NAME

ural - Ralink Technology RT2500USB IEEE 802.11 driver

SYNOPSIS

To compile this driver into the kernel, place the following lines in your kernel configuration file:

```
device ehci
device uhci
device ohci
device usb
device ural
device wlan
device wlan_amrr
```

Alternatively, to load the driver as a module at boot time, place the following line in loader.conf(5):

```
if_ural_load="YES"
```

DESCRIPTION

The **ural** driver supports USB 2.0 wireless adapters based on the RT2500USB chipset.

The RT2500USB chipset consists of two integrated chips, a RT2570 MAC/BBP and a radio transceiver (the model of which depends on the card revision).

The RT2522, RT2523, RT2524, RT2525, RT2525e and RT2526 radio transceivers operate in the 2.4GHz band (802.11b/g) whereas the RT5222 is a dual-band radio transceiver that can operate in the 2.4GHz and 5.2GHz bands (802.11a).

ural supports **station**, **adhoc**, **hostap**, and **monitor** mode operation. Only one virtual interface may be configured at any time. For more information on configuring this device, see ifconfig(8).

HARDWARE

The **ural** driver supports USB 2.0 wireless adapters based on the Ralink Technology RT2500USB chipset, including:

Card	*Bus*
AMIT WL532U	USB
ASUS WL-167g	USB
Belkin F5D7050 v2000	USB
Buffalo WLI-U2-KG54-AI	USB

CNet CWD-854	USB
Compex WLU54G 2A1100	USB
Conceptronic C54RU	USB
D-Link DWL-G122 b1	USB
Dynalink WLG25USB	USB
E-Tech WGUS02	USB
Gigabyte GN-WBKG	USB
Hercules HWGUSB2-54	USB
KCORP LifeStyle KLS-685	USB
Linksys WUSB54G v4	USB
Linksys WUSB54GP v4	USB
MSI MS-6861	USB
MSI MS-6865	USB
MSI MS-6869	USB
NovaTech NV-902	USB
OvisLink Evo-W54USB	USB
SerComm UB801R	USB
SparkLAN WL-685R	USB
Surecom EP-9001-g	USB
Sweex LC100060	USB
Tonze UW-6200C	USB
Zinwell ZWX-G261	USB
Zonet ZEW2500P	USB

An up to date list can be found at *http://ralink.rapla.net/*.

EXAMPLES

Join an existing BSS network (i.e., connect to an access point):

```
ifconfig wlan create wlandev ural0 inet 192.168.0.20 \
    netmask 0xffffff00
```

Join a specific BSS network with network name "my_net":

```
ifconfig wlan create wlandev ural0 ssid my_net up
```

Join a specific BSS network with 64-bit WEP encryption:

```
ifconfig wlan create wlandev ural0 ssid my_net \
        wepmode on wepkey 0x1234567890 weptxkey 1 up
```

Join a specific BSS network with 128-bit WEP encryption:

```
ifconfig wlan create wlandev ural0 wlanmode adhoc ssid my_net \
  wepmode on wepkey 0x010203040506070809101112 13 weptxkey 1
```

DIAGNOSTICS

ural%d: device timeout The driver will reset the hardware. This should not happen.

SEE ALSO

intro(4), netintro(4), usb(4), wlan(4), wlan_amrr(4), wlan_ccmp(4), wlan_tkip(4), wlan_wep(4), wlan_xauth(4), hostapd(8), ifconfig(8), wpa_supplicant(8)

HISTORY

The **ural** driver first appeared in OpenBSD 3.7.

AUTHORS

The original **ural** driver was written by Damien Bergamini <*damien.bergamini@free.fr*>.

BUGS

Host AP mode doesn’t support client power save. Clients using power save mode will experience packet loss (disabling power saving on the client will fix this).