

# VMware Horizon 7: Install, Configure, Manage [V7.3]

Duration 5 Days

## COURSE DESCRIPTION

This five-day, hands-on 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.

Product Alignment

- VMware Horizon 7.3

## COURSE 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™ to manage user personalization and application configurations
- Describe steps to deploy profile management
- Use VMware App Volumes™ 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)

## COURSE 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 (ADM) 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 loadbalancing 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 option 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

#### **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 allow Remote Desktop Connections
- Build an ODBC connection to an SQL Server database

#### **WHO SHOULD ATTEND**

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