



WLAN

Chipset: Atheros AR2425

Change Regdomain

The WLAN (Wireless Local Area Network) card comes set to regdom 0x65 (World/ETSI C) which limits the channels to 1..11. (`iw list` shows channels 12..14 as *disabled*.) In Germany, there are also channels 12 and 13 which are unusable this way. But there's the tool `ath_info` which can read and write the EEPROM (Electrically Erasable Programmable Read-Only Memory) on the card and thus also the regdomain.

First, find the base address of the adapter using

```
lspci -vv
```

Mine was at address 75200000. Now you can dump the contents of the EEPROM using

```
ath_info 0x75200000
```

To write the EEPROM, you have to unlock it by setting a GPIO register, namely the first, to zero. I changed the regdomain to 0x00 (=ALL channels available) 0x68 (=EU1 World) using this command:

```
ath_info -g 1:0 -w 0x75200000 regdomain 68
```

You can find all valid codes by looking at the `DMN_` constants in the [regdom.h](#) file.

After unloading the modules: `ath5k`, `ath`, `mac80211` and `cfg80211` and doing a `modprobe ath5k`, the command `iw list` should show the two new channels enabled.

For older ieee80211 modules, there's a module option `ieee80211_regdom` for the `cfg80211` module. This takes the values `US`, `JP` or `EU` (European Union). Add the following lines to `/etc/modprobe.d/options`:

```
options cfg80211 ieee80211_regdom=EU
options lbm_cw_cfg80211 ieee80211_regdom=EU
```

And after a reboot, you will have channels 12 and 13 available.

On Jaunty, you have to install the package `iw` and use the following command in e.g. your `/etc/rc.local` to set



the regdomain to *Germany*:

```
iw reg set DE
```

Possible errors

If you get the message `MAC (Media Access Control) revision 0xffff is not supported!` it means that some other module, likely `ath_hal` and/or `ath_pci` took over your card.