

Szkolenie: HPE

VMware vSphere: Optimize and Scale plus Troubleshooting Fast Track



W celu przeprowadzenia kalkulacji ceny tego szkolenia prosimy o kontakt z działem handlowym

Cel szkolenia:

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

- Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- Manage changes to the vSphere environment
- Optimize the performance of all vSphere components
- Use VMware vSphere® ESXi™ Shell and VMware vSphere® Command-Line Interface to manage vSphere
- Harden the vSphere environment against security threats
- Use VMware vSphere® Client™, the command-line interface, and log files to diagnose and correct problems in vSphere
- Troubleshoot networking, storage, VMware vCenter Server®, VMware ESXi™ host, vSphere cluster, VMware vSphere® vMotion®, and virtual machine problems

Audience

- Experienced system administrators
- System engineers
- System integrators

Plan szkolenia:

- Course Introduction
 - Introductions and course logistics
 - Course objectives
- Introduction to Troubleshooting
 - Identify the effects of a system problem
 - Define the scope of troubleshooting
 - Use a structured approach
 - Understand the principles of troubleshooting

- Follow a logical troubleshooting procedure
- Examine examples of troubleshooting
- Troubleshooting Tools
 - Use command-line tools to identify and troubleshoot problems
 - Use vSphere CLI
 - Find and interpret important log files
 - Use VMware vRealize® Log Insight™ for log aggregation, efficient log search, and problem analysis
- Network Optimization
 - Explain the performance features of network adapters
 - Explain the performance features of vSphere networking
 - Use esxtop to monitor key network performance metrics
- Networking Troubleshooting
 - Identify the symptoms of network-related problems
 - Analyze and resolve standard switch and distributed switch problems
 - Analyze virtual machine connectivity problems and fix them
 - Examine common management network connectivity problems and restore configurations
 - Identify and prevent potential problems
- Storage Optimization
 - Describe storage queue types and other factors that affect storage performance
 - Use esxtop to monitor key storage performance metrics
- Storage Troubleshooting
 - Troubleshoot storage (iSCSI, NFS, VMware vSphere® VMFS, VMware vSAN™, and VMware vSphere® Virtual Volumes™) connectivity problems
 - Analyze storage-related logs
 - Analyze hardware malfunction and software misconfiguration scenarios
 - Identify multipathing-related problems, including permanent device loss (PDL) and all paths down (APD)
 - Analyze possible causes, recover from the faulty conditions, and restore storage visibility
- CPU Optimization
 - Explain the CPU scheduler operation and other features that affect CPU performance
 - Explain NUMA and vNUMA support
 - Use esxtop to monitor key CPU performance metrics
- Memory Optimization
 - Explain ballooning, memory compression, and host-swapping techniques for memory reclamation when memory is overcommitted

- Use esxtop to monitor key memory performance metrics
- vCenter Server Performance Optimization
 - Describe the factors that influence vCenter Server performance
 - Use VMware vCenter® Server Appliance™ tools to monitor resource usage
- vSphere Cluster Troubleshooting
 - Identify and recover from problems related to VMware vSphere® High Availability
 - Analyze and troubleshoot various types of vSphere vMotion problems related to virtual machine migrations
 - Discuss and recover from VMware vSphere® Distributed Resource Scheduler™ problems to achieve proper function and balanced resource use
 - Examine vSphere cluster failure scenarios and possible solutions
- Virtual Machine Troubleshooting
 - Analyze and resolve common virtual machine snapshot problems
 - Identify possible causes and resolve virtual machine power-on problems
 - Troubleshoot virtual machine connection state problems
 - Resolve problems seen during VMware Tools™ installations
 - Examine failure scenarios and provide solutions
- vSphere Security
 - Configure ESXi host access and authorization
 - Secure ESXi, vCenter Server, and virtual machines
 - Use VMware Certificate Authority to configure vSphere certificate management
 - Configure vSphere to encrypt virtual machines, core dumps and VMware vSphere® vMotion® migrations
- vCenter Server and ESXi Troubleshooting
 - Understand the vCenter Server and VMware Platform Services Controller™ architecture in vSphere 6.x
 - Identify and resolve authentication problems
 - Troubleshoot VMware Certificate Authority and certificate problems
 - Analyze and fix problems with vCenter Server services
 - Analyze and fix vCenter Server database problems
 - Identify VMware vCenter Server® High Availability problems
 - Examine ESXi host and vCenter Server failure scenarios and resolve the problems

Wymagania:

This course requires completion of one of the following prerequisites:

- Understanding of concepts presented in the VMware vSphere®: Install, Configure, Manage

[V6.7] course

- Equivalent knowledge and administration experience with ESXi and vCenter Server

Poziom trudności



Certyfikaty:

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

Prowadzący:

Authorized VMware Trainer.