



VMware vSphere: Fast Track

Duration: 5 Days **Course Code: VSFT** **Version: 5.0**

Overview:

This intensive, extended-hours training course focuses on installing, configuring, and managing VMware vSphere® 5. It combines the content of the VMware vSphere: Install, Configure, Manage course with advanced tasks and skills for configuring a highly available and scalable virtual infrastructure. The course is based on VMware ESXi™ 5.0 and VMware vCenter Server™ 5.0. Completion of this course satisfies the prerequisite for taking the VMware® Certified Professional 5 exam.

Target Audience:

Experienced system administrators and system integrators willing to work hard to achieve superior vSphere skills with minimal time away from the office.

Objectives:

- At the end of the course, you should be able to do the following:
 - Implement business continuity solutions.
 - Manage changes to the vSphere environment.
 - Use a command-line interface to manage vSphere.
 - Install and configure ESXi and vCenter Server.
 - Use vSphere Auto Deploy to provision ESXi hosts.
 - Configure and manage ESXi networking and storage.
 - Create, configure, migrate, manage, convert, and monitor virtual machines and virtual appliances.
 - Manage user access to the virtual infrastructure.
 - Use vCenter Server to monitor resource usage.
 - Scale the vSphere virtual infrastructure.
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Prerequisites:

- Willingness to participate in a demanding, high-intensity training experience
 - Comfort with system administration using command-line interfaces
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Follow-on-Courses:

Students who complete this course may enroll in any of several more advanced vSphere courses.

Content:

1. Course Introduction

- Introductions and course logistics
- Course objectives

2. Introduction to VMware Virtualization

- Introduce virtualization, virtual machines, 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

3. Create Virtual Machines

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

4. VMware vCenter Server

- Introduce vCenter Server architecture
- Manage vCenter Server inventory objects and licenses

5. Configuring and Managing Virtual Networks

- Describe, create, and manage a standard virtual switch
- Describe and modify standard virtual switch properties
- Configure virtual switch load-balancing algorithms

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
- Introduce VMware vSphere® Storage Appliance

7. Virtual Machine Management

- Use templates and cloning to deploy virtual machines
- Modify and manage virtual machines
- Create and manage virtual machine snapshots
- Perform VMware vSphere® vMotion® and vSphere Storage vMotion migrations
- Create a vSphere vApp

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
- Introduce VMware® vShield Zones

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

10. High Availability and Fault Tolerance

- Introduce new vSphere High Availability architecture
- Configure and manage a vSphere HA cluster
- Introduce vSphere Fault Tolerance

11. Host Scalability

- Use Host Profiles to manage ESXi configuration compliance
- Configure and manage a vSphere Distributed Resource Scheduler cluster
- Configure and manage vSphere Distributed Power Management

12. Network Scalability

- Create, configure, and manage vNetwork distributed switches, network connections, and port groups

13. Storage Scalability

- Introduce Storage I/O Control
- Describe VMware vSphere® Storage APIs - Array Integration and VASA
- Explain policy-driven storage
- Add a storage policy to a virtual machine storage profile
- Describe Storage DRS operation
- Create a datastore cluster for Storage DRS
- Configure Storage DRS

14. Data Protection

- Discuss a strategy for backing up ESXi hosts and vCenter Server
- Introduce the VMware Data Recovery appliance
- Discuss solutions for backing up virtual machines efficiently

15. Patch Management

- Use VMware vSphere® vCenter Update Manager to manage ESXi patching
- Install Update Manager and the Update Manager plug-in
- Create patch baselines
- Scan and remediate hosts

16. VMware vSphere Management Assistant

- Describe VMware vSphere® Management Assistant (vMA)
- Configure vMA
- Discuss the esxcli and vicfg commands
- Perform command-line operations for host management, network management, storage management, and performance monitoring

17. Installing VMware Components

- Use vCenter Linked Mode to manage multiple vCenter Server inventories
- Introduce ESXi installation
- Describe boot-from-SAN requirements
- Describe vCenter Server hardware, software, and database requirements
- Install vCenter Server (Windows-based)
- Introduce VMware vCenter Server Appliance

Additional Information:

For advanced course options, go to <http://www.vmware.com/education>.

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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