

VMware vSphere: Install, Configure, Manage v7 Training

VMware Authorized Training · Applied Technology Academy

VMware vSphere: Install, Configure, Manage v7 is a 5-day course which features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7. This course prepares you to administer a vSphere infrastructure for an organization of any size. This course is the foundation for most of the other VMware technologies in the software-defined data center.

LEVEL	DURATION	EXPERIENCE	AVERAGE SALARY	LABS
Intermediate	5 Days	2 years: VMware vSphere	\$138,166	Yes

Course Overview

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe the software-defined data center (SDDC)
- Explain the vSphere components and their function in the infrastructure
- Install and configure VMware ESXi™ hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware vSphere® Client™ to manage the vCenter Server inventory and the vCenter Server configuration
- Manage, monitor, back up, and protect vCenter Server Appliance
- Create virtual networks with vSphere standard switches
- Describe the storage technologies supported by vSphere
- Configure virtual storage using iSCSI and NFS storage
- Create and manage VMware vSphere® VMFS datastores
- Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- Create a content library and deploy virtual machines from templates in the library
- Manage virtual machine resource use
- Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®

Create and manage a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™

- Discuss solutions for managing the vSphere life cycle
- Use VMware vSphere® Update Manager™ to apply patches and perform upgrades to ESXi hosts and virtual machines

Course Outline

- **Module 1: Course Introduction**
 - Introductions and course logistics
 - Course objectives
- **Module 2: Introduction to vSphere and the Software-Defined Data Center**
 - Explain basic virtualization concepts
 - Describe how vSphere fits into the software-defined data center and the cloud infrastructure
 - Explain how vSphere interacts with CPUs, memory, networks, and storage
 - Recognize the user interfaces for accessing the vCenter Server system and ESXi hosts
 - Use VMware Host Client™ to access and manage ESXi host
- **Module 3: Virtual Machines**
 - Create and remove a virtual machine
 - Provision a virtual machine with virtual devices
 - Identify the files that make up a virtual machine
 - Explain the importance of VMware Tools™
- **Module 4: vCenter Server**
 - Describe the vCenter Server architecture
 - Discuss how ESXi hosts communicate with vCenter Server
 - Deploy and configure vCenter Server Appliance
 - Use the vSphere Client to manage the vCenter Server inventory
 - Add data center, organizational objects, and hosts to vCenter Server
 - Use roles and permissions to enable users to access objects in the vCenter Server inventory
 - Back up vCenter Server Appliance
 - Monitor vCenter Server tasks, events, and appliance health
 - Use vCenter Server High Availability to protect a vCenter Server Appliance
- **Module 5: Configuring and Managing Virtual Networks**
 - Create and manage standard switches
 - Describe the virtual switch connection types
 - Configure virtual switch security, traffic-shaping and load-balancing policies
 - Compare vSphere distributed switches and standard switches
- **Module 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 VMFS and NFS datastores
 - Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
 - Deploy virtual machines on a VMware vSAN™ datastore

- **Module 7: Virtual Machine Management**
 - Use templates and cloning to deploy new virtual machines
 - Modify and manage virtual machines
 - Create a content library and deploy virtual machines from templates in the library
 - Dynamically increase the size of a virtual disk
 - Use customization specification files to customize a new virtual machine
 - Perform vSphere vMotion and vSphere Storage vMotion migrations
 - Create and manage virtual machine snapshots
 - Examine the features and functions of VMware vSphere® Replication™
- **Module 8: Resource Management and Monitoring**
 - Discuss CPU and memory concepts in a virtualized environment
 - Describe what overcommitment of a resource means
 - Describe methods for optimizing CPU and memory usage
 - Use various tools to monitor resource use
 - Create and use alarms to report certain conditions or events
- **Module 9: vSphere Clusters**
 - Describe options for making a vSphere environment highly available

Intended Audience

The primary audience for this course is as follows:

- System administrators
- System engineers

Follow-On Courses

- VMware vSphere: Operate, Scale and Secure v8
- VMware vSphere: Troubleshooting [V8]

Prerequisite

For students to be successful in this course they should have the following experience:

- System administration experience on Microsoft Windows or Linux operating systems
- Some networking and storage experience would be helpful but not required

Ready to enroll? Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.