# VMWA-1 - VMWARE VSPHERE: INSTALL, CONFIGURE, MANAGE [V8]

Categoria: **VMware**

## INFORMAZIONI SUL CORSO

| Durata: | Categoria: | Qualifica Istruttore: | Dedicato a: | Produttore: |
|---|---|---|---|---|
| 5 Giorni | VMware | VMware Certified Instructor | Professionista IT | VMware |

## OBIETTIVI

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

-Install and configure ESXi hosts
-Deploy and configure vCenter
-Use the vSphere Client to create the vCenter inventory and assign roles to vCenter users
-Create virtual networks using vSphere standard switches and distributed switches
-Create and configure datastores using storage technologies supported by vSphere
-Use the vSphere® Client™ to create virtual machines, templates, clones, and snapshots
-Create content libraries for managing templates and deploying virtual machines
-Manage virtual machine resource allocation
-Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
-Create and configure a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™
-Manage the life cycle of vSphere to keep vCenter, ESXi hosts, and virtual machines up to date

## PREREQUISITI

This course has the following prerequisites:

-System administration experience on Microsoft Windows or Linux operating systems

## CONTENUTI

**1 Course Introduction**

-Introductions and course logistics
-Course objectives

**2 vSphere and Virtualization Overview**

-Explain basic virtualization concepts
-Describe how vSphere fits in the software-defined data center and the cloud infrastructure
-Recognize the user interfaces for accessing vSphere
-Explain how vSphere interacts with CPUs, memory, networks, storage, and GPUs

### 3 Installing and Configuring ESXi

- -Install an ESXi host
- -Recognize ESXi user account best practices
- -Configure the ESXi host settings using the DCUI and VMware Host Client

### 4 Deploying and Configuring vCenter

- -Recognize ESXi hosts communication with vCenter
- -Deploy vCenter Server Appliance
- -Configure vCenter settings
- -Use the vSphere Client to add and manage license keys
- -Create and organize vCenter inventory objects
- -Recognize the rules for applying vCenter permissions
- -View vCenter logs and events

### 5 Configuring vSphere Networking

- -Configure and view standard switch configurations
- -Configure and view distributed switch configurations
- -Recognize the difference between standard switches and distributed switches
- -Explain how to set networking policies on standard and distributed switches

### 6 Configuring vSphere Storage

- -Recognize vSphere storage technologies
- -Identify types of vSphere datastores
- -Describe Fibre Channel components and addressing
- -Describe iSCSI components and addressing
- -Configure iSCSI storage on ESXi
- -Create and manage VMFS datastores
- -Configure and manage NFS datastores

### 7 Deploying Virtual Machines

- -Create and provision VMs
- -Explain the importance of VMware Tools
- -Identify the files that make up a VM
- -Recognize the components of a VM
- -Navigate the vSphere Client and examine VM settings and options
- -Modify VMs by dynamically increasing resources
- -Create VM templates and deploy VMs from them
- -Clone VMs
- -Create customization specifications for guest operating systems
- -Create local, published, and subscribed content libraries
- -Deploy VMs from content libraries
- -Manage multiple versions of VM templates in content libraries

### 8 Managing Virtual Machines

- -Recognize the types of VM migrations that you can perform within a vCenter instance and across vCenter instances
- -Migrate VMs using vSphere vMotion
- -Describe the role of Enhanced vMotion Compatibility in migrations
- -Migrate VMs using vSphere Storage vMotion

-Take a snapshot of a VM
-Manage, consolidate, and delete snapshots
-Describe CPU and memory concepts in relation to a virtualized environment
-Describe how VMs compete for resources
-Define CPU and memory shares, reservations, and limits

**9 Deploying and Configuring vSphere Clusters**

-Create a vSphere cluster enabled for vSphere DRS and vSphere HA
-View information about a vSphere cluster
-Explain how vSphere DRS determines VM placement on hosts in the cluster
-Recognize use cases for vSphere DRS settings
-Monitor a vSphere DRS cluster
-Describe how vSphere HA responds to various types of failures
-Identify options for configuring network redundancy in a vSphere HA cluster
-Recognize vSphere HA design considerations
-Recognize the use cases for various vSphere HA settings
-Configure a vSphere HA cluster
-Recognize when to use vSphere Fault Tolerance

**10 Managing the vSphere Lifecycle**

-Enable vSphere Lifecycle Manager in a vSphere cluster
-Describe features of the vCenter Update Planner
-Run vCenter upgrade prechecks and interoperability reports
-Recognize features of VMware vSphere® Lifecycle Manager™
-Distinguish between managing hosts using baselines and managing hosts using images
-Describe how to update hosts using baselines
-Describe ESXi images
-Validate ESXi host compliance against a cluster image and update ESXi hosts
-Update ESXi hosts using vSphere Lifecycle Manager
-Describe vSphere Lifecycle Manager automatic recommendations
-Use vSphere Lifecycle Manager to upgrade VMware Tools and VM hardware

## INFO

**Esame:** 2V0-21.23 - VMware vSphere 8.x Professional --- VMware Certified Professional - Data Center Virtualization (VCP-DCV)
**Materiale didattico:** Materiale didattico ufficiale VMware in formato digitale
**Costo materiale didattico:** incluso nel prezzo del corso a Calendario
**Natura del corso:** Operativo (previsti lab su PC)