

# Welcome!

## Raspberry Pi Samba

Michael Helfrich

[www.mhelfrich.me](http://www.mhelfrich.me)



THE FLORIDA STATE UNIVERSITY



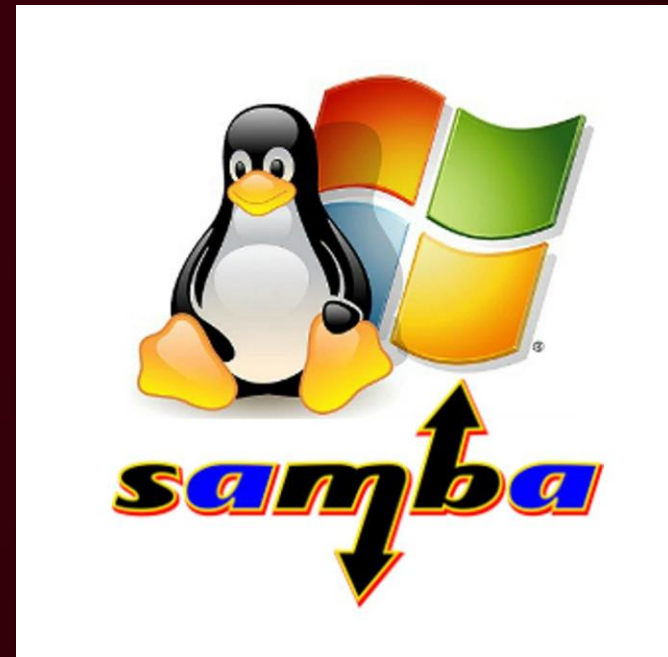
# Topics

- What is Samba?
- What can we do with Samba?
- Installing and configuring Samba



# What is Samba?

- **Samba** – Standard Windows interoperability suite for Linux and Unix.
- Extremely lightweight.
- Very easy to setup and maintain.



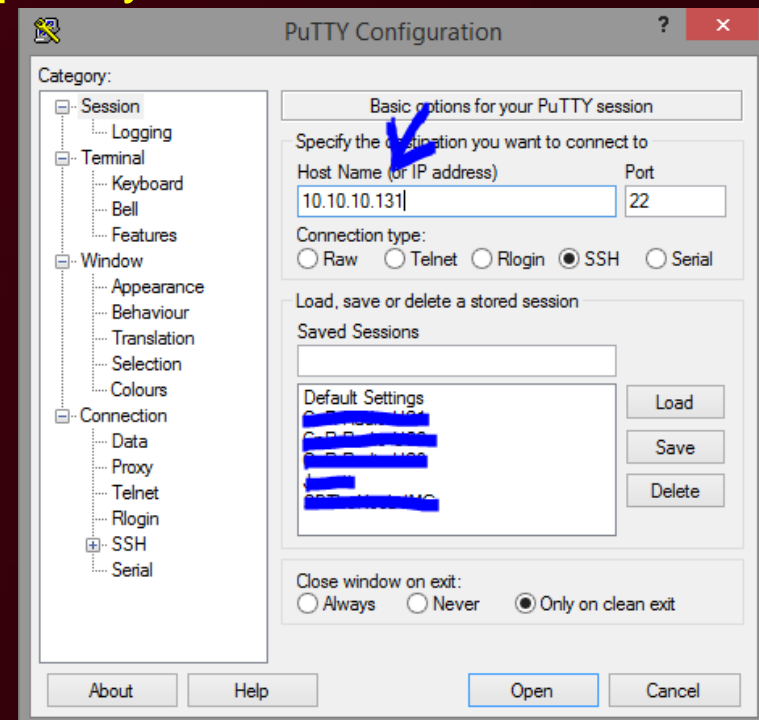
# Why would I want Samba?

- Setup network shares for remote storage
  - Create network drives and give specific users access to read/write/execute.
- Setup networked printers
  - Plug a USB printer in and create a networked printer.
- Retrieve files from home over a VPN with Samba.



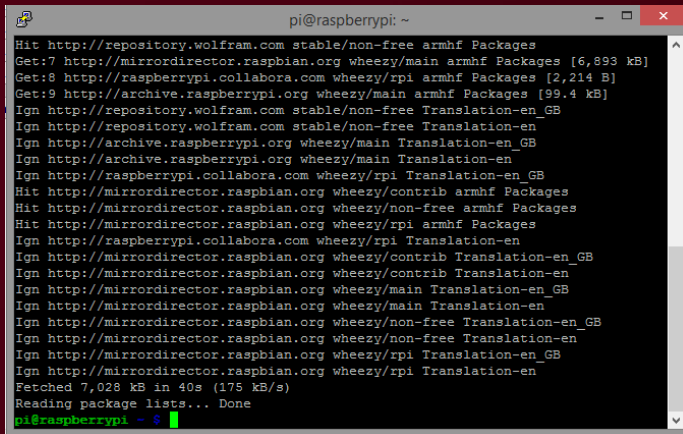
# 1. SSH into the Raspberry Pi

- We need to SSH into the Raspberry Pi.
- This assumes we know the IP address and that the SSH server is running. By default, it will be running on port 22
- If you need obtain the IP, plug your Raspberry Pi into a TV/Monitor.
- Login with the following credentials:
  - Username: pi
  - Password: raspberry
- Run the command `ifconfig`
- It will return an IP address

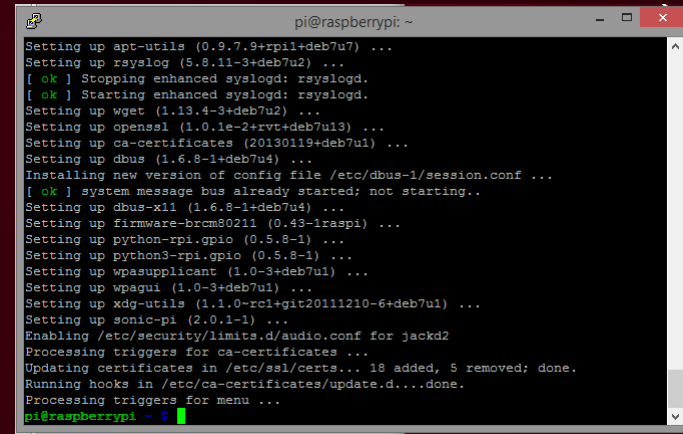


# 2. Run Updates/Upgrades

- We need to make sure the repositories and packages on the Raspberry Pi are up-to-date.
- Run the following commands:
  - `sudo apt-get update`
  - `sudo apt-get upgrade`
- Follow the prompts and answer Y when necessary.



```
pi@raspberrypi: ~  
Hit http://repository.wolfram.com stable/non-free armhf Packages  
Get:7 http://mirrordirector.raspbian.org wheezy/main armhf Packages [6,893 kB]  
Get:8 http://raspberrypi.collabora.com wheezy/rpi armhf Packages [2,214 B]  
Get:9 http://archive.raspberrypi.org wheezy/main armhf Packages [99.4 kB]  
Ign http://repository.wolfram.com stable/non-free Translation-en_GB  
Ign http://repository.wolfram.com stable/non-free Translation-en  
Ign http://archive.raspberrypi.org wheezy/main Translation-en_GB  
Ign http://archive.raspberrypi.org wheezy/main Translation-en  
Ign http://raspberrypi.collabora.com wheezy/rpi Translation-en_GB  
Hit http://mirrordirector.raspbian.org wheezy/contrib armhf Packages  
Hit http://mirrordirector.raspbian.org wheezy/non-free armhf Packages  
Hit http://mirrordirector.raspbian.org wheezy/rpi armhf Packages  
Ign http://raspberrypi.collabora.com wheezy/rpi Translation-en  
Ign http://mirrordirector.raspbian.org wheezy/contrib Translation-en_GB  
Ign http://mirrordirector.raspbian.org wheezy/contrib Translation-en  
Ign http://mirrordirector.raspbian.org wheezy/main Translation-en_GB  
Ign http://mirrordirector.raspbian.org wheezy/main Translation-en  
Ign http://mirrordirector.raspbian.org wheezy/non-free Translation-en_GB  
Ign http://mirrordirector.raspbian.org wheezy/non-free Translation-en  
Ign http://mirrordirector.raspbian.org wheezy/rpi Translation-en_GB  
Ign http://mirrordirector.raspbian.org wheezy/rpi Translation-en  
Fetched 7,028 kB in 40s (175 kB/s)  
Reading package lists... Done  
pi@raspberrypi ~ $
```



```
pi@raspberrypi: ~  
Setting up apt-utils (0.9.7.9+rp1+deb7u7) ...  
Setting up rsyslog (5.8.11-3+deb7u2) ...  
[ ok ] Stopping enhanced syslogd: rsyslogd.  
[ ok ] Starting enhanced syslogd: rsyslogd.  
Setting up wget (1.13.4-3+deb7u2) ...  
Setting up openssl (1.0.1e-2+rvt+deb7u13) ...  
Setting up ca-certificates (20130119+deb7u1) ...  
Setting up dbus (1.6.8-1+deb7u4) ...  
Installing new version of config file /etc/dbus-1/session.conf ...  
[ ok ] system message bus already started: not starting..  
Setting up dbus-x11 (1.6.8-1+deb7u4) ...  
Setting up firmware-brcm80211 (0.43-1raspi) ...  
Setting up python3-rpi.gpio (0.5.8-1) ...  
Setting up python3-rpi.gpio (0.5.8-1) ...  
Setting up wpasupplicant (1.0-3+deb7u1) ...  
Setting up wpagui (1.0-3+deb7u1) ...  
Setting up xdg-utils (1.1.0-rc1+git20111210-6+deb7u1) ...  
Setting up sonic-pi (2.0.1-1) ...  
Enabling /etc/security/limits.d/audio.conf for jackd2  
Processing triggers for ca-certificates ...  
Updating certificates in /etc/ssl/certs... 18 added, 5 removed; done.  
Running hooks in /etc/ca-certificates/update.d...done.  
Processing triggers for menu ...  
pi@raspberrypi ~ $
```



# 3. Install Samba

- We need to start the installation process for Samba!
- Run the following command:
  - `sudo apt-get install samba samba-common-bin`
- The command above will fetch the Samba package and install it for you.



# 4. Configuring Samba

- We need to configure Samba
- Run the following command:
  - `sudo smbpasswd -a pi`
- The above command will allow you to set a Samba password for the Linux user, pi.
- Run the following command:
  - `sudo nano /etc/samba/smb.conf`





# 5. Configuring Samba

Once "smb.conf" has loaded, add this to the very end of the file:

```
[network]
```

```
path = /home/pi/
```

```
available = yes
```

```
valid users = pi
```

```
read only = no
```

```
browseable = yes
```

```
public = no
```

```
writable = yes
```



# 6. Starting Samba

- We need to start motion now!
- Run the following command:
  - `sudo service samba restart`
- We can now access the share from any computer on our network!
  - Open My Computer on any computer and enter the following:
    - \\IP\network\
    - Make sure to change IP to your Raspberry Pi's IP address.
- You can even map it as a network drive on your computers!



# Questions?



Feel free to ask any questions you may have now!



**E-mail:**

[me@michaelhelfrich.com](mailto:me@michaelhelfrich.com)

**Twitter:**

[@HelfrichMichael](https://twitter.com/HelfrichMichael)

**LinkedIn:**

<http://mht.pw/LIN>