VMware vSphere: Troubleshooting

Course Overview

This five-day, hands-on training course provides you with the advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 7.x environment. This workshop increases your skill and competence in using the command-line interface, VMware vSphere® Client™, log files, and other tools to analyze and solve problems.

Course Objectives

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

- Introduce troubleshooting principles and procedures
- Use command-line interfaces, log files, and the vSphere Client to diagnose and resolve problems in the vSphere environment
- Describe the benefits and capabilities of VMware Skyline
- Explain the purpose of key vSphere log files
- Identify networking problems based on reported symptoms, validate, and troubleshoot the reported problem, identify the root cause, and implement the appropriate resolution
- Analyze storage failure scenarios using a logical troubleshooting methodology, identify the root cause, and apply the appropriate resolution to resolve the problem
- Troubleshoot vSphere cluster failure scenarios and analyze possible causes
- Diagnose common VMware vSphere® High Availability problems and provide solutions
- Identify and validate VMware ESXi™ host and VMware vCenter Server® problems, analyze failure scenarios, and select the correct resolution
- Troubleshoot virtual machine problems, including migration problems, snapshot problems, and connection problems
- Troubleshoot performance problems with vSphere components

Target Audience

- System administrators
- System integrators

Prerequisites

This course requires completion of one of the following prerequisites:

- VMware vSphere: Fast Track [V6.x] or [V7]
- VMware vSphere: Install, Configure, Manage [V6.x] or [V7]
- VMware vSphere: Optimize and Scale [V6.x] or [V7]
- Equivalent knowledge and administration experience with ESXi and vCenter Server

Experience in working with a command-line interface is highly recommended.

Certifications

Attending this course meets the training requirement to achieve the following certification:

- VMware Certified Professional – Data Center Virtualization (VCP-DCV)

Attending this course is also recommended if you aim to achieve the following certification:

- VMware Certified Advanced Professional – Data Center Virtualization (VCAP-DCV) Deploy

Course Delivery Options

- Classroom
- Live Online
- Onsite

Product Alignment

- VMware ESXi 7
- VMware vCenter Server 7

Course Modules

1 Course Introduction
- Introductions and course logistics
- Course objectives

2 Introduction to Troubleshooting
- Define the scope of troubleshooting
- Use a structured approach to solve configuration and operational problems
- Apply a troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

3 Troubleshooting Tools
- Use command-line tools (such as ESXCLI) to identify and troubleshoot vSphere problems
- Identify important vSphere log files and interpret the log file contents
- Describe the benefits and capabilities of VMware Skyline
- Explain how VMware Skyline works
- Identify uses for Skyline Advisor

4 Troubleshooting Virtual Networking
- 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

5 Troubleshooting Storage
- Troubleshoot and resolve storage (iSCSI, NFS, and VMware vSphere® VMFS) connectivity and configuration problems
- Analyze and resolve common VM snapshot problems
- Identify and resolve multipathing-related problems, including common causes of permanent device loss (PDL) and all paths down (APD) event problems

6 Troubleshooting vSphere Clusters
- Identify and recover from problems related to vSphere HA

- Analyze and resolve VMware vSphere® vMotion® configuration and operational problems
- Analyze and resolve common VMware vSphere® Distributed Resource Scheduler™ problems

7 Troubleshooting Virtual Machines
- Identify, analyze, and solve virtual machine snapshot problems
- Troubleshoot virtual machine power-on problems
- Identify possible causes and troubleshoot virtual machine connection state problems
- Diagnose and recover from VMware Tools™ installation failures

8 Troubleshooting vCenter Server and ESXi
- Analyze and fix problems with vCenter Server services
- Diagnose and troubleshoot vCenter Server database problems
- Examine ESXi host and vCenter Server failure scenarios and resolve the problems

Contact

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