# Windows Server 2008 Active Directory Training

1042 Administrator Tue, Jun 23, 2020 2008 Server 0 1931

## Lesson 1 – Getting Started with Windows Server 2008 Active Directory

In this video you will meet your instructor and you will find out what you will be doing in the Active Directory lessons. In addition, you will also find out how to use this course to maximize your benefits.

- Who is Your Instructor?
- What Will We Be Doing?
- How to Use This Course



Lesson 2 – Lab Setup

In this lesson you will find out what hardware and software you need in order to follow along with this course. You will also find about the servers you will be building throughout the lessons.

- The New York Office
- The Chicago, Dallas, and Tokyo Offices
- The Seattle Office
- My Environment

- Install Windows Server 2008
- Install Active Directory in Windows Server 2008

#### Lesson 03 - Scenario

This lesson will explain our scenario for this course and how we will be using it throughout the course. The purpose of the scenario is to help you to apply your Active Directory knowledge in the "real world".

#### Lesson 4 – Introduction to Active Directory

In this introductory lesson to Active Directory I will explain the structure and functionality of Active Directory. It will help you make educated decisions about the latest directory services technology which is: Windows Server 2008 R2 Active Directory Infrastructure.

- What is Active Directory?
- Benefits of Active Directory
- Active Directory Database
- What is a Domain?
- What is a Tree?
- What is a Forest?
- What is a Organizational Unit (OU)?
- What is a Domain Controller?
- What is a Site?
- What is a Schema?
- What is a Global Catalog?
- Domain & Forest Functional Levels
- What is a Trust Relationship?

## Lesson 5 – The Role of DNS in Active Directory

DNS plays very important role in Active Directory. I will help you understand the DNS as well as show you how to efficiently and effectively implement an appropriate DNS Infrastructure to your environment.

- Introduction to DNS
- What is a Domain Namespace?
- What is a DNS Query?

- How Queries Work
- DNS Forwarders
- Understanding DNS Zones
- Zone Types
- Stub Zones
- Active Directory Integrated Zones
- Forward & Reverse Lookup
- Dynamic Updates
- Different Types of DNS Records
- How Does DNS Interact with Active Directory?

#### Lesson 6 – Installing Windows Server 2008 R2 and Active Directory

This lesson is all about detailed installation of Windows Server 2008 R2 and Active Directory. We will perform the installation on first two domain controllers in our environment.

- The Globomantics Scenario
- Steps for Installing Windows Server 2008 R2
- Installing Windows Server 2008 R2
- Creating/Changing the Administrator Password
- Completing the Initial Configuration Tasks
- Enabling, Downloading, and Installing Updates
- Enabling Remote Desktop
- Configuring Windows Firewall
- Steps for Installing the Forest Root Domain Controller
- Steps for Verifying Forest Root Domain Controller Installation
- Adding the Active Directory Domain Services Role
- Running DCPROMO
- Opening Active Directory Users and Computers
- Verifying the Creation of NTDS.DIT and the SYSVOL Share
- Looking for SRV Resource Records in DNS
- Steps for Installing a Replica Domain Controller
- Installing a Replica Domain Controller
- Verifying Replica Domain Controller Installation

#### Lesson 7 – Remote Management

In an effort to work more efficiently, you will want to allow your IT administrators to

manage your servers without having to get up from their desk. This will increase the security of your server room because there will be less traffic going in and out. In this lesson we will learn how to set up a remote management environment which will satisfy these needs.

- The Globomantics Scenario
- Steps for Installing a Windows 7 Client
- Installing Windows 7
- Activating Windows 7
- Steps for Joining the Client to the Domain
- Joining the Client to the Domain
- Remote Desktop Overview
- Enabling Remote Desktop on the Servers
- Creating a Remote Desktop Connection
- Creating a Shortcut on the Client's Desktop for Easy Access
- Remote Server Administration Tools (RSAT) Overview
- Installing the Remote Server Administration Tools

#### Lesson 8 - Creating Active Directory Objects

In this lesson we will learn about many different types of objects within the Active Directory database and how to create and manage them.

- The Globomantics Scenario
- Organizational Units (OUs)
- User, Group, and Computer Objects
- Adding Objects to Active Directory
- Build-in Containers in Active Directory
- Creating an Organization Unit
- Moving Objects
- Creating Computer Objects
- Creating User Objects
- Creating Group Objects
- Adding Organizational Units Using DSADD
- Adding User Objects Using RSADD
- Adding User Objects Using a Script
- Adding User Objects to Built-in Container Using RSADD
- Exporting Objects Using CSVDE
- Importing Objects Using CSVDE

Exporting/Importing Objects Using LDIFDE

#### Lesson 9 - Managing Active Directory Objects

Your next step in Active Directory deployment is to assign permissions to access various resources throughout your organization. It will take too much time and effort to attempt to allocate this access on a user by user basis. To streamline this process we will learn how to use groups to grant or deny users access to resources. This will also keep access privileges more organized and secure.

- Moving Objects Overview
- Deleting Objects Overview
- Moving Objects Using Drag and Drop and Context Menu
- Moving Objects Using Command Line
- Deleting Objects Using Delete Key and Context Menu
- Deleting Objects Using Command Line
- Protecting Objects From Accidental Deletion
- Managing Users
- User Attributes
- Password Reset and Unlocking a User Account
- Enabling/Disabling a User Account
- Copying a User Account
- Modifying Objects Using DSMod
- Retrieving Attributes Using DSGet
- Performing a Search Using DSQuery
- Managing Groups
- Group Types
- Group Scopes
- Group Management Strategy (AGDLP ? AGUDLP)
- Modifying Group Membership
- Copying Group Membership
- Managing Computers

#### Lesson 10 – Configuring Access to Network Resources

Now that you have created and organized your users and groups, you need to give access to your network resources. In this lesson we will learn how to share folders and printers. I will show you how to assign permissions and we'll take a look at how the users will access these resources once they have been made available.

- Globomantics Scenario
- NTFS Permissions
- Network Setup
- Setting Up NTFS Permissions
- NTFS Practice Scenarios
- Changing Permission Inheritance
- Shared Folder Permissions
- Shared Folder Permissions
- Combining NTFS and Shared Folder Permissions
- Accessing a Shared Folder
- Sharing a Printer
- Connecting to a Shared Printer

#### Lesson 11 – Configuring Group Policy Objects

In this lesson we will see how Group Policy can be used to control users' working environment. With Group Policy we can make sure that users cannot access or install components on their local computers if they don't need them but at the same time we can make sure that the resources they need are readily available to them.

- Globomantics Scenario
- What is a GPO?
- Using the Group Policy Management Console (GPMC)
- Using Remote Server Administration Tools to Manage GPOs
- Group Policy Administrative Templates
- Creating and Linking a GPO
- Group Policy Application and Inheritance (LSDOu)
- Implementing a Policy
- Testing the Policy Using Group Policy Modeling
- Testing the Policy Using Group Policy Results
- Testing the Policy by Logging in as a User

#### Lesson 12 – Working with Group Policy Exceptions

Active Directory can be very flexible and can support many different methods of organization. In this lesson we will explore these different methods as well as look at ways to modify the default application of Group Policy Objects.

• Globomantics Scenario

- Creating an OU Structure to Support GPO Application
- Group Policy Exceptions Overview
- Reviewing Active Directory Structure
- Changing OU Structure for Globomantics
- When to Use Block Inheritance
- When to Use the Enforced Setting
- When to Use Security Filtering
- Testing Group Policy Exception Settings
- Link Order in Single Container
- What is Loopback Processing?
- Using the ?gpupdate? Command

#### Lesson 13 - Configuring Group Policy Preferences

Group Policy in Windows Server 2008 R2 has become much more flexible and powerful through the use of Preferences. In this lesson we will take a look at some of these Group Policy Preferences and see how we can put them to use.

- Globomantics Scenario
- Introduction to Group Policy Preferences
- Configuring Group Policy Preferences
- Testing Preferences

## Lesson 14 – Using Group Policy for Software Deployment

Many companies need a way to easily deploy resilient and self-repairing applications to workstations without having to visit each one individually. This lesson will show you how to use Group Policy to do exactly that. In addition, you will learn how to control which users and/or computers get which applications. This will help avoiding needless clutter and overhead that comes from installing everything on every computer.

- Globomantics Scenario
- Software Installation Options
- What You Need to Install Software with a GPO
- Preparing Our Environment for Software Deployment
- Assigning Firefox to Entire Company Using Group Policy
- How Resilient and Self-Repairing Application Works
- Publishing Adobe Reader to Entire Company Using Group Policy
- Assigning Office 2007 to All Computers Using Group Policy

- Using Group Policy to Maintain Software
- Redeploying, Upgrading and Removing Application Using Group Policy

#### Lesson 15 – Configuring Password Policies

In previous version of Active Directory we could only have one rule when it came to the level of password complexity. In Windows Server 2008 R2 this is no longer the case. In this lesson we will look at different ways to set up password policies.

- Globomantics Scenario
- Password Policy
- Account Lockout Policy
- Using the Default Domain Policy
- Testing the Password Policy
- Creating a Password Settings Object
- Applying Password Settings Object to a Group

#### Lesson 16 – Delegating Administrative Control

It is strongly recommended that senior network administrators pass along some of the more remedial administrative tasks out to other IT staff members as well as managers who can more appropriately and efficiently respond to the needs of their users. In this lesson we will learn how to delegate these tasks and see how to create user friendly tools to make it easier to train users how to complete these tasks.

- Globomantics Scenario
- Using Active Directory Permissions
- Using the Delegation of Control Wizard
- Using Built-in Groups
- Creating Custom Administration Tools

#### Lesson 17 – Managing and Maintaining Active Directory

Now that Active Directory is up and running we need to optimize its operation with proper placement of database files and FSMOs. In this lesson we talk about the different options available to move the database files and manage FSMOs.

- Active Directory Files
- Managing Operation Masters

- Forest FSMOs
- Domain FSMOs
- Transferring vs. Seizing FSMOs
- Locating Domain FSMOs on a Domain Controller
- Locating Forest FSMOs on a Domain Controller
- Transferring FSMO
- Seizing FSMOs Using GUI
- Seizing FSMOs Using FSMO Maintenance Utility within ntdsutil Utility
- Defragmenting the Database
- Moving Database and Log Files
- Performing an Offline Defrag of AD Database

#### Lesson 18 – Active Directory Backup and Recovery

Since Active Directory is the central hub of all information and functionality within a network it is very important that the company has a backup of that information. In this lesson we will take a look at how to backup and recover the Active Directory database.

- Globomantics Scenario
- Backup Tools
- Backing Up Active Directory
- Setting Up a Shared Folder for Backups
- Installing Windows Server Backup Features
- Performing Single Backup Using GUI
- Performing Single Backup Using Command Line
- Restoring Active Directory
- Deleting Active Directory Objects
- Performing a Restore in Active Directory Restore Mode
- Performing Authoritative Restore
- Creating Installation from Media (IFM) Data Sets

## Lesson 19 – Creating Sites and Configuring Replication

In this lesson we will create Site and Subnet objects to help control the flow of replication between different location in your network.

- Globomantics Scenario
- Site and Subnet Objects
- Renaming Default-First-Site-Name

- Creating a Subnet Object
- Creating a New Site
- Creating a New DC for Our New Site
- Global Catalog
- Universal Group Membership Caching
- Application Directory Partitions
- Configuring Replication
- Intrasite Replication
- Intersite Replication
- Managing Intrasite Replication
- Using repadmin Command Line Tool to Disable and Enable Replication
- Managing Intersite Replication

#### Lesson 20 - Securing a Branch Office Domain Controller

In this lesson we will learn what Read Only Domain Controller (RODC) is and in what situations it can be used. We will also see how to implement a Read Only Domain Controller on a Server Core installation of Windows Server 2008.

- Globomantics Scenario
- What is a Read Only Domain Controller (RODC)?
- What is Server Core Installation?
- Installing an RODC on a Server Core Installation
- Downloading and Starting Core Configurator
- Configuring Windows Server 2008 R2 Server Core Using Core Configurator
- Installing Active Directory on RODC

#### Lesson 21 – Upgrading Your Active Directory Infrastructure

In this lesson we will see how to migrate Active Directory from Windows Server 2003 to Windows Server 2008.

- Wired Brain Coffee Scenario
- Upgrade vs. Migration
- How to Migrate
- Wired Brain Coffee Servers Overview
- Preparing Windows Server 2003 Forest for Migration Using adprep Command
- Preparing Windows Server 2003 Domain for Migration Using adprep Command
- Adding Windows Server 2008 Domain Controller to wiredbraincoffee.local

- Transferring FSMOs to Windows Server 2008
- Decommissioning Windows Server 2003 from wiredbraincoffee.local
- Raising the Domain and Forest Functional Levels

#### Lesson 22 – Working with Trust Relationships

Many times a company may enter into a partnership with another company. The administrators then need to figure out a way for users within each organization to be able to access certain resources from the other. In this lesson we will look at the existing trust relationships within each forest and then create a new Forest Trust relationship to accommodate this need.

- Globomantics Scenario
- What is Trust?
- Automatic Trusts
- Manual Trusts
- Reviewing Automatic Trusts in Globomantics Forest
- Creating a Shortcut Trust
- Creating a Forest Trust

#### Lesson 23 – Active Directory Lightweight Directory Services Overview

In this lesson you will be introduced to Active Directory Lightweight Directory Services and it's components as well as management tools. I will also talk about how to install AD LDS Server Role.

- What is AD LDS?
- AD LDS Components
- AD LDS Management Tools
- Installing the AD LDS Server Role
- Supporting Resources

## Lesson 24 – Active Directory Rights Management Services Overview

This is another overview lesson. In this lesson I will talk about Active Directory Rights Management Services and when to use. We will go over AD RMS Benefits and then I will talk about how to install AD RMS.

• What is AD RMS?

- When to Use AD RMS
- AD RMS Benefits
- Installing AD RMS
- Supporting Resources

#### Lesson 25 – Active Directory Certificate Services Overview

In this overview lesson I will explain Active Directory Certificate Services and its components. Later on in the lesson I will show you how to install it.

- What is a Certificate?
- AD CS Components
- Certification Authorities
- Using a CA Hierarchy
- Installing AD CS ? Root CA
- Installing AD CS ? Subordinate CA

### Lesson 26 – Active Directory Federation Services Overview

In the last overview lesson we will go over Active Directory Federation Services and show you how to set up a sample ADFS environment.

- What is AD FS?
- AD FS Role Services
- Preparing Network for AD FS Installation
- Installing AD FS
- Installing and Configuring AD FS Web Agent
- Configuring AD FS

# Lesson 27 – Preparing for Windows Server 2008 Active Directory, Configuring (70-640) Certification Exam

In this lesson you will gain some insight into Windows Server 2008 Active Directory Exam. We will go over the Objectives and then review some recommendations that you should consider before taking the exam.

- Exam Overview
- Exam Objectives
- Study Recommendations

#### • Exam Preparation

#### Lesson 28 – Next Steps

In this last lesson we will quickly review what we learned in this course. After quick follow up we will talk about what certification paths are available to you.

- What We Learned
- Follow Up
- What's Next for Certification?

## Windows Server 2008 Active Directory Training – Bonus Lessons

- 1. Lesson 1 Active Directory Recycle Bin
- 2. Lesson 2 Active Directory Administrative Center
- 3. Lesson 3 Active Directory Best Practices Analyzer
- 4. Lesson 4 Active Directory Offline Domain Join
- 5. Lesson 5 Windows Server 2008 R2 Updates

#### Online URL:

https://www.articlediary.com/article/windows-server-2008-active-directory-training-1042.html