

## VMware vSphere: Install, Configure, Manage [V4.1]

**Duration:** 5 Days

### Course Description

In this VMware-authorized, hands-on course based on ESX/ESXi 4.1 and vCenter Server 4.1, you will learn to install, configure, and manage VMware vSphere™, which consists of VMware ESX/ESXi and VMware vCenter Server. You will spend approximately 60% of instruction time completing 25 hands-on labs.

Upon completion of this course, you can take the examination to become a VMware Certified Professional 4 (voucher not included).

### Audience

System administrators, systems engineers, and operators responsible for ESXi, ESX, and/or vCenter Server

### Prerequisites:

System administration experience on Microsoft Windows or Linux operating systems

### Course Outline

#### 1. Introduction to VMware Virtualization

- Virtualization, virtual machines, and vSphere components

#### 2. VMware ESX/ESXi

- Architecture of ESX and ESXi
- Manually configure ESX/ESXi

#### 3. VMware vCenter Server

- Install and configure vCenter Server components
- Manage vCenter Server inventory objects

#### 4. Networking

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

#### 5. Storage

- Configure ESX/ESXi with iSCSI, NFS, and Fibre Channel storage
- Create and manage vSphere datastores

#### 6. Virtual Machines

- Deploy virtual machines using the Create New Virtual Machine wizard, templates, cloning, and VMware vCenter Converter
- Modify and manage virtual machines
- Perform Storage vMotion™ migrations

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### 7. Access Control

- Control user access through roles and permissions

### 8. Resource Monitoring

- Control virtual machine access to CPU, memory, and I/O resources
- VMkernel methods for optimizing CPU and memory usage
- Monitor resource usage using vCenter Server performance graphs and alarms

### 9. Data Protection

- Back up and recover virtual machines using VMware Data Recovery

### 10. Scalability

- Manage multiple vCenter Server inventories using VMware vCenter Linked Mode
- Manage ESX/ESXi configuration compliance using Host Profiles
- Create, configure, and manage vNetwork distributed switches, network connections, and port groups
- Perform VMware vMotion migrations
- Configure and manage a VMware Distributed Resource Scheduler cluster
- Configure and manage VMware Distributed Power Management

### 11. High Availability

- Configure and manage a VMware High Availability cluster
- Configure fault-tolerant virtual machines using VMware Fault Tolerance

### 12. Patch Management

- Manage patching and patch compliance using vCenter Update Manager

### 13. Installing VMware ESX and ESXi

- Introduce ESX and ESXi installable installation