

# Course : VMware vSphere 8, optimization and advanced features

Practical course - 5d - 35h00 - Ref. V8A

Price : 3370 € E.T.

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This training course will give you the knowledge you need to optimize and implement the advanced features of VMware vSphere 8. You'll learn how to set up virtual machines, identify Central Processing Unit (CPU), memory, network and storage performance issues.

## Teaching objectives

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

- ✓ Optimizing virtual machine configuration in a VMware vSphere 8 environment
- ✓ Understand CPU, memory, network and storage resource allocation
- ✓ Identify the main problems with CPU, memory, network and storage performance
- ✓ Set up Distributed Switches and use their advanced functions
- ✓ Improving deployment and configuration of ESXi servers

## Intended audience

Administrators and system architects with experience of the VMware vSphere software suite who want to acquire advanced knowledge.

## Prerequisites

Good knowledge of VMware vSphere administration.

## Course schedule

### 1 Command line overview

- Overview of VMware command lines.
- esxcli commands.
- Other commands (PowerCLI).

## PARTICIPANTS

Administrators and system architects with experience of the VMware vSphere software suite who want to acquire advanced knowledge.

## PREREQUISITES

Good knowledge of VMware vSphere 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 Performance in a virtualized environment

- Performance factors in virtual environments.
- Performance monitoring with vCenter and esxtop.

## 3 Distributed Virtual Switches (dvSwitch)

- Creation, configuration and management.
- Migration from standard to distributed virtual switches.
- Understand NetFlow, port-mirroring, Link Aggregation Control Protocol (LACP).
- Private VLANs (PVLANs). QoS/Network I/O Control.

### Hands-on work

Command-line network configuration.

## 4 Network performance

- Adapter features.
- Set up a traffic analyzer.
- Monitor performance metrics.

### Hands-on work

Troubleshoot classic performance problems.

## 5 Storage access, performance and scalability

- Storage performance factors (protocols, VMFS, load balancing).
- Storage-related performance problems.
- Configure storage multipathing. Understand VAAI and VASA storage drivers.
- Using storage profiles for VMs. DataStore clusters.

### Hands-on work

Storage DRS and Storage IO Control configuration.

## 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.

## 6 Deployment, optimized server management

- PSC (Platform Services Controller) architecture.
- Using content libraries.
- VMware Host Profile: compliance maintenance, ESXi deployment.
- Image Builder: create an ESXi installation image.
- vSphere Auto Deploy: deploy ESXi hosts.

## 7 Processor and memory performance

- CPU Scheduler features.
- Monitor CPU and memory resources.
- Memory management techniques on ESXi.

### Hands-on work

Troubleshoot CPU problems.

## 8 VM and cluster performance

- Performance of DRS clusters, resource pools and resource allocation parameters.
- Resource allocation parameters.

## Dates and locations

### REMOTE CLASS

2026: 13 Apr., 1 June, 19 Oct., 23 Nov.

### PARIS LA DÉFENSE

2026: 30 Mar., 18 May, 12 Oct., 16 Nov.