

## VMware vSphere: Install, Configure, Manage [v7]

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Lisboa
- **Com certificação:** VMware Certified Professional – Data Center Virtualization (VCP-DCV)
- **Data:** 26 Set. 2022 a 30 Set. 2022
- **Preço:** 2950€
- **Horário:** Laboral - das 09h00 às 18h00
- **Nível:** Intermédio
- **Duração:** 40 horas

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. Attending this course meets the training requirement to achieve the following certification: VMware Certified Professional – Data Center Virtualization (VCP-DCV).

This course **includes the certification exam VMware Certified Professional – Data Center Virtualization (VCP-DCV)**.

This course is also available in an On Demand format. For more information, select this link: [VMware vSphere: Install, Configure, Manage \[V7\]](#).

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### Destinatários

- System administrators
- System engineers

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### Pré-requisitos

- System administration experience on Microsoft Windows or Linux operating systems

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## 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™ 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™
- Discuss solutions for managing the vSphere life cycle
- Use VMware vSphere® Lifecycle Manager™ to perform upgrades to ESXi hosts and virtual machines

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## Programa

### 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™
- 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