

# Quick Wireless Setup On FreeBSD

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## 1 Introduction

Setting up wireless networking on FreeBSD is not as complex as in the past. Here's the short form. The examples that follow show a RealTek wireless device using the *urtw(4)* driver.

## 2 Setup For Automatic Wireless Connection

If needed, load driver modules in */boot/loader.conf*.

```
if_urtw_load="YES"
```

Create */etc/wpa\_supplicant.conf* with SSID and PSK.

```
network={
    ssid="myssid"
    psk="myultrasecretkey"
}
```

Modify */etc/rc.conf* to create *wlan0* and connect:

```
wlans_urtw0="wlan0"
ifconfig_wlan0="WPA SYNCDHCP"
```

On startup, FreeBSD will automatically connect.

That's it, pretty much all you need. Stop here unless you want to manually start a wireless connection.

## 3 Command Line Manual Method

```
# kldload if_urtw ❶
# ifconfig wlan0 create wlandev urtw0 ❷
# wpa_supplicant -B -i wlan0 -c /etc/wpa_supplicant.conf ❸
# dhclient wlan0 ❹
```

- ❶ If your wireless card driver isn't built into the *GENERIC* kernel, or you use a custom kernel without it, the driver module must be loaded first. Some devices also need firmware modules, usually provided by a port. See the man page for your device.
- ❷ Create a generic wireless device for the wireless network code to use.
- ❸ Run *wpa\_supplicant(8)* to associate to an access point defined in */etc/wpa\_supplicant.conf*.
- ❹ Get an IP address and DNS servers.

## 4 More Detail

[The FreeBSD Handbook chapter on wireless networking.](#)

## **A Things To Use Or Avoid**

WEP is insecure, avoid it. WPA2 is much better, use it. If you have old equipment that doesn't support WPA, smash it with a hammer or other convenient blunt instrument.

TKIP has some flaws. Use AES.

"Hidden" SSIDs are not really hidden. They make network setup more difficult and provide no real security benefits.

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