

VMware vSphere V6.0 : Skills for Operators

Duration 2 Days

OVERVIEW

This two-day technical classroom training course is designed to help operators and administrators who create and manage virtual machines. This course provides you with a strong understanding of VMware virtual machine features in vSphere 6.0. By combining lecture and hands-on labs, this course will help you gain the skills required to work effectively with VMware virtual machines. This course is based on VMware ESXi™ 6.0 and VMware vCenter Server™ 6.0.

OBJECTIVES:

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

- Describe virtualization, virtual machines, and vSphere components
- Describe the concepts of server, network, storage, and desktop virtualization
- Deploy, configure, clone, and manage virtual machines
- Use vCenter Server to monitor virtual machine resource usage
- Use VMware vSphere® vApp(s)™ to bundle and manage multiple interoperating virtual machines and software applications
- Use VMware vSphere® vMotion® and VMware vSphere® Storage vMotion® to migrate virtual machines
- Use VMware vSphere® Distributed Resource Scheduler™, VMware vSphere® High Availability, VMware vSphere® Fault Tolerance, VMware vSphere® Data Protection™, and VMware vSphere® Replication™ to optimize the performance of your vSphere virtual environment

INTENDED AUDIENCE:

Technical professionals with system administration skills and operators responsible for managing virtual machines using ESXi and vCenter Server

PREREQUISITES:

- System administration experience on Microsoft, Linux, Solaris
- Understanding of basic network and storage concepts

OUTLINE:**Course Introduction**

- Introductions and course logistics
- Course goals and objectives
- Online vSphere resources
- Location of online vSphere documentation

VMware Virtualization Overview

- Compare the components and concepts of traditional architecture and virtual architecture
- Identify the benefits of virtual architecture
- Describe the VMware virtualization infrastructure
- Describe vSphere products and features
- Describe inventory objects managed by vSphere
- Describe the main features of vCenter Server

vSphere Client and vSphere Web Client

- Identify the differences between the VMware vSphere® Client™ and VMware vSphere® Web Client interfaces
- Access, navigate, and customize vSphere Web Client
- Use vSphere Web Client to monitor and manage vSphere objects
- Perform searches in vSphere Web Client
- Explain how roles and permissions can be assigned to users and user groups using vSphere Web Client

Creating and Managing Virtual Machines

- Create and manage virtual machines
- Install a guest operating system and VMware Tools™
- Explain how to use clones and templates to manage virtual machines
- Explain the importance of content libraries
- Configure virtual machines
- Manage virtual machines using snapshots
- Explain how raw device mapping (RDM) allows a virtual machine to directly access and use a storage device

Monitor Virtual Machine Resources

- Explain virtual machine resource monitoring concepts
- Monitor virtual machine resource usage using vCenter Server performance graphs and alarms
- Describe and monitor tasks
- Describe, monitor, and manage events
- Describe, monitor, manage, and acknowledge alarms

Using vSphere vApp(s)

- Describe a vApp
- Create a vApp
- Add objects to a vApp
- Edit vApp settings
- Clone a vApp
- Manage power operations for a vApp

Migrating Virtual Machines

- Describe the types of vSphere migration
- Explain the importance of vSphere vMotion
- Identify and verify vSphere vMotion requirements
- Perform a vSphere Storage vMotion migration
- Perform a shared-nothing vSphere vMotion migration
- Explain how to migrate virtual machines across virtual switches, vCenter Server systems, and long distances

Using vSphere for Scalability and Business Continuity

- Explain how vSphere DRS can be used to optimize the performance of the hosts and virtual machines in a cluster
- Explain how vSphere HA can be used to increase the availability of your virtual machines
- Explain how vSphere Fault Tolerance can be used for continuous availability of a virtual machine
- Explain how vSphere Data Protection and vSphere Replication can be used to replicate backup and restore data in your virtual environment