

# VMware vSphere: Install, Configure, Manage

## Delivery Methods

- Instructor-led training
- Live-online
- Onsite training

## Course Duration

- Five days of instructor-led training
- 60% lecture, 40% hands-on lab

## Target Audience

- System administrators
- Systems engineers
- Operators responsible for VMware® ESX™, ESXi, and VMware vCenter™ Server

## Prerequisites

System administration experience on Microsoft Windows or Linux operating systems

## Pricing

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

## More Information

Courses are conveniently scheduled around the world. Please visit [www.vmware.com/education](http://www.vmware.com/education) to find the class that is right for you.

Onsite training is also available for customers who prefer to bring a VMware Certified Instructor to their own facilities. For additional information about onsite classes, including facility requirements, contact [www.vmware.com/education](http://www.vmware.com/education)

## Course Overview

This hands-on training course explores installation, configuration, and management of VMware vSphere™, which consists of ESX/ESXi and vCenter Server. The course is based on ESX/ESXi 4.1 and vCenter Server 4.1. Completion of this course satisfies as a prerequisite to take the VMware Certified Professional 4 exam.

Students who complete this course may enroll in any of several more-advanced vSphere courses. See [www.vmware.com/education](http://www.vmware.com/education) for advanced course options.

## Course Objectives

At the end of the course, you should gain an understanding of the functionality in VMware vSphere 4 and be able to:

- Install and configure ESX or ESXi
- Install and configure vCenter Server components
- Configure and manage ESX/ESXi networking and storage using vCenter Server
- Deploy, manage, and migrate virtual machines
- Manage user access to the VMware infrastructure
- Use vCenter Server to monitor resource usage
- Use vCenter Server to increase scalability
- Use VMware vCenter Update Manager to apply ESX/ESXi patches
- Use vCenter Server to manage higher availability and data protection

## Course Modules

1	<b>Course Introduction</b> <ul style="list-style-type: none"> <li>• Introductions and course logistics</li> <li>• Course objectives</li> </ul>	8	<b>Access Control</b> <ul style="list-style-type: none"> <li>• Control user access through roles and permissions</li> </ul>
2	<b>Introduction to VMware Virtualization</b> <ul style="list-style-type: none"> <li>• Introduce virtualization, virtual machines, and vSphere components</li> </ul>	9	<b>Resource Monitoring</b> <ul style="list-style-type: none"> <li>• Control virtual machine access to CPU, memory, and I/O resources</li> <li>• Introduce VMkernel methods for optimizing CPU and memory usage</li> <li>• Monitor resource usage using vCenter Server performance graphs and alarms</li> </ul>
3	<b>VMware ESX and ESXi</b> <ul style="list-style-type: none"> <li>• Introduce the architecture of ESX and ESXi</li> <li>• Manually configure ESX/ESXi</li> </ul>	10	<b>Data Protection</b> <ul style="list-style-type: none"> <li>• Back up and recover virtual machines using VMware Data Recovery</li> </ul>
4	<b>VMware vCenter Server</b> <ul style="list-style-type: none"> <li>• Install and configure vCenter Server components</li> <li>• Manage vCenter Server inventory objects</li> </ul>	11	<b>Scalability</b> <ul style="list-style-type: none"> <li>• Manage multiple vCenter Server inventories using VMware vCenter Linked Mode</li> <li>• Manage ESX/ESXi configuration compliance using Host Profiles</li> <li>• Create, configure, and manage vNetwork distributed switches, network connections, and port groups</li> <li>• Perform VMware vMotion™ migrations</li> <li>• Configure and manage a VMware Distributed Resource Scheduler cluster</li> <li>• Configure and manage VMware Distributed Power Management</li> </ul>
5	<b>Networking</b> <ul style="list-style-type: none"> <li>• Create, configure, and manage vNetwork standard switches, network connections, and port groups</li> </ul>	12	<b>High Availability</b> <ul style="list-style-type: none"> <li>• Configure and manage a VMware High Availability cluster</li> <li>• Configure fault-tolerant virtual machines using VMware Fault Tolerance</li> </ul>
6	<b>Storage</b> <ul style="list-style-type: none"> <li>• Configure ESX/ESXi with iSCSI, NFS, and Fibre Channel storage</li> <li>• Create and manage vSphere datastores</li> </ul>	13	<b>Patch Management</b> <ul style="list-style-type: none"> <li>• Manage patching and patch compliance using vCenter Update Manager</li> </ul>
7	<b>Virtual Machines</b> <ul style="list-style-type: none"> <li>• Deploy virtual machines using the Create New Virtual Machine wizard, templates, cloning, and VMware vCenter Converter</li> <li>• Modify and manage virtual machines</li> <li>• Perform Storage vMotion migrations</li> </ul>	14	<b>Installing VMware ESX and ESXi</b> <ul style="list-style-type: none"> <li>• Introduce ESX and ESXi Installable installation</li> </ul>



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

© 2010 VMware, Inc. All rights reserved. The product or workshop materials is protected by U.S. and international copyright and intellectual property laws. VMware products are covered by one or more patents listed at <http://www.vmware.com/download/patents.html>. VMware is a registered trademark or trademark of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

VMware warrants that it will perform these workshop services in a reasonable manner using generally accepted industry standards and practices. THE EXPRESS WARRANTY SET FORTH IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE SERVICES AND DELIVERABLES PROVIDED BY VMWARE, OR AS TO THE RESULTS WHICH MAY BE OBTAINED THEREFROM. VMWARE WILL NOT BE LIABLE FOR ANY THIRD-PARTY SERVICES OR PRODUCTS IDENTIFIED OR REFERRED TO CUSTOMER. All materials provided in this workshop are copyrighted by VMware ("Workshop Materials"). VMware grants the customer of this workshop a license to use and make reasonable copies of any Workshop Materials strictly for the purpose of facilitating such company's internal understanding, utilization and operation of its licensed VMware product(s). Except as set forth expressly in the sentence above, there is no transfer of any intellectual property rights or any other license granted under the terms of this workshop. If you are located in the United States, the VMware contracting entity for the service will be VMware, Inc., and if outside of the United States, the VMware contracting entity will be VMware International Limited.