# VMware Horizon: Deploy and Manage

# **Course Overview**

This five-day course gives you the hands-on skills to deliver virtual desktops and applications through a single virtual desktop infrastructure platform. You build on your skills in configuring and managing VMware Horizon<sup>®</sup> 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 learn how to install and configure a virtual desktop infrastructure platform. You learn how to install and configure VMware Horizon<sup>®</sup> Connection Server<sup>™</sup>, VMware Unified Access Gateway<sup>™</sup>, how to configure a load balancer for use with Horizon, and how to establish Cloud Pod Architecture.

# **Course Objectives**

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

- Recognize the features and benefits of VMware Horizon
- Define a use case for your virtual desktop and application infrastructure
- Use vSphere to create VMs to be used as desktops for VMware Horizon
- Create and optimize Windows VMs to create VMware Horizon desktops
- Install and Configure Horizon Agent on a VMware Horizon desktop
- Configure, manage, and entitle desktop pools of full VMs
- Configure and manage the VMware Horizon Client systems and connect the client to a VMware Horizon desktop
- Configure, manage, and entitle pools of instant-clone desktops
- Create and use Remote Desktop Services (RDS) desktops and application pools
- Monitor the VMware Horizon environment using the VMware Horizon Console Dashboard and Horizon Help Desk Tool
- Identify VMware Horizon Connection Server installation, architecture, and requirements
- Describe the authentication and certificate options for the VMware Horizon environment
- Recognize the integration process and benefits of Workspace ONE® Access™ and Horizon 8
- Compare the remote display protocols that are available in VMware Horizon
- Describe the 3D rendering options available in Horizon 8
- Discuss scalability options available in Horizon 8
- Describe different security options for the Horizon environment

# Target Audience

• Tier 1 Operators, administrators, and architects for VMware Horizon

# Prerequisites

Before attending this course, you must have the following skills:

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

You must 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 Delivery Options**

- Classroom
- Live Online
- Private Training
- On Demand

# Product Alignment

• VMware Horizon 8 v2212

# Course Modules

# 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

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

#### 4 vSphere for VMware Horizon

- Explain basic virtualization concepts
- Use VMware vSphere<sup>®</sup> Client<sup>™</sup> to access your VMware vCenter System and VMware ESXi™ hosts
- Create a Windows virtual machine using vSphere

#### 5 Create Windows Desktops

- Outline the steps to install Horizon Agent on Windows virtual machines
- Install Horizon Agent on a Windows virtual Machine
- Optimize and prepare Windows virtual machines to set up Horizon desktop VMs

#### 6 Create Linux Desktops

- Create a Linux VM for Horizon
- Install Horizon Agent on a Linux virtual machine
- Optimize and prepare Linux virtual machines to set up Horizon desktop VMs

#### Creating and Managing Desktop Pools 7

- · Identify the steps to set up a template for desktop pool deployment
- List the steps to add desktops to the VMware Horizon<sup>®</sup> Connection Server<sup>™</sup> inventory
- Compare dedicated-assignment and floatingassignment pools
- Outline the steps to create an automated pool
- Define user entitlement

• Explain the hierarchy of global, pool-level, and userlevel policies

# 8 VMware Horizon Client Options

- Describe the different clients and their benefits
- Access the 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 Remote Desktop Session Host 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
- Monitor the performance of the remote desktop using the Horizon Performance Tracker

# 12 Horizon Connection Server

• Recognize the VMware Horizon reference architecture

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- 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 AD LDS database as a critical {an important component?} component of the Horizon Connection Server installation

# 13 Horizon Protocols

- Compare the remote display protocols that are available in VMware Horizon
- Describe the BLAST Display Protocol Codecs
- Summarize the BLAST Codec options
- List the ideal applications for each BLAST codec
- Describe the BLAST and PCoIP ADMX GPO common configurations

# 14 Graphics in Horizon

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

### 15 Securing Connections: Network

- Compare tunnels and direct connections for client access to desktops
- Discuss the benefits of using Unified Access Gateway
- List the Unified Access Gateway firewall rules
- Configure TLS certificates in Horizon

# 16 Securing Connections: Authentication

- Compare the authentication options that Horizon **Connection Server supports**
- Restrict access to the Horizon remote desktops using restricted entitlements
- Describe the smart card authentication methods that Horizon Connection Server supports
- Explain the purpose of permissions, roles, and privileges in VMware Horizon

Create custom roles

# 17 Horizon Scalability

- Describe the purpose of a replica connection server
- Explain how multiple Horizon Connection Server instances in a pod maintain synchronization
- List the steps to configure graphics cards for use in a Horizon environment
- Configure a load balancer for use in a Horizon environment
- Explain Horizon Cloud Pod Architecture LDAP replication.
- Explain Horizon Cloud Pod Architecture scalability options

# 18 Horizon Cloud and Universal Broker

- Recognize the features and benefits of Horizon **Cloud Service**
- Use Universal broker to connect to a Horizon Cloud instance
- Configure and pair the Horizon Cloud Connector appliance with Horizon Connection Server

# 19 Workspace ONE Access and Virtual Application Management

- Recognize the features and benefits of Workspace **ONE** Access
- Explain identity management in Workspace ONE Access
- Explain access management in Workspace ONE Access
- Describe the requirements to install and configure True SSO in a Horizon environment
- Describe the Workspace ONE Access directory integration
- Deploy virtual applications with Workspace services

# Contact

If you have questions or need help registering for this course, click here.

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