

# 浙大校网VPN

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搞定在校网上拨VPN出校。

### 实现目的

- 1 了解Acadia或RPi或WRTnode中如何对网络进行配置；
- 2 了解Acadia或RPi或WRTnode中如何对VPN进行连接。

### 实验器材

#### 硬件

- Acadia或RPi或WRTnode板一块；
- 5V/1A电源一个；
- microUSB线一根；
- USB-TTL串口线一根（FT232RL芯片或PL2303芯片）。

以下为自备（可选）器材：

- PC（Windows/Mac OS/Linux）一台；
- 声卡一个；
- 以太网线一根（可能还需要路由器等）。

#### 软件

- PC上的USB-TTL串口线配套的驱动程序；
- PC上的串口终端软件，如minicom、picocom、putty等；
- PC上的SSH软件，如putty等。

### 实验步骤

- 1 对Acadia或RPi或WRTnode上的网卡进行配置；  
安装ppp, l2tp, libpcap软件

```
File Edit Tabs Help
root@raspberrypi:/home/pi# apt-get install xl2tpd
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libpcap0.8 ppp
The following NEW packages will be installed:
  libpcap0.8 ppp xl2tpd
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 560 kB of archives.
After this operation, 1,275 kB of additional disk space will be used.
Do you want to continue [Y/n]? y
Get:1 http://mirrordirector.raspbian.org/raspbian/ wheezy/main libpcap0.8 armhf
1.3.0-1 [135 kB]
Get:2 http://mirrordirector.raspbian.org/raspbian/ wheezy/main ppp armhf 2.4.5-5
.1+deb7u1 [354 kB]
Get:3 http://mirrordirector.raspbian.org/raspbian/ wheezy/main xl2tpd armhf 1.3.
1+dfsg-1 [70.8 kB]
Fetched 560 kB in 10s (51.7 kB/s)
Selecting previously unselected package libpcap0.8:armhf.
(Reading database ... 78097 files and directories currently installed.)
Unpacking libpcap0.8:armhf (from .../libpcap0.8_1.3.0-1_armhf.deb) ...
Selecting previously unselected package ppp.
Unpacking ppp (from .../ppp_2.4.5-5.1+deb7u1_armhf.deb) ...
update-rc.d: using dependency based boot sequencing
Selecting previously unselected package xl2tpd.
Unpacking xl2tpd (from .../xl2tpd_1.3.1+dfsg-1_armhf.deb) ...
Processing triggers for man-db ...
Setting up libpcap0.8:armhf (1.3.0-1) ...
Setting up ppp (2.4.5-5.1+deb7u1) ...
Setting up xl2tpd (1.3.1+dfsg-1) ...
Starting xl2tpd: xl2tpd.
root@raspberrypi:/home/pi#
root@raspberrypi:/home/pi# ls
Desktop python_games
root@raspberrypi:/home/pi# cd Desktop/
root@raspberrypi:/home/pi/Desktop# ls
libpcap0.8_1.3.0-1_armhf.deb ppt.rar zjuvpn-8.2.tar
root@raspberrypi:/home/pi/Desktop# dpkg -i libpcap0.8_1.3.0-1_armhf.deb
(Reading database ... 78250 files and directories currently installed.)
Preparing to replace libpcap0.8:armhf 1.3.0-1 (using libpcap0.8_1.3.0-1_armhf.de
b) ...
Unpacking replacement libpcap0.8:armhf ...
Setting up libpcap0.8:armhf (1.3.0-1) ...
```

## 2 拨通校网VPN。

安装zjuvpn

设置拨号信息

```
tar: Error is not recoverable: exiting now
root@raspberrypi:/home/pi/Desktop# sudo tar -xvf zjuvpn-8.2.tar.gz -C /
usr/
usr/share/
usr/share/zjuvpn/
usr/share/zjuvpn/xl2tpd.conf-example
usr/share/zjuvpn/options
usr/sbin/
usr/sbin/zjuvpn
root@raspberrypi:/home/pi/Desktop# zjuvpn -c
Configure L2TP VPN for ZJU.
Username: 3120104385
Password:
[MSG] Disconnecting VPN ... Done!
[MSG] Restarting l2tpd...
Restarting xl2tpd: xl2tpd.
[MSG] Done!
[MSG] Trying to bring up vpn... 85 secs... Done!
[MSG] Detected gateway: 192.168.0.1, PPP device: ppp0 .
[MSG] Setting up route table... Done!
root@raspberrypi:/home/pi/Desktop#
root@raspberrypi:/home/pi/Desktop#
```

### 3.完成vpn连接。可以上网

