VS80-ICM

VMware vSphere: Install, Configure, Manage

40 horas | Data Center Virtualization | VMware

INTRODUÇÃO

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere 8, which includes VMware ESXi 8 and VMware vCenter 8. This course prepares you to administer a vSphere infrastructure for an organization of any size. This course is the foundation for most VMware technologies in the software-defined data center.

OBJETIVO DO CURSO

Objectives

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

- Install and configure ESXi hosts
- Deploy and configure vCenter
- Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
- Create virtual networks using vSphere standard switches and distributed switches
- Create and configure datastores using storage technologies supported by vSphere
- Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource allocation
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability (HA) and vSphere Distributed Resource Scheduler
- Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date

PÚBLICO-ALVO

Target audience

- System administrators
- System engineers

PRÉ-REQUISITOS

Prerequisites

This course has the following prerequisites:

- System administration experience on Microsoft Windows or Linux operating systems

CONTEÚDO PROGRAMÁTICO

Outline

Module 1: vSphere and Virtualization Overview

• Explain basic virtualization concepts

• Describe how vSphere fits in the software-defined data center and the cloud infrastructure

• Recognize the user interfaces for accessing vSphere

• Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs

Module 2: Installing and Configuring ESXi

• Install an ESXi host

• Recognize ESXi user account best practices

• Configure the ESXi host settings using the DCUI and VMware Host Client

Module 3: Deploying and Configuring vCenter

• Recognize ESXi hosts communication with vCenter

• Deploy vCenter Server Appliance

• Configure vCenter settings

• Use the vSphere Client to add and manage license keys

• Create and organize vCenter inventory objects

• Recognize the rules for applying vCenter permissions

• View vCenter logs and events

Module 4: Configuring vSphere Networking

• Configure and view standard switch configurations

• Configure and view distributed switch configurations

• Recognize the difference between standard switches and distributed switches

• Explain how to set networking policies on standard and distributed switches

Module 5: Configuring vSphere Storage

• Recognize vSphere storage technologies

• Identify types of vSphere datastores

• Describe Fibre Channel components and addressing

• Describe iSCSI components and addressing

• Configure iSCSI storage on ESXi

• Create and manage VMFS datastores

• Configure and manage NFS datastores

Module 6: Deploying Virtual Machines

• Create and provision VMs

• Explain the importance of VMware Tools

• Identify the files that make up a VM

• Recognize the components of a VM

• Navigate the vSphere Client and examine VM settings and options

• Modify VMs by dynamically increasing resources

• Create VM templates and deploy VMs from them

• Clone VMs

• Create customization specifications for guest operating systems

• Create local, published, and subscribed content libraries

• Deploy VMs from content libraries

• Manage multiple versions of VM templates in content libraries

Module 7: Managing Virtual Machines

• Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
• Migrate VMs using vSphere vMotion
• Describe the role of Enhanced vMotion Compatibility in migrations
• Migrate VMs using vSphere Storage vMotion
• Take a snapshot of a VM
• Manage, consolidate, and delete snapshots
• Describe CPU and memory concepts in relation to a virtualized environment
• Describe how VMs compete for resources
• Define CPU and memory shares, reservations, and limits

Module 8: Deploying and Configuring vSphere Clusters

• Create a vSphere cluster enabled for vSphere DRS and vSphere HA
• View information about a vSphere cluster
• Explain how vSphere DRS determines VM placement on hosts in the cluster
• Recognize use cases for vSphere DRS settings
• Monitor a vSphere DRS cluster