

# 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® 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® Connection Server™, VMware Unified Access Gateway™, 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](#)

## 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® Client™ 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

### 7 Creating and Managing Desktop 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 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



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

© 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization, and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.

- 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](#).



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

© 2023 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization, and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.