

# VMware vSphere: Install, Configure, Manage [v7] (VWVSICM)

VMWare

Live Training ( também disponível em presencial )

Com certificação

- Localidade: Aveiro
- Data: 04 Apr 2022
- Preço: 2950 € (Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes. )
- Horário: Laboral das das 09h00 às 18h00
- Nível: Avançado
- Duração: 40h

### Sobre o curso

VMware vSphere: Install, Configure, Manage é composto por uma formação prática intensiva que se concentra na instalação, configuração e administração do VMware vSphere® 7, que inclui o VMware ESXi<sup>™</sup> 7 e o VMware vCenter Server<sup>™</sup> 7.

Este curso fornece os conhecimentos necessários para gerir uma infraestrutura de vSphere em empresas de qualquer dimensão.

#### **Objetivos:**

- Describe the software-defined data center (SDDC)
- Explain the vSphere components and their function in the infrastructure
- Install and configure ESXi hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware vSphere® Client<sup>™</sup> 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® Lifecycle Manager™ to perform upgrades to ESXi hosts and virtual machines

## Destinatários

- System administrators
- Systems engineers

## Pré-requisitos

• System administration experience on Microsoft Windows or Linux operating systems

## Programa

- Course Introduction
- Introduction to vSphere and the Software-Defined Data Center
- Virtual Machines
- vCenter Server
- Configuring and Managing Virtual Networks
- Configuring and Managing Virtual Storage
- Virtual Machine Management
- Resource Management and Monitoring
- vSphere Clusters
- vSphere Lifecycle Management

### **Course Introduction**

- Introductions and course logistics
- Course objectives

#### 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
- Describe the ESXi host architecture
- Navigate the Direct Console User Interface (DCUI) to configure an ESXi host
- Recognize ESXi host user account best practices
- Install an ESXi host
- Use VMware Host Client™ to configure ESXi host settings

#### **Virtual Machines**

- Create and provision a virtual machine
- Explain the importance of VMware Tools<sup>™</sup>
- Install VMware Tools
- Identify the files that make up a VM
- Recognize the components of a VM
- Recognize virtual devices supported by a VM
- · Describe the benefits and use cases for containers
- · Identify the parts of a container system

#### vCenter Server

- Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenter Server
- Deploy and configure vCenter Server Appliance
- Use 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 VMware vCenter Server® High Availability to protect a vCenter Server Appliance

#### **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

#### **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
- Recognize the components of a VMware vSAN™ configuration

#### **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
- Use customization specification files to customize a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Describe the Enhanced vMotion Compatibility feature
- Create and manage virtual machine snapshots
- Examine the features and functions of VMware vSphere® Replication™
- Describe the benefits of VMware vSphere® Storage APIs Data Protection

#### **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

### vSphere Clusters

- Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster
- Monitor a vSphere cluster configuration
- 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

### vSphere Lifecycle Management

- Recognize the importance of vCenter Server Update Planner
- Describe how VMware vSphere® Lifecycle Manager™ works
- Describe how to update ESXi hosts using baselines
- Validate ESXi host compliance using a cluster image
- Describe how to upgrade VMware Tools and VM hardware