

# Server issues

## SD cards for RPi

[https://elinux.org/RPi\\_SD\\_cards](https://elinux.org/RPi_SD_cards)

## Get host IP in LAN

```
hostname -I
```

```
/sbin/ifconfig [-a]
```

```
ip addr show eth0
```

**For a static IP address on an Ethernet connection:**

1. `sudo nano /etc/dhcpd.conf`.
2. Type in the following lines on the top of the file:  
interface eth0 **static** ip\_address=192.168.1.XX/24 **static** routers=192.168.1.1 **static** domain\_name\_servers=192.168.1.1  
interface eth0 **static** ip\_address=10.0.1.XX/24 **static** routers=10.0.1.26 **static** domain\_name\_servers=10.0.1.26
3. `sudo reboot`.

```
sudo leafpad /etc/dhcpd.conf
```

-----

```
interface eth0
static ip_address=10.0.1.3/24
static routers=10.0.1.1
static domain_name_servers=10.0.1.1
```

```
interface wlan0
static ip_address=10.0.1.3/24
static routers=10.0.1.1
static domain_name_servers=10.0.1.1
```

## Get router external WAN IP

google for: how to get wan router ip in lan raspberry pi

```
curl -s "http://whatismyip.org/"
```

```
sudo apt-get install curl
```

```
wget http://aschillings.co.uk/myscripts/getip.php
```

```
wget -q -O- icanhazip.com
```

Or if your router has a HTML admin interface and you have the router admin username and password, you could wget the relevant config page and grep ...  
**DOES NOT WORK FOR Airport Extreme**

```
import urllib2
ip = urllib2.urlopen("http://automation.whatismyip.com/n09230945.asp").read()
```

```
from requests import get
```

```
ip = get('https://api.ipify.org').text
```

```
import urllib.request
external_ip = urllib.request.urlopen('https://ident.me').read().decode('utf8')
print(external_ip)
```

## Airport Extreme configuration

Airport Extreme can be configured through the AirPort\_UTILITY ONLY!!! There is no web interface....

### Set static IP address

for raspberry pi in LAN (10.0.1.3)

AirPort\_UTILITY (V7.7.9, 10.0.1.1) -> Manual Setup -> Internet -> DHCP -> + -> Description: raspberrypi, MAC Address -> Continue -> b8:27:eb:f3:0a:74 ...

AirPort\_UTILITY (V7.7.9, 10.0.1.1) -> Manual Setup -> Internet -> DHCP -> + -> Description: "Home raspberrypi", DHCP Client Id: raspberrypi, 10.0.1.3

### Port Forwarding

AirPort\_UTILITY (V7.7.9, 10.0.1.1) -> Manual Setup -> Advanced > Port Mapping -> "Home raspberrypi", 10.0.1.3, port-number

## Add and remove user

```
$sudo -s
$adduser username
$usermod -a -G adm,dialout,cdrom,sudo,audio,video,plugdev,games,users,input,netdev,gpio,i2c,spi username
```

Turn off "Login as user pi" in Menu -> Preferences -> Raspberry Pi Configuration -> System

```
$reboot
$deluser --remove-home pi
```

Editor

leafpad, vi, idle are installed

```
sudo apt-get install emacs
```

```
sudo apt-get install vim
```

Setup get

```
git config --global user.name <my-name>
```

```
git config --global user.email <my@email>
```

```
git config -l
```

## Find MAC address

```
cat /sys/class/net/wlan0/address : b8:27:eb:f3:0a:74
```

```
cat /sys/class/net/eth0/address : b8:27:eb:a6:5f:21
```