



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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CODE:	LENGTH:	PRICE:
VM-H7-ICM-V7.10	40 Hours (5 days)	\$4,250.00

## 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 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

## Objectives

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

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

## Programme

- 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
- 1 Course Introduction
- Introductions and course logistics
- Course objectives
- 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

## Session Dates

On request. Please [Contact Us](#)

## Additional Information

This training is also available as onsite training. Please contact us to find out more.