

How to setup WiFi on the Raspberry Pi - Raspbian

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In this tutorial we will show you how to setup WIFI on the Raspberry Pi. This particular tutorial will be focusing on the Raspbian operating system. Tutorials for other Raspberry Pi operating systems, such as OpenELEC, RaspBMC and Arch can be found below:

- [How to setup WIFI on Raspbian](#)
- [How to setup WIFI on OpenELEC XBMC](#)
- [How to setup WIFI on RaspBMC](#)
- [How to setup WIFI on Arch](#)

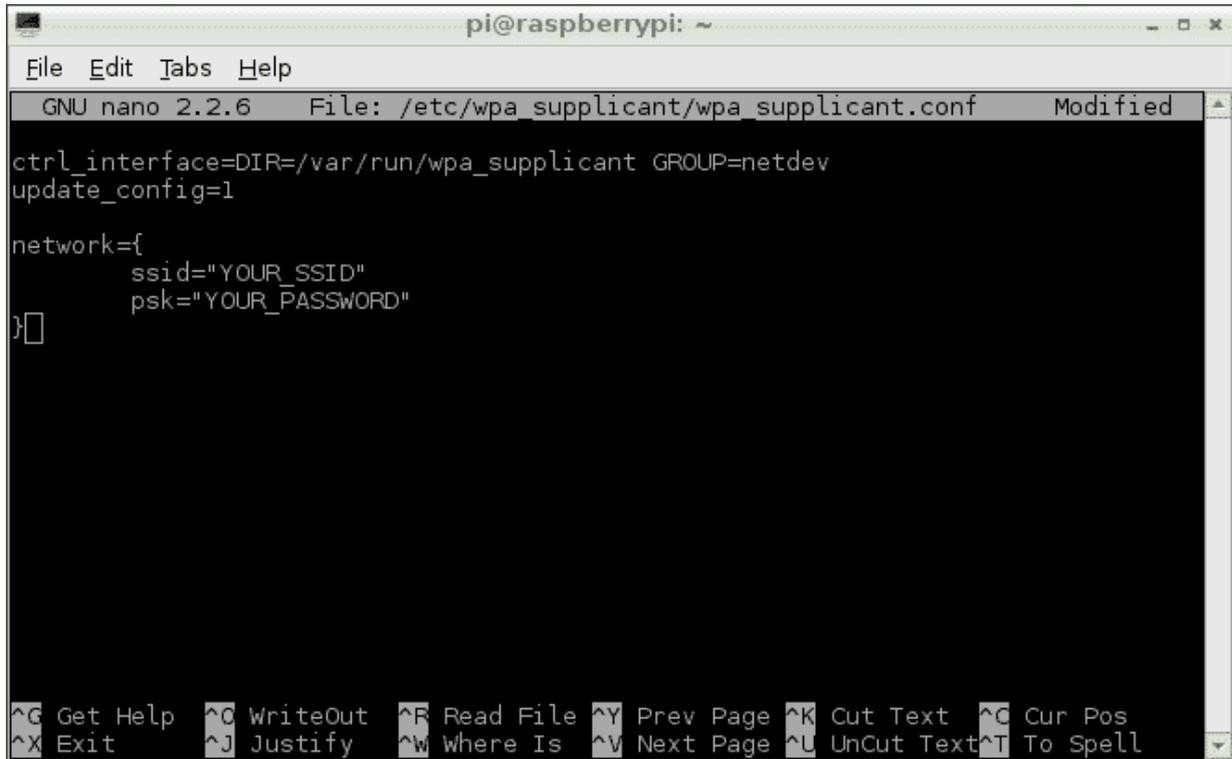
We'll be showing you the two main ways to setup WIFI, both via the GUI (Graphical User Interface) and CMD (Command Line). Let's begin! **1. GUI (Graphical User Interface)**

1. Launch "WIFI Config" from the desktop, this will launch the GUI application for easily configuring wireless networks
2. Click "Scan"
3. Double click your desired network, This will bring up another window containing some more advanced options for connecting to your network. For this example, we are assume you have a simple network setup.
4. In the "PSK" field, enter your wireless password. All keyboard entries here will be converted into *'s for security purposes
5. Once done, click "Add". This will take you back to the previous scan screen, which you can now close. If everything has been done correctly, the WIFI config application will show you as connected



CMD (Command Line) First we're going to make sure our Raspbian operating system is all up to date with the latest drivers. To do this we'll run the following commands `sudo apt-get update` `sudo apt-get upgrade` `sudo apt-get autoremove` We'll want to take a backup of the WIFI configuration file before we start to make changes. `sudo cp /etc/wpa_supplicant/wpa_supplicant.conf`

`/etc/wpa_supplicant/wpa_supplicant.conf.bak` Next up we can edit the file with the "nano" editor. `sudo nano /etc/wpa_supplicant/wpa_supplicant.conf` We want the file to look like the screenshot below. You'll need to swap "YOUR_SSID" and "YOUR_PASSWORD" for your WIFI name and password. Once done, save and close the nano editor

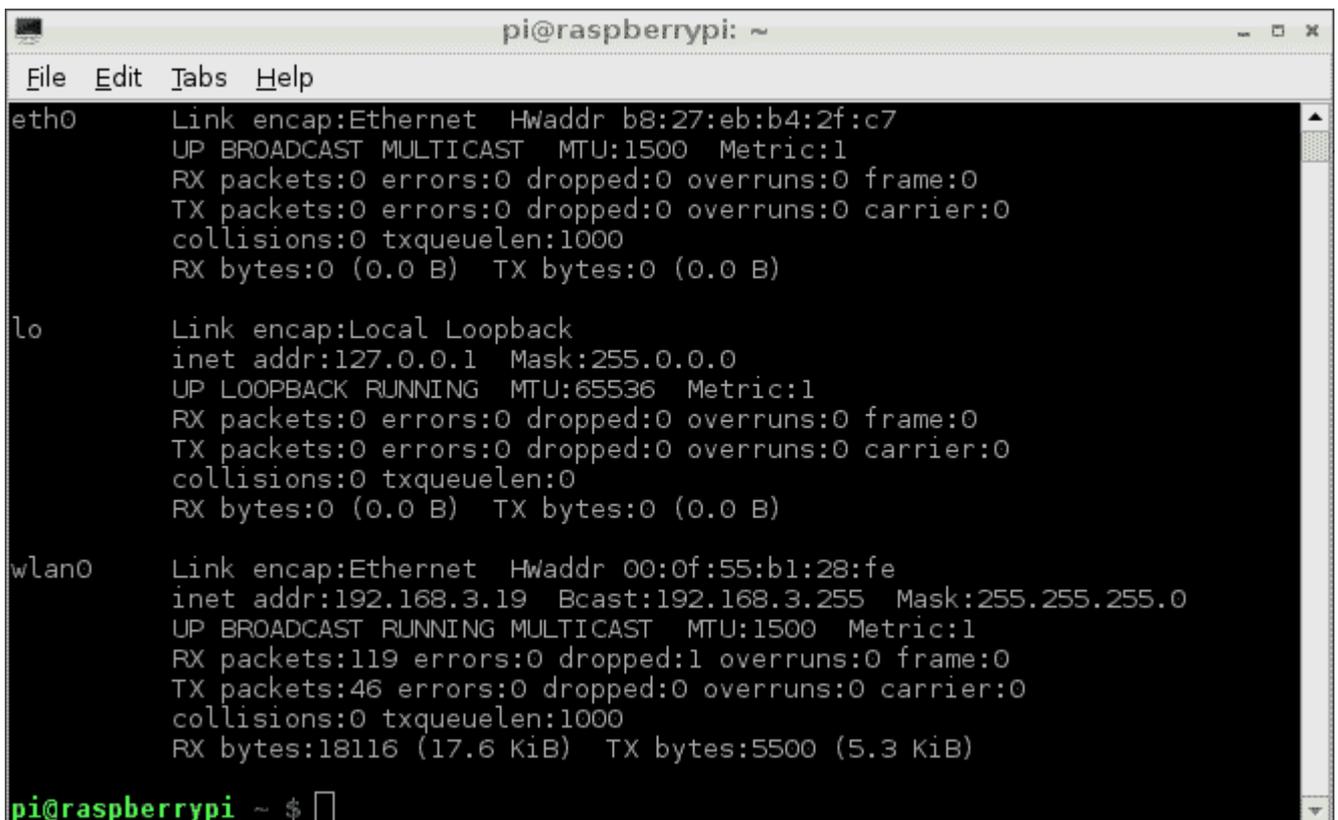


```
pi@raspberrypi: ~
File Edit Tabs Help
GNU nano 2.2.6 File: /etc/wpa_supplicant/wpa_supplicant.conf Modified
ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev
update_config=1

network={
    ssid="YOUR_SSID"
    psk="YOUR_PASSWORD"
}

^G Get Help  ^O WriteOut  ^R Read File  ^Y Prev Page  ^K Cut Text    ^C Cur Pos
^X Exit      ^J Justify   ^W Where Is  ^V Next Page  ^L UnCut Text  ^T To Spell
```

That should be all we need to do to get things going! Reboot your Pi with `sudo reboot` Once your Pi is back up and running, we can run `sudo ifconfig` to see if the change we have made has worked. The screenshot below shows that it has worked and that our WLAN adapter has been assigned an IP address (192.168.3.19 in this example)



```
pi@raspberrypi: ~
File Edit Tabs Help
eth0      Link encap:Ethernet  Hwaddr b8:27:eb:b4:2f:c7
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:0 (0.0 B)  TX bytes:0 (0.0 B)

wlan0     Link encap:Ethernet  Hwaddr 00:0f:55:b1:28:fe
          inet addr:192.168.3.19  Bcast:192.168.3.255  Mask:255.255.255.0
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:119 errors:0 dropped:1 overruns:0 frame:0
          TX packets:46 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:18116 (17.6 KiB)  TX bytes:5500 (5.3 KiB)

pi@raspberrypi ~ $
```