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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VIRTUAL CLASSROOM LIVE	$5,525 CAD	5 Day

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Aug 11 - 15, 2025 | 10:00 AM - 6:00 PM EST

Aug 25 - 29, 2025 | 10:00 AM - 6:00 PM EST

Sep 15 - 19, 2025 | 10:00 AM - 6:00 PM EST

Sep 29 - Oct 3, 2025 | 10:00 AM - 6:00 PM EST

Oct 6 - 10, 2025 | 10:00 AM - 6:00 PM EST

Oct 27 - 31, 2025 | 10:00 AM - 6:00 PM EST

Nov 3 - 7, 2025 | 10:00 AM - 6:00 PM EST

Nov 17 - 21, 2025 | 10:00 AM - 6:00 PM EST

Dec 1 - 5, 2025 | 10:00 AM - 6:00 PM EST

Dec 8 - 12, 2025 | 10:00 AM - 6:00 PM EST

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PRIVATE GROUP TRAINING	5 Day

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