

# VMware vSphere: Install, Configure, Manage

## Overview

This hands-on training course explores installation, configuration, and management of VMware® vSphere™, which consists of VMware ESXi/ESX™ and VMware vCenter™ Server. Upon completion of this course, you can take the examination to become a VMware Certified Professional. The course is based on ESXi 4.0, ESX 4.0, and vCenter Server 4.0.

Students who complete this course may enroll in any of several more-advanced vSphere courses. See [www.vmware.com/education](http://www.vmware.com/education) for options.

## Course Objectives

At the end of the course, you should gain an understanding of the functionality in VMware vSphere 4 and be able to:

- Install and configure ESX
- Install and configure vCenter Server
- Configure and manage ESX networking and storage using vCenter Server
- Deploy and manage virtual machines
- Manage user access to the VMware infrastructure
- Increase scalability using vCenter Server
- Monitor resource usage using vCenter Server
- Apply patches using VMware vCenter Update Manager
- Manage higher availability and data protection using vCenter Server

Best practices and lab exercises are interspersed throughout the course.

## Pricing and Scope

- Approximately 26 hours of instructor-led, classroom training
- 50% lecture and 50% hands-on lab
- Individual enrollment available at convenient locations worldwide at <http://www.vmware.com/education>
- Contact your VMware representative for pricing information.
- Onsite training available for companies that want the benefits of instructor-led classes without travel.
- Contact VMware Education to discuss facility requirements for onsite training at [education@vmware.com](mailto:education@vmware.com).

## Target Audience

System administrators, systems engineers, and operators responsible for ESXi, ESX, and/or vCenter Server

## Prerequisites

System administration experience on Microsoft Windows or Linux operating systems

## Course Outline

Module 1: Course Introduction

Module 2: Introduction to VMware Virtualization

- Discussion of virtualization and vSphere components

Module 3: Configuring ESXi/ESX

- Configuration of ESXi and ESX

Module 4: Installing and Using VMware vCenter Server

- Install and configure vCenter Server, and use the VMware vSphere Client to manage vCenter Server inventory hierarchies

Module 5: Networking

- Configuration of vNetwork standard and distributed switches, network connections, and port groups

Module 6: Storage

- Storage management technologies

Module 7: Virtual Machines

- Deploy virtual machines using templates, VMware vCenter Converter, Guided Consolidation
- Modifying, managing, and migrating virtual machines

Module 8: Access Control

- Controlling user access through roles and permissions

Module 9: Resource Monitoring

- Workload assessment, monitoring using vCenter Server

Module 10: Scalability

- VMware vMotion™ migrations
- Setup of resource pools and VMware Distributed Resource Scheduler cluster

Module 11: High Availability and Data Protection

- Setup of a VMware High Availability cluster
- Backup and recovery of virtual machines using VMware Data Recovery

## Module 12: Configuration Management

- Patching using vCenter Update Manager

## Module 13: Installing ESX

- Installation of ESX



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