

# Course : IIS 10, Web server administration, for Windows Server 2016

*Practical course - 3d - 21h00 - Ref. IIA*

*Price : 2150 CHF E.T.*

You'll learn how to install, configure and administer an IIS 10 Web server on Windows Server 2016. You'll also learn how to set up, control and administer sites and applications, taking into account the security and performance constraints associated with this server.

## Teaching objectives

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

- ✓ How to set up an IIS server
- ✓ Learn how to secure an IIS server
- ✓ Maintaining an IIS server
- ✓ Manage IIS server performance

## Intended audience

Administrators and system engineers in charge of Web server administration

## Prerequisites

Good knowledge of Web protocols and architectures. Basic knowledge of Windows Server 2016 administration

## Course schedule

### 1 Presentation

- IIS 10 architecture, HTTP/2, Nano Server, Generic host header, Application pool variables, HTTP 308.
- Install IIS with Server Manager, DISM and unattend.xml.
- How do I migrate from an IIS 8.0 / 8.5 website to IIS 10?

### Hands-on work

Installing IIS 10.

### PARTICIPANTS

Administrators and system engineers in charge of Web server administration

### PREREQUISITES

Good knowledge of Web protocols and architectures. Basic knowledge of Windows Server 2016 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 Basic configuration

- Service management, post-installation configuration.
- Administration tools, WMI, PowerShell, Appcmd.
- Website structure, virtual directory, application pool.

### Hands-on work

Creation of sites, applications and virtual directories.

## 3 Setting up Web sites and applications

- Static sites, site linking, host header, ISAPI filters.
- Web server configuration, inheritance and conflict.
- Application initialization: CPU consumption, NUMA scalability.
- Configure features: default document, HTTP error pages, redirection.
- Configure ASP.NET, PHP and Fast-CGI applications.

### Hands-on work

Site installation and configuration. ASP.NET and PHP configuration.

## 4 Security

- The main attacks: how to defend yourself? Security tools in IIS.
- Anonymous authentication, customer certificate.
- Authorization: Application Pool Identity.
- Create a self-signed server certificate, centralize certificates.
- Request filtering.
- ISAPI, CGI, IP and domain restrictions, URL authorization rules.

### Hands-on work

Installation of SSL certificates. Installation of an authentication system. Security tests on an IIS server.

## 5 Web server maintenance

- Log format, improved logging.
- Event tracking: ETW integration.
- Monitoring of work processes, configuration of request follow-up.
- Backup and restore.

### Hands-on work

Log analysis and reporting tools. Backup and restore an IIS environment.

## 6 Performance management

- Dynamic site activation.
- Compression, static/dynamic caching.
- Performance analyzer, the counters to watch.
- Configure website and application pool performance.

### Hands-on work

Monitor an IIS server. Install a traffic management tool. Set up a cache for dynamic content.

### 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.