Install a Realtek RTL8188CU based **Wireless LAN (WiFi)** 802.11b/g/n network adapter.

- If the Raspberry Pi is powered and not in *halt* mode perform the following at the shell prompt.
- **sudo shutdown –h now**
- The system will shutdown and halt immediately.

Plug in the USB 2.0 WiFi adapter into the top USB 2.0 socket. I generally use the bottom USB 2.0 socket for my powered USB 2.0 hub.

Repower the Raspberry Pi. The USB 2.0 WiFi adapter should be automatically detected and configured using DHCP.

The easy way to do this is to ***startx*** and use the ***WiFi Config*** application link on the default desktop. The ***wpa_gui*** application window will be displayed with *Adapter:* → wlan0 and *Network:* → {blank}. The *Current Status* tab displays the *Status:* → Inactive. Except for the *Last Message:* , all other fields are blank.

- Left-click the ***Scan*** button

The ***Scan results*** application window will additionally be displayed.

- Left-click the ***Scan*** button on this window also

The scan results will now be populated with WiFi networks your USB 2.0 adapter can 'see'.

- Double-click the line corresponding to the desired network SSID

  Note: The WiFi network's *SSID Broadcast*, must be *Enabled*.

The top three fields should be automatically populated based upon the previously performed *scan*. Typically your WiFi network should be setup for *Authentication:* → **WPA2 Personal (PSK)** and *Encryption:* → **CCMP**.

- Enter the PSK: → *{your passphrase}*
- Left-click the ***Add*** button to add the network to you list of networks
- Left-click the ***Close*** button to exit the *Scan results* window

At this point you are now connected to the selected WiFi network.

Back at the ***wpa_gui*** window on the *Current Status* tab. Note that for *Adapter:* → wlan0 and *Network:* → your SSID all of the additional fields have been populated. Note that this tab supplies you DHCP assigned *IP address*. Now save the configuration.

- Left-click ***File → Save Configuration Ctrl+S***

You may now exit the *wpa_gui* window. *wpa_gui* will continue to run in background and be available in the tool tray.