

# Use USB Wireless Adapter On Ubuntu16.04 LTS

Ubuntu Linux DickSuckerThinkPad

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## 1. Overview

- What I wanna do is to install wireless adapter driver on Ubuntu
- The adapter I use is TP-Link Archer T2U, whose driver is mt7610u
- You can also take <https://www.youtube.com/watch?v=D2fmbp-VF10> as reference

## 2. Installation

- Download and install

```
1. sudo apt-get install git build-essential
2. git clone
   https://github.com/chenhaiq/mt7610u_wifi_sta_v3002_dpo_20130916.git
3. cd mt7610u_wifi_sta_v3002_dpo_20130916
4. make
5. sudo make install
6. sudo mkdir /etc/RT2870STA
7. sudo cp RT2870STA.dat /etc/Wireless/RT2870STA/RT2870STA.dat
8. reboot
```

- Then you can check whether the adapter can be recognized: Ralink Tech

```
1. lsusb
```

```

venturer@venturer-ThinkPad-T450s:~$ lsusb
Bus 001 Device 002: ID 8087:8001 Intel Corp.
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
Bus 003 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 002 Device 004: ID 5986:026a Acer, Inc
Bus 002 Device 003: ID 138a:0017 Validity Sensors, Inc. Fingerprint Reader
Bus 002 Device 002: ID 148f:761a Ralink Technology, Corp.
Bus 002 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub

```

- Launch the adapter

```

1. ifconfig #you can not see the adapter currently
2. sudo ifconfig ra0 up
3. ifconfig #check again

```

```

ra0      Link encap:以太网  硬件地址 84:16:f9:0c:87:cd
         inet 地址:10.249.28.232  广播:10.249.31.255  掩码:255.255.240.0
         inet6 地址: fe80::6f8:f7ee:93cd:7de5/64 Scope:Link
         UP BROADCAST RUNNING MULTICAST  MTU:1500  跃点数:1
         接收数据包:35734  错误:267  丢弃:0  过载:0  帧数:0
         发送数据包:4392  错误:0  丢弃:0  过载:0  载波:0
         碰撞:0  发送队列长度:1000
         接收字节:9715222 (9.7 MB)  发送字节:799310 (799.3 KB)

```

- Config of iwpriv

```

1. sudo iwpriv ra0 set SiteSurvey = 1
2. iwpriv ra0 get_site_survey

```

- Finally, we can check the status via `iwconfig`

```

venturer@venturer-ThinkPad-T450s:~$ iwconfig
lo          no wireless extensions.

enp0s25     no wireless extensions.

ra0         Ralink STA  ESSID:"uniwide"  Nickname:"MT7610U_STA"
           Mode:Managed  Frequency=2.437 GHz  Access Point: 08:CC:68:B5:F1:61
           Bit Rate=65 Mb/s
           RTS thr:off   Fragment thr:off
           Link Quality=89/100  Signal level:-56 dBm  Noise level:-56 dBm
           Rx invalid nwid:0  Rx invalid crypt:0  Rx invalid frag:0
           Tx excessive retries:0  Invalid misc:0  Missed beacon:0

```

### 3. Some other configurations

- Everytime you restart, you should type `sudo ifconfig ra0 up` to reactive the adapter
- Then you need to restart the network manager  
`sudo service network-manager restart`