



Enterprise Computing Solutions - Education Services

TRAINING OFFERING

Skontaktuj się z nami

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Kod:	Czas trwania:	Cena netto:
VMW_VSKDM7	24 Hours (3 days)	zł6,100.00

Description

During this 3-day course, you focus on deploying and managing VMware vSphere® with Kubernetes. You learn about how vSphere with Kubernetes can be used to orchestrate the delivery of Kubernetes clusters and containerized applications in a vSphere environment.

Cel szkolenia

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

- Describe vSphere with Kubernetes and use cases in on-premises environments
- Deploy vSphere with Kubernetes
- Describe the VMware NSX® networking requirements for vSphere with Kubernetes.
- Create and manage vSphere with Kubernetes namespaces
- Deploy and run container applications on vSphere with Kubernetes
- Deploy and configure VMware Harbor
- Describe the VMware Tanzu™ Kubernetes Grid™ service
- Deploy a Tanzu Kubernetes Grid cluster
- Deploy and run container applications on a Tanzu Kubernetes Grid cluster
- Describe the vSphere with Kubernetes lifecycle
- Use logs and CLI commands to monitor and troubleshoot vSphere with Kubernetes

Uczestnicy

Experienced system administrators and system integrators responsible for designing and implementing vSphere with Kubernetes.

Wymagania wstępne

This course requires completion the following courses:

- VMware vSphere: Install, Configure, Manage OR VMware vSphere: Optimize and Scale
- AND
- VMware NSX-T Data Center: Install, Configure, Manage

Experience working at the command line is helpful.

This course requires that a student be able to perform the following tasks with no assistance or guidance before enrolling in this course:

- Create VMware vCenter Server® objects, such as data centers and folders
- Create a virtual machine using a wizard or a template
- Modify a virtual machine's hardware
- Migrate a virtual machine with VMware vSphere® vMotion®
- Migrate a virtual machine with VMware vSphere® Storage vMotion®
- Configure and manage a vSphere DRS cluster with resource pools
- Configure and manage a VMware vSphere® High Availability cluster

If you cannot perform all of these tasks, VMware recommends that you complete one of the prerequisite courses before enrolling in VMware vSphere with Kubernetes: Deploy & Manage.

Program szkolenia

1. Course Introduction

- Introductions and course logistics
- Course objectives

2. Introduction to Containers and Kubernetes

- Describe virtual machines and containers
- Describe container hosts
- Describe container engines
- Describe Dockerfile
- Describe container images
- Describe image registry
- Describe the purpose and functionality of Kubernetes
- Describe YAML manifest files
- Explain pods
- Explain Replica Sets
- Explain services
- Explain deployments
- Explain network policies

3. Introduction to vSphere with Kubernetes

- Introduce the Cloud Native Computing Foundation
- Introduce the VMware Tanzu™ portfolio
- Describe the purpose and functionality of vSphere with Kubernetes
- Describe the capabilities of vSphere with Kubernetes
- Describe the components of vSphere with Kubernetes
- Contrast vSphere with Kubernetes to traditional Kubernetes
- Describe the requirements for vSphere with Kubernetes
- Describe the NSX components required for vSphere with Kubernetes
- Describe the network topology of vSphere with Kubernetes
- Explain the networking requirements of vSphere with Kubernetes
- Compare NSX networking objects with Kubernetes networking objects
- Describe the kubectl command line interface

4. vSphere with Kubernetes Core Services

- Explain the architecture of the vSphere with Kubernetes core services
- Describe the use cases of vSphere with Kubernetes
- Enable vSphere with Kubernetes
- Deploy Harbor Registry
- Describe a vSphere with Kubernetes namespace
- Describe resource quotas
- Explain authentication and authorization to vSphere with Kubernetes
- Create a namespace
- Use kubectl to interact with vSphere with Kubernetes
- Describe using kubectl pod deployment
- Explain scaling a pod deployment
- Explain deleting pods
- Use kubectl to deploy a pod
- Use kubectl to scale a pod
- Describe a Container Storage Interface
- Explain VM Storage Policies and Persistent Volumes
- Monitor Cloud Native Storage
- Create a Persistent Volume
- Describe the NSX Container Plugin
- Explain Supervisor Cluster Network Topology
- Explain Container Objects in NSX
- Describe Kubernetes Services
- Describe Kubernetes Network Policies
- Describe Harbor Image Registry
- Explain Harbor integration with vSphere with Kubernetes
- Enable Harbor
- Push container images to Harbor
- Deploy containers from Harbor

5. VMware Tanzu Kubernetes Grid service for vSphere

- Introduce Kubernetes Cluster API
- Explain Tanzu Kubernetes Grid service for vSphere
- Describe the use cases for Tanzu Kubernetes Grid clusters
- Describe enabling Tanzu Kubernetes Clusters
- Deploy a Tanzu Kubernetes Cluster

- Scale a Tanzu Kubernetes Cluster
- Explain the life cycle of Tanzu Kubernetes Clusters
- Deploy pods to a Tanzu Kubernetes Cluster
- Describe monitoring of Tanzu Kubernetes Clusters

6. Monitoring and Troubleshooting

- Describe the monitoring tools for vSphere with Kubernetes
- Describe the troubleshooting tools for vSphere with Kubernetes
- Describe VMware vRealize® Operations Manager™ integration
- Describe vCenter Server events
- Describe vSphere with Kubernetes events
- Describe gathering vSphere with Kubernetes support log bundles

7. vSphere with Kubernetes Life Cycle

- Introduce Kubernetes version
- Explain Kubernetes release cadence
- Describe vSphere with Kubernetes life cycle
- Describe NSX component life cycle
- Describe vSphere with Kubernetes Certificate Management

Terminy

Na żądanie. [Prosimy o kontakt](#)

Dodatkowe informacje

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