

Experiment-7

Add and configure server roles

(ADDS without DNS delegation/certificate/DHCP/DNS)

| | | | |
|----------|---------------|----------|---------------|
| Name: | Rishabh Anand | UID: | 19BCS4525 |
| Branch: | CSE | Sec/Grp: | 19BIT-KRG-1/A |
| Sem: | 6th | Date: | 29/03/2022 |
| Subject: | NOS LAB | Code: | CSP-396 |

1. Aim/Overview of the practical:

Add and configure server roles
(ADDS without DNS delegation/certificate/DHCP/DNS).

2. Task to be done:

On the Windows server 2008 add DHCP role and features on the server.

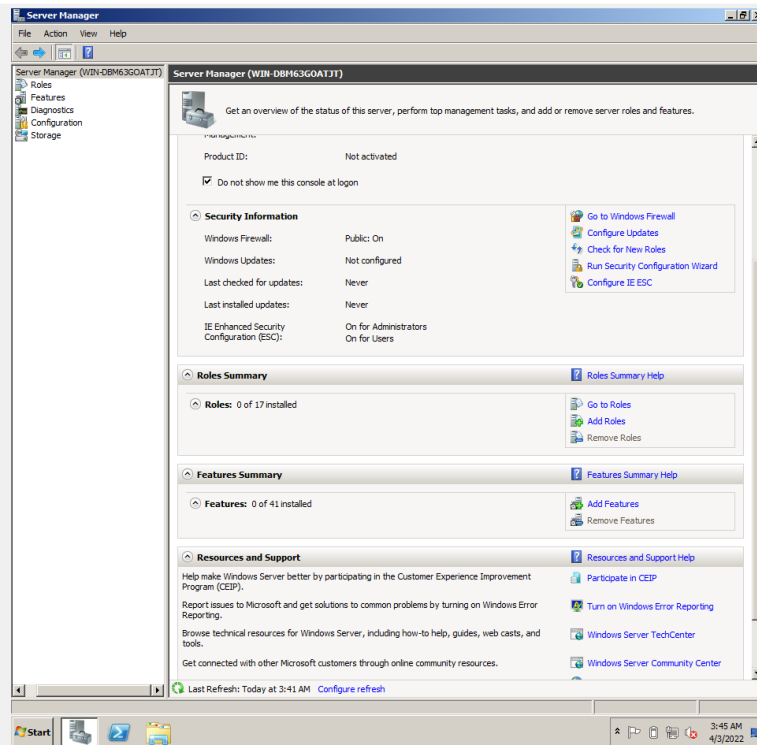
3. Apparatus:

Windows Server 2008
Oracle VM Virtual Box Manager

4. Steps and their screenshots:

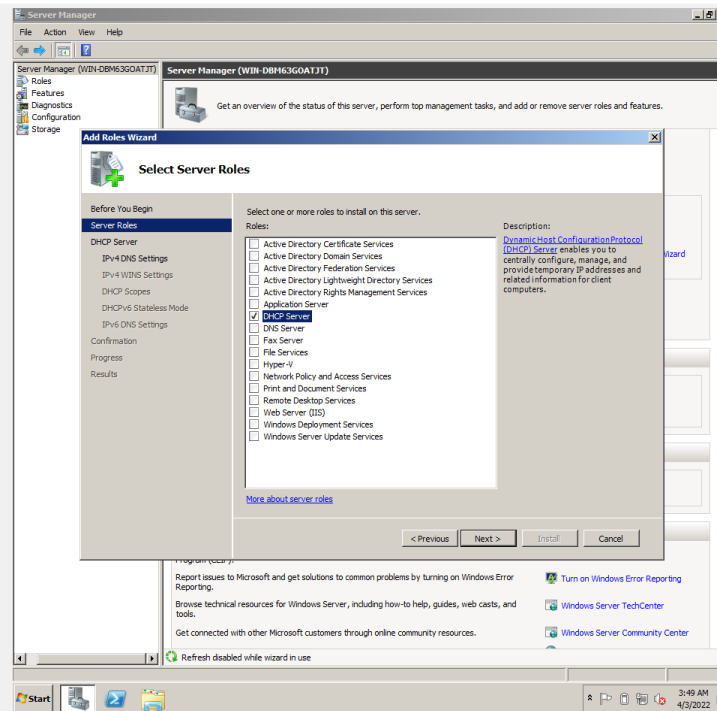
1: Open the Virtual Box and start the windows server 2008. Then open teh server manager.

Server 2008 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help



2: Select the Roles option and add a role for the server. Choose a DHCP server for the role.

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3: Specify the Domain name (for the experimentation purpose we can specify any random Domain name).

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Server Manager (WIN-08M63G0ATJT)

Get an overview of the status of this server, perform top management tasks, and add or remove server roles and features.

Add Roles Wizard

Specify IPv4 DNS Server Settings

Before You Begin
Server Roles
DHCP Server
IPv4 DNS Settings
IPv4 WINS Settings
DHCP Scopes
DHCPv6 Stateless Mode
IPv6 DNS Settings
Confirmation
Progress
Results

When clients obtain an IP address from the DHCP server, they can be given DHCP options such as the IP addresses of DNS servers and the parent domain name. The settings you provide here will be applied to clients using IPv4.

Specify the name of the parent domain that clients will use for name resolution. This domain will be used for all scopes you create on this DHCP server.

Parent domain:

Specify the IP addresses of the DNS servers that clients will use for name resolution. These DNS servers will be used for all scopes you create on the DHCP server.

Preferred DNS server IPv4 address:

Alternate DNS server IPv4 address:

[More about DNS server settings](#)

< Previous Next > Install Cancel

Program (cscs.j...
Report issues to Microsoft and get solutions to common problems by turning on Windows Error Reporting.
Browse technical resources for Windows Server, including how-to help, guides, web casts, and tools.
Get connected with other Microsoft customers through online community resources.

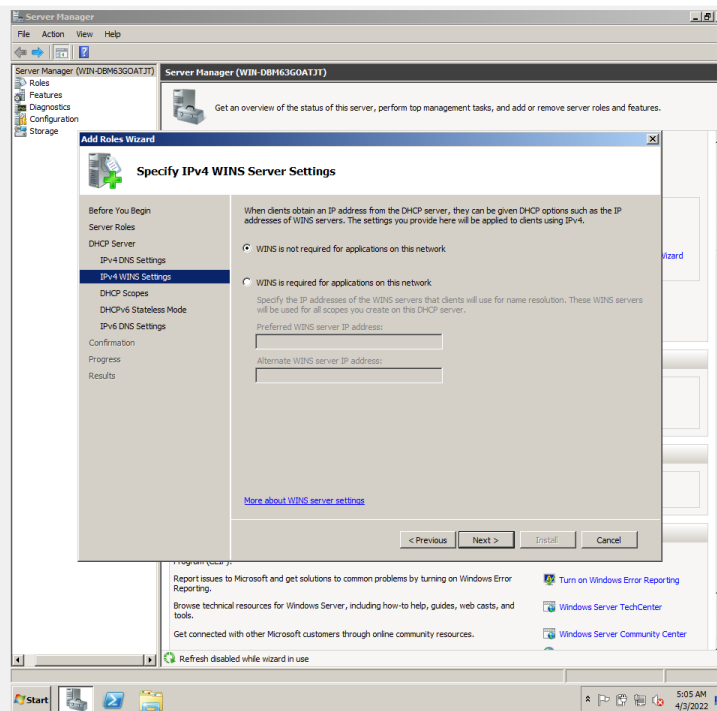
Turn on Windows Error Reporting
Windows Server TechCenter
Windows Server Community Center

Refresh disabled while wizard in use

4: Select the specified option, as we do not require WINS for this network.

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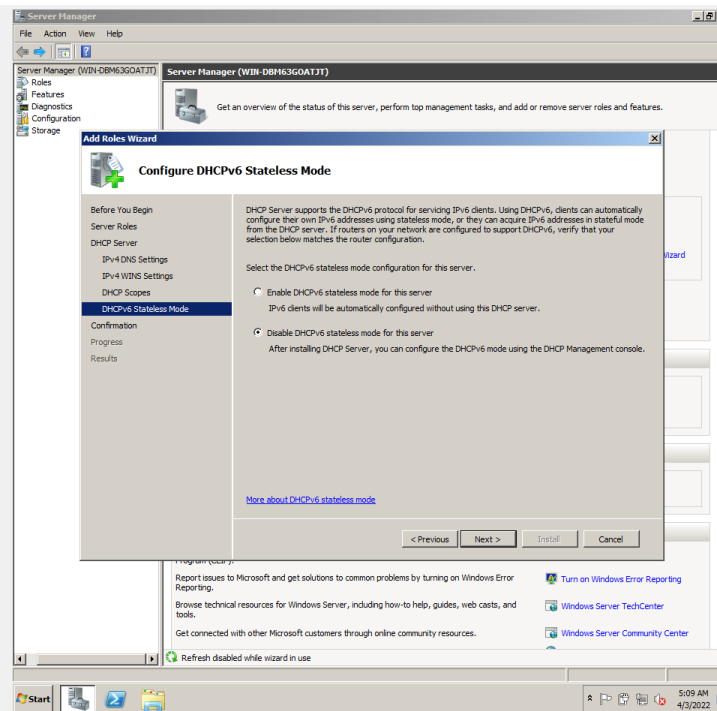
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5: Disable DHCPv6 stateless mode for this server.

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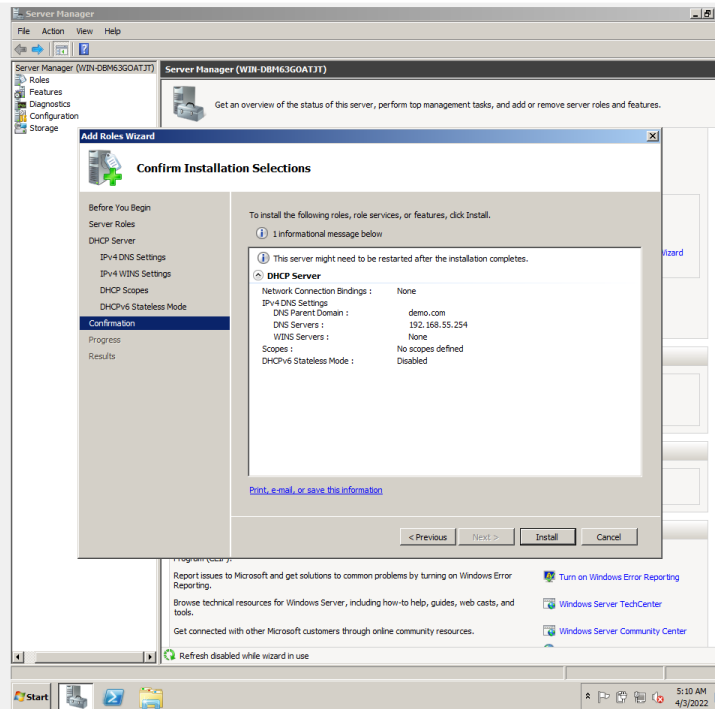
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7: Install the selected configurations of the DHCP server.

Server 2008 [Running] - Oracle VM VirtualBox

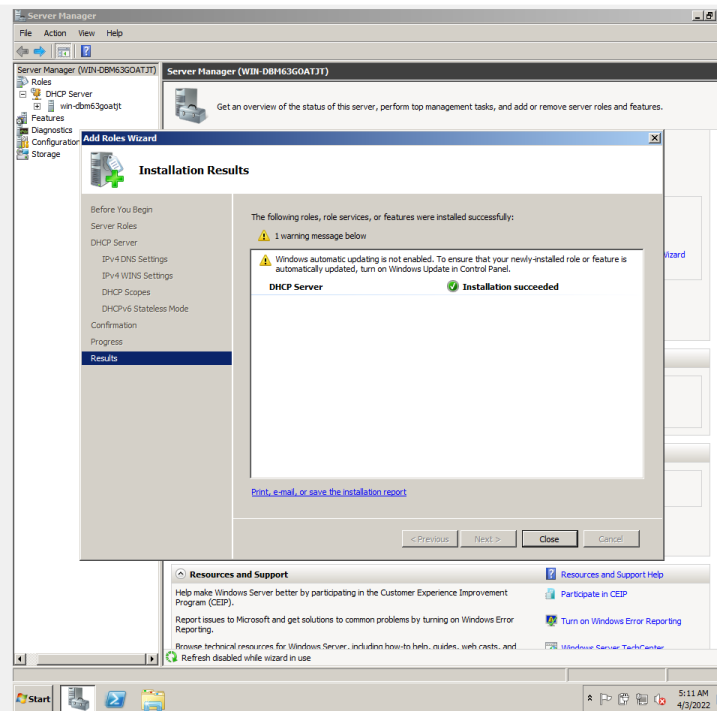
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8: Installation succesful. Now the server will act as a DHCP server.

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File Machine View Input Devices Help

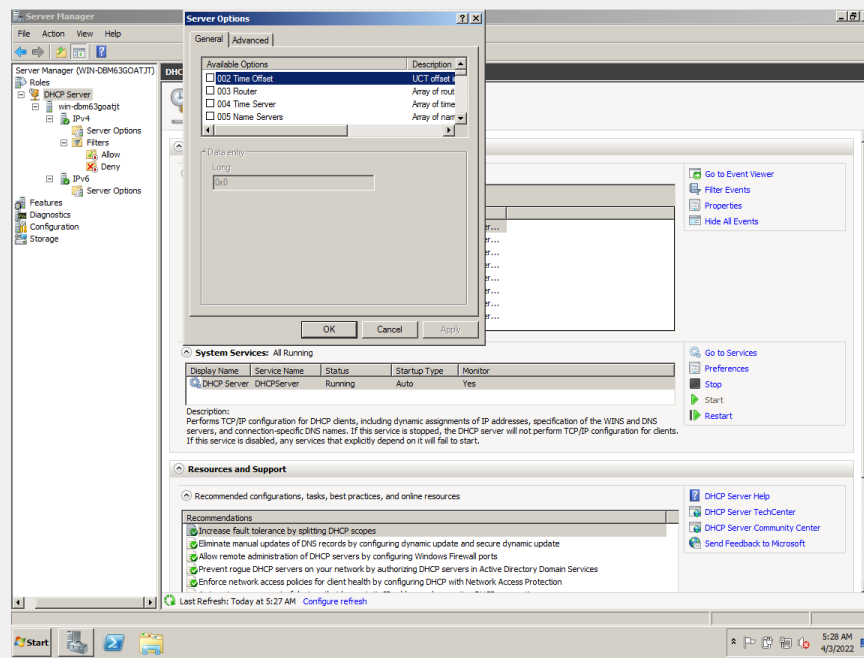


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9: We can choose any server options that we want to add to the DHCP server.

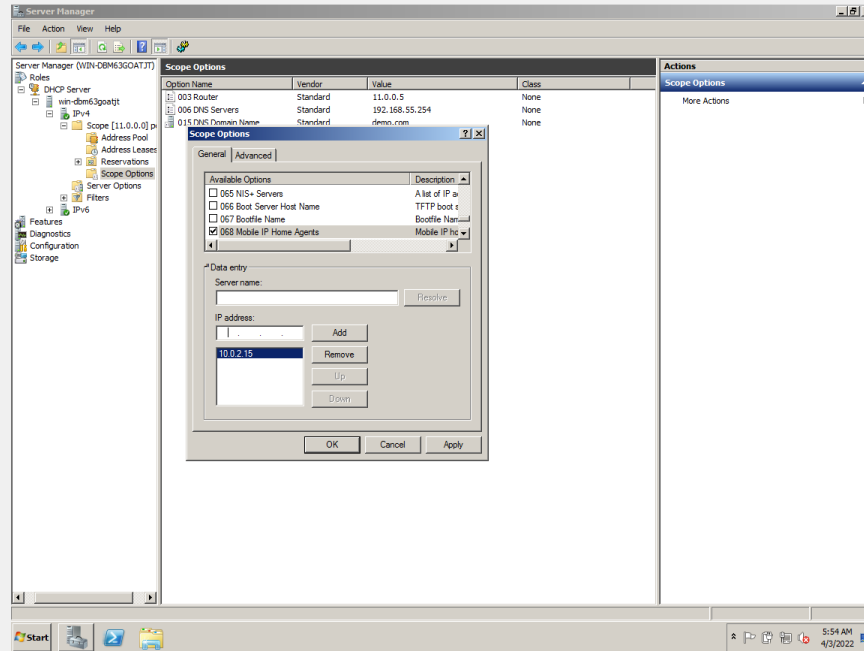
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10: Adding the Mobile IP Home Agents server option, using the name of the same server on which we are working. On resolving the server name, it will automatically generate its IP address.

Server 2008 [Running] - Oracle VM VirtualBox

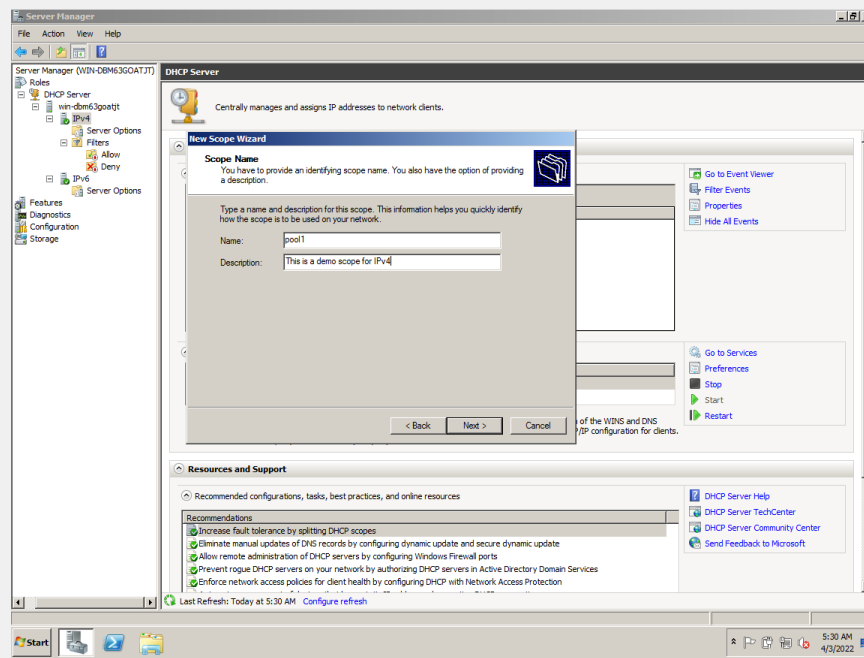
File Machine View Input Devices Help



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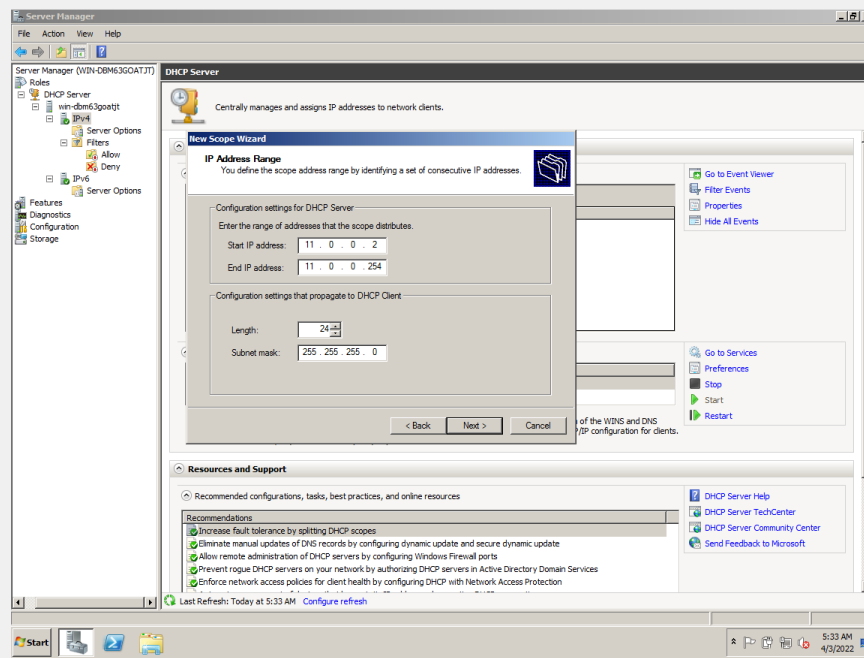
11: We can create a new scope wizard by right-clicking on the IPv4 option. Specify the scope name and an optional description.

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12: Specify the starting and ending IP address pool, for the IP address allocation by the DHCP server.

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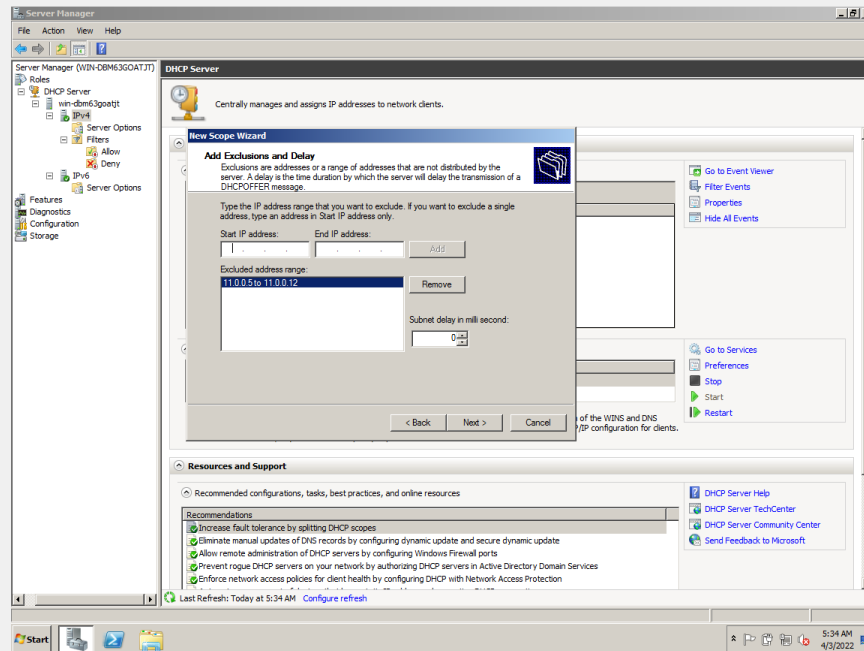


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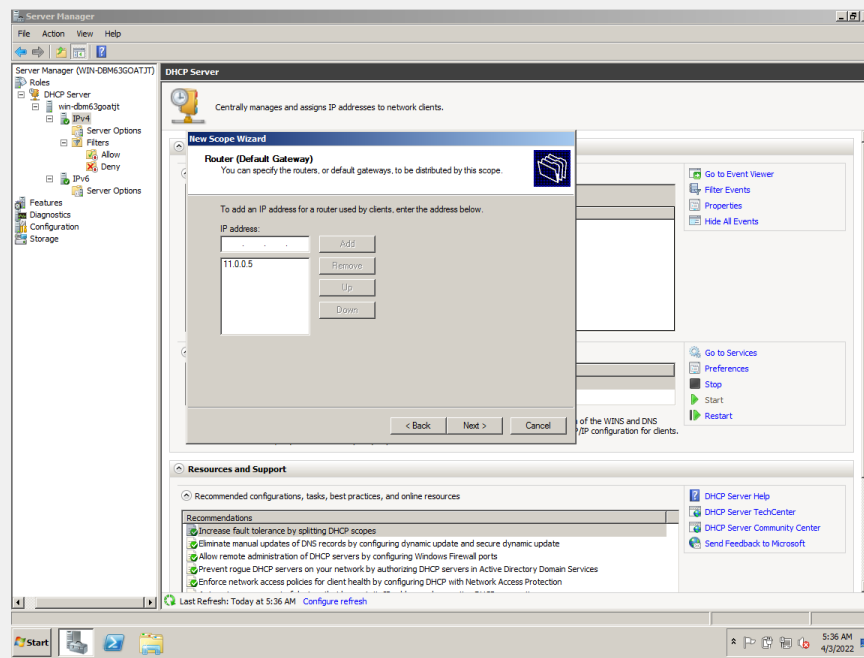
13: We can exclude any range of IP addresses, which we don't want to allocate to the client device, for example, an IP address like that of the router.

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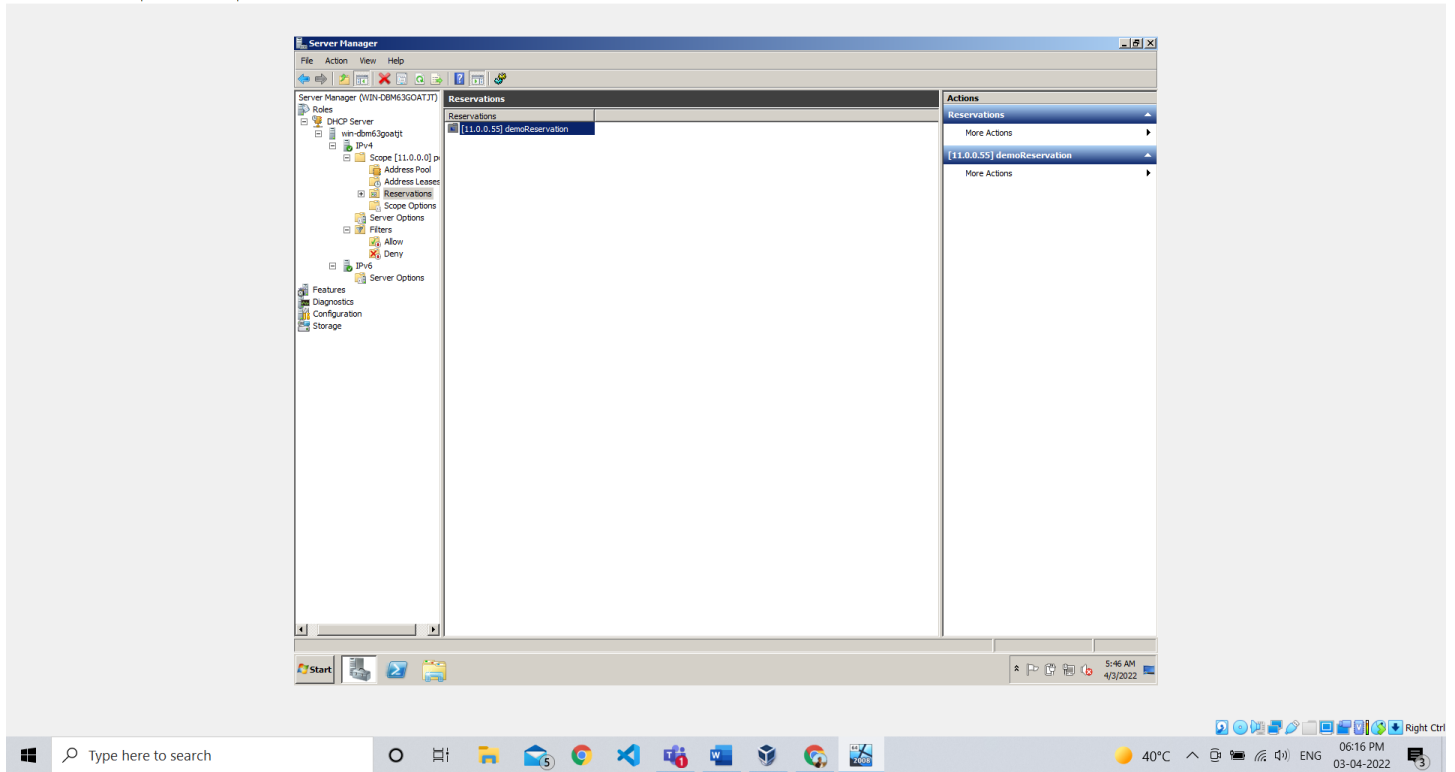
14: Give the IP address to the router(from the range which was excluded in the last step).

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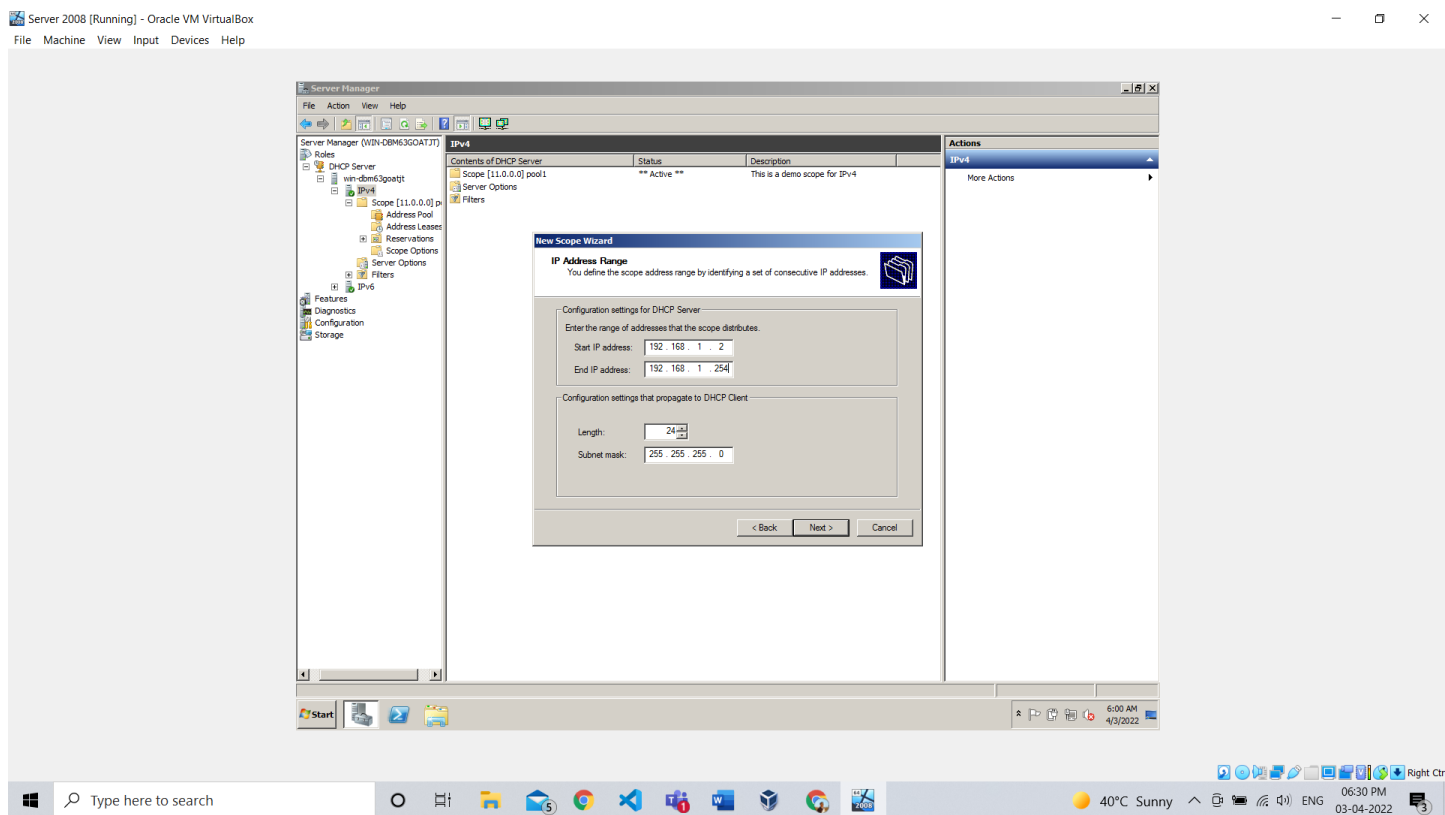


15: We use reservation to give a fixed/specific Ip address to a device by DHCP server.

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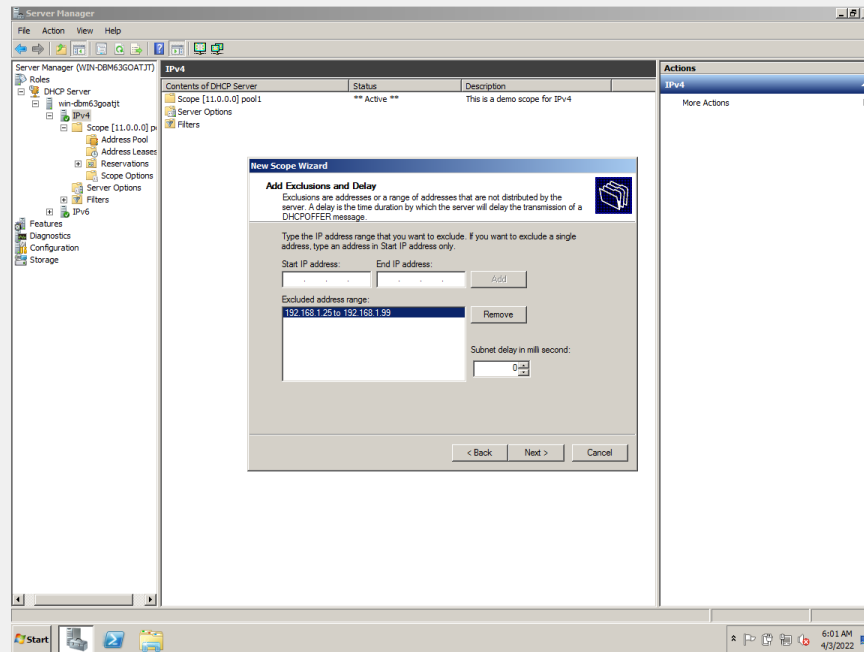


16: Creating another scope wizard for revision, named pool2. The same steps need to be performed as mentioned above.

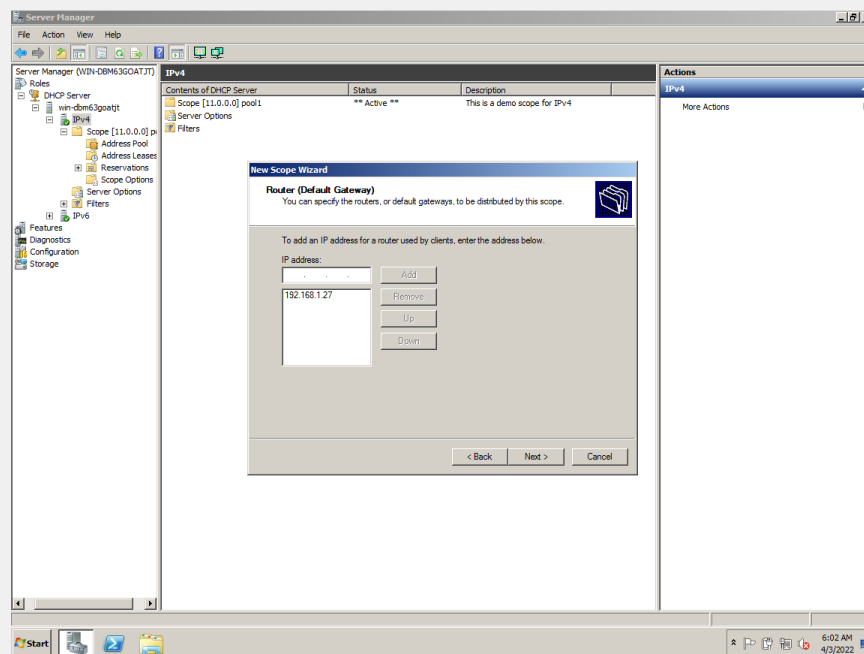


Results :

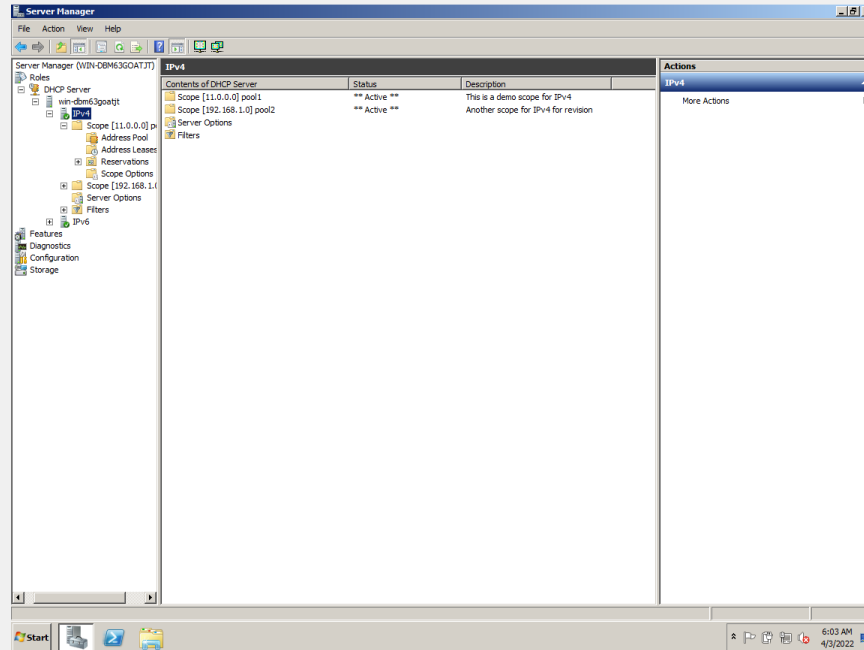
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File Machine View Input Devices Help



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File Machine View Input Devices Help



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File Machine View Input Devices Help



The screenshot shows the Windows Server 2008 Server Manager console. The left pane displays the 'Server Manager (WIN-DBM63G0AT77)' tree with 'Roles' expanded, showing 'DHCP Server' and 'IP-4'. The right pane shows the 'Contents of DHCP Server' table with the following data:

| Scope | Status | Description |
|---------------------------|--------------|-------------------------------------|
| Scope [11.0.0.0] pool1 | ** Active ** | This is a demo scope for IP-4 |
| Scope [192.168.1.0] pool2 | ** Active ** | Another scope for IP-4 for revision |

The 'Actions' pane on the right shows 'More Actions'.

Learning outcomes (What I have learned) :

1. Learned to add roles and features on Windows server 2008, specifically DHCP.
2. Learned to add server options like Mobile IP Home Agents, specifying the server name and its IP address.
3. Learned to add a new scope wizard on IPv4.
4. Understood the different steps required like specifying the start and end IP address pool, excluding certain IP address ranges, which we don't want to allocate to the client device.
5. Configuring router with IP address.
6. Using reservation to allocate fixed/specific IP address to a particular client device.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

| Sr. No. | Parameters | Marks Obtained | Maximum Marks |
|---------|------------|----------------|---------------|
| 1. | | | |
| 2. | | | |
| 3. | | | |
| | | | |