

VMware vSphere: Operate, Scale and Secure

Duration: 5 days

Audience: Professionnel TI

Who is this training for?

- Experienced System Administrators
- System Engineers
- System Integrators

Training objectives

- Configure and manage a VMware Tools repository
- Configure vSphere Replication and recover replicated virtual machines
- Manage virtual machine resource utilization with resource pools
- Configure and manage vSphere network and storage at scale
- Configure VMware vCenter Server high availability
- Use host profiles to manage VMware ESXi 8 host compliance
- Use the vSphere client and command line to manage Certificates
- Monitor the performance of vCenter, ESXi, and virtual machines in the vSphere client
- Secure VMware vCenter 8, ESXi, and virtual machines
- Use identity federation to connect vCenter to external identity sources
- Use VMware vSphere Trust Authority to secure encrypted virtual machine infrastructure

Summary

This five-day course equips you with advanced skills to set up and maintain a highly available and scalable virtual infrastructure. Through a combination of lectures and labs, you configure and optimize the features of VMware vSphere 8 that form the foundation of a truly scalable infrastructure. You'll also discuss when and where these features have the most effect.

Attend this course to deepen your understanding of vSphere and learn how vSphere's advanced features and controls can benefit your organization.

Course outline

Virtual Machine Operations

- Recognize the Role of a VMware Tools Repository
- Configure a VMware Tools Repository
- Recognize the Virtual Machine Backup and Recovery Solution
- Identify VMware vSphere Replication Components
- Deploy and Configure vSphere Replication and VMware Site Recovery
- Recover Replicated Virtual Machines

vSphere Cluster Operations

- Create and Manage resource pools in a cluster
- Describe how scalable shares work
- Describe the role of vCLS
- Identify operations that can disrupt vCLS Network

Operations VMs

- Configure and manage vSphere distributed switches
- Describe how VMware vSphere Network I/O Control improves performance
- Explain the features of distributed switches (port mirroring, NetFlow)
- Define the vSphere Distributed Services Engine
- Describe the use cases for VMware

vSphere Distributed Services Engine Storage Operations

- Discuss NVMe and iSER support in vSphere
- Describe vSAN architecture and requirements
- Describe storage policy-based management
- Identify the components of VMware vSphere Virtual Volumes
- Configure storage I/O control

vCenter and ESXi operations

- Create a vCenter backup schedule
- Explain the importance of vCenter high availability
- Explain how vCenter Server high availability works
- Use host profiles for ESXi compliance
- Use vSphere Monitoring client and command-line certificate management tools
- Monitor factors that influence virtual machine performance
- Identify factors that influence

vCenter performance

- Use vCenter monitoring tools
- Create Custom alarms
- Describe VMware Skyline and its security and access control benefits
- Identify vCenter, ESXi, and virtual machine security policies
- Describe supported security standards and protocols
- Describe identity federation and its use cases
- Configure identity federation with an external provider

Trusted environments and encryption for virtual machines

- Configure ESXi access and authentication
- Describe the VM Security Features
- Describe the architecture of VM encryption
-

Create, manage, and migrate encrypted VMs

- Identify encryption-related events and alarms
- Describe VMware Trust Authority use cases

Approach and methodology

Lectures • Demonstrations • Guided and individual practical work

Prerequisites

- Have completed VMware vSphere: Install, Configure, and Manage
- Equivalent experience in ESXi and vCenter administration
- Command line experience highly recommended

Recommendations

- Review: Virtualization Basics Data Center Architectures
- Familiarize With: VMware Environments (ESXi, vCenter)
- Identify Your Goals: Virtual Machine Management Performance Optimization Infrastructure Security

Legal notices

© VMware