

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 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 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.

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

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 • Introduce the VMware Data Recovery appliance • 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 • Introduce VMware vShield Zones
3 Create 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 vCenter Server architecture • Introduce 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 new vSphere High Availability (HA) architecture • Configure and manage a vSphere High Availability cluster • Introduce VMware Fault Tolerance
5 Configure and Manage 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 Distributed Resource Scheduler (DRS) cluster • Configure Enhanced vMotion Compatibility • Use vSphere HA and DRS together
6 Configure and Manage 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 the VMware vSphere® Storage Appliance 	13 Patch Management <ul style="list-style-type: none"> • Manage ESXi patching using vCenter Update Manager • Install Update Manager and Update Manager plug-in • Create patch baselines • Scan and remediate hosts
7 Virtual Machine Management <ul style="list-style-type: none"> • Deploy virtual machines using templates and cloning • Modify and manage virtual machines • Create and manage virtual machine snapshots • Perform VMware vSphere® vMotion® and Storage vMotion migrations • Create a 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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