

# Course : VMware vSphere 9: Installation, Configuration, and Administration

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

*Price : 4190 € E.T.*

NEW

This course will teach you how to install, configure, and manage the components of a VMware vSphere 9 virtual infrastructure. You will learn how to manage the virtual network, storage, resources, and machine deployment. You will also learn how to secure and back up the infrastructure you have set up.

## Teaching objectives

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

- ✓ Install, configure, and manage a VMware virtual infrastructure (vSphere, vCenter)
- ✓ Configure and Manage Virtual Networks and Storage in vSphere 9
- ✓ Create, deploy, and use virtual machines
- ✓ Securing Access to VMware Infrastructure
- ✓ Manage Updates to the Virtual Infrastructure

## Intended audience

System administrators and architects who want to quickly get up to speed with the VMware vSphere 9 and vCenter 9 software suite.

## Prerequisites

Basic knowledge of Windows or Linux administration.

## Course schedule

### 1 Virtual Infrastructure

- Concepts of computing, networking, and storage virtualization.
- Overview of VMware vSphere 9.
- vSphere 9 Components: New Features in the Data Plane (DPU).
- Enhanced security with lockdown mode.

### Hands-on work

Install and manage vSphere ESXi 9.

## PARTICIPANTS

System administrators and architects who want to quickly get up to speed with the VMware vSphere 9 and vCenter 9 software suite.

## PREREQUISITES

Basic knowledge of Windows or Linux 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 vCenter 9

- Features of the management plan.
- License Management.
- vSphere Inventory Management.

### Hands-on work

Deploy, configure, and manage vCenter.

## 3 Virtual Network Management

- Standard and distributed switches.
- Logic Switches (NSX).
- Advanced network configuration (security, traffic management, teaming management).

### Hands-on work

Configure and manage the virtual network in vSphere.

## 4 Virtual Storage Management

- The various storage protocols.
- FC and iSCSI SAN storage, NAS, and NVMe.
- Virtual Volumes and Virtual SAN.
- Creating and managing datastores.

### Hands-on work

Configure, manage, and optimize storage in VMware vSphere.

## 5 Creating, Deploying, and Managing Virtual Machines (VMs)

- Components of a VM: Virtual Hardware, Version 22.
- Creating, cloning, deleting, and taking snapshots of VMs.
- Cold and hot migrations, vMotion enhancements.
- Creating and managing templates.
- Content libraries, OVF and OVA templates.
- Virtual Hardware Management: Thin and Thick Provisioning.

### Hands-on work

Creations, clones, templates, snapshots, and VM replicas.

## 6 High Availability and Service Continuity

- Managing a high-availability cluster.
- VM Failure Tolerance with VMware Fault Tolerance.

### Hands-on work

Manage the high availability of the virtual infrastructure.

### 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 Monitoring and Managing Resource Use

- VM Resource Management (shares, limits, reservations).
- Load balancing within the computing cluster.
- Resource pools.
- Technologies for optimizing processor and memory usage.
- Performance monitoring.
- Infrastructure Monitoring with Alarms.
- - Managing updates with VMware Lifecycle Manager.

### Hands-on work

DRS cluster, roles and privileges, updates, and patching.

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## Dates and locations

### REMOTE CLASS

2027 : 15 Mar., 31 May, 13 Sep., 6 Dec.

### PARIS LA DÉFENSE

2027 : 15 Mar., 31 May, 13 Sep., 6 Dec.