VMware vSphere
Install, Configure, and Manage

Length
5 days

Format
Lecture/lab

Track
Support

Version
4.1

vSphere

Course Description

This hands-on instructor led course of training explores installation, configuration, and management of VMware vSphere, which consists of VMware ESXi/ESX™ and VMware vCenter Server. Upon completion of this course, you can take the examination to become a VMware Certified Professional.

This course is based on ESXi 4.1, ESX 4.1, and vCenter Server 4.1.

Who Should Attend

This course is designed for systems administrators and systems integrators who are responsible for deploying and supporting VMware.

Required Prerequisites

- Basic knowledge of operating system administration (Windows, Unix, Linux, or others) is strongly recommended

Related Training

- VMware vSphere: What's New

Learning Objectives

After you complete this course, you will be able to:

- Install and configure ESX
- Install and configure vCenter Server
- Configure and manage ESX networking and storage using vCenter Server
- Deploy and manage virtual machines
- Manage user access to the VMware infrastructure
- Increase scalability using vCenter Server
- Monitor resource usage using vCenter Server
- Apply patches using vCenter Update Manager
- Manage higher availability and data protection using vCenter Server

CISCO PARTNER
Learning Solutions

VMware vSphere
Install, Configure, and Manage

Course Outline

Module 1: Introduction to VMware Virtualization
- Virtualization, virtual machines, and vSphere components

Module 2: Configuring ESXi/ESX
- Architecture of ESX and ESXi
- Manually configure ESX/ESXi

Module 3: Installing and Using VMware vCenter Server
- Install and configure vCenter Server components
- Use the vSphere Client to manage vCenter inventory hierarchies

Module 4: Networking
- Configure vNetwork standard and distributed switches, network connections, and port groups

Module 5: Storage
- Configure ESX/ESXi with iSCSI, NFS, and Fibre Channel storage
- Create and manage vSphere datastores

Module 6: Virtual Machines
- Deploy virtual machines using templates, VMware vCenter Converter, Guided Consolidation
- Modify, manage, and migrate virtual machines

Module 7: Access Control
- Control user access through roles and permissions

Module 8: Resource Monitoring
- Control virtual machine access to CPU, memory, and I/O resources
- VMkernel methods for optimizing CPU and memory usage
- Monitor resource usage using vCenter Server performance graphs and alarms

Module 9: Scalability
- Manage multiple vCenter Server inventories using VMware vCenter Linked Mode
- Manage ESX/ESXi configuration compliance using Host Profiles
- Create, configure, and manage vNetwork distributed switches, network connections, and port groups
- Perform VMware vMotion migrations
- Configure and manage a VMware Distributed Resource Scheduler cluster
- Configure and manage VMware Distributed Power Management

Module 10: High Availability and Data Protection
- Setup of a VMware High Availability (HA) cluster
- Backup and recovery of virtual machines using vCenter Data Recovery

Module 11: Configuration Management
- Patching using vCenter Update Manager

Module 12: Installing ESX
- Introduce ESX and ESXi installations

CISCO PARTNER
Learning Solutions

VMware vSphere
Install, Configure, and Manage

Course Labs

Lab 1: Configuring VMware ESXi
Lab 2: Installing VMware vCenter Server
Lab 3: Using VMware vCenter Server
Lab 4: Standard Virtual Switches
Lab 5: Accessing IP Storage
Lab 6: Managing VMware vStorage VMFS Datastores
Lab 7: Working with Virtual Machines
Lab 8: Using Templates and Clones
Lab 9: VMware vCenter Converter
Lab 10: Modifying a Virtual Machine
Lab 11: Managing Virtual Machines
Lab 12: Access Control
Lab 13: Resource Pools
Lab 14: Monitoring Virtual Machine Performance
Lab 15: Using Alarms
Lab 16: VMware Data Recovery
Lab 17: Working with Host Profiles
Lab 18: vNetwork Distributed Switches
Lab 19: Migrating Virtual Machines
Lab 20: VMware Distributed Resource Scheduler
Lab 21: VMware Distributed Power Management
Lab 22: Using VMware High Availability
Lab 23: Working with Slot Sizes and Admission Control
Lab 24: Configuring VMware Fault Tolerance
Lab 25: VMware vCenter Update Manager