Publication date : 02/21/2024

Course : Windows 2016, virtualization with Hyper-V

plan and deploy a Hyper-V virtual architecture

Practical course - 2d - 14h00 - Ref. WAV

Price : 1370 € E.T.

4 / 5

This Hyper-V training course will teach you how to plan and deploy a virtual architecture using Hyper-V 2016. You'll discover how to optimally configure and administer Hyper-V and its virtual machines to guarantee better performance and availability.

Teaching objectives

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

- Installing and configuring Hyper-V 2016
- Creating and administering virtual machines under Hyper-V
- Setting up virtual machine replicas
- Backing up virtual machines

Intended audience

System and network administrators and engineers.

Prerequisites

Basic knowledge of Windows 2016 and 2012 administration.

Course schedule

1 Virtualization under Hyper-V 2016

- What is a virtual infrastructure?
- Overview of what's new in Hyper-V 2016.
- Hyper-V 2016 hypervisor architecture.

PARTICIPANTS

System and network administrators and engineers.

PREREQUISITES

Basic knowledge of Windows 2016 and 2012 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 Hyper-V installation and configuration

- Hyper-V installation.
- Deploy and configure with PowerShell.
- Managing and configuring Hyper-V 2016.
- The container principle.

Hands-on work

Install the Hyper-V role. Plan and deploy containers in Hyper-V 2016.

3 Networking and storage under Hyper-V

- Understand networks and virtual switches.
- vSwitch Embedded Teaming and vSwith NAT.
- Network configuration and optimization.
- Storage for virtual disks.
- SMBv3 storage.

Hands-on work

Planning and creation of virtual networks and switches. Implement storage for virtual machines.

4 Virtual machine (VM) creation

- New configuration file types.
- The different types of virtual machine.
- Secure boot for VMs.
- VM hardware configuration and optimization.
- Deploy and configure virtual machines in PowerShell.
- Reinforced virtual machines, Host Guardian Service.

Hands-on work

Create VMs under different OS. Hot-swap hardware parameters. Create secure VMs. Create virtual machines in PowerShell.

5 Virtual machine administration

- Standard and production checkpoints.
- Virtual machine groups.
- PowerShell for VM administration.
- Virtual machine import and export.

Hands-on work

Virtual machine administration via Hyper-V Manager and PowerShell. Implement checkpoints. Export VMs.

6 Virtual machine management

- VM clustering under Hyper-V 2016.
- Move VM and/or its storage.
- Replicas under Hyper-V 2016.

Hands-on work

VM hot swapping, storage swapping. Implementing replicas. VM backup.

Dates and locations

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.

REMOTE CLASS
2026 : 18 June, 24 Sep., 19 Nov.

PARIS LA DÉFENSE
2026 : 18 June, 24 Sep., 19 Nov.