

# 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 ESXi and 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. Go to [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, go to [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 VMware ESXi™ and VMware vCenter™ Server. The course is based on ESXi 5.0 and vCenter Server 5.0. Completion of this course satisfies the prerequisite for taking the VMware® Certified Professional 5 exam.

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

## Course Objectives

At the end of the course, you should gain an understanding of the functionality in vSphere 5 and be able to do the following:

- Install and configure ESXi
- Install and configure vCenter Server components
- Configure and manage 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 ESXi patches
- Use vCenter Server to manage higher availability and data protection

## Course Modules

<b>1 Course Introduction</b> <ul style="list-style-type: none"> <li>• Introductions and course logistics</li> <li>• Course objectives</li> </ul>	<b>8 Access and Authentication Control</b> <ul style="list-style-type: none"> <li>• Control user access through roles and permissions</li> <li>• Configure and manage the ESXi firewall</li> <li>• Integrate ESXi with Active Directory</li> <li>• Introduce vShield Zones</li> </ul>
<b>2 Introduction to VMware Virtualization</b> <ul style="list-style-type: none"> <li>• Introduce virtualization, virtual machines, and vSphere components</li> <li>• Explain the concepts of server, network, and storage virtualization</li> <li>• Describe where vSphere fits into the cloud architecture</li> <li>• Install and use vSphere user interfaces</li> </ul>	<b>9 Resource Management and 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>
<b>3 Virtual Machines</b> <ul style="list-style-type: none"> <li>• Introduce virtual machines, virtual machine hardware, and virtual machine files</li> <li>• Deploy a single virtual machine and virtual machine appliance</li> </ul>	<b>10 Data Protection</b> <ul style="list-style-type: none"> <li>• Discuss strategies for backing up ESXi hosts</li> <li>• Introduce the backup/recovery APIs</li> <li>• Discuss strategies for backing up virtual machines</li> </ul>
<b>4 VMware vCenter Server</b> <ul style="list-style-type: none"> <li>• Identify vCenter Server and database requirements</li> <li>• Describe vCenter Server architecture</li> <li>• Deploy a vCenter Server appliance</li> <li>• View and create vCenter Server inventory objects</li> </ul>	<b>11 High Availability and Fault Tolerance</b> <ul style="list-style-type: none"> <li>• Configure and manage a VMware High Availability (HA) cluster</li> <li>• Configure fault-tolerant virtual machines using VMware Fault Tolerance</li> </ul>
<b>5 Configure and Manage Virtual Networks</b> <ul style="list-style-type: none"> <li>• Describe, create, and manage a standard virtual switch</li> <li>• Describe and modify standard virtual switch properties</li> </ul>	<b>12 Scalability</b> <ul style="list-style-type: none"> <li>• Configure and manage a VMware Distributed Resource Scheduler (DRS) cluster</li> <li>• Configuring Enhanced vMotion Compatibility</li> <li>• Using VMware HA and DRS together</li> </ul>
<b>6 Configure and Manage vSphere Storage</b> <ul style="list-style-type: none"> <li>• Configure ESXi with iSCSI, NFS, and Fibre Channel storage</li> <li>• Create and manage vSphere datastores</li> <li>• Configure, deploy, and manage the VMware Virtual Storage Appliance</li> </ul>	<b>13 Patch Management</b> <ul style="list-style-type: none"> <li>• Manage ESXi patching and patch compliance using vCenter Update Manager</li> </ul>
<b>7 Virtual Machine Management</b> <ul style="list-style-type: none"> <li>• Deploy virtual machines using templates, cloning, and VMware vCenter Converter™</li> <li>• Modify and manage virtual machines</li> <li>• Create and manage virtual machine snapshots</li> <li>• Perform VMware vMotion® and Storage vMotion migrations</li> </ul>	<b>14 Installing VMware vSphere 5 Components</b> <ul style="list-style-type: none"> <li>• Introduce ESXi Installable installation</li> <li>• Introduce vCenter Server installation</li> <li>• Additional vCenter Server module installation</li> </ul>



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