

## **Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# VMware vSphere: Install Configure Manage [V6.7] - On Demand

CODE: LENGTH: PRICE:

VM-VSICM-V6.7 - OD 40 Hours (5 days) \$4,250.00

#### **Description**

This course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6.7, which includes VMware ESXi<sup>™</sup> 6.7 and VMware vCenter Server® 6.7. This course prepares you to administer a vSphere infrastructure for an organization of any size.

This course is the foundation for most of the other VMware technologies in the software-defined data center.

#### **Objectives**

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

- · Describe the software-defined data center
- Explain the vSphere components and their function in the infrastructure
- Add ESXi hosts to a VMware vCenter® Server Appliance™ instance
- · Manage vCenter Server Appliance
- · Use a local content library as an ISO store, and deploy a virtual machine
- · Describe vCenter Server architecture
- · Use vCenter Server to manage an ESXi host
- Configure and manage vSphere infrastructure with VMware Host Client™ and VMware vSphere® Client™
- · Describe virtual networks with vSphere standard switches
- · Configure standard switch policies
- Use vCenter Server to manage various types of host storage: VMware vSphere® VMFS, NFS, iSCSI, and RDM
- Examine the features and functions of Fibre Channel and VMware vSAN™
- · Manage virtual machines, templates, clones, and snapshots
- · Migrate virtual machines with VMware vSphere® vMotion®
- Migrate virtual machine storage with VMware vSphere® Storage vMotion®
- Monitor resource usage, and manage resource pools
- Discuss the VMware vSphere® High Availability (vSphere HA) cluster architecture
- · Configure vSphere HA
- Manage vSphere HA 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 VMware vSphere® Update Manager™ to apply patches and perform basic troubleshooting of ESXi hosts, virtual machines, and vCenter Server operations
- Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

### Audience

- System administrators
- · System engineers

#### **Prerequisites**

This course has the following prerequisites:

· System administration experience on Microsoft Windows or Linux operating systems

#### **Programme**

- 1 Course Introduction
- · Introductions and course logistics
- · Course objectives
- · Describe the content of the course
- · Gain a complete picture of the VMware certification system
- · Familiarize yourself with the benefits of the VMware Education Learning Zone
- Identify additional resources
- 2 Introduction to vSphere and the Software-Defined Data Center
- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Use vSphere Client to access and manage your vCenter Server system and ESXi host
- Compare virtual machine hardware version 14 to other versions
- Identify the virtual network adapters, and describe the enhanced VMXNET3
- Compare the types of virtual disk provisioning
- Install and configure ESXi host settings
- Identify the advantages of ESXi Quick Boot
- 4 vCenter Server
- · Describe the vCenter Server architecture
- · Discuss how ESXi hosts communicate with vCenter Server
- · Access and configure vCenter Server Appliance
- Use vSphere Client to manage the vCenter Server inventory
- · Add data center, organizational objects, and hosts to vCenter Server
- · Create custom inventory tags
- Describe the rules for applying permissions
- · Create a custom role in vCenter Server
- · Create a vCenter Server Appliance backup schedule
- · Restore vCenter Server Appliance from a backup

- 3 Creating Virtual Machines
- Create, provision, and remove a virtual machine
- Explain the importance of VMware Tools™
- · Describe how to import a virtual appliance OVF template · Monitor vCenter Server Appliance
- 5 Configuring and Managing Virtual Networks
- Describe, create, and manage standard switches
- · Configure virtual switch security, traffic-shaping and load-balancing policies
- · Compare vSphere distributed switches and standard switches
- · Describe the virtual switch connection types
- · Describe the new TCP/IP stack architecture
- Use VLANs with standard switches
- 6 Configuring and Managing Virtual Storage
- Identify storage protocols and storage device types
- · Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
- Create and manage VMware vSphere® VMFS and NFS datastores
- · Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
- Identify the advantages of VMware vSAN™
- 7 Virtual Machine Management
- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Create an instant clone of a virtual machine
- Identify the types of content libraries and how to deploy and use them
- Add a hot-pluggable device
- Dynamically increase the size of a virtual disk
- · Use customization specification files to customize a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Create and manage virtual machine snapshots
- 8 Resource Management and Monitoring
- Discuss CPU and memory concepts in a virtualized environment
- · Describe what overcommitment of a resource means
- Identify additional technologies that improve memory usage
- · Configure and manage resource pools
- · Describe methods for optimizing CPU and memory usage
- · Use various tools to monitor resource usage
- · Create and use alarms to report certain conditions or events

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- 9 vSphere HA, vSphere Fault Tolerance, and Protecting Data
- · Explain the vSphere HA architecture
- · Configure and manage a vSphere HA cluster
- Use vSphere HA advanced parameters
- Enforce infrastructural or intra-app dependencies during failover
- · Describe vSphere HA heartbeat networks and datastore heartbeats
- Examine the features and functions of vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines
- Support vSphere Fault Tolerance interoperability with vSAN
- Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
- · Examine the features and functions of vSphere Replication

#### 10 vSphere DRS

- · Describe the functions of a vSphere DRS cluster
- · Create a vSphere DRS cluster
- View information about a vSphere DRS cluster
- · Configure virtual machine affinity, DRS groups, and VM-host affinity rules
- · Remove a host from a vSphere DRS cluster

#### 11 vSphere Update Manager

- · Describe the architecture, components, and capabilities of vSphere Update Manager
- Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps
- · Examine the features and functions of vSphere Update Manager EAM integration
- Integrate vSphere Update Manager with vSphere DRS

#### 12 vSphere Troubleshooting

- · Apply a troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency
- · Review troubleshooting tools
- · Find important log files
- Use vSphere Syslog Collector

#### **Session Dates**

Date	Location	Time Zone	Language	Туре	Guaranteed	PRICE
17 Apr 2023			English	Self Paced Training		\$4,250.00

#### **Additional Information**

This training is also available as onsite training. Please contact us to find out more.