



Enterprise Computing Solutions - Education Services

## TRAINING OFFERING

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CODE:	LENGTH:	PRICE:
VMW_VSICM8	40 Hours (5 days)	€3,850.00

## Description

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere 8, which includes VMware ESXi 8 and VMware vCenter 8. This course prepares you to administer a vSphere infrastructure for an organization of any size.

This course is the foundation for most VMware technologies in the software-defined data center. **Product Alignment**

- VMware ESXi 8.0
- VMware vCenter 8.0

## 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
- Create 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
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource allocation
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability (HA) and vSphere Distributed Resource Scheduler
- Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date

## 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
- 3 Installing and Configuring ESXi**
  - Install an ESXi host
  - Recognize ESXi user account best practices
  - Configure the ESXi host settings using the DCUI and VMware Host Client

#### **4 Deploying and Configuring vCenter**

- 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 vCenter logs and events

#### **5 Configuring 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

#### **6 Configuring 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

#### **8 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

#### **9 Deploying and Configuring vSphere Clusters**

- Create a vSphere cluster enabled for vSphere DRS and vSphere HA
- 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 various types of failures
- Identify options for configuring network redundancy in a vSphere HA cluster
- Recognize vSphere HA design considerations
- Recognize the use cases for various vSphere HA settings
- Configure a vSphere HA cluster
- Recognize when to use vSphere Fault Tolerance

#### **10 Managing the vSphere Lifecycle**

- Enable vSphere Lifecycle Manager in a vSphere cluster
- Describe features of the vCenter Update Planner
- Run vCenter upgrade prechecks and interoperability reports
- Recognize features of vSphere Lifecycle Manager
- Distinguish between managing hosts using baselines and managing hosts using images
- Describe how to update hosts using baselines
- Describe ESXi images
- Validate ESXi host compliance against a cluster image and update ESXi hosts
- Update ESXi hosts using vSphere Lifecycle Manager
- Describe vSphere Lifecycle Manager automatic recommendations
- Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

#### **Test and Certification**

<https://www.vmware.com/learning/certification/vcp-dcv.html>

#### **Session Dates**

#### **7 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

Date	Location	Time Zone	Language	Type	Guaranteed	PRICE
19 Aug 2024	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€3,850.00
23 Sep 2024	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€3,850.00
21 Oct 2024	Virtual Classroom (GMT / UTC)	BST	English	Instructor Led Online		€3,850.00
18 Nov 2024	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		€3,850.00
16 Dec 2024	Virtual Classroom (GMT / UTC)	GMT	English	Instructor Led Online		€3,850.00

## Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)