

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

# **OFERTA FORMATIVA**

Detalles de contacto

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## VMware vSphere: Install, Configure, Manage [V6.7]

CÓDIGO: DURACIÓN: Precio:

VMW\_VSICM67 40 Hours (5 días) A consultar

## **Description**

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6.7, which includes VMware ESXi<sup>™</sup> 6.7 and VMware vCenter Server® 6.7. This course prepares you to administer a vSphere infrastructure for an organization of any size. It is the foundation for most other VMware technologies in the software-defined data center.

#### **Product Alignment**

- ESXi 6.7
- vCenter Server 6.7

### **Objetivos**

By the end of the course, you should be able to meet the following objectives:

- · 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

#### **Público**

- · System administrators
- · System engineers

## **Requisitos Previos**

This course has the following prerequisites:

· System administration experience on Microsoft Windows or Linux operating systems

#### **Programa**

#### 1 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

#### 2 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
- · Identify the advantages of ESXi Quick Boot

#### 3 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

#### 4 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

#### 5 Configuring and Managing Virtual Networks

- · Describe, create, and manage standard switches
- Configure virtual switch security and load-balancing 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

#### 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 VMware vSphere® VMFS and NFS datastores
- · Describe the new features of VMFS 6.5
- Identify the advantages of VMware vSAN™
- · Describe guest file encryption

## 7 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 content libraries and how to deploy and use them

#### 8 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

#### 9 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

#### 10 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

#### 11 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

#### 12 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

## **Fechas Programadas**

A petición. Gracias por contactarnos.

#### Información Adicional

Esta formación también está disponible en modalidad presencial. Por favor contáctenos para más información.