FORMA SZKOLENIA | MATERIAŁY SZKOLENIOWE | CENA | CZAS TRWANIA
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Stacjonarne | Tradycyjne | 6450 NETTO* | 5 dni

* (+VAT zgodnie z obowiązującą stawką w dniu wystawienia faktury)

LOKALIZACJE

Kraków - ul. Tatarska 5, II piętro, godz. 9:00 - 16:00
Warszawa - ul. Bielska 17, godz. 9:00 - 16:00

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.