

Raspberry Pi



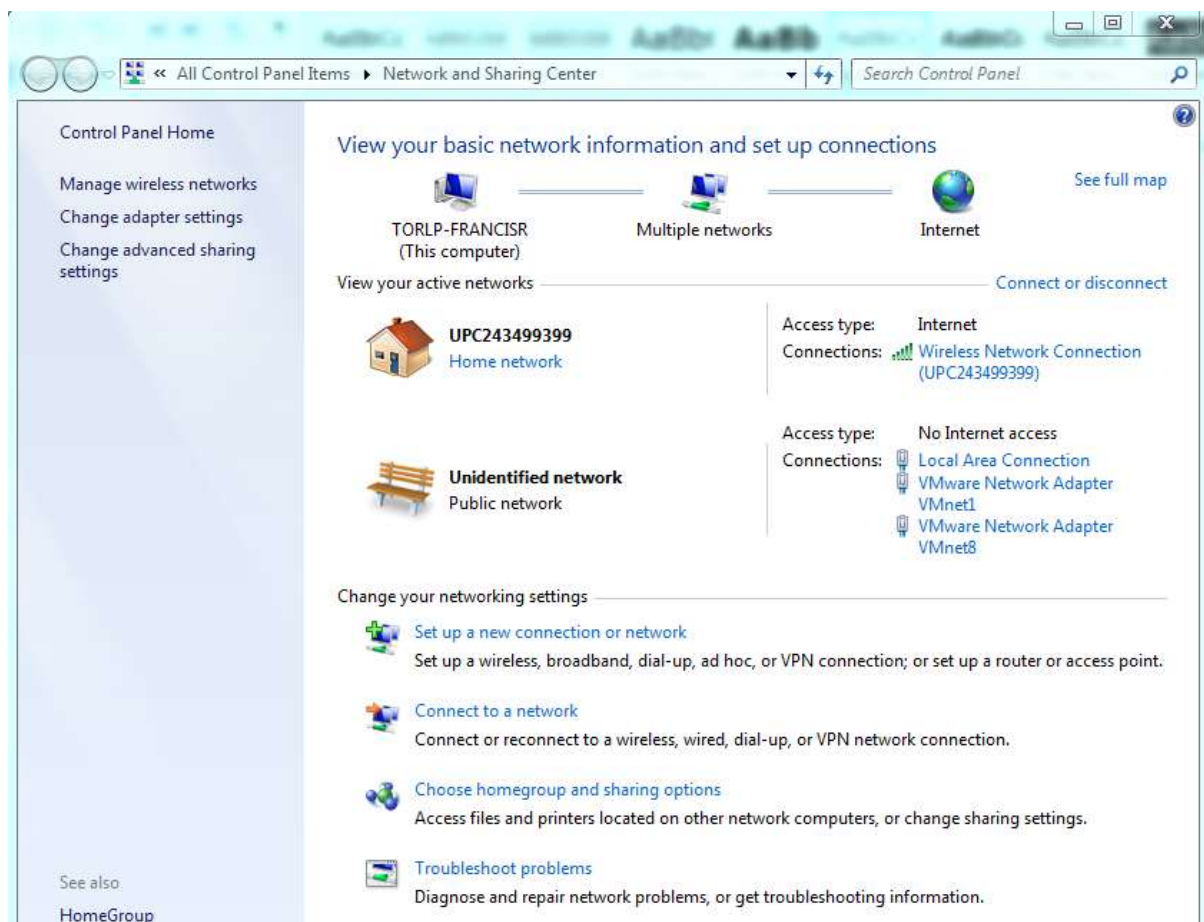
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1 If your Pi does not have a Wifi Dongle then you can still connect it to your Wifi network using your PC as a Bridge. This will allow the Pi to send traffic through the Ethernet port to the PC and then out onto your Wifi network – effectively using the PC as a “Bridge”.

You can use this method as an alternative to setting a Static IP address on both the Pi and the Lan Connection and is useful when using your PC and Pi in a headless mode, and accessing the Pi from your PC.

2 Go to the Control Panel and Open the Network and Sharing Centre



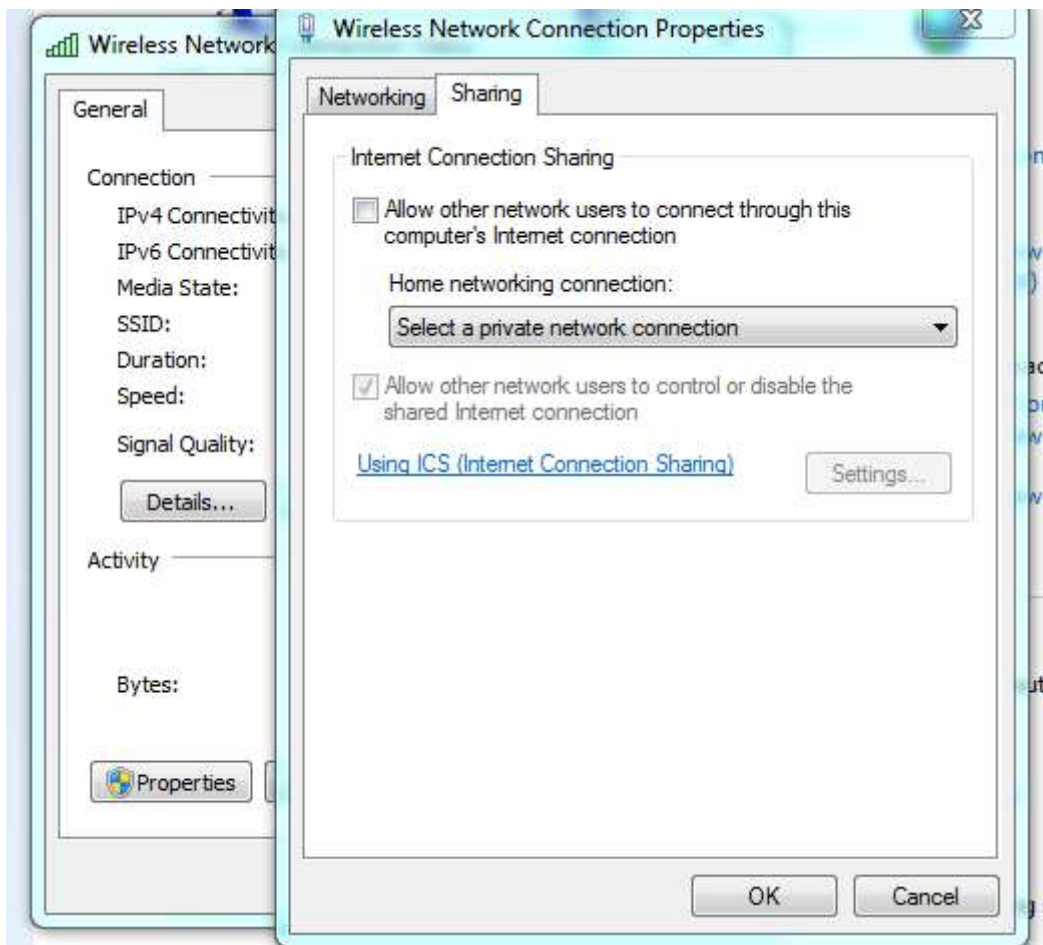
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3 Now click on the **Wireless** connection you are using to connect to the Internet, click on **Properties** and then click the **Sharing** tab.



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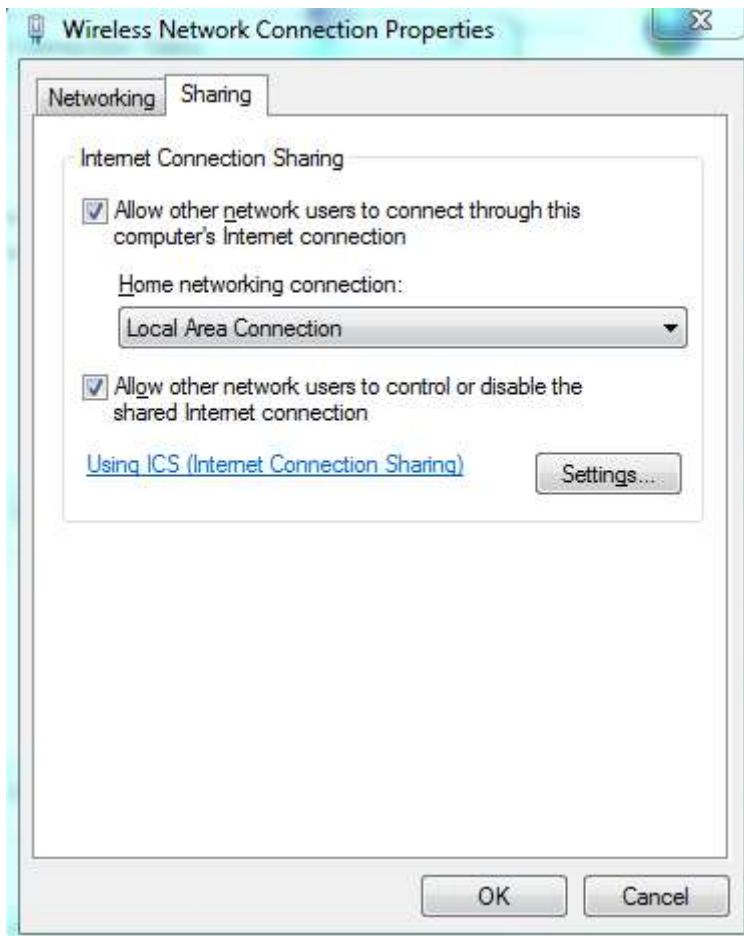


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4 Now allow sharing the Wifi connection with the **Local Area Connection**.

In windows 10 the home networking drop down may not be present.



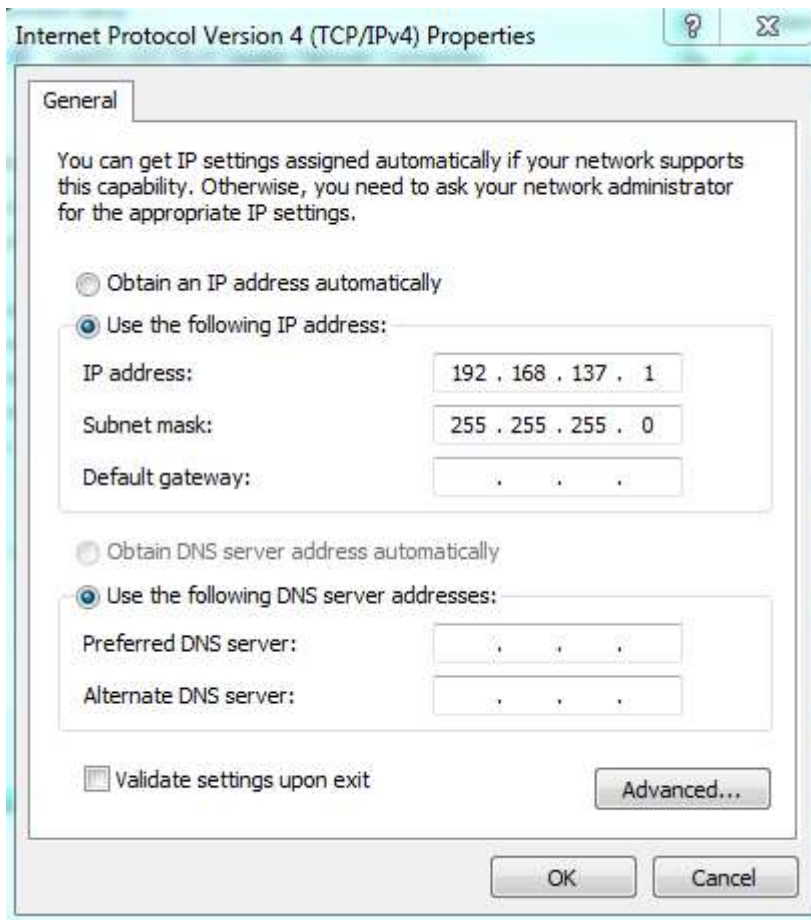
By default windows will manage a private network to the Local Area Network and will automatically provide a **private** IP Address to the Pi (or any device) connected to it.

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The Pi Address will be dynamically allocated from the same IP Range.

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5 The address the Pi will get may vary each time the Pi is connected. One method of finding the Pi is to ping each available IP address. A command line batch file 'findmypi.bat' is included to help automate this.

Once you have run this once, to find out what address your Pi has been given you can run this command in a Command Prompt

```
arp -a
```

```
Administrator: C:\windows\system32\cmd.exe

C:\Users\francisr>arp -a

Interface: 192.168.137.1 --- 0xd
Internet Address      Physical Address      Type
192.168.137.154       b8-27-eb-39-63-fb    dynamic
192.168.137.255       ff-ff-ff-ff-ff-ff    static
224.0.0.22            01-00-5e-00-00-16    static
224.0.0.251           01-00-5e-00-00-fb    static
224.0.0.252           01-00-5e-00-00-fc    static
255.255.255.255       ff-ff-ff-ff-ff-ff    static

Interface: 192.168.2.143 --- 0xe
Internet Address      Physical Address      Type
192.168.2.1           20-d5-bf-a2-79-7e    dynamic
192.168.2.5           00-11-32-0d-f8-a8    dynamic
192.168.2.105         00-00-85-ec-cd-de    dynamic
192.168.2.255         ff-ff-ff-ff-ff-ff    static
224.0.0.2             01-00-5e-00-00-02    static
224.0.0.22            01-00-5e-00-00-16    static
224.0.0.251           01-00-5e-00-00-fb    static
224.0.0.252           01-00-5e-00-00-fc    static
239.255.255.250       01-00-5e-7f-ff-fa    static
255.255.255.255       ff-ff-ff-ff-ff-ff    static
```

Look at the list to find the MAC Address of your Pi. You can then remotely access your Pi!

Once you have located your Pi, you can then use Putty to connect to it. To access the Desktop of the Pi you will need to install TightVNC on both your PC and your Pi. Refer to other Sushi cards in this collection to find out how to do this.

6 Finally, when using this method you may need to set the DNS address manually on the network preferences on the Pi if you want to surf the internet or download additional content to the Pi.

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8.8.8.8 is google's DNS server.