

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

Course Suitability

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

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 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.

Course Overview

This hands-on training course explores installation, configuration, and management of VMware vSphere®, which consists of VMware vSphere® ESXi™ and VMware® vCenter Server™. This course is based on prerelease versions of ESXi 5.1 and vCenter Server 5.1. Completion of this course satisfies the prerequisite for taking the VMware Certified Professional 5 – Data Center Virtualization exam.

Students who complete this course may enroll in any of several, more advanced vSphere courses. For advanced course options, go to www.vmware.com/education.

Course Objectives

By the end of the course, you should understand vSphere 5.1 functions and features and be able to do the following:

- Install and configure ESXi
- Install and configure vCenter Server components
- Use vCenter Server to configure and manage ESXi networking and storage
- 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 vSphere® Update Manager™ to apply ESXi patches
- Use vCenter Server to manage higher availability and data protection

Course Modules

1 Course Introduction <ul style="list-style-type: none"> • Introductions and course logistics • Course objectives 	8 Data Protection <ul style="list-style-type: none"> • Discuss a strategy for backing up ESXi hosts and vCenter Server • Discuss solutions for backing up virtual machines efficiently
2 Introduction to VMware Virtualization <ul style="list-style-type: none"> • Introduce virtualization, virtual machines, 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 	9 Access and Authentication Control <ul style="list-style-type: none"> • Control user access through roles and permissions • Configure and manage the ESXi firewall • Configure ESXi lockdown mode • Integrate ESXi with Active Directory • Explain VMware® vShield Endpoint™ integration in vSphere
3 Creating Virtual Machines <ul style="list-style-type: none"> • Introduce virtual machines, virtual machine hardware, and virtual machine files • Deploy a single virtual machine 	10 Resource Management and Monitoring <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 • Monitor resource usage using vCenter Server performance graphs and alarms
4 VMware vCenter Server <ul style="list-style-type: none"> • Introduce the vCenter Server architecture • Introduce VMware® vCenter™ Server Appliance™ • Configure and manage vCenter Server Appliance • Manage vCenter Server inventory objects and licenses 	11 High Availability and Fault Tolerance <ul style="list-style-type: none"> • Introduce the new VMware vSphere® High Availability architecture • Configure and manage a vSphere HA cluster • Introduce VMware vSphere® Fault Tolerance • Describe VMware vSphere® Replication
5 Configuring and Managing Virtual Networks <ul style="list-style-type: none"> • Describe, create, and manage a standard virtual switch • Describe and modify standard virtual switch properties • Configure virtual switch load-balancing algorithms 	12 Scalability <ul style="list-style-type: none"> • Configure and manage a VMware vSphere® Distributed Resource Scheduler™ (DRS) cluster • Configure Enhanced vMotion Compatibility • Use vSphere HA and DRS together
6 Configuring and Managing Virtual Storage <ul style="list-style-type: none"> • Introduce storage protocols and device names • Configure ESXi with iSCSI, NFS, and Fibre Channel storage • Create and manage vSphere datastores • Deploy and manage VMware vSphere® Storage Appliance 	13 Patch Management <ul style="list-style-type: none"> • Use Update Manager to manage ESXi patching • Install Update Manager and the Update Manager plug-in • Create patch baselines • Scan and remediate hosts
7 Virtual Machine Management <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™ 	14 Installing VMware Components <ul style="list-style-type: none"> • Introduce ESXi installation • Describe boot-from-SAN requirements • Introduce vCenter Server deployment options • Describe vCenter Server hardware, software, and database requirements • Install vCenter Server (Windows-based)



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