

WIFI Configuration for PiCar-X

You need to configure/modify WIFI connection for PiCar-X, if it has not already been configured/modified. For this purpose, you should modify a WIFI configuration file called *wpa-supPLICant.conf* in the Micro SD card of the PiCar-X. To do so, the first step is connecting to the Raspberry Pi in order to get to a terminal. you can do this by connecting the Raspberry Pi to a monitor and keyboard. Then, you can login to the Raspberry Pi with the default Raspberry Pi credentials:

```
Username: pi
```

```
Password: raspberry
```

If your personal computer is working on a linux system, you can access the directory directly to modify the configuration file. However, if your PC use Windows system, then you can't access the directory and what you need next is to go to the directory, and create a new file with the same name (*wpa-supPLICan*). To open the file in nano, type the following command:

```
pi@raspberrypi:~ $ sudo nano /etc/wpa_supplicant/wpa_supplicant.conf
```

You can also to go back to the relevant directory step by step to have access to the configuration file (*wpa-supPLICant.conf*). For this purpose, you can respectively use the following commands. In each stage, you can use the command “ls” to see the contents of each directory.

```
pi@raspberrypi:~ $ cd ..
```

```
pi@raspberrypi:/home $ cd ..
```

```
pi@raspberrypi:/ $ cd etc
```

```
pi@raspberrypi:/etc $ cd wpa_supplicant
```

```
pi@raspberrypi:/etc/wpa_supplicant $ sudo nano wpa_supplicant.conf
```

Then, you can scroll down to the end of the file and add the following to the file to configure your network. Remember to replace this with your own network name and password.

```
network={  
  
    ssid="cognitehackathon"  
  
    psk="cognite123"  
  
}
```

Now, you can save (Ctrl+O) and close (Ctrl+X) the file. At this point, the Raspberry Pi should automatically connect to your network. If the file “wpa_supplicant.conf” is empty, you can write the complete code with name and password of your network as follows:

```
Ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev  
  
Update_config=1  
  
country=NO  
  
network={  
  
    ssid="cognitehackathon"  
  
    psk="cognite123"  
  
}
```

Sometimes the Raspberry Pi will not connect automatically and require a reboot to connect. If it doesn't connect after waiting 2-3 minutes try to reboot the pi using the following command:

```
pi@raspberrypi:~ $ sudo reboot
```