Course : VMware vSphere 9: Optimization and Advanced Features

Practical course - 5d - 35h00 - Ref. VFB
Price : 4190 CHF E.T.

NEW

This training course will provide you with the knowledge you need to optimize and implement the advanced features of VMware vSphere 9. You will learn how to configure virtual machines and identify performance issues related to the Central Processing Unit (CPU), memory, network, and storage.

Teaching objectives

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

- Optimizing Virtual Machine Configuration in a VMware vSphere 9 Environment
- Understanding the Allocation of CPU, Memory, Network, and Storage Resources
- Identify the main issues related to CPU, memory, network, and storage performance
- Set up Distributed Switches and use their advanced features
- Improving the Deployment and Configuration of ESX Servers

Intended audience

Experienced system administrators and architects familiar with the VMware vSphere software suite who wish to gain advanced knowledge.

Prerequisites

Strong knowledge of VMware vSphere administration.

Course schedule

1 Introduction to the Command Line

- Introduction to VMware Command Lines.
- The esxcli commands.
- Other commands (PowerCLI).

PARTICIPANTS

Experienced system administrators and architects familiar with the VMware vSphere software suite who wish to gain advanced knowledge.

PREREQUISITES

Strong 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 of a Virtualized Environment

- Performance Factors in a Virtual Environment.
- Performance Monitoring with vCenter and esxtop.

3 Distributed Virtual Switches (dvSwitch)

- Creation, configuration, and management.
- Migration from standard virtual switches to distributed virtual switches.
- Understanding the advanced features of dvSwitch.
- Private VLANs (PVLANs). QoS/Network I/O Control.

Hands-on work

Configuring the network using the command line, via esxcli and PowerCLI.

4 Network Performance

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

Hands-on work

Configuring the network using the command line, via esxcli and PowerCLI.

5 Storage Access, Performance, and Scalability

- Storage performance factors (protocols, VMFS, load balancing).
- Storage-related performance issues.
- Configure storage multipathing.
- Understanding VAAI and VASA storage drivers.
- Datastore clusters.

Hands-on work

Configuring Storage DRS and Storage IO Control.

6 Deployment, optimized server management

- vCenter Server 9 Architecture and Services.
- Using content libraries.

7 Processor and Memory Performance

- CPU Scheduler Features.
- Monitor CPU and memory resources.
- Memory Management Techniques on an ESX.

Hands-on work

Troubleshoot CPU issues.

8 Performance of Virtual Machines and Clusters

- Performance at the DRS cluster level, resource pools, and resource allocation settings.
- Resource allocation settings.

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 to review your request and its feasibility.

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Dates and locations

REMOTE CLASS
2027 : 22 Mar., 14 June, 6 Sep., 29 Nov.