

VMware vSphere: Fast Track [V7] Training

Duration: 5 Days

Course Content:

VMware vSphere: Fast Track Training helps professionals understand advanced VMware vSphere® management skills better. This technical course teaches you to install and configure content and enables you to gain the advanced skills required to maintain and manage a highly scalable digital framework. In this course, you will discover the features responsible for developing a scalable framework and learn where these features have the maximum influence. You will also prepare to administer a vSphere infrastructure for any organization using vSphere 7, including VMware vCenter Server® 7 and VMware ESXi 7.

Our enterprise training program is best for organizations and companies. After finishing this training program, you will be able to set-up and configure ESXi hosts, and you will also learn to utilize VMware vSphere® Web Client, VMware Host Client, and VMware vSphere® Client to handle the vCenter Server configuration and the vCenter Server Inventory.

Who should attend?

This course is intended for professionals who have a very good experience in administering system i.e system administrators, system integrators and system engineers.

Prerequisites for this training

- System administration experience on Microsoft Windows or Linux operating systems

What you will learn

- Managing and creating a vSphere cluster which is enables with VMware vSphere® Distributed Resource Scheduler and VMware vSphere® High Availability.
- Migrating virtual machines along with VMware vSphere® Storage vMotion® and VMware vSphere® vMotion®.
- Describing the procedure for recovering and protecting virtual machines data.
- Encrypting virtual machines for extra security
- Configuring and installing ESXi hosts.
- Configuring and deploying VMware vCenter® Server Appliance
- Utilizing VMware vSphere® Web Client, VMware vSphere® Client and VMware Host Client to manage vCenter Server configuration and vCenter Server inventory.
- Creating virtualized network system with vSphere standard switches
- Describing the unique storage technologies assisted by vSphere.
- Configuring virtual storage utilizing NFS storage and iSCSI.
- Managing and creating VMware vSphere® VMFS datastores.
- Utilizing vSphere Clients to create templates, virtual machines, snapshots and clones.
- Creating the content library for designing virtual machines.
- Managing virtual machine resources where you can manage and use resource pools.
- Migrating virtual machines with VMware vSphere® Storage vMotion® and VMware vSphere® vMotion®.
- Creating virtual networks with VMware vSphere® distribution switches.

- Utilizing host profiles to manage ESXi configuration compliance.
- Utilizing and configuring virtual machine storage policies.
- Describing how vSphere storage APIs help storage system integrated with vSphere.
- Configuring VMware vSphere® Storage DRS and VMware vSphere.
- Describing how vSphere storage APIs support storage system integration with vSphere.

Certification:

This course prepares you for **VMware Certified Professional - Data Center Virtualization (VCP-DCV)**.

Curriculum

Module 1: Course Introduction

- Introductions and course logistics
- Course objectives

Module 2: Introduction to vSphere and the Software-Defined Data Center

- Explain basic virtualization concepts
- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Recognize the user interfaces for accessing the vCenter Server system and ESXi hosts
- Describe the ESXi host architecture
- Navigate the Direct Console User Interface (DCUI) to configure an ESXi host
- Recognize ESXi host user account best practices
- Install an ESXi host
- Use VMware Host Client™ to configure ESXi host settings
- Describe how to proactively manage your vSphere environment using VMware Skyline

Module 3: Virtual Machines

- Create and provision a virtual machine
- Explain the importance of VMware Tools™
- Install VMware Tools
- Identify the files that make up a VM
- Recognize the components of a VM
- Recognize virtual devices supported by a VM
- Describe the benefits and use cases for containers
- Identify the parts of a container system

Module 4: vCenter Server

- Describe the vCenter Server architecture
- Discuss how ESXi hosts communicate with vCenter Server
- Deploy and configure vCenter Server Appliance
- Use the vSphere Client to manage the vCenter Server inventory
- Add data center, organizational objects, and hosts to vCenter Server
- Use roles and permissions to enable users to access objects in the vCenter Server inventory
- Back up vCenter Server Appliance
- Monitor vCenter Server tasks, events, and appliance health
- Use vCenter Server High Availability to protect a vCenter Server Appliance

Module 5: Configuring and Managing Virtual Networks

- Create and manage standard switches
- Describe the virtual switch connection types
- Configure virtual switch security, traffic-shaping and load-balancing policies
- Compare vSphere distributed switches and standard switches

Module 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 VMFS and NFS datastores
- Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
- Recognize the components of a VMware vSAN™ configuration

Module 7: Virtual Machine Management

- Use templates and cloning to deploy new virtual machines
- Modify and manage virtual machines
- Create a content library and deploy virtual machines from templates in the library
- Use customization specification files to customize a new virtual machine
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Describe Enhanced vMotion Compatibility
- Create and manage virtual machine snapshots
- Examine the features and functions of VMware vSphere® Replication™
- Describe the benefits of vSphere Storage APIs - Data Protection

Module 8: Resource Management and Monitoring

- Discuss CPU and memory concepts in a virtualized environment
- Describe what overcommitment of a resource means
- Describe methods for optimizing CPU and memory usage
- Use various tools to monitor resource use
- Create and use alarms to report certain conditions or events

Module 9: vSphere Clusters

- Describe the functions of a vSphere DRS cluster
- Create a vSphere DRS cluster
- Monitor a vSphere cluster configuration
- Describe options for making a vSphere environment highly available
- Explain the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Examine the features and functions of VMware vSphere® Fault Tolerance
- Describe the function of the vSphere® Cluster Service

Module 10: Network Scalability

- Configure and manage vSphere distributed switches
- Describe how VMware vSphere® Network I/O Control enhances performance
- Explain distributed switch features such as port mirroring and NetFlow

Module 11: vSphere Lifecycle Management

- Recognize the importance of vCenter Server Update Planner
- Describe how VMware vSphere® Lifecycle Manager™ works
- Describe how to update ESXi hosts using baselines

- Validate ESXi host compliance using a cluster image
- Describe how to upgrade VMware Tools and VM hardware
- Describe VMware vSphere® Lifecycle Manager™ and VMware vSAN™ integration

Module 12: Host and Management Scalability

- Use host profiles to manage ESXi configuration compliance
- Create and manage resource pools in a cluster
- Describe how scalable shares work

Module 13: Storage Scalability

- Explain why VMware vSphere® VMFS is a high-performance, scalable file system
- Explain VMware vSphere® Storage APIs - Array Integration, VMware vSphere® API for Storage Awareness™, and vSphere APIs for I/O Filtering
- Configure and assign virtual machine storage policies
- Create VMware vSAN™ storage policies
- Recognize components of the vSphere Virtual Volumes architecture
- Configure VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/O Control

For any query Contact Us – MicrotekLearning
