

Installing Libftdi on Linux

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Libftdi is an alternative software driver for the official FTDI USB chips. It has been found that Libftdi offer a much stable driver than the official Linux FTDI drivers and they are also Open Source.

Libftdi requires some dependencies such as pkg-config and libusb so I wanted to make an easy to understand guide for Linux users.

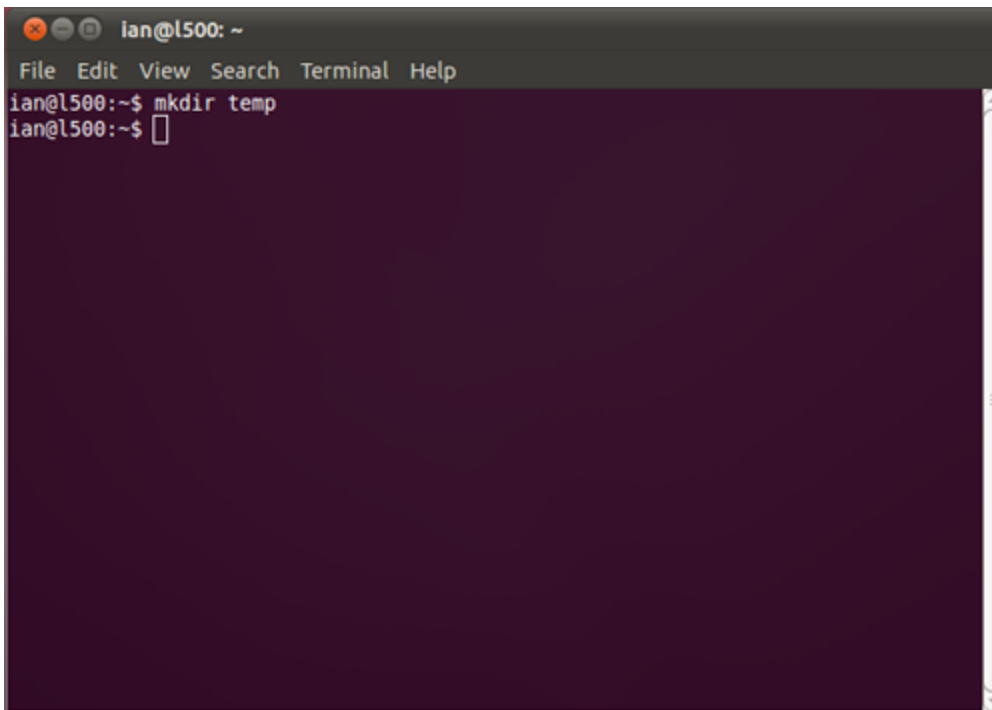
Some basic Terminal usage is required.

I am using Ubuntu 10.10 distribution for this tutorial.

Edit: evilynux has added a simple solution for installing libusb and libftdi in this the USB Gecko forum thread [GNU/Linux status - moving toward a basic SDK code example](#)

Step 1. Create a working temporary folder.

Open the Terminal and create a temp folder in your home folder. This is done by using the mkdir command like below. This temp folder will be used for storing the downloaded packages.

A screenshot of a Linux terminal window. The window title is 'ian@l500: ~'. The menu bar includes 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal shows the command 'mkdir temp' being entered and executed, with the prompt returning to 'ian@l500:~\$'.

Step 1. Install pkg-config.

Download pkg-config from <http://pkgconfig.freedesktop.org/releases/> the latest version is 0.25. Click this file and save to your previously created temp folder.

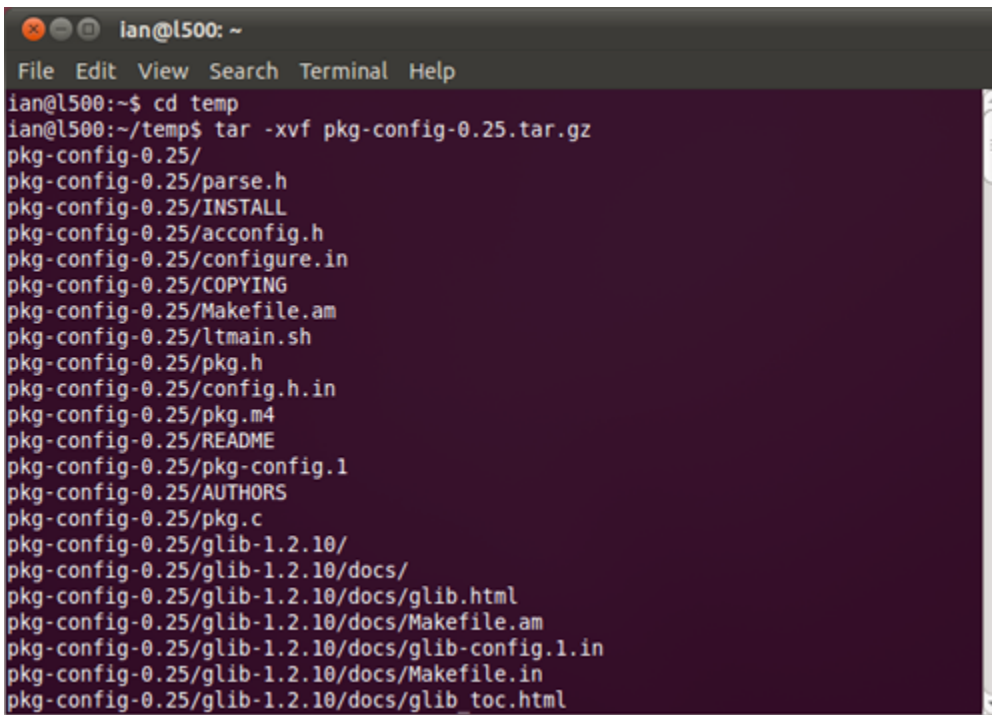
Index of /releases

Name	Last modified	Size	Description
 Parent Directory		-	
 pkg-config-0.18.1.tar.gz	29-Jun-2005 04:12	946K	
 pkg-config-0.19.tar.gz	16-Jul-2005 03:25	946K	
 pkg-config-0.20.tar.gz	16-Oct-2005 22:02	947K	
 pkg-config-0.21.tar.gz	16-Aug-2006 12:12	1.0M	
 pkg-config-0.22.tar.gz	18-Jun-2007 14:38	1.0M	
 pkg-config-0.23.tar.gz	16-Jan-2008 14:54	1.0M	
 pkg-config-0.24.tar.gz	23-May-2010 14:33	970K	
 pkg-config-0.25.tar.gz	28-May-2010 09:12	966K	
 pkgconfig-0.3.0.tar.gz	15-Sep-2003 06:01	34K	
 pkgconfig-0.3.1.tar.gz	15-Sep-2003 06:01	34K	
 pkgconfig-0.3.2.tar.gz	15-Sep-2003 06:01	34K	
 pkgconfig-0.3.5.tar.gz	15-Sep-2003 06:01	35K	
 pkgconfig-0.4.0.tar.gz	15-Sep-2003 06:01	525K	
 pkgconfig-0.4.1.tar.gz	15-Sep-2003 06:01	526K	
 pkgconfig-0.5.0.tar.gz	15-Sep-2003 06:01	527K	
 pkgconfig-0.6.0.tar.gz	15-Sep-2003 06:01	572K	
 pkgconfig-0.7.0.tar.gz	15-Sep-2003 06:01	571K	
 pkgconfig-0.8.0.tar.gz	15-Sep-2003 06:01	572K	
 pkgconfig-0.9.0.tar.gz	15-Sep-2003 06:01	594K	



Now enter your temp folder and decompress the files from the archive, this is done with following command:

```
tar -xvf pkg-config-0.25.tar.gz
```

A terminal window titled 'ian@l500: ~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the following commands and output:

```
ian@l500:~$ cd temp
ian@l500:~/temp$ tar -xvf pkg-config-0.25.tar.gz
pkg-config-0.25/
pkg-config-0.25/parse.h
pkg-config-0.25/INSTALL
pkg-config-0.25/acconfig.h
pkg-config-0.25/configure.in
pkg-config-0.25/COPYING
pkg-config-0.25/Makefile.am
pkg-config-0.25/ltmain.sh
pkg-config-0.25/pkg.h
pkg-config-0.25/config.h.in
pkg-config-0.25/pkg.m4
pkg-config-0.25/README
pkg-config-0.25/pkg-config.1
pkg-config-0.25/AUTHORS
pkg-config-0.25/pkg.c
pkg-config-0.25/glib-1.2.10/
pkg-config-0.25/glib-1.2.10/docs/
pkg-config-0.25/glib-1.2.10/docs/glib.html
pkg-config-0.25/glib-1.2.10/docs/Makefile.am
pkg-config-0.25/glib-1.2.10/docs/glib-config.1.in
pkg-config-0.25/glib-1.2.10/docs/Makefile.in
pkg-config-0.25/glib-1.2.10/docs/glib_toc.html
```

Now cd into the folder of the unarchived files:

```
cd pkg-config-0.25
```

Now configure, compile and install (you need root to make install, so will ask for your admin password when using sudo):

```
./configure
```

```
make
```

```
sudo make install
```

Step 2. Install libusb 1.0.8

Download [libusb 1.0.8 from sourceforge](#) and save to the temp folder, the file name is libusb-1.0.8.tar.bz2 like shown below.

sourceforge.net/projects/libusb/files/libusb-1.0/libusb-1.0.8/

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SourceForge.net > Find Software > libusb > Files

 **libusb** by dsd_, jerdfelt

Summary Files Support Develop

Looking for the latest version? [Download libusb-1.0.8.tar.bz2 \(331.8 KB\)](#)

Home / libusb-1.0 / libusb-1.0.8

Name	Modified	Size
Parent folder		
libusb-1.0.8.tar.bz2	2010-05-04	331.8 KB

Totals: 1 Item 331.8 KB

Now make sure you are in your temp directory once again and decompress the libusb files with the following command:

```
tar -xvf libusb-1.0.8.tar.bz2
```

Now CD into the libusb folder:

```
cd libusb-1.0.8
```

Now configure, make and make install:

```
./configure  
make  
sudo make install
```

Step 2. Install libusb-compat


Download the latest [libusb-compat from sourceforge](#) and save again to the temp folder, the filename is libusb-compat-0.1.3.tar.bz2

sourceforge.net/projects/libusb/files/libusb-compat-0.1/libusb-compat-0.1.3/

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Summary **Files** Support Develop

Looking for the latest version? [Download libusb-1.0.8.tar.bz2 \(331.8 KB\)](#)

Home / libusb-compat-0.1 / libusb-compat-0.1.3

Name	Modified	Size	
Parent folder			
libusb-compat-0.1.3.tar.bz2	2009-07-09	251.2 KB	 
Totals: 1 Item		251.2 KB	

Now make sure you are in your temp directory once again and decompress the libusb-compat files with the following command:

```
tar -xvf libusb-compat-0.1.3.tar.bz2
```

Now CD into the libusb folder:

```
cd libusb-compat-0.1.3
```

Now configure, make and make install:

```
./configure  
make  
sudo make install
```

Step 3. Install Libftdi

Download libftdi from the [official homepage](#), and save once again to our temp folder. The latest version while writing this guide is libftdi-0.18.tar.gz



Now make sure you are in your temp directory yetagain and decompress the libftdi files with the following command:

```
tar -xvf libftdi-0.18.tar.gz
```

Now CD into the libftdi directory with the following command:

```
cd libftdi-0.18
```

Now configure, make and make install:

```
./configure  
make  
sudo make install
```

You have successfully installed libftdi. If you want you can now delete the temp directory, this is done with the following terminal command:

```
rm -rf temp
```

Notes: when compiling with GCC you need to use `-libftdi -libusb` flags. A sample makefile and libftdi project for linux can be downloaded at <http://www.usbgecko.com/downloads/linuxbasic.tar.gz>

Trouble Shooting

If you receive any errors when compiling the basic example, try the following:

sudo apt-get install libftdi1 or use the Synaptic Package Manager to installed libftdi.

If you receive the following error message when running the `./geckobasic` test application:

USB Gecko SE Basic Test Application

libusb couldn't open USB device `/dev/bus/usb/005/002`: Permission denied.

libusb requires write access to USB device nodes.

Error: Failed to open device, check device is connected.

Then try setting permissions or running as `sudo ./geckobasic` and the example will run.