



## **VMware vSphere: Troubleshooting Workshop [V6.0]**

### *Outline for this course:*

#### **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

#### **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

#### **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

#### **4. Networking**

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

#### **5. Storage**

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

#### **6. vSphere Clusters**

- Identify and recover from issues related to vSphere HA
- Analyze 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

#### **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
- Analyze and fix vCenter Server services issues
- Examine ESXi host and vCenter Server failure scenarios and resolve the issues

#### **8. Virtual Machines**

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