Windows Server 2022 And Active Directory

ISO Files

From the lab file server download the following ISO files if they are not present in your download directory:

1. Windows2k22.iso
2. Windows 10 iso file.

Create VMs

For all VMs use:

- 2 CPU cores.
- 4 GB of RAM.
- 200 GB HDD.
- Bridged Network adapter.

Create the following VMs (x is your group number):

- On PC1 Create windows Server VM named GRPxDC to be used as a domain controller.
- On PC2 Create a windows 10 VM named GRPxClient1.

Active Directory

1. In order to setup active directory log in as local administrator.
2. Once the server manager opens click Local Server on the left hand side of the window.
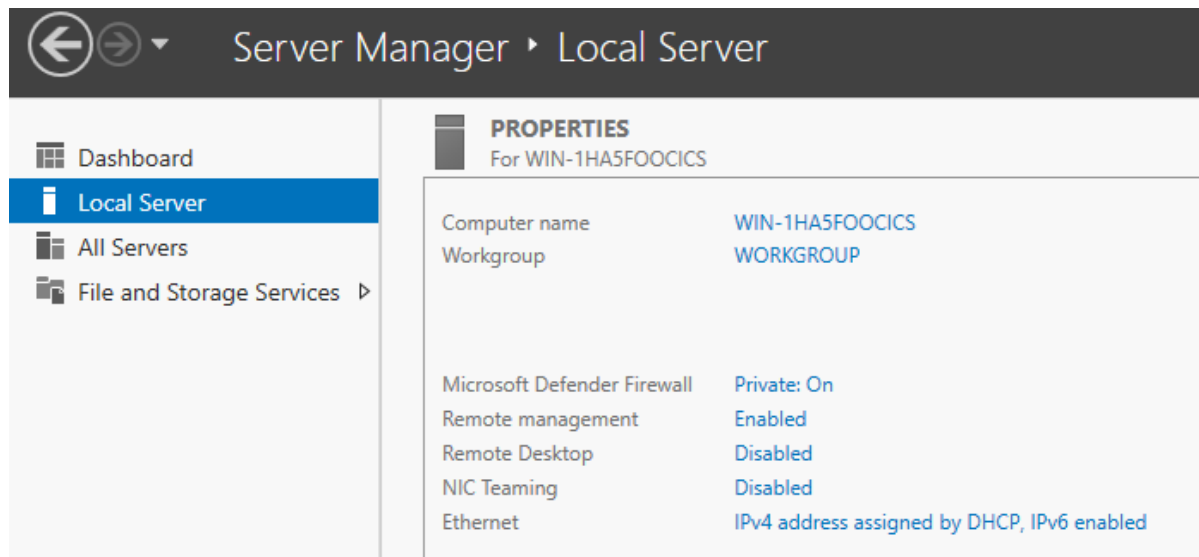

3. Click on IPv4 Address assigned by DHCP beside the Ethernet entry.

4. Open the Ethernet properties and set the server IP address configuration as follows:
    IP address: 172.16.107.24x   (x: the group number)
    Subnet Mask: 255.255.255.0
    Default Gateway: 172.16.107.1
   DNS Server: 8.8.8.8
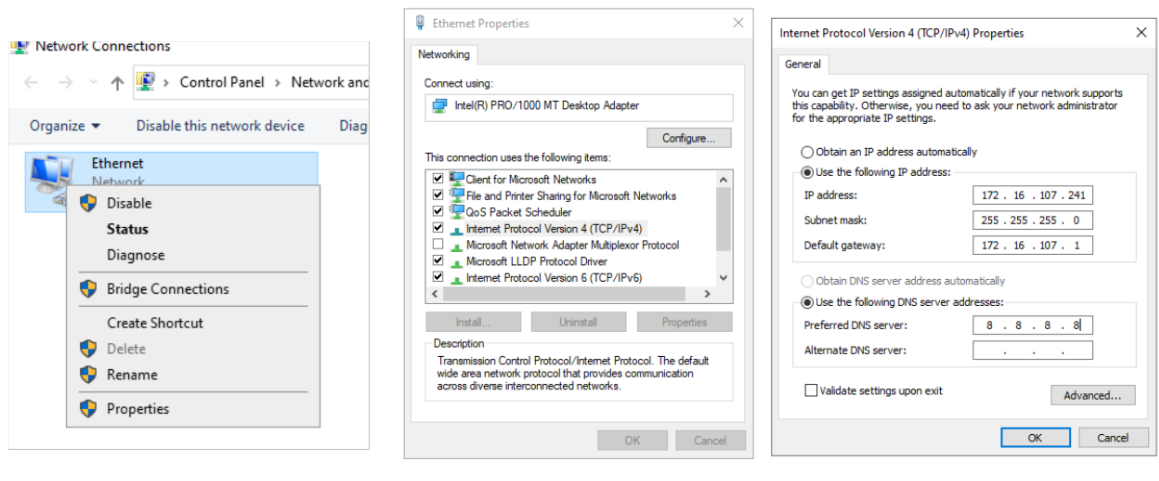
5. In the server manager window click the current computer name then **Change** and set the server name to GRPxDC reboot your VM for the changes to take effect.
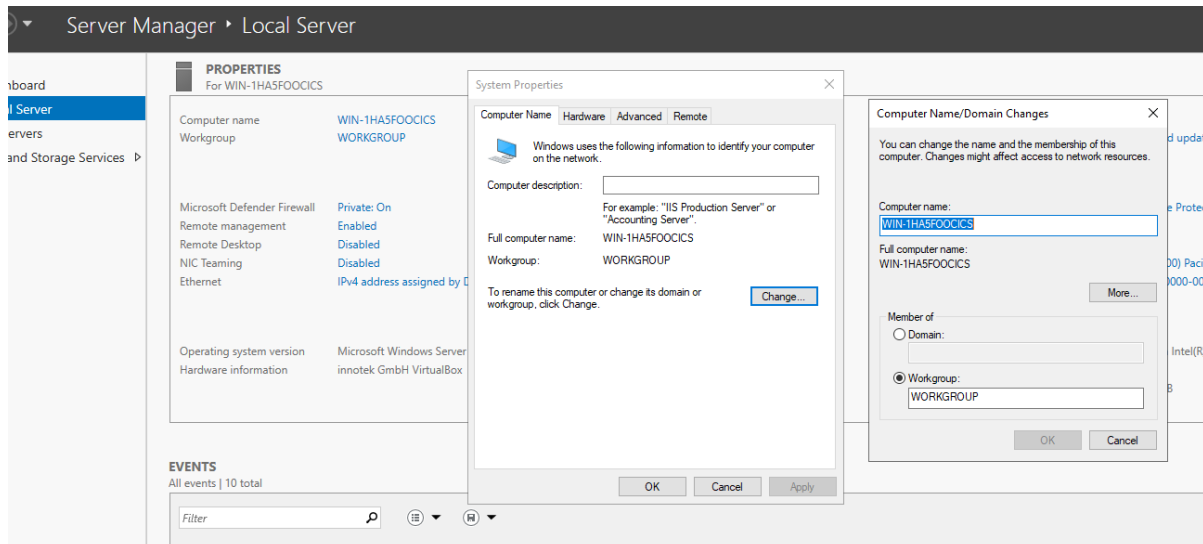
6. In server manager click Add roles and features this will open the Add Roles and Features wizard.
7. Keep clicking Next until you get to the Select Server Roles screen .

8. From Roles tick "Active Directory Domain Services" [option 2]. A prompt will show you what associated features this role has. Click on "add features" to add those. Then click Next to continue.
9. Keep clicking Next and then Install.
10. Once installation completes, click on "Promote this server to a domain controller".
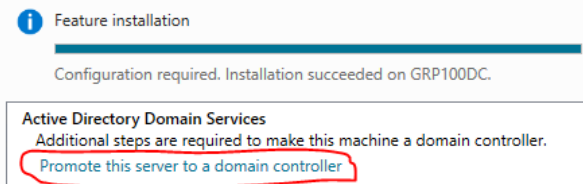
11. Then it will open the active directory configuration wizard.
12. Select the option to add a new forest and type AdminGRPx.Lab as the root domain name. Then click Next.
13. In next page you can select the domain and forest functional levels. Leave the default. Then type a password for DSRM. Then click Next.
14. For the DNS options, this is going to be the first DNS server in new forest. So, no need for any modifications. Click Next to proceed.
15. For the NETBIOS name keep the default and click Next.
16. Next page is to define the NTDS, SYSVOL and LOG file folders. Keep the default and click Next to continue.
17. Next page will give an option to review the configuration changes. If everything is okay you can click Next to proceed otherwise you can go back and change the settings.
18. In the next window it will do a prerequisite check. If it's all good the option to install will be enabled. Click on install to begin installation process.
19. After the installation is complete the system will restart automatically. Once it comes back log in to the server as the domain admin.
20. From Server Manager click AD DS on the left of the screen and right click your server and choose **Active Directory Administrative Center**.
21. Open the **Users** Functional group then from the right hand side of the screen under AdminGRPx(local) choose **New** then **user** to create a user with following specs:
First Name: Student
Full Name: Student
User UPN logon: student@AdminGRPx.Lab
User SamAccountName logon: AdminGRPx\student
Password: P@$$w0rd123
choose "other password options" and check "passwords never expires".

22. Click OK.
23. Open the Computers functional group then from the right hand side of the screen under AdminGRPx(local) choose new then Computer to create a Computer object with the Name GRPxClient1.

Joining a Windows PC to The Domain

1. On Windows GRPxClient1 set IP address configuration as follows:
   IP address: automatically
   DNS Server: 172.16.107.24x (this is your domain controllers' IP address)
2. Open system from control panel.
3. Under "Computer name, Domain and workgroup settings" section click Change settings.
4. In the Computer name dialog box click change and use "GRPxClient1" as a computer name, and AdminGRPx.Lab as the domain name then click OK.
5. Input the username: administrator and password: P@$$w0rd and click OK.
6. Follow on screen instruction to restart the PC.
7. Once the client starts login with the student domain account; if successful then congratulations you have successfully setup a domain, if not troubleshoot.

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