

VMware vSphere: Advanced Administration

Durée: 5 Jours **Réf de cours: VMVSAA** **Version: 8.0** **Méthodes d'apprentissage: Virtual Learning**

Résumé:

This five-day course provides hands-on training to equip students with a range of skills, from performing routine VMware vSphere 8 administrative tasks to complex vSphere operations and configurations. Through lab-based activities, students are immersed in real-life situations faced by VMBeans, a fictitious company. These situations expose students to real-life scenarios faced by companies that are building and scaling their virtual infrastructure.

This course uses scenario-based lab exercises and does not provide guided step-by-step instructions. To complete the scenario-based lab exercises, you are required to analyze the task, research, and deduce the required solution. References and suggested documentation are provided. This course utilizes labs to teach students how to effectively navigate and manage vSphere. The course aligns fully with the VMware Certified Advanced Professional – Data Center Virtualization Deploy exam objectives.

Product Alignment

- VMware ESXi 8.0
- VMware vCenter 8.0

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Public visé:

System administrators System engineers

Objectifs pédagogiques:

- By the end of the course, you should be able to meet the following objectives:
 - Perform lifecycle operations on vSphere components
 - Troubleshoot vSphere infrastructure and connectivity issues
 - Back up vCenter configurations
 - Implement solutions for securing the vSphere infrastructure
- Configure VMware vCenter and VMware ESXi
- Configure and manage a vSphere cluster solution for vSphere HA, vSphere DRS, and vSAN
- Configure vSphere storage and networking

Pré-requis:

- VSICM - VMware vSphere: Install, Configure, Manage
- VSOSS - VMware vSphere: Operate, Scale and Secure

Contenu:

1 Course Introduction

- Introductions and course logistics
- Course objectives

2 Creating and Configuring Management Clusters

- Create a vSphere cluster for management workloads
- Activate vSphere cluster features that help to improve resource allocation and availability of virtual machines
- Use standard virtual switches to create networking in a cluster
- Select the appropriate vSphere storage types to meet requirements
- Configure iSCSI storage
- Configure VMFS and NFS datastores
- Recognize when to configure ESXi NTP and PTP support
- Recognize ESXi user account best practices
- Configure ESXi host settings
- Use vSphere configuration profiles to maintain consistent ESXi host configurations

3 Creating and Configuring Production Clusters

- Use Cluster Quickstart to create a vSAN-activated cluster
- Configure advanced vSphere HA settings
- Configure the vCenter identity provider
- Assign specific permissions and roles to Active Directory Federation Services (ADFS) users
- Configure Enhanced vMotion Compatibility on a cluster and a VM
- Perform a Cross vCenter Server migration
- Use content libraries to share virtual machine templates between sites
- Manage VM and ESXi host resources using resource pools, scalable shares, and vSphere DRS rules

4 Troubleshooting vSphere and Backing Up Configurations

- Troubleshoot ESXi connectivity issues
- Troubleshoot ESXi storage issues
- Troubleshoot vSphere cluster issues
- Troubleshoot PowerCLI issues
- Generate vCenter and ESXi log bundles
- Back up vCenter
- Create a vCenter profile to standardize configurations in the environment

5 Lifecycle Management

- Troubleshoot upgrade-blocking issues
- Increase logging levels on vCenter
- Configure a VMware Tools shared repository
- Upgrade vCenter
- Upgrade ESXi
- Upgrade VMware Tools
- Upgrade virtual machine hardware compatibility

6 vSphere Security

- Configure a key management server
- Encrypt virtual machines using vSphere VM encryption
- Secure VMs in transit with encrypted vSphere vMotion
- Identify and implement different ESXi CPU scheduler options
- Apply security hardening guidelines to ESXi hosts
- Replace vCenter certificates with trusted CA-signed certificates
- Reconfigure the primary network identifier for a vCenter instance

Autres moyens pédagogiques et de suivi:

- Compétence du formateur : Les experts qui animent la formation sont des spécialistes des matières abordées et ont au minimum cinq ans d'expérience d'animation. Nos équipes ont validé à la fois leurs connaissances techniques (certifications le cas échéant) ainsi que leur compétence pédagogique.
- Suivi d'exécution : Une feuille d'émargement par demi-journée de présence est signée par tous les participants et le formateur.
- En fin de formation, le participant est invité à s'auto-évaluer sur l'atteinte des objectifs énoncés, et à répondre à un questionnaire de satisfaction qui sera ensuite étudié par nos équipes pédagogiques en vue de maintenir et d'améliorer la qualité de nos prestations.

Délais d'inscription :

- Vous pouvez vous inscrire sur l'une de nos sessions planifiées en inter-entreprises jusqu'à 5 jours ouvrés avant le début de la formation sous réserve de disponibilité de places et de labs le cas échéant.
- Votre place sera confirmée à la réception d'un devis ou "booking form" signé. Vous recevrez ensuite la convocation et les modalités d'accès en présentiel ou distanciel.
- Attention, si cette formation est éligible au Compte Personnel de Formation, vous devrez respecter un délai minimum et non négociable fixé à 11 jours ouvrés avant le début de la session pour vous inscrire via moncompteformation.gouv.fr.

Accueil des bénéficiaires :

- En cas de handicap : plus d'info sur globalknowledge.fr/handicap
- Le Règlement intérieur est disponible sur globalknowledge.fr/reglement