Course : VMware vSphere: Fast Track V8 (VSFT8)

Official course, exam preparation 2V0-21.23

Practical course - 5d - 35h00 - Ref. DMW

With this course, you'll be equipped with advanced management skills for VMware vSphere® 8 and the skills you need to manage and maintain a highly available and scalable virtual infrastructure. Through extensive hands-on training, you'll learn how to install, configure and manage vSphere 8. This course prepares you to administer a vSphere infrastructure for an organization of any size using vSphere 8, which includes VMware ESXi™ 8 and VMware vCenter Server® 8.

PARTICIPANTS

System administrators and engineers.

PREREQUISITES

Experience in system administration on Microsoft Windows or Linux operating systems. Ref AMW training or equivalent is also recommended.

TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

ASSESSMENT TERMS

Assessment of targeted skills prior to training.
Assessment by the participant, at the end of the training course, of the skills acquired during the training course.
Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.
At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.
An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Installing and configuring ESXi hosts
- ✓ Deploying and configuring vCenter
- ✓ Use vSphere Client to create vCenter inventory and assign roles to vCenter users
- ✓ Configuring vCenter High Availability
- ✓ Create and configure virtual networks with vSphere standard and distributed switches
- ✓ Create and configure datastores using storage technologies supported by vSphere
- ✓ Use vSphere Client to create virtual machines, templates, clones and snapshots
- ✓ Configuring and managing VMware Tools Repository
- ✓ Create content libraries to manage templates and deploy virtual machines
- ✓ Manage virtual machine resource utilization
- ✓ Migrating virtual machines with vSphere vMotion and vSphere Storage vMotion
- ✓ Create and configure a vSphere cluster enabled with vSphere High Availability and vSphere Distributed Resource Scheduler
- ✓ Manage the vSphere lifecycle to keep vCenter, ESXi hosts and virtual machines up to date
- ✓ Configure and manage vSphere networking and storage for a large enterprise
- ✓ Use host profiles to manage VMware ESXi host compliance
- ✓ Monitor vCenter, ESXi and virtual machine performance in the vSphere Client

Intended audience

System administrators and engineers.

Prerequisites

Experience in system administration on Microsoft Windows or Linux operating systems. Ref AMW training or equivalent is also recommended.

Certification

Successful completion of the 2V0-21.23 exam leads to VMware Certified Professional - Data Center Virtualization 2023 (VCP-DCV 2023) certification.
Comment passer votre examen ?

Practical details

Teaching methods

Training in French. Official course material in digital format and in English. Good understanding of written English

Course schedule

(1) Introduction to vSphere and virtualization

- Understand the basic concepts of virtualization.
- Describe how vSphere fits into the Software Defined Data Center and cloud infrastructure.
- Discover the user interfaces for accessing vSphere.
- Explain how vSphere interacts with CPUs, memory, networks, storage and GPUs.
- Install an ESXi host.

(2) vCenter management

- Learn how ESXi hosts communicate with vCenter.
- Deploy vCenter Server Appliance.
- Configure vCenter parameters.
- Use vSphere Client to add and manage license keys.
- Create and organize vCenter inventory objects.
- Discover the importance of vCenter High Availability.
- View vSphere tasks and events.
- Create a vCenter backup schedule.
- Know the rules for applying vCenter authorizations.
- Explain how vCenter High Availability works.

(3) Configuring and managing vSphere networking

- Configure and visualize standard and distributed switch configurations.
- Discover the difference between standard and distributed switches.
- Explain how to define networking policies on standard and distributed switches.

(4) Configuring and managing vSphere storage

- Discover vSphere storage technologies.
- Identify vSphere datastore types.
- Describe Fibre Channel components and addressing.
- Décrire les composants iSCSI et l'adressage.
- Configure iSCSI storage on ESXi.
- Create and manage VMFS datastores.
- Configure and manage NFS datastores.
- vSphere support for NVMe and iSER technologies.

(5) Deploy virtual machines (VMs)

- Create and provision VMs.
- Explain the importance of VMware Tools.
- Identify the files that make up a VM.
- Discover 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.

(6) VM management

- Know the types of VM migrations that can be carried out in a vCenter instance.
- 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 the concepts of CPU and memory in relation to a virtualized environment.
- Describe how VMs share resources.
- Define shares, reservations, CPU and memory limits.
- Understand the role of VMware Tools Repository.
- Configure VMware Tools Repository.
- Identify VM backup and restore solution.

(7) Deploying and configuring vSphere Cluster

- Use Cluster Quickstart to activate vSphere cluster services and configure the cluster.
- View information on a vSphere cluster.
- Explain how vSphere DRS (Distributed Resource Scheduler) determines VM placement on cluster hosts.
- Learn how to use vSphere DRS parameters.
- Monitor a vSphere DRS cluster.
- Describe how vSphere HA responds to different types of failure.
- Identify the options for configuring network redundancy in a vSphere HA cluster.
- Recognize the use cases of the different vSphere HA parameters.
- Configure an activated cluster for vSphere DRS and vSphere HA.
- Know when to use vSphere Fault Tolerance.
- Describe the function of vCLS (vSphere Cluster Services).
- Recognize operations that could disrupt the operation of vCLS VMs.

(8) vSphere lifecycle management

- Generate vCenter interoperability reports.
- Discover the features of vSphere Lifecycle Manager.
- Describe ESXi images and image repositories.
- Activate vSphere Lifecycle Manager in a vSphere cluster.
- Validate ESXi host compliance with a cluster image and correct them using Lifecycle Manager.
- Describe vSphere Lifecycle Manager's automatic recommendations.
- Use vSphere Lifecycle Manager to update VMware Tools and VM hardware.

(9) Network operations

- Configure and manage vSphere distributed switches.
- Describe how VMware vSphere Network I/O Control improves performance.
- Define vSphere Distributed Services Engine.
- Describe the use cases and benefits of vSphere Distributed Services Engine.

(10) Storage operations

- Describe vSAN architecture and configuration requirements.
- Describe rule-based storage management.
- Know the components in the vSphere Virtual Volumes architecture.
- Configure Storage I/O Control.

(11) ESXi Operations

- Use host profiles to manage ESXi configuration compliance.
- Discover the benefits of using configuration profiles.

(12) vSphere Monitoring

- Monitor key factors that can affect virtual machine performance.
- Describe the factors that influence vCenter performance.
- Use vCenter tools to monitor resource usage.
- Create custom alarms in vCenter.
- Describe the benefits and features of VMware Skyline.
- Learn how to use Skyline Advisor Pro.