

VMware vSphere: Fast Track

Delivery Methods

- Instructor-led
- Live-online

Course Duration

- Five (5) extended days of instructor-led classroom training
- 60% lecture, 40% hands-on lab

Target Audience

Experienced system administrators and system integrators willing to work hard to achieve superior vSphere skills with minimal time away from the office

Prerequisites

- Willingness to participate in a demanding, high-intensity training experience
- Comfort with system administration using command-line interfaces
- Have a basic understanding of virtualization concepts

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 *intensive, extended-hours* training course focuses on installing, configuring, and managing VMware vSphere® 5. This course combines the content of the VMware vSphere: Install, Configure, Manage course with advanced tasks and skills for configuring a highly available and scalable virtual infrastructure. The course is based on VMware ESXi™ 5.0 and VMware 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, go to <http://www.vmware.com/education>.

Course Objectives

At the end of the course, you should be able to do the following:

- Configure and manage ESXi networking and storage.
- Create, configure, migrate, manage, convert, and monitor virtual machines and virtual appliances.
- Manage user access to the virtual infrastructure.
- Use vCenter Server to monitor resource usage.
- Scale the vSphere virtual infrastructure.
- Implement business continuity solutions.
- Manage changes to the vSphere environment.
- Use a command-line interface to manage vSphere.
- Install and configure ESXi and vCenter Server.
- Use VMware vSphere® Auto Deploy to provision ESXi hosts.

Course Modules

<p>1 Course Introduction</p> <ul style="list-style-type: none"> • Introductions and course logistics • Course objectives 	<p>7 Virtual Machine Management</p> <ul style="list-style-type: none"> • Use templates and cloning to deploy virtual machines • Modify and manage virtual machines • Create and manage virtual machine snapshots • Perform VMware vSphere vMotion® and vSphere Storage vMotion migrations • Create a vSphere vApp • Use VMware vCenter Converter™ Standalone to hot-clone a system
<p>2 Introduction to VMware Virtualization</p> <ul style="list-style-type: none"> • Introduce virtualization and vSphere components • Explain the concepts of server, network, and storage virtualization • Describe where vSphere fits into the cloud architecture • Install and use vSphere user interfaces • Describe the ESXi architecture and configure various ESXi settings 	<p>8 Access and Authentication Control</p> <ul style="list-style-type: none"> • Control user access through roles and permissions • Discuss ESXi host access and authentication • Integrate ESXi with Active Directory • Introduce VMware® vShield™ products
<p>3 Creating Virtual Machines</p> <ul style="list-style-type: none"> • Introduce virtual machines, virtual machine hardware, and virtual machine files • Deploy a single virtual machine 	<p>9 Resource Management and Monitoring</p> <ul style="list-style-type: none"> • Introduce virtual CPU and memory concepts • Describe methods for optimizing CPU and memory usage • Configure and manage resource pools • Use vCenter Server performance graphs and alarms to monitor resource usage
<p>4 VMware vCenter Server</p> <ul style="list-style-type: none"> • Introduce vCenter Server architecture • Manage vCenter Server inventory objects and licenses 	<p>10 High Availability and Fault Tolerance</p> <ul style="list-style-type: none"> • Explain the vSphere High Availability (HA) architecture • Configure and manage a vSphere HA cluster • Introduce vSphere Fault Tolerance
<p>5 Configuring and Managing Virtual Networks</p> <ul style="list-style-type: none"> • Describe, create, and manage a standard virtual switch • Describe and modify standard virtual switch properties 	<p>11 Host Scalability</p> <ul style="list-style-type: none"> • Use Host Profiles to manage ESXi configuration compliance • Configure and manage a vSphere Distributed Resource Scheduler™ cluster • Configure and manage vSphere Distributed Power Management
<p>6 Configuring and Managing Virtual Storage</p> <ul style="list-style-type: none"> • Introduce storage protocols and device names • Configure ESXi with iSCSI, NFS, and Fibre Channel storage • Create and manage VMware vSphere® VMFS datastores • Introduce VMware vSphere® Storage Appliance 	<p>12 Network Scalability</p> <ul style="list-style-type: none"> • Create, configure, and manage vNetwork distributed switches, network connections, and port groups • Discuss distributed virtual switch features, such as PVLANS, discovery protocols, Network I/O Control, NetFlow, and port mirroring



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| <p>13 Storage Scalability</p> <ul style="list-style-type: none"> • Describe VMware vSphere® Storage APIs - Array Integration and Storage Awareness • Explain profile-driven storage • Add a storage policy to a virtual machine storage profile • Introduce storage I/O control • Create a datastore cluster for Storage DRS™ • Configure Storage DRS | <p>16 VMware vSphere Management Assistant</p> <ul style="list-style-type: none"> • Describe VMware vSphere® Management Assistant (vMA) • Configure vMA • Discuss the VMware vSphere® Command-Line Interface command set • Perform command-line operations for host management, network management, storage management, and performance monitoring |
| <p>14 Data Protection</p> <ul style="list-style-type: none"> • Discuss a strategy for backing up ESXi hosts and vCenter Server • Introduce the VMware® Data Recovery appliance • Discuss solutions for efficiently backing up virtual machines | <p>17 Installing VMware Components</p> <ul style="list-style-type: none"> • Use vCenter Linked Mode to manage multiple vCenter Server inventories • Introduce ESXi installation • Describe boot-from-SAN requirements • Describe vCenter Server hardware, software, and database requirements • Install vCenter Server (Windows-based) • Introduce vCenter Server Appliance • Install and configure vCenter Server Appliance • Use Image Builder to create an ESXi installation image • Use Auto Deploy to deploy a stateless ESXi host |
| <p>15 Patch Management</p> <ul style="list-style-type: none"> • Use VMware vSphere® Update Manager™ to manage ESXi patching • Install Update Manager and the Update Manager plug-in • Create patch baselines • Scan and remediate hosts | |



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