

# 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

# VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V8]

Course Code: 821637

CLASSROOM LIVE

\$4,250 USD

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 types 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

# VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V8]

Course Code: 821637

VIRTUAL CLASSROOM LIVE

\$4,250 USD

5 Day

## Virtual 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 types 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

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

Oct 19 - 23, 2026 | 10:00 AM - 6:00 PM EST

Nov 2 - 6, 2026 | 10:00 AM - 6:00 PM EST

Nov 16 - 20, 2026 | 10:00 AM - 6:00 PM EST

Nov 30 - Dec 4, 2026 | 10:00 AM - 6:00 PM EST

Dec 14 - 18, 2026 | 10:00 AM - 6:00 PM EST



# VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V8]

Course Code: 821637

PRIVATE GROUP TRAINING

5 Day

Visit us at [www.globalknowledge.com](http://www.globalknowledge.com) or call us at 1-866-716-6688.

Date created: 6/20/2026 9:09:59 PM

Copyright © 2026 Global Knowledge Training LLC. All Rights Reserved.