VMware vSphere: Install, Configure, Manage [v6.0]

$3,999

Length: 35 Hours (5 days)

Introduction: This hands-on training course explores installation, configuration, and management of VMware vSphere® 6, which includes VMware ESXi 6 and VMware® vCenter Server 6. This course will give you a solid understanding of how to administer a vShpere infrastructure for an organization of any size. Completion of this course satisfies the prerequisite for taking the vSphere 6 Foundations exam. This course will prepare you for the Foundations exam and put you on the path to obtaining the VCP6-DCV, VCP6-CMA, VCP6-NV, and VCP6-DTM certifications.

Prerequisites: In addition to their professional experience, students who attend should have the following technical knowledge:

- System administration experience on Microsoft Windows or Linux operating systems
- Understanding of virtual data concepts compared to those needed for VCA-DCV certification

Objectives: Students will learn:

- Software-defined data center
- Deploy an ESXi host and create virtual machines
- vCenter Server architecture
- Deploy a vCenter Server instance or VMware vCenter Server Appliance
- Use vCenter Server to manage an ESXi host
- Configure and manage vSphere infrastructure with VMware vSphere Client and VMware vSphere Web Client
- Configure virtual networks with vSphere standard switches
- Use vCenter Server to manage various types of host storage
- Manage virtual machines, templates, clones, and snapshots
- Create a vApp
- Use the content library
- Migrate virtual machines with VMware vSphere vMotion
- Use VMware vSphere Storage vMotion to migrate virtual machine storage
- Monitor resource usage and manage resource pools
- 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, and vCenter Server operations

VMware vSphere: Install, Configure, Manage [v6.0]

$3,999

Course Outline

I. Software-Defined Data Center

A. Introduce Components of the Software-Defined Data Center
B. Where vSphere Fits into the Cloud Architecture
C. Install and Use vSphere Client
D. Overview of ESXi

II. Creating Virtual Machines

A. Introduce Virtual Machines, Virtual Machine Hardware, and Virtual Machine Files
B. Create and Work With Virtual Machines

III. vCenter Server

A. Introduce the vCenter Server Architecture
B. Deploy and Configure vCenter Server Appliance
C. Install and Use vSphere Web Client
D. Manage vCenter Server Inventory Objects and Licenses
E. Explain the Benefits of Enhanced vMotion Compatibility

IV. Configuring and Managing Virtual Networks

A. Create and Manage Standard Switches
B. Modify Standard Switch Properties
C. Configure Virtual Switch Load-Balancing Algorithms
D. Create, Configure, and Manage vSphere Distributed Switches, Network Connections, and Port Groups

V. Configuring and Managing Virtual Storage

A. Introduce Storage Protocols and Storage Device Names
B. Discuss ESXi with iSCSI, NFS, and Fibre Channel Storage
C. Create and Manage VMware vSphere VMFS Datastores
D. Introduce VMware® Virtual SAN

VI. Virtual Machine Management

A. Use Templates and Cloning To Deploy Virtual Machines
B. Modify and Manage Virtual Machines
C. Perform vSphere vMotion and vSphere Storage vMotion Migrations
D. Create and Manage Virtual Machine Snapshots
E. Create a vApp
F. Introduce the Various Types of Content Libraries and How To Deploy and Use Them

VII. Resource Management and Monitoring

A. Introduce Virtual CPU and Memory Concepts
B. Configure and Manage Resource Pools
C. Methods for Optimizing CPU And Memory Usage
D. Use vCenter Server Performance Graphs and Alarms to Monitor Resource Usage
E. Create and Use Alarms to Report Certain Conditions or Events
F. Introduce vRealize Operations Manager for Data Center Monitoring and Management

VIII. vSphere HA and vSphere Fault Tolerance

A. Explain the vSphere HA Architecture
B. Configure and Manage a vSphere HA Cluster
C. Use vSphere HA Advanced Parameters
D. Introduce vSphere Fault Tolerance
E. Enable vSphere Fault Tolerance on Virtual Machines
F. Introduce vSphere® Replication
G. Use vSphere Data Protection to Back Up and Restore Data

IX. Host Scalability

A. Functions of a vSphere DRS Cluster
B. Configure and Manage a vSphere DRS Cluster
C. Work with Affinity and Anti-Affinity Rules
D. Use vSphere HA and vSphere DRS Together

VMware vSphere: Install, Configure, Manage [v6.0]

$3,999

X. vSphere Update Manager and Host Maintenance

A. Use vSphere Update Manager to Manage ESXi Patching
B. Install vSphere Update Manager and the vSphere Update Manager Plug-In
C. Create Patch Baselines
D. Use Host Profiles to Manage ESXi Configuration Compliance
E. Scan and Remediate Hosts

XI. Installing VMware Components

A. ESXi Installation
B. Boot-from-SAN Requirements
C. Introduce vCenter Server Deployment Options
D. vCenter Server Hardware, Software, and Database Requirements
E. Installation of vCenter Server Appliance and a vCenter Server Instance