Szkolenie: HPE

# VMware vSphere: Install, Configure, Manage [V8]

## Cel szkolenia:

This course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 8, which includes VMware ESXi 8 and VMware vCenter 8. This course prepares you to administer a vSphere infrastructure for an organization of any size.

This course is the foundation for most VMware technologies in the software-defined data center.

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
- Create 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
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource allocation
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability (HA) and vSphere Distributed Resource Scheduler
- Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date

Audience

- System administrators
- System engineers

## Plan szkolenia:

- Course Introduction
  - Introduction and course logistics
  - Course objectives



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- 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
- Installing and Configuring ESXi
  - Install an ESXi host
  - Recognize ESXi user account best practices
  - Configure the ESXi host settings using the DCUI and VMware Host Client
- Deploying and Configuring vCenter
  - 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 vCenter logs and events
- Configuring 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
- Configuring 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
- 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



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- 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
- Deploying and Configuring vSphere Clusters
  - Create a vSphere cluster enabled for vSphere DRS and vSphere High Availability (HA)
  - 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 various types of failures
  - Identify options for configuring network redundancy in a vSphere HA cluster
  - Recognize vSphere HA design considerations
  - Recognize the use cases for various vSphere HA settings
  - Configure a vSphere HA cluster
  - Recognize when to use vSphere Fault Tolerance
- Managing the vSphere Lifecycle
  - Enable vSphere Lifecycle Manager in a vSphere cluster
  - Describe features of the vCenter Update Planner
  - Run vCenter upgrade prechecks and interoperability reports
  - Recognize features of vSphere Lifecycle Manager
  - Distinguish between managing hosts using baselines and managing hosts using images



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- Describe how to update hosts using baselines
- Describe ESXi images
- Validate ESXi host compliance against a cluster image and update ESXi hosts
- Update ESXi hosts using vSphere Lifecycle Manager
- Describe vSphere Lifecycle Manager automatic recommendations
- Use vSphere Lifecycle Manager to upgrade VMware tools and VM hardware

## Wymagania:

System administration experience on Microsoft Windows or Linux operating systems is a prerequisite for this course.

## Poziom trudności



## Certyfikaty:

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

## Prowadzący:

Authorized VMware Trainer.



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