

# Course : Windows 2016, Active Directory maintenance and troubleshooting

*Practical course - 4d - 28h00 - Ref. MAY*  
*Price : 2650 CHF E.T.*

Learn the various preventive and corrective maintenance techniques in an Active Directory 2016 environment. You'll learn how to manage changes to the Active Directory structure, rename domain controllers, and resolve network and replication issues.

## Teaching objectives

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

- ✓ Diagnose and resolve structural problems in Active Directory 2016
- ✓ Diagnose and solve DFS replication problems
- ✓ Restructuring and migrating Active Directory domains and objects
- ✓ Define an Active Directory recovery plan

## Intended audience

System administrators and engineers.

## Prerequisites

Good knowledge of Windows server 2016 or 2012 administration in an Active Directory environment.

## Practical details

### Hands-on work

Alternating practice and theory

## Course schedule

### PARTICIPANTS

System administrators and engineers.

### PREREQUISITES

Good knowledge of Windows server 2016 or 2012 administration in an Active Directory environment.

### 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.

## 1 AD architecture and security

- A reminder of the architecture and new features of AD 2016.
- AD and NanoServers.
- Privileged Access Management (PAM).
- DC encryption.

### Hands-on work

Secure AD administration. Encrypt DCs. Encryption key recovery.

## 2 Troubleshooting AD-related network problems

- DNS records linked to AD.
- DNS zone management and delegation.
- Securing areas.
- Cleaning DNS zones integrated into AD.
- DNS troubleshooting utilities.

### Hands-on work

Test DNS operation. Configure zone cleaning. Solve problems related to DC deletion.

## 3 Troubleshooting AD objects

- Manage ACLs on objects.
- AD Recycle Bin, restore items without the Recycle Bin.
- Isolate obsolete objects in PowerShell.
- Diagnose service account problems.

### Hands-on work

Restore objects. Using PowerShell to solve problems. Troubleshoot managed service accounts.

## 4 Domain troubleshooting

- AD backup and restore.
- Global catalog optimization and troubleshooting.
- Managing project managers.
- Problems with AD sites, domain approval relationships and forests.

### Hands-on work

Backup and restore AD. Resolve site and approval relationship problems.

## 5 Troubleshooting DFS replication problems

- DFS replications and DC replications.
- DFS root problems Sysvol and DFS limitations.
- DFS deployment, optimization and troubleshooting.

### Hands-on work

Solve sysvol replication and DFS problems linked to migrations.

### 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.

## 6 Estate reconstruction and restructuring

- Rename domain DCs.
- Domain restructuring with ADMT.
- Migration-related problems.
- Define a forest reconstruction plan.

### Hands-on work

Rename CDs. Restructure, migrate objects with ADMT. Build a forest restoration plan.

## 7 Troubleshooting and DC hardware performance

- BPA tool, MSDART.
- AD data collector, performance counters.

### Hands-on work

The performance monitor for analyzing DCs. Use of MSDART.

## Dates and locations

### REMOTE CLASS

2026 : 3 Mar., 26 May, 15 Sep.