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# VMware vSphere: Install, Configure, Manage [v6.7] (VWVSICM)

- **Formato do curso:** Presencial
- **Localidade:** Lisboa
- **Com certificação:** VMware Certified Professional 6 – Data Center Virtualization (VCP6-DCV)
- **Data:** 21 Out. 2019 a 25 Out. 2019
- **Preço:** 2950€
- **Horário:** Laboral - das 09h00 às 18h00
- **Nível:** Intermédio
- **Duração:** 40 horas

**VMware vSphere: Install, Configure, Manage** é composto por uma formação prática intensiva que se concentra na instalação, configuração e administração do VMware vSphere® 6.7, que inclui o VMware ESXi™ 6.7 e o VMware vCenter Server™ 6.7.

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

Este curso **inclui exame de certificação**.

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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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## Objectivos

- Describe the software-defined data center
- Explain the vSphere components and their function in the infrastructure
- Add ESXi hosts to a VMware vCenter® Server Appliance™ instance
- Manage vCenter Server Appliance
- Use a local content library as an ISO store, and deploy a virtual machine
- Describe vCenter Server architecture
- Use vCenter Server to manage an ESXi host

- Configure and manage vSphere infrastructure with VMware Host Client™ and VMware vSphere® Client™
  - Describe virtual networks with vSphere standard switches
  - Configure standard switch policies
  - Use vCenter Server to manage various types of host storage: VMware vSphere® VMFS, NFS, iSCSI, and RDM
  - Examine the features and functions of Fibre Channel and VMware vSAN™
  - Manage virtual machines, templates, clones, and snapshots
  - Migrate virtual machines with VMware vSphere® vMotion®
  - Migrate virtual machine storage with VMware vSphere® Storage vMotion®
  - Monitor resource usage, and manage resource pools
  - Discuss the VMware vSphere® High Availability cluster architecture
  - Configure vSphere HA
  - Manage vSphere HA and VMware vSphere® Fault Tolerance
  - Use VMware vSphere® Replication™ and VMware vSphere® Data Protection™ to replicate virtual machines and perform data recovery
  - Use VMware vSphere® Distributed Resource Scheduler™ clusters to improve host scalability
  - Use VMware vSphere® Update Manager™ to apply patches and perform basic troubleshooting of ESXi hosts, virtual machines, and vCenter Server operations
  - Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency
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## Programa

### Course Introduction

- Introductions and course logistics
- Course objectives
- Describe the content of the course
- Gain a complete picture of the VMware certification system
- Familiarize yourself with the benefits of the VMware Education Learning Zone
- Identify additional resources

### Introduction to vSphere and the Software-Defined Data Center

- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Use vSphere Client to access and manage your vCenter Server system and ESXi host
- Compare virtual machine hardware version 14 to other versions
- Identify the virtual network adapters, and describe the enhanced VMXNET3
- Compare the types of virtual disk provisioning

### Creating Virtual Machines

- Create, provision, and remove a virtual machine
- Explain the importance of VMware Tools™
- Describe how to import a virtual appliance OVF template

- Manage VMware Tools
- Explain troubleshooting OS installation and VMware Tools

## **vCenter Server**

- Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenter Server
- Identify the vCenter Server services, components, and modules
- Access and configure vCenter Server Appliance
- Use vSphere Client to manage the vCenter Server inventory
- Describe the rules for applying permissions
- Create a custom role in vCenter Server
- Create a backup schedule
- Restore vCenter Server Appliance from backup
- Monitor vCenter Server Appliance

## **Configuring and Managing Virtual Networks**

- Describe, create, and manage standard switches
- Configure virtual switch security and loadbalancing policies
- Compare vSphere distributed switches and standard switches
- Describe the virtual switch connection types
- Describe the new TCP/IP stack architecture
- Use VLANs with 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 VMware vSphere® VMFS and NFS datastores
- Describe the new features of VMFS 6.5
- Identify the advantages of VMware vSAN™
- Describe guest file encryption

## **Virtual Machine Management**

- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Clone a virtual machine
- Upgrade virtual machine hardware to version 14
- Remove virtual machines from the vCenter Server inventory and datastore
- Use customization specification files to customize a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Create and manage virtual machine snapshots
- Create, clone, and export vApps
- Identify the types of con

## **Resource Management and Monitoring**

- Discuss CPU and memory concepts in a virtualized environment
- Describe what overcommitment of a resource means
- Identify additional technologies that improve memory usage
- Configure and manage resource pools
- Describe methods for optimizing CPU and memory usage
- Use various tools to monitor resource usage
- Create and use alarms to report certain conditions or events

## **vSphere HA, vSphere Fault Tolerance, and Protecting Data**

- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Use vSphere HA advanced parameters
- Enforce infrastructural or intra-app dependencies during failover
- Describe vSphere HA heartbeat networks and datastore heartbeats
- Examine the features and functions of vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines
- Support vSphere Fault Tolerance interoperability with vSAN
- Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
- Examine the features and functions of vSphere Replication

## **vSphere DRS**

- Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster
- View information about a vSphere DRS cluster
- Configure virtual machine affinity, DRS groups, and VM-host affinity rules
- Remove a host from a vSphere DRS cluster

## **vSphere Update Manager**

- Describe the new architecture, components, and capabilities of vSphere Update Manager
- Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps
- Install vSphere Update Manager and the vSphere Update Manager plug-in
- Create patch baselines
- Use host profiles to manage host configuration compliance
- Examine the features and functions of vSphere
- Update Manager EAM integration
- Integrate vSphere Update Manager with vSphere DRS
- Scan and remediate hosts

## **vSphere Troubleshooting**

- Define the scope of troubleshooting
- Use a structured approach to solve configuration and operational problems

- Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency