancing feature for RDS hosts that optimizes placement of sessions

# **Using App Volumes to Provision and Manage Applications**

Explain how App Volumes works
Identify the features and benefits of App Volumes
Identify the interface elements of App Volumes
Install and configure App Volumes

## **Command-Line Tools and Backup Options**

Describe key View Connection Server features that are available as command-line options with the vdmadmin command

Explain the purpose of kiosk mode for client systems and how it is configured Identify the log locations for each VMware Horizon component Describe the backup options for VMware Horizon databases Explain the potential problems if the databases are not synchronized

## **VMware Horizon Performance and Scalability**

Describe the purpose of a replica server

List several best practices for multiserver deployment in a pod

Describe the benefits of the Cloud Pod Architecture feature for large-scale VMware Horizon deployments

Describe the purpose of interpod communication and the View InterPod API Explain how global entitlements can benefit a single-pod environment

