# Windows Server 2012 R2 - Active Directory

# Project

## **Installation and basic configuration:**

### Before beginning:

* Install a Windows Server 2012 R2 GUI virtual machine
* Set Qwerty77 as a password for the administrator of the server.
* Rename your server: ServerX
* Use a static IP address. 192.168.X.Y
* The server will be promoted to a Domain Controller for an Active Directory domain and will act as a DNS Server as well.

### Installation of an Active Directory Domain Service Domain

The installation of Active Directory is done:

* By using Server Manager, add the Active Directory Domain Services role and running the DCpromo command.
* Choose the Domain in a new forest.
* The domain name is **mynetcourse.lan**
* NetBios name : MYNETCOURSE
* Function level : Windows 2012R2
* Leave the default settings for the other options.

## **Managing users groups and computers**

Create the three following OUs:

* Accounting
* Secretariat
* Information technology

Create the following security global groups:

* In the Accounting OU, create the following groups: **assistants** and **account managers**.
* In the Secretariat OU, create the following groups: **reception** and **executive assistants**.
* In the Information technology OU, create the following groups: **developers** and **network technicians**.

Create the following users accounts with the following settings:

* Each user must use the following login information:

The first letter of the first name, followed by the last name, for example Sam Secret must use: **ssecret**

* Password: Qwerty77
* Users cannot change their password.
* **Sam Secret** and **Will Tariat** will be created in the Secretariat OU and are member of the **reception** group.
* **Julie Assist** and **Rose Directi** will be created in the Secretariat OU and are member of the **executive assistants** group.
* **Jean Develo** and **Joseph Peur** will be created in the Information technology OU and are member of the **Developers** group.
* **Lucien Tec** and **Arthur Nicien** will be created in the Information technology OU and are member of the **network technicians** group.
* **Yves Comp** and **François Table** will be created in the Accounting OU and are member of the **account managers** group.
* **Mathieu Assis** and **Julien Tant** will be created in the Accounting OU and are member of the **assistants** group.

### Integrate a client in a domain:

Install a Windows 7/8/10 workstation, rename it Win7/8/10\_Client, use a static IP address in the same range as ServerX and join it to the Mynetcourse domain.

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### Users Profiles:

* Ensure that users from the reception group can logon to the domain only from 8AM to 6PM and that they can connect only from the client computer you have integrated.
* Create a home directory called Sam for the user **Sam secret** on ServerX and map a network drive named **P:** that points to the share \\ServerX\ Sam.
* Set a roaming profile for the user **Sam Secret**.
* Ensure that user **Sam Secret** is administrator of his workstation (not a domain administrator).

1. **Group policies**

Implement the following group policies:

**The entire domain:**

* Do not display the last user name
* Set a Message text for users attempting to log on
* Set a Message title for users attempting to log on
* Remove Recycle Bin icon from desktop
* Remove Properties from the Computer icon context menu
* Disable Windows firewall

**Secretariat Service:**

* Disable Internet Explorer Internet connexion Wizard.
* Prevent users from modifying Internet Explorer Proxy settings.
* Turn off IE Favorites bar
* Turn on IE menu bar by default

**Accounting Service (except for account managers):**

* Hide the C: drive
* Prevent using the manage command from the contextual menu when you right-click on my computer icon.

**Information technology Service:**

* Hide the security tab from Windows explorer.
* Prevent access to windows command prompt
* Redirect document folder to a new location on ServerX and make the pictures folder follow the Documents folder

Logon scripts:

* Create a batch file for accounting users to:
* Synchronize the clock on the client computers with the PDC emulator clock.
* Map a network drive **Z:** that point to a shared folder [\\serverX\accounting](file:///\\\\serverX\\accounting) (create the accounting folder on Server X and share it with Read and Write permissions for accounting users)
* Create the following registry key on the client: HKEY\_LOCAL\_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon\EnableFirstLogonAnimation=dword:00000001
* Use this script in the GPO that is linked to the accounting OU.
* Configure Logon Script Delay to 0.

### Account Policy:

* Set an account password policy for the domain with settings you choose yourself.
* Create a fine grained password policy (PSO) with different settings for the Account managers users.

### Complexes policies:

* Create a new OU named **production** with two user accounts **prod1 and prod2** (Use **Qwerty77** for the password)
* This OU will concern computers that are installed in a very sensitive production context. Those computers must be **highly restricted**. Users of this organizational unit should not be able to do anything other than using a specific software (consider that this software is notepad.exe for example).

### Software deployment:

* Download firefox msi package and use the GPO linked to the domain to deploy it on all the computers of the domain.

1. **Active Directory architecture**

### Domain Controllers and RODCs:

* Install a second Windows Server 2012 R2 GUI virtual machine.
* Rename it ServerY.
* Use a static IP address within the same range as ServerX.
* Join this server to mynetcourse.lan domain.
* Install ADDS role and promote ServerY to a read only domain controller RODC for my netcourse.lan domain.
* Create a password replication policy for the accounting users.
* Turn off the principal Server to simulate a failure, then test that it’s possible to logon to the domain using an accounting user account.

### Forests and trust relationship:

Mynetcourse and Greta companies have merged. Greta Company has his own Active Directory Domain Services.

* Install a third Windows Server 2012 R2 GUI virtual machine.
* Rename it ServerZ.
* Use a static IP address within the same range as ServerX.
* Install ADDS role and promote ServerZ to domain controller to create a new root domain **greta.edu** for the company Greta.
* Create in the greta.edu domain an OU named Communication Service
* Create in this OU a global security group called publication.
* Create in this OU three user accounts (greta\_user1, greta\_user2 and greta\_user3) , use Qwerty77 for the password and make them members of the publication group.
* Create a forest trust relationship between mynetcourse and greta forests.
* Create and shared a printer on ServerX in mynetcourse domain and give greta users the print permission.
* Create and shared a folder on ServerZ in greta domain, and give the Read and Write permission to the account managers group from mynetcourse domain

Bonus:

Download ADMT and try to migrate a couple of users from one forest to the other!

Good luck!