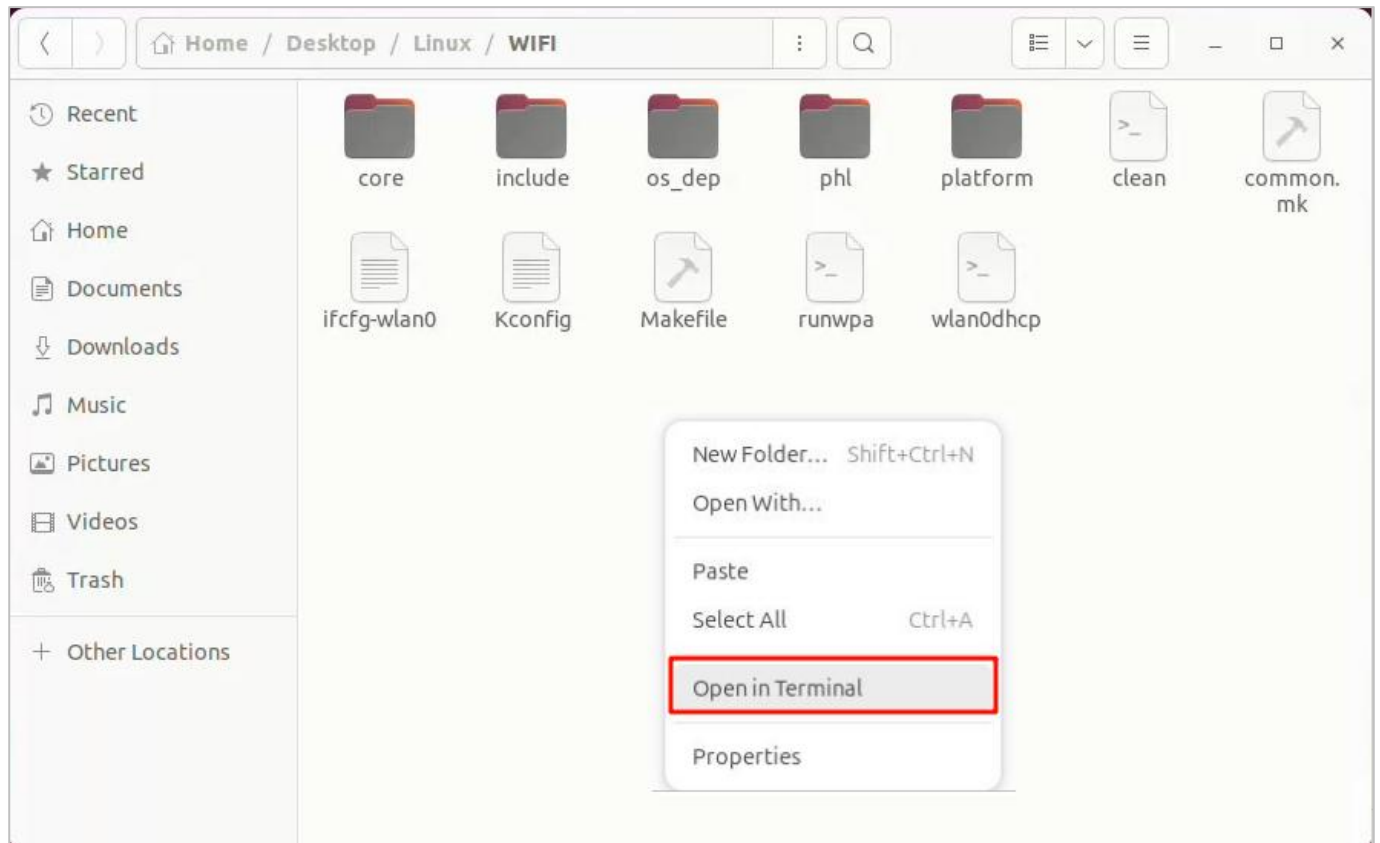


一、安装驱动

1、将下载的驱动解压后打开WIFI文件夹，鼠标右击空白的地方，选择“Open in Terminal”，如下图



2、输入 `su root` 命令，切换到root用户，此时需要输入root用户对应的密码。

```
cyril@Latia:~/Desktop/Linux/WIFI$ su root
Password:
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

3、输入 `make all` 命令，编译生成网卡的驱动文件。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# make all
make ARCH=x86_64 CROSS_COMPILE= -C /lib/modules/5.15.0-25-generic/build M=/home/cyril/Desktop/Linux/WIFI module
s
make[1]: Entering directory '/usr/src/linux-headers-5.15.0-25-generic'
warning: the compiler differs from the one used to build the kernel
The kernel was built by: gcc (Ubuntu 11.2.0-19ubuntu1) 11.2.0
You are using:          gcc (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0
CC [M] /home/cyril/Desktop/Linux/WIFI/platform/platform_ops.o
CC [M] /home/cyril/Desktop/Linux/WIFI/os_dep/osdep_service.o
CC [M] /home/cyril/Desktop/Linux/WIFI/os_dep/osdep_service_linux.o
CC [M] /home/cyril/Desktop/Linux/WIFI/os_dep/linux/rtw_cfg.o
CC [M] /home/cyril/Desktop/Linux/WIFI/os_dep/linux/os_intfs.o
CC [M] /home/cyril/Desktop/Linux/WIFI/os_dep/linux/ioctl_linux.o
CC [M] /home/cyril/Desktop/Linux/WIFI/phl/hal_g6/phy/rtw/rtw_8851b/halrf_8851b/halrf_tssi_8851b.o
CC [M] /home/cyril/Desktop/Linux/WIFI/phl/hal_g6/phy/rtw/rtw_8851b/halrf_kfree_8851b.o
CC [M] /home/cyril/Desktop/Linux/WIFI/phl/hal_g6/phy/rtw/rtw_8851b/halrf_psd_8851b.o
CC [M] /home/cyril/Desktop/Linux/WIFI/phl/hal_g6/phy/rtw/rtw_8851b/halrf_ops_rtl8851b.o
LD [M] /home/cyril/Desktop/Linux/WIFI/8851bu.o
MODPOST /home/cyril/Desktop/Linux/WIFI/Module.symvers
CC [M] /home/cyril/Desktop/Linux/WIFI/8851bu.mod.o
LD [M] /home/cyril/Desktop/Linux/WIFI/8851bu.ko
BTF [M] /home/cyril/Desktop/Linux/WIFI/8851bu.ko
Skipping BTF generation for /home/cyril/Desktop/Linux/WIFI/8851bu.ko due to unavailability of vmlinux
make[1]: Leaving directory '/usr/src/linux-headers-5.15.0-25-generic'
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

4、输入 `ls 8851bu.ko` 命令，检查是否生成8851bu.ko驱动文件，如下图

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# ls 8851bu.ko
8851bu.ko
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

5、输入 `make install` 命令，安装网卡驱动程序。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# make install
install -p -m 644 8851bu.ko /lib/modules/5.15.0-25-generic/kernel/drivers/net/wireless/
/sbin/depmod -a 5.15.0-25-generic
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

6、输入 `modprobe cfg80211` 命令，加载内核中的WiFi模块。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# modprobe cfg80211
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

输入 `modprobe 8851bu` 命令，加载网卡驱动。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# modprobe 8851bu
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

7、输入 `lsmod | grep 8851bu` 命令，查看驱动是否加载起来。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# lsmod | grep 8851bu
8851bu                7168000  0
cfg80211               962560  1 8851bu
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

二、使用网卡

1、把网卡连接到电脑上，输入命令 `ifconfig` 查看网卡是否被Linux系统识别到。以w开头的名称代表无线网卡，如下图。也可以将网卡拔掉后输入 `ifconfig` 命令，再插上后输入 `ifconfig` 命令，通过对比锁定无线网卡。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# ifconfig
enol: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.10.188 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::ca52:35c0:2256:6cc3 prefixlen 64 scopeid 0x20<link>
    ether 74:78:27:7c:ad:56 txqueuelen 1000 (Ethernet)
    RX packets 869438 bytes 1244395133 (1.2 GB)
    RX errors 0 dropped 7 overruns 0 frame 0
    TX packets 173592 bytes 17826036 (17.8 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    device interrupt 16 memory 0xcc300000-cc320000

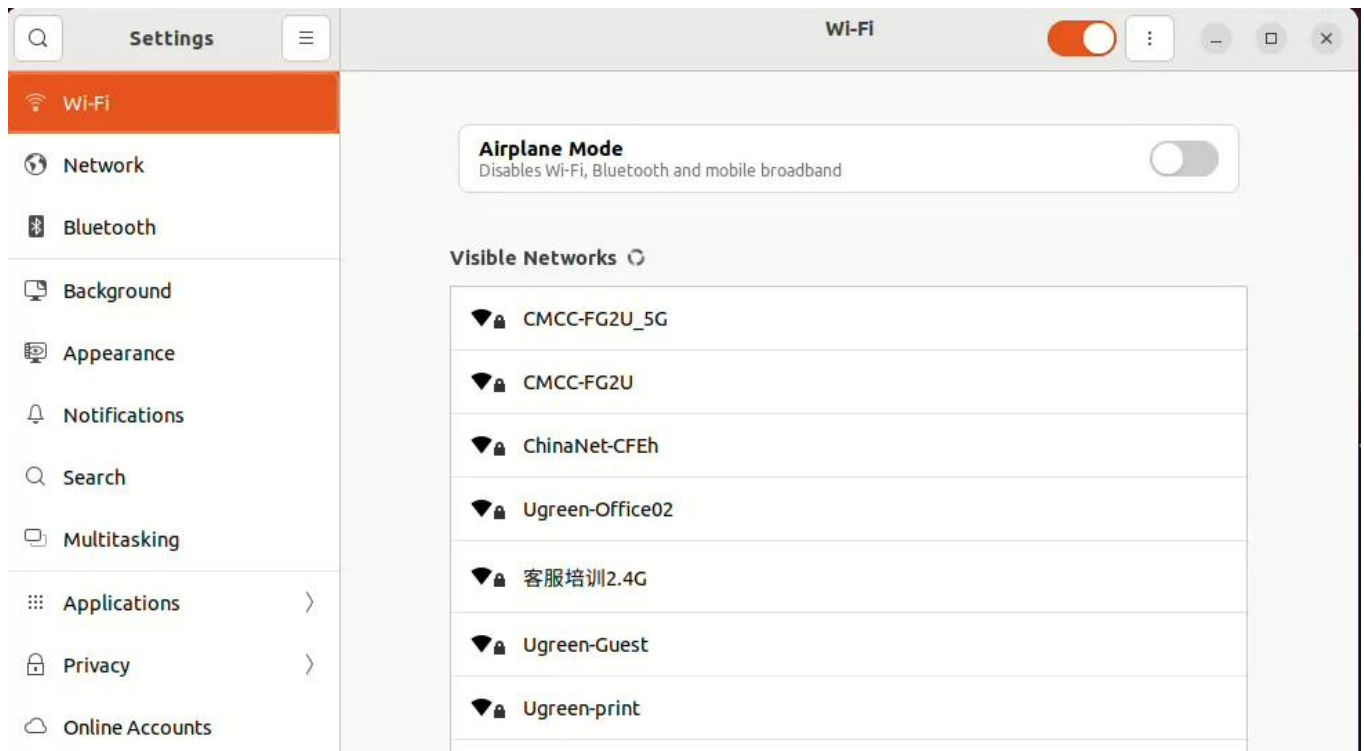
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 15357 bytes 2107154 (2.1 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 15357 bytes 2107154 (2.1 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlx6c1ff7793ddd: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 6c:1f:f7:79:3d:dd txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@Latia:/home/cyril/Desktop/Linux/WIFI#
```

如果正常识别到网卡，可以搜索并连接WiFi网络后使用。

图形化界面，可以在设置中WiFi位置找到网卡，搜索并连接WiFi网络后使用。



三、卸载驱动

如果不需要再在这台电脑上使用网卡，可以按照如下步骤将驱动程序卸载掉。

1、参考安装驱动步骤1和2，打开终端并切换到root用户，输入 `make uninstall` 命令。

```
root@Latia:/home/cyril/Desktop/Linux/WIFI# make uninstall
rm -f /lib/modules/5.15.0-25-generic/kernel/drivers/net/wireless//8851bu.ko
/sbin/depmod -a 5.15.0-25-generic
root@Latia:/home/cyril/Desktop/Linux/WIFI#
```