VMware vSphere: Troubleshooting Workshop V6.5

Course Details

Course Outline

1. **Course Introduction**

   - Introductions and course logistics

   - Course objectives

   - Describe the content of this course

   - Gain a complete picture of the VMware certification system

   - Familiarize yourself with the benefits of the VMware Education Learning Zone

   - Identify additional resources

2. **Introduction to Troubleshooting**

   - Identify the effects of a system problem

   - Define the scope of troubleshooting

   - Use a structured approach

   - Understand the principles of troubleshooting

   - Follow a logical troubleshooting procedure

   - Examine examples of troubleshooting

3. **Troubleshooting Tools**

   - Use command-line tools to identify and troubleshoot problems

   - Use VMware vSphere® Management Assistant

   - Find and interpret important log files

   - Use vRealize Log Insight for log aggregation, efficient log search, and problem analysis

4. **Networking**

   - Identify the symptoms of network-related problems

   - Analyze and resolve standard switch and distributed switch problems

   - Analyze virtual machine connectivity problems and fix them

   - Examine common management network connectivity problems and restore configurations

   - Identify and prevent potential problems

5. **Storage**

   - Troubleshoot storage (iSCSI, NFS, VMware vSphere® VMFS, VMware vSAN, and VMware vSphere® Virtual Volumes) connectivity problems

   - Analyze storage-related logs

   - Analyze hardware malfunction and software misconfiguration scenarios

   - Identify multipathing-related problems, including permanent device loss (PDL) and all paths down (APD)

   - Analyze possible causes, recover from the faulty conditions, and restore storage visibility

6. **vSphere Clusters**

   - Identify and recover from problems related to vSphere HA

   - Analyze and troubleshoot various types of vSphere vMotion problems 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. **Virtual Machines**

   - Analyze and resolve common virtual machine snapshot problems

   - Identify possible causes and resolve virtual machine power-on problems

   - Troubleshoot virtual machine connection state problems

   - Resolve problems seen during VMware Tools installations

   - Examine failure scenarios and provide solutions

8. **vCenter Server and ESXi**

   - Understand the vCenter Server and VMware Platform Services Controller architecture in vSphere 6.x

   - Identify and resolve authentication problems

   - Troubleshoot VMware Certificate Authority and certificate problems

   - Analyze and fix problems with vCenter Server services

   - Analyze and fix vCenter Server database problems

   - Identify VMware vCenter Server® High Availability problems

   - Examine ESXi host and vCenter Server failure scenarios and resolve the problems