

VMware vSphere – Install, Configure and Manage

Course details

In association with Infocloud Technologies VMware Authorized training partner

Location: Pune

Course Outline:

Course Overview

This hands-on training course explores installation, configuration, and management of VMware vSphere®, which consists of VMware ESXi™ and VMware® vCenter Server™. This course is based on versions of ESXi 5.5 and vCenter Server 5.5. Completion of this course satisfies the prerequisite for taking the VMware® Certified Professional 5 exam.

Students who complete this course can enroll in several more advanced vSphere courses. For advanced course options, go to <http://www.vmware.com/education>.

Course Objectives

By the end of the course, you should understand vSphere 5.5 functions and features and be able to meet the following objectives:

- ☑ Deploy an ESXi host
- ☑ Deploy a vCenter Server instance
- ☑ Deploy a vCenter Server appliance
- ☑ Manage an ESXi host using vCenter Server
- ☑ Manage ESXi storage using vCenter Server
- ☑ Manage ESXi networking using vCenter Server
- ☑ Manage virtual machines using vCenter Server
- ☑ Deploy and manage thin-provisioned virtual machines
- ☑ Migrate virtual machines with VMware vSphere® vMotion®
- ☑ Manage vSphere infrastructure with VMware vSphere® Web Client and VMware vSphere® Client™
- ☑ Migrate virtual machines using VMware vSphere® Storage vMotion®
- ☑ Manage access control using vCenter Server
- ☑ Monitor resource usage using vCenter Server
- ☑ Manage VMware vSphere® High Availability, VMware vSphere® Fault Tolerance, and VMware vSphere® Data Protection™ using vCenter Server
- ☑ Apply patches using VMware vSphere® Update Manager™

Course Modules

1	Course Introduction <ul style="list-style-type: none"> • Introductions and course logistics • Course objectives
2	Virtualized Data Center <ul style="list-style-type: none"> • Introduce components of the virtualized data center • Describe where vSphere fits into the cloud architecture • Install and use vSphere Client
3	Creating Virtual Machines <ul style="list-style-type: none"> • Introduce virtual machines, virtual machine hardware, and virtual machine files • Deploy a single virtual machine
4	VMware vCenter Server <ul style="list-style-type: none"> • Introduce the vCenter Server architecture • Introduce VMware® vCenter™ Single Sign-On™ • Install and use vSphere Web Client • Introduce VMware® vCenter™ Server Appliance™ • Configure and manage vCenter Server Appliance • Manage vCenter Server inventory objects and licenses
5	Configuring and Managing Virtual Networks <ul style="list-style-type: none"> • Describe, create, and manage a standard switch • Describe and modify standard switch properties • Configure virtual switch load-balancing algorithms
6	Configuring and Managing Virtual Storage <ul style="list-style-type: none"> • Introduce storage protocols and device names • Configure ESXi with iSCSI, NFS, and Fibre Channel storage • Create and manage vSphere datastores • Deploy and manage VMware® Virtual SAN™
7	Virtual Machine Management <ul style="list-style-type: none"> • Use templates and cloning to deploy virtual machines • Modify and manage virtual machines • Create and manage virtual machine snapshots • Perform vSphere vMotion and vSphere Storage vMotion migrations • Create a VMware vSphere® vApp™
8	Access and Authentication Control <ul style="list-style-type: none"> • Control user access through roles and permissions • Configure and manage the ESXi firewall • Configure ESXi lockdown mode • Integrate ESXi with Active Directory
9	Resource Management and Monitoring <ul style="list-style-type: none"> • Introduce virtual CPU and memory concepts • Describe methods for optimizing CPU and memory usage • Configure and manage resource pools • Monitor resource usage using vCenter Server performance graphs and alarms
10	High Availability and Fault Tolerance <ul style="list-style-type: none"> • Introduce the new vSphere High Availability architecture • Configure and manage a vSphere HA cluster • Introduce vSphere Fault Tolerance • Describe VMware vSphere® Replication
11	Scalability <ul style="list-style-type: none"> • Configure and manage a VMware vSphere® Distributed Resource Scheduler™ (DRS) cluster • Configure Enhanced vMotion Compatibility • Use vSphere HA and DRS together
12	Patch Management <ul style="list-style-type: none"> • Use vSphere Update Manager to manage ESXi patching • Install vSphere Update Manager and the vSphere Update Manager plug-in • Create patch baselines • Scan and remediate hosts

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Installing VMware Components

- Introduce ESXi installation
- Describe boot-from-SAN requirements
- Introduce vCenter Server deployment options
- Describe vCenter Server hardware, software, and database requirements
- Install vCenter Server (Windows-based)