



How to Install and Configure Samba
on Linux Mint 21.2

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How to Install and Configure Samba on Linux Mint 21.2

By [Karim Buzdar](#). Published on 26/07/2023.

[Samba](#) is a sharing software that can operate on different operating systems. It is equipped with built-in security tools that are used to secure your data while sharing across the networks. One of its key advantages is that the Samba server is freely

available to everyone. Through this platform, you can effortlessly share files, printers, and other data over a network.

In this article, you will gain the skills to install and configure Samba on [Linux Mint 21.2](#). Furthermore, you will be guided through a practical example of sharing files and resources using Samba.

How to Install and Configure Samba on Linux Mint 21.2?

The sequential steps given below will be utilized to install and configure the Samba, a sharing software, on Linux Mint 21.2.

Step 1: Linux Mint Release

The command will display brief information of the Linux Mint:

```
lsb_release -a
```

```
genie@Linuxmint:~$ lsb_release -a
No LSB modules are available.
Distributor ID: Linuxmint
Description:   Linux Mint 21.2
Release:      21.2
Codename:     victoria
genie@Linuxmint:~$
```

Step 2: Update Linux Mint Packages

The below command will keep your Linux Mint packages up to date:

```
sudo apt update
```

```
genie@Linuxmint:~$ sudo apt update
[sudo] password for genie: Password
Hit:1 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Ign:4 http://packages.linuxmint.com victoria InRelease
Get:5 http://archive.ubuntu.com/ubuntu jammy-backports InRelease [108 kB]
Hit:6 http://packages.linuxmint.com victoria Release
Fetched 337 kB in 2s (148 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
8 packages can be upgraded. Run 'apt list --upgradable' to see them.
genie@Linuxmint:~$
```

Step 3: Upgrade Linux Mint Packages

To upgrade your Linux Mint 21.2 and get the latest versions of installed applications, run this command in the terminal:

```
sudo apt upgrade -y
```

```
genie@Linuxmint:~$ sudo apt upgrade -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
  curl libcurl3-gnutls libcurl4 xapp-appimage-thumbnailer xapp-epub-thumbnailer xapp-mp3-thumbnailer
  xapp-raw-thumbnailer xapp-thumbnaillers-common
8 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 784 kB of archives.
After this operation, 0 B of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libcurl3-gnutls amd64 7.81.0-1ubuntu1.13 [
284 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 curl amd64 7.81.0-1ubuntu1.13 [194 kB]
Get:3 http://packages.linuxmint.com victoria/main amd64 xapp-thumbnaillers-common all 1.2.2 [3,488 B]
Get:4 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libcurl4 amd64 7.81.0-1ubuntu1.13 [290 kB]
Get:5 http://packages.linuxmint.com victoria/main amd64 xapp-appimage-thumbnailer all 1.2.2 [3,188 B]
Get:6 http://packages.linuxmint.com victoria/main amd64 xapp-epub-thumbnailer all 1.2.2 [3,044 B]
Get:7 http://packages.linuxmint.com victoria/main amd64 xapp-mp3-thumbnailer all 1.2.2 [2,692 B]
Get:8 http://packages.linuxmint.com victoria/main amd64 xapp-raw-thumbnailer all 1.2.2 [2,760 B]
Fetched 784 kB in 5s (172 kB/s)

Preparing to unpack .../6-xapp-raw-thumbnailer_1.2.2_all.deb ...
Unpacking xapp-raw-thumbnailer (1.2.2) over (1.2.1+victoria) ...
Setting up xapp-thumbnaillers-common (1.2.2) ...
Setting up xapp-appimage-thumbnailer (1.2.2) ...
Setting up xapp-mp3-thumbnailer (1.2.2) ...
Setting up libcurl4:amd64 (7.81.0-1ubuntu1.13) ...
Setting up xapp-epub-thumbnailer (1.2.2) ...
Setting up curl (7.81.0-1ubuntu1.13) ...
Setting up xapp-raw-thumbnailer (1.2.2) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
genie@Linuxmint:~$
```

All the Linux Mint 21.2 package files are now upgraded with the latest versions.

Step 4: Install Samba Package

The command mentioned below will install the complete package of Samba on Linux Mint 21.2:

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

```

genie@Linuxmint:~$ sudo apt install samba -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  ibverbs-providers libcephfs2 libgfs2 libgfrpc0 libgfsxdr0 libglusterfs0 libibverbs1 librados2
  librdmacm1 samba-vfs-modules tdb-tools
Suggested packages:
  bind9 bind9utils ctdb ldb-tools ntp | chrony smbldap-tools winbind
The following NEW packages will be installed:
  ibverbs-providers libcephfs2 libgfs2 libgfrpc0 libgfsxdr0 libglusterfs0 libibverbs1 librados2
  librdmacm1 samba samba-vfs-modules tdb-tools
0 upgraded, 12 newly installed, 0 to remove and 0 not upgraded.
Need to get 6,869 kB of archives.
After this operation, 39.6 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 tdb-tools amd64 1.4.5-2build1 [26.2 kB]
Get:2 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 samba amd64 2:4.15.13+dfsg-0ubuntu1.2 [1,192 kB]
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 libibverbs1 amd64 39.0-1 [69.3 kB]
Get:4 http://archive.ubuntu.com/ubuntu jammy/main amd64 ibverbs-providers amd64 39.0-1 [341 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy/main amd64 librdmacm1 amd64 39.0-1 [71.2 kB]
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 librados2 amd64 17.2.5-0ubuntu0.22.04.3 [39.6 kB]
debconf: delaying package configuration, since apt-utils is not installed
Created symlink /etc/systemd/system/multi-user.target.wants/smbd.service → /lib/systemd/system/smbd.service.
samba-ad-dc.service is a disabled or a static unit, not starting it.
Setting up libgfsxdr0:amd64 (10.1-1ubuntu0.1) ...
Setting up librdmacm1:amd64 (39.0-1) ...
Setting up librados2 (17.2.5-0ubuntu0.22.04.3) ...
Setting up libcephfs2 (17.2.5-0ubuntu0.22.04.3) ...
Setting up libgfrpc0:amd64 (10.1-1ubuntu0.1) ...
Setting up libgfs2 (10.1-1ubuntu0.1) ...
Setting up libgfsxdr0:amd64 (10.1-1ubuntu0.1) ...
Processing triggers for ufw (0.36.1-4build1) ...
Rules updated for profile 'Samba'

Processing triggers for man-db (2.10.2-1) ...
Processing triggers for libc-bin (2.35-0ubuntu3.1) ...
genie@Linuxmint:~$

```

Based on the above message mentioned in the screenshot, Samba has been installed along with its associated libraries and dependencies.

How to Configure Samba on Linux Mint 21.2?

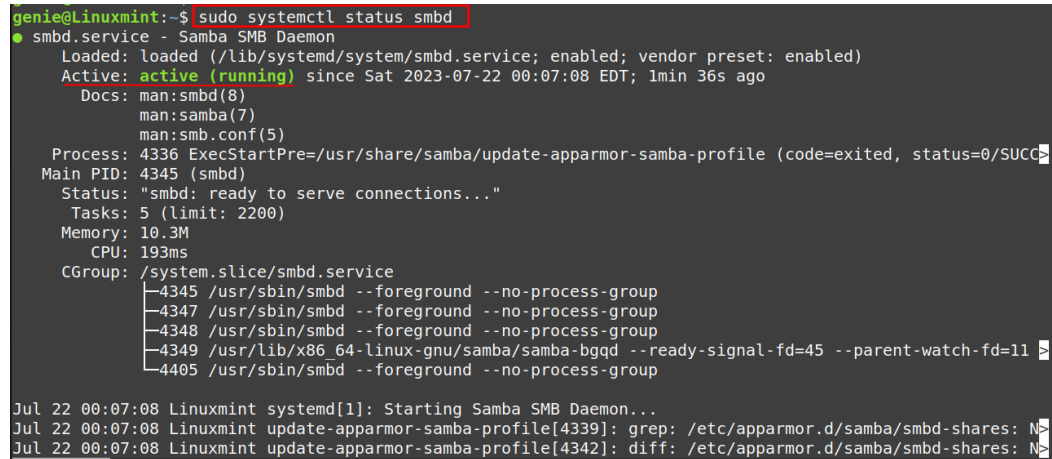
The following instruction will be utilized to configure the Samba on your Linux Mint 21.2.

Step 1: Samba Status Check

Before jumping into the Samba configuration, you need to activate the

Samba services. Here is the command:

```
sudo systemctl status smbd
```



```
genie@Linuxmint:~$ sudo systemctl status smbd
● smbd.service - Samba SMB Daemon
   Loaded: loaded (/lib/systemd/system/smbd.service; enabled; vendor preset: enabled)
   Active: active (running) since Sat 2023-07-22 00:07:08 EDT; 1min 36s ago
     Docs: man:smbd(8)
           man:samba(7)
           man:smb.conf(5)
  Process: 4336 ExecStartPre=/usr/share/samba/update-apparmor-samba-profile (code=exited, status=0/SUCCESS)
 Main PID: 4345 (smbd)
    Status: "smbd: ready to serve connections..."
      Tasks: 5 (limit: 2200)
    Memory: 10.3M
       CPU: 193ms
    CGroup: /system.slice/smbd.service
            └─4345 /usr/sbin/smbd --foreground --no-process-group
              └─4347 /usr/sbin/smbd --foreground --no-process-group
                └─4348 /usr/sbin/smbd --foreground --no-process-group
                  └─4349 /usr/lib/x86_64-linux-gnu/samba/samba-bgqd --ready-signal-fd=45 --parent-watch-fd=11
                    └─4405 /usr/sbin/smbd --foreground --no-process-group

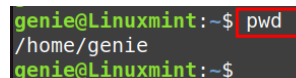
Jul 22 00:07:08 Linuxmint systemd[1]: Starting Samba SMB Daemon...
Jul 22 00:07:08 Linuxmint update-apparmor-samba-profile[4339]: grep: /etc/apparmor.d/samba/smbd-shares: No such file or directory
Jul 22 00:07:08 Linuxmint update-apparmor-samba-profile[4342]: diff: /etc/apparmor.d/samba/smbd-shares: No such file or directory
```

The screenshot presented above indicates that the Samba is active and ready to use.

Step 2: Check Present Working Directory

The command “**pwd**” will display your current working directory:

```
pwd
```



```
genie@Linuxmint:~$ pwd
/home/genie
genie@Linuxmint:~$
```


As you can see, we are currently in the

“/home/genie” location of the drive.

Step 3: Make Directory

In Linux operating systems, the “**mkdir**” command is used to create a directory/folder from the command line:

```
mkdir GenieShared
```

A terminal window screenshot showing the command 'mkdir GenieShared' being entered and executed. The prompt is 'genie@Linuxmint:~\$'. The command is highlighted with a red box. The output is 'genie@Linuxmint:~\$' on the next line.

```
genie@Linuxmint:~$ mkdir GenieShared
genie@Linuxmint:~$
```

Here it can be seen that we have created an empty directory with the name “GenieShared”.

Step 4: List the “GenieShared”

Run the “**ls**” command from your terminal to show if the “GenieShared” has been created in the “/home/genie/”:

```
ls
```

```
genie@Linuxmint:~$ ls
Desktop Documents Downloads GenieShared Music Pictures Public Templates Videos
genie@Linuxmint:~$
```

You can see the “GenieShared” directory is present.

Step 5: Create a Password for the User

Using the following command will be run from the terminal to generate an authentication password against the user such as “genie”:

```
sudo smbpasswd -a genie
```

```
genie@Linuxmint:~$ sudo smbpasswd -a genie
New SMB password:
Retype new SMB password:
genie@Linuxmint:~$
```

You have successfully created a new password for the “genie”.

Step 6: Edit Samba Configuration File

To open the Samba configuration file, the following command is attached for your reference:

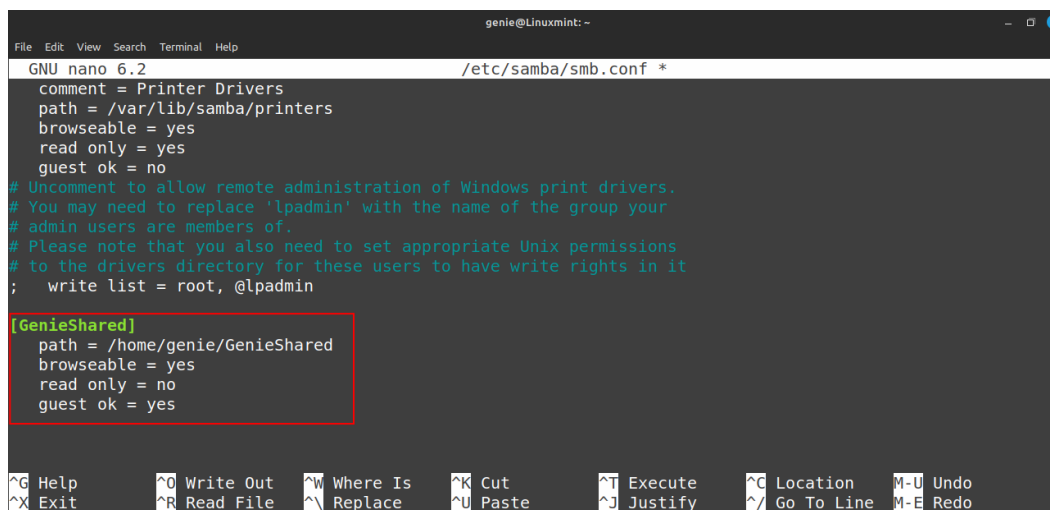

```
sudo nano /etc/samba/smb.conf
```

```
genie@Linuxmint:~$ sudo nano /etc/samba/smb.conf
genie@Linuxmint:~$
```

Once you have entered the 'smb.conf' file, the Samba configuration file, scroll down to the end and add the script provided below. Save the file by pressing Ctrl+S and exit by Ctrl+X:

```
[GenieShared]
path = /home/genie/GenieShared
browseable = yes
read only = no
guest ok = yes
force user = genie
```

ver <https://forums.linuxmint.com/viewtopic.php?t=354439>



```
genie@Linuxmint: ~
File Edit View Search Terminal Help
GNU nano 6.2 /etc/samba/smb.conf *
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

[GenieShared]
path = /home/genie/GenieShared
browseable = yes
read only = no
guest ok = yes

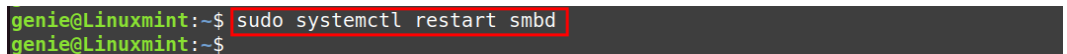
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location  M-U Undo
^X Exit      ^R Read File ^N Replace   ^U Paste     ^J Justify   ^_ Go To Line M-E Redo
```

The script can also be examined in the above example.

Step 7: Restart Samba Services

Run the command presented below to restart the Samba services of your Linux Mint 21.2:

```
sudo systemctl restart smbd
```

A terminal window screenshot showing the command 'sudo systemctl restart smbd' being entered and executed. The prompt is 'genie@linuxmint:~\$'. The command is highlighted with a red box. The output is an empty line, indicating successful execution.

```
genie@linuxmint:~$ sudo systemctl restart smbd
genie@linuxmint:~$
```

The empty result indicates that Samba has restarted successfully.

Step 8: Display Your System IP Address

Using the below command will display the IP address of your Linux Mint 21.2:

```
ifconfig
```

```
genie@Linuxmint:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.10.15 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::cc95:a457:d58b:f2ba prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:56:49:0c txqueuelen 1000 (Ethernet)
    RX packets 9073 bytes 12199905 (12.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 7238 bytes 654940 (654.9 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 199 bytes 21856 (21.8 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 199 bytes 21856 (21.8 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

genie@Linuxmint:~$
```

As you can see, our Linux Mint is running on the IP “192.168.10.15”. Your IP may differ from this one, so replace it with your IP address.

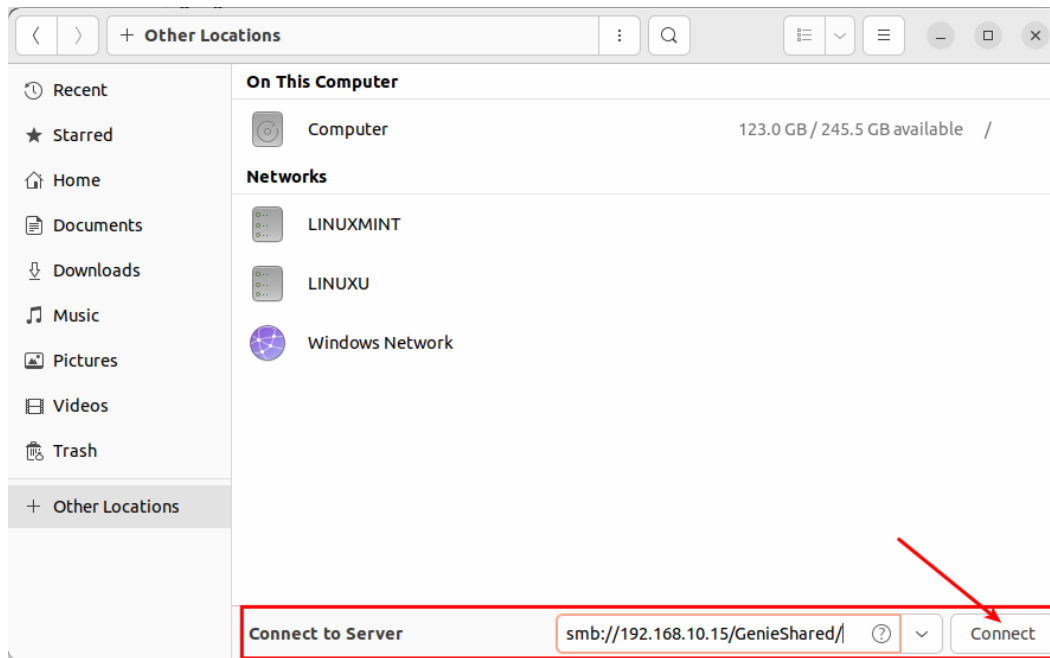
How to Access the Samba Shared Directory from Ubuntu 22.04?

Here are a few steps that can be used to access the directory shared through Samba.

Step 1: Access “GenieShared” via IP Address

First of all, go to the “other Locations”. In the “Connect to Server” address bar, copy your system IP address and shared folder in the following pattern. Lastly, press the “Connect” button:

smb://192.168.10.15/GenieShared



In the below screenshot, you can see we have accessed the “GenieShared” directory, which was created in Linux Mint 21.2: