

# 智能系统与控制

## 树莓派：多wifi 多静态IP 配置

于泓

鲁东大学

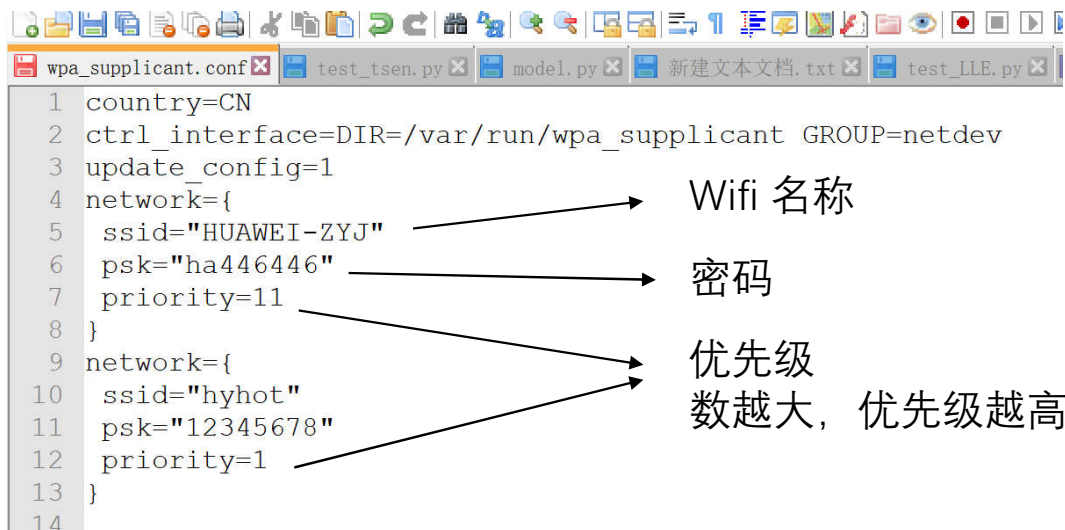
信息与电气工程学院

2021.10.8

# 树莓派 首次wifi连接

创建空文件 ssh

创建文件: wpa\_supplicant.conf



```
1 country=CN
2 ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev
3 update_config=1
4 network={
5     ssid="HUAWEI-ZYJ"
6     psk="ha446446"
7     priority=11
8 }
9 network={
10    ssid="hyhot"
11    psk="12345678"
12    priority=1
13 }
14
```

Wifi 名称

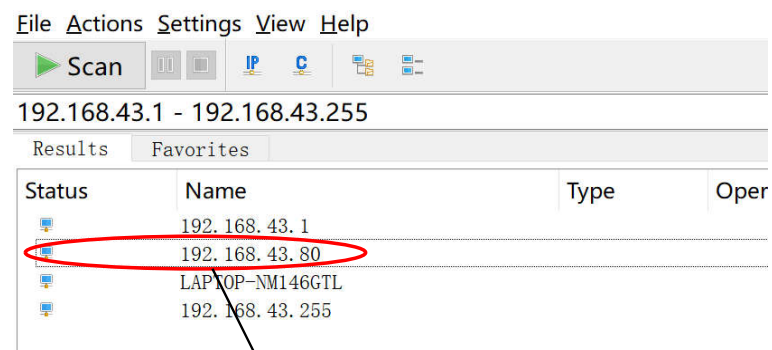
密码

优先级  
数越大, 优先级越高

将上述两个文件, 利用SD卡读卡器文件拷贝到 **boot 根目录**

首次wifi连接：建议使用手机热点

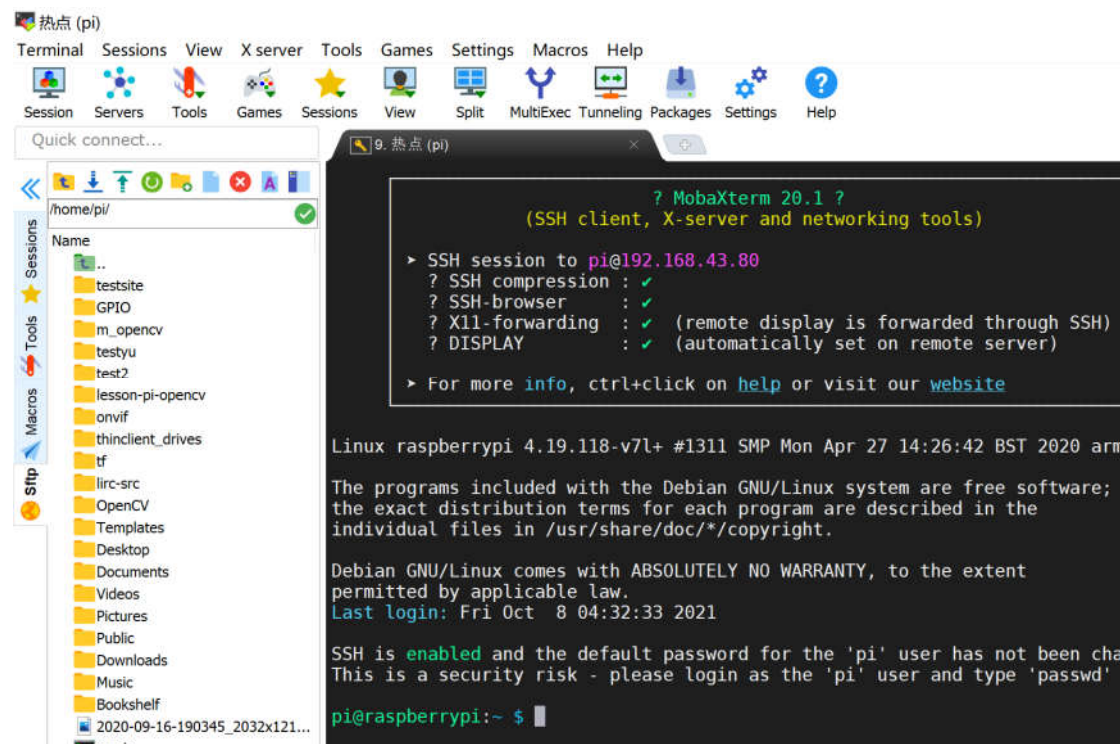
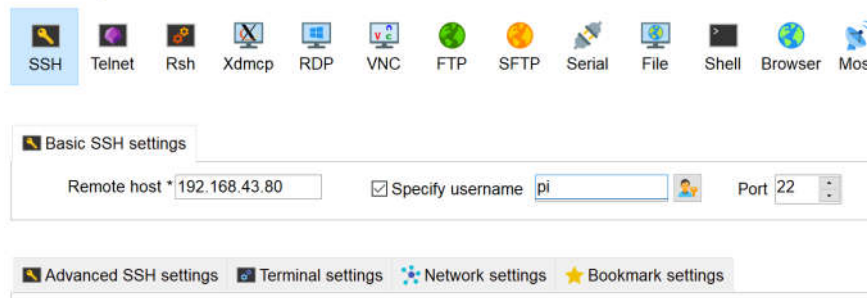
利用 Advanced IP Scanner



找到此时连接的IP

## 利用 ssh 连接工具进行连接（这里使用的是MobaXterm）

Session settings




## 第一步

修改 wpa\_supplicant.conf

具体位置： /etc/wpa\_supplicant/wpa\_supplicant.conf

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

增加一些其他的wifi



```
GNU nano 3.2 /etc/wpa_su  
ctrl_interface=DIR=/var/run/wpa_supplicant GROUP=netdev  
update_config=1  
country=CN  
  
network={  
    ssid="hyhot"  
    psk="12345678"  
    key_mgmt=WPA-PSK  
    priority=20  
}  
  
network={  
    ssid="LDU508"  
    psk="LDUAIGOOD"  
    priority=15  
}  
  
network={  
    ssid="HUAWEI-ZYJ"  
    psk="ha446446"  
    key_mgmt=WPA-PSK  
    priority=11  
}  
  
network={  
    ssid="ldu2020"  
    psk="ldu123456"  
    key_mgmt=WPA-PSK  
    priority=16  
}
```

修改完成后 **ctrl+X** 退出

**Y**,  
**回车**  
保存

## 第二步

`sudo nano /etc/network/interfaces`

```
pi@raspberrypi:~ $ sudo nano /etc/network/interfaces
pi@raspberrypi:~ $
```

输入以下内容

Wifi自动连接

```
GNU nano 3.2 /etc/network/interfaces

# interfaces(5) file used by ifup(8) and ifdown(8)

# Please note that this file is written to be used with dhcpcd
# For static IP, consult /etc/dhcpcd.conf and 'man dhcpcd.conf'

# Include files from /etc/network/interfaces.d:
source-directory /etc/network/interfaces.d

auto lo
iface lo inet loopback

iface eth0 inet manual

allow-hotplug wlan0
iface wlan0 inet manual
    wpa-conf /etc/wpa_supplicant/wpa_supplicant.conf

allow-hotplug wlan1
iface wlan1 inet manual
    wpa-conf /etc/wpa_supplicant/wpa_supplicant.conf
```

## 第三步 设置固定IP

设置： **sudo nano /etc/dhcpd.conf**

在最后部分加入：

连接的路由器  
地址

```
# fallback to static profile on eth0
#interface eth0
#fallback static_eth0
interface wlan0
arping 192.168.1.1
arping 192.168.3.1
arping 192.168.43.1

profile 192.168.1.1
static ip_address=192.168.1.55/24
static routers=192.168.1.1
static domain_name_servers=114.114.114.114

profile 192.168.3.1
static ip_address=192.168.3.24/24
static routers=192.168.3.1
static domain_name_servers=114.114.114.114

profile 192.168.43.1
static ip_address=192.168.43.80/24
static routers=192.168.43.1
static domain_name_servers=114.114.114.114
```