

Tytuł szkolenia: VMware vSphere - Skills for Operators [V6.7] (EDU-VSO67)

Kod szkolenia: EDU-VSO67

Wprowadzenie

This two-day training course is for operators and administrators who create and manage virtual machines. This course provides you with an understanding of VMware virtual machine features in VMware vSphere® 6.7. By combining lecture and hands-on labs, you gain the skills required to work effectively with VMware virtual machines.

Adresaci szkolenia

Technical professionals with system administration skills and operators responsible for managing virtual machines using VMware ESXi™ and vCenter Server.

Prerequisites:

This course has the following prerequisites:

System administration experience on Microsoft, Linux, and Solaris

Understanding of basic network and storage concepts

Cel szkolenia

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

Describe virtualization, virtual machines, and vSphere components

Describe the concepts of server, network, storage, and desktop virtualization

Deploy, configure, clone, and manage virtual machines

Use VMware vCenter Server® to monitor virtual machine resource usage

Use VMware vSphere® vMotion® and VMware vSphere® Storage vMotion® to migrate virtual machines

Use VMware vSphere® Distributed Resource Scheduler™ and VMware vSphere® High Availability to optimize the performance of your vSphere virtual environment

Czas i forma szkolenia

- 14 godzin (2 dni x 7 godzin), w tym wykłady i warsztaty praktyczne.

Plan szkolenia

1. Course Introduction

- a. Introductions and course logistics
- b. Course objectives

2. Introduction to vSphere and the Software-Defined Data Center

- a. Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- b. Explain how vSphere interacts with CPUs, memory, networks, and storage
- c. Use vSphere Client to access and manage your vCenter Server system and ESXi host

- d. Compare virtual machine hardware version 14 to other versions
- e. Identify the virtual network adapters, and describe the enhanced VMXNET3
- f. Compare the types of virtual disk provisioning

3. Creating Virtual Machines

- a. Create, provision, and remove a virtual machine
- b. Explain the importance of VMware Tools™
- c. Describe how to import a virtual appliance OVF template

4. vCenter Server

- a. Describe the vCenter Server architecture
- b. Discuss how ESXi hosts communicate with vCenter Server
- c. Use vSphere Client to manage the vCenter Server inventory
- d. Add data center and organizational objects to vCenter Server
- e. Add hosts to vCenter Server
- f. Discuss how to create custom inventory tags for inventory objects
- g. Monitor VMware vCenter® Server Appliance™
- h. Monitor vCenter Server Appliance for service and disk space usage
- i. Use vSphere alarms for resource exhaustion and service failures

5. Configuring and Managing Virtual Networks

- a. Describe the virtual switch connection types
- b. Configure and view standard switch configurations, such as virtual machine port group, VMkernel port, VLAN, and security features
- c. List the features comparison of standard and distributed switches

6. Virtual Storage

- a. Describe vSphere storage technologies and datastores

7. Virtual Machine Management

- a. Use templates and cloning to deploy new virtual machines
- b. Enable guest operating system customization by vCenter Server
- c. Upgrade a virtual machine's hardware
- d. Perform an instant clone of a VM
- e. Describe virtual machine settings and options
- f. Add a hot-pluggable device
- g. Dynamically increase the size of a virtual disk
- h. Add a raw device mapping (RDM) to a virtual machine
- i. Perform a vSphere vMotion migration
- j. Perform a vSphere Storage vMotion migration

8. Resource Management and Monitoring

- a. Use the performance-tuning methodology and resource monitoring tools
- b. Use performance charts to view and improve performance
- c. Monitor the key factors that can affect the virtual machine's performance:
CPU, memory, disk, and network bandwidth use
- d. Create alarms with condition-based triggers
- e. Create alarms with event-based triggers
- f. View and acknowledge triggered alarms

9. vSphere HA

- a. Describe the options that you can configure to make your vSphere environment highly available
- b. Discuss the response of vSphere HA when an ESXi host, a virtual

machine, or an application fails

10. vSphere DRS

- a. Describe the functions of a vSphere DRS cluster
- b. Create a vSphere DRS cluster
- c. View information about a vSphere DRS cluster
- d. Remove a host from a vSphere DRS cluster