



VMware vSphere: Install, Configure, Manage [v7] (e-Learning)

VMWare

Com certificação

- **Nível:** Avançado
 - **Duração:** -h
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Sobre o curso

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.

Destinatários

- System administrators
 - System engineers
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Objetivos

- 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
 - Describe the benefits and capabilities of VMware Skyline
 - 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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Pré-requisitos

- System administration experience on Microsoft Windows or Linux operating systems
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Metodologia

Este curso e-learning inclui

- Conteúdos disponíveis 24/7
- 30 dias de duração com assessments e labs
- Exame, válido durante 1 ano, a partir da data em que foi emitido
 - 1 sessão de Kick Off de 1h para apresentação da plataforma de e-Learning em que decorre o curso e esclarecimento de dúvidas sobre a mesma Por forma a alcançar melhores resultados na aprendizagem, o formando irá contar com sessões de apoio GALILEU em formato síncrono (online em tempo real)
 - 1 sessão de Preparação para Exame de 3h que ocorre 7 dias antes do término do curso

Este curso está também disponível na modalidade Presencial / Live Training: [VMware vSphere: Install, Configure, Manage \[V7\]](#).

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
- Describe how to proactively manage your vSphere environment using VMware Skyline

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
- Describe the function of the vSphere® Cluster Service

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
- Describe VMware vSphere® Lifecycle Manager™ and VMware vSAN™ integration