

Szkozenie: HPE
VMware vSphere: Fast Track



Cel szkolenia:

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

- Install and configure ESXi hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware Host Client™, VMware vSphere® Web Client, and VMware vSphere® Client™ to manage the vCenter Server inventory and the vCenter Server configuration
- Create virtual networks with vSphere standard switches
- Describe the storage technologies supported by vSphere
- Configure virtual storage using iSCSI and NFS storage
- Create and manage VMware vSphere® VMFS datastores
- Use vSphere Client to create virtual machines, templates, clones, and snapshots
- Create a content library for deploying virtual machines
- Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
- Describe the methods for protecting and recovering virtual machine data
- Create and manage a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™
- Create virtual networks with VMware vSphere® Distributed Switch™ and enable distributed switch features
- Use VMware vSphere® Update Manager™ to apply patches and perform upgrades to ESXi hosts and virtual machines
- Use host profiles to manage ESXi configuration compliance
- Describe how vSphere storage APIs help storage systems integrate with vSphere
- Configure and use virtual machine storage policies
- Configure VMware vSphere® Storage I/O Control and VMware vSphere® Storage DRS™
- Encrypt virtual machines for additional security

Audience

- System administrators
- System engineers

Plan szkolenia:

- Course Introduction
 - Introductions and course logistics
 - Course objectives
 - Describe the content of this course
 - Gain a complete picture of the VMware certification system
 - Familiarize yourself with the benefits of the VMware Education Learning Zone
 - Identify additional resource
- Introduction to vSphere and the Software- Defined Data Center
 - Describe how vSphere fits into the software-defined data center and the cloud infrastructure
 - Explain how vSphere interacts with CPUs, memory, networks, and storage
 - Use vSphere Client to access and manage your vCenter Server system and ESXi host
 - Compare virtual machine hardware version 14 to other versions
 - Identify the virtual network adapters, and describe the enhanced VMXNET3
 - Compare the types of virtual disk provisioning
 - Install and configure ESXi host settings
 - Identify the advantages of ESXi Quick Boot
- Creating Virtual Machines
 - Create, provision, and remove a virtual machine
 - Explain the importance of VMware Tools™
 - Describe how to import a virtual appliance OVF template
- vCenter Server
 - Describe the vCenter Server architecture
 - Discuss how ESXi hosts communicate with vCenter Server
 - Access and configure vCenter Server Appliance
 - Use vSphere Client to manage the vCenter Server inventory
 - Add data center, organizational objects, and hosts to vCenter Server
 - Create custom inventory tags
 - Describe the rules for applying permissions
 - Create a custom role in vCenter Server
 - Create a vCenter Server Appliance backup schedule
 - Restore vCenter Server Appliance from a backup
 - Monitor vCenter Server Appliance
- Configuring and Managing Virtual Networks

- Describe, create, and manage standard switches
- Configure virtual switch security, traffic-shaping and load-balancing policies
- Compare vSphere distributed switches and standard switches
- Describe the virtual switch connection types
- Describe the new TCP/IP stack architecture
- Use VLANs with standard switches
- Configuring and Managing Virtual Storage
 - Identify storage protocols and storage device types
 - Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
 - Create and manage VMware vSphere® VMFS and NFS datastores
 - Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
 - Identify the advantages of VMware vSAN™
- Virtual Machine Management
 - Use templates and cloning to deploy new virtual machines
 - Modify and manage virtual machines
 - Create an instant clone of a virtual machine
 - Identify the types of content libraries and how to deploy and use them
 - Add a hot-pluggable device
 - Dynamically increase the size of a virtual disk
 - Use customization specification files to customize a new virtual machine
 - Perform vSphere vMotion and vSphere Storage vMotion migrations
 - Create and manage virtual machine snapshots
- Resource Management and Monitoring
 - Discuss CPU and memory concepts in a virtualized environment
 - Describe what over commitment of a resource means
 - Identify additional technologies that improve memory usage
 - Configure and manage resource pools
 - Describe methods for optimizing CPU and memory usage
 - Use various tools to monitor resource usage
 - Create and use alarms to report certain conditions or events
- vSphere HA, vSphere Fault Tolerance, and Protecting Data
 - Explain the vSphere HA architecture
 - Configure and manage a vSphere HA cluster
 - Use vSphere HA advanced parameters
 - Enforce infrastructural or intra-app dependencies during failover
 - Describe vSphere HA heartbeat networks and datastore heartbeats

- Examine the features and functions of vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines
- Support vSphere Fault Tolerance interoperability with vSAN
- Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
- Examine the features and functions of vSphere Replication
- vSphere DRS
 - Describe the functions of a vSphere DRS cluster
 - Create a vSphere DRS cluster
 - View information about a vSphere DRS cluster
 - Configure virtual machine affinity, DRS groups, and VM-host affinity rules
 - Remove a host from a vSphere DRS cluster
- Network Scalability
 - Configure and manage vSphere distributed switches
 - Explain distributed features such as port mirroring, LACP, QoS tagging, and NetFlow
 - Configuring port mirroring on a distributed switch
- vSphere Update Manager and Host Maintenance
 - Describe the architecture, components, and capabilities of vSphere Update Manager
 - Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps
 - Examine the features and functions of vSphere Update Manager EAM integration
 - Integrate vSphere Update Manager with vSphere DRS
 - Describe and use host profiles
- Storage Scalability
 - Explain VMware vSphere® Storage APIs - Array Integration, VMware vSphere® API for Storage Awareness™, and vSphere APIs for I/O Filtering
 - Configure and assign virtual machine storage policies
 - Configure vSphere Storage DRS and Storage I/O Control
- Securing Virtual Machines
 - Set up encryption in your vSphere environment
 - Encrypt virtual machines
 - Encrypt core dumps
 - Enable encrypted vSphere vMotion
 - Describe support for virtual machine security features, such as UEFI secure boot, vTPM, and virtualization-based security

Wymagania:

This course requires completion of one of the following prerequisites:

- System administration experience on Microsoft Windows or Linux operating systems

Poziom trudności



Certyfikaty:

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

Prowadzący:

Authorized VMware Trainer.