

1. SAMBA SHARE

Experiment no. 1

Date: 06/06/2024

Description: This experiment involves installing and configuring a Samba file server on a Linux system to facilitate file sharing over a network. The Samba server will be configured to share a directory on the system, making it accessible from other machines.

Package name: samba

Configuration details: etc/samba/smb.conf

Procedure:

i) Switch to superuser: **su -**

ii) install samba package:

- **sudo apt update**
- **sudo apt install samba**
- Navigate to Samba Configuration Directory: **cd/etc/samba**
- List Directory Contents: **ls**
- Open Samba Configuration File: **nano smb.conf**

In the opened smb.conf file, set the following:

- Name: sreelakshmi
- Path: /home/ubuntu22/share
- Configure Firewall to Allow Samba: **sudo ufw allow samba**
- Install Network Tools: **apt install net-tools**
- Check Network Configuration: **ifconfig**

Connecting to the Samba Server:

- Open File Explorer and navigate to "Other Locations."
- Connect to the server using the following address: **smb://127.0.0.1/sreelakshmi/**
- Click "Connect."
- The folder is now accessible via the network
- **Result:**

```

ubuntu22@UBUNTU:~$ su -
Password:
root@UBUNTU:~# sudo apt update
Hit:1 http://archive.canonical.com/ubuntu jammy InRelease
Hit:2 http://in.archive.ubuntu.com/ubuntu jammy InRelease
Hit:3 http://archive.ubuntu.com/ubuntu jammy InRelease
Hit:4 http://in.archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:5 http://archive.ubuntu.com/ubuntu jammy-updates InRelease
Hit:6 http://in.archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:7 http://archive.ubuntu.com/ubuntu jammy-security InRelease
Hit:8 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Get:9 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Fetched 129 kB in 5s (28.5 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
147 packages can be upgraded. Run 'apt list --upgradable' to see them.
root@UBUNTU:~# sudo apt install samba

```

```

PID TTY          TIME CMD
28755 pts/0      00:00:00 su
28833 pts/0      00:00:00 bash
31560 pts/0      00:00:00 ps
root@UBUNTU:~# cd /etc/samba
root@UBUNTU:/etc/samba# ls
gdbcommands  smb.conf  t1s
root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# sudo service smbd restart
root@UBUNTU:/etc/samba# sudo ufw allow samba
Rules updated
Rules updated (v6)
root@UBUNTU:/etc/samba# ipconfig
Command 'ipconfig' not found, did you mean:
  command 'ifconfig' from deb net-tools (1.60+git20181103.0eebece-1ubuntu5)
  command 'iwconfig' from deb wireless-tools (30-pre9-13.1ubuntu4)
  command 'iconfig' from deb ipmiutil (3.1.8-1)
Try: apt install <deb name>
root@UBUNTU:/etc/samba# ifconfig
Command 'ifconfig' not found, but can be installed with:
apt install net-tools
root@UBUNTU:/etc/samba# apt install net-tools
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following NEW packages will be installed:
  net-tools
0 upgraded, 1 newly installed, 0 to remove and 121 not upgraded.
Need to get 204 kB of archives.
After this operation, 819 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Fetched 204 kB in 4s (51.6 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 231026 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Processing triggers for man-db (2.10.2-1) ...
root@UBUNTU:/etc/samba# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500

```

```
; path = /home/samba/profiles
; guest ok = no
; browseable = no
; create mask = 0600
; directory mask = 0700

[printers]
comment = All Printers
browseable = no
path = /var/spool/samba
printable = yes
guest ok = no
read only = yes
create mask = 0700

# Windows clients look for this share name as a source of downloadable
# printer drivers
[print$]
comment = Printer Drivers
path = /var/lib/samba/printers
browseable = yes
read only = yes
guest ok = no
# Uncomment to allow remote administration of Windows print drivers.
# You may need to replace 'lpadmin' with the name of the group your
# admin users are members of.
# Please note that you also need to set appropriate Unix permissions
# to the drivers directory for these users to have write rights in it
; write list = root, @lpadmin

[Sreelakshmi]
path=/home/ubuntu22/share
browseable = yes
read only = yes
guest ok = no
```

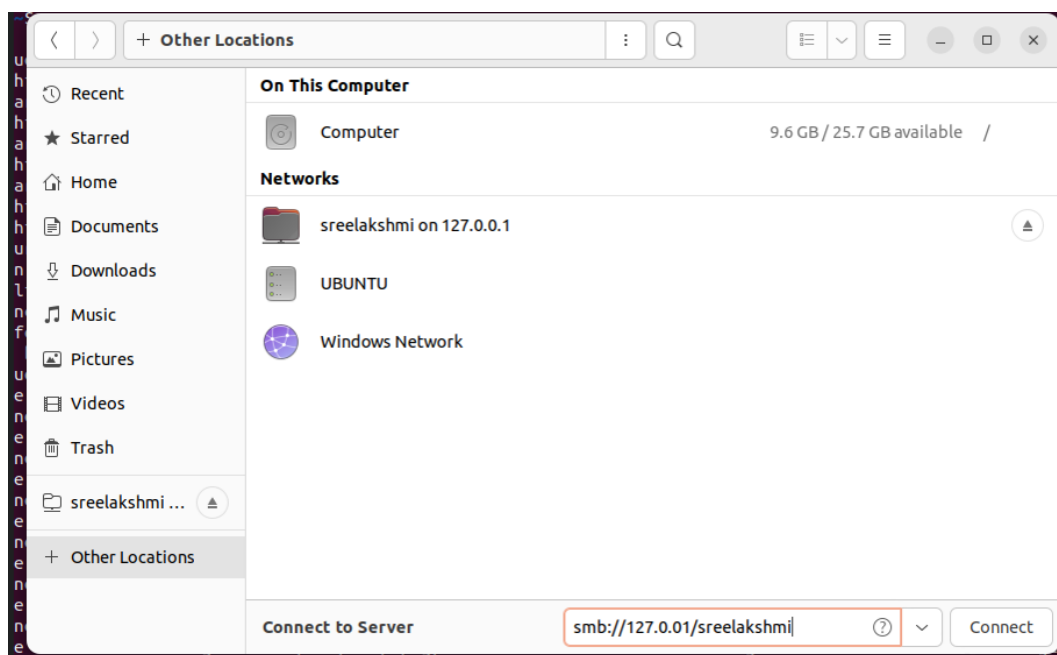
```
PID TTY          TIME CMD
28755 pts/0      00:00:00 su
28833 pts/0      00:00:00 bash
31560 pts/0      00:00:00 ps
root@UBUNTU:~# cd /etc/samba
root@UBUNTU:/etc/samba# ls
gdbcommands  smb.conf  tls
root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# sudo service smbd restart
root@UBUNTU:/etc/samba# sudo ufw allow samba
Rules updated
Rules updated (v6)
root@UBUNTU:/etc/samba# ipconfig
Command 'ipconfig' not found, did you mean:
  command 'ifconfig' from deb net-tools (1.60+git20181103.0eebece-1ubuntu5)
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Try: apt install <deb name>
root@UBUNTU:/etc/samba# ifconfig
Command 'ifconfig' not found, but can be installed with:
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Reading package lists... Done
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Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Fetched 204 kB in 4s (51.6 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 231026 files and directories currently installed.)
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Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Processing triggers for man-db (2.10.2-1) ...
root@UBUNTU:/etc/samba# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
```

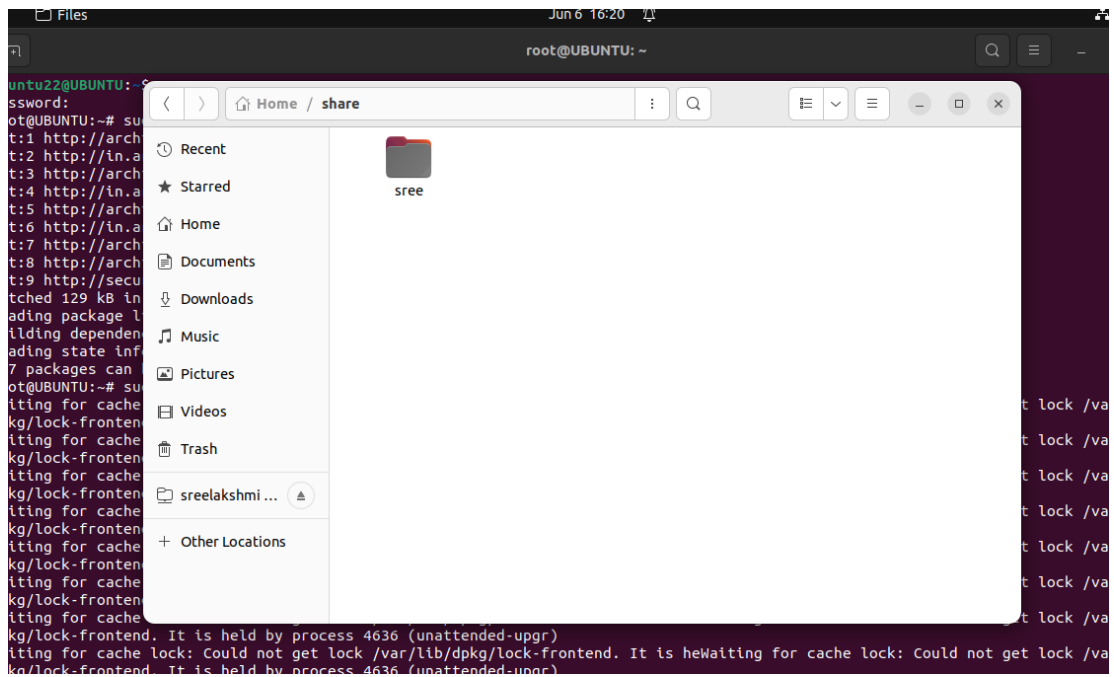
```

inet 127.0.0.1 netmask 255.0.0.0
inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 640 bytes 77915 (77.9 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 640 bytes 77915 (77.9 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UBUNTU:/etc/samba# nano smb.config
root@UBUNTU:/etc/samba# nano /etc/samba/smb.config
root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# sudo service smbd restart
root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# sudo service smbd restart
root@UBUNTU:/etc/samba# sudo smbpasswd -a ubuntu22
New SMB password:
Retype new SMB password:
Failed to add entry for user ubuntu22.
root@UBUNTU:/etc/samba# cd..
cd.: command not found
root@UBUNTU:/etc/samba# su -
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# sudo service smbd restart
root@UBUNTU:~# sudo smbpasswd -a ubuntu22
New SMB password:
Retype new SMB password:
Failed to add entry for user ubuntu22.
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# sudo service smbd restart
root@UBUNTU:~# sudo smbpasswd -a ubuntu22
New SMB password:
Retype new SMB password:
Failed to add entry for user ubuntu22.
root@UBUNTU:~# sudo smbpasswd -a ubuntu22
New SMB password:
Retype new SMB password:
Added user ubuntu22.
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~#

```





Conclusion: All the commands have been executed and the output has been obtained successfully.