

VMware Horizon 7: Install, Configure, Manage [V7.10]

Learn via: **Classroom / Virtual Classroom**

Duration: **5 Days**

Overview

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 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 7.10
- VMware User Environment Manager™ 9.9
- App Volumes Manager 2.18

Prerequisites

Technical Pre-requisites

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 user activities by implementing Group Policy objects
- Configure Windows systems to enable Remote Desktop Connections
- Build an ODBC connection to an SQL Server database

What You Will Learn

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

- Recognize the features and benefits of VMware Horizon
- Install and configure View Connection Server
- Create and optimize Windows VMs to create VMware Horizon desktops
- Describe the purpose of Horizon Agent
- Compare the remote display protocols that are available in VMware Horizon
- Configure and manage the Horizon Client systems and connect the client to a VMware Horizon desktop
- Configure, manage, and entitle automated pools of full VMs
- Configure, manage, and entitle pools of instant-clone desktops and linked-clone desktops
- Install and configure View Composer
- Outline the steps and benefits for using TLS CA signed certificates in VMware Horizon environments
- Use the role-based delegation to administer a VMware Horizon environment
- Configure secure access to VMware Horizon desktops
- Understand and create Remote Desktop Services (RDS) desktops and application pools
- Install and configure VMware App Volumes™ to deliver and manage applications
- Deploy VMware Dynamic Environment Manager for user and application management
- Install and configure a Just-in-Time Management Platform (JMP) server for managing JMP components

- Describe VMware Dynamic Environment Manager™ Smart Policies
- Use the command-line tools available in View to back up and restore the required VMware Horizon databases
- Manage the performance and scalability of a VMware Horizon deployment
- Identify the benefits of the Cloud Pod Architecture feature for large-scale VMware Horizon deployments

Outline

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Introduction to VMware Horizon

- Recognize the features and benefits of VMware Horizon
- Describe the conceptual and logical architecture of VMware Horizon
- Define a use case for your virtual desktop and application infrastructure
- Convert customer requirements to use case attributes

3 Horizon View Connection Server

- Recognize VMware Horizon reference architecture
- Identify the recommended system requirements for View Connection Server
- Identify the recommended virtualization requirements for a View Connection Server instance
- Access Horizon Manager
- License VMware Horizon components
- Outline the steps for the initial configuration of View Connection Server
- Describe the capabilities that Horizon Administrator provides for monitoring the health of a VMware Horizon deployment
- Use the dashboard to quickly focus on the details of a problem
- Access the settings and status of a pool
- Access the settings and status of a specific machine and the resources controlled by vCenter Server that the VM uses
- Identify the benefits of using the VMware Horizon Help Desk tool

4 VMware Horizon Desktops

- Outline the process and choices to set up VMware Horizon VMs
- Assign vCPUs and RAM
- Create Windows VMs
- Configure ESXi host virtual switches
- Optimize the performance of VMs
- Compare the remote display protocols that are available in VMware Horizon
- Outline the steps to enable a machine for remote access from VMware Horizon® Client™
- Describe BLAST
- Describe the purpose of Horizon Agent
- List the steps to prepare a VM before installing Horizon Agent
- Outline the configuration choices when installing Horizon Agent
- Use the Horizon Skype for Business Virtualization Pack

5 VMware Horizon 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 user entitlement
- Describe how information found on the Users and Groups page is used to control and monitor VMware Horizon users
- Explain the hierarchy of global, pool-level, and user-level policies
- List the VMware Horizon Group Policy ADMX files

6 VMware Horizon Client Options

- Describe the requirements for a Horizon Client installation on a Windows system
- Explain USB redirection and options
- Describe the shared folders option
- Describe the different clients and their benefits
- Discuss the benefits of the Virtual Printing feature
- Explain the architecture of the Virtual Printing feature
- List the steps to install the Virtual Printing feature
- Configure the Virtual Printing feature
- Discuss the benefits of the location-based printing feature
- Identify use cases where location-based printing is desirable
- List the client system parameters that can be used to assign a printer

7 Creating Automated Desktop Pools

- Describe how an automated pool operates
- Compare dedicated-assignment and floating-assignment pools
- Outline the steps to create an automated pool

8 Configuring and Managing Linked-Clone Desktop Pools

- Describe VMware linked-clone technology
- Explain why both a parent VM and a snapshot must be used to create linked clones
- Outline the system requirements for View Composer
- Describe the relationship between a vCenter Server instance and a View Composer instance
- Identify the View Composer objects in a vCenter Server inventory
- Describe the preparation required for installing View Composer
- Outline the steps to install View Composer
- Outline the necessary steps to set up an automated desktop pool that uses linked clones
- Compare the purpose of parent and replica VMs
- Describe the additional steps that are required for linked clones that are not necessary for other automated pools
- Discuss the merits of using tiered storage for replica and linked clones
- Compare the benefits of vSAN and tiered storage
- Compare the recompose, refresh, and rebalance management operations for linked clones
- Describe the management operations for persistent disks

9 Creating and Managing Instant-Clone Desktop Pools

- Describe instant clones
- List the advantages of instant clones
- Differentiate between View Composer linked clones and instant clones
- Describe the different types of instant-clone VMs
- Recognize the use of folders in delegating pool administration
- Explain how instant clones work
- Describe instant clone desktop pools
- Determine the requirements for an instant-clone desktop pool
- Identify the steps used to create an instant clone
- Set up an automated pool of instant clones
- Enable instant clones and authorize a VMware Horizon administrator account for use by ClonePrep
- Update the image of an instant-clone desktop pool using the push image operation

10 VMware Horizon Authentication and Certificates

- Compare the authentication options that View Connection Server supports
- Explain the purpose of roles and privileges in VMware Horizon
- Explain how folders are used to delegate pool administration
- Describe a permission and its components
- Outline the steps to create a Horizon administrator
- List the management options for permissions and folders
- Outline the steps to create a custom role
- List some of the best practices for configuring Horizon Administrator
- Describe the purpose of using TLS certificates for VMware Horizon
- Outline the benefits of using TLS certificates signed by a CA
- Outline the steps to set up TLS certificates

11 Managing VMware Horizon Security

- Compare tunnels and direct connections for client access to desktops
- Identify the benefits of using Unified Access Gateway in the DMZ
- Identify the tunnel endpoints when the security gateway is not used
- Describe a direct connection in a VMware Horizon environment
- List the advantages of direct connections
- Describe how direct connections are enabled
- Discuss the benefits of using VMware Unified Access Gateway™
- 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

12 Profile Management Using User Environment Manager

- Identify the VMware Dynamic Environment Manager functional areas and their benefits
- Prepare infrastructure for VMware Dynamic Environment Manager
- Outline the steps that are required to install and configure VMware Dynamic Environment Manager components
- Manage user personalization and application configurations using the VMware Dynamic Environment Manager management console and application profiler
- Outline the VMware Horizon Smart Policies available when using VMware Dynamic Environment Manager in the Horizon environment

13 Creating RDS Desktop and Application Pools

- Explain the difference between an RDS desktop pool and an automated pool
- Access a single application by using the RDS application pool
- Compare and contrast an RD Sessions Host pool, a farm, and an application pool
- Create an RDS desktop pool and an application pool
- Identify the load-balancing options for Remote Desktop Session Hosts (6.2)
- Use View Composer linked-clone technology to automate the build out of RDSH farms
- Use instant-clone technology to automate the build out of RDSH farms
- Describe the default load-balancing procedure for RDSHs in a farm
- Describe the alternative load-balancing feature for RDSHs that optimizes placement of sessions
- Explain how load values and load preferences are used by View Connection Server to make placement decisions for new sessions
- Explain how anti-affinity rules affect session placement decisions
- Identify the hardware, software, and network requirements for all integrated components.

14 Provisioning and Managing Application Using App Volumes

- 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

15 Just-in-Time Management Platform and VMware Horizon

- Identify the benefits of Just-in-Time Management Platform (JMP)
- List the JMP and Horizon 7 components
- Install and configure a JMP server
- Identify App Volumes deployment considerations
- Identify VMware Dynamic Environment Manager deployment considerations

16 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
- Explain why you limit the domains that View Connection Server displays to users as they attempt to authenticate
- Identify the log locations for each VMware Horizon component
- Collect Horizon Client and Horizon Agent log files
- Describe the backup options for VMware Horizon databases
- Explain the potential problems related to not synchronizing databases
- Outline solutions to handle orphaned linked clones

17 VMware Horizon Performance and Scalability

- Describe the purpose of a replica connection server
- Compare a replica server to a standard connection server
- Explain how multiple View Connection Server instances in a pod maintain synchronization
- List several best practices for multiserver deployment in a pod
- Describe how a load-balancing capability might improve VMware Horizon performance
- Describe the benefits of the Cloud Pod Architecture feature for large-scale VMware Horizon deployments
- Establish a session with a desktop machine in a different pod by logging in to a local View Connection Server instance
- Compare the purpose of the global LDAP instance and the local LDAP instance
- Describe the purpose of interpod communication and the View Interpod API (VIPA)
- Create global entitlements for accessing Horizon Desktops