

- 嵌入式实验报告
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实验内容

把 Acadia 或 RPi 或 WRTnode 变成一个 DHCP 服务器。

实验步骤

安装 DHCP 软件，我们在这里选择安装 dnsmasq，这是一个 dns，dhcp，tft 等很多功能都支持的软件。

```
Last login: Fri Mar 27 10:56:46 2015 from richard-yq
pi@raspberrypi ~ $ sudo apt-get install dnsmasq
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  dnsmasq-base libnetfilter-conntrack3
Suggested packages:
  resolvconf
The following NEW packages will be installed:
  dnsmasq dnsmasq-base libnetfilter-conntrack3
0 upgraded, 3 newly installed, 0 to remove and 0 not upgraded.
Need to get 405 kB of archives.
After this operation, 984 kB of additional disk space will be used.
Do you want to continue [Y/n]? █
```

配置 DNSMASQ

```
# (53). Setting this to zero compl
# leaving only DHCP and/or TFTP.
port=0
```

关闭 DNS 功能

```
# interface (eg eth0) m
# Repeat the line for m
interface=eth0
# Or you can specify wh
#except-interfaces=
```

绑定 DHCP 的网络接口

```
# Repeat this for each network on which you
# service.
dhcp-range=192.168.2.50,192.168.2.200,12h
```

配置 DHCP 的地址范围

```
Restarting DNS forwarder and DHCP server: dnsmasq.  
pi@raspberrypi /var/lib/misc $ sudo service dnsmasq restart  
Restarting DNS forwarder and DHCP server: dnsmasq.  
pi@raspberrypi /var/lib/misc $ cat dnsmasq.leases  
1427498214 8c:3a:e3:46:eb:89 192.168.2.59 android-efa968b8bbeb15 01:8c:3a:e3:46:eb:89  
pi@raspberrypi /var/lib/misc $
```

重启 DNS 服务器后，我们用安卓手机连接上路由器，就可以看到 dnsmasq 的 dhcp 记录里面已经有这个手机并且给它分配了地址了