

VMware vSphere: Troubleshooting [V8]

Duration 5 Days

COURSE DESCRIPTION

This five-day training course provides you with the knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere® 8 environment. This course increases your skill level and competence in using the command-line interface, VMware vSphere® Client™, log files, and other tools to analyze and solve problems.

Product Alignment

- VMware ESXi 8.0
- VMware vCenter Server 8.0

COURSE OBJECTIVES

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

- Describe troubleshooting principles and procedures
- Use the vSphere Client, the command line, and log files to configure, diagnose, and correct problems in vSphere
- Explain the key vSphere log files from troubleshooting perspective
- Describe the benefits and capabilities of VMware Skyline
- Identify the networking issues by examining the reported symptoms, and troubleshoot the reported problems
- Identify the storage issues by examining the reported symptoms, and troubleshoot the reported problems
- Troubleshoot vSphere cluster failure scenarios and analyze possible causes
- Diagnose common VMware vSphere® High Availability (vSphere HA) problems and provide solutions
- Troubleshoot virtual machine problems, including migration problems, snapshot problems, and connectivity problems
- Identify VMware ESXi™ host and VMware vCenter Server® problems, analyze failure scenarios, and find resolutions
- Troubleshoot performance problems with vSphere components

COURSE OUTLINE

Module 1: Course Introduction

- Introductions and course logistics
- Course objectives

Module 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

Module 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

Module 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

Module 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

Module 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

Module 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

WHO SHOULD ATTEND

- System administrators
- System architects

PREREQUISITES

This course requires completion of one of the following prerequisites:

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