

# Course : VMware vSphere 6.5, installation, configuration and administration

*Practical course - 5d - 35h00 - Ref. HVM*

*Price : 3370 € E.T.*

This course will enable you to install, configure and administer the components of a VMware vSphere 6.5 virtual infrastructure. You'll learn how to manage the virtual network, storage, resources and machine deployment. You'll also learn how to secure and back up your infrastructure.

## Teaching objectives

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

- ✓ Install and configure the various VMware vSphere 6.5 components
- ✓ Configuring and managing the virtual network
- ✓ Configure, manage and optimize storage
- ✓ Secure access to VMware infrastructure

## Intended audience

This course is aimed at system administrators and architects who want to get to grips with the VMware vSphere 6.5 software suite (ESXi 6.5 and vCenter 6.5) quickly.

## Prerequisites

Basic knowledge of Linux/Unix or Windows system administration.

## Course schedule

### 1 Virtualization

- Overview of VMware vSphere, licenses.
- Virtualization market and challenges.
- Cloud computing.

### PARTICIPANTS

This course is aimed at system administrators and architects who want to get to grips with the VMware vSphere 6.5 software suite (ESXi 6.5 and vCenter 6.5) quickly.

### PREREQUISITES

Basic knowledge of Linux/Unix or Windows system administration.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

## 2 Hypervisors, clients and vCenter

- Architecture, Management Node and Platform Services Controller.
- Hypervisor and vCenter Server, deployment of the photon OS appliance.
- vSphere Flash and Html5 clients.
- Server conversion and VMware Converter Standalone.

### Hands-on work

Install and configure an ESXi server, vCenter 6.5. Deploy vCenter 6.5 Appliance. Use the various vSphere Clients. Convert a physical server into a virtual machine.

## 3 Virtual network management

- Virtual network features.
- Network configurations: local/distributed switches, security, traffic management and teaming.

### Hands-on work

Configure and manage the virtual network.

## 4 Virtual storage management

- Fibre Channel SAN, iSCSI SAN, NFS, virtual volumes.
- Datastores: creation and management.

### Hands-on work

Connect vSphere to iSCSI storage to create datastores.

## 5 Virtual machine (VM) administration

- VMware Tools.
- VM creation, clones, templates, snapshots.
- Hot and cold migration, RDM volumes.
- Virtual hardware management, Thin Provisioning, VM DirectPath, vSphere Replication.

### Hands-on work

Create VMs and templates. Clone, customize and migrate VMs. Set up VM replication (vSphere Replication).

## 6 High availability and virtual resource management

- VMware High Availability (HA) cluster management, Distributed Resource Scheduler (DRS).
- Optimization of CPU and memory utilization.
- Data persistence.

### Hands-on work

Implement high availability, load balancing and VM backup. Implement alarms, monitor CPU consumption on a VM.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## 7 Virtual infrastructure monitoring and security

- Default and custom alarms.
- Securing access: roles and permissions.
- Update management (VMware Update Manager).

### Hands-on work

Create event-driven alarms. Secure access to VMware infrastructure with roles. Manage virtual infrastructure updates.