VMware vSphere: Operate, Scale and Secure [V8]

VMWare

- **Nível:** Avançado
- **Duração:** 40h

Sobre o curso

This five-day course teaches you advanced skills for configuring and maintaining a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you configure and optimize the VMware vSphere 8 features that build a foundation for a truly scalable infrastructure. You also discuss when and where these features have the greatest effect. Attend this course to deepen your understanding of vSphere and learn how its advanced features and controls can benefit your organization.

Destinatários

Experienced system administrators, system engineers, and system integrators

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Objetivos

- Configure and manage vSphere networking and storage for a large and sophisticated enterprise
- Configure vCenter High Availability
- Use host profiles to manage VMware ESXi host compliance
- Use the vSphere Client to manage certificates
- Monitor the vCenter, ESXi, and VMs performance in the vSphere client
- Secure vCenter, ESXi, and VMs in your vSphere environment
- Use VMware vSphere Trust Authority to secure the infrastructure for encrypted VMs
- Use Identity Federation to configure the vCenter to use external identity sources

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Pré-requisitos

- Attend VMware vSphere: Install, Configure, Manage [V8]
- Equivalent knowledge and administration experience with ESXi and vCenter

- Experience with working at the command line is highly recommended.

Programa

- Course Introduction
- Virtual Machine Operations
- vSphere Cluster Operations
- Network Operations
- Storage Operations
- vCenter and ESXi Operations
- vSphere Monitoring
- vSphere Security and Access Control
- vSphere Trusted Environments and VM Encryption

Course Introduction

- Introductions and course logistics
- Course objectives

Virtual Machine Operations

- Recognize the role of a VMware Tools Repository
- Configure a VMware Tools Repository
- Recognize the backup and restore solution for VMs
- Identify the components in the vSphere Replication architecture
- Deploy and configure vSphere Replication
- Recover replicated VMs

vSphere Cluster Operations

- Create and manage resource pools in a cluster
- Describe how scalable shares work
- Describe the function of the vCLS
- Recognize operations that might disrupt the healthy functioning of vCLS VMs

Network Operations

- Configure and manage vSphere distributed switches
- Describe how VMware vSphere Network I/O Control enhances performance

- Explain distributed switch features such as port mirroring and NetFlow
- Define vSphere Distributed Services Engine
- Describe the use cases and benefits of vSphere Distributed Services Engine

Storage Operations

- Discuss vSphere support for NVMe and iSER technologies
- Describe the architecture and requirements of vSAN configuration
- Describe storage policy-based management
- Recognize components in the vSphere Virtual Volumes architecture
- Configure Storage I/O Control

vCenter and ESXi Operations

- Create a vCenter backup schedule
- Recognize the importance of vCenter High Availability
- Explain how vCenter High Availability works
- Use host profiles to manage ESXi configuration compliance
- Use the vSphere client to manage vSphere certificates

vSphere Monitoring

- Monitor the key factors that can affect a virtual machine’s performance
- Describe the factors that influence vCenter performance
- Use vCenter tools to monitor resource use
- Create custom alarms in vCenter
- Describe the benefits and capabilities of VMware Skyline
- Recognize uses for Skyline Advisor Pro

vSphere Security and Access Control

- Recognize strategies for securing vSphere components, such as vCenter, ESXi hosts, and virtual machines
- Describe vSphere support for security standards and protocols
- Describe identity federation and recognize its use cases
- Configure identity federation to allow vCenter to use an external identity provider

vSphere Trusted Environments and VM Encryption

- Configure ESXi Host Access and Authentication

- Describe virtual machine security features
- Describe the components of a VM encryption architecture
- Create, manage, and migrate encrypted VMs
- List VM encryption events and alarms
- Describe the benefits and use cases of vSphere Trust Authority
- Configure vSphere Trust Authority