

# **VMware Horizon 8: Deploy and Manage**

**Modality: Virtual Classroom**

**Duration: 5 Days**

## **About this Course:**

VMware Horizon 8: Deploy and Manage is a five-day combination course of VMware Horizon 8: Skills for Virtual Desktop Management & VMware Horizon 8: Infrastructure Administration. This training collection gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You will build on your skills in configuring and managing VMware Horizon® 8 through a combination of lecture and hands-on labs. You learn how to configure and deploy pools of virtual machines and how to provide a customized desktop environment to end-users. Additionally, you will learn how to install and configure a virtual desktop infrastructure platform. You learn how to install and configure VMware Horizon® Connection Server™, VMware Unified Access Gateway™, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.

The average salary for VMware Administrator is **\$79,168** per year.

## **Course Objectives:**

- Recognize the features and benefits of Horizon
- Use VMware vSphere® to create VMs to be used as desktops for Horizon
- Create and optimize Windows VMs to create Horizon desktops
- Install and configure Horizon Agent on Horizon desktop
- Configure and manage the VMware Horizon® Client™ systems and connect the client to a VMware Horizon desktop
- Configure, manage, and entitle desktop pools of full VMs
- Configure, manage, and entitle pools of instant-clone desktops
- Create and use Remote Desktop Services (RDS) desktops and application pools
- Monitor the Horizon environment using Horizon Console Dashboard and Horizon Help Desk Tool
- Identify Horizon Connection Server installation, architecture, and requirements.
- Describe the authentication and certification options for a Horizon environment
- Recognize the integration process and benefits of VMware Workspace ONE® Access™ and Horizon 8
- Discuss performance and scalability options available in Horizon 8
- Describe different security options for the Horizon environment

## **Audience:**

- Experienced system administrators and system integrators responsible for designing and implementing Horizon solutions

## **Prerequisites:**

- 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

## **Course Outline:**

### **1 Course Introduction**

- Introductions and course logistics
- Course objectives

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

- Recognize the features and benefits of Horizon
- Describe the conceptual and logical architecture of Horizon

### **3 Introduction to Use Case**

- Define a use case for your virtual desktop and application infrastructure
- Convert customer requirements to use-case attributes

### **4 vSphere for VMware Horizon**

- Explain basic virtualization concepts
- Use VMware vSphere® Client™ to access your vCenter Server system and VMware ESXi™ hosts
- Create, provision, and remove a virtual machine

### **5 VMware Horizon Desktops**

- Create a Windows and a Linux virtual machine using vSphere
- Optimize and prepare Windows and Linux virtual machines to set up Horizon desktop VMs

### **6 VMware Horizon Agents**

- Outline the configuration choices when installing Horizon Agent on Windows and Linux virtual machines
- Create a gold master for Windows Horizon desktops

### **7 VMware Horizon Pools**

- Identify the steps to set up a template for desktop pool deployment
- List the steps to add desktops to the VMware Horizon® Connection Server™ inventory

- Compare dedicated-assignment and floating-assignment pools
- Outline the steps to create an automated pool
- Define user entitlement
- Explain the hierarchy of global, pool-level, and user-level policies

## **8 VMware Horizon Client Options**

- Describe the different clients and their benefits
- Access Horizon desktop using various Horizon clients and HTML
- Configure integrated printing, USB redirection, and the shared folders option
- Configure session collaboration and media optimization for Microsoft Teams

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

- List the advantages of instant clones
- Explain the provisioning technology used for instant clone desktop pools
- Set up an automated pool of instant clones
- Push updated images to instant clone desktop pools

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

- Explain the difference between an RDS desktop pool and an automated pool
- Compare and contrast an RDS session host pool, a farm, and an application pool
- Create an RDS desktop pool and an application pool
- Access RDS desktops and application from Horizon Client
- Use the instant clone technology to automate the build-out of RDSH farms
- Configure load-balancing for RDSHs on a farm

## **11 Monitoring VMware Horizon**

- Monitor the status of the Horizon components using the Horizon Administrator console dashboard
- Monitor desktop sessions using the HelpDesk tool

## **12 Course Introduction**

- Introductions and course logistics
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## **13 Horizon Connection Server**

- Recognize VMware Horizon reference architecture
- Identify the Horizon Connection Server supported features
- Identify the recommended system requirements for Horizon Connection Server
- Configure the Horizon event database
- Outline the steps for the initial configuration of Horizon Connection Server
- Discuss the ADAM database as a critical component of Horizon Connection Server installation

## **14 Authentication and Certificates**

- Compare the authentication options that Horizon Connection Server supports
- Describe the Smartcard authentication options that Horizon Connection Server supports
- Outline the steps to create a Horizon administrator and custom roles
- Describe the roles available in a Horizon environment
- Explain the role that certificates play for Horizon Connection Server
- Install and configure certificates for Horizon Connection Server

- Install and configure True SSO in a Horizon environment

## **15 Workspace ONE Access & Virtual Application Management**

- Recognize the features and benefits of Workspace ONE Access
- Recognize the Workspace ONE Access console features
- Explain identity management in Workspace ONE Access
- Explain access management in Workspace ONE Access
- Describe the Workspace ONE Access directory integration
- Describe the Workspace ONE Access directory integration
- Deploy virtual applications with Workspace services

## **16 Horizon Protocols**

- Compare the remote display protocols that are available in VMware Horizon
- Describe the BLAST Display Protocol Codecs
- Describe BLAST and PCoIP ADMX GPO common configurations

## **17 Graphic Cards**

- Describe the 3D rendering options available in Horizon 8
- Compare vSGA and vDGA
- List the steps to configure graphics cards for use in a VMware Horizon environment

## **18 Horizon Scalability**

- Describe the purpose of a replica connection server
- Explain how multiple Horizon Connection Server instances in a pod maintain synchronization
- Explain Horizon Cloud Pod Architecture LDAP replication and VIPA
- Explain Horizon Cloud Pod Architecture scalability options

## **19 Horizon Security**

- Explain concepts relevant to secure Horizon connections
- Describe how to restrict Horizon connections.
- Discuss the benefits of using Unified Access Gateway
- List the two-factor authentication options that are supported by Unified Access Gateway
- List Unified Access Gateway firewall rules
- Describe the situation in which you might deploy Unified Access Gateway instances with one, two, or three network interfaces