

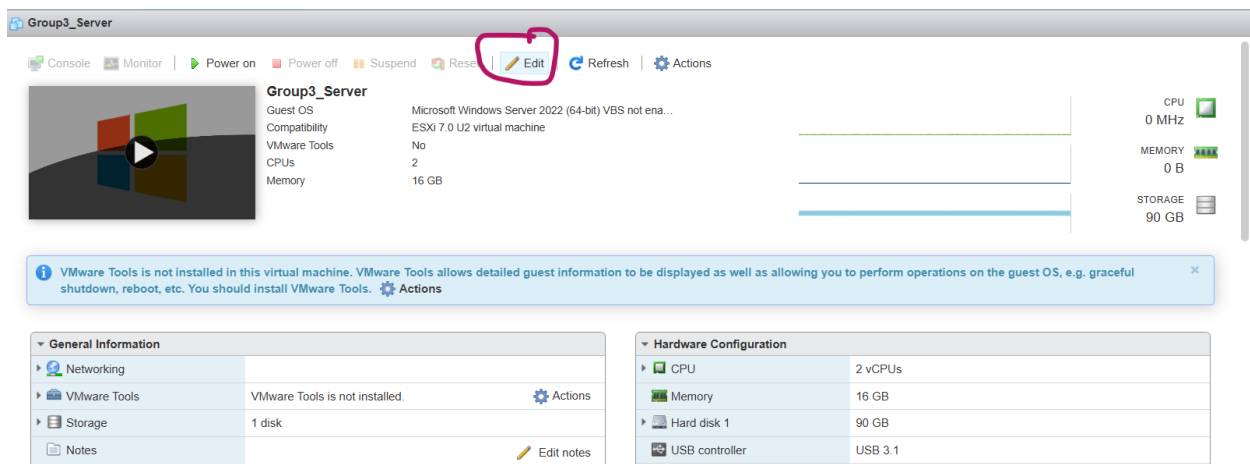
Extend Server Installation 2025 Virtual Machine

Group: 3

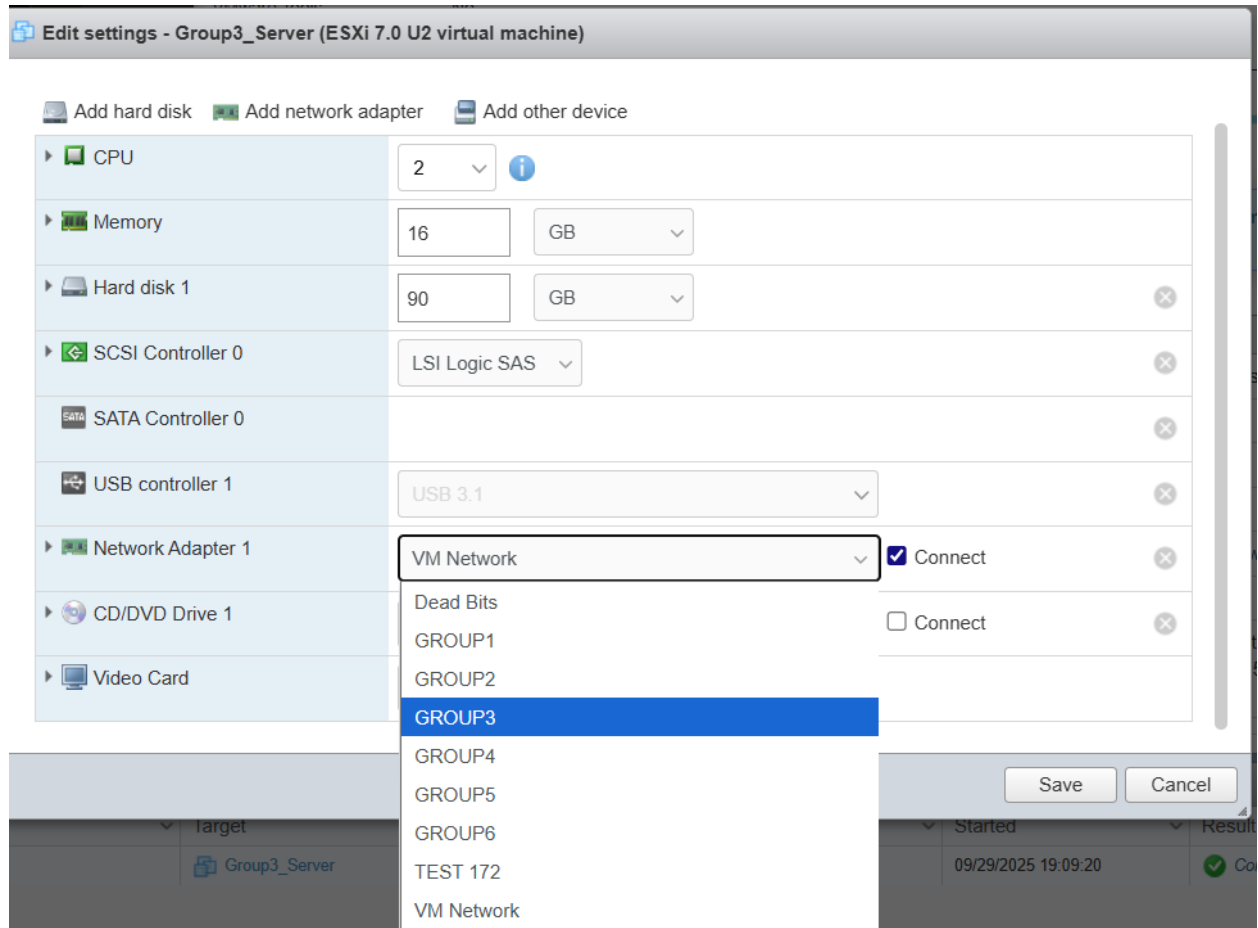
Logan Haberman, Braden Yokopenic, Joseph Turkovich

In this we will explain how to complete the install of an Active Directory.

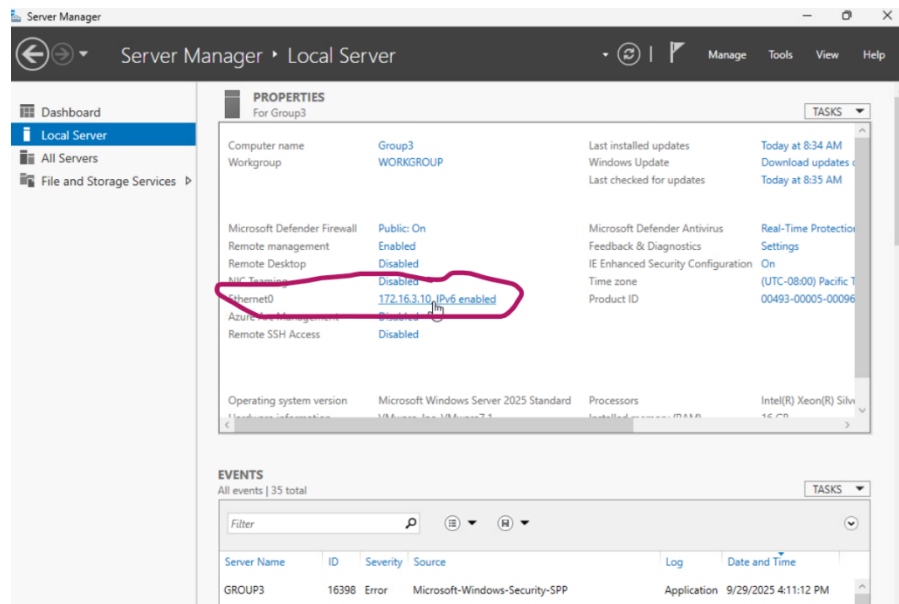
Before we begin, we first need to change our network adapter connection. To do this we need to edit the VM itself by clicking **“Edit”** on the VM host.



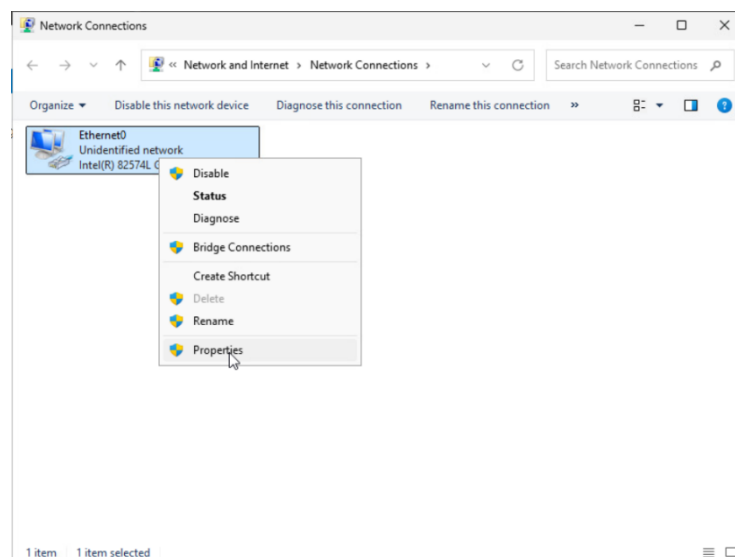
After clicking edit, find the “**Network Adapter 1**” section and click on the box to see the different network options and click on the desired one. After switching to the desired network, you can then log into the server.



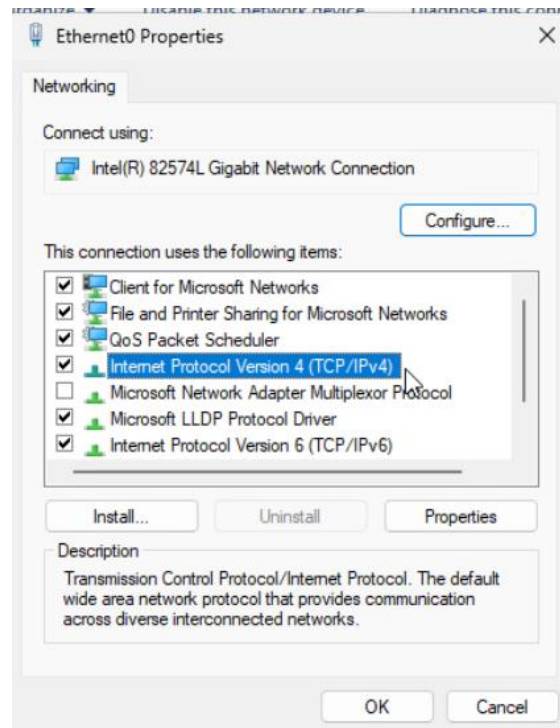
1. Once logged into your server, open the server manager and navigate to the “**Local Server**” tab on the left side of the manager. When in the Local Server tab, find the “**Ethernet0**” section to the right of it. You should see your IP address highlighted and underlined in blue, left click it.



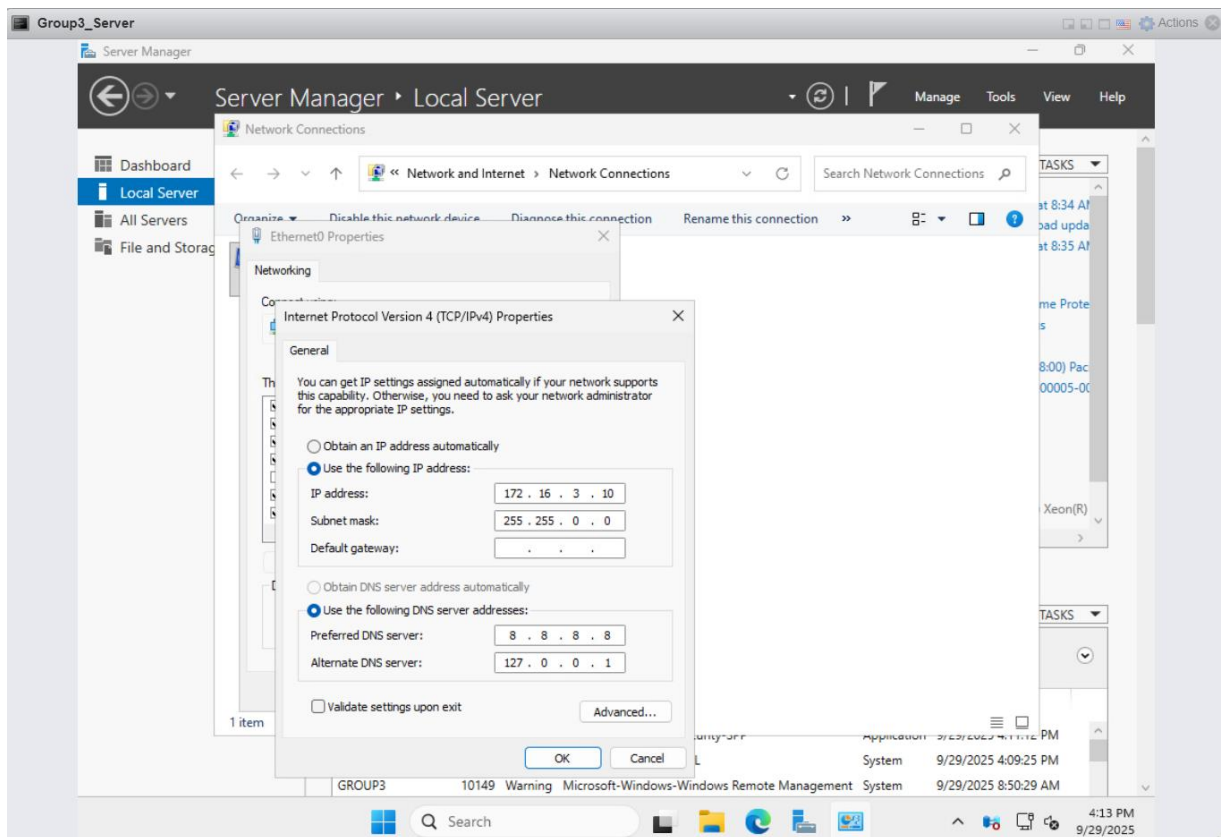
2. After clicking, it will open the “**Network Connections**” window. Find the connection titled “**Ethernet0**” and right-click on it and navigate to “**Properties**” and left-click.



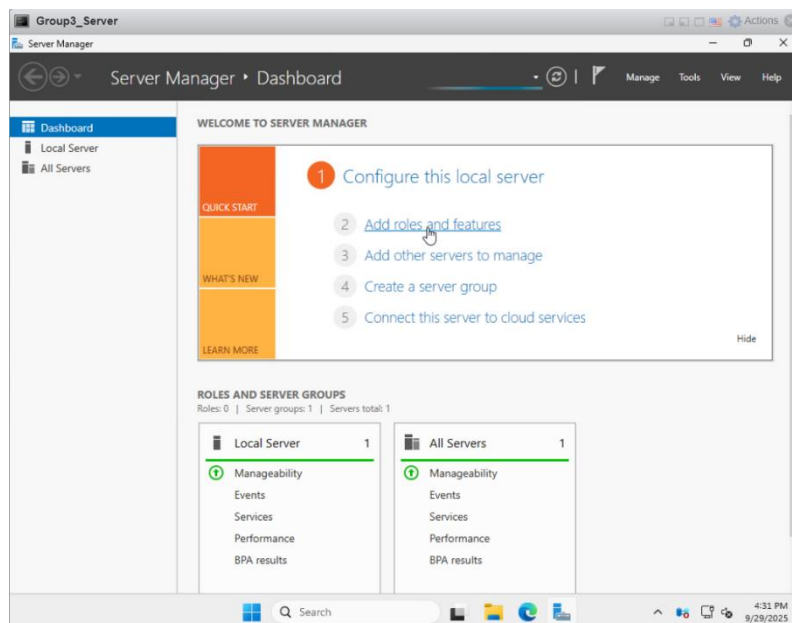
3. This will open the Ethernet0 properties. Under where it says **“This connection uses the following items:”** find where it says **“Internet Protocol Version 4 (TCP/IPv4)”** and click **“Properties.”**



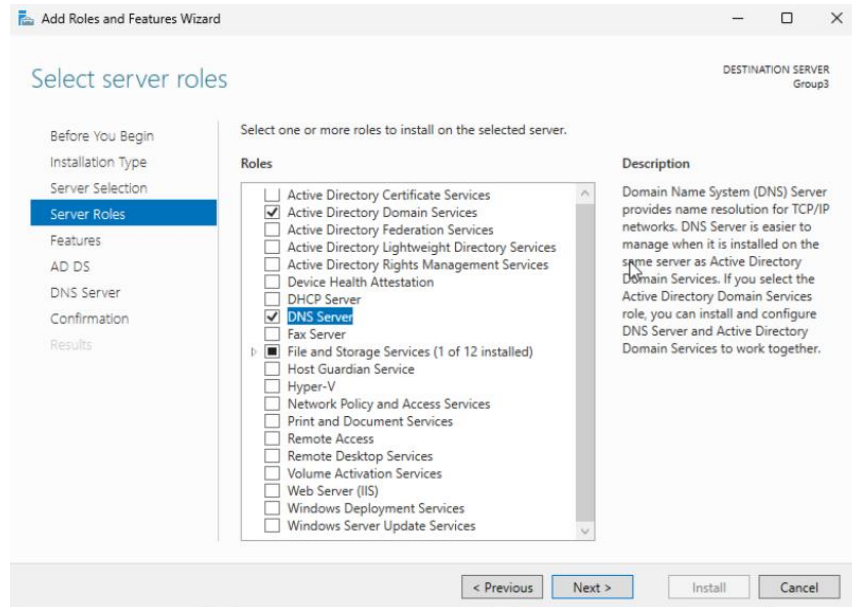
4. Once in the properties click the circle to the left of the **“Use the following IP address”** and **“Use the following DNS server addresses.”** This will allow you to enter an IP address, Subnet mask, Default gateway, and a Preferred DNS server. However, for the AD, we will only need to enter an IP, Subnet mask, and DNS. For the IP enter 172.16.x.10, with x being the desired number. For the Subnet mask enter 255.255.0.0 and for the DNS enter 8.8.8.8. After all the fields are filled click **“Ok.”**



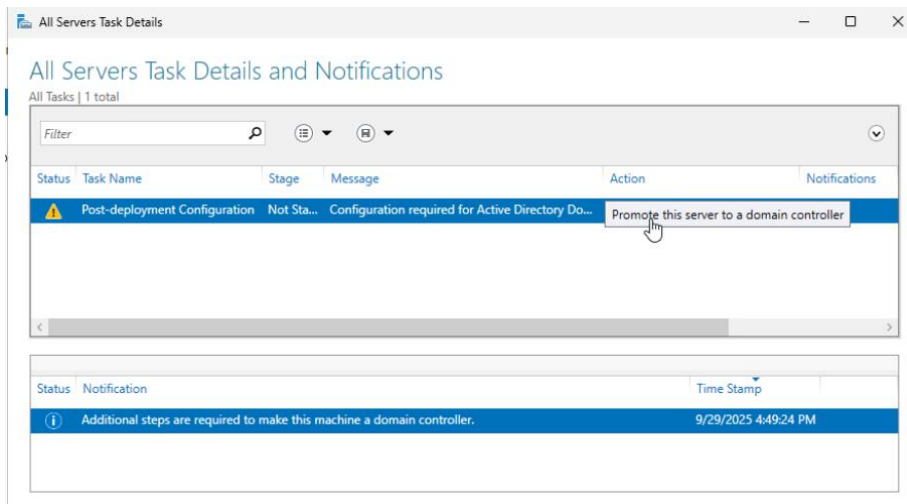
5. After you have finished entering all of the Ethernet information, go back to the Server Manager and go to the **“Dashboard”** tab on the left. From there, left-click the **“Add roles and features”**



6. After clicking on Add roles and features, it will open the **“Add Roles and Features Wizard.”** Once in the Wizard, Click next until you get to the **“Server Roles”** tab. When in the server roles tab click the check box for the **“Active Directory Domain Services”** and **“DNS Server”** and click next.



7. The next step is promoting the server to a domain controller. Do this by double left clicking on the **“Post-deployment Configuration”**



8. You will then get to Deployment Configuration. Once here click on **“Add a new forest.”** Enter the desired Root domain name and click **“Next.”**

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar reads 'Active Directory Domain Services Configuration Wizard'. The main window has a left-hand navigation pane with the following items: 'Deployment Configuration' (highlighted in blue), 'Domain Controller Options', 'Additional Options', 'Paths', 'Review Options', 'Prerequisites Check', 'Installation', and 'Results'. The main content area is titled 'Deployment Configuration' and contains the following elements:

- Top right: 'TARGET SERVER Group3'
- Section: 'Select the deployment operation'
 - ☐ Add a domain controller to an existing domain
 - ☐ Add a new domain to an existing forest
 - ☒ Add a new forest
- Section: 'Specify the domain information for this operation'
 - Root domain name:
- Bottom left: [More about deployment configurations](#)
- Bottom right: Navigation buttons: '< Previous', 'Next >' (highlighted in blue), 'Install', and 'Cancel'.

9. You will then get to the Domain Controller Options page. Make sure the newest version on the windows server is selected in the **“Forest functional level”** and the

10. **“Domain functional level.”** Also be sure that **“Domain Name System (DNS) server”** and **“Global Catalog (GC)”** have a check in the box to the left of it. Then, enter your desired password and click next.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window. The title bar includes the application name and standard window controls. The main area is titled 'Domain Controller Options' and indicates the 'TARGET SERVER' is 'Group3'. On the left, a navigation pane lists steps: Deployment Configuration, Domain Controller Options (selected), DNS Options, Additional Options, Paths, Review Options, Prerequisites Check, Installation, and Results. The main content area is titled 'Select functional level of the new forest and root domain'. It contains two dropdown menus: 'Forest functional level' and 'Domain functional level', both set to 'Windows Server 2025'. Below these is a section 'Specify domain controller capabilities' with three checkboxes: 'Domain Name System (DNS) server' (checked), 'Global Catalog (GC)' (checked), and 'Read only domain controller (RODC)' (unchecked). Further down is a section 'Type the Directory Services Restore Mode (DSRM) password' with two password fields labeled 'Password:' and 'Confirm password:', both containing masked characters. At the bottom, there are four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'. A link 'More about domain controller options' is also present.

11. You will then get to this screen. Make sure the **“Create DNS delegation”** is not checked and click next.

The screenshot shows the 'Active Directory Domain Services Configuration Wizard' window at the 'DNS Options' step. The title bar and navigation pane are consistent with the previous screen. The main content area is titled 'DNS Options' and indicates the 'TARGET SERVER' is 'Group3'. A yellow warning banner at the top states: 'A delegation for this DNS server cannot be created because the authoritative parent zone cannot be found... Show more X'. Below the banner, the section 'Specify DNS delegation options' contains a single checkbox labeled 'Create DNS delegation', which is currently unchecked. At the bottom, there are four buttons: '< Previous', 'Next >' (highlighted in blue), 'Install', and 'Cancel'. A link 'More about DNS delegation' is also present.

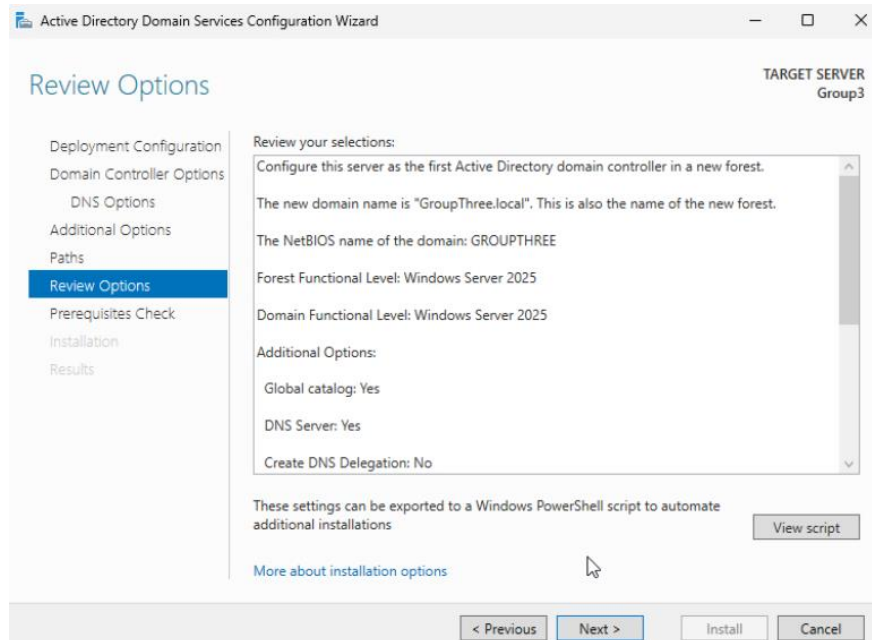
12. Once on the screen below enter your desired NetBIOS domain name in the field given and click next.

The screenshot shows the 'Additional Options' screen of the Active Directory Domain Services Configuration Wizard. The title bar reads 'Active Directory Domain Services Configuration Wizard'. On the left, a navigation pane lists the following steps: Deployment Configuration, Domain Controller Options, DNS Options, Additional Options (highlighted), Paths, Review Options, Prerequisites Check, Installation, and Results. The main area is titled 'Additional Options' and contains the instruction 'Verify the NetBIOS name assigned to the domain and change it if necessary'. Below this, a label 'The NetBIOS domain name:' is followed by a text input field containing the value 'GROUPTHREE'. At the bottom right, the text 'TARGET SERVER Group3' is displayed. A link 'More about additional options' is located at the bottom left of the main area. The bottom of the window features four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

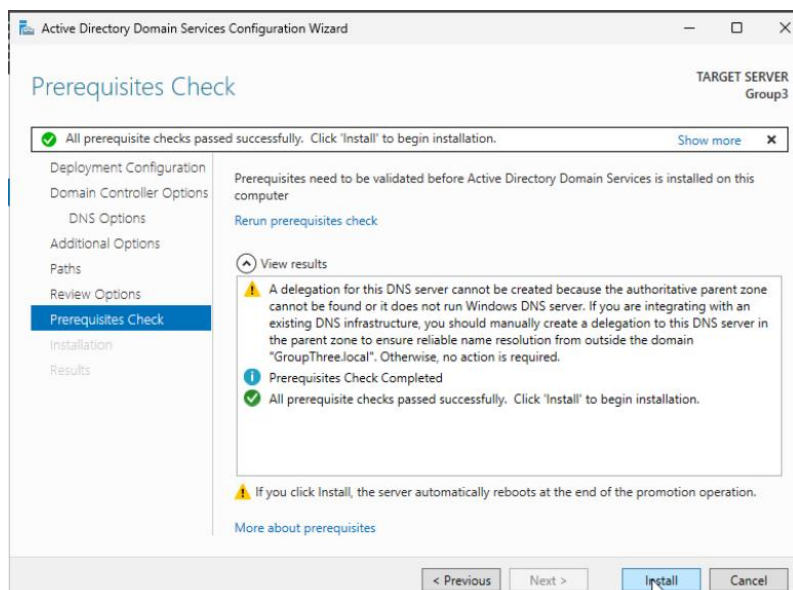
13. Once on the next screen make sure that all of the folders are as followed and click next.

The screenshot shows the 'Paths' screen of the Active Directory Domain Services Configuration Wizard. The title bar reads 'Active Directory Domain Services Configuration Wizard'. The navigation pane on the left is the same as in the previous screen, with 'Paths' now highlighted. The main area is titled 'Paths' and contains the instruction 'Specify the location of the AD DS database, log files, and SYSVOL'. Below this, there are three labels with corresponding text input fields and browse buttons (...): 'Database folder:' with 'C:\WINDOWS\NTDS', 'Log files folder:' with 'C:\WINDOWS\NTDS', and 'SYSVOL folder:' with 'C:\WINDOWS\SYSVOL'. At the bottom right, the text 'TARGET SERVER Group3' is displayed. A link 'More about Active Directory paths' is located at the bottom left of the main area. The bottom of the window features four buttons: '< Previous', 'Next >', 'Install', and 'Cancel'.

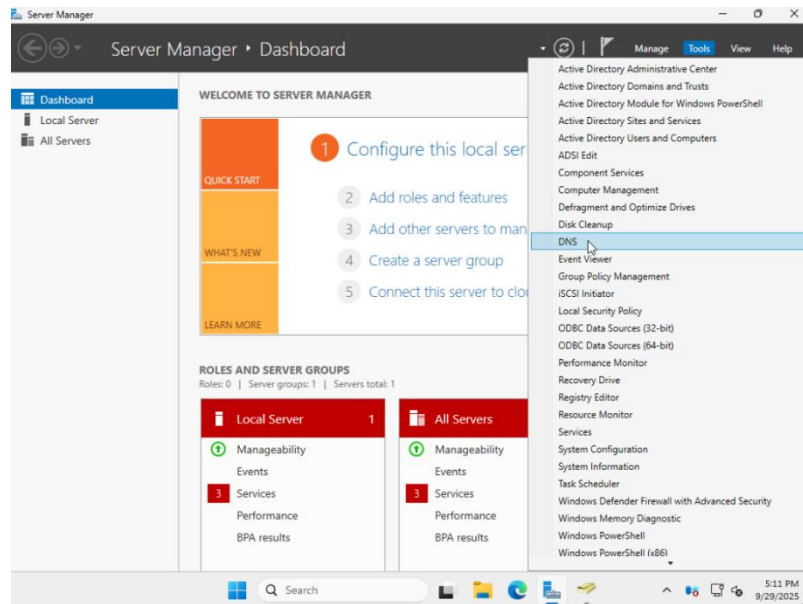
14. You will then get to the **“Review Options”** page. If everything is correct, click next.



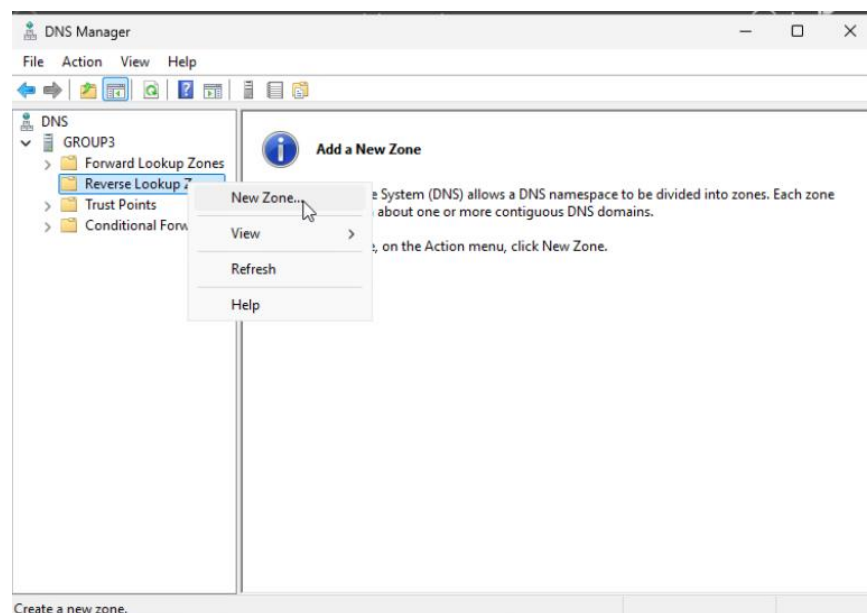
15. You should now be on the **“Prerequisites Check”** page. You do not have to do anything here so you can click **“Install.”** Doing this will restart your Server. Once complete, log back in to your server.



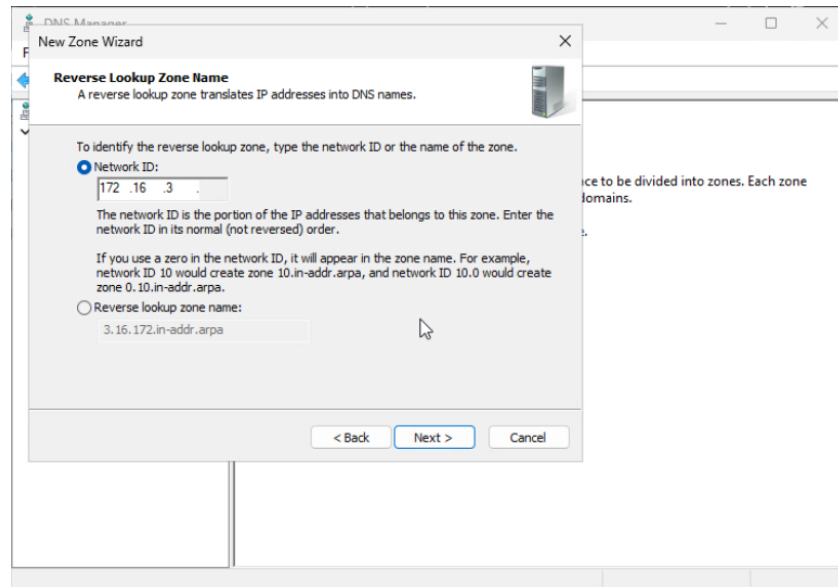
16. Now go back to the **Server Manager -> Dashboard -> Tools -> DNS** and click.



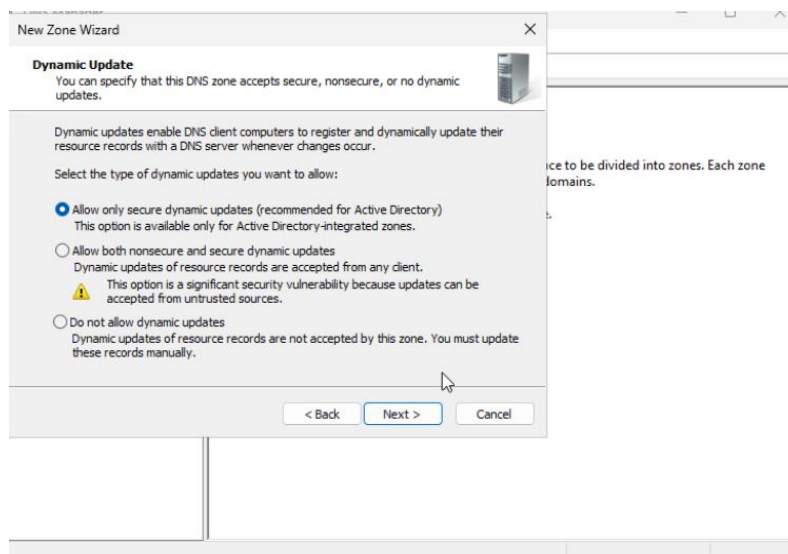
17. Once in the DNS Manager, find the **“Reverse Lookup Zone”** and right click to find **“New Zone...”** and click.



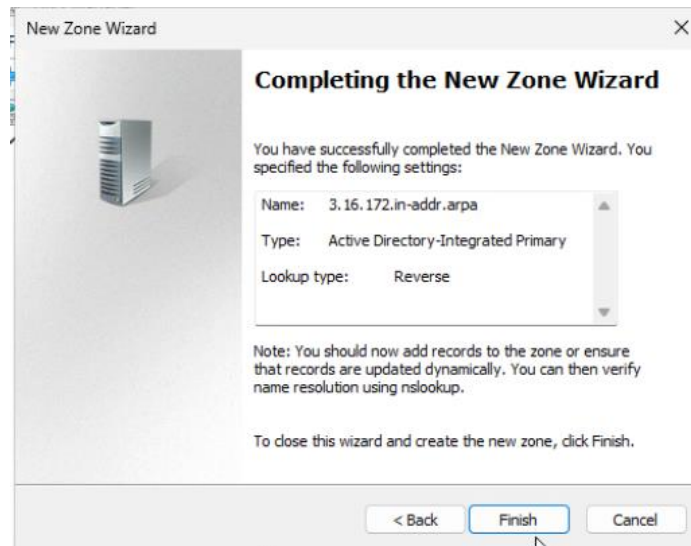
18. This will open the **“New Zone Wizard.”** From here enter the IP of your server without the host ID and click next.



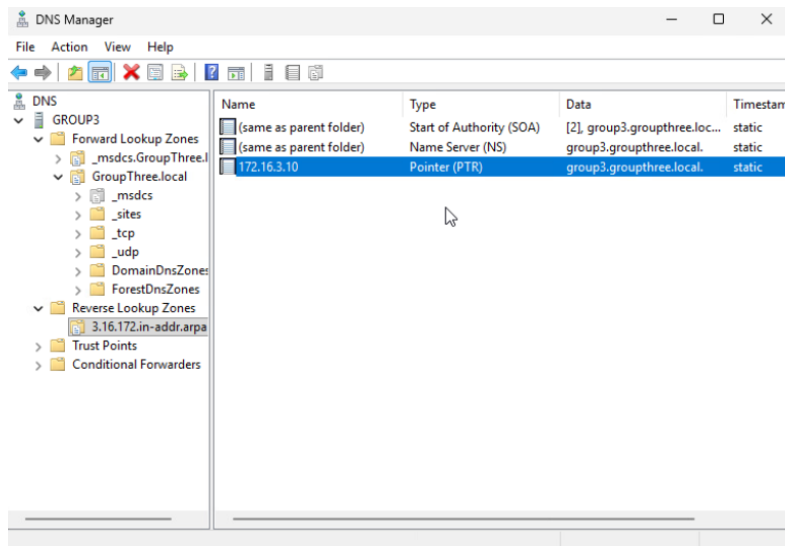
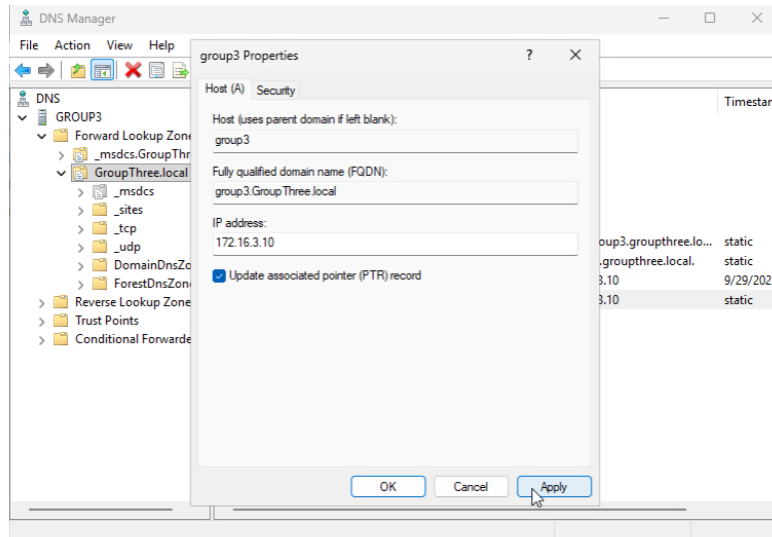
19. You will then arrive at the **“Dynamic Update”** page. Select the first option of **“Allow only secure dynamic updates”** and click next.



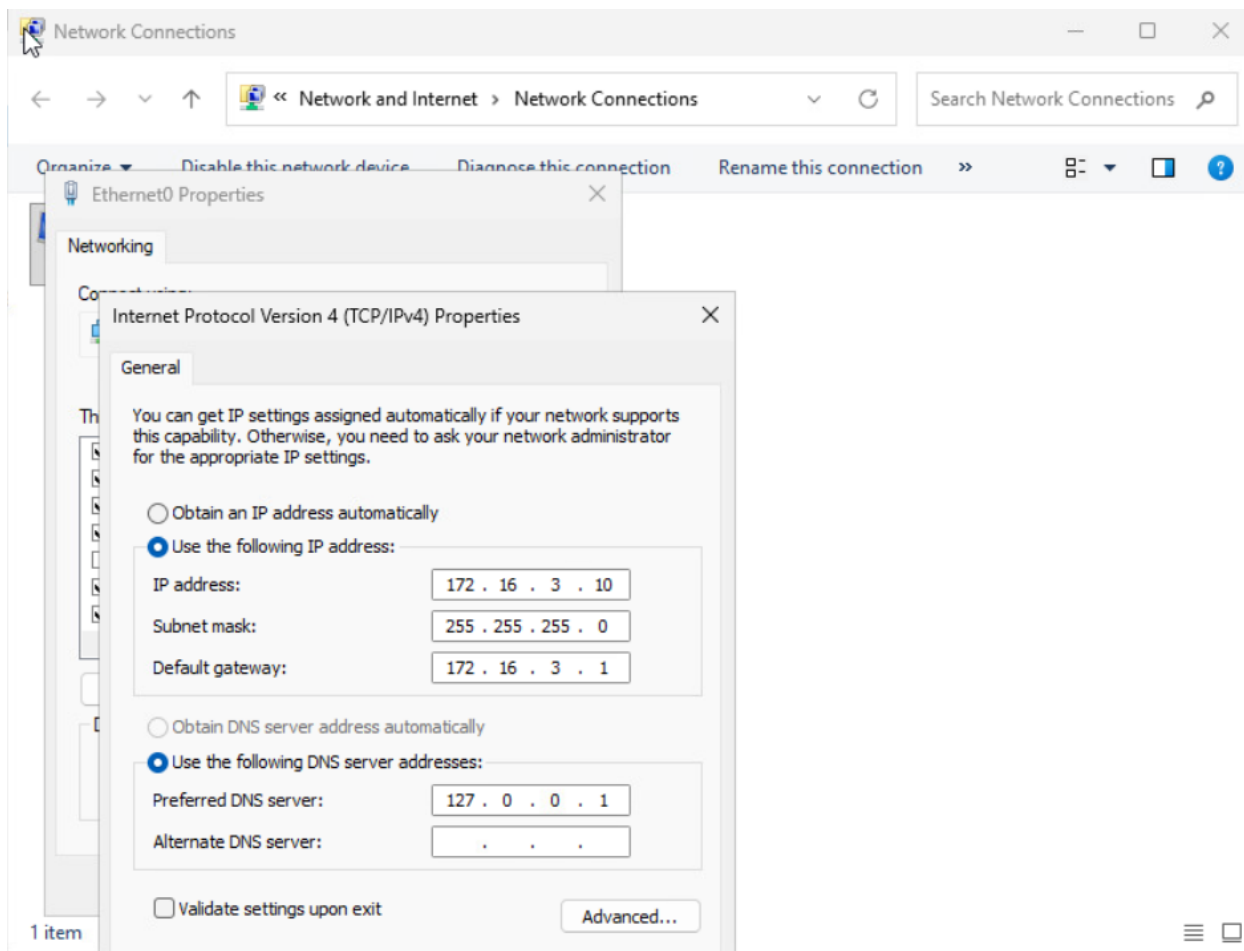
20. You can then click **“Finish”**



21. Now go back to the DNS Manager and find the **“Forward Lookup Zone”** folder and expand it. Then find the folder that reads **“Name.local”** Where “Name” is the name you entered. Right click the folder and select **“Properties.”** When in properties, click the check box for **“Update associated pointer (PTR) record”** and click apply. Now, if you go back to the reverse lookup zone -> expand and click on the folder you should see a new pointer that points to your IP.



22. Now if you go and look at the properties of your IPv4 IP, you should see that the Preferred DNS changed to 127.0.0.1



And just like that, your server should now have an Active directory set up!