

# Course : Windows 2019, what's new for administrators

*Practical course - 3d - 21h - Ref. WRF*

*Price : 1800 € E.T.*

Enhanced security, greater reliability, interconnection with the Cloud, improved container management... Windows Server 2019 offers a host of new features. This training course will enable you to discover the new environment, learn how to implement it and evaluate its behavior.

## Teaching objectives

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

- ✓ Learn how to install Windows Server 2019
- ✓ Installing and administering WAC
- ✓ Understanding what's new in Hyper-V 2019
- ✓ Managing IPv4 and IPv6 addresses
- ✓ Implementing Windows Server 2019 disk manager

## Intended audience

Systems and network technicians, administrators and engineers.

## Prerequisites

Good knowledge of Windows 2016 or 2012 server administration and Active Directory. Experience in system administration desirable.

## Course schedule

### 1 Windows Server 2019 installation or upgrade

- Introduction to Windows Server 2019.
- Windows Server 2019 licenses.
- GUI, CORE and NanoServer modes.
- Activation models.
- New interface features.

### Hands-on work

Discover the different installation and parameterization modes.

### PARTICIPANTS

Systems and network technicians, administrators and engineers.

### PREREQUISITES

Good knowledge of Windows 2016 or 2012 server administration and Active Directory. Experience in system administration desirable.

### 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 New features for local and remote administration

- Installation of the Windows Admin Center (WAC) console.
- WAC UI extensions.
- Windows System Insights modules.
- Azure memberships and interconnections.
- Hyperconvergence and what's new.
- Advanced storage technologies.
- Audits and monitors. QoS.

### Hands-on work

Installation and configuration of WAC. Administration via WAC.

## 3 Hyper-V 2019

- Failover Clustering.
- Hyper-V Replica.

### Hands-on work

Installing and configuring a cluster.

## 4 Protecting and securing your infrastructure 2019

- Identity concepts and what's new in 2019.
- WAC: an alternative to MMC.
- Hybrid scenarios.
- Windows ATP.
- Analysis of methods for compromising security.
- Service protection methods and features.
- Enhanced security and improved network support.
- What's new in SDN.
- Windows Defender Advanced Threat Protection.

### Hands-on work

Implementation of a protection policy using Windows Defender Advanced Threat Protection.

## 5 Application platform

- New applications.
- Containers and their upgrades.
- Linux/Microsoft interaction.

## 6 Infrastructure, networks, clustering and high availability

- High availability and clusters: what's new?
- DHCP and DHCP FailOver, DNS and DNS Secure.
- IPv4 and IPv6 servers and protocols.
- IP address manager.
- Creating DNS record zones with PowerShell.
- Bandwidth optimization with NIC Teaming.

### Hands-on work

DHCP server setup. IPv4 and IPv6 address management (IPAM and FailOver).

### 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 Disks, shares and file systems

- The ReFS (Resilient File System) file system.
- File system availability.
- Configure storage spaces.
- Dynamic access control (DAC).
- Windows Defender Malware Protection.
- File and folder security.
- Storage Migration Services.

### Hands-on work

Implementing the Windows Server 2019 disk manager.

## 8 PowerShell interactions

- What's new in PowerShell 6.
- PowerShell features in Windows Server 2019.
- Best practices.

## Dates and locations

### REMOTE CLASS

2026 : 22 June, 16 Sep.

### PARIS LA DÉFENSE

2026 : 22 June, 16 Sep.