# VMware Horizon 8: Infrastructure Administration and Troubleshooting

# Course Overview

VMware Horizon 8: Infrastructure Administrator and Troubleshooting is a five-day combination course of VMware Horizon 8: Infrastructure Administration & VMware Horizon 8: Infrastructure Troubleshooting. This training collection gives you the skills to install and configure a virtual desktop infrastructure platform. This course builds your skills in installing and configuring VMware Horizon® through a combination of lecture and hands-on labs. 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.

Also, this course provides you with the advanced knowledge, skills, and abilities to troubleshoot VMware Horizon 8 infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server, Unified Access Gateway, protocols, connections, and certificates.

This course provides a challenge lab designed to present participants with infrastructure issues that may arise in actual Horizon environments. The lab objective is to put into practice the contents covered during the training to create a working environment.

# Course Objectives

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

- Identify VMware Horizon Connection Server installation, architecture and requirements
- Describe the authentication and certificate options for a 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 Horizon environment
- Discuss Connection Server advanced configurations.
- List troubleshooting techniques for Connection Server common issues.
- Interpret VMware Horizon 8 Connection Server logs.
- Identify Unified Access Gateway configuration and certificate problems.
- List troubleshooting steps for Unified Access Gateway common problems.
- Describe BLAST configuration verification using logs and settings.
- Describe BLAST optimization recommendations for different use cases.
- Describe VMware Horizon 8 Connections and how to troubleshoot related problems.
- Describe VMware Horizon 8 Certificates.



- List troubleshooting steps for VMware Horizon 8 certificates common issues.
- Describe Cloud Pod Architecture troubleshooting scenarios
- Identify and fix problems in a VMware Horizon environment

# **Target Audience**

Tier 1 system administrators, and integrators responsible for managing and maintaining VMware Horizon Infrastructure.

# 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

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 Delivery Options

**Product Alignment** 

• Classroom

VMware Horizon 8 v2103

- Live Online
- Private Training



# Course Modules

#### Course Introduction

- Introductions and course logistics
- Course objectives

#### **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 Horizon event database
- Outline the steps for the initial configuration of Horizon Connection Server
- Discuss the AD LDS database as a critical component of Horizon Connection Server installation

#### **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

# Workspace ONE Access and Virtual Application Management

- Recognize the features and benefits of Workspace **ONE Access**
- Recognize the Workspace ONE Access console
- Explain identity management in Workspace ONE Access

- Explain access management in Workspace ONE Access
- Describe the Workspace ONE Access directory integration
- Deploy virtual applications with Workspace services

#### 5 Horizon Protocols

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

#### 6 Graphics 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 Horizon environment

#### 7 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 and VIPA
- Explain Horizon Cloud Pod Architecture scalability options

#### 8 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



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- 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

#### Horizon Connection Server Troubleshooting

- Discuss Horizon Connection Server General Troubleshooting techniques
- Use logs to identity Horizon Connection Server common issues
- Describe Active Directory (AD) Lightweight Directory Service (LDS) Replication
- Discuss Horizon Connection Server Replication common issues
- Review and Interpret Horizon Connection Servers
- Compare successful and unsuccessful logs from common infrastructure administration tasks.

#### 10 Unified Access Gateway Troubleshooting

- List and identify common UAG deployment issues
- Monitor the UAG deployment to identify health and issues
- Identify and Troubleshoot UAG certificate issues
- Monitor, test, and troubleshoot network errors
- Discuss general UAG troubleshooting processes.

# **BLAST Configuration Verification**

- Discuss BLAST Codecs and Encoder Switch settings.
- Describe how to verify BLAST configuration using logs and settings.

# 12 BLAST Optimization

- List general BLAST optimization recommendations.
- Summarize BLAST tuning recommendations that apply to WAN connections.
- Summarize BLAST tuning recommendations that apply to work-from-home and home-office-tocloud use cases.
- Describe recommended tuning options to increase display protocol quality for all use cases and applications.

# 13 Horizon Connections Troubleshooting

- Explain Horizon Connections.
- Describe the role of Primary and Secondary protocols in Horizon Connections.
- Describe HTML Client Access Connections.
- Describe Horizon Connections Load Balancing.
- Describe timeout settings, supported health monitoring string, and suitable Load balancer persistence values.
- Identify troubleshooting steps for failing Horizon Load Balancer connections.
- List troubleshooting steps for Horizon Connections.

#### 14 Horizon Certificates Troubleshooting

- List Horizon certificate functions.
- Describe Horizon certificates scenarios.
- Discuss potential challenges related to certificates in Horizon
- Describe the troubleshooting approach to Horizon certificates issues

## 15 Cloud Pod Architecture Troubleshooting

Describe Cloud Pod Architecture troubleshooting scenarios

#### Contact

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



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