New Horizons®
Learning Centres

VMware vSphere: Troubleshooting Workshop

Duration: **5 Days**

Overview:

This hands-on training workshop provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 6 environment. This workshop increases your skill and competence in using the command-line interface, VMware vSphere® Web Client, VMware vRealize™ Log Insight™, and other tools to analyse and solve problems.

This workshop is based on VMware ESXi™ 6 and VMware vCenter Server™ 6

Target Audience:

System Administrators and System Integrators

Pre-requisites:

This course requires the following prerequisites:

- VMware certified professional 6- Data Center Virtualisation (VCP6-DCV)
- VMware vSphere: Fast Track [V6]
- VMware vSphere: Optimise and Scale [V6]
- Equivalent knowledge and administration experience with ESXi and vCenter Server Experience in working with a command-line interface is highly recommended

Module 1: Course Introduction

- Understand the course objectives
- Understand the scope and topics covered by the course
- Become familiar with online technical resources
- Become familiar with the VMware education system and certification tracks

Module 2: Introduction to Troubleshooting

- Identify the effects of a system problem
- Define the troubleshooting scope
- Use a structured approach
- Understand the troubleshooting principles
- Follow a logical troubleshooting procedure
- Troubleshooting examples

Module 3: Troubleshooting Tools

- Use command-line tools to identify and troubleshoot problems
- Use VMware vSphere® Management Assistant
- Find and interpret important log files
- Export relevant log files for technical support
- Use vRealize Log Insight for log aggregation and problem analysis
- Use vRealize Log Insight for efficient log search

Module 4: Networking

- Identify the symptoms of network-related problems
- Analyse and resolve standard and distributed switch issues
- Analyse virtual machine connectivity issues and restore them
- Examine common management network connectivity issues and restore configurations
- Identify and prevent potential problems

Module 5: Storage

- Troubleshoot storage (iSCSI, NFS, VMware vSphere® VMFS, and VMware Virtual SAN™) connectivity problems
- Analyse hardware malfunction and software misconfiguration scenarios
- Identify multipathing-related issues, including PDL and APD
- Analyse possible causes, recover from the faulty conditions, and restore storage visibility

Module 6: vSphere Clusters

- Identify and recover from issues related to vSphere HA
- Analyse and troubleshoot various types of vSphere vMotion issues related to virtual machine migrations
- Discuss and recover from vSphere DRS problems to achieve proper function and balanced resource use
- Examine vSphere cluster failure scenarios and possible solutions

Module 7: vCenter Server and ESXi

- Understand the vCenter Server and VMware Platform Services Controller™ architecture in vSphere 6
- Identify and resolve authentication issues
- Troubleshoot VMware Certificate Authority and certificate store issues
- Analyse and fix vCenter Server services issues
- Examine ESXi host and vCenter Server Failure scenarios and resolve the issues

Module 8: Virtual Machines

- Analyse and resolve common virtual machine snapshot issues
- Identify possible causes and resolves virtual machine power-on issues
- Troubleshoot virtual machine connection state issues
- Resolve problems seen during VMware Tools™ installations
- Examine failure scenarios and provide solutions