



K. J. Somaiya Polytechnic, Mumbai-77

Batch No: C1

Enrollment No.: FCOW19118

Experiment No: 08

Experiment Name: Setting up DHCP server.

Experiment No.:08**Experiment Name: Setting up DHCP server****Course Outcome:**

O18RC58.1	Install & Configure Linux, Windows 2003 Server & set up DHCP server
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Theory:

A **DHCP Server** is a network server that automatically provides and assigns IP addresses, default gateways and other network parameters to client devices. It relies on the standard protocol known as Dynamic Host Configuration Protocol or DHCP to respond to broadcast queries by clients.

A DHCP server automatically sends the required network parameters for clients to properly communicate on the network. Without it, the network administrator has to manually set up every client that joins the network, which can be cumbersome, especially in large networks. DHCP servers usually assign each client with a unique dynamic IP address, which changes when the client's lease for that IP address has expired.

To setup a DHCP server follow these steps:

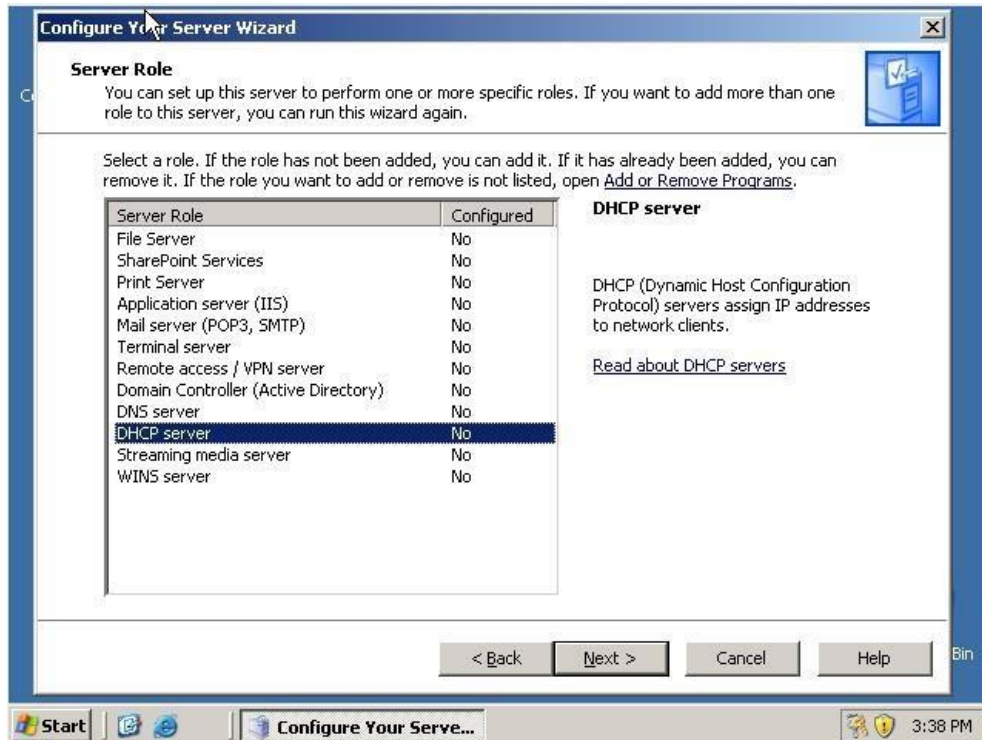
1. **Click on start>All programs>Administrative Tools> Configure your server wizard.**



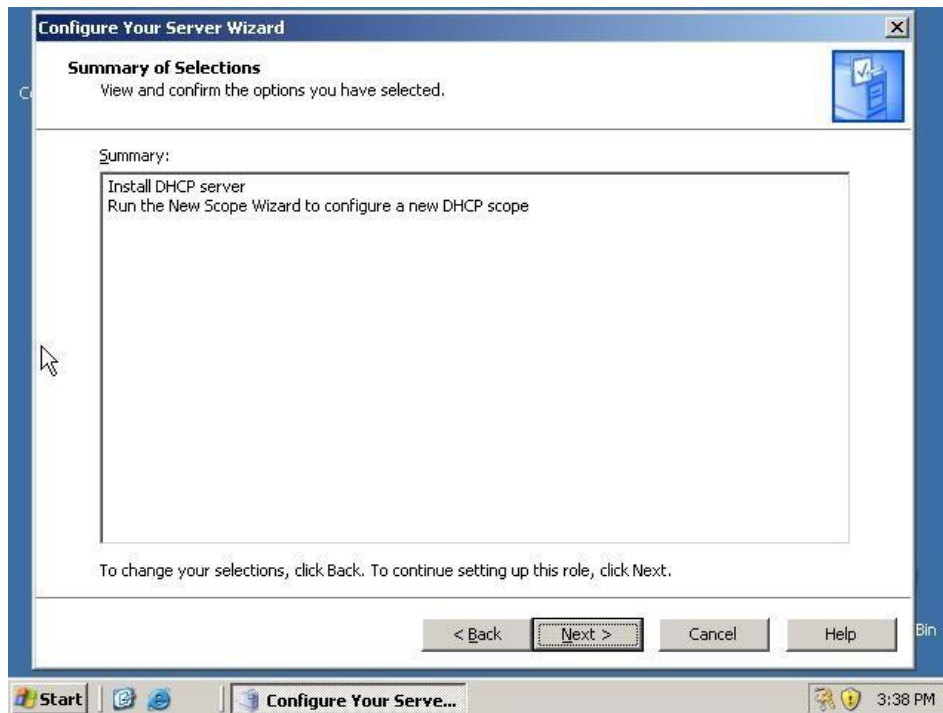
2. Click Next.



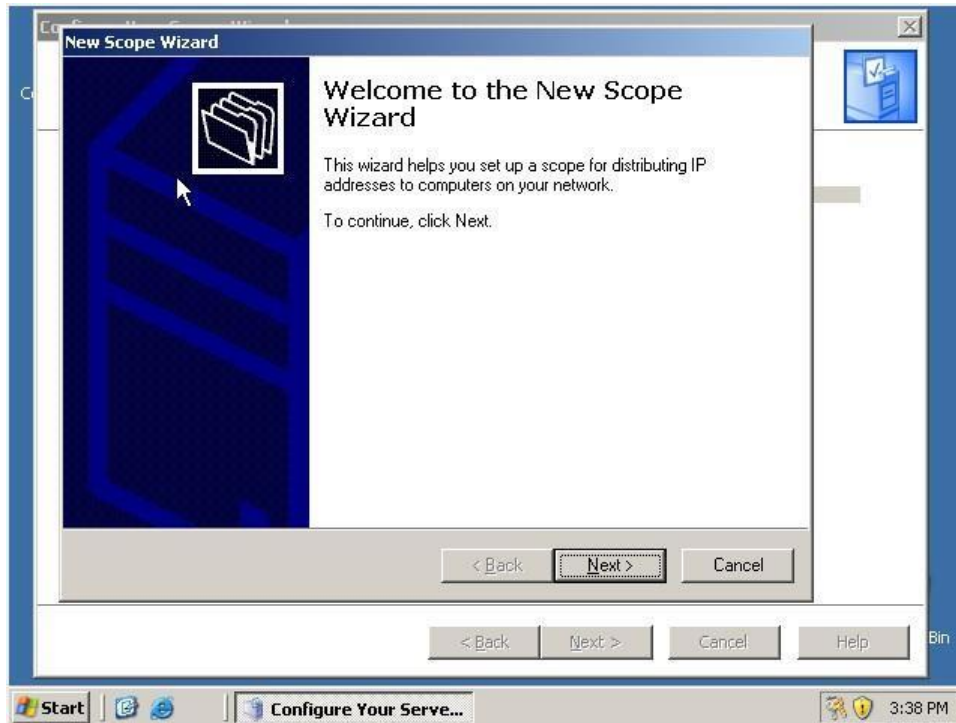
3. Select DHCP server then click Next.



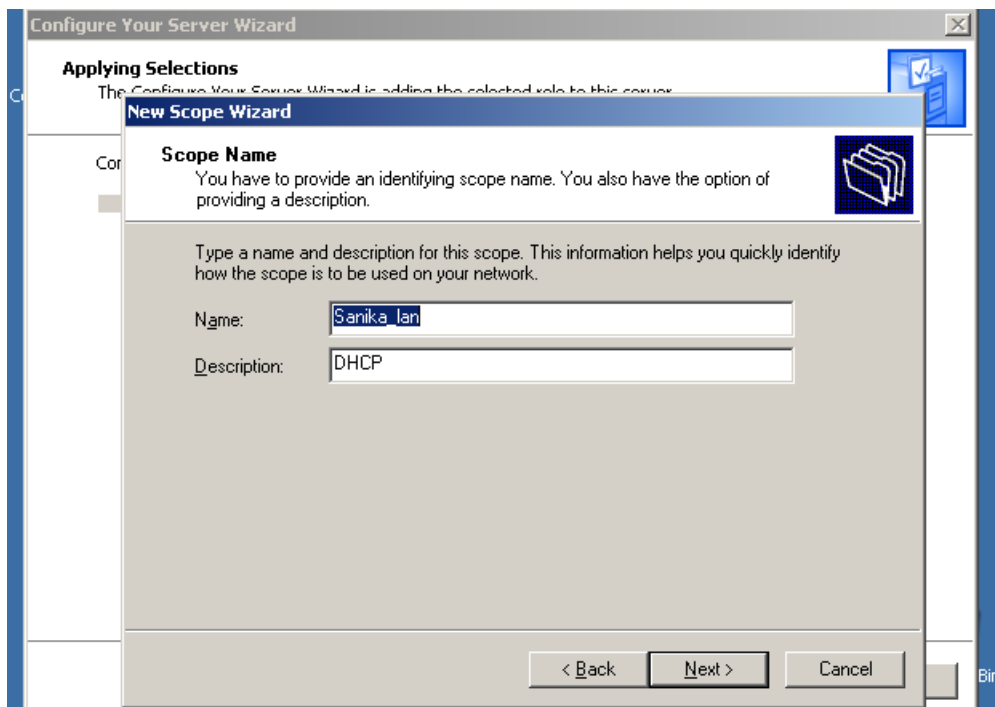
4. Click Next.



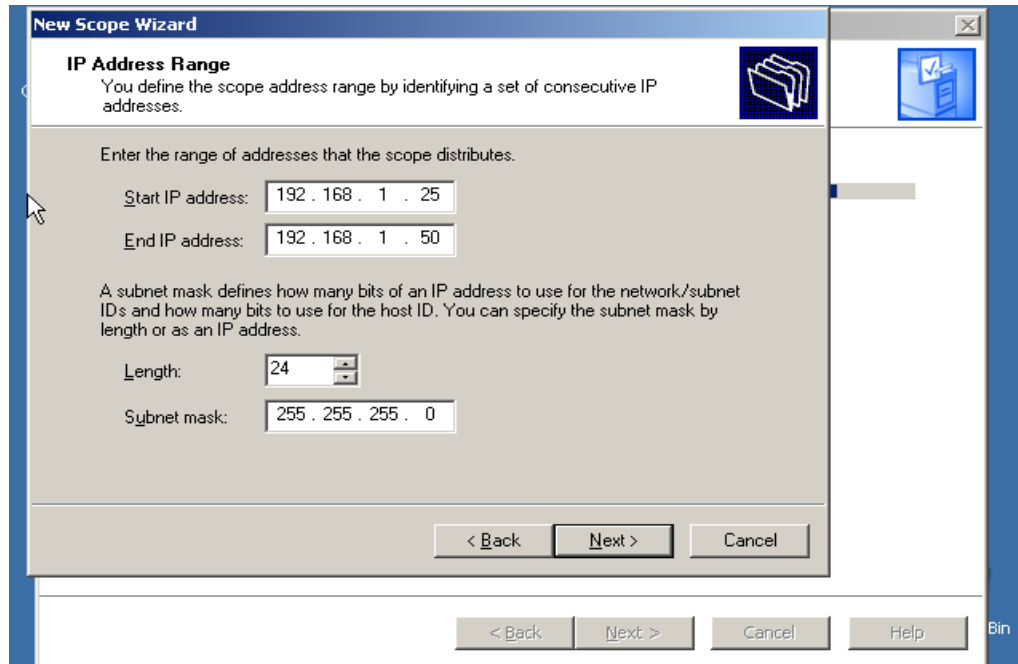
5. Now DHCP setup started, Click Next.



6. Specify Name and Description for your DHCP server then click Next.

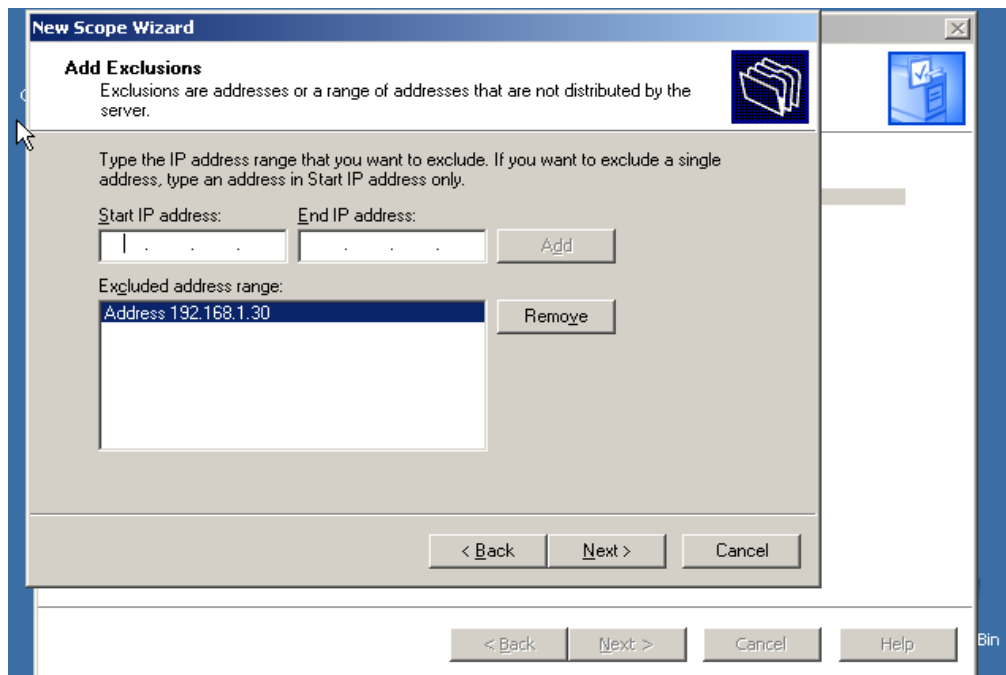


7. Provide the starting and ending IP address range, Length and subnet mask will be automatically provided. Click Next



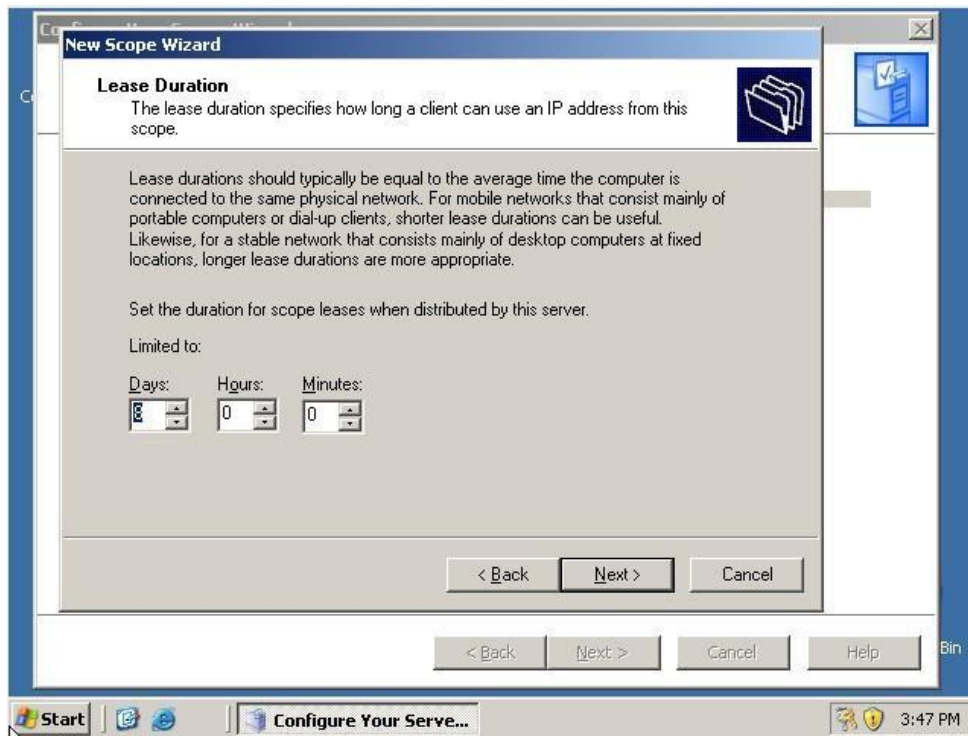
The screenshot shows the 'New Scope Wizard' window, specifically the 'IP Address Range' step. The window has a title bar 'New Scope Wizard' and a close button. Below the title bar, there's a section 'IP Address Range' with a folder icon and a checkmark icon. The text says: 'You define the scope address range by identifying a set of consecutive IP addresses.' Below this, it says: 'Enter the range of addresses that the scope distributes.' There are two input fields: 'Start IP address:' with the value '192 . 168 . 1 . 25' and 'End IP address:' with the value '192 . 168 . 1 . 50'. Below these, it says: 'A subnet mask defines how many bits of an IP address to use for the network/subnet IDs and how many bits to use for the host ID. You can specify the subnet mask by length or as an IP address.' There are two input fields: 'Length:' with the value '24' and 'Subnet mask:' with the value '255 . 255 . 255 . 0'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. Below the main window, there's a secondary bar with buttons: '< Back', 'Next >', 'Cancel', and 'Help'. A 'Bin' icon is visible on the right side of the secondary bar.

8. Your entered IP address will show in below window, Click Next.



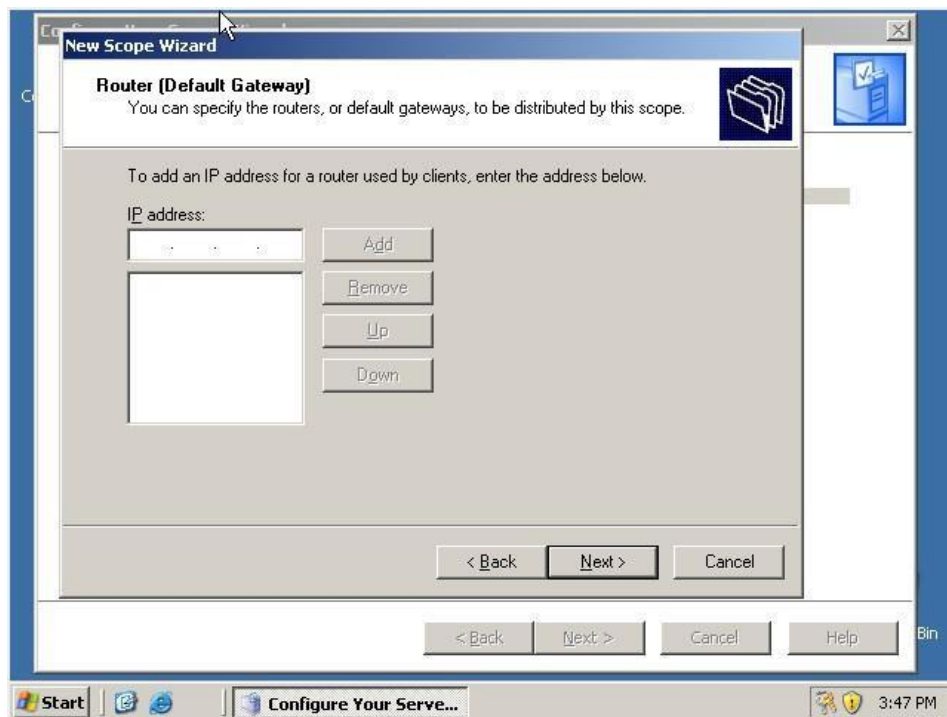
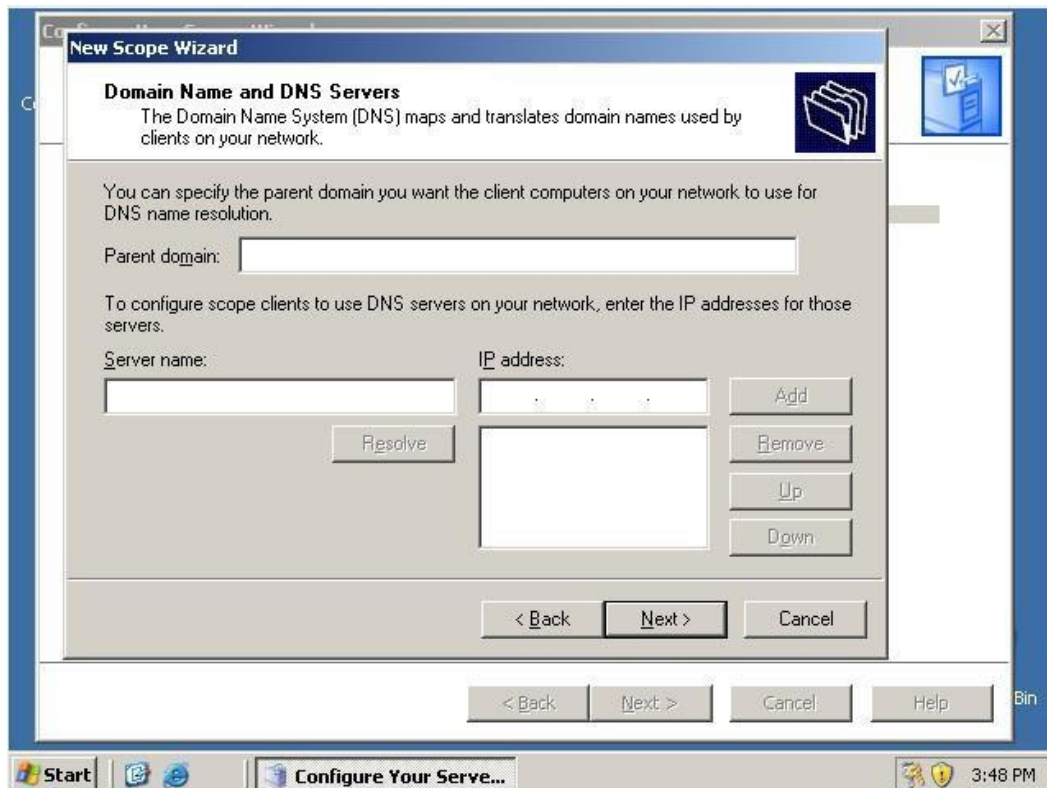
The screenshot shows the 'New Scope Wizard' window, specifically the 'Add Exclusions' step. The window has a title bar 'New Scope Wizard' and a close button. Below the title bar, there's a section 'Add Exclusions' with a folder icon and a checkmark icon. The text says: 'Exclusions are addresses or a range of addresses that are not distributed by the server.' Below this, it says: 'Type the IP address range that you want to exclude. If you want to exclude a single address, type an address in Start IP address only.' There are two input fields: 'Start IP address:' and 'End IP address:'. Below these, there's an 'Add' button. Below the 'Add' button, there's a list box labeled 'Excluded address range:' containing the text 'Address 192.168.1.30'. To the right of the list box is a 'Remove' button. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'. Below the main window, there's a secondary bar with buttons: '< Back', 'Next >', 'Cancel', and 'Help'. A 'Bin' icon is visible on the right side of the secondary bar.

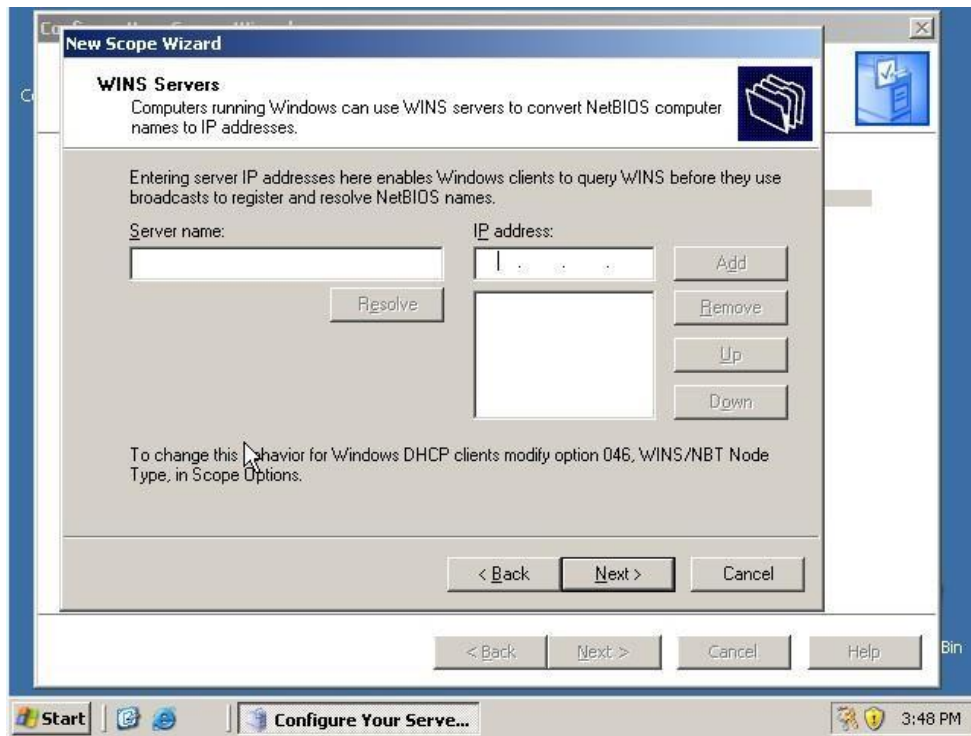
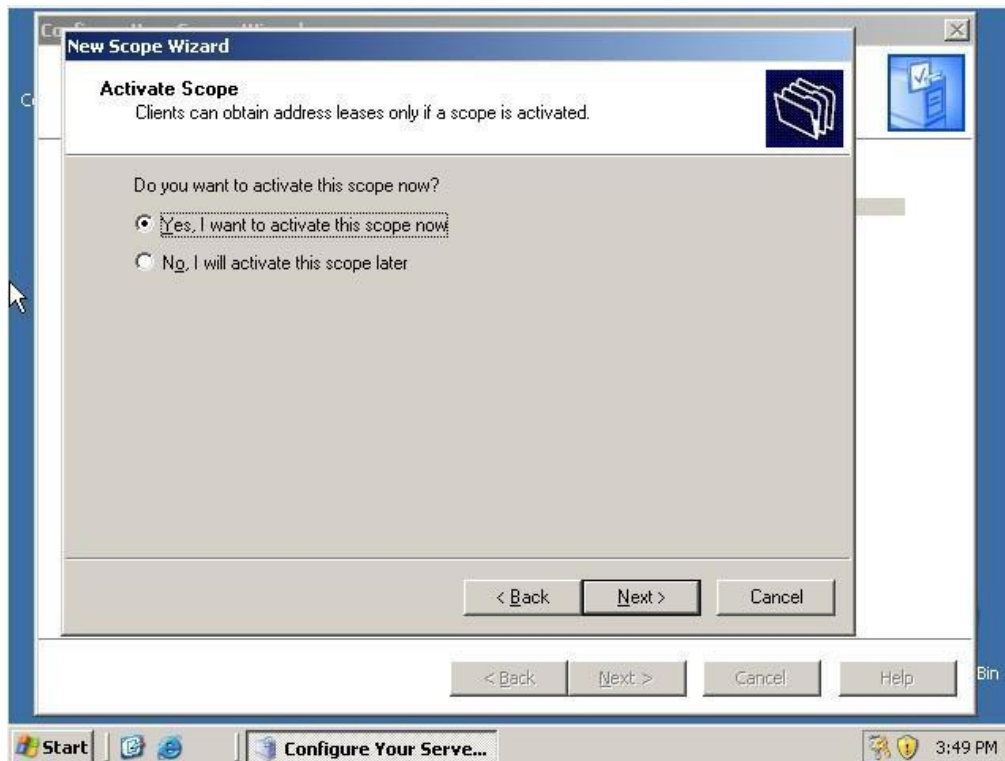
9. Select Expiration date and time of server.

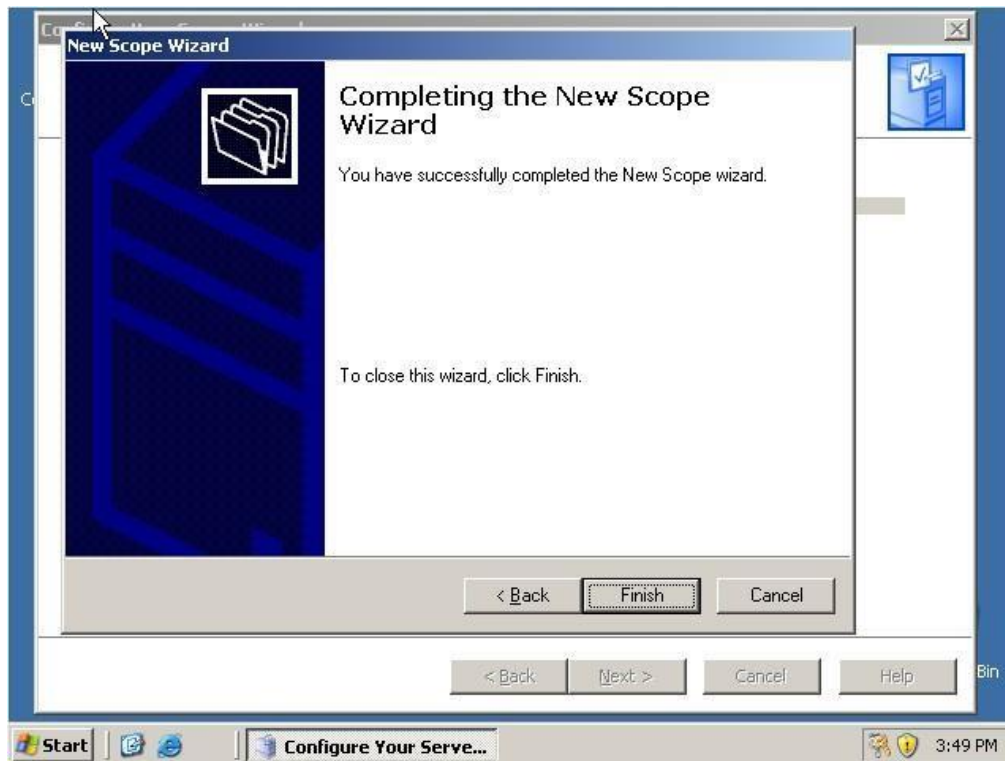
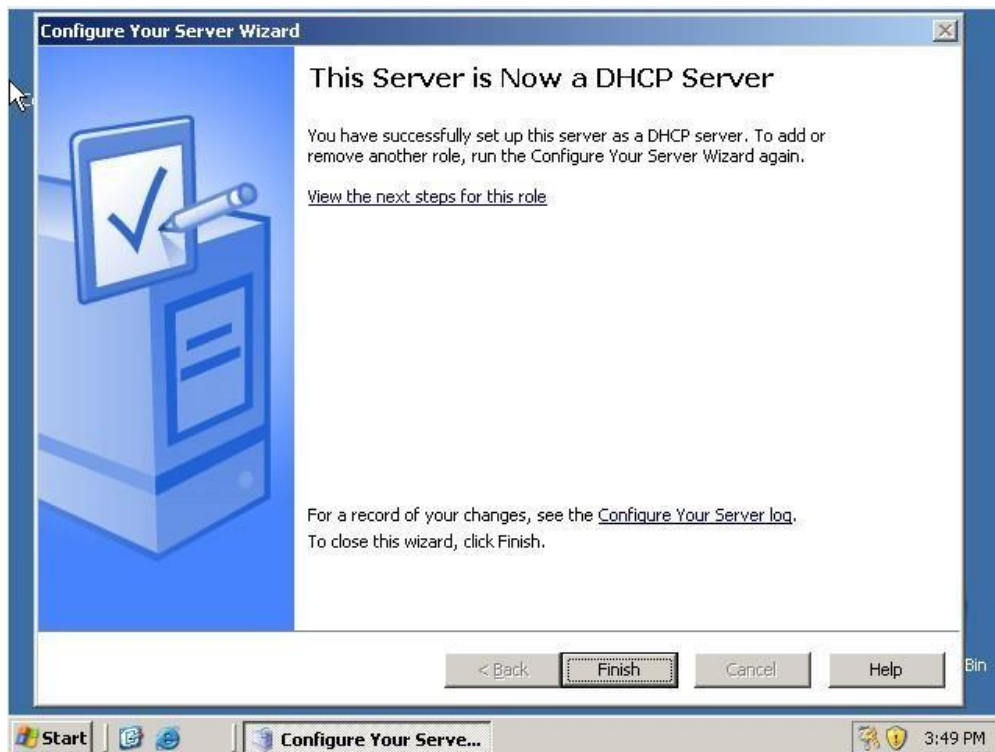


10. Select 'Yes, I want to configure these options now' then click Next.

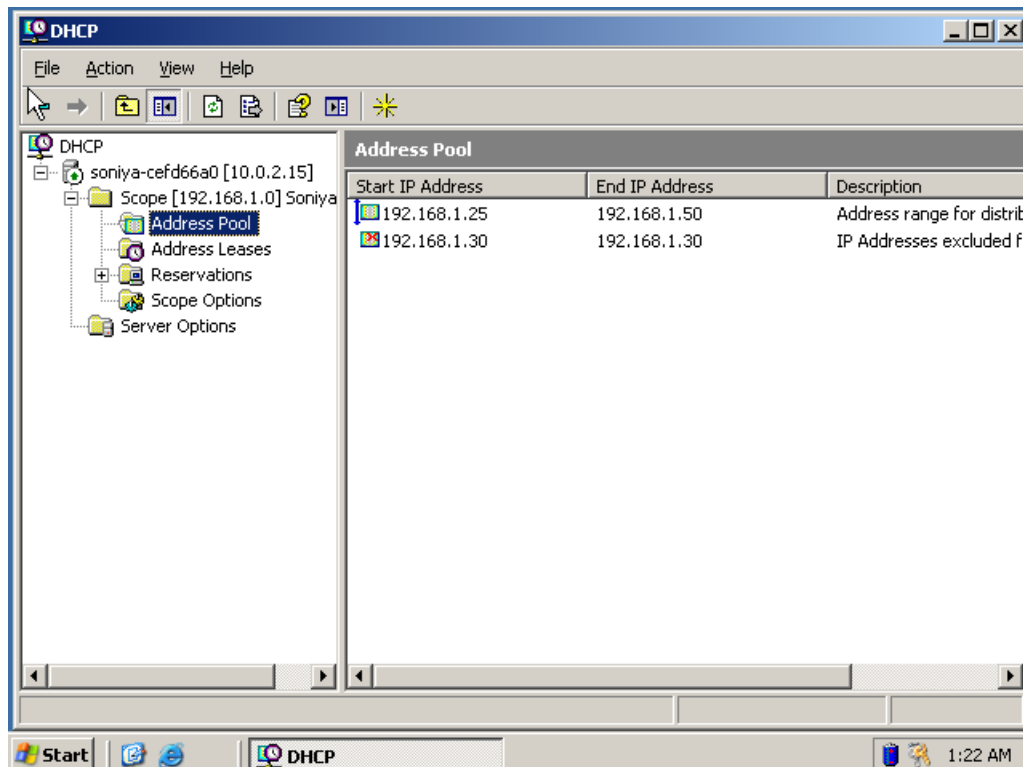


11. Click next.**12. Click next.**

13. Click Next.**14. Select 'Yes, I want to activate this scope now' option then click next.**

15. Click Finish.**16. Click Finish. With this you completed setting up a DHCP server.**

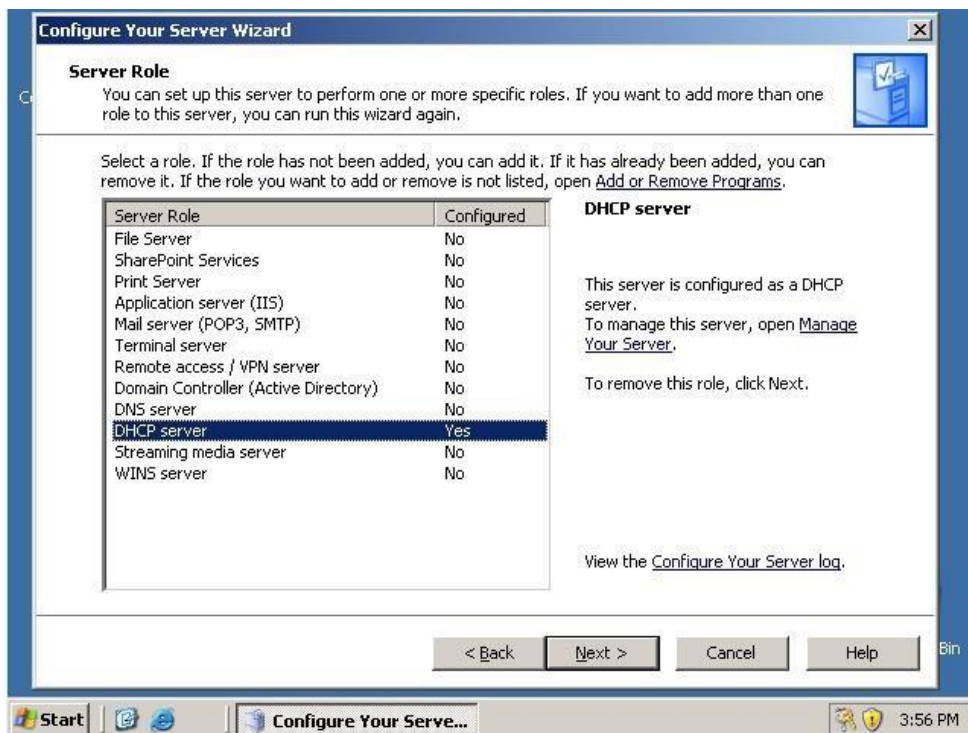
Now to check your DHCP server goto start>All programs>Administrative Tools> DHCP



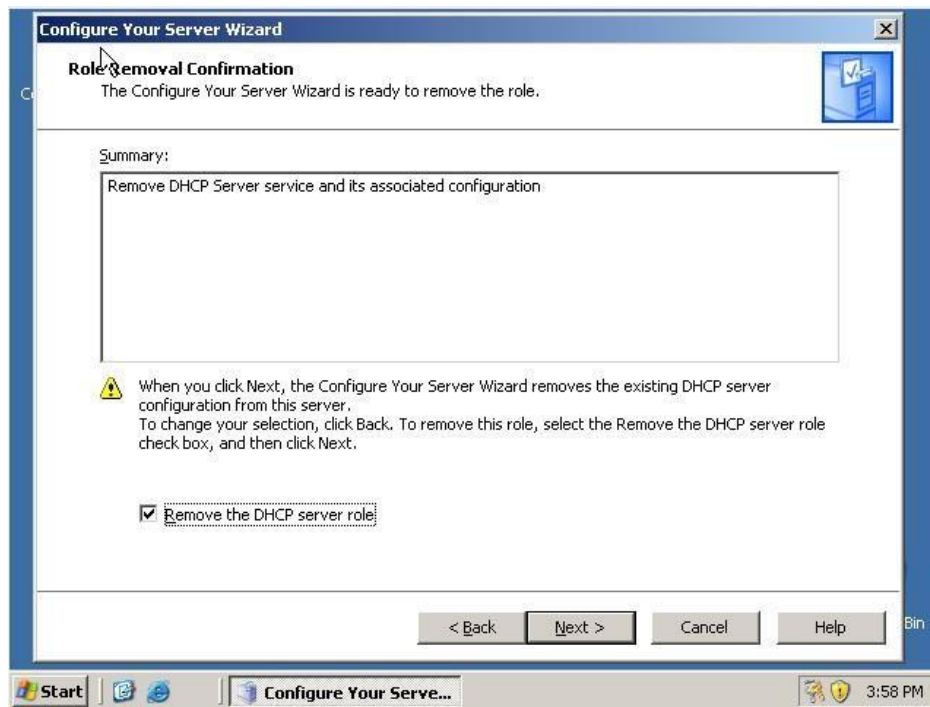
Now if you want to delete your DHCP server go to configure your server wizard.



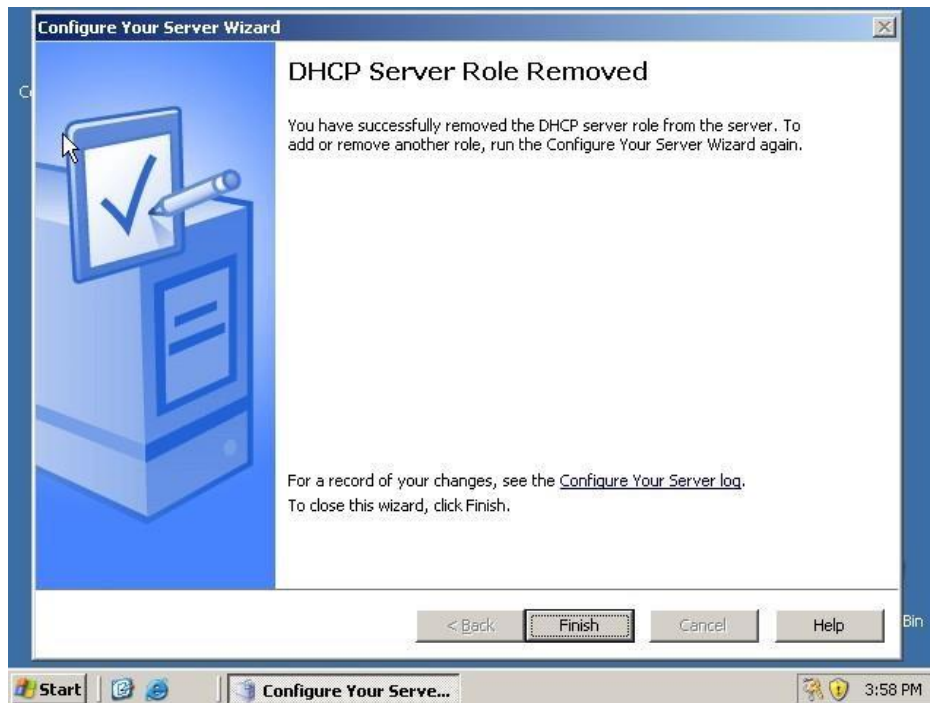
Select DHCP server then click next.



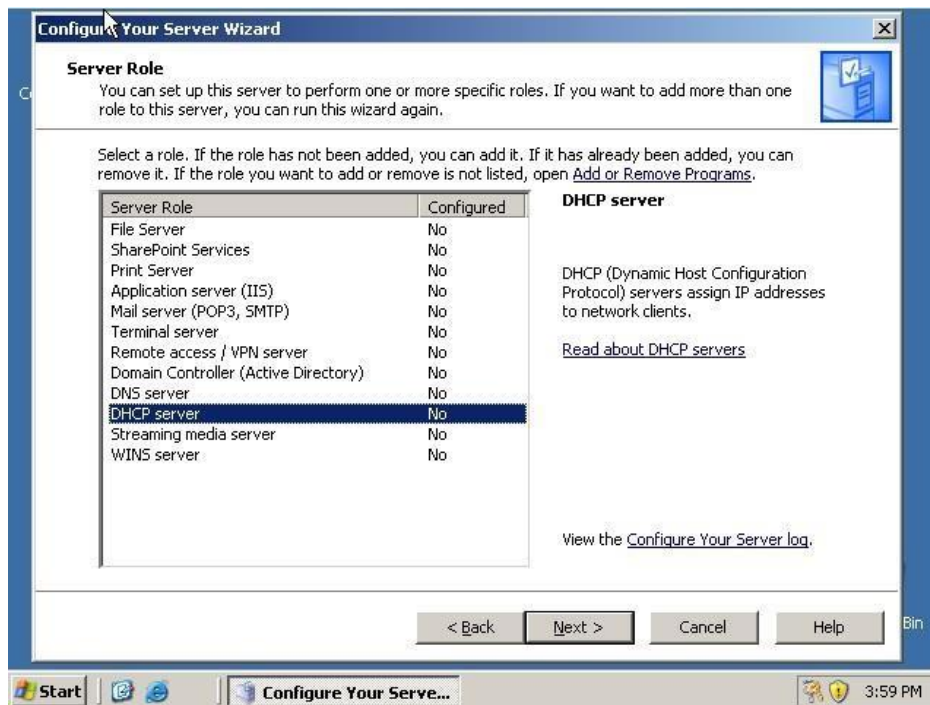
Check the 'Remove the DHCP server role' and click Next.



DHCP server delete



After deleting you can check configure your server wizard.



Conclusion: Thus, we set up a DHCP server.