



HP Education Services Course Overview

VMware vSphere: Install, Configure, Manage [5.5] (H6D01S)

This hands-on training course explores installation, configuration, and management of VMware vSphere®, which consists of VMware ESXi™ and VMware® vCenter Server™. This course is based on versions of ESXi 5.5 and vCenter Server 5.5. Completion of this course satisfies the prerequisite for taking the VMware® Certified Professional 5 exam. This course is 60% lecture and 40% hands-on lab.

Audience

- System administrators
- Systems engineers
- Operators of ESXi and vCenter Server

Prerequisites

- System administration experience on Microsoft Windows or Linux operating systems.
- Understanding of concepts presented in the VMware Data Center Virtualization Fundamentals course for VCA-DCV certification.

Course objectives

By the end of the course, you should understand vSphere 5.5 functions and features and be able to meet the following objectives:

- Deploy an ESXi host
- Deploy a vCenter Server instance
- Deploy a vCenter Server appliance
- Manage an ESXi host using vCenter Server
- Manage ESXi storage using vCenter Server
- Manage ESXi networking using vCenter Server
- Manage virtual machines using vCenter Server
- Deploy and manage thin-provisioned virtual machines
- Migrate virtual machines with VMware vSphere® vMotion®
- Manage vSphere infrastructure with VMware vSphere® Web Client and VMware vSphere® Client™
- Migrate virtual machines using VMware vSphere® Storage vMotion®
- Manage access control using vCenter Server
- Monitor resource usage using vCenter Server

Course title:	VMware vSphere: Install, Configure, Manage [5.5]
HP product number:	H6D01S
Category/Subcategory:	VMware
Course length:	5 day
Level:	Intermediate
Delivery language:	English
To order:	You can order this course online at http://www.hp.com/learn . At the site, select a country, then choose "registration" or "Book a course" and fill out the online registration form.

- Manage VMware vSphere® High Availability, VMware vSphere® Fault Tolerance, and VMware vSphere® Data Protection™ using vCenter Server
- Apply patches using VMware vSphere® Update Manager™

Why education services from HP?

- Online instructor-led and self-paced training at <http://www.hp.com/learn>
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- Comprehensive student materials
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Detailed course outline

Module 1: Course Introduction

- Introductions and course logistics
- Course objectives

Module 2: Virtualized Data Center

- Introduce components of the virtualized data center
- Describe where vSphere fits into the cloud architecture
- Install and use vSphere Client

Module 3: Creating Virtual Machines

- Introduce virtual machines, virtual machine hardware, and virtual machine files
- Deploy a single virtual machine

Module 4: VMware vCenter Server

- Introduce the vCenter Server architecture ? Introduce VMware® vCenter™ Single Sign-On™
- Install and use vSphere Web Client
- Introduce VMware® vCenter™ Server Appliance™
- Configure and manage vCenter Server Appliance
- Manage vCenter Server inventory objects and licenses

Module 5: Configuring and Managing Virtual Networks

- Describe, create, and manage a standard switch
- Describe and modify standard switch properties
- Configure virtual switch load-balancing algorithms

Module 6: Configuring and Managing Virtual Storage

- Introduce storage protocols and device names
- Configure ESXi with iSCSI, NFS, and Fibre Channel storage
- Create and manage vSphere datastores
- Deploy and manage VMware® Virtual SAN™

Module 7: Virtual Machine Management

- Use templates and cloning to deploy virtual machines
- Modify and manage virtual machines
- Create and manage virtual machine snapshots
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Create a VMware vSphere® vApp™

Module 8: Access and Authentication Control

- Control user access through roles and permissions
- Configure and manage the ESXi firewall
- Configure ESXi lockdown mode
- Integrate ESXi with Active Directory

Module 9: Resource Management and Monitoring

- 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

Module 10: High Availability and Fault Tolerance

- Introduce the new vSphere High Availability architecture
- Configure and manage a vSphere HA cluster
- Introduce vSphere Fault Tolerance
- Describe VMware vSphere® Replication

Module 11: Scalability

- Configure and manage a VMware vSphere® Distributed Resource Scheduler™ (DRS) cluster
- Configure Enhanced vMotion Compatibility
- Use vSphere HA and DRS together

Module 12: Patch Management

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

Module 13: Installing VMware Components

- 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)

For more information

To locate country contact information and to learn more about education services, please visit our worldwide web site at <http://www.hp.com/learn>.

