Simon the Pi Man

To Infinity (probably) and beyond
(A beginners Resource for the Raspberry Pi computer using the Debian distro)
475995 since June 2012

If you are looking for info on the Raspberry Pi computer stay on this site
however
If you are looking for a good cafe in Rye in East Sussex try "Simon the Pie man" near the church.

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How2SetUp remote access to a Raspberry Pi Computer

One of a set of simple easy to use guides for beginners to set up a Raspberry Pi computer.

The first problem i have is that the only TV in the house with an hdmi interface is in my front room and my nearest network port is in my study and i dont have any long ethernet cables.

So i need to enable remote access on my Raspberry Pi

Now to get started just plug the hdmi or RCA cable into the pi, and plug it into the telly then plug in the sdcard with the Operating system(See How2Setup sdcard) into the pi card slot finally plug in the Raspberry Pi power lead, the pi should boot up to a login prompt

```
login as:
```

Then enter the default username which is **pi** and the default password which is **raspberry**

you should now see some system messages and a prompt

```
pi@raspberrypi:~$
```

- this shows that you are logged in as user pi on the machine called raspberry

The first thing i want to do is fix my I.P. address you dont have to but it makes life easier to connect to a known IP address

We need to fix the I.P address by editing the **/etc/network/interfaces** file using either the vi or pico editor(I will for this article assume you know either vi or pico) - so at the prompt edit the file using vi or pico - i am oldskool so I use vi

```
root@raspberrypi:~# sudo vi /etc/network/interfaces
```

```
The default interfaces file content will be shown on your screen
-----------------------------------------------------------------
# Used by ifup(8) and ifdown(8). See the interfaces(5) manpage or
# /usr/share/doc/ifupdown/examples for more information.

auto lo
```

```
iface lo inet loopback
iface eth0 inet dhcp
-----------------------------------------------------------------
```

We need to change the eth0(the first and only ethernet port on the pi) detail so we comment out the current eth0 line by adding a # to the front of the line and add further lines to define a fixed IP address.
In my case my network is run on 192.168.1.1 from a BT internet box (see How2Setup Find my I.P. details) therefore I want to fix the address to 192.168.1.200 so i add the lines below.

```
#iface eth0 inet dhcp
iface eth0 inet static

  address 192.168.1.200
  netmask 255.255.255.0
  network 192.168.1.0
  broadcast 192.168.1.255
  gateway 192.168.1.1
```

and now save the file.
Lets just check the entries have been saved correctly so type
root@raspberrypi:~# sudo cat /etc/network/interfaces
and the file contents will be displayed on the TV check the above lines are shown.

Next we want the [Raspberry Pi] when attached to the network to find a DNS server therefore we edit the **/etc/resolv.conf** file and add the google DNS nameservers so that internet names will work. You may want to use your default gateway I.P so that the requests go to your ISP instead of google but that is your choice.
root@raspberrypi:~# sudo vi /etc/resolv.conf

```
-----------------------------------------------------
nameserver 208.67.220.220
nameserver 208.67.222.222
nameserver 10.10.10.10
-----------------------------------------------------
```

however i will add the google ones as they are usually fast so the top 2 entries are new

```
-----------------------------------------------------
nameserver 8.8.8.8
nameserver 8.8.4.4
nameserver 208.67.220.220
nameserver 208.67.222.222
nameserver 10.10.10.10
-----------------------------------------------------
```

and now save the file.
just to check the entries have saved correctly type
root@raspberrypi:~# sudo cat /etc/resolv.conf
and the file contents will be displayed on the TV

OK lets restart the network so that the changes are applied
root@raspberrypi:~# sudo service networking restart

Now i need the ssh(Secure Shell) service to start at boot, otherwise it wont start and I will be unable to login remotely
root@raspberrypi:~# sudo mv /boot/boot enable ssh.rc /boot/boot.rc

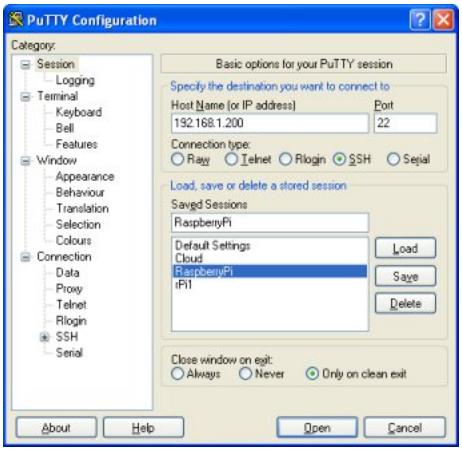
Now I will shutdown the Raspberry Pi attached to my TV so i can move it to the study and plug in the LAN cable - so type

```
root@raspberrypi:~# sudo shutdown -h now
```

When System stopped appears - unplug and move to the nearest LAN port and plug back in the Raspberry Pi will automatically start.

Now to connect to the Raspberry Pi from a windows PC you will need to install putty which is a secure ssh client for windows.

Once installed run putty.exe and fill in the Hostname with the IP of your Raspberry Pi so in my case **192.169.1.200** port must be **22** and fill in Saved Sessions with **RaspberryPi** then click save - the RaspberryPi will appear in the lower list as shown below.



To connect to the Raspberry Pi just click on the saved RaspberryPi entry and then click **[Load]** then **[Open]** you should now see a console window(see image below) open with a prompt of
login as:
shown - ok now just login as user **pi** with a password of **raspberry**.

If you do not get this screen appearing then either your pi's IP address is wrong or your ssh has not started - please go back and retrace your steps through this web page.

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The Raspberry Pi Foundation is a UK registered charity which exists to promote the study of computer science and related topics, especially at school level, and to put the fun back into learning computing.

Please Note:- any mention of the **Raspberry Pi** computer on these pages

refers to the Raspberry Pi Foundation's product, who also have trademark rights to the term 'Raspberry Pi'.