

# VMware vSphere: Install, Configure, Manage [V6.7]

## INFORMATIONS GÉNÉRALES

**Type de formation :** Formation continue

**Éligible au CPF :** Non

**Domaine :** Systèmes et Réseaux

**Action collective :** Non

**Filière :** Cloud computing

**Rubrique :** VMware

**Code de formation :** AS743D

## € Tarifs

**Prix public :** 3990 €

### Tarif & financement :

Nous vous accompagnons pour trouver la meilleure solution de financement parmi les suivantes :

**Le plan de développement des compétences de votre entreprise :** rapprochez-vous de votre service RH.

**Le dispositif FNE-Formation.**

**L'OPCO** (opérateurs de compétences) de votre entreprise.

**France Travail:** sous réserve de l'acceptation de votre dossier par votre conseiller Pôle Emploi.

**CPF -MonCompteFormation**

Contactez nous pour plus d'information : [contact@aston-institut.com](mailto:contact@aston-institut.com)

## PRÉSENTATION

### Objectifs & compétences

By the end of the course, you should be able to meet the following objectives: Describe the software-defined data center Explain the vSphere components and their function in the infrastructure Add ESXi hosts to a VMware vCenter® Server Appliance™ instance Manage vCenter Server Appliance Use a local content library as an ISO store, and deploy a virtual machine Describe vCenter Server architecture Use vCenter Server to manage an ESXi host

### Public visé

System administrators System engineers

### Pré-requis

This course has the following prerequisites: System administration experience on Microsoft Windows or Linux operating systems

## 📍 Lieux & Horaires

**Durée :** 35 heures

**Délai d'accès :** Jusqu'à 8 jours avant le début de la formation, sous condition d'un dossier d'inscription complet

## PROGRAMME

1. Course Introduction Introductions and course logistics Course objectives Describe the content of the course Gain a complete picture of the VMware certification system Familiarize yourself with the benefits of the VMware Education Learning Zone Identify additional resources
2. Introduction to vSphere and the Software-Defined Data Center Describe how vSphere fits into the software-defined data center and the cloud infrastructure Explain how vSphere interacts with CPUs, memory, networks, and storage Use vSphere Client to access and manage your vCenter Server system and ESXi host Compare virtual machine hardware version 14 to other versions Identify the virtual network adapters, and describe the enhanced VMXNET3 Compare the types of virtual disk provisioning Identify the advantages of ESXi Quick Boot
3. Creating Virtual Machines Create, provision, and remove a virtual machine Explain the importance of VMware Tools™ Describe how to import a virtual appliance OVF template Manage VMware Tools Explain troubleshooting OS installation and VMware Tools
4. vCenter Server Describe the vCenter Server architecture Discuss how ESXi hosts communicate with vCenter Server Identify the vCenter Server services, components, and modules Access and configure vCenter Server Appliance Use vSphere Client to manage the vCenter Server inventory Describe the rules for applying permissions Create a custom role in vCenter Server Create a backup schedule Restore vCenter Server Appliance from backup Monitor vCenter Server Appliance
5. Configuring and Managing Virtual Networks Describe, create, and manage standard switches Configure virtual switch security and load-balancing policies Compare vSphere distributed switches and standard switches Describe the virtual switch connection types Describe the new TCP/IP stack architecture Use VLANs with standard switches
6. Configuring and Managing Virtual Storage Identify storage protocols and storage device types Discuss ESXi hosts using iSCSI, NFS, and Fibre Channel storage Create and

## 📅 Prochaines sessions

Consultez-nous pour les prochaines sessions.

manage VMware vSphere® VMFS and NFS datastores Describe the new features of VMFS 6.5 Identify the advantages of VMware vSAN™ Describe guest file encryption

7 Virtual Machine Management Use templates and cloning to deploy new virtual machines Modify and manage virtual machines Clone a virtual machine Upgrade virtual machine hardware to version 14 Remove virtual machines from the vCenter Server inventory and datastore Use customization specification files to customize a new virtual machine Perform vSphere vMotion and vSphere Storage vMotion migrations Create and manage virtual machine snapshots Create, clone, and export vApps Identify the types of content libraries and how to deploy and use them

8 Resource Management and Monitoring Discuss CPU and memory concepts in a virtualized environment Describe what overcommitment of a resource means Identify additional technologies that improve memory usage Configure and manage resource pools Describe methods for optimizing CPU and memory usage Use various tools to monitor resource usage Create and use alarms to report certain conditions or events

9 vSphere HA, vSphere Fault Tolerance, and Protecting Data Explain the vSphere HA architecture Configure and manage a vSphere HA cluster Use vSphere HA advanced parameters Enforce infrastructural or intra-app dependencies during failover Describe vSphere HA heartbeat networks and datastore heartbeats Examine the features and functions of vSphere Fault Tolerance Enable vSphere Fault Tolerance on virtual machines Support vSphere Fault Tolerance interoperability with vSAN Examine enhanced consolidation of vSphere Fault Tolerance virtual machines Examine the features and functions of vSphere Replication

10 vSphere DRS Describe the functions of a vSphere DRS cluster Create a vSphere DRS cluster View information about a vSphere DRS cluster Configure virtual machine affinity, DRS groups, and VM-host affinity rules Remove a host from a vSphere DRS cluster

11 vSphere Update Manager Describe the new architecture, components, and capabilities of vSphere Update Manager Use vSphere Update Manager to manage the patching of ESXi, virtual machines, and vApps Install vSphere Update Manager and the vSphere Update Manager plug-in Create patch baselines Use host profiles to manage host configuration compliance Examine the features and functions of vSphere Update Manager EAM integration Integrate vSphere Update Manager with vSphere DRS Scan and remediate hosts

12 vSphere Troubleshooting Define the scope of troubleshooting Use a structured approach to solve configuration and operational problems Identify troubleshooting methodology to logically diagnose faults and improve troubleshooting efficiency

## MODALITÉS

### Modalités

**Modalités :** en présentiel, distanciel ou mixte . Toutes les formations sont en présentiel par défaut mais les salles sont équipées pour faire de l'hybride. – Horaires de 9H à 12H30 et de 14H à 17H30 soit 7H – Intra et Inter entreprise.

**Pédagogie :** essentiellement participative et ludique, centrée sur l'expérience, l'immersion et la mise en pratique. Alternance d'apports théoriques et d'outils pratiques.

**Ressources techniques et pédagogiques :** Support de formation au format PDF ou PPT Ordinateur, vidéoprojecteur, Tableau blanc, Visioconférence : Cisco Webex / Teams / Zoom.

**Pendant la formation :** mises en situation, autodiagnostic, travail individuel ou en sous-groupe sur des cas réels.

### Méthode

**Fin de formation :** entretien individuel.

**Satisfaction des participants :** questionnaire de satisfaction réalisé en fin de formation.

**Assiduité :** certificat de réalisation.

**Validations des acquis :** grille d'évaluation des acquis établie par le formateur en fin de formation.