

5 Days

VMware vSphere: Install, Configure, Manage plus Optimize and Scale Fast Track [V6.0]

VMware vSphere ICM Plus Optimize and Scale Fast Track V6.0 is an extended-hours training course, as suggested by the name fast track, that majorly focuses on how to Install, Configure, and Manage the VSphere 6 infrastructure, that is inclusive of VMware ESXi 6.0 and VMware vCenter Server 6.0.

This course provides a comprehensive curriculum of its two major courses of VSphere namely the VMware VSphere Install, Configure, Manage with the VMware VSphere Optimize & Scale that provide advanced scalability requisite skills to deploy a highly scalable and available VSphere infrastructure.

Through hands-on lab experiences and intensive training methods, the candidates get practical experience to deploy the advanced tools and technologies to manage risks on the vSphere environment.

Course Details

Course Outline

1. Course Introduction

- Introduction to course logistics
- Course objectives
- References and resources

2. Software-Defined Data Center

- Introducing components of the software-defined data center
- Describing where vSphere fits into the cloud architecture
- Installation and use of vSphere Client
- Overview of ESXi

3. Creating Virtual Machines

- Introducing virtual machines, virtual machine hardware, and virtual machine files
- Use a single virtual machine

4. vCenter Server

- vCenter Server architecture Introduction
- Using vSphere Web Client
- Managing vCenter Server inventory objects and licenses
- Deploy and configure vCenter Server Appliance

5. Configuring and Managing Virtual Networks

- Create, and Manage a standard switch
- Discuss and modify standard switch properties
- Define the NIC teaming of a standard switch port group

6. Configuring and Managing Virtual Storage

- Introducing storage protocols and device names
- Introducing Virtual SAN datastores
- Introducing Virtual Volumes
- Configuring ESXi with iSCSI and NFS storage
- Create and manage VMFS datastores

7. Virtual Machine Management

- Introducing content libraries
- Create and manage virtual machine snapshots
- Creating VMware vSphere® vApp(s)™
- Modify and manage virtual machines
- Perform vSphere vMotion and vSphere Storage vMotion migrations
- Deploy templates and cloning to deploy virtual machines

8. Access and Authentication Control

- Controlling user access through roles and permissions
- Describe ESXi host access and authentication
- Integrating ESXi with Active Directory

9. Resource Management and Monitoring

- Introducing virtual CPU and memory concepts
- Describe methods for optimizing CPU and memory usage
- Configure and manage resource pools

- Using vCenter Server performance graphs and alarms to monitor resource usage

10. vSphere HA and vSphere Fault Tolerance

- Describe the vSphere HA architecture
- Configure and manage a vSphere HA cluster
- Deploy vSphere HA advanced parameters
- Introducing vSphere Fault Tolerance
- Enable vSphere Fault Tolerance on virtual machines
- Introducing VMware vSphere® Replication™
- Use vSphere Data Protection to backup and restore data

11. Network Scalability

- Discuss distributed switch features, such as private VLANs, discovery protocols, Network I/O Control, NetFlow, and port mirroring
- Create, Configure, and Manage vSphere distributed switches, network connections, and port groups

12. Host Scalability

- Deploy host profiles to manage ESXi configuration compliance
- Configure and manage a vSphere DRS cluster
- Configure Enhanced vMotion Compatibility
- Deploy vSphere HA and vSphere DRS together

13. Storage Scalability

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

14. Patch Management

- Use vSphere Update Manager to manage ESXi patching
- Installation of vSphere Update Manager and the vSphere Update Manager plug-in
- Creation of patch baselines
- Scan and remediate hosts

15. VMware Management Resources

- Describing VMware vSphere® Management Assistant
- Configure vSphere Management Assistant
- Discuss the VMware vSphere® Command-Line Interface command set
- Performing Command-line operations for host management, network management, performance monitoring, and storage management

16. Installing VMware Components

- Introducing ESXi installation
- Describe vCenter Linked Mode to manage multiple vCenter Server inventories
- Describing boot-from-SAN requirements
- Describing vCenter Server hardware, software, and database requirements
- Installation of vCenter Server (Windows-based)

17. Host and Management Scalability

- Configure and manage VMware vSphere® Distributed Power Management™
- Use VMware vSphere® PowerCLI™
- Use vSphere Auto Deploy to deploy a stateless ESXi host
- Use vSphere ESXi Image Builder CLI to create an ESXi installation image

Who Should Attend

VMware vSphere Install, Configure, and Manage Plus Optimize and Scale Fast Track V6.0 training course is ideal for those working with the profiles :

- Systems engineers
- System integrators
- Experienced system administrators
- Administrators with fundamental knowledge of virtualization

Pre Requisite

Required prerequisites include completion of one of the following:

- Hands-on experience with vSphere
- System Administration experience on Microsoft Windows or Linux Operating System
- Conceptual knowledge presented in the VMware Data Center Virtualization Fundamentals course or VCA-DCV certification

Exams

VMware Certified Professional (VCP) [VCP6-DCV]

VMware Certified Associate (VCA) [VCA]

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