

VMware vSphere : Fast Track

VMWAREFAST

Présentiel - Synchrone

Objectifs



Public Visé

System administrators, System engineers



Pré Requis

System administration experience on Microsoft Windows or Linux operating systems

Objectifs pédagogiques et d'évaluation

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

- Describe the software-defined data center (SDDC)
- Explain the vSphere components and their function in the infrastructure
- Describe the benefits and capabilities of VMware Skyline
- Install and configure VMware ESXi™ hosts
- Deploy and configure VMware vCenter® Server Appliance™
- Use VMware vSphere® Client™ to manage the vCenter Server inventory and the vCenter Server configuration
- Manage, monitor, back up, and protect vCenter Server Appliance
- Create virtual networks with vSphere standard switches
- Describe the storage technologies supported by vSphere
- Configure virtual storage using iSCSI and NFS storage
- Create and manage VMware vSphere® VMFS datastores
- Use the vSphere Client to create virtual machines, templates, clones, and snapshots
- Create a content library and deploy virtual machines from templates in the library
- Manage virtual machine resource use and manage resource pools
- Migrate virtual machines with VMware vSphere® vMotion® and VMware vSphere® Storage vMotion®
- Create and manage a vSphere cluster that is enabled with VMware vSphere® High Availability and VMware vSphere® Distributed Resource Scheduler™
- Create virtual networks with VMware vSphere® Distributed Switch™ and enable distributed switch features
- Discuss solutions for managing the vSphere life cycle
- Use VMware vSphere® Lifecycle Manager™ to perform upgrades to ESXi hosts and virtual machines
- Use host profiles to manage ESXi configuration compliance
- Describe how vSphere storage APIs help storage systems integrate with vSphere
- Configure and use virtual machine storage policies

Parcours pédagogique

1 Course Introduction

Introductions and course logistics
Course objectives

2 Introduction to vSphere and the Software-Defined Data Center

Explain basic virtualization concepts
Describe how vSphere fits into the softwaredefined data center and the cloud infrastructure
Explain how vSphere interacts with CPUs, memory, networks, and storage
Recognize the user interfaces for accessing the vCenter Server system and ESXi hosts
Describe the ESXi host architecture
Navigate the Direct Console User Interface (DCUI) to configure an ESXi host
Recognize ESXi host user account best practices
Install an ESXi host
Use VMware Host Client™ to configure ESXi host settings
Describe how to proactively manage your vSphere environment using VMware Skyline

3 Virtual Machines

Create and provision a virtual machine
Explain the importance of VMware Tools™
Install VMware Tools
Identify the files that make up a VM
Recognize the components of a VM
Recognize virtual devices supported by a VM
Describe the benefits and use cases for containers
Identify the parts of a container system

4 vCenter Server

Describe the vCenter Server architecture
Discuss how ESXi hosts communicate with vCenter Server
Deploy and configure vCenter Server Appliance
Use the vSphere Client to manage the vCenter Server inventory
Add data center, organizational objects, and hosts to vCenter Server
Use roles and permissions to enable users to access objects in the vCenter Server inventory
Back up vCenter Server Appliance
Monitor vCenter Server tasks, events, and appliance health
Use vCenter Server High Availability to protect a vCenter Server Appliance

5 Configuring and Managing Virtual Networks

Version : V2 - VMWAREFAST-20231121

STRATEGIE Formation - Numéro de déclaration d'activité (ne vaut pas agrément de l'état) : 95970120697

Stratégie Informatique

Guadeloupe : Immeuble la Coupole, Grand-Camp 97142 ABYMES Tél : 05 90 83 06 18 Fax : 05 90 83 46 71
Martinique : Immeuble Sera n°6, Zone de Manhity 97232 LAMENTIN Tél : 05 96 57 40 20 Fax : 05 96 51 60 53
SARL AU CAPITAL DE 7775€ - SIRET 352 717 193 00044-APE 6202 A

installation and configuration content from our best-selling course, you will also develop advanced skills needed to manage and maintain a highly available and scalable virtual infrastructure. Through a mix of lecture and hands-on labs, you will install, configure and manage vSphere 7. You will explore the features that build a foundation for a truly scalable infrastructure and discuss when and where these features have the greatest effect. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 7, which includes VMware ESXi™ 7 and VMware vCenter Server® 7.

Qualification Intervenant-e-s

Consultant formateur certifié

Create and manage standard switches
 Describe the virtual switch connection types
 Configure virtual switch security, traffic-shaping and load-balancing policies
 Compare vSphere distributed switches and 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 manage VMFS and NFS datastores
 Explain how multipathing works with iSCSI, NFS, and Fibre Channel storage
 Recognize the components of a VMware vSAN™ configuration

7 Virtual Machine Management

Use templates and cloning to deploy new virtual machines
 Modify and manage virtual machines
 Create a content library and deploy virtual machines from templates in the library
 Use customization specification files to customize a new virtual machine
 Perform vSphere vMotion and vSphere Storage vMotion migrations
 Describe Enhanced vMotion Compatibility
 Create and manage virtual machine snapshots
 Examine the features and functions of VMware vSphere® Replication™
 Describe the benefits of vSphere Storage APIs – Data Protection

8 Resource Management and Monitoring

Discuss CPU and memory concepts in a virtualized environment
 Describe what overcommitment of a resource means
 Describe methods for optimizing CPU and memory usage
 Use various tools to monitor resource use
 Create and use alarms to report certain conditions or events

9 vSphere Clusters

Describe the functions of a vSphere DRS cluster
 Create a vSphere DRS cluster
 Monitor a vSphere cluster configuration
 Describe options for making a vSphere environment highly available
 Explain the vSphere HA architecture
 Configure and manage a vSphere HA cluster
 Examine the features and functions of VMware vSphere® Fault Tolerance
 Describe the function of the vSphere® Cluster Service

10 Network Scalability

Configure and manage vSphere distributed switches
 Describe how VMware vSphere® Network I/O Control enhances performance
 Explain distributed switch features such as port mirroring and NetFlow

11 vSphere Lifecycle Management

Recognize the importance of vCenter Server Update Planner
 Describe how VMware vSphere® Lifecycle Manager™ works
 Describe how to update ESXi hosts using baselines
 Validate ESXi host compliance using a cluster image
 Describe how to upgrade VMware Tools and VM hardware
 Describe VMware vSphere® Lifecycle Manager™ and VMware vSAN™ integration

12 Host and Management Scalability

Use host profiles to manage ESXi configuration compliance
 Create and manage resource pools in a cluster
 Describe how scalable shares work

13 Storage Scalability

Explain why VMware vSphere® VMFS is a highperformance, scalable file system
 Explain VMware vSphere® Storage APIs - Array Integration, VMware vSphere® API for Storage Awareness™, and vSphere APIs for I/O Filtering
 Configure and assign virtual machine storage policies
 Create VMware vSAN™ storage policies

Recognize components of the vSphere Virtual Volumes architecture
Configure VMware vSphere® Storage DRS™ and VMware vSphere® Storage I/O Control

Méthodes et modalités d'évaluation

Questionnaire de positionnement Evaluation en cours de formation :
mises en situation Evaluation de fin de formation : Cas pratique Bilan
individuel des compétences acquises Questionnaire de satisfaction à
chaud Attestation de fin de formation

Modalités d'Accessibilité

Nous consulter

Durée

35.00 Heures

5 Jours

Effectif

De 3 à 8 Personnes

Tarifs (net de taxes)

Inter (Par personne) :

3 850.00 €



Contactez-nous !

Agnès BOSSER
Ingénieur d'affaires IT

Tél. : 0690237500

Mail : abosser@strategie-info.com

Stratégie Informatique