

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

Course Suitability

- | | |
|---|--|
| <input checked="" type="checkbox"/> Administrator | <input type="checkbox"/> Expert |
| <input checked="" type="checkbox"/> Engineer | <input type="checkbox"/> Advanced |
| <input checked="" type="checkbox"/> Architect | <input checked="" type="checkbox"/> Professional |
| | <input type="checkbox"/> Fundamentals |

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® 5.1. 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™ 5.1 and VMware® vCenter Server™ 5.1. 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

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

- Configure and manage ESXi networking and storage
- Create, configure, migrate, manage, and monitor virtual machines and virtual appliances
- Manage user access to the VMware virtual infrastructure
- Use vCenter Server to monitor resource usage
- Implement VMware vSphere® High Availability and VMware vSphere® Fault Tolerance (FT)
- Use host profiles to manage ESXi configuration compliance
- Use vSphere distributed switches to scale networking
- Use profile-driven storage and VMware vSphere® Storage DRS™ to scale storage
- Use VMware vSphere® Update Manager™ to apply ESXi patches
- Use VMware vSphere® Management Assistant (vMA) to manage vSphere
- Deploy ESXi, vCenter Server, and VMware® vCenter Server™ Appliance™
- Use VMware vSphere® ESXi™ Image Builder CLI to create an ESXi image
- 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 VMware vSphere® Storage vMotion® migrations • Create a VMware vSphere® vApp™
<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 HA architecture • Configure and manage a vSphere HA cluster • Set vSphere HA advanced parameters • Enable FT on a virtual machine
<p>5 Configuring and Managing Virtual Networks</p> <ul style="list-style-type: none"> • Describe, create, and manage a standard switch • Describe and modify standard switch properties • Configure virtual switch load-balancing algorithms 	<p>11 Host Scalability</p> <ul style="list-style-type: none"> • Use host profiles to manage ESXi configuration compliance • Configure and manage a VMware vSphere® Distributed Resource Scheduler™ cluster • Configure Enhanced vMotion Compatibility • Use vSphere HA and vSphere DRS together • Configure and manage VMware 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 vSphere distributed switches, network connections, and port groups • Discuss distributed switch features, such as private VLANs, discovery protocols, VMware vSphere® Network I/O Control, NetFlow, and port mirroring



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

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13 Storage Scalability

- 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 VMware vSphere® Storage I/O Control
- Create a datastore cluster
- Configure Storage DRS

14 Data Protection

- Discuss a strategy for backing up ESXi hosts and vCenter Server
- Introduce VMware vSphere® Data Protection™
- Discuss solutions for efficiently backing up virtual machines

15 Patch Management

- Use Update Manager to manage ESXi patching
- Install Update Manager and the Update Manager plug-in
- Create patch baselines
- Scan and remediate hosts

16 VMware vSphere Management Assistant

- Describe 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

17 Installing VMware Components

- Describe 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 VMware vSphere® Auto Deploy™ to deploy a stateless ESXi host



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com

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