

**NAME**

**ipw** - Intel PRO/Wireless 2100 IEEE 802.11 driver

**SYNOPSIS**

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

```
device ipw
device ipwfw
device pci
device wlan
device firmware
```

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

```
if_ipw_load="YES"
```

In both cases, place the following line in loader.conf(5) to acknowledge the firmware license (see below):

```
legal.intel_ipw.license_ack=1
```

**DESCRIPTION**

The **ipw** driver provides support for the Intel PRO/Wireless 2100 MiniPCI network adapter. **ipw** supports **station**, **adhoc**, and **monitor** mode operation. Only one virtual interface may be configured at any time. For more information on configuring this device, see ifconfig(8).

This driver requires the firmware built with the **ipwfw** module to work. For the loaded firmware to be enabled for use the license at `/usr/share/doc/legal/intel_ipw.LICENSE` must be agreed by adding the following line to loader.conf(5):

```
legal.intel_ipw.license_ack=1
```

**FILES**

`/usr/share/doc/legal/intel_ipw.LICENSE` **ipw** firmware license

**EXAMPLES**

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

```
ifconfig wlan create wlandev ipw0 inet 192.168.0.20 \
netmask 0xfffff00
```

Join a specific BSS network with network name "my\_net":

```
ifconfig wlan create wlandev ipw0 ssid my_net up
```

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

```
ifconfig wlan create wlandev ipw0 ssid my_net \  
wepmode on wepkey 0x1234567890 weptxkey 1 up
```

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

```
ifconfig wlan create wlandev ipw0 wlanmode adhoc ssid my_net \  
wepmode on wepkey 0x01020304050607080910111213 weptxkey 1
```

## DIAGNOSTICS

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

**ipw%d: firmware error** The onboard microcontroller crashes for some reason. The driver will reset the hardware. This should not happen.

**ipw%d: timeout waiting for firmware initialization to complete** The onboard microcontroller failed to initialize in time. This should not happen.

**ipw%d: could not load firmware image '%s'** The driver failed to load the firmware image using the `firmware(9)` subsystem. Verify the `ipwfw(4)` firmware module is installed and the license agreement loader(8) tunable has been set.

**ipw%d: could not load microcode** An attempt to upload the microcode image to the onboard microcontroller failed. This should not happen.

**ipw%d: could not load firmware** An attempt to upload the firmware image to the onboard microcontroller failed. This should not happen.

## SEE ALSO

`ipwfw(4)`, `pci(4)`, `wlan(4)`, `wlan_ccmp(4)`, `wlan_tkip(4)`, `wlan_wep(4)`, `ifconfig(8)`, `wpa_supplicant(8)`

## AUTHORS

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