VMware vSphere: Troubleshooting [v8.0]

Specs

- 5 Days
- Lecture and Hands-on Labs

Course Overview

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® ClientTM, log files, and other tools to analyze and solve problems.

Review this course online at https://www.alta3.com/courses/vstrb8

Who Should Attend

Audience

- System architects
- System administrators

What You'll Learn

Objectives

- Introduce troubleshooting principles and procedures.
- Use command-line interfaces to diagnose and resolve issues.
- Identify and implement resolutions for networking and storage problems.
- Analyze and solve common VMware vSphere cluster issues.

Outline

Module 1: Course Introduction

1. Introductions and course logistics
2. Course objectives #### Module 2: Introduction to Troubleshooting
3. Define the scope of troubleshooting
4. Use a structured approach to solve configuration and operational problems
5. Apply troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency #### Module 3: Troubleshooting Tools
6. Discuss the various methods to run commands
7. Discuss the various ways to access ESXi Shell
8. Use commands to view, configure, and manage your vSphere components
9. Use the vSphere CLI
10. Use ESXCLI commands from the vSphere CLI
11. Use Data Center CLI commands

12. Identify the best tool for command-line interface troubleshooting
13. Identify important log files for troubleshooting vCenter Server and ESXi
14. Describe the benefits and capabilities of VMware Skyline
15. Explain how VMware Skyline works
16. Describe VMware Skyline Health
17. Describe VMware Skyline Advisor #### Module 4: Troubleshooting Virtual Networking
18. Analyze and troubleshoot standard switch problems
19. Analyze and troubleshoot virtual machine connectivity problems
20. Analyze and troubleshoot management network problems
21. Analyze and troubleshoot distributed switch problems #### Module 5: Troubleshooting Storage
22. Discuss the vSphere storage architecture
23. Identify the possible causes of problems in the various types of datastores
24. Analyze the common storage connectivity and configuration problems
25. Discuss the possible storage problems causes
26. Solve the storage connectivity problems, correct misconfigurations, and restore LUN visibility
27. Review vSphere storage architecture and functionality necessary to troubleshoot storage problems
28. Use ESXi and Linux commands to troubleshoot storage problems
29. Analyze log file entries to identify the root cause of storage problems
30. Investigate ESXi storage issues
31. Troubleshoot VM snapshots
32. Troubleshoot storage performance problems
33. Review multipathing
34. Identify the common causes of missing paths, including PDL and APD conditions
35. Solve the missing path problems between hosts and storage devices #### Module 6: Troubleshooting vSphere Clusters
36. Identify and troubleshoot vSphere HA problems
37. Analyze and solve vSphere vMotion problems
38. Diagnose and troubleshoot common vSphere DRS problems #### Module 7: Troubleshooting Virtual Machines
39. Discuss virtual machine files and disk content IDs
40. Identify, analyze, and solve virtual machine snapshot problems
41. Troubleshoot virtual machine power-on problems
42. Identify possible causes and troubleshoot virtual machine connection state problems
43. Diagnose and recover from VMware Tools installation failures #### Module 8: Troubleshooting vCenter Server and ESXi
44. Analyze and solve vCenter Server service problems
45. Diagnose and troubleshoot vCenter Server database problems
46. Use vCenter Server Appliance shell and the Bash shell to identify and solve problems
47. Identify and troubleshoot ESXi host problems

Prerequisites

Prereq

- Completion of VCP-DCV certification, VMware vSphere: Install, Configure, Manage, or VMware vSphere: Operate, Scale and Secure course
- Ability to install and configure ESXi and vCenter Server
- Create vCenter Server objects, standard and distributed switches
- Connect an ESXi host to storage solutions like NAS, iSCSI, or Fibre Channel
- Create a VMware vSphere VMFS datastore and modify virtual machine hardware
- Migrate virtual machines with VMware vMotion and VMware vStorage vMotion
- Configure and manage a VMware vSphere Distributed Resource Scheduler cluster and High Availability cluster