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.

Prix de l'inscription en Présentiel (CHF)
5300
Prix de l'inscription en Virtuel (CHF)
5300
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
Durée (Nombre de Jours)
5
Reference
VMW-VSPHICM