# WUVN

### **Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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CODE:	LENGTH:	PRICE:	
VMW_VSICM7	40 Hours (5 days)	€3,440.00	

#### Description

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7. This course prepares you to administer a vSphere infrastructure for an organization of any size.

This course is the foundation for most of the other VMware technologies in the software-defined data center.

#### Objectives

By the end of the course, you should be able to meet the following objectives: • Describe the software-defined data center (SDDC)

- Explain the vSphere components and their function in the infrastructure Install and configure VMware ESXi™ hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware vSphere® Client™ to manage the vCenter Server inventory and the vCenter Server configuration
- Manage, monitor, back up, and protect vCenter Server Appliance 
  Create virtual networks with vSphere standard switches
- Describe the storage technologies supported by vSphere 
  Configure virtual storage using iSCSI and NFS storage
  - Create and manage VMware vSphere® VMFS datastores
  - · Use the vSphere Client to create virtual machines, templates, clones, and snapshots
  - Create a content library and deploy virtual machines from templates in the library 
    Manage virtual machine resource use
  - Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
  - Create and manage a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere®

Distributed Resource Scheduler<sup>™</sup> • Discuss solutions for managing the vSphere life cycle • Use VMware vSphere® Update Manager<sup>™</sup> to apply patches and perform upgrades to ESXi hosts and virtual machines

#### 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 Introduction to vSphere and the Software-Defined Data Center Explain basic virtualization concepts
- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Recognize the user interfaces for accessing the vCenter Server system and ESXi hosts
- Use VMware Host Client™ to access and manage ESXi host 3 Virtual Machines Create and remove a virtual machine
- Provision a virtual machine with virtual devices Identify the files that make up a virtual machine
- Explain the importance of VMware Tools™ 4 vCenter Server Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenter Server Deploy and configure vCenter Server Appliance
- Use the vSphere Client to manage the vCenter Server inventory
- Add data center, organizational objects, and hosts to vCenter Server
- Use roles and permissions to enable users to access objects in the vCenter Server inventory Back up vCenter Server Appliance
- Monitor vCenter Server tasks, events, and appliance health
- Use vCenter Server High Availability to protect a vCenter Server Appliance 5 Configuring and Managing Virtual Networks
- Create and manage standard switches 
  Describe the virtual switch connection types
- Configure virtual switch security, traffic-shaping and load-balancing policies

- Compare vSphere distributed switches and standard switches 6 Configuring and Managing Virtual Storage
- Identify storage protocols and storage device types Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
- Create and manage VMFS and NFS datastores Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
- Deploy virtual machines on a VMware vSAN™ datastore 7 Virtual Machine Management
- Use templates and cloning to deploy new virtual machines 
  Modify and manage virtual machines
- Create a content library and deploy virtual machines from templates in the library Dynamically increase the size of a virtual disk
- Use customization specification files to customize a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations 
  Create and manage virtual machine snapshots
- Examine the features and functions of VMware vSphere® Replication™ 8 Resource Management and Monitoring
- Discuss CPU and memory concepts in a virtualized environment Describe what overcommitment of a resource means
- Describe methods for optimizing CPU and memory usage 
  Use various tools to monitor resource use
- Create and use alarms to report certain conditions or events 9 vSphere Clusters
- Describe options for making a vSphere environment highly available •Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster Examine the features and functions of VMware vSphere® Fault Tolerance
- Configure a vSphere cluster using ESXi Cluster Quickstart 
  Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster 10 vSphere Lifecycle Management Describe how VMware vSphere® Lifecycle Manager™ works
  Use vSphere Lifecycle Manager to update ESXi hosts in a cluster

#### **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
24 Nov 2024			English	Self Paced Training		€3,440.00

#### Additional Information

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