# Samba File Share Settings

- Samba is named after the Server Message Block (SMB) protocol. SMB is a Microsoft protocol for file and printer sharing across a network
- For more details on any of these commands, be sure to read the man pages from the command line for each command, e.g. **man smbpasswd**, **man pdbedit**, etc...
- Samba log files are saved at /var/log/samba. These might be useful to review if you are having any problems
- Samba uses port 445. Be sure to enable this port in your firewall

## Sequence:

### 1. Install samba

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

This will install the SAMBA file server to your server

### 2. Create new config file

```
cd /etc/samba
sudo mv smb.conf smb.conf.ORIGINAL
sudo nano smb.conf
```

Samba comes with a lengthy default configuration file (smb.conf), which lists all of its options. Rather than trying to edit this, it is easier to back it up and make a new one. Here we move into the /etc/samba directory and rename the config file to smb.conf.ORIGINAL. We then use the nano text editor to create and open a new file.

You will need to use sudo when creating the new config file. The config lines to be added are listed on **page 2 below**

### 3. Restart samba

```
sudo service smbd restart
```

To have Samba use the new config file you must restart it.

### 4. Set permissions on the /srv directory

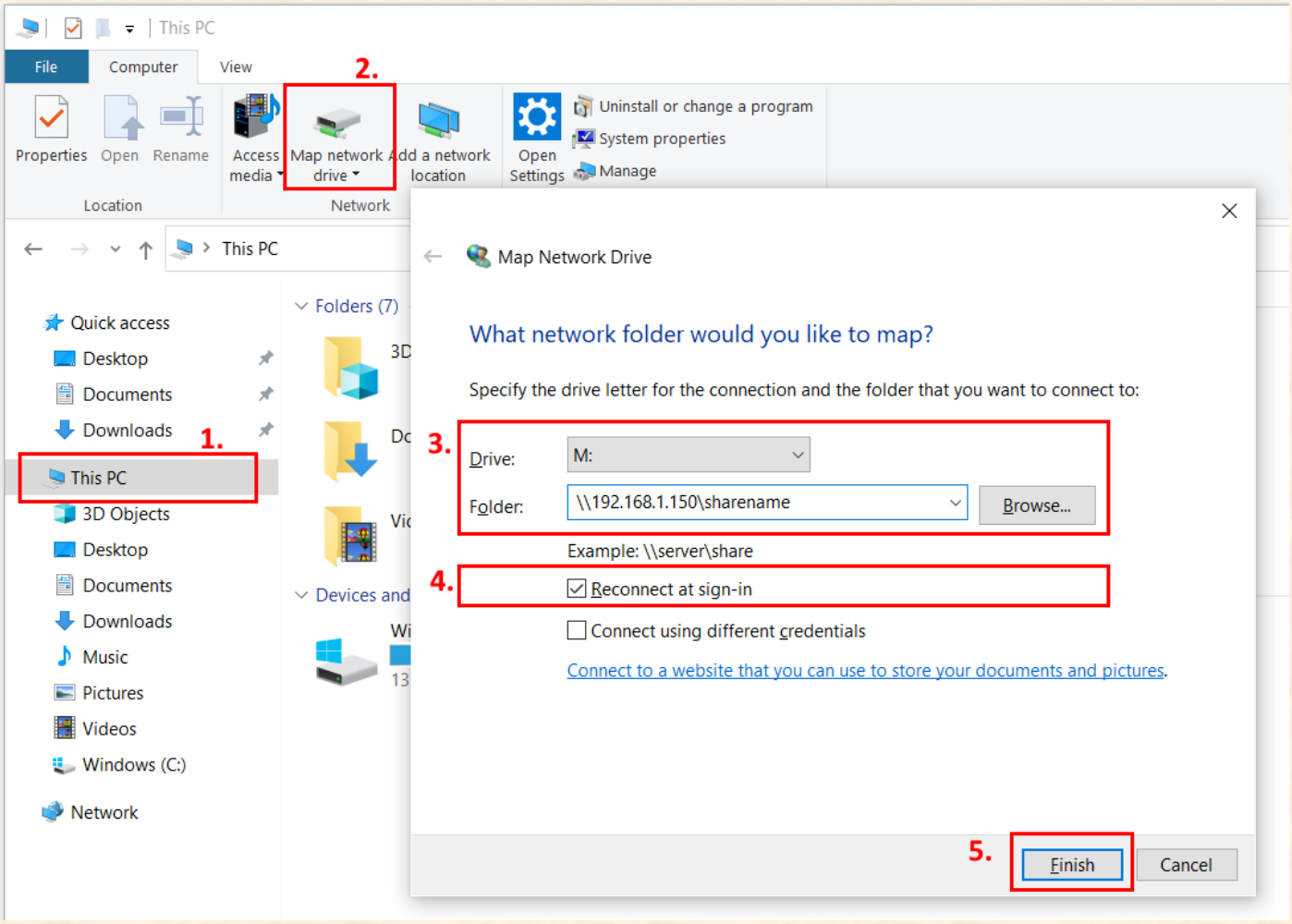
```
sudo chmod 777 /srv
```

In this video, we use /srv as the folder for the file share. By default, this is owned by the root user. To allow the **jupiter** user to create and delete files on it, set the permissions to 777.

### 5. Connect to the file share from your laptop, desktop or phone

From a Windows 10 laptop:

1. Open File Explorer and click This PC
2. Click Map Network Drive
3. Enter the Drive Letter you want to use and the folder. Be sure to add the \\ before the server IP address
4. Tick the option to reconnect at sign in. This remembers this file share for when you shut down and start up your laptop again
5. Click Finish. The network file share should open straight away for you.




| **/etc/samba/smb.conf format** |
|---|
| [global]<br>map to guest = bad user<br>guest account = jupiter<br><br>[sharename]<br>path = /srv<br>writable = yes<br>guest ok = yes<br>create mask = 0666<br>directory mask = 0777<br>vfs object = recycle<br>recycle:repository = /srv/RecycleBin<br>recycle:keeptree = yes<br>recycle:versions = yes<br>recycle:exclude = *.tmp,*.temp<br>recycle:exclude_dir = RecycleBin<br>recycle:directory_mode = 0777<br>recycle:subdir = 0777 |

| | |
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| **[global]** | These are options that apply to the behavior of the Samba server itself and not to any of the specific shares |
| **map to guest** | When set to 'bad user', it allows users to use the file share without having to log in, and they will be assigned the guest account |
| **guest account** | This is used to specify the account that guest users should be assigned when connecting to the Samba server. If you remove this entry you can still use the file share, but your files will be assigned a owner account called 'nobody' |

| | |
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| **[sharename]** | Share specific options control the behaviour of the file shares you configure. You can have more than one file share, pointing to different paths for example.<br>You connect to the file share by browsing to \\server_ip_address\sharename, i.e. 192.168.178.150\files |
| **path** | The location of the folder on the server being used as the file share. |
| **writable** | Required so you can write to the file share, i.e. upload and save files |
| **guest ok** | Required so you can access the file share without having to enter a password to log in |
| **create mask** | Assigns the permissions to give to files created on or uploaded to the file share |
| **directory mask** | Assigns the permissions to folders created on the fileshare |
| **vfs object** | Enable the Recycle Bin module |
| **recycle:repository** | Set the path/folder for where deleted items will go |
| **recycle:keeptree** | If a deleted item is within a folder, that folder will be recreated within the Recycle Bin. This keeps the folder structure, making it easier for you to see where deleted files were stored before deletion |
| **recycle:versions** | If two files with the same name are deleted, two versions will be created in the Recycle Bin |
| **recycle:exclude** | File types to be excluded. These will not go to the Recycle Bin and will be permanently deleted |
| **recycle:exclude_dir** | Folders to be excluded from the Recycle Bin. You need to include your Recycle Bin folder here |
| **recycle:directory_mode** | Permissions of the Recycle Bin folder. 777 is required in order to browse into it |
| **recycle:subdir** | Permissions of sub-folders created within the Recycle Bin folder |