Detailed Installation Instructions

General

Extract all the files from the archive you downloaded to a sensible location (c:\Program Files\FahMon or ~/FahMon).

Windows

Just run fahmon.exe and everything will work just fine!

Linux

Installing FahMon on Linux is slightly more complicated than on Windows as you need to compile from source yourself.

This is NOT as difficult as it sounds though, and should take no more than a couple of minutes.

FahMon has been tested to compile on: PCLinuxOS 0.93a, PCLinuxOS 2007, Ubuntu 6.10 32bit, Ubuntu 7.04 AMD64 and SUSE 10.2 AMD64. Other distributions may require minor alterations to the instructions below, but they should be generic enough to alter easily.

If you've compiled FahMon before, you should have no difficulties. Once you've updated the source, you simply

```
[me@mybox ~]$ cd path/to/fahmon/src
[me@mybox ~]$ scons
```

If you've never installed FahMon before or are new to Linux, read on.

What follows are detailed instructions on how to compile and get FahMon running correctly.

Prerequisites

To compile FahMon you need several packages installed on your machine, these are:

- g++
- scons
- wxgtk =< 2.6.3 (both the runtimes and the header files, 2.6.1 will NOT work)

In most Linux distributions, the headers are part of the dev(el) packages.

For Ubuntu (6.10 Edgy and 7.04 Feisty) the packages are:

- scons
- libwxgtk2.8-dev
- wx-common
- g++

Note: Ubuntu 6.06 (Dapper) does not contain wxGTK 2.6.3 in the official repositories, but does contain 2.6.1. FahMon will not compile with this version. Ubuntu 6.10 (Edgy) and 7.04 (Feisty) do have 2.6.3 in the repositories, they also have 2.8. FahMon will compile with either versions, and I recommend you use 2.8

For PCLinuxOS (0.93a and 2007) the packages are:

- scons
- libwxgtk2.6-devel
- libwxgtk2.6
- wxGTK2.6
- gcc-c++

For SuSE 10.2 AMD64 the packages are:

- scons

- gcc41-c++ (the 41 value may be different)
- wxGTK (currently the SUSE repos contain 2.6.3)
- wxGTK-devel

Installing these packages is fairly painless, you can either use a gui package manager like synaptic or yast2, or use the shell, with a one-liner. In Ubuntu all you need do (assuming the packages are in the repositories) is issue this from the shell:

```
[me@mybox ~]$ sudo apt-get install scons libwxgtk2.8-dev wx-common g++
```

If you get error messages about not being able to locate packages, or you can't fund them in your GUI package manager, you may need to update your list of repositories (you don't need to for PCLinuxOS). Please consult your own respective distribution's documentation/website for instructions on how to do this. In Ubuntu, enable the "Universe" and "Multiverse" repositories. In SUSE, enable the online "oss" repository.

Assuming you've got this far and installed the packages listed above, you need to test wxGTK to make sure it's installed correctly. To do this, open a shell and type:

```
[me@mybox ~]$ wx-config --list
```

If wxGTK is installed correctly you should get some output like this:

```
[me@mybox ~]$ Default config is gtk2-unicode-release-2.8

Default config will be used for output

Alternate matches:

  gtk2-unicode-debug-2.8
```

Now make sure that g++ (The GNU c++ compiler) is installed properly by issuing:

```
[me@mybox ~]$ g++ -dumpversion
```

If g++ is installed, it will print out its version number.

Note: If you are using SUSE Linux, the above command will probably not work, even though you installed g++. This is because SUSE installs g++ as g++-4.1 (if 4.1 was the downloaded version). To fix this, and allow FahMon to compile, open a terminal and run "su" (without the quotation marks) and enter your root password. Then run "ln -s /usr/bin/g++-4.1 /usr/bin/g++". This will create a symbolic link that means if you try and run g++, g++-4.1 will be used. After doing this run "exit" to exit root mode, then use the -dumpversion command above to confirm.

If g++ is not installed or linked-to correctly, when you try and compile you'll get lots of error messages that say:

```
sh: o: command not found
```

After you've confirmed that wxGTK is installed correctly its fairly painless to compile FahMon. Simply navigate to the location you extracted FahMon to, I'll assume it's in a directory called "FahMon" in your home directory, cd into the src directory and run scons:

```
[me@mybox ~]$ cd ~/FahMon

[me@mybox ~]$ cd src

[me@mybox ~]$ scons
```

Lots of scary looking information will start flowing up your console window at this point, don't be alarmed though, it's doing exactly what it should. It will look a lot like this:

```
scons: Reading SConscript files ...

scons: done reading SConscript files.

scons: Building targets ...

g++ -o aboutDialog.o -c -DGTK_NO_CHECK_CASTS -D__WXGTK__ -D_FILE_OFFSET_BITS=64
-D_LARGE_FILES -D_LARGEFILE_SOURCE=1 -pthread -O2 -D_FAHMON_LINUX_ -Wall -Wno-strict-aliasing
-I/usr/lib/wx/include/gtk2-ansi-release-2.6 -I/usr/include/wx-2.6 -I
/home/uncle_fungus/FahMon/include aboutDialog.cpp

g++ -o base64Codec.o -c -DGTK_NO_CHECK_CASTS -D__WXGTK__ -D_FILE_OFFSET_BITS=64
-D_LARGE_FILES -D_LARGEFILE_SOURCE=1 -pthread -O2 -D_FAHMON_LINUX_ -Wall -Wno-strict-aliasing
-I/usr/lib/wx/include/gtk2-ansi-release-2.6 -I/usr/include/wx-2.6 -I
/home/uncle_fungus/FahMon/include base64Codec.cpp

g++ -o benchmark.o -c -DGTK_NO_CHECK_CASTS -D__WXGTK__ -D_FILE_OFFSET_BITS=64 -D_LARGE_FILES
-D_LARGEFILE_SOURCE=1 -pthread -O2 -D_FAHMON_LINUX_ -Wall -Wno-strict-aliasing -I
```

```
/usr/lib/wx/include/gtk2-ansi-release-2.6 -I/usr/include/wx-2.6 -I
/home/uncle_fungus/FahMon/include benchmark.cpp

g++ -o benchmarksDialog.o -c -DGTK_NO_CHECK_CASTS -D__WXGTK__ -D_FILE_OFFSET_BITS=64
-D_LARGE_FILES -D_LARGEFILE_SOURCE=1 -pthread -O2 -D_FAHMON_LINUX_ -Wall -Wno-strict-aliasing
-I/usr/lib/wx/include/gtk2-ansi-release-2.6 -I/usr/include/wx-2.6 -I
/home/uncle_fungus/FahMon/include benchmarksDialog.cpp
```

If there are no errors then FahMon has been compiled correctly, ignore any "warning" messages.

Running FahMon in Linux

Because FahMon needs to be run from its own directory in Linux, you can't just double click on the application and expect it to work.

There are several methods to start FahMon, which are explained below.

Running FahMon straight from the terminal

This is perhaps the easiest way of running FahMon, but it is not very elegant and requires you to use the terminal every time you want to start FahMon

```
[me@mybox ~]$ cd ~/FahMon/src

[me@mybox ~]$ ./fahmon &
```

A nicer way, would be to have a desktop shortcut, or a menu link etc. For this you need to create a little script, which can also be run on it's own without the need for shortcuts or links.

Running FahMon from a shell script

Creating a shell script to launch FahMon is as easy as a copy and paste + a few mouse clicks. (Or terminal commands if you're that way inclined).

Open your favourite text editor, such as kate or gedit, and paste the following into it, editing as necessary if you extracted FahMon to a different location:

```
#!/bin/sh

cd ~/FahMon/src

./fahmon
```

You'll notice that this is almost the same as what you typed into the terminal in the section above.

Now save the file as *fahmon.sh* in your home directory. If you want to make the shell script hidden, call it *.fahmon.sh* (leading dot).

Now right click on the file, and change the permissions to allow execution.

If you want to do this from a terminal (add the leading dot, if you made it hidden), run

```
[me@mybox ~]$ chmod +x ~/fahmon.sh
```

You can now use this script to launch fahmon, either by clicking on it as you would any other application or document, or you can make a Desktop shortcut to it. Desktop shortcut creation won't be covered here because it depends which Desktop Environment you are using, but all you need to make sure, is that the application you run is ~/fahmon.sh (i.e. the shell script you just made).