

VMware® vSphere Install, Configure, Manage v5.5

Duration

Classroom Learning - 5 Day(s)

Overview

In this hands-on course you explore the 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. Successful completion of this course satisfies the prerequisite to take the VMware Certified Professional 5 - Data Center Virtualization (VCP5-DCV) certification exam.

Who Should Attend

- System Administrator
- Systems Engineer
- Data Center Operations Professionals
- Technology Professionals seeking VMware Certified Professional 5 - Data Center Virtualization (VCP5-DCV) certification
- Systems Operators responsible for ESXi and vCenter Server

Outline

Lesson 1: Course Introduction

Introductions and course logistics
Course objectives

Lesson 2: Virtualized Data Center

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

Lesson 3: Creating Virtual Machines

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

Lesson 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

Lesson 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

Lesson 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

Lesson 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

Lesson 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

Lesson 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

Lesson 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

Lesson 11: Scalability

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

Lesson 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

Lesson 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)