

Windows Server 2012 / 2012 R2 Active Directory Disaster Recovery



Workshop

Target Audience:

Workshop Level: 300

(You need some advanced Active Directory troubleshooting and Command line/PowerShell knowledge).

This workshop is not meant as an introduction to Active Directory Domain Services on Windows Server 2012.

Overview

This workshop is designed to give you an overview of possible disasters and best practices on the recovery scenarios.

Because disaster recovery best practice is all about time and documentation, Workshop-labs are designed to work mainly on the Command Line interface or PowerShell (possibility to prepare scripts and automation).

This workshop addresses Active Directory Domain Services recovery but not dependent services. Depending services, such as DNS, are part of this Workshop.

Technical Topics *(not in workshop order):*

- Schema and Function Level Changes
- Domain Controller Cloning
- Active Directory Topology generation (KCC and ISTG)
- Windows Server Backup
- Systemstate and Bare-Metal recovery
- Active Directory Database Snapshots
- Operations Masters (FSMOs) handling
- RID Master handling and new features since Windows Server 2012
- Active Directory Recycle bin and Object (Tree) restore
- Group policy deletions (GPO and GPLink restore)
- Active Directory integrated DNS
- Different Password (Secure Channel) reset
- Authoritative / Non-Authoritative Sysvol / Netlogon recovery (DFSR and FRS)
- Post-Restore operations

Syllabus

Hardware Requirements:

- **Windows Server 2012 R2** with Hyper-V or **Windows 8.1 Pro** with Hyper-V (SLAT compatible)
- 16 GB of RAM
- 250 GB hard disk space, 7200 RPM speed (150 GB min available)
- 16 MB video adapter (32 MB recommended)

This workshop runs for **3** full days.

Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

Phase 1:

We start having a small two domain environment, based on Windows Server 2008 R2. Right at the beginning, we upgrade the entire environment to Windows Server 2012 and deploy additional domain controllers using some different deployment technologies. We also operate with Windows Server 2012 but not Read-Only Domain Controllers. Those steps going side-by-side with Slides, Labs and Knowledge transfers.

Phase 2:

During the next Workshop phase, we discuss about disasters, how they may occur, what kind of disaster are to expect (known from the field) and how to recover from that.

Then we explain and discuss involved services and components and do some Labs on different component recoveries. We also discuss on proactive steps to prevent from component / forest disasters and possibilities to prepare for that.

Phase 3:

During the final Lab, you restore the entire forest based on backups. This is meant to prove and apply your learnings. This final lab is also meant to perform autonomous or in a small team of neighbors. Of course, teachers will assist you if needed. Success for this final lab depends on your learnings.

There will be no documentation for this final lab.