Samba - Sharing files from Ubuntu

Samba is a free and open-source re-implementation of the SMB/CIFS network file sharing protocol that allows end users to access files, printers, and other shared resources.

#linux #sharing #samba

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1. Installation

Samba is available from the official Ubuntu repositories. To install it on Ubuntu system follow the steps below:

1. Start by updating the apt packages index:

```
sudo apt update
```

2. Install the Samba package with the following command:

```
sudo apt install -y samba
```

3. Once the installation is completed, the Samba service will start automatically. To check whether the Samba server is running, type:

```
sudo systemctl status smbd
```sh
smbd.service - Samba SMB Daemon
Loaded: loaded (/lib/systemd/system/smbd.service; enabled; vendor preset:
enabled)
Active: active (running) since Mon 2021-07-12 15:30:57 +07; 1min 41s ago
 Docs: man:smbd(8)
 man:samba(7)
 man:smb.conf(5)
Main PID: 4059 (smbd)
Status: "smbd: ready to serve connections..."
 Tasks: 4 (limit: 2329)
CGroup: /system.slice/smbd.service
 ├─4059 /usr/sbin/smbd --foreground --no-process-group
 ├─4061 /usr/sbin/smbd --foreground --no-process-group
 ├4062 /usr/sbin/smbd --foreground --no-process-group
 └─4064 /usr/sbin/smbd --foreground --no-process-group
Jul 12 15:30:57 ubuntu18 systemd[1]: Starting Samba SMB Daemon...
Jul 12 15:30:57 ubuntu18 systemd[1]: Started Samba SMB Daemon.
```

### 2. Add an user

Samba has its own user management system. However, any user existing on the samba user list must also exist within /etc/passwd file. Use the smbpasswd command to add an user to Samba user list:

```
sudo smbpasswd -a vqtrong
```

## 3. Configuration

Before making changes to the Samba configuration file, create a backup for future reference purposes:

```
sudo cp /etc/samba/smb.conf{,.backup}
```

Edit the Samba configuration file

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

The default configuration file that ships with the Samba package is configured for standalone Samba server. Open the file and make sure <code>server role</code> is set to <code>standalone server</code>.

```
Most people will want "standalone sever" or "member server".

Running as "active directory domain controller" will require first

running "samba-tool domain provision" to wipe databases and create a

new domain.

server role = standalone server

...
```

Uncomment the [home] section, then edit its options as below:

```
[homes]
 comment = Home Directories
 browseable = yes
 read only = no
 create mask = 0700
 directory mask = 0700
 valid users = %S
```

i Use mask 0775 to enable execution permission.

Save the file, then test the params by running the utility testparm to see the configs:

```
testparm

Load smb config files from /etc/samba/smb.conf
rlimit_max: increasing rlimit_max (1024) to minimum Windows limit (16384)
WARNING: The "syslog" option is deprecated
Processing section "[homes]"
Processing section "[printers]"
Processing section "[printers]"
```

```
Loaded services file OK.
Server role: ROLE_STANDALONE
Press enter to see a dump of your service definitions
Global parameters
[global]
 dns proxy = No
 log file = /var/log/samba/log.%m
 map to guest = Bad User
 max log size = 1000
 obey pam restrictions = Yes
 pam password change = Yes
 panic action = /usr/share/samba/panic-action %d
 passwd chat = *Enter\snew\s*\spassword:* %n\n *Retype\snew\s*\spassword:* %n\n
password\supdated\ssuccessfully .
 passwd program = /usr/bin/passwd %u
 server role = standalone server
 server string = %h server (Samba, Ubuntu)
 syslog = 0
 unix password sync = Yes
 usershare allow guests = Yes
 idmap config * : backend = tdb
[homes]
 comment = Home Directories
 create mask = 0700
 directory mask = 0700
 read only = No
 valid users = %S
[printers]
 browseable = No
 comment = All Printers
 create mask = 0700
 path = /var/spool/samba
 printable = Yes
[print$]
 comment = Printer Drivers
 path = /var/lib/samba/printers
```

Then restart the service:

```
sudo service smbd restart
```

Finally, connect to the Samba Server from another computer with username and password set in above steps. The path to the Samba server can be located by IP Address, e.g. \\192.168.100.12\\\cusername>\ or by a computer name, e.g. \\\ubuntu\\\\cusername>\.