

VMware vSphere: Troubleshooting [V8]

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 troubleshooting methodology to diagnose faults and make troubleshooting efficient

3 Troubleshooting Tools

- Identify the utilities and tools used to run commands
- Identify how to access the vSphere ESXi shell
- Run commands to view, configure, and manage vSphere components
- Use Standalone ESXCLI for troubleshooting
- Run ESXCLI commands from the Standalone ESXCLI tool
- Use Data Center CLI commands for troubleshooting
- Run commands to view, configure, and manage your vSphere components
- Identify the best tool to use for CLI troubleshooting
- Locate important log files
- Identify how to use log files in troubleshooting
- Describe the benefits and capabilities of VMware Skyline™
- Explain how VMware Skyline works at a high-level
- Identify the types of health information provided by Skyline™ Health
- Identify uses for VMware Skyline™ Advisor
- Describe the support bundle REST API
- Use the support bundle REST API

4 Troubleshooting Virtual Networking

- Analyze and troubleshoot standard switch problems

- Analyze and troubleshoot virtual machine connectivity problems
- Analyze and troubleshoot management network problems
- Analyze and troubleshoot distributed switch problems

5 Troubleshooting Storage

- Recognize components in the vSphere storage architecture
- Identify the possible causes of problems in the various types of datastores
- Analyze the common storage connectivity and configuration problems and discuss the possible causes
- Resolve the storage connectivity problems, correct misconfigurations, and restore LUN visibility
- Analyze log file entries to identify the root cause of storage problems
- Use ESXi and Linux commands to troubleshoot storage problems
- Investigate ESXi storage issues
- Troubleshoot virtual machine snapshots
- Troubleshoot storage performance problems
- Recognize how multipathing works
- Identify the common causes of missing paths
- Resolve the missing path problems between hosts and storage devices

6 Troubleshooting vSphere Clusters

- Identify and troubleshoot potential vSphere HA problems
- Analyze and solve vSphere potential vMotion problems
- Diagnose and troubleshoot potential vSphere DRS problems

7 Troubleshooting Virtual Machines

- Describe virtual machine files
- Identify, analyze, and solve virtual machine snapshot problems
- Discuss virtual machine files and disk content IDs
- 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 resolve vCenter service problems
- Diagnose and troubleshoot vCenter database problems
- Use vCenter appliance shell and the Bash shell to identify and solve problems
- Identify and troubleshoot ESXi host problems

Length

5 Days

Audience

System architects and system administrators

Products

VMware vSphere

Prerequisites

This course requires completion of one the following courses:

- VMware vSphere: Fast Track
- VMware vSphere: Install, Configure, Manage
- VMware vSphere: Operate, Scale and Secure

The course material presumes that you can perform the following tasks with no assistance or guidance before enrolling in this course:

- Install and configure ESXi
- Install vCenter Server
- Create vCenter Server objects, such as data centers and folders
- Create and modify a standard switch
- Create and modify a distributed switch
- Connect an ESXi host to NAS, iSCSI, or Fibre Channel storage
- Create a VMware vSphere VMFS datastore
- Modify a virtual machine's hardware
- Migrate a virtual machine with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®

- Configure and manage a VMware vSphere® Distributed Resource Scheduler™ cluster
- Configure and manage a VMware vSphere HA cluster
- Basic knowledge of command line tools like ESXCLI, DCLI, and PowerCLI