VMware vSphere: Skills for Operators

Course 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.

After completing this course, you may enroll in advanced VMware vSphere® courses. For advanced vSphere course options, go to http://www.vmware.com/education.

Course 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

Delivery Methods

- Classroom
- Live Online
- Onsite

Course Duration

- Two (2) days of instructor-led classroom training (8-hour days)
- 50% lecture, 50% hands-on lab

Target Audience

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

Course Suitability

☒ Administrator ☐ Expert
☐ Engineer ☐ Advanced
☐ Architect ☒ Professional
☐ Fundamentals

Prerequisites

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

Certification

For more information, go to VMware Certification.

Pricing

Contact your VMware representative or a VMware Authorized Training Center™ for pricing information.

More Information

Courses are conveniently scheduled around the world. Go to VMware Education to find the class that is right for you.
## Course Modules

<table>
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<th>Course Module</th>
<th>Description</th>
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| **1 Course Introduction** | - Introductions and course logistics  
- Course goals and objectives  
- Online vSphere resources  
- Location of online vSphere documentation |
| **2 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 |
| **3 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 |
| **4 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 |
| **5 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 |
| **6 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 |
| **7 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 |
| **8 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 |