

# **Programming Note**

## **//Check fw build date**

```
cat /etc/openwrt_release  
cat /proc/version
```

## **//check CPU usage**

```
top
```

## **//snmpwalk run in teraterm or ssh**

```
snmpwalk -Os -c public -v 1 -u admin 192.168.1.1
```

## **//enable snmp**

```
/etc/init.d/snmpd start  
snmpwalk -v 1 -c public 192.168.1.20
```

## **// disable ignore broadcasts**

```
echo 0 >/proc/sys/net/ipv4/icmp_echo_ignore_broadcasts
```

## **//1216VX board ID**

5G- 11

2.4G- 12

//1216V5-20 board id

5G = 31

//1216V2-20 board id

2G = 30

# //upgrade fw from the command line without tftp mode

sysupgrade /path/to/firmware

## //alternative to upgrade fw

winscp or scp the *firmware* to */tmp* of the board  
run `sysupgrade /tmp/firmware\_name`

## //show wireless config

```
cat /etc/config/wireless
config wifi-device 'wifi0'
    option type 'atheros'
    option hwmode '11ng'
    option antenna_gain '0'
    option txpower 'max'
    option country '356'
    option channel 'auto'
    option ochann '1'
    option chainmask '3'
    option anienablelua '1'
    option dcsenablelua '0'
config wifi-iface
    option device 'wifi0'
    option network 'lan'
    option id_ssid 'wifi0_1'
    option manrate 'auto'
    option mode 'sta'
    option ssid 'telenet'
    option shortgi '1'
    option mcastenhance '2'
    option disablecoext '0'
    option wds '1'
    option encryption 'wpa2+tkip+ccmp'
    option eap_type 't'
    option auth 'MSCHAPV2'
    option identity 'telenet'
    option password 'telenet'
```

root@MimoAP:~# uci show wireless

```
wireless.wifi0=wifi-device
wireless.wifi0.type='qcawifi'
wireless.wifi0.macaddr='04:f0:21:2f:6d:61'
wireless.wifi0.channel='36'
wireless.wifi0.hwmode='11ac'
wireless.wifi0.txpower='18'
wireless.wifi0.htmode='HT80'
wireless.@wifi-iface[0]=wifi-iface
wireless.@wifi-iface[0].device='wifi0'
wireless.@wifi-iface[0].network='lan'
wireless.@wifi-iface[0].mode='ap'
wireless.@wifi-iface[0].ssid='Test'
wireless.@wifi-iface[0].wds='1'
wireless.@wifi-iface[0].disablecoext='1'
wireless.@wifi-iface[0].vht_11ng='1'
wireless.@wifi-iface[0].encryption='psk2'
wireless.@wifi-iface[0].key='123456789'
```

## //set country code and tx power in qca ref fw

Please use uci command:

```
uci set wireless.wifi1.country=843
```

```
uci commit wireless
```

```
wifi down
```

```
wifi up
```

```
iwconfig ath1 txpower 31
```

```
iwconfig ath1
```

The tx power shown is either the calibrated max power  
or the max power by country limit, whichever is lower.

For WLE600V5-27, the value should be 30 (2 chains).

## //arp

```
arp -d 192.168.1.1
```

```
//872 MACID: machid: 8010008 -> NAND
```