CO1 COMPENDIUM CENTRUM EDUKACYJNE

Szkolenie: HPE
VMware vSphere: Troubleshooting [V8]

HPE

Cel szkolenia:

This training course provides the knowledge, skills, and abilities to troubleshoot the VMware vSphere® 8 environment. This course increases your skill level and competence in using the commandline interface, VMware vSphere® Client™, log files, and other tools to analyze and solve problems.

Course objectives

By the end of this course, you will be able to:

- Introduce troubleshooting principles and procedures
- Use command-line interfaces, log files, and the vSphere Client to diagnose and resolve problems in the vSphere environment
- Explain the purpose of common vSphere log files
- Identify networking issues based on reported symptoms
- Validate and troubleshoot the reported networking issue
- Identify the root cause of a networking issue
- Implement the appropriate resolution to recover from networking problems
- Analyze storage failure scenarios using a logical troubleshooting methodology
- Identify the root cause of storage failure
- Apply the appropriate resolution to resolve storage failure problems
- Troubleshoot vSphere cluster failure scenarios
- Analyze possible vSphere cluster failure causes
- Diagnose common VMware vSphere® High Availability problems and provide solutions
- Identify and validate VMware ESXi™ host and VMware vCenter® problems
- Analyze failure scenarios of ESXi host and vCenter problems
- Select the correct resolution for the failure of ESXi host and vCenter problems
- Troubleshoot virtual machine problems, including migration problems, snapshot problems, and connection problems
- Troubleshoot performance problems with vSphere components

Audience

- System architects and system Administrators

Plan szkolenia:

- 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 troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

- Troubleshooting Tools
  - Discuss the various methods to run commands
  - Discuss the various ways to access ESXi Shell
  - Use commands to view, configure, and manage your vSphere components
  - Use the vSphere CLI
  - Use ESXCLI commands from the vSphere CLI
  - Use Data Center CLI commands
  - Identify the best tool for command-line interface troubleshooting
  - Identify important log files for troubleshooting vCenter Server and ESXi
  - Describe the benefits and capabilities of VMware Skyline™
  - Explain how VMware Skyline works
  - Describe VMware Skyline™ Health
  - Describe VMware Skyline Advisor™

- 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

- Troubleshooting Storage
  - Discuss vSphere storage architecture
  - Identify possible causes of problems in the various types of datastores
  - Analyze common storage connectivity and configuration problems
  - Discuss possible storage problems causes
  - Solve storage connectivity problems, correct misconfigurations, and restore LUN visibility
  - Review vSphere storage architecture and functionality necessary to troubleshoot storage

problems

- Use ESXi and Linux commands to troubleshoot storage problems
- Analyze log file entries to identify the root cause of storage problems
- Investigate ESXi storage issues
- Troubleshoot VM snapshots
- Troubleshoot storage performance problems
- Review multipathing
- Identify common causes of missing paths, including PDL and APD conditions
- Solve missing path problems between hosts and storage devices

- Troubleshooting vSphere Clusters
  - Identify and troubleshoot vSphere HA problems
  - Analyze and solve vSphere vMotion problems
  - Diagnose and troubleshoot common vSphere DRS problems

- Troubleshooting Virtual Machines
  - Discuss virtual machine files and disk content IDs
  - 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
  - Analyze and solve vCenter Server service problems
  - Diagnose and troubleshoot vCenter Server database problems
  - Use vCenter Server Appliance shell and the Bash shell to identify and solve problems
  - Identify and troubleshoot ESXi host problems

Wymagania:

This course requires completion of one the following courses:

- VCP-DCV certification
- 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 High Availability cluster
- Basic knowledge of command line tools like ESXCLI, DCLI, and PowerCLI

If you cannot complete these tasks, VMware recommends that you take the VMware vSphere: Install, Configure, Manage [V8] course instead.

Poziom trudności

Certyfikaty:

After completing the course, participants receive a certificate of completion of an authorized VMware course.

Prowadzący:

Authorized VMware Trainer.