VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V8]

Course Code: 821637

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

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere 8, which includes VMware ESXi 8 and VMware vCenter 8. This course prepares you to administer a vSphere infrastructure for an organization of any size.

What You'll Learn

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

- Install and configure ESXi hosts
- Deploy and configure vCenter
- Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
- Create virtual networks using vSphere standard switches and distributed switches
- Create and configure datastores using storage technologies supported by vSphere
- Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- Create content libraries for managing templates and deploying virtual machines
- Manage virtual machine resource allocation
- Migrate virtual machines with vSphere vMotion and vSphere Storage vMotion
- Create and configure a vSphere cluster that is enabled with vSphere High Availability (HA) and vSphere Distributed Resource Scheduler
- Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date

Who Needs to Attend

- System administrators
- System engineers

Prerequisites

This course has the following prerequisites:

- System administration experience on Microsoft Windows or Linux operating

systems

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CLASSROOM LIVE	$5,525 CAD	5 Day

Classroom Live Outline

1. vSphere and Virtualization Overview
   - Explain basic virtualization concepts
   - Describe how vSphere fits in the software-defined data center and the cloud infrastructure
   - Recognize the user interfaces for accessing vSphere
   - Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs
2. Installing and Configuring ESXi
   - Install an ESXi host
   - Recognize ESXi user account best practices
   - Configure the ESXi host settings using the DCUI and VMware Host Client
3. Deploying and Configuring vCenter
   - Recognize ESXi hosts communication with vCenter
   - Deploy vCenter Server Appliance
   - Configure vCenter settings
   - Use the vSphere Client to add and manage license keys
   - Create and organize vCenter inventory objects
   - Recognize the rules for applying vCenter permissions
   - View vCenter logs and events
4. Configuring vSphere Networking
   - Configure and view standard switch configurations
   - Configure and view distributed switch configurations
   - Recognize the difference between standard switches and distributed switches
   - Explain how to set networking policies on standard and distributed switches
5. Configuring vSphere Storage
   - Recognize vSphere storage technologies
   - Identify types of vSphere datastores
   - Describe Fibre Channel components and addressing

- Describe iSCSI components and addressing
- Configure iSCSI storage on ESXi
- Create and manage VMFS datastores
- Configure and manage NFS datastores

6. Deploying Virtual Machines
    - Create and provision VMs
    - Explain the importance of VMware Tools
    - Identify the files that make up a VM
    - Recognize the components of a VM
    - Navigate the vSphere Client and examine VM settings and options
    - Modify VMs by dynamically increasing resources
    - Create VM templates and deploy VMs from them
    - Clone VMs
    - Create customization specifications for guest operating systems
    - Create local, published, and subscribed content libraries
    - Deploy VMs from content libraries
    - Manage multiple versions of VM templates in content libraries

7. Managing Virtual Machines
    - Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
    - Migrate VMs using vSphere vMotion
    - Describe the role of Enhanced vMotion Compatibility in migrations
    - Migrate VMs using vSphere Storage vMotion
    - Take a snapshot of a VM
    - Manage, consolidate, and delete snapshots
    - Describe CPU and memory concepts in relation to a virtualized environment
    - Describe how VMs compete for resources
    - Define CPU and memory shares, reservations, and limits

8. Deploying and Configuring vSphere Clusters
    - Create a vSphere cluster enabled for vSphere DRS and vSphere HA
    - View information about a vSphere cluster
    - Explain how vSphere DRS determines VM placement on hosts in the cluster
    - Recognize use cases for vSphere DRS settings
    - Monitor a vSphere DRS cluster
    - Describe how vSphere HA responds to various t.ypes of failures
    - Identify options for configuring network redundancy in a vSphere HA cluster
    - Recognize vSphere HA design considerations
    - Recognize the use cases for various vSphere HA settings
    - Configure a vSphere HA cluster
    - Recognize when to use vSphere Fault Tolerance

9. Managing the vSphere Lifecycle
    - Enable vSphere Lifecycle Manager in a vSphere cluster

- Describe features of the vCenter Update Planner
- Run vCenter upgrade prechecks and interoperability reports
- Recognize features of vSphere Lifecycle Manager
- Distinguish between managing hosts using baselines and managing hosts using images
- Describe how to update hosts using baselines
- Describe ESXi images
- Validate ESXi host compliance against a cluster image and update ESXi hosts
- Update ESXi hosts using vSphere Lifecycle Manager
- Describe vSphere Lifecycle Manager automatic recommendations
- Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

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Feb 9 - 13, 2026 | 10:00 AM - 6:00 PM EST

Feb 23 - 27, 2026 | 10:00 AM - 6:00 PM EST

Mar 9 - 13, 2026 | 10:00 AM - 6:00 PM EDT

Mar 23 - 27, 2026 | 10:00 AM - 6:00 PM EDT

Apr 6 - 10, 2026 | 10:00 AM - 6:00 PM EDT

Apr 20 - 24, 2026 | 10:00 AM - 6:00 PM EDT

May 4 - 8, 2026 | 10:00 AM - 6:00 PM EDT

May 18 - 22, 2026 | 10:00 AM - 6:00 PM EDT

Jun 1 - 5, 2026 | 10:00 AM - 6:00 PM EDT

Jun 22 - 26, 2026 | 10:00 AM - 6:00 PM EDT

Jul 6 - 10, 2026 | 10:00 AM - 6:00 PM EDT

Jul 20 - 24, 2026 | 10:00 AM - 6:00 PM EDT

Aug 3 - 7, 2026 | 10:00 AM - 6:00 PM EDT

Aug 17 - 21, 2026 | 10:00 AM - 6:00 PM EDT

Sep 14 - 18, 2026 | 10:00 AM - 6:00 PM EDT

Sep 28 - Oct 2, 2026 | 10:00 AM - 6:00 PM EDT

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PRIVATE GROUP TRAINING	5 Day

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