

# **Enterprise Computing Solutions - Education Services**

# **TRAINING OFFERING**

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# VMware vSphere: Fast Track [V8]

CODE: LENGTH: PRICE:

VMW VSFT8 40 Hours (5 days) kr57,500.00

# **Description**

This five-day, extended hour course takes you from introductory to advanced VMware vSphere® 8 management skills. Building on the installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and handson labs, you will install, configure, and manage vSphere 7. You will explore the features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 8, which includes VMware ESXi<sup>TM</sup> 8 and VMware vCenter Server® 8.

# **Objectives**

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

- · Install and configure ESXi hosts
- Deploy and configure vCenter
- Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
- · Configure vCenter High Availability
- · Create and configure 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
- Configure and manage a VMware Tools Repository
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource use
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability and vSphere Distributed Resource Scheduler
- · Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date
- · Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- Use host profiles to manage VMware ESXi host compliance
- Monitor the vCenter, ESXi, and VMs performance in the vSphere client

#### **Audience**

- · System administrators
- · System engineers

# **Prerequisites**

This course has the following prerequisites:

· System administration experience on Microsoft Windows or Linux operating systems

### **Programme**

2 vSphere and Virtualization Overview

- Explain basic virtualization concepts
- Describe how vSphere fits in the software-defined data center and the cloud infrastructure
- 1 Course Introduction
- Recognize the user interfaces for accessing vSphere
- Introductions and course logistics Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
- · Course objectives
- Install an ESXi host

#### 3 vCenter Management

- · 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 vSphere tasks and events
- · Create a vCenter backup schedule
- Recognize the importance of vCenter High Availability
- · Explain how vCenter High Availability works
- 4 Configure and Manage vSphere Networking

5 Configure and Manage vSphere Storage

· Recognize vSphere storage technologies

· Describe iSCSI components and addressing

Identify types of vSphere datastores

· Configure iSCSI storage on ESXi

· Create and manage VMFS datastores

Configure and manage NFS datastores

- · Configure and view standard switch configurations
- Configure and view distributed switch configurations

Describe Fibre Channel components and addressing

- Recognize the difference between standard switches and distributed switches
- Explain how to set networking policies on standard and distributed switches
  - 6 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
  - 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
- Discuss vSphere support for NVMe and iSER technologies Manage multiple versions of VM templates in content libraries
- 7 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
- Recognize the role of a VMware Tools Repository
- Configure a VMware Tools Repository
- Recognize the backup and restore solution for VMs

#### 8 vSphere Cluster Management

- Use Cluster Quickstart to enable vSphere cluster services and configure the cluster
- 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 differenttypes of failures
- Identify options for configuring network redundancy in a vSphere HA cluster
- · Recognize the use cases for various vSphere HA settings
- Configure a cluster enabled for vSphere DRS and vSphere HA
- Recognize when to use vSphere Fault Tolerance
- · Describe the function of the vCLS
- · Recognize operations that might disrupt the healthy functioning of vCLS VMs
- 9 Managing the vSphere Lifecycle
- Generate vCenter interoperability reports
- Recognize features of vSphere Lifecycle Manager
- Describe ESXi images and image depots
- Enable vSphere Lifecycle Manager in a vSphere cluster
- Validate ESXi host compliance against a cluster image and remediate ESXi hosts using vSphere Lifecycle Manager
- Describe vSphere Lifecycle Manager automatic recommendations
- Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

#### 10 Network Operations

- Configure and manage vSphere distributed switches
- Describe how VMware vSphere Network I/O Control enhances performance
- Define vSphere Distributed Services Engine
- · Describe the use cases and benefits of vSphere Distributed Services Engine

# 11 Storage Operations

- Describe the architecture and requirements of vSAN configuration
- Describe storage policy-based management

12 ESXi Operations

- Recognize components in the vSphere Virtual Volumes architecture Use host profiles to manage ESXi configuration compliance
- Configure Storage I/O Control

• Recognize the benefits of using configuration profiles

- 13 vSphere Monitoring
- Monitor the key factors that can affect a virtual machine's performance
- Describe the factors that influence vCenter performance
- Use vCenter tools to monitor resource use
- · Create custom alarms in vCenter
- Describe the benefits and capabilities of VMware Skyline
- Recognize uses for Skyline Advisor Pro

# **Test and Certification**

Attending this course meets the training requirement to achieve the following certification:

• VMware Certified Professional – Data Center Virtualization (VCP-DCV)

# **Further Information**

**Product Alignment** 

- VMware ESXi 8.0
- VMware vCenter 8.0

#### **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
10 Jun 2024	Virtual Classroom (CET / UTC +1)	CEDT	English	Instructor Led Online		kr57,500.00

# **Tilleggsinformasjon**

Denne treningen er også tilgjengelig som trening på stedet. Kontakt oss for å finne ut mer.