VMware vSphere: Fast Track

Delivery Methods

- Classroom
- Live Online
- Onsite

Course Duration

- Five (5) extended days of instructor-led classroom training (50 hours)
- 55% lecture, 45% hands-on lab

Target Audience

New and experienced system administrators, systems engineers, and system integrators willing to work hard to achieve superior vSphere skills with minimal time away from the office

Course Suitability

- ☒ Administrator ☐ Expert
- ☒ Engineer ☒ Advanced
- ☒ Architect ☒ Professional
-   ☐ Fundamentals

Prerequisites

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

Certifications

For more information, go to VMware Certification.

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 VMware Education to find the class that is right for you.

Course Overview

This intensive, extended-hours course combines instructor training with hands-on labs to focus on how to install, configure, manage, and troubleshoot VMware vSphere® 6, including VMware ESXi™ 6 and VMware vCenter Server™ 6. This course combines the content of the VMware vSphere: Install, Configure, Manage course with troubleshooting skills needed for maintaining highly available and scalable vSphere environments. Students gain practical experience with these concepts through the completion of hands-on labs.

Completion of this course satisfies the prerequisite for taking the VMware Certified Professional 6 – Data Center Virtualization (VCP6-DCV) exam.

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

Course Objectives

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

- Deploy an ESXi host and create virtual machines
- Deploy a vCenter Server instance or VMware vCenter™ Server Appliance™
- Configure and manage the vSphere infrastructure with the VMware vSphere® Client™ and the VMware vSphere® Web Client
- Configure virtual networks with vSphere standard switches
- Describe and use a content library
- Migrate virtual machines with VMware vSphere® vMotion®
- Use VMware vSphere® Storage vMotion® to migrate virtual machine storage
- Use VMware vRealize™ Operations Manager™ to identify and solve issues through analytics and alerts
- Manage VMware vSphere® High Availability and VMware vSphere® Fault Tolerance
- Use VMware vSphere® Replication™ and VMware vSphere® Data Protection™ to replicate virtual machines and perform data recovery
- Use VMWare vSphere® Distributed Resource Scheduler™ clusters to improve host scalability
- Use vSphere distributed switches to improve network scalability
- Use VMware vSphere® Update Manager™ to apply patches

- Perform basic troubleshooting of ESXi hosts, virtual machines, vCenter Server, virtual networking, virtual storage, and other vSphere operations

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Course Modules

1 Course Introduction
- Introductions and course logistics
- Course objectives

2 Software-Defined Data Center
- 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

3 Creating Virtual Machines
- Introduce virtual machines, virtual machine hardware, and virtual machine files
- Deploy a single virtual machine
- Explain the importance of VMware Tools™
- Describe how to import an OVF template

4 VMware vCenter Server
- Introduce vCenter Server architecture
- Introduce vCenter Server Appliance
- Install and configure vCenter Server Appliance
- Use the vSphere Web Client
- Configure VMware vCenter™ Single Sign-On™ and VMware Platform Services Controller™
- Manage vCenter Server inventory objects and licenses

5 Troubleshooting vSphere
- Use a structured approach to troubleshoot issues in vSphere
- Discuss options for running vSphere commands
- Locate and use important vSphere log files

6 Configuring and Managing Virtual Networks
- Describe, create, and manage a standard switch
- Describe and modify standard switch properties
- Describe the NIC teaming of a standard switch port group
- Describe, create, and manage a distributed switch
- Troubleshoot virtual networking

7 Configuring and Managing Virtual Storage
- Introduce storage protocols and device names
- Configure ESXi with iSCSI, NFS, and Fibre Channel storage
- Create and manage vSphere VMFS datastores
- Introduce VMware Virtual SAN™ datastores
- Troubleshoot virtual storage

8 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 VMware vSphere® vApp™
- Describe the types of content libraries
- Troubleshoot virtual machines and snapshots

9 Resource Management and Monitoring
- 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
- Use vRealize Operations Manager to manage a software-defined data center
- Troubleshoot ESXi and vCenter Server

10 vSphere HA and vSphere FT
- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Set vSphere HA advanced parameters
- Enable vSphere FT on a virtual machine
- Describe vSphere Replication and vSphere Data Protection
- Troubleshoot vSphere HA

11 Host Scalability with vSphere DRS
- Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster
- View information about a vSphere DRS cluster
- Troubleshoot vSphere DRS clusters

12 vSphere Update Manager and Host Maintenance
- Describe, install, and configure vSphere Update Manager
- Describe and use host profiles
- Use baselines and remediate ESXi hosts
- Perform patch management

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13	**Installing vSphere Components**
	• Describe how to install ESXi interactively
	• Identify the basic requirements for an ESXi host to boot from SAN
	• Identify system requirements to install vCenter Server
	• Install vCenter Server on a supported Windows system

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