

Course name: vSphere: Install, Configure, Manage [V6] (EDU-VSICM6) (VCP6-DCV)

Course code: VT-SP-ICM-6-EN

Introduction

VMware vSphere: Install, Configure, Manage is our best-selling course. It features intensive hands-on training that focuses on installing, configuring, and managing VMware vSphere® 6, which includes VMware ESXi™ 6 and VMware vCenter Server™ 6.

Note: This course is based on beta software.

Participant profile

- System administrators
- Systems engineers
- Operators of ESXi and vCenter Server

Goal description

This course will give you a solid understanding of how to administer a vSphere infrastructure for an organization of any size. This course meets the prerequisite for advanced vSphere courses, which can be found at www.vmware.com/education.

Course duration and form

- 35 hours (5 days x 7 hours), including lectures and exercises.

Course plan

1. Course Introduction
 - a. Introductions and course logistics
 - b. Course objectives
2. Software-Defined Data Center
 - a. Introduce components of the software-defined data center
 - b. Describe where vSphere fits into the cloud architecture
 - c. Install and use vSphere Client
 - d. Overview of ESXi
3. Creating Virtual Machines
 - a. Introduce virtual machines, virtual machine hardware, and virtual machine files
 - b. Create and work with virtual machines
4. vCenter Server
 - a. Introduce the vCenter Server architecture
 - b. Deploy and configure vCenter Server Appliance
 - c. Install and use vSphere Web Client
 - d. Manage vCenter Server inventory objects and licenses
 - e. Explain the benefits of Enhanced vMotion Compatibility
5. Configuring and Managing Virtual Networks
 - a. Describe, create, and manage standard switches
 - b. Describe and modify standard switch properties
 - c. Configure virtual switch load-balancing algorithms
 - d. Create, configure, and manage vSphere distributed switches, network connections, and port groups
6. Configuring and Managing Virtual Storage
 - a. Introduce storage protocols and storage device names
 - b. Discuss ESXi with iSCSI, NFS, and Fibre Channel storage

- c. Create and manage VMware vSphere® VMFS datastores
 - d. Introduce VMware Virtual SAN™
7. Virtual Machine Management
- a. Use templates and cloning to deploy virtual machines
 - b. Modify and manage virtual machines
 - c. Perform vSphere vMotion and vSphere Storage vMotion migrations
 - d. Create and manage virtual machine snapshots
 - e. Create a vApp
 - f. Introduce the various types of content libraries and how to deploy and use them
8. Resource Management and Monitoring
- a. Introduce virtual CPU and memory concepts
 - b. Configure and manage resource pools
 - c. Describe methods for optimizing CPU and memory usage
 - d. Use vCenter Server performance graphs and alarms to monitor resource usage
 - e. Create and use alarms to report certain conditions or events
 - f. Introduce vRealize Operations Manager for data center monitoring and management
9. vSphere HA and vSphere Fault Tolerance
- a. Explain the vSphere HA architecture
 - b. Configure and manage a vSphere HA cluster
 - c. Use vSphere HA advanced parameters
 - d. Introduce vSphere Fault Tolerance
 - e. Enable vSphere Fault Tolerance on virtual machines
 - f. Introduce vSphere Replication
 - g. Use vSphere Data Protection to back up and restore data
10. Host Scalability
- a. Describe the functions of a vSphere DRS cluster
 - b. Configure and manage a vSphere DRS cluster
 - c. Work with affinity and anti-affinity rules
 - d. Use vSphere HA and vSphere DRS together
11. vSphere Update Manager and Host Maintenance
- a. Use vSphere Update Manager to manage ESXi patching
 - b. Install vSphere Update Manager and the vSphere Update Manager plug-in
 - c. Create patch baselines
 - d. Use host profiles to manage ESXi configuration compliance
 - e. Scan and remediate hosts
12. Installing VMware Components
- a. Introduce ESXi installation
 - b. Describe boot-from-SAN requirements
 - c. Introduce vCenter Server deployment options
 - d. Describe vCenter Server hardware, software, and database requirements
 - e. Discuss installation of vCenter Server Appliance and a vCenter Server instance