

# Windows Server 2012 Admin, Part 8 of 8: Active Directory

page 1

**Meet the expert:** Chris Bell, MCITP, is an 18-year SQL Server veteran for both business intelligence and application development providing solutions for businesses, organizations, and individuals. He is the founder and CEO of WaterOx Consulting, Inc., a provider of remote SQL Server consulting and services. Chris is also the founder and current President of the Washington DC chapter of PASS and a member of the Board of Directors for CPCUG. Chris also frequently attends and presents at PASS events around the country, sharing his passion for all things SQL Server. In 2012, Chris was one of 5 finalists in the world for Red Gate's Exceptional DBA Award.

**Prerequisites:** The course assumes that students have some familiarity with Microsoft Windows, Microsoft Windows Server, basic networking concepts, and a fundamental understanding of computer hardware.

**Runtime:** 01:56:38

**Course description:** The backbone of any Microsoft network is active directory domain services. All servers, clients, and most services depend heavily on to function properly. As system administrators, we need to be able to monitor and manage the active directory service and its database. Through this session we will learn how to implement virtual domain controllers, along with read only domain controllers. We will also go over how to manage domain controllers and perform maintenance on our active directory installation.

## Course outline:

### Virtual Domain Controllers

- Introduction
- VDCs
- Clone VDCs
- VDC Cloning
- Safe Cloning
- Cloning Requirements
- VDC Clone Management
- Cloneable Domain Controllers
- DCCloneConfig.xml
- New-ADDCCloneconfig
- Get Excluded Application List
- Copy the Domain Controller VM
- VDC Snapshots
- VM Snapshot Challenge
- USN
- Safe Restore
- Safe Restore Considerations
- VDC PowerShell
- Demo: Setup
- Demo: PowerShell and VDC
- Summary

### Read-Only Domain Controllers

- Introduction
- RODC
- RODC Functionality

- Credential Caching
- Administrative Role Separation
- Read Only DNS
- RODC Prerequisites
- RODC Development
- RODC Installation
- RODC Delegate Installation
- Password Replication Policy
- Managing Permissions
- Managing Permissions Per RODC
- Pre-Populating Passwords
- Best Practices
- RODC Administration
- Delegation
- Demo: Active Directory
- Demo: RODC Install
- Demo: RODC Configuration
- Summary

### Manage Domain Controllers

- Introduction
- Domain Controller Installation
- Promotion Wizard
- Domain Controllers
- Domain Controller Admin
- Active Directory Tools
- AD Administrative Center
- AD Module for PowerShell

- Common PowerShell Cmdlets
- NTDSUtil.exe
- DSAMAIN.exe
- OperationsMasterRoleTransfer
- Schema Master
- Domain Naming Master
- Infrastructure Master
- PDC Emulator
- Relative ID (RID) Master
- TransferOperationsMasterRoles
- Seize Operations Master Role
- Placement Best Practices
- UGMC
- Kerberos Delegation
- Server Principal Names
- Demo: Configure UGMC
- Summary

### Maintain Active Directory

- Introduction
- AD Database Maintenance
- AD Database Partitions
- AD Database Files
- AD & SYSVOL Backup
- Restartable AD DS
- Offline AD Management
- NTDSUtil.exe

- Offline Defragmentation
- Offline Defragmentation Steps
- Database Integrity Check
- Active Directory Snapshots
- DSAMain.exe
- Demo: AD Snapshot
- Summary

### DSRM Password Reset

- Introduction
- DSRM Password Reset
- Demo: DSRM Password
- Summary

### Active Directory Restore

- Introduction
- Active Directory Restore
- Authoritative Restore
- Deleted Objects Recovery
- Recover Using LDP
- Enable the AD Recycle Bin
- Demo: AD Recycle Bin
- Demo: Restore
- Demo: Unmount
- Summary