

Szkolenie: HPE
VMware vSphere: Fast Track [V8]



DOSTĘPNE TERMINY

2024-12-02 | 5 dni | Warszawa / Wirtualna sala

Cel szkolenia:

This extended course takes you from introductory to advanced VMware vSphere® 8 management skills. Building on the installation and configuration content from our best-selling course, you develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you install, configure, and manage vSphere 7. You explore the features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 8, which includes VMware ESXi™ 8 and VMware vCenter Server® 8.

Course objectives

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

- Install and configure ESXi hosts
- Deploy and configure vCenter
- Use the vSphere client to create the vCenter inventory and assign roles to vCenter users
- Configure vCenter High Availability
- Create and configure virtual networks using vSphere standard switches and distributed switches
- Create and configure datastores using storage technologies supported by vSphere
- Use the vSphere client to create virtual machines, templates, clones, and snapshots
- Configure and manage a VMware Tools Repository
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource use
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability and vSphere Distributed Resource Scheduler
- Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date
- Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- Use host profiles to manage VMware ESXi host compliance

- Monitor the vCenter, ESXi, and VMs' performance in the vSphere client

Audience

- System administrators
- System engineers

Plan szkolenia:

- Course Introduction
 - Introduction and course logistics
 - Course objectives
- vSphere and Virtualization Overview
 - Explain basic virtualization concepts
 - Describe how vSphere fits in the software-defined data center and the cloud infrastructure
 - Recognize the user interfaces for accessing vSphere
 - Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
 - Install an ESXi host
- vCenter Management
 - Recognize ESXi hosts communication with vCenter
 - Deploy vCenter Server Appliance
 - Configure vCenter settings
 - Use the vSphere client to add and manage license keys
 - Create and organize vCenter inventory objects
 - Recognize the rules for applying vCenter permissions
 - View vSphere tasks and events
 - Create a vCenter backup schedule
 - Recognize the importance of vCenter High Availability
 - Explain how vCenter High Availability works
- Configure and Manage vSphere Networking
 - Configure and view standard switch configurations
 - Configure and view distributed switch configurations
 - Recognize the difference between standard switches and distributed switches
 - Explain how to set networking policies on standard and distributed switches
- Configure and Manage vSphere Storage
 - Recognize vSphere storage technologies
 - Identify types of vSphere datastores

- Describe fibre channel components and addressing
- Describe iSCSI components and addressing
- Configure iSCSI storage on ESXi
- Create and manage VMFS datastores
- Configure and manage NFS datastores
- Discuss vSphere support for NVMe and iSER technologies
- Deploying Virtual Machines
 - Create and provision VMs
 - Explain the importance of VMware tools
 - Identify the files that make up a VM
 - Recognize the components of a VM
 - Navigate the vSphere client and examine VM settings and options
 - Modify VMs by dynamically increasing resources
 - Create VM templates and deploy VMs from them
 - Clone VMs
 - Create customization specifications for guest operating systems
 - Create local, published, and subscribed content libraries
 - Deploy VMs from content libraries
 - Manage multiple versions of VM templates in content libraries
- Managing Virtual Machines
 - Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
 - Migrate VMs using vSphere vMotion
 - Describe the role of Enhanced vMotion Compatibility in migrations
 - Migrate VMs using vSphere Storage vMotion
 - Take a snapshot of a VM
 - Manage, consolidate, and delete snapshots
 - Describe CPU and memory concepts in relation to a virtualized environment
 - Describe how VMs compete for resources
 - Define CPU and memory shares, reservations, and limits
 - Recognize the role of a VMware Tools Repository
 - Configure a VMware Tools Repository
 - Recognize the backup and restore solution for VMs
- vSphere Cluster Management
 - Use Cluster Quickstart to enable vSphere cluster services and configure the cluster
 - View information about a vSphere cluster

- Explain how vSphere DRS determines VM placement on hosts in the cluster
- Recognize use cases for vSphere DRS settings
- Monitor a vSphere DRS cluster
- Describe how vSphere HA responds to different types of failures
- Identify options for configuring network redundancy in a vSphere HA cluster
- Recognize the use cases for various vSphere HA settings
- Configure a cluster enabled for vSphere DRS and vSphere HA
- Recognize when to use vSphere fault tolerance
- Describe the function of the vCLS
- Recognize operations that might disrupt the healthy functioning of vCLS VMs
- Managing the vSphere Lifecycle
 - Generate vCenter interoperability reports
 - Recognize features of vSphere Lifecycle Manager
 - Describe ESXi images and image depots
 - Enable vSphere Lifecycle Manager in a vSphere cluster
 - Validate ESXi host compliance against a cluster image and remediate ESXi hosts using vSphere Lifecycle Manager
 - Describe vSphere Lifecycle Manager automatic recommendations
 - Use vSphere Lifecycle Manager to upgrade VMware tools and VM hardware
- Network Operations
 - Configure and manage vSphere distributed switches
 - Describe how VMware vSphere network I/O control enhances performance
 - Define vSphere Distributed Services Engine
 - Describe the use cases and benefits of vSphere
- Distributed Services Engine Storage Operations
 - Describe the architecture and requirements of vSAN configuration
 - Describe storage policy-based management
 - Recognize components in the vSphere virtual volumes architecture
 - Configure storage I/O control
- ESXi Operations
 - Use host profiles to manage ESXi configuration compliance
 - Recognize the benefits of using configuration profiles
- vSphere Monitoring
 - Monitor the key factors that can affect a virtual machine's performance
 - Describe the factors that influence vCenter performance
 - Use vCenter tools to monitor resource use

- Create custom alarms in vCenter
- Describe the benefits and capabilities of VMware Skyline
- Recognize uses for Skyline Advisor Pro

Wymagania:

- System administration experience on Microsoft Windows or Linux operating systems

Poziom trudności



Certyfikaty:

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

Prowadzący:

Authorized VMware Trainer.