

# Experiment 1: SAMBA SHARE

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## AIM:

Installation and configuration of Samba share.

**DATE:** 06-06-2024 **Description:**

## SAMBA

One of the most common ways to network Ubuntu and Windows computers is to configure Samba as a File Server. This section covers setting up a Samba server to share files with Windows clients.

The server will be configured to share files with any client on the network without prompting for a password. If your environment requires stricter Access Controls see Share Access Control

**Port No:** 139

**Package name:** samba

**Configuration file:** /etc/samba/smb.conf.

## Procedure:

1. To install Samba, we can run:

```
$sudo apt update
```

```
$sudo apt install samba
```

2. We can check if the installation was successful by running:

```
$whereis samba
```

3. Now that Samba is installed, we need to create a directory for it to share:

```
$mkdir /home/&lt;username>/sambashare/
```

The command above creates a new folder samba share in our home directory which we will share later. The configuration file for Samba is located at /etc/samba/smb.conf. To add the new directory as a share, we edit the file by running:

```
$sudo nano /etc/samba/smb.conf
```

At the bottom of the file, add the following lines:

```
[sambashare] comment = Samba on  
Ubuntu path =
```

/home/username/sambashare read only

= no

browsable = yes

4. Then press Ctrl-O to save and Ctrl-X to exit from the nano text editor.

5. Now that we have our new share configured, save it and restart Samba for it to take effect:

\$sudo service smbd restart

6. Update the firewall rules to allow Samba traffic:

\$sudo ufw allow samba

## SETTING UP USER ACCOUNTS AND CONNECTING TO SHARE

7. Since Samba doesn't use the system account password, we need to set up a Samba password for our user account:

\$sudo smbpasswd -a username CONNECTING

## TO SHARE

8. On Ubuntu: Open up the default file manager and click Connect to Server then enter:

Connecting to samba via smb://127.0.0.1/sambashare

Note: ip-address is the Samba server IP address and sambashare is the name of the share. You'll be prompted for your credentials. Enter them to connect!

## RESULT:

```
root@UBUNTU:~# ls
root@UBUNTU:~# whoxpostinstall.sh
root@UBUNTU:~# ps
  PID TTY          TIME CMD
 7420 pts/2    00:00:00 su
 7421 pts/2    00:00:00 bash
 7434 pts/2    00:00:00 sudo
 7438 pts/2    00:00:00 sudo
 8054 pts/2    00:00:00 sudo
 8062 pts/2    00:00:00 ps
root@UBUNTU:~# kill process
-bash: kill: process: arguments must be process or job IDs
root@UBUNTU:~# cd
.cache/ .local/ snap/
root@UBUNTU:~# cd /etc/samba ls
-bash: cd: too many arguments
root@UBUNTU:~# cd /etc/samba ls
-bash: cd: too many arguments
root@UBUNTU:~# cd /etc/samba
root@UBUNTU:~# ls
gdbcommands smb.conf
root@UBUNTU:~# nano smb.conf
root@UBUNTU:~# sudo service smbd restart
root@UBUNTU:~# sudo ufw
+ERROR: not enough args
root@UBUNTU:~# allow samba
allow: command not found
root@UBUNTU:~# sudo ufw allow samba
Rules updated
Rules updated (v6)
root@UBUNTU:~# ipconfig
Command 'ipconfig' not found, did you mean:
  Command 'lswconfig' from deb wireless-tools (30-pre9-13.1ubuntu4)
  Command 'ifconfig' from deb net-tools (1.60+git20181103.0eebece-1ubuntu5)
  Command 'lconfig' from deb lprutil (3.1.0-1)
Try: apt install <deb name>
root@UBUNTU:~# ifconfig
Command 'ifconfig' not found, but can be installed with:
apt install net-tools
root@UBUNTU:~# apt install net-tools
```

```
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 2s (127 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 201995 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:~# ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::babf:b255:e5ba:c37c prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:0e:3c:4f txqueuelen 1000 (Ethernet)
    RX packets 538692 bytes 811572174 (811.5 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 49398 bytes 3244972 (3.2 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (local loopback)
    RX packets 571 bytes 68204 (68.2 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 571 bytes 68204 (68.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# whoami
root
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# sudo smbpasswd -s ubuntu22
New SMB password:
Retype new SMB password:
Added user ubuntu22.
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# nano /etc/samba/smb.conf
root@UBUNTU:~# nano /etc/samba/smb.conf
```

```
Activities Terminal Jun 6 16:18
root@UBUNTU: /etc/samba

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 1:6.0-glibc20181103.0eebece-1ubuntu5 [204 kB]
Fetched 204 kB in 2s (127 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 201995 files and directories currently installed.)
Preparing to unpack .../net-tools_1:6.0-glibc20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1:6.0-glibc20181103.0eebece-1ubuntu5) ...
Setting up net-tools (1:6.0-glibc20181103.0eebece-1ubuntu5) ...
Processing triggers for man-db (2.10.2-1) ...
root@UBUNTU:/etc/samba# ifconfig
ens3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::ba0f:b255:e5ba:c37c prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:0e:3c:4f txqueuelen 1000 (Ethernet)
    RX packets 538692 bytes 811572174 (811.5 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 49590 bytes 3244972 (3.2 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop: txqueuelen 1000 (Local Loopback)
    RX packets 571 bytes 68204 (68.2 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 571 bytes 68204 (68.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@UBUNTU:/etc/samba# nano /etc/samba/smb.conf
root@UBUNTU:/etc/samba# whoami
root
root@UBUNTU:/etc/samba# nano /etc/samba/smb.conf
root@UBUNTU:/etc/samba# sudo smbpasswd -a ubuntu22
New SMB password:
Retype new SMB password:
Added user ubuntu22.
root@UBUNTU:/etc/samba# nano /etc/samba/smb.conf
root@UBUNTU:/etc/samba# nano /etc/samba/smb.conf
root@UBUNTU:/etc/samba# nano /etc/samba/smb.conf
```

```
Activities Terminal Jun 6 16:19
root@UBUNTU: /etc/samba

GNU nano 6.2 /etc/samba/smb.conf
; directory mask = 0700

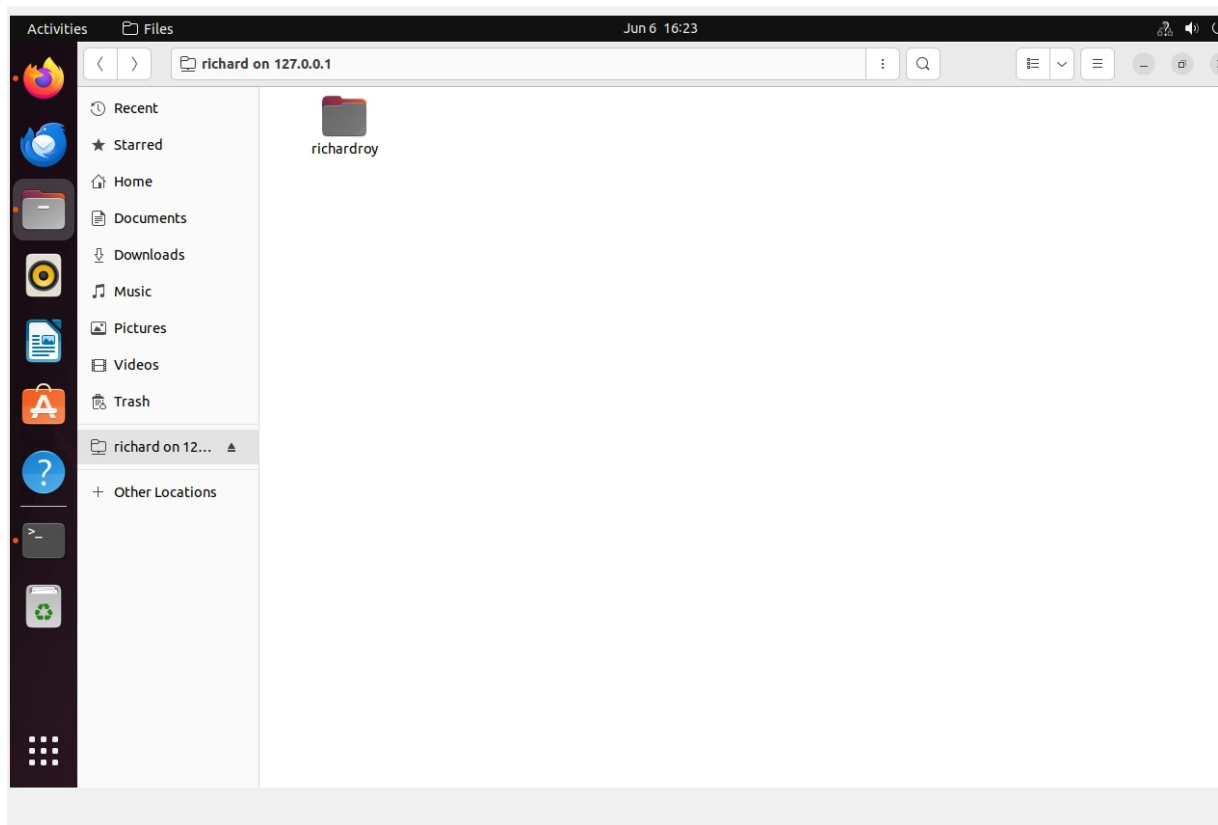
[printers]
comment = All Printers
browseable = no
path = /var/spool/samba
printable = yes
guest ok = no
read only = yes
create mask = 0700

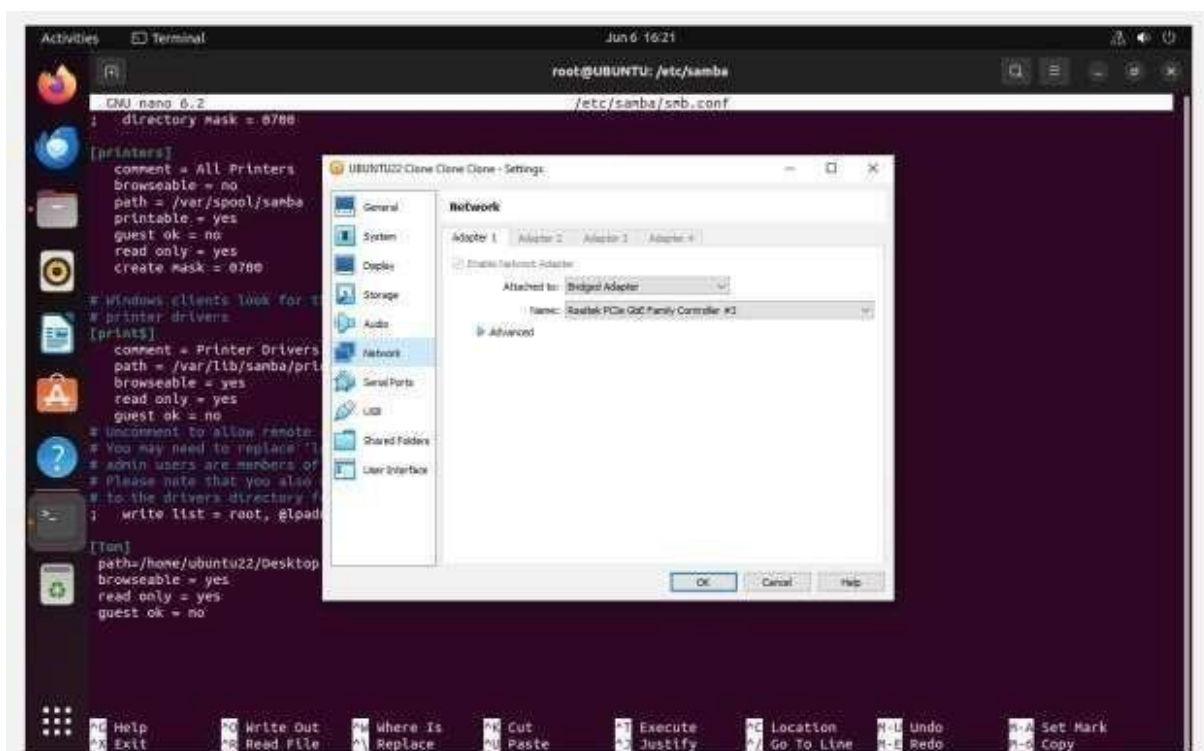
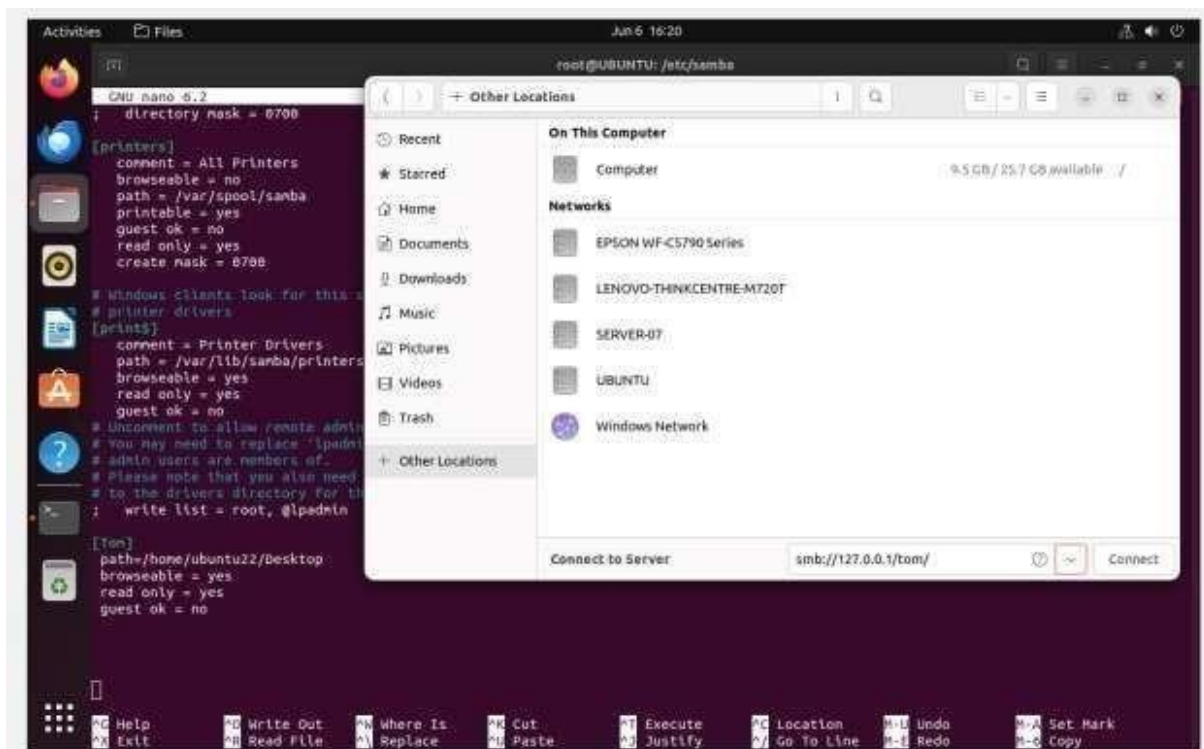
# Windows clients look for this share name as a source of downloadable
# printer drivers
[print$]
comment = Printer Drivers
path = /var/lib/samba/printers
browseable = yes
read only = yes
guest ok = no

# 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

[ton]
path=/home/ubuntu22/Desktop
browseable = yes
read only = yes
guest ok = no

PG Help Write Out Where Is Cut Execute Location Undo Set Mark
NY Exit Read File Replace Paste NT Justify Go To Line Redo Copy
```





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