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)	€5,250.00

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™ 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

1 Course Introduction
• Introductions and course logistics
• Course objectives

2 vSphere and Virtualization Overview
• Explain basic virtualization concepts
• Describe how vSphere fits in the software-defined data center and the cloud infrastructure
• Recognize the user interfaces for accessing vSphere
• Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
• 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
• Configure and view standard switch configurations
• Configure and view distributed switch configurations
• Recognize the difference between standard switches and distributed switches
• Explain how to set networking policies on standard and distributed switches
5 Configure and Manage vSphere Storage
• Recognize vSphere storage technologies
• Identify types of vSphere datastores
• Describe Fibre Channel components and addressing
• Describe iSCSI components and addressing
• Configure iSCSI storage on ESXi
• Create and manage VMFS datastores
• Configure and manage NFS datastores
• Discuss vSphere support for NVMe and iSER technologies
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
• 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
• Recognize components in the vSphere Virtual Volumes architecture
• Configure Storage I/O Control

12 ESXi Operations
• Use host profiles to manage ESXi configuration compliance
• 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	Type	Guaranteed	PRICE
20 May 2024	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€5,250.00
02 Sep 2024	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€5,250.00
04 Nov 2024	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		€5,250.00

Additional Information

This training is also available as onsite training. Please contact us to find out more.