NAME

wavelan − AT&T GIS WaveLAN ISA device driver

SYNOPSIS

insmod wavelan_cs.o [io=*B,B..***] [irq=***I,I..***] [name=***N,N..***]**

DESCRIPTION

wavelan is the low-level device driver for the NCR / AT&T / Lucent **WaveLAN ISA** and Digital (DEC) **RoamAbout DS** wireless ethernet adapter. This driver is available as a module or might be compiled in the kernel. This driver supports multiple cards in both forms (up to 4) and allocates the next available ethernet device (eth0..eth#) for each card found, unless a device name is explicitly specified (see below). This device name will be reported in the kernel log file with the MAC address, NWID and frequency used by the card.

Parameters

This section apply to the module form (parameters passed on the **insmod**(8) command line). If the driver is included in the kernel, use the *ether=IRQ,IO,NAME* syntax on the kernel command line.

io Specify the list of base address where to search for wavelan cards (setting by dip switch on the card). If you don't specify any io address, the driver will scan 0x390 and 0x3E0 addresses, which might conflict with other hardware...

irq Set the list of irq that each wavelan card should use (the value is saved in permanent storage for future use).

name Set the list of name to be used for each wavelan cards device (name used by **ifconfig**(8)).

Wireless Extensions

Use **iwconfig**(8) to manipulate wireless extensions.

NWID (or domain)

Set the network ID [*0* to *FFFF*] or disable it [*off*]. As the NWID is stored in the card Permanent Storage Area, it will be reuse at any further invocation of the driver.

Frequency & channels

For the 2.4GHz 2.00 Hardware, you are able to set the frequency by specifying one of the 10 defined channels (*2.412, 2.422, 2.425, 2.4305, 2.432, 2.442, 2.452, 2.460, 2.462* or *2.484*) or directly by its value. The frequency is changed immediately and permanently. Frequency availability depends on the regulations...

Statistics spy

Set a list of MAC addresses in the driver (up to 8) and get the last quality of link for each of those (see **iwspy**(8)).

/proc/net/wireless

status is the status reported by the modem. *Link quality* reports the quality of the modulation on the air (direct sequence spread spectrum) [max = 16]. *Level* and *Noise* refer to the signal level and noise level [max = 64]. The *crypt discarded packet* and *misc discarded packet* counters are not implemented.

Private Ioctl

You may use **iwpriv**(8) to manipulate private ioctls.

Quality and Level threshold

Enable you the define the quality and level threshold used by the modem (packet below that level are discarded).

Histogram

This functionality allow to set a number of signal level intervals and to count the number of packets received in each of those defined intervals. This distribution might be used to calculate the mean value and standard deviation of the signal level.

Specific Notes

This driver will fail to detect some **non-NCR/ATT&T/Lucent** Wavelan cards. If this happens for you, you must look in the source code on how to add your card to the detection routine.

Some of the mentioned features are optional. You may enable to disable them by changing flags in the driver header and recompile.

SEE ALSO

wavelan_cs(4), **ifconfig**(8), **insmod**(8), **iwconfig**(8), **iwpriv**(8), **iwspy**(8)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.