

# Horizon Troubleshooting Bootcamp

## TARGET AUDIENCE

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

## DELIVERY METHOD

- Classroom
- Live Online
- Private Training
- On Demand

## COURSE DURATION

Five (5) days

## MAPPED CERTIFICATION

- Omnissa Certified Professional Desktop (OCPD)

## PREREQUISITES

- Horizon Deploy and Manage

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

- Use vSphere Web Client
- Configure Windows systems to enable Remote Desktop Connections

## Course Overview

Horizon Troubleshooting Bootcamp is a five-day combination course of Horizon Virtual Desktop Troubleshooting & Horizon Infrastructure Troubleshooting. This training collection gives you the hands-on skills in resolving common issues that occur in a Horizon® environment.

You will engage in a series of lab exercises to bring existing environment issues to resolution. The exercises mirror real-world troubleshooting use cases. These exercises equip learners with the knowledge and practical skills to manage typical challenges faced by Tier 1 virtual desktop administrators and operators, as well as advanced knowledge, skills, and abilities to troubleshoot Horizon infrastructure. This workshop teaches the required skill and competence for troubleshooting Horizon Connection Server, Unified Access Gateway, protocols, connections, and certificates. Horizon Troubleshooting bootcamp provides two challenge labs designed to present participants with virtual desktops and 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 this session, attendees should be able to:

- Implement a structured approach to troubleshooting
- Resolve common issues that occur in a Horizon environment
- Describe key Horizon Connection Server features that are available as CLI options with the vdmadmin command
- Identify the log locations for each Horizon component
- Identify procedures to diagnose and fix problems related to the creation and use of machines and desktop pools
- Discuss the Logon Monitor requirements
- Explain how to optimize Horizon Windows desktops
- Discuss how to troubleshoot problems related to Instant cloned machines
- Identify steps that you can follow to solve problems related to Horizon Client
- Discuss troubleshooting techniques for common client connection issues
- Discuss troubleshooting steps applicable to device redirection in Horizon
- Discuss Connection Server advanced configurations
- List troubleshooting techniques for Connection Server common issues
- Interpret Horizon Connection Server logs
- Identify UAG configuration and certificate issues
- List troubleshooting steps for UAG common issues
- Describe BLAST configuration verification using logs and settings
- Describe different security options for the Horizon environment.
- Describe BLAST optimization recommendations for different use cases

- Describe Horizon Connections and how to troubleshoot related issues
- Describe Horizon Certificates
- List troubleshooting steps for Horizon certificates common issues
- Describe Cloud Pod Architecture troubleshooting scenarios
- Identify and fix problems in a Horizon environment

## Course Modules

### 1 Course Introduction

- Introductions and course logistics
- Course objectives

### 2 Overview of Virtual Desktop and Application Virtualization Troubleshooting

- Identify Horizon architecture and supportability using Horizon Documentation
- Apply systematic troubleshooting methods to logically diagnose faults by collecting valid and accurate information regarding the environment and problems
- Identify the different approaches to take when a problem occurs and how to document them

### 3 Command-Line Tools and Backup Options

- Describe key Horizon Connection Server features that are available as CLI options with the vdmadmin command
- Identify and collect the log locations for each Horizon component
- Describe the Horizon backup and restore and its benefits
- Identify the Database reporting functionality and the steps to resolve inconsistencies

### 4 Troubleshooting Machines and Desktops

- Identify the information captured in the Help Desk Tool
- List the procedures to diagnose and fix problems encountered when creating or using machines and desktop pools
- Identify procedures you can follow to diagnose and fix problems while creating and using Linux desktops

### 5 Horizon End User Performance and Optimization

- Discuss the Logon Monitor requirements
- Describe the Logon Monitor configuration
- List the Logon Monitor metrics
- Identify the advantages of image optimization
- Explain how to optimize Horizon Windows desktops

### 6 Troubleshooting Instant Clones

- Describe how instant clones are created
- Explain what gets logged when an instant clone is created
- Identify the keywords to look for in logs when troubleshooting instant clones
- Discuss how to troubleshoot problems with instant clones

### 7 Troubleshooting Horizon Client

- Identify steps that you can follow to solve problems related to Windows Horizon Client
- Identify steps to solve problems related to Horizon Client for Linux
- Identify steps that you can follow to solve problems related to Horizon HTML Access
- Identify steps to solve problems related to Horizon Client for Mac

### 8 Troubleshooting Common Client Connection Issues

- Identify the key ports in the Horizon environment
- Discuss how to troubleshoot black screen problems

### 9 Troubleshooting Device Redirection

- List troubleshooting steps applicable to USB Redirection issue
- Discuss Nested RDSH Redirection

### 10 Troubleshooting Horizon Connection Server

- Identify general troubleshooting techniques for Horizon Connection Server
- Explain how to use logs to identify common Horizon Connection Server problems
- Describe Active Directory (AD) Lightweight Directory Service (LDS) Replication
- Discuss Horizon Connection Server Replication common issues
- Explain how to interpret Horizon Connection Server logs
- Compare successful and unsuccessful logs from common infrastructure administration tasks

### 11 Troubleshooting Unified Access Gateway

- List and identify common UAG deployment issues
- Explain how to monitor the health of a Unified Access Gateway deployment
- Identify and Troubleshoot UAG certificate issues
- Explain how to monitor, test, and troubleshoot network errors using tcpdump and curl
- Detail general Unified Access Gateway troubleshooting methods

### 12 BLAST Configuration

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

### 13 Optimizing BLAST

- 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-to-cloud use cases
- Describe recommended tuning options to increase display protocol quality for all use cases and applications

### 14 Troubleshooting Horizon Connections

- 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 the steps for troubleshooting Horizon connections

### 15 Troubleshooting Horizon Certificates

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

### 16 Cloud Pod Architecture

- Describe Cloud Pod Architecture troubleshooting scenarios