

## Linux 406 - Network raspberry pi

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**Networking.** Most systems use Samba to move files and NetBios for connecting, two different daemon apps.

**NetBios.** Windows no longer recognizes NetBios discovery, so Linux must send a Web Service Directory Discovery (wsdd).

**Wsdd.** The daemon lets the local Linux computer see remote Windows and other Linux. 'wsdd-server' lets remote Windows see local Linux, but not other way around. Wsdd-server loads both. However, wsdd does not work with Kubuntu which uses an alternative daemon.

These are Debian-12 instructions.

```
sudo apt install wsdd ; installed in Orange, still not visible
or sudo apt install wsdd-server ; not part of raspberry package
sudo apt-get -y autoremove --purge wsdd
```

**Where.** For some reason, the Raspberry unpack puts the service in a different directory, so it must be moved.

```
sudo nano /lib/systemd/system/wsdd.service ; normally should be /etc/
move sudo cp /lib/systemd/system/wsdd.service /etc/systemd/system
```

**Reference.** <https://github.com/christgau/wsdd>, also <https://magpi.raspberrypi.com/articles/samba-file-server>  
<https://devanswe.rs/discover-ubuntu-machines-samba-shares-windows-10-network/>  
<https://allthings.how/how-to-share-files-and-folders-over-a-network-in-windows-11/>

**Samba.** The SMB/CIFS file sharing is cross-platform. Install with `sudo apt install samba`  
Create a shared directory. This command sets the sticky bit (1) to help prevent the directory from being accidentally deleted and gives everyone read/write/execute (777) permissions on it. `sudo mkdir -m 1777 /share`  
Edit Samba's config file. Workgroup is WORKGROUP.

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

To make the directory *share* visible to the Windows PCs on the network, add the following. This no longer works???

```
[share]
Comment = Pi shared folder
Path = /share
Browseable = yes
Writeable = Yes
only guest = no
create mask = 0777
directory mask = 0777
Public = yes
Guest ok = yes
```

Set a Samba password, if you want or use the default. `sudo smbpasswd -a pi`

Restart.

**Running.** See if a system is running. `sudo service wsdd status ; wsdd`  
`systemctl status smbd ; samba`

**Conf.** Comment [HOMES] stanza so everything is accessible???

**Windows can't see Linux.** As noted above, but there is a decent fix. In Windows Explorer or from Search type in remote computer name like "\\Dell-Ubuntu" or 192.168.1.xxx. When pop-up screen, Login.

**Error.** gvfs

Life is good. Enjoy!

