Install Samba on 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

Last update: 2021-07-21 20:42:01

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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
```

```
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 `server role` is set to `standalone server`.

```
...
# 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
```

> ℹ️ Use mask `0775` to enable execution permission.

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

```
testparm
```

```
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 "[print$]"
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\<username>` or by a computer name, e.g. `\\ubuntu\<username>` .