

VMware vSphere: Troubleshooting [V7]

Course Duration: 40 Hours (5 Days)

Overview

The VMware vSphere Troubleshooting [V7] course is a comprehensive training program designed to equip learners with the knowledge and skills necessary to identify and resolve issues within the VMware vSphere environment. This course covers a structured approach to troubleshooting, including the use of Command-line tools, Interpreting log files, and utilizing VMware Skyline for proactive problem resolution. Starting with an introduction to Troubleshooting methodologies, the course progresses through a series of modules that delve into the specifics of troubleshooting Virtual networking, Storage, vSphere clusters, Virtual machines, vCenter Server, and ESXi. Each module focuses on practical lessons to resolve common issues encountered in these areas. By the end of the course, participants will have a solid foundation in VMware vSphere troubleshooting training, making them adept at diagnosing and fixing a wide range of problems. This will ensure minimal downtime and optimal performance in their virtual environments, leveraging the capabilities of VMware vSphere Troubleshooting V7 to maintain robust IT infrastructures.

Audience Profile

The VMware vSphere: Troubleshooting [V7] course is designed for IT professionals seeking to master vSphere problem-solving techniques. Target audience for the VMware vSphere: Troubleshooting [V7] course:

- System Administrators managing VMware vSphere environments
- IT Operations Personnel responsible for ESXi hosts and vCenter Server
- Systems Engineers who need to troubleshoot vSphere configurations and performance
- VMware Certified Professionals (VCPs) looking to deepen their troubleshooting skills
- Network Administrators overseeing virtual networks within vSphere
- Storage Administrators managing vSphere storage resources
- Technical Support Personnel providing backend support for a vSphere infrastructure
- IT Consultants who design or deploy vSphere environments
- Data Centre Operations staff involved in the day-to-day management of vSphere resources
- Virtualization Specialists tasked with maintaining and optimizing virtual environments

Course Syllabus

Course Introduction

- Introductions and course logistics
- Course objectives

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

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

Troubleshooting Virtual Networking

- Analyse and resolve standard switch and distributed switch problems
- Analyse virtual machine connectivity problems and fix them
- Examine common management network connectivity problems and restore configurations

Troubleshooting Storage

- Troubleshoot and resolve storage (iSCSI, NFS, and VMware vSphere® VMFS) connectivity and configuration problems
- Analyse 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

Troubleshooting vSphere Clusters

- Identify and recover from problems related to vSphere HA
- Analyse and resolve VMware vSphere® vMotion® configuration and operational problems
- Analyse and resolve common VMware vSphere®
- Distributed Resource Scheduler™ problems

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

Troubleshooting vCenter Server and ESXi

- Analyse 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