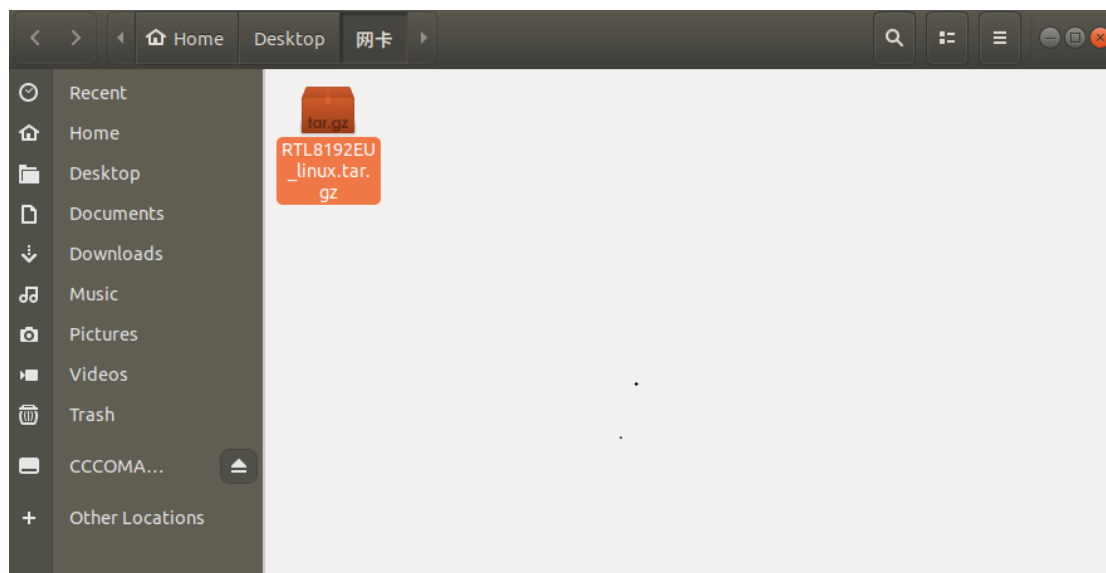


## Ubuntu 18.04（驱动最高支持 Linux 内核版本 5.4）

1) 将驱动拷贝到Linux系统桌面目录下。



2) 鼠标右键点击解压到当前文件夹，得到解压后的文件；或者在终端工具中使用命令解压：打开终端工具，界面键入：“tar zxf RTL8192EU\_Linux.tar.gz” 也可以将文件解压在当前目录。

```
tp@tp-ALL-Series:~/Desktop$ cd 网卡
tp@tp-ALL-Series:~/Desktop/网卡$ ls
RTL8192EU_linux.tar.gz
tp@tp-ALL-Series:~/Desktop/网卡$ tar zxf RTL8192EU_linux.tar.gz
tp@tp-ALL-Series:~/Desktop/网卡$
```

3) 右键点击解压后的文件，然后点击在终端中打开，进入终端管理界面，通过cd命令cd到解压后的文件目录下（也可以直接在终端管理界面通过CD命令进入到对应的目录）：

```
tp@tp-ALL-Series:~/Desktop/网卡$ tar zxf RTL8192EU_linux.tar.gz
tp@tp-ALL-Series:~/Desktop/网卡$ ls
RTL8192EU_linux  RTL8192EU_linux.tar.gz
tp@tp-ALL-Series:~/Desktop/网卡$ cd RTL8192EU_linux/
tp@tp-ALL-Series:~/Desktop/网卡/RTL8192EU_linux$ ls
driver  install.sh  readme.txt  wpa_0_8.conf
tp@tp-ALL-Series:~/Desktop/网卡/RTL8192EU_linux$
```

4) 进入该目录下后，执行命令“sudo bash install.sh”，执行install.sh文件。

```

tp@tp-All-Series:~/Desktop/网卡/RTL8192EU_linux$ ls
driver  install.sh  readme.txt  wpa_0_8.conf
tp@tp-All-Series:~/Desktop/网卡/RTL8192EU_linux$ sudo bash install.sh
[sudo] password for tp: 

```

5) 执行文件之前需要获取root权限，这里输入“tp”用户的密码获取root权限。

```

tp@tp-All-Series:~/Desktop/网卡/RTL8192EU_linux$ ls
driver  install.sh  readme.txt  wpa_0_8.conf
tp@tp-All-Series:~/Desktop/网卡/RTL8192EU_linux$ sudo bash install.sh
[sudo] password for tp: 

```

6) 获取root权限后，即可进行驱动程序的安装过程，等待安装完成。

```

File Edit View Search Terminal Help
CC [M] /home/tp/Desktop/网卡/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.1
1.2-6-g17aaefb.20200723_COEX20171113-0047/core/rtw_mp.o
LD [M] /home/tp/Desktop/网卡/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.1
1.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.o
Building modules, stage 2.
MODPOST 1 modules
CC /home/tp/Desktop/网卡/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.1
1.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.mod.o
LD [M] /home/tp/Desktop/网卡/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.1
1.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.ko
make[1]: Leaving directory '/usr/src/linux-headers-4.15.0-20-generic'
#####
Compile make driver ok!!
#####
Authentication requested [root] for install driver:
install -p -m 644 8192eu.ko /lib/modules/4.15.0-20-generic/kernel/drivers/net/w
ireless/
/sbin/depmod -a 4.15.0-20-generic
Authentication requested [root] for remove driver:
Authentication requested [root] for insert driver:
#####
The Setup Script is completed !
#####

```

7) 键入命令“lsusb -t” 回车，查看网卡接口对应安装的驱动信息，系统默认会给网卡启用Driver=rtl8xxu的驱动，不是刚安装的驱动，因此需要调整网卡驱动的加载顺序。

```

#####
The Setup Script is completed !
#####
tp@tp-All-Series:~/Desktop/网卡/RTL8192EU_linux$ lsusb -t
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/2p, 5000M
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 480M
|__ Port 1: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8xxu, 480M
|__ Port 3: Dev 6, If 0, Class=Mass Storage, Driver=usb-storage, 480M
|__ Port 4: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M
|__ Port 3: Dev 4, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M
|__ Port 3: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
|__ Port 4: Dev 5, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/4p, 480M

```

8) 通过命令“modinfo 8192eu”找到刚安装的驱动的信息，找到对应的目录路径。

```

root@kali:~# modinfo 8192eu
filename:       /lib/modules/4.15.0-20-generic/kernel/drivers/net/wireless/8192eu.ko
version:        v5.11.2-6-g1/aaefb.20200723_COEX201/1113-004/
author:         Realtek Semiconductor Corp.
description:    Realtek Wireless Lan Driver
license:        GPL
srcversion:     07A91B3CBEE8BE9A12452C4
alias:          usb:v08DAP818Cd*dc*dsc*dp*icFFiscFFipFFin*
alias:          usb:v08DAP818Bd*dc*dsc*dp*icFFiscFFipFFin*
depends:         cfg80211
retpoline:      Y
name:           8192eu
vermagic:       4.15.0-20-generic SMP mod_unload
parm:           rtw_wireless_mode:int
parm:           rtw_ips_mode:The default IPS mode (int)
parm:           rtw_lps_level:The default LPS level (int)
parm:           rtw_lps_chk_by_tp:int
parm:           rtw_max_bss_cnt:int
parm:           rtw_usb_rxagg_mode:int
parm:           rtw_dynamic_agg_enable:int
parm:           rtw_drv_log_level:set log level when insert driver module, default log level is _DRV_INFO
               _ = 4 (uint)

```

9) 通过命令 “cd /lib/modules/4.15.0-20-generic” (4.15.0-20-generic为系统内核版本，不同版本不一样，可以通过命令 “uname -r” 查看) 进入内核文件中。

```

root@kali:~# cd /lib/modules/4.15.0-20-generic/
root@kali:/lib/modules/4.15.0-20-generic# ls
build  modules.alias  modules.builtin.bin  modules.devname  modules.symbols
initrd  modules.alias.bin  modules.dep  modules.order  modules.symbols.bin
kernel  modules.builtin  modules.dep.bin  modules.softdep  vds
root@kali:/lib/modules/4.15.0-20-generic#

```

10) 通过命令编辑目录下的 modules.order 文件，将刚安装的驱动ko文件放在系统自带的ko文件之前，通过命令 “sudo vim modules.order” ,修改该文件的ko顺序。

通过输入 “/rtl8xxx” ,找到对应的行：

```
File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
kernel/drivers/net/wireless/ray_cs.ko
/rtl8xxxu |
```

通过Insert按键，在这行之前插入刚安装的驱动的目录：

kernel/drivers/net/wireless/8192eu.ko.

```
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
-- INSERT --
```

1341, 38

25%

修改完成后通过Esc按键退出INSERT状态，输入:wq保存修改的内容，然后再使用命令“sudo depmod -a”刷新一次驱动。

```
File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
:wq

tp@tp: ~$
tp@tp: ~$ sudo depmod -a
[sudo] password for tp:
tp@tp: ~$
```

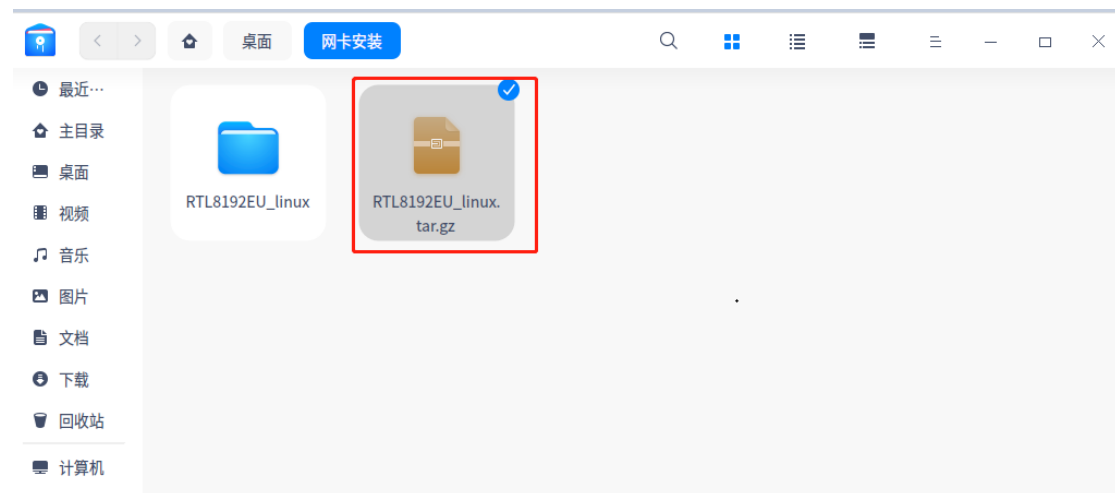
11) 完成以上步骤后，重启设备，然后再通过命令“lsusb -t”查看驱动是否加载成功，加载成功后便可以正常使用网卡。

```
tp@tp: ~$ lsusb -t
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/2p, 5000M
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 480M
   |__ Port 1: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8192eu, 480M
   |__ Port 4: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M
       |__ Port 3: Dev 4, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M
       |__ Port 3: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
       |__ Port 4: Dev 5, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
   |__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
   |__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/4p, 480M
```

注意：尽量不要在SSID或密码中使用单引号等特殊字符，否则通过图形操作界面连接无线时，可能会出现无法扫描到或者关联不上无线信号的情况；如果一定要使用这类字符，建议通过CLI命令行的操作方式关联无线信号，具体操作过程见后文的无线关联说明。

## 统信 UOS（驱动最高支持 Linux 内核版本 5.4）

1) 将驱动拷贝到Linux桌面文件夹“网卡安装”目录下。



2) 鼠标右键点击解压到当前文件夹，得到解压后的文件；或者在终端工具中使用命令解压：打开终端工具，界面键入：“tar xzf RTL8192EU\_Linux.tar.gz”也可以将文件解压在当前目录。

```
tp-link@tp-link: PC: ~/Desktop/网卡安装$ ls
RTL8192EU_linux.tar.gz
tp-link@tp-link: PC: ~/Desktop/网卡安装$ tar xzf RTL8192EU_linux.tar.gz
tp-link@tp-link: PC: ~/Desktop/网卡安装$ ls
RTL8192EU_linux  RTL8192EU_linux.tar.gz
```

3) 进入该目录下后，执行命令“sudo bash install.sh”，执行install.sh文件。

```
tp-link@tp-link: PC: ~/Desktop/网卡安装$ cd RTL8192EU_linux/
tp-link@tp-link: PC: ~/Desktop/网卡安装/RTL8192EU_linux$ ls
driver  install.sh  readme.txt  wpa_0_8.conf
tp-link@tp-link: PC: ~/Desktop/网卡安装/RTL8192EU_linux$ ls
driver  install.sh  readme.txt  wpa_0_8.conf
tp-link@tp-link: PC: ~/Desktop/网卡安装/RTL8192EU_linux$ sudo bash install.sh
请输入密码
[sudo] tp-link 的密码:
```

执行文件之前需要获取root权限，输入显示账号的用户密码，输入正确的密码之后开始驱动的安装过程。



4) 获取root权限后,即可进行驱动程序的安装过程,等待安装完成。

```
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/hal/btc/halbtc8192e2ant.o
CC [M] /home/tplink/Desktop/网卡安装/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/platform/platform_ops.o
CC [M] /home/tplink/Desktop/网卡安装/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/core/rtw_mp.o
LD [M] /home/tplink/Desktop/网卡安装/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.o
Building modules, stage 2.
MODPOST 1 modules
CC [M] /home/tplink/Desktop/网卡安装/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.mod.o
LD [M] /home/tplink/Desktop/网卡安装/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux
_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.ko
make[1]: 离开目录"/usr/src/linux-headers-5.4.50-amd64-desktop"
#####
Compile make driver ok!!
#####
Authentication requested [root] for install driver:
install -p -m 644 8192eu.ko /lib/modules/5.4.50-amd64-desktop/kernel/drivers/net/w
ireless/
/sbin/depmod -a 5.4.50-amd64-desktop
Authentication requested [root] for remove driver:
Authentication requested [root] for insert driver:
#####
The Setup Script is completed !
#####
```

5) 键入命令“lsusb -t” 回车,查看网卡接口对应安装的驱动信息,系统默认会给网卡启用Driver=rtl8xxxu的驱动,不是刚安装的驱动,因此需要调整网卡驱动的加载顺序。

```
#####
The Setup Script is completed !
#####
root@kali:~/Desktop/网卡/RTL8192EU_linux# lsusb -t
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/2p, 5000M
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 480M
|__ Port 1: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8xxxu, 480M
|__ Port 3: Dev 6, If 0, Class=Mass Storage, Driver=usb-storage, 480M
|__ Port 4: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M
|__ Port 3: Dev 4, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M
|__ Port 3: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
|__ Port 4: Dev 5, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/4p, 480M
```

6) 通过命令“modinfo 8192eu”找到刚安装的驱动的信息,找到对应的目录路径。

```

root@kali:~# modinfo 8192eu
filename:       /lib/modules/4.15.0-20-generic/kernel/drivers/net/wireless/8192eu.ko
version:       V5.11.2-6-g1/aaefb.20200723_COEX201/1113-004/
author:        Realtek Semiconductor Corp.
description:    Realtek Wireless Lan Driver
license:       GPL
srcversion:     07A91B3CBE8BE9A12452C4
alias:         usb:v08BDAp818Cd*dc*dsc*dp*icFFiscFFipFFin*
alias:         usb:v08BDAp818Bd*dc*dsc*dp*icFFiscFFipFFin*
depends:        cfg80211
retpoline:     Y
name:          8192eu
vermagic:      4.15.0-20-generic SMP mod_unload
parm:          rtw_wireless_mode:int
parm:          rtw_ips_mode:The default IPS mode (int)
parm:          rtw_lps_level:The default LPS level (int)
parm:          rtw_lps_chk_by_tp:int
parm:          rtw_max_bss_cnt:int
parm:          rtw_usb_rxagg_mode:int
parm:          rtw_dynamic_agg_enable:int
parm:          rtw_drv_log_level:set log level when insert driver module, default log level is _DRV_INFO
               _ = 4 (uint)

```

7) 通过命令 “cd /lib/modules/4.15.0-20-generic” (4.15.0-20-generic为系统内核版本，不同版本不一样，可以通过命令 “uname -r” 查看) 进入内核文件中。

```

root@kali:~# cd /lib/modules/4.15.0-20-generic/
root@kali:/lib/modules/4.15.0-20-generic# ls
build  modules.alias      modules.builtin.bin  modules.devname      modules.symbols
initrd modules.alias.bin  modules.dep          modules.order         modules.symbols.bin
kernel modules.builtin    modules.dep.bin      modules.softdep       vdsso
root@kali:/lib/modules/4.15.0-20-generic#

```

8) 通过命令编辑目录下的 modules.order 文件，将刚安装的驱动ko文件放在系统自带的ko文件之前，通过命令 “sudo vim modules.order” ,修改该文件的ko顺序。

通过输入 “/rtl8xxx” ,找到对应的行：



```

File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
kernel/drivers/net/wireless/ray_cs.ko
/rtl8xxxu

```

通过Insert按键，在这行之前插入刚安装的驱动的目录：

kernel/drivers/net/wireless/8192eu.ko.

```

kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
-- INSERT --

```

1341, 38

25%

修改完成后通过Esc按键退出INSERT状态，输入:wq保存修改的内容，然后再使用命令“sudo depmod -a”刷新一次驱动。

```
File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
:wq

tp@tp: ~$
tp@tp: ~$ sudo depmod -a
[sudo] password for tp:
tp@tp: ~$
```

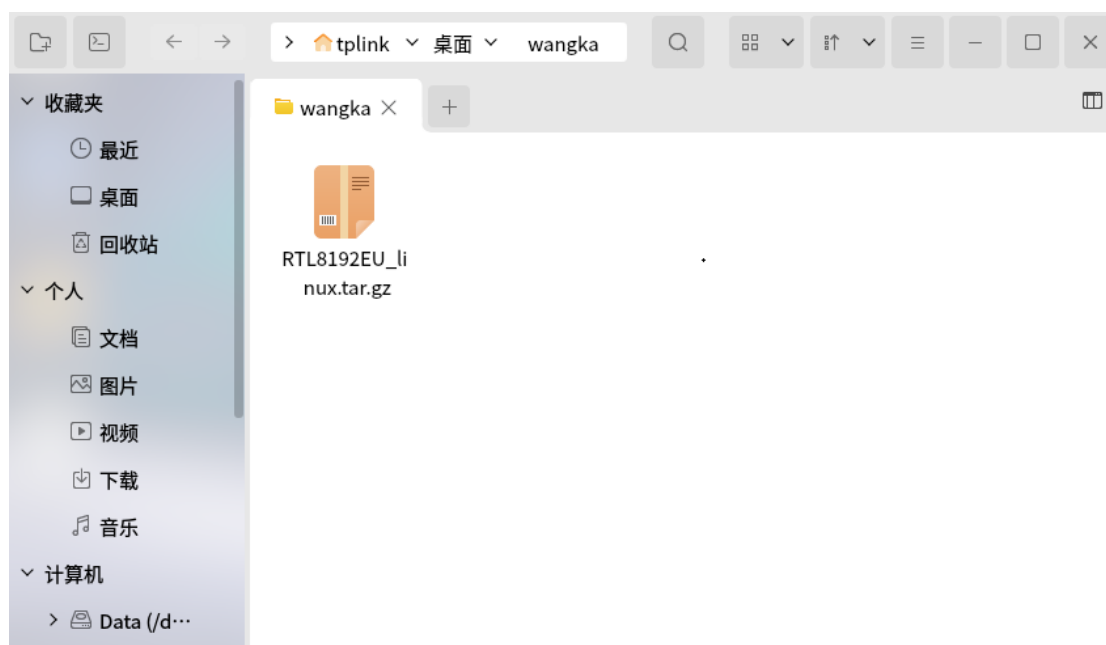
9) 完成以上步骤后，重启设备，然后再通过命令“lsusb -t”查看驱动是否加载成功，加载成功后便可以正常使用网卡。

```
tp@tp: ~$ lsusb -t
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/2p, 5000M
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 480M
   |__ Port 1: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8192eu, 480M
   |__ Port 4: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M
       |__ Port 3: Dev 4, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M
       |__ Port 3: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
       |__ Port 4: Dev 5, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
   |__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M
   |__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/4p, 480M
```

注意：尽量不要在SSID或密码中使用单引号等特殊字符，否则通过图形操作界面连接无线时，可能会出现无法扫描到或者关联不上无线信号的情况；如果一定要使用这类字符，建议通过CLI命令行的操作方式关联无线信号，具体操作过程见后文的无线关联说明。

## 银河麒麟（Kylin）（驱动最高支持 Linux 内核版本 5.4）

1) 将驱动拷贝到Linux桌面目录下。



2) 鼠标右键点击解压到当前文件夹，得到解压后的文件；或者在终端工具中试用命令解压：打开终端工具，界面键入：“tar zxf RTL8192EU\_Linux.tar.gz”也可以将文件解压在当前目录。

```
tp@tp-link-Tosha: ~/桌面$ cd wangka
tp@tp-link-Tosha: ~/桌面/wangka$ ls
RTL8192EU_linux.tar.gz
tp@tp-link-Tosha: ~/桌面/wangka$ tar zxf RTL8192EU_linux.tar.gz
tp@tp-link-Tosha: ~/桌面/wangka$ ls
RTL8192EU_linux RTL8192EU_linux.tar.gz
tp@tp-link-Tosha: ~/桌面/wangka$
```

3) 右键点击解压后的文件，然后点击在终端中打开，进入终端管理界面，或通过cd命令cd到解压后的文件目录下：

```
tp@tp-link-Tosha: ~/桌面/wangka$ cd RTL8192EU_linux/
tp@tp-link-Tosha: ~/桌面/wangka/RTL8192EU_linux$ ls
Could not find command-not-found database. Run 'sudo apt update' to populate it.
LS: 未找到命令
tp@tp-link-Tosha: ~/桌面/wangka/RTL8192EU_linux$ ls
driver install.sh readme.txt wpa_0.8.conf
```

4) 进入该目录下后，执行命令“sudo bash install.sh”，执行install.sh文件。

```
tp@tp-link-Tosha: ~/桌面/wangka/RTL8192EU_linux$
tp@tp-link-Tosha: ~/桌面/wangka/RTL8192EU_linux$ sudo bash install.sh
[sudo] 的密码:
```

执行文件之前需要进入root权限，输入显示用户的密码，输入正确的密码之后开始驱动的安装过程。

5) 输入密码后，等待安装完成。

```
.o
CC [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/hal/btc/halbtc8192e1ant.o
CC [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/hal/btc/halbtc8192e2ant.o
CC [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/platform/platform_ops.o
CC [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/core/rtw_mp.o
LD [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.o
Building modules, stage 2.
MODPOST 1 modules
CC [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.mod.o
LD [M] /home/tplink/桌面/wangka/RTL8192EU_linux/driver/rtl8192EU_WiFi_linux_v5.11.2-6-g17aaefb.20200723_COEX20171113-0047/8192eu.ko
make[1]: 离开目录“/usr/src/linux-headers-5.4.18-15-generic”
#####
Compile make driver ok!!
#####
Authentication requested [root] for install driver:
install -p -m 644 8192eu.ko /lib/modules/5.4.18-15-generic/kernel/drivers/net/wireless/
/sbin/depmod -a 5.4.18-15-generic
Authentication requested [root] for remove driver:
Authentication requested [root] for insert driver:
#####
The Setup Script is completed !
#####
```

6) 键入命令“lsusb -t” 回车，查看网卡接口对应安装的驱动信息，系统默认会给网卡启用Driver=rtl8xxxu的驱动，不是刚安装的驱动，因此需要调整网卡驱动的加载顺序。

```
tplink@tplink-T480:~/桌面/wangka/RTL8192EU_linux$ lsusb -t
/: Bus 04.Port 1: Dev 1, Class=root hub, Driver=xhci_hcd/4p, 5000M
/: Bus 03.Port 1: Dev 1, Class=root hub, Driver=xhci_hcd/4p, 480M
|__ Port 3: Dev 3, If 0, Class=Mass Storage, Driver=usb-storage, 480M
|__ Port 4: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8xxxu, 480M
/: Bus 02.Port 1: Dev 1, Class=root hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/8p, 480M
/: Bus 01.Port 1: Dev 1, Class=root hub, Driver=ehci-pci/2p, 480M
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M
|__ Port 5: Dev 3, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
|__ Port 6: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M
```

7) 通过命令“modinfo 8192eu”找到刚安装的驱动的信息，找到对应的目录路径。

```
tplink@tplink-T480:~$ modinfo 8192eu
filename: /lib/modules/4.15.0-20-generic/kernel/drivers/net/wireless/8192eu.ko
version: v5.11.2-6-g17aaefb.20200723_COEX20171113-0047
author: Realtek Semiconductor Corp.
description: Realtek Wireless Lan Driver
license: GPL
srcversion: 07A91B3CBEE8BE9A12452C4
alias: usb:v0BDAp818Cd*dc*dsc*dp*icFFiscFFipFFin*
alias: usb:v0BDAp818Bd*dc*dsc*dp*icFFiscFFipFFin*
depends: cfg80211
retpoline: y
name: 8192eu
vermagic: 4.15.0-20-generic SMP mod_unload
parm: rtw_wireless_mode:int
parm: rtw_ips_mode:The default IPS mode (int)
parm: rtw_lps_level:The default LPS level (int)
parm: rtw_lps_chk_by_tp:int
parm: rtw_max_bss_cnt:int
parm: rtw_usb_rxagg_mode:int
parm: rtw_dynamic_agg_enable:int
parm: rtw_drv_log_level:set log level when insert driver module, default log level is _DRV_INFO = 4 (uint)
```

8) 通过命令“cd /lib/modules/4.15.0-20-generic” (4.15.0-20-generic为系统内核版本，不同版本不一样，可以通过命令“uname -r”查看) 进入内核文件中。

```

root@kali:~/lib/modules$ cd /lib/modules/4.15.0-20-generic/
root@kali:~/lib/modules/4.15.0-20-generic$ ls
build      modules.alias      modules.builtin.bin  modules.devname      modules.symbols
initrd     modules.alias.bin  modules.dep          modules.order         modules.symbols.bin
kernel     modules.builtin    modules.dep.bin      modules.softdep       vdso
root@kali:~/lib/modules/4.15.0-20-generic$

```

9) 通过命令编辑目录下的 modules.order 文件，将刚安装的驱动ko文件放在系统自带的ko文件之前，通过命令“sudo vim modules.order”，修改该文件的ko顺序。

通过输入“/rtl8xxx”，找到对应的行：

```

File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
kernel/drivers/net/wireless/ray_cs.ko
/rtl8xxxu

```

通过Insert按键，在这行之前插入刚安装的驱动的目录：

kernel/drivers/net/wireless/8192eu.ko.



```

kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
-- INSERT --

```

1341,38

25%

修改完成后通过Esc按键退出INSERT状态，输入:wq保存修改的内容，然后再使用命令

“sudo depmod -a” 刷新一次驱动。

```

File Edit View Search Terminal Help
kernel/drivers/net/wireless/ralink/rt2x00/rt2800usb.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8180/rtl818x_pci.ko
kernel/drivers/net/wireless/realtek/rtl818x/rtl8187/rtl8187.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtlwifi.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_pci.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl_usb.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192c/rtl8192c-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ce/rtl8192ce.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192cu/rtl8192cu.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192se/rtl8192se.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192de/rtl8192de.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723ae/rtl8723ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723be/rtl8723be.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8188ee/rtl8188ee.ko
kernel/drivers/net/wireless/realtek/rtlwifi/btcoexist/btcoexist.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8723com/rtl8723-common.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8821ae/rtl8821ae.ko
kernel/drivers/net/wireless/realtek/rtlwifi/rtl8192ee/rtl8192ee.ko
kernel/drivers/net/wireless/8192eu.ko
kernel/drivers/net/wireless/realtek/rtl8xxxu/rtl8xxxu.ko
kernel/drivers/net/wireless/rsi/rsi_91x.ko
kernel/drivers/net/wireless/rsi/rsi_sdio.ko
kernel/drivers/net/wireless/rsi/rsi_usb.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_core.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_sdio.ko
kernel/drivers/net/wireless/st/cw1200/cw1200_wlan_spi.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore.ko
kernel/drivers/net/wireless/ti/wlcore/wlcore_sdio.ko
kernel/drivers/net/wireless/ti/wl12xx/wl12xx.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_spi.ko
kernel/drivers/net/wireless/ti/wl1251/wl1251_sdio.ko
kernel/drivers/net/wireless/ti/wl18xx/wl18xx.ko
kernel/drivers/net/wireless/zydas/zd1211rw/zd1211rw.ko
kernel/drivers/net/wireless/zydas/zd1201.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac.ko
kernel/drivers/net/wireless/quantenna/qtnfmac/qtnfmac_pearl_pcie.ko
:wq

```



```
tp@tp-M17-Sentosa:~$  
tp@tp-M17-Sentosa:~$ sudo depmod -a  
[sudo] password for tp:  
tp@tp-M17-Sentosa:~$
```

10) 完成以上步骤后，重启设备，然后再通过命令“lsusb -t”查看驱动是否加载成功，加载成功后便可以正常使用网卡。

```
tp@tp-M17-Sentosa:~$ lsusb -t  
/: Bus 04.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/2p, 5000M  
/: Bus 03.Port 1: Dev 1, Class=root_hub, Driver=xhci_hcd/10p, 480M  
|__ Port 1: Dev 2, If 0, Class=Vendor Specific Class, Driver=rtl8192eu, 480M  
|__ Port 4: Dev 3, If 0, Class=Hub, Driver=hub/4p, 480M  
|__ Port 3: Dev 4, If 1, Class=Human Interface Device, Driver=usbhid, 1.5M  
|__ Port 3: Dev 4, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M  
|__ Port 4: Dev 5, If 0, Class=Human Interface Device, Driver=usbhid, 1.5M  
/: Bus 02.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M  
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/6p, 480M  
/: Bus 01.Port 1: Dev 1, Class=root_hub, Driver=ehci-pci/2p, 480M  
|__ Port 1: Dev 2, If 0, Class=Hub, Driver=hub/4p, 480M
```

注意：尽量不要在SSID或密码中使用单引号等特殊字符，否则通过图形操作界面连接无线时，可能会出现无法扫描到或者关联不上无线信号的情况；如果一定要使用这类字符，建议通过CLI命令行的操作方式关联无线信号，具体操作过程见后文的无线关联说明。

## 如何关联无线 SSID（图形操作界面/CLI 命令行）

### 通过图形操作界面连接无线：

Ubuntu，统信 UOS，麒麟系统都提供了友好的图形操作界面，当驱动安装成功之后，我们可以在图形操作界面直接连接 WIFI，这里就不详细介绍。

### 通过终端命令行操作连接无线：

#### 1. 识别设备

接入 USB 无线网卡，并运行以下命令查看网卡是否被识别。

```
$ lsusb
```

#### 2. 创建接口

运行以下命令检查是否创建了无线网络接口。

```
$ ifconfig
```

### 3. 将接口状态更改为 Up

检查 WLAN 接口是否正常。如果不是，请运行以下命令。这里我们以 wlan1 为例。

```
$ ifconfig wlan1 up
```

如果无法更改为 UP，请运行以下命令重新设置状态。

```
$ rfkill unblock wifi  
$ ifconfig wlan1 up
```

### 4. 在后台启动 wpa\_supplicant。

使用如下的命令：

```
$ wpa_supplicant -Dnl80211 -iwlan1 -c ./wpa_0_8.conf -B
```

注意：wpa\_0\_8.conf 是当前驱动程序目录中的一个文件，运行命令时转到驱动程序目录。

如果上述命令无效，请运行以下命令以结束 wpa\_supplicant 程序，然后再次运行上述命令。

```
$ killall wpa_supplicant
```

如果您的 Linux 内核不支持 802.11，请运行以下命令。

```
$ wpa_supplicant -Dwext -iwlan0 -c ./wpa_0_8.conf -B
```

#### 4.1 扫描无线网络 (SSID)

运行如下命令：

```
$ wpa_cli -p /var/run/wpa_supplicant scan  
$ wpa_cli -p /var/run/wpa_supplicant scan_results
```

#### 4.2 连接到接入点 (AP)

关联不同认证方式下的 SSID 所需的指令配置如下：

### 1.开放系统认证

Run the following commands

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1
$ wpa_cli -p /var/run/wpa_supplicant add_network
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink"" //tplink is the SSID
of the desired AP. The SSID is in double quotation marks and then as a whole
enclosed by single quotation marks.
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 key_mgmt NONE
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

### 2.开放系统认证搭配 WEP40 加密

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1
$ wpa_cli -p /var/run/wpa_supplicant add_network
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink""
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 key_mgmt NONE
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_key0 1234567890
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_tx_keyidx 0
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

### 3.共享密钥认证搭配 WEP40 加密

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1
$ wpa_cli -p /var/run/wpa_supplicant add_network
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink""
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 key_mgmt NONE
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_key0 1234567890
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_tx_keyidx 0
```

```
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 auth_alg SHARED
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

### 4.开放系统搭配 WEP 104 加密

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1
$ wpa_cli -p /var/run/wpa_supplicant add_network
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink""
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 key_mgmt NONE
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_key0
12345678901234567890123456
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_tx_keyidx 0
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

## 5.预共享密钥认证搭配 WEP 104 加密

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1
$ wpa_cli -p /var/run/wpa_supplicant add_network
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink""
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 key_mgmt NONE
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_key0
12345678901234567890123456
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 wep_tx_keyidx 0
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 auth_alg SHARED
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

注意：

如果 WEP 密钥是 ASCII，请运行以下命令：

```
#WEP40: wpa_cli -p/var/run/wpa_supplicant set_network 0 wep_key0 ""12345""
```

```
#WEP104: wpa_cli -p/var/run/wpa_supplicant set_network 0 wep_key0
```

```
""1234567890123""
```

如果 WEP 密钥的索引是 0-3，则运行以下命令：

```
#wpa_cli -p/var/run/wpa_supplicant set_network 0 wep_keyX
```

```
12345678901234567890123456
```

```
#wpa_cli -p/var/run/wpa_supplicant set_network 0 wep_tx_keyidx X
```

## 6) TIKP/AES

```
$ wpa_cli -p /var/run/wpa_supplicant remove_network 0  
$ wpa_cli -p /var/run/wpa_supplicant ap_scan 1  
$ wpa_cli -p /var/run/wpa_supplicant add_network  
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 ssid ""tplink""  
$ wpa_cli -p /var/run/wpa_supplicant set_network 0 psk ""12345678""  
$ wpa_cli -p /var/run/wpa_supplicant select_network 0
```

### 4.3 保存配置

运行以下命令保存当前的连接配置。

```
# wpa_cli -p /var/run/wpa_supplicant save_config
```

### 4.4 启用 DHCP 客户端

运行如下命令：

```
$ dhclient wlan1
```

运行命令后，适配器将获得 AP 分配的 IP。然后可以运行 ping 命令检查无线连接是否成功。

```

root@kali:/home/kali/Documents/wpa_supplicant_hostapd# ifconfig
eth0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether 40:8d:5c:1b:34:28 txqueuelen 1000 (Ethernet)
    RX packets 9950 bytes 5963340 (5.6 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 7420 bytes 676707 (660.8 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

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 474 bytes 38286 (37.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 474 bytes 38286 (37.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.113 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::c0cc:8e6c:6977:cf24 prefixlen 64 scopeid 0x20<link>
    ether 50:3e:aa:44:65:51 txqueuelen 1000 (Ethernet)
    RX packets 118 bytes 14574 (14.2 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 103 bytes 11253 (10.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

root@kali:/home/kali/Documents/wpa_supplicant_hostapd# ping 192.168.1.1
PING 192.168.1.1 (192.168.1.1) 56(84) bytes of data:
64 bytes from 192.168.1.1: icmp_seq=1 ttl=64 time=1.24 ms
64 bytes from 192.168.1.1: icmp_seq=2 ttl=64 time=1.45 ms
64 bytes from 192.168.1.1: icmp_seq=3 ttl=64 time=1.00 ms
64 bytes from 192.168.1.1: icmp_seq=4 ttl=64 time=1.08 ms
64 bytes from 192.168.1.1: icmp_seq=5 ttl=64 time=7.86 ms
^C
--- 192.168.1.1 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 1.001/2.530/7.867/2.672 ms
root@kali:/home/kali/Documents/wpa_supplicant_hostapd# route
Kernel IP routing table
Destination Gateway Genmask Flags Metric Ref Use Iface
default Archer.lan 0.0.0.0 UG 600 0 0 wlan0
192.168.1.0 0.0.0.0 255.255.255.0 U 600 0 0 wlan0
root@kali:/home/kali/Documents/wpa_supplicant_hostapd#

```

注意：

如果使用 ifconfig 命令确认已获得 IP 地址，并使用 ping 命令确认无线连接成功，但网络仍然不可用，则可以运行以下命令更改默认系统网关为路由器 LAN IP 地址。

\$ route del default wlan0	//Delete the default gateway of wlan0
\$ route add default gw 192.168.1.1	//Add the router's LAN IP as the default gateway.