VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V6.7]

Course Code: 9888

Learn how to administer a vSphere infrastructure for an organization of any size.

This five-day course features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6.7, which includes VMware ESXi™ 6.7 and VMware vCenter Server® 6.7. This course prepares you to administer a vSphere infrastructure for an organization of any size. It is the foundation for most other VMware technologies in the software-defined data center.

- vSphere Foundations Exam Voucher. (a $125 value)
- 30 lab credits for 30 days post-class.
- A practice test from Kaplan IT.
- Exam Objectives PDF.

What You’ll Learn

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

Describe the software-defined data center

Explain the vSphere components and their function in the infrastructure

Add ESXi hosts to a VMware vCenter® Server Appliance™ instance

Manage vCenter Server Appliance

Use a local content library as an ISO store, and deploy a virtual machine

Describe vCenter Server architecture

Use vCenter Server to manage an ESXi host

Configure and manage vSphere infrastructure with VMware Host Client™ and VMware vSphere® Client™. Describe virtual networks with vSphere standard switches

Configure standard switch policies
Use vCenter Server to manage various types of host storage: VMware vSphere® VMFS, NFS, iSCSI, and RDM

Examine the features and functions of Fibre Channel and VMware vSAN™

Manage virtual machines, templates, clones, and snapshots

Migrate virtual machines with VMware vSphere® vMotion®

Migrate virtual machine storage with VMware vSphere® Storage vMotion®

Monitor resource usage, and manage resource pools

Discuss the VMware vSphere® High Availability cluster architecture

Configure vSphere HA

Manage vSphere HA and VMware vSphere® Fault Tolerance

Use VMware vSphere® Replication™ and VMware vSphere® Data Protection™ to replicate virtual machines and perform data recovery

Use VMware vSphere® Distributed Resource Scheduler™ clusters to improve host scalability

Use VMware vSphere® Update Manager™ to apply patches and perform basic troubleshooting of ESXi hosts, virtual machines, and vCenter Server operations

Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

Who Needs to Attend

System administrators

System engineers
VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V6.7]

Course Code: 9888

| CLASSROOM LIVE | $4,250 USD | 5 days |

Classroom Live Outline

1 Course Introduction
- Introductions and course logistics
- Course objectives
- Describe the content of the course
- Gain a complete picture of the VMware certification system
- Familiarize yourself with the benefits of the VMware Education Learning Zone
- Identify additional resources

2 Introduction to vSphere and the SoftwareDefined Data Center
- Describe how vSphere fits into the softwaredefined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Use vSphere Client to access and manage your vCenter Server system and ESXi host
- Compare virtual machine hardware version 14 to other versions
- Identify the virtual network adapters, and describe the enhanced VMXNET3
- Compare the types of virtual disk provisioning
- Identify the advantages of ESXi Quick Boot
3 Creating Virtual Machines
Create, provision, and remove a virtual machine
Explain the importance of VMware Tools™
Describe how to import a virtual appliance OVF template
Manage VMware Tools
Explain troubleshooting OS installation and VMware Tools

4 vCenter Server
Describe the vCenter Server architecture
Discuss how ESXi hosts communicate with vCenter Server
Identify the vCenter Server services, components, and modules
Access and configure vCenter Server Appliance
Use vSphere Client to manage the vCenter Server inventory
Describe the rules for applying permissions
Create a custom role in vCenter Server
Create a backup schedule
Restore vCenter Server Appliance from backup
Monitor vCenter Server Appliance

5 Configuring and Managing Virtual Networks
Describe, create, and manage standard switches
Configure virtual switch security and load balancing policies
Compare vSphere distributed switches and standard switches
Describe the virtual switch connection types
Describe the new TCP/IP stack architecture
Use VLANs with standard switches

6 Configuring and Managing Virtual Storage
Identify storage protocols and storage device types
Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
Create and manage VMware vSphere® VMFS and NFS datastores
Describe the new features of VMFS 6.5
Identify the advantages of VMware vSAN™
Describe guest file encryption

7 Virtual Machine Management
Use templates and cloning to deploy new virtual machines
Modify and manage virtual machines
Clone a virtual machine
Upgrade virtual machine hardware to version 14
Remove virtual machines from the vCenter Server inventory and datastore
Use customization specification files to customize a new virtual machine
Perform vSphere vMotion and vSphere Storage vMotion migrations
Create and manage virtual machine snapshots
Create, clone, and export vApps
Identify the types of content libraries and how to deploy and use them

8 Resource Management and Monitoring
Discuss CPU and memory concepts in a virtualized environment
Describe what over commitment of a resource means
Identify additional technologies that improve memory usage
Configure and manage resource pools
Describe methods for optimizing CPU and memory usage
Use various tools to monitor resource usage
Create and use alarms to report certain conditions or events

9 vSphere HA, vSphere Fault Tolerance, and Protecting Data
Explain the vSphere HA architecture
Configure and manage a vSphere HA cluster
Use vSphere HA advanced parameters
Enforce infrastructural or intra-app dependencies during failover

Describe vSphere HA heartbeat networks and datastore heartbeats

Examine the features and functions of vSphere Fault Tolerance

Enable vSphere Fault Tolerance on virtual machines

Support vSphere Fault Tolerance interoperability with vSAN

Examine enhanced consolidation of vSphere Fault Tolerance virtual machines

Examine the features and functions of vSphere Replication

10 vSphere DRS

Describe the functions of a vSphere DRS cluster

Create a vSphere DRS cluster

View information about a vSphere DRS cluster

Configure virtual machine affinity, DRS groups, and VM-host affinity rules

Remove a host from a vSphere DRS cluster.

11 vSphere Update Manager

Describe the new architecture, components, and capabilities of vSphere Update Manager

Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps

Install vSphere Update Manager and the vSphere Update Manager plug-in

Create patch baselines

Use host profiles to manage host configuration compliance

Examine the features and functions of vSphere Update Manager EAM integration

Integrate vSphere Update Manager with vSphere DRS

Scan and remediate hosts

12 vSphere Troubleshooting

Define the scope of troubleshooting

Use a structured approach to solve configuration and operational problems

Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency
Nov 12 - 16, 2018 | 8:30 AM - 4:30 PM | NEW YORK CITY, NY
Nov 26 - 30, 2018 | 8:30 AM - 4:30 PM | CHICAGO, IL
Nov 26 - 30, 2018 | 8:30 AM - 4:30 PM | SAN JOSE, CA
Dec 3 - 7, 2018 | 8:30 AM - 4:30 PM | BOSTON, MA
Dec 3 - 7, 2018 | 8:30 AM - 4:30 PM | DALLAS, TX
Dec 10 - 14, 2018 | 8:30 AM - 4:30 PM | MORRISTOWN, NJ
Dec 10 - 14, 2018 | 8:30 AM - 4:30 PM | RESEARCH TRIANGLE PARK, NC
Dec 17 - 21, 2018 | 8:30 AM - 4:30 PM | ATLANTA, GA
Dec 17 - 21, 2018 | 8:30 AM - 4:30 PM | COLUMBIA, MD
Dec 17 - 21, 2018 | 8:30 AM - 4:30 PM | WASHINGTON, DC
Jan 7 - 11, 2019 | 8:30 AM - 4:30 PM | LOS ANGELES, CA
Jan 7 - 11, 2019 | 8:30 AM - 4:30 PM | SAN JOSE, CA
Jan 14 - 18, 2019 | 8:30 AM - 4:30 PM | DALLAS, TX
Jan 14 - 18, 2019 | 8:30 AM - 4:30 PM | DENVER, CO
Jan 14 - 18, 2019 | 8:30 AM - 4:30 PM | HOUSTON, TX
Jan 21 - 25, 2019 | 8:30 AM - 4:30 PM | NEW YORK CITY, NY
Jan 21 - 25, 2019 | 8:30 AM - 4:30 PM | RESEARCH TRIANGLE PARK, NC
Jan 28 - Feb 1, 2019 | 8:30 AM - 4:30 PM | CHICAGO, IL
Jan 28 - Feb 1, 2019 | 8:30 AM - 4:30 PM | WASHINGTON, DC
Feb 4 - 8, 2019 | 8:30 AM - 4:30 PM | BOSTON, MA
Feb 4 - 8, 2019 | 8:30 AM - 4:30 PM | SAN JOSE, CA
Feb 11 - 15, 2019 | 8:30 AM - 4:30 PM | DALLAS, TX
Feb 11 - 15, 2019 | 8:30 AM - 4:30 PM | MORRISTOWN, NJ
Feb 18 - 22, 2019 | 8:30 AM - 4:30 PM | COLUMBIA, MD
Feb 18 - 22, 2019 | 8:30 AM - 4:30 PM | RESEARCH TRIANGLE PARK, NC
Feb 25 - Mar 1, 2019 | 8:30 AM - 4:30 PM | ATLANTA, GA
Feb 25 - Mar 1, 2019 | 8:30 AM - 4:30 PM | WASHINGTON, DC
Mar 4 - 8, 2019 | 8:30 AM - 4:30 PM | LOS ANGELES, CA
Mar 4 - 8, 2019 | 8:30 AM - 4:30 PM | SAN JOSE, CA
Mar 11 - 15, 2019 | 8:30 AM - 4:30 PM | DALLAS, TX
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar 11 - 15, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>HOUSTON, TX</td>
</tr>
<tr>
<td>Mar 18 - 22, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>NEW YORK CITY, NY</td>
</tr>
<tr>
<td>Mar 18 - 22, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>RESEARCH TRIANGLE PARK, NC</td>
</tr>
<tr>
<td>Mar 25 - 29, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>CHICAGO, IL</td>
</tr>
<tr>
<td>Mar 25 - 29, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>WASHINGTON, DC</td>
</tr>
<tr>
<td>Apr 1 - 5, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>BOSTON, MA</td>
</tr>
<tr>
<td>Apr 1 - 5, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>SAN JOSE, CA</td>
</tr>
<tr>
<td>Apr 8 - 12, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>DALLAS, TX</td>
</tr>
<tr>
<td>Apr 8 - 12, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>MORRISTOWN, NJ</td>
</tr>
<tr>
<td>Apr 15 - 19, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>RESEARCH TRIANGLE PARK, NC</td>
</tr>
<tr>
<td>Apr 22 - 26, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>ATLANTA, GA</td>
</tr>
<tr>
<td>Apr 22 - 26, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>COLUMBIA, MD</td>
</tr>
<tr>
<td>Apr 22 - 26, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>WASHINGTON, DC</td>
</tr>
<tr>
<td>Apr 29 - May 3, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>LOS ANGELES, CA</td>
</tr>
<tr>
<td>Apr 29 - May 3, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>SAN JOSE, CA</td>
</tr>
<tr>
<td>May 6 - 10, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>DALLAS, TX</td>
</tr>
<tr>
<td>May 6 - 10, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>HOUSTON, TX</td>
</tr>
<tr>
<td>May 13 - 17, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>NEW YORK CITY, NY</td>
</tr>
<tr>
<td>May 13 - 17, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>RESEARCH TRIANGLE PARK, NC</td>
</tr>
<tr>
<td>May 20 - 24, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>CHICAGO, IL</td>
</tr>
<tr>
<td>May 20 - 24, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>WASHINGTON, DC</td>
</tr>
<tr>
<td>Jun 3 - 7, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>BOSTON, MA</td>
</tr>
<tr>
<td>Jun 3 - 7, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>SAN JOSE, CA</td>
</tr>
<tr>
<td>Jun 10 - 14, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>DALLAS, TX</td>
</tr>
<tr>
<td>Jun 10 - 14, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>MORRISTOWN, NJ</td>
</tr>
<tr>
<td>Jun 17 - 21, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>COLUMBIA, MD</td>
</tr>
<tr>
<td>Jun 17 - 21, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>RESEARCH TRIANGLE PARK, NC</td>
</tr>
<tr>
<td>Jun 24 - 28, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>ATLANTA, GA</td>
</tr>
<tr>
<td>Jun 24 - 28, 2019</td>
<td>8:30 AM - 4:30 PM</td>
<td>WASHINGTON, DC</td>
</tr>
</tbody>
</table>
Virtual Classroom Live Outline

1 Course Introduction
- Introductions and course logistics
- Course objectives
- Describe the content of the course
- Gain a complete picture of the VMware certification system
- Familiarize yourself with the benefits of the VMware Education Learning Zone
- Identify additional resources

2 Introduction to vSphere and the SoftwareDefined Data Center
- Describe how vSphere fits into the software-defined data center and the cloud infrastructure
- Explain how vSphere interacts with CPUs, memory, networks, and storage
- Use vSphere Client to access and manage your vCenter Server system and ESXi host
- Compare virtual machine hardware version 14 to other versions
- Identify the virtual network adapters, and describe the enhanced VMXNET3
- Compare the types of virtual disk provisioning
- Identify the advantages of ESXi Quick Boot
3 Creating Virtual Machines
Create, provision, and remove a virtual machine
Explain the importance of VMware Tools™
Describe how to import a virtual appliance OVF template
Manage VMware Tools
Explain troubleshooting OS installation and VMware Tools

4 vCenter Server
Describe the vCenter Server architecture
Discuss how ESXi hosts communicate with vCenter Server
Identify the vCenter Server services, components, and modules
Access and configure vCenter Server Appliance
Use vSphere Client to manage the vCenter Server inventory
Describe the rules for applying permissions
Create a custom role in vCenter Server
Create a backup schedule
Restore vCenter Server Appliance from backup
Monitor vCenter Server Appliance

5 Configuring and Managing Virtual Networks
Describe, create, and manage standard switches
Configure virtual switch security and loadbalancing policies
Compare vSphere distributed switches and standard switches
Describe the virtual switch connection types
Describe the new TCP/IP stack architecture
Use VLANs with standard switches

6 Configuring and Managing Virtual Storage
Identify storage protocols and storage device types
Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage
Create and manage VMware vSphere® VMFS and NFS datastores
Describe the new features of VMFS 6.5
Identify the advantages of VMware vSAN™
Describe guest file encryption

7 Virtual Machine Management
Use templates and cloning to deploy new virtual machines
Modify and manage virtual machines
Clone a virtual machine
Upgrade virtual machine hardware to version 14
Remove virtual machines from the vCenter Server inventory and datastore
Use customization specification files to customize a new virtual machine
Perform vSphere vMotion and vSphere Storage vMotion migrations
Create and manage virtual machine snapshots
Create, clone, and export vApps
Identify the types of content libraries and how to deploy and use them

8 Resource Management and Monitoring
Discuss CPU and memory concepts in a virtualized environment
Describe what over commitment of a resource means
Identify additional technologies that improve memory usage
Configure and manage resource pools
Describe methods for optimizing CPU and memory usage
Use various tools to monitor resource usage
Create and use alarms to report certain conditions or events

9 vSphere HA, vSphere Fault Tolerance, and Protecting Data
Explain the vSphere HA architecture
Configure and manage a vSphere HA cluster
Use vSphere HA advanced parameters
Enforce infrastructural or intra-app dependencies during failover
Describe vSphere HA heartbeat networks and datastore heartbeats
Examine the features and functions of vSphere Fault Tolerance
Enable vSphere Fault Tolerance on virtual machines
Support vSphere Fault Tolerance interoperability with vSAN
Examine enhanced consolidation of vSphere Fault Tolerance virtual machines
Examine the features and functions of vSphere Replication

10 vSphere DRS
Describe the functions of a vSphere DRS cluster
Create a vSphere DRS cluster
View information about a vSphere DRS cluster
Configure virtual machine affinity, DRS groups, and VM-host affinity rules
Remove a host from a vSphere DRS cluster.

11 vSphere Update Manager
Describe the new architecture, components, and capabilities of vSphere Update Manager
Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps
Install vSphere Update Manager and the vSphere Update Manager plug-in
Create patch baselines
Use host profiles to manage host configuration compliance
Examine the features and functions of vSphere Update Manager EAM integration
Integrate vSphere Update Manager with vSphere DRS
Scan and remediate hosts
Define the scope of troubleshooting
Use a structured approach to solve configuration and operational problems
Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency
Nov 26 - 30, 2018 | 8:30 AM - 4:30 PM EST
Nov 26 - 30, 2018 | 9:30 AM - 5:30 PM EST
Dec 3 - 7, 2018 | 8:30 AM - 4:30 PM EST
Dec 3 - 7, 2018 | 11:30 AM - 7:30 PM EST
Dec 10 - 14, 2018 | 8:30 AM - 4:30 PM EST
Dec 17 - 21, 2018 | 8:30 AM - 4:30 PM EST
Jan 7 - 11, 2019 | 8:30 AM - 4:30 PM EST
Jan 7 - 11, 2019 | 11:30 AM - 7:30 PM EST
Jan 14 - 18, 2019 | 8:30 AM - 4:30 PM EST
Jan 14 - 18, 2019 | 9:30 AM - 5:30 PM EST
Jan 21 - 25, 2019 | 8:30 AM - 4:30 PM EST
Jan 21 - 25, 2019 | 11:30 AM - 7:30 PM EST
Jan 28 - Feb 1, 2019 | 8:30 AM - 4:30 PM EST
Jan 28 - Feb 1, 2019 | 9:30 AM - 5:30 PM EST
Feb 4 - 8, 2019 | 8:30 AM - 4:30 PM EST
Feb 4 - 8, 2019 | 11:30 AM - 7:30 PM EST
Feb 11 - 15, 2019 | 8:30 AM - 4:30 PM EST
Feb 11 - 15, 2019 | 9:30 AM - 5:30 PM EST
Feb 18 - 22, 2019 | 8:30 AM - 4:30 PM EST
Feb 18 - 22, 2019 | 11:30 AM - 7:30 PM EST
Feb 25 - Mar 1, 2019 | 8:30 AM - 4:30 PM EST
Mar 4 - 8, 2019 | 8:30 AM - 4:30 PM EST
Mar 4 - 8, 2019 | 11:30 AM - 7:30 PM EST
Mar 11 - 15, 2019 | 8:30 AM - 4:30 PM EST
Mar 11 - 15, 2019 | 9:30 AM - 5:30 PM EST
Mar 18 - 22, 2019 | 8:30 AM - 4:30 PM EST
Mar 25 - 29, 2019 | 8:30 AM - 4:30 PM EST
Mar 25 - 29, 2019 | 9:30 AM - 5:30 PM EST
Apr 1 - 5, 2019 | 8:30 AM - 4:30 PM EST
Apr 1 - 5, 2019 | 11:30 AM - 7:30 PM EST
<table>
<thead>
<tr>
<th>Date Range</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr 8 - 12, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Apr 8 - 12, 2019</td>
<td>9:30 AM - 5:30 PM EST</td>
</tr>
<tr>
<td>Apr 15 - 19, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Apr 15 - 19, 2019</td>
<td>11:30 AM - 7:30 PM EST</td>
</tr>
<tr>
<td>Apr 22 - 26, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Apr 29 - May 3, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Apr 29 - May 3, 2019</td>
<td>11:30 AM - 7:30 PM EST</td>
</tr>
<tr>
<td>May 6 - 10, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>May 6 - 10, 2019</td>
<td>9:30 AM - 5:30 PM EST</td>
</tr>
<tr>
<td>May 13 - 17, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>May 13 - 17, 2019</td>
<td>11:30 AM - 7:30 PM EST</td>
</tr>
<tr>
<td>May 20 - 24, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>May 20 - 24, 2019</td>
<td>9:30 AM - 5:30 PM EST</td>
</tr>
<tr>
<td>Jun 3 - 7, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Jun 3 - 7, 2019</td>
<td>11:30 AM - 7:30 PM EST</td>
</tr>
<tr>
<td>Jun 10 - 14, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Jun 10 - 14, 2019</td>
<td>9:30 AM - 5:30 PM EST</td>
</tr>
<tr>
<td>Jun 17 - 21, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Jun 24 - 28, 2019</td>
<td>8:30 AM - 4:30 PM EST</td>
</tr>
<tr>
<td>Jun 24 - 28, 2019</td>
<td>11:30 AM - 7:30 PM EST</td>
</tr>
</tbody>
</table>
VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V6.7]

Course Code: 9888

| ON-DEMAND | $4,250 USD |
VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V6.7]

Course Code: 9888

PRIVATE GROUP TRAINING 5 days

Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

Date created: 11/7/2018 7:30:30 AM
Copyright © 2018 Global Knowledge Training LLC. All Rights Reserved.