

SAMBA SHARE

Experiment: 2

Aim:

Installation and configuration of Samba share.

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&gt;/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:

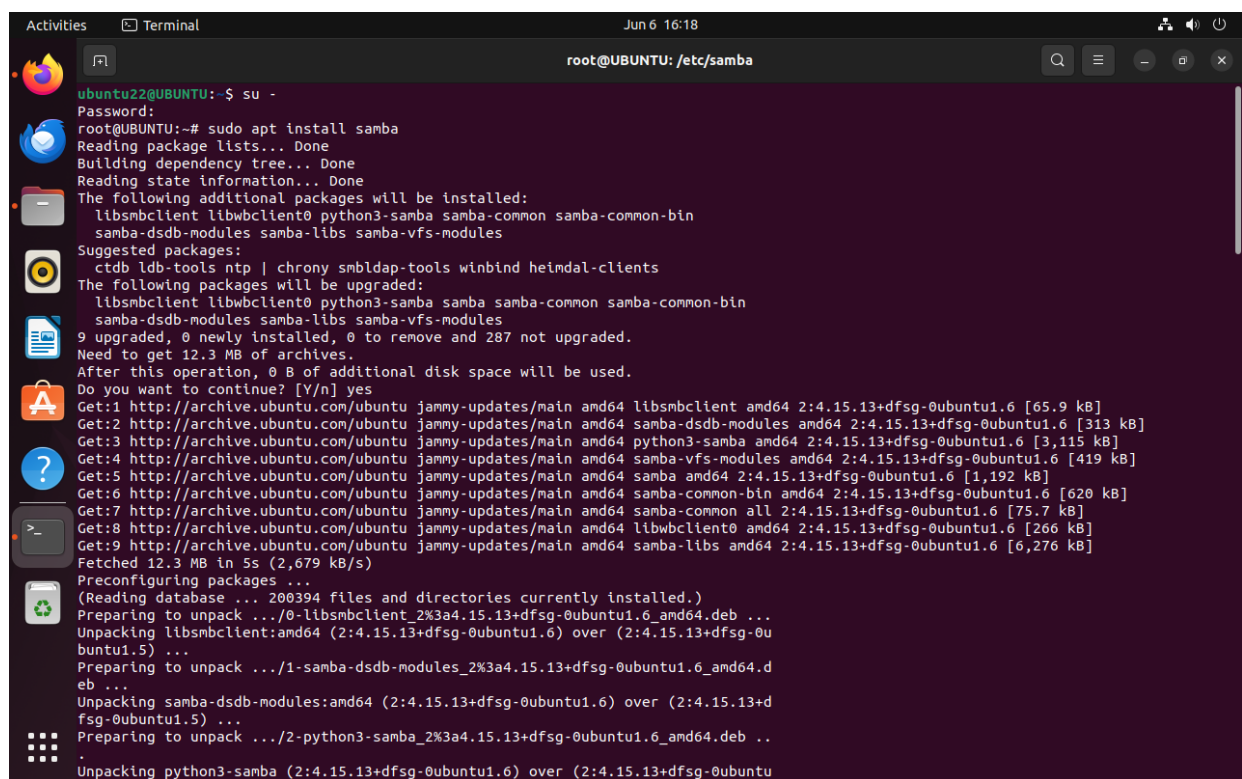
```
$sudo smbpasswd -a username
```

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: /etc/samba
ubuntu22@UBUNTU:~$ su -
Password:
root@UBUNTU:~# sudo apt install samba
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libsmclient libwbclient0 python3-samba samba-common samba-common-bin
  samba-dsdb-modules samba-libs samba-vfs-modules
Suggested packages:
  ctdb ldb-tools ntp | chrony smbldap-tools winbind heimdal-clients
The following packages will be upgraded:
  libsmclient libwbclient0 python3-samba samba samba-common samba-common-bin
  samba-dsdb-modules samba-libs samba-vfs-modules
9 upgraded, 0 newly installed, 0 to remove and 287 not upgraded.
Need to get 12.3 MB of archives.
After this operation, 0 B of additional disk space will be used.
Do you want to continue? [Y/n] yes
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libsmclient amd64 2:4.15.13+dfsg-0ubuntu1.6 [65.9 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba-dsdb-modules amd64 2:4.15.13+dfsg-0ubuntu1.6 [313 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 python3-samba amd64 2:4.15.13+dfsg-0ubuntu1.6 [3,115 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba-vfs-modules amd64 2:4.15.13+dfsg-0ubuntu1.6 [419 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba amd64 2:4.15.13+dfsg-0ubuntu1.6 [1,192 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba-common-bin amd64 2:4.15.13+dfsg-0ubuntu1.6 [620 kB]
Get:7 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba-common all 2:4.15.13+dfsg-0ubuntu1.6 [75.7 kB]
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libwbclient0 amd64 2:4.15.13+dfsg-0ubuntu1.6 [266 kB]
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba-libs amd64 2:4.15.13+dfsg-0ubuntu1.6 [6,276 kB]
Fetched 12.3 MB in 5s (2,679 kB/s)
Preconfiguring packages ...
(Reading database ... 200394 files and directories currently installed.)
Preparing to unpack .../0-libsmclient_2%3a4.15.13+dfsg-0ubuntu1.6_amd64.deb ...
Unpacking libsmclient:amd64 (2:4.15.13+dfsg-0ubuntu1.6) over (2:4.15.13+dfsg-0ubuntu1.5) ...
Preparing to unpack .../1-samba-dsdb-modules_2%3a4.15.13+dfsg-0ubuntu1.6_amd64.deb ...
Unpacking samba-dsdb-modules:amd64 (2:4.15.13+dfsg-0ubuntu1.6) over (2:4.15.13+dfsg-0ubuntu1.5) ...
Preparing to unpack .../2-python3-samba_2%3a4.15.13+dfsg-0ubuntu1.6_amd64.deb ...
Unpacking python3-samba (2:4.15.13+dfsg-0ubuntu1.6) over (2:4.15.13+dfsg-0ubuntu1.5) ...
```

```
Activities Terminal Jun 6 15:51
root@UBUNTU: /etc/samba

root@UBUNTU:/etc/samba# sudo ufw allow samba
Rules updated
Rules updated (v6)
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 119 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 2s (105 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 231957 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
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::baf:b255:e5ba:c37c prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:0e:3c:4f txqueuelen 1000 (Ethernet)
    RX packets 5633 bytes 4279640 (4.2 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4040 bytes 602196 (602.1 KB)
    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 1043 bytes 121270 (121.2 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1043 bytes 121270 (121.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
Activities Files Jun 6 16:19
Screenshot captured
You can paste the image from the clipboard.

The folder 'hrn on 127.0.0.1' contains 2 items:
  hrn  hrn

Recent
Starred
Home
Documents
Downloads
Music
Pictures
Videos
Trash
hrn on 127.0.0.1
+ Other Locations

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

root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# nano smb.conf
root@UBUNTU:/etc/samba# nano smb.conf
```

```
Activities Terminal Jun 6 15:53 root@UBUNTU: /etc/samba

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 119 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 2s (105 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 231957 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
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::bafb:b255:e5ba:c37c prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:0e:3c:4f txqueuelen 1000 (Ethernet)
    RX packets 5633 bytes 4279640 (4.2 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4040 bytes 602196 (602.1 KB)
    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 1043 bytes 121270 (121.2 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1043 bytes 121270 (121.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

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

Activities Terminal Jun 6 15:49 root@UBUNTU: /etc/samba

GNU nano 6.2 smb.conf
; guest ok = no
; browseable = no
; create mask = 0600
; directory mask = 0700

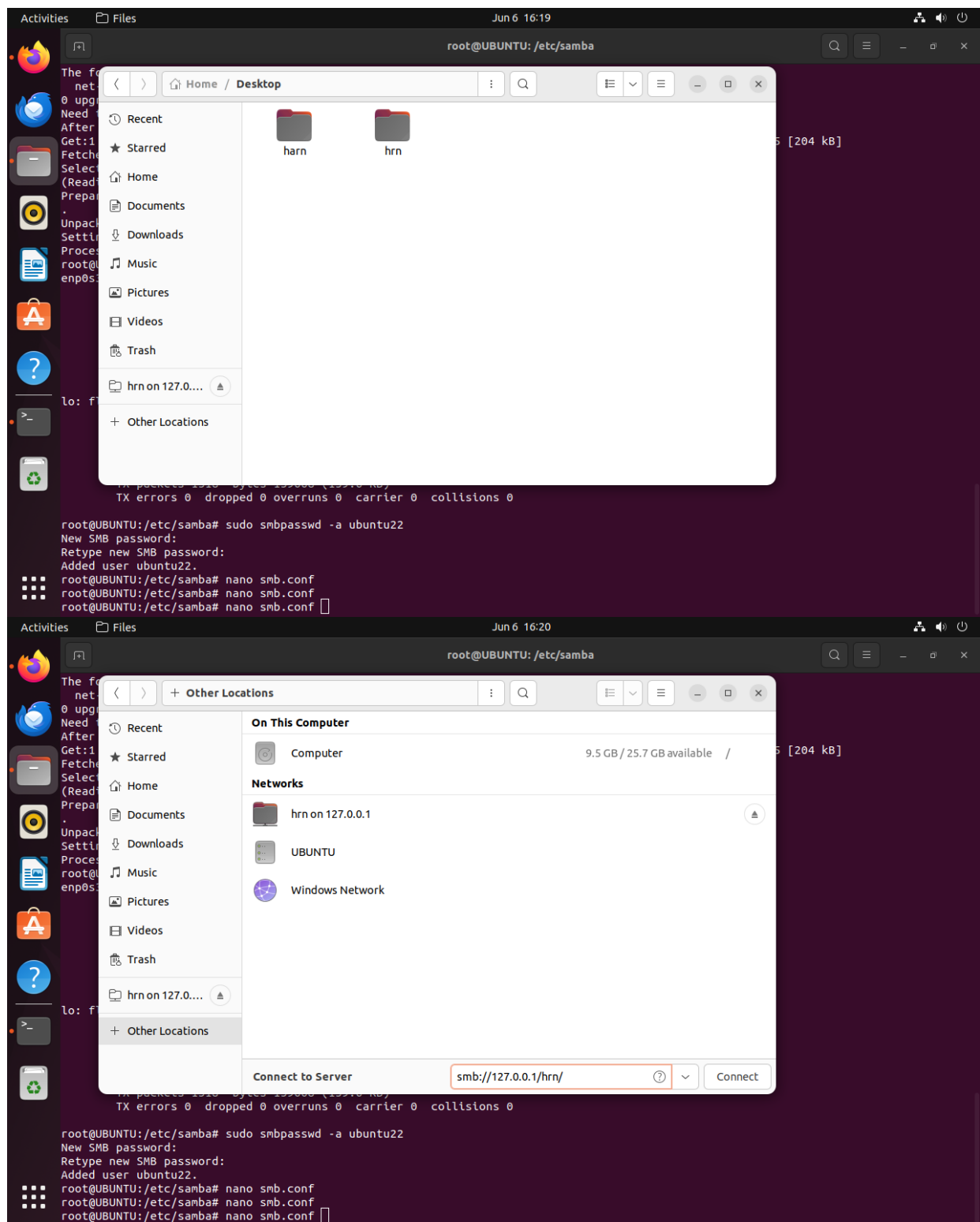
[printers]
comment = All Printers
browseable = no
path = /var/spool/samba
printable = yes
guest ok = no
read only = yes
create mask = 0700

# 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

[ftdha]
path=/home/ubuntu22/Desktop
browseable = yes
read only = yes
guest ok = yes

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location ^U Undo ^A Set Mark
```



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