

# VMware vSphere: Overview

## Delivery Methods

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

## Course Duration

- One day of instructor-led training
- 55% lecture, 45% hands-on lab

## Target Audience

This course is designed for technical persons responsible for evaluating vSphere 5, including IT managers, system architects, and system administrators.

## Prerequisites

System administration knowledge or experience on Microsoft Windows or Linux operating systems is helpful

## 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 <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 <http://www.vmware.com/education>.

## Course Overview

This hands-on training course introduces the most compelling features of VMware vSphere® 5, which is the foundational component of the cloud infrastructure suite of software from VMware®. This course demonstrates vSphere features that help reduce your IT costs while improving efficiency, availability, scalability, flexibility, and manageability. The course is based on VMware ESXi™ 5.0 and VMware vCenter Server™ 5.0.

For students who want more in-depth vSphere training, VMware Education offers a variety of other courses. Go to <http://www.vmware.com/education> for your course options.

## Course Objectives

By the end of the course, you will be able to explain vSphere 5.0 storage, network, and virtualization concepts and have hands-on experience with the following:

- Using the VMware vSphere® Client™ to deploy and manage virtual machines
- Using VMware vSphere® vMotion® to migrate live virtual machines
- Using vSphere Storage vMotion to migrate live virtual machine data
- Configuring ESXi clusters to automatically balance virtual machine workloads
- Hierarchically allocating CPU and memory resources to specific business functions
- Using vCenter Server alarms and performance graphs to actively monitor the datacenter

## Course Modules

<p><b>1 Course Introduction</b></p> <ul style="list-style-type: none"> <li>• Understand the course goals</li> <li>• Understand the course objectives</li> <li>• Become familiar with the course outline</li> </ul>	<p><b>6 Balancing Virtual Machine Workloads</b></p> <ul style="list-style-type: none"> <li>• Describe the operation and scalability benefits of vSphere Distributed Resource Scheduler (DRS)</li> <li>• Configure a DRS cluster and resource pools</li> <li>• Describe the operation and scalability benefits of Storage DRS</li> <li>• Configure a Storage DRS cluster</li> <li>• Describe the operation and cost benefits of vSphere Distributed Power Management</li> </ul>
<p><b>2 Virtual Infrastructure Overview</b></p> <ul style="list-style-type: none"> <li>• Describe server virtualization concepts</li> <li>• Identify vSphere components, including vCenter Server, ESXi, and the vSphere Client</li> <li>• View and describe virtual network and storage components</li> <li>• Learn to use the vSphere Client management interface</li> </ul>	<p><b>7 Monitoring the Virtual Datacenter</b></p> <ul style="list-style-type: none"> <li>• Describe vCenter Server monitoring capabilities, including performance graphs and alarms</li> <li>• Use performance graphs to monitor ESXi hosts</li> <li>• Configure ESXi host and virtual machine alarms</li> </ul>
<p><b>3 Creating Virtual Machines</b></p> <ul style="list-style-type: none"> <li>• Describe virtual machine virtual hardware components</li> <li>• Create and use templates to deploy virtual machines</li> <li>• Describe the functionality and benefits of installing VMware Tools on virtual machines</li> <li>• Automate guest operating system customization</li> </ul>	<p><b>8 High Availability and Fault Tolerance</b></p> <ul style="list-style-type: none"> <li>• Describe the operation and availability benefits of vSphere High Availability</li> <li>• Configure a vSphere HA cluster</li> <li>• Describe the operation and availability benefits of VMware Fault Tolerance</li> <li>• Configure a virtual machine for fault tolerance</li> </ul>
<p><b>4 Allocating Compute Resources to Business Functions</b></p> <ul style="list-style-type: none"> <li>• Describe CPU and memory resource management techniques used in ESXi</li> <li>• Use virtual machine resource controls to allocate CPU and memory resources</li> <li>• Use resources pools to hierarchically allocate CPU and memory resources</li> </ul>	<p><b>9 Extending VMware vSphere Capabilities</b></p> <ul style="list-style-type: none"> <li>• Discuss how different VMware products and features work together to reduce the costs and improve the efficiency, availability, flexibility, and manageability of your datacenter</li> </ul>
<p><b>5 Migrating Virtual Machines</b></p> <ul style="list-style-type: none"> <li>• Describe the operation and benefits of vMotion and Storage vMotion</li> <li>• Use vMotion to migrate a live virtual machine</li> <li>• Use Storage vMotion to migrate a live virtual machine's data</li> </ul>	



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