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[Installing Intel Wireless 3945 Adapter in FC6](#)

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Several laptop manufacturers have used the Intel PRO Wireless 3945 A/B/G adapter as the wireless component for their products. This adapter is most likely to be found in Intel, Toshiba, DELL, Lenovo ThinkPad or even in some Asus laptops. So the probability to get a laptop with this adapter is quite large. Unfortunately, the problems will start once you decide to install Linux on it. As you might know, the wireless solutions aren't supported by default in Linux; therefore, you'll need to manually install several kernel modules or to dynamically link the vendor's Windows drivers using a driver wrapper such as ndiswrapper. For Fedora at least, there's a cleaner and possibly easier way to set-up the Intel adapter. Note that Anaconda (FC6 installation system) will most likely install the wrong architecture kernel in some systems. This doesn't affect functionality much, but you might run into troubles while compiling 3rd party kernels. Run the following command to see if you have the right kernel:

```
[CODE=0]$ sudo yum -d 0 list kernel [CODE=1]
```

If this command reports kernel i586 or XEN installed and i686 available, then follow the steps from one of the many guides related to this issue. Moreover, if you have used a different guide for installing the IPW 3945 adapter which used several RPM packages provided by Atrpms, you should reinstall the affected kernel as those modules won't work.

Installation Open a terminal and type the following command to become root (if you are already logged in as super user, skip this):

```
[CODE=0]$ su --login [CODE=1]
```

Make sure you have the kernel development package and C compiler installed (you're still root):

```
[CODE=0]# yum install kernel-devel gcc [CODE=1]
```

And exit ROOT. You are now logged in as a normal user. Next, you will need to download the driver/kernel module, microcode/firmware and daemon. All three can be found on Softpedia: [ipw3945](#)

ipw3945-ucode
ipw3945d As normal user, change directory to where you downloaded the files, uncompress and build the ipw3945 kernel module as normal user!

NOTE!! If you want to enable Monitor Mode (eg. for running Kismet), Promiscuous Mode and/or RadioTap for this device, open the Makefile in your favorite text editor and uncomment (remove the #s) the following lines:

```
[CODE=0]CONFIG_IPW3945_MONITOR=y
CONFIG_IEEE80211_RADIOTAP=y
CONFIG_IPW3945_PROMISCUOUS=y [CODE=1]
```

Then, compile the module (as user - is a must!):

```
[CODE=0]$ cd /path/to/downloaded/archive$ tar xzf ipw3945-1.2.0.tgz$ cd ipw3945-1.2.0$ make [CODE=1]
```

Now re-login as root user (using su) and from the ipw3945 directory, type:

```
[CODE=0]# cp ipw3945.ko /lib/modules/2.6.19-1.2895.fc6/kernel/drivers/net/wireless/# chmod 744 /lib/modules/2.6.19-1.2895.fc6/kernel/drivers/net/wireless/ipw3945.ko# depmod -ae [CODE=1]
```

Install the microcode/firmware:

```
[CODE=0]As user:$ cd /path/to/downloaded/file$ tar xzf ipw3945-ucode-1.14.2.tgzAs root:# cp ipw3945.ucode /lib/firmware [CODE=1]
```

Install the regulatory daemon:

```
[CODE=0]As user:$ cd /path/to/downloaded file$ tar xzf ipw3945d-1.7.22.tgzAs root:# cp x86/ipw3945d /sbin [CODE=1]
```

(Choose the x86_64 if necessary). Reboot. After loading, type:

```
[CODE=0]$ su --login# /sbin/ipw3945 [CODE=1]
```

Then,

```
[CODE=0]# system-config-network [CODE=1]
```

Click 'New', choose Wireless device, choose the Intel card and configure it (IP, security etc.)

Managing Connection Network Manager is a very good tool for configuring and managing both wireless and wired networks. To install Network Manager, type:

```
[CODE=0]$ su --login# yum install NetworkManager [CODE=1]
```

FOR KDE:

```
# yum install knetworkmanager [CODE=1]
```

Start Network Manager with:

```
[CODE=0]/sbin/service NetworkManager start/sbin/service NetworkManagerDispatcher start [CODE=1]
```

Enjoy!