Install and Configure NFS Server

Introduction to NFS Setup

Objective: Learn how to install, configure, and manage an NFS server on machine X and mount the NFS share on a client machine Y. This guide will cover installation, configuration, and testing steps.

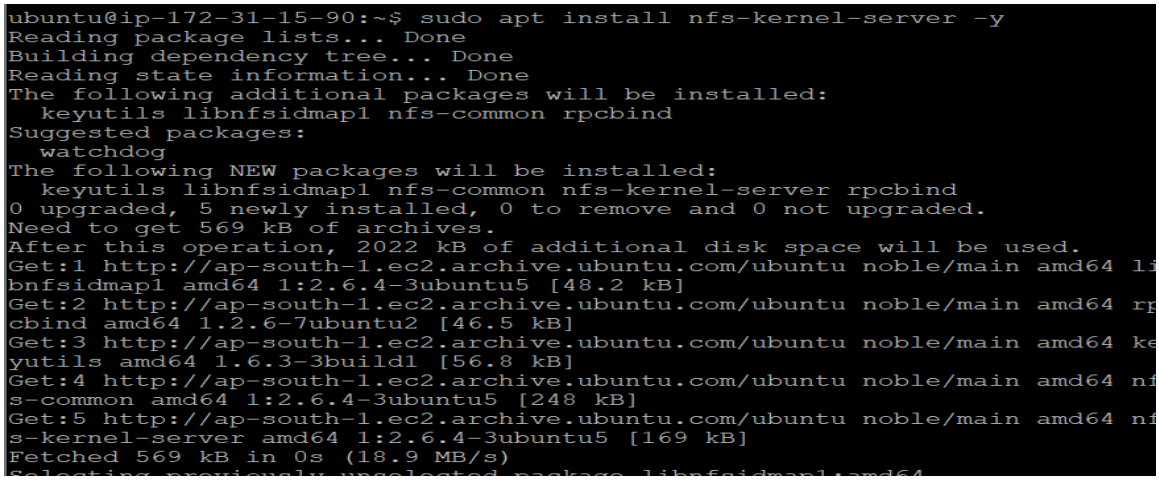
Step-by-Step Installation on the NFS Server (Machine X)

1. Update Package Lists:

sudo apt update

2. Install NFS Server:

sudo apt install nfs-kernel-server



3. Create the Directory to be Shared:

sudo mkdir /sample

4. Set Permissions for the Directory:

- Change ownership:

sudo chown nobody:nogroup /sample

- Set permissions:

sudo chmod 777 /sample

```
ubuntu@ip-172-31-15-90:~$ sudo mkdir /sample
ubuntu@ip-172-31-15-90:~$ sudo chmod 777 /sample
ubuntu@ip-172-31-15-90:~$
```

5. Edit the NFS Exports File:

sudo nano /etc/exports

- Add this line to share the directory:

/sample 65.0.27.81(rw,sync,no_subtree_check)

6. Export the NFS Shares:

sudo exportfs -a

7. Restart the NFS Server:

sudo systemctl restart nfs-kernel-server

8. Check the NFS Server Status:

sudo systemctl status nfs-kernel-server

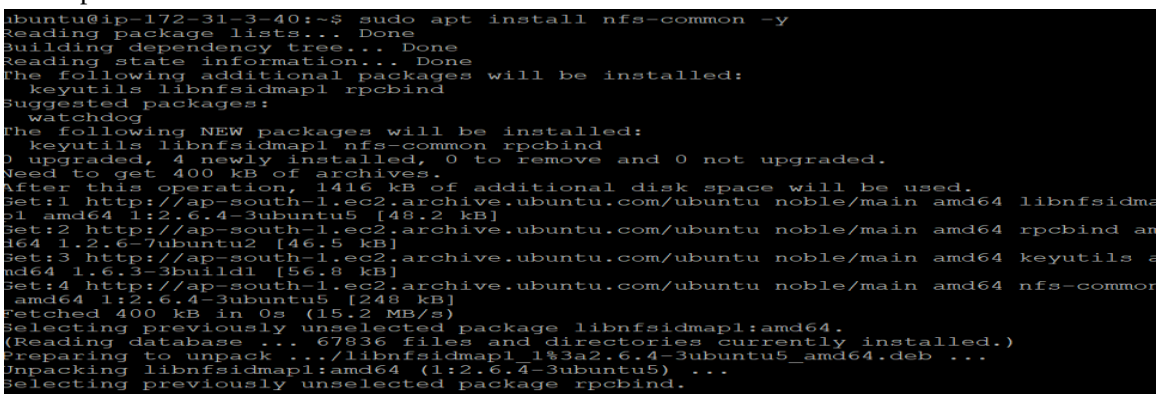
Setting Up the NFS Client (Machine Y)

1. Update Package Lists:

sudo apt update

2. Install NFS Client Package:

sudo apt install nfs-common



3. Create a Mount Point for the NFS Share:

sudo mkdir /mnt

4. Mount the NFS Share:

sudo mount 13.234.122.91:/sample /mnt

5. Verify the Mount:

df -h

Testing the NFS Share on the Client Machine

1. Access the Mount Point:

cd /mnt

2. Create a Folder and File to Test Access:

sudo mkdir test_folder

sudo touch test_file.txt

3. Troubleshooting Tips:

- If you cannot create folders or files in /mnt, check permissions on the NFS server's shared directory.

- Ensure the NFS client has the correct mount options and network access to the NFS server.

- Verify the NFS service is running properly on the server using:

sudo systemctl status nfs-kernel-server

- Check the /etc/exports file on the NFS server to ensure the configuration is correct.