

# VMware vSphere v8 – Install, Configure and Manage

## Description

Ce cours propose une formation pratique intensive qui met l'accent sur l'installation, la configuration et la gestion de VMware vSphere 8, qui inclut VMware ESXi 8 et VMware vCenter Server 8. Ce cours vous prépare à administrer une infrastructure vSphere pour une organisation de toute taille. C'est la base de la plupart des autres technologies VMware dans le centre de données défini par logiciel.

## Contenu du cours

### CONTENU DISPONIBLE UNIQUEMENT EN ANGLAIS

#### Module 01: Course Introduction

- Introductions and course logistics
- Course objectives

#### Module 02: 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

#### Module 03: 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

#### Module 04: 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

#### Module 05: 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

#### Module 06: 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

## **Module 07: 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

## **Module 08: 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

## **Module 09: 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

## **Module 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 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

## Documentation

- Support de cours numérique inclus

## Profils des participants

- Administrateurs système
- Ingénieurs système

## Connaissances Préalables

- Experience en gestion des systèmes d'exploitation Microsoft Windows ou Linux

## Objectifs

- Installer et configurer les hôtes VMware ESXi
- Déployer et configurer VMware vCenter
- Utiliser VMware vSphere Client pour gérer l'inventaire et la configuration de serveur vCenter
- Créer des réseaux virtuels avec des commutateurs standard vSphere
- Créer et configurer des stockages de données avec des technologies de stockage supportées par vSphere
- Utiliser le client vSphere pour créer des machines virtuelles, des modèles, des clones et des instantanés.
- Créer une bibliothèque de contenu et déployer des machines virtuelles à partir des modèles dans la bibliothèque
- Gérer l'utilisation des ressources des machines virtuelles
- Migrer des machines virtuelles avec VMware vSphere vMotion et VMware vSphere Storage vMotion
- Créer et gérer un cluster vSphere qui est activé avec VMware vSphere High Availability (HA) et VMware vSphere Storage vMotion
- vSphere Distributed Resource Scheduler
- Gérer le cycle de vie de vSphere pour maintenir vCenter, les hôtes ESXi et les machines virtuelles à jour

## Niveau

Fondamental

## Prix de l'inscription en Présentiel (CHF)

5300

## Prix de l'inscription en Virtuel (CHF)

5300

## Durée (Nombre de Jours)

5

## Reference

VMW-VSPHICM