



MUUGlines

The Manitoba UNIX User Group Newsletter

Next Meeting: March 9th – Voice over IP

Bill Reid will give a brief intro to VoIP technology with emphasis on the Session Initiation Protocol (SIP). Bill will also demonstrate installing and configuring Asterisk as well as a number of SIP hard and soft phones. Asterisk is a complete PBX in software. It runs on Linux and provides all of the features you would expect from a PBX and more. Asterisk does voice over IP in three protocols, and can interoperate with almost all standards-based telephony equipment using relatively inexpensive hardware.

Where to find the Meeting

Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk, and then wait for someone to take you up (in groups) to the meeting room. Please try to arrive by about 7:15pm, so the meeting can start promptly at 7:30pm. Don't be late or you may not get in.

Limited parking is available for free on the street, or in a lot across Ellice from IBM, for \$1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for \$2.00 for the evening.

gpsdrive (<http://gpsdrive.kraftvoll.at/>)

By Shawn Wallbridge

For a recent trip to Vancouver, I was wondering if I could find anything to replace MS Pocket Streets

(running on my iPaq) for general mapping related information under OSX.

After some searching, I found that gpsdrive worked fine under OSX on my Powerbook, and since I was able to borrow a GPS unit from a friend, it should be able to do most of what I needed. Here is what I found...

Installation

The first thing you are going to want to do is make sure your GPS receiver is functioning properly and you are able to receive data from it.

One thing that makes gpsdrive (or using a GPS unit in general) easier to set up is gpsd, which is available at <http://www.pygps.org/gpsd/gpsd.html>. This daemon runs in the background, and handles all communications with the gps receiver. It is used by many gps related applications.

Since I was using OSX, I checked to see if gpsdrive was available with Fink, (<http://fink.sourceforge.net/>) which is a project that kind of replicates the Debian packaging system under OSX. While gpsdrive wasn't in the stable or testing tree's of Fink, it was in the unstable tree. After a couple of attempts to get it installed, I actually read the Fink documentation and was able to get it installed fairly quickly. For people running other operating systems, I would check to see if it is available in your packaging format of choice, if not, a source compile probably isn't too difficult.

Once you have installed gpsdrive, start it up (most likely, `/usr/local/bin/gpsdrive`). Once it is up and running, you will need to do some configuration. Click on the Preferences button in the main window.

The main thing to configure is your gps unit under 'Settings 2'. For my setup, I just had to let it know which serial port to use (in my case it was a Bluetooth GPS unit, which under OSX, you create a Bluetooth serial connection, which you name, so mine is /dev/tty.Socket) and the Baud rate, which can vary with manufacturer, so make sure you check first. The one other thing you will probably want to confirm is that the maps directory is set properly, this folder can get fairly big, so make sure you have room.

Once you have all that configured, you should be able to click 'Start GPSD' and after a few seconds you should have your current location displayed on the map.

Maps

The default map isn't going to do you much good, because it is a topographical map of the earth, which doesn't really have much detail. So, you want to download some maps. The simplest way is to just click the 'Download map' button. That will bring up a dialog box asking you what map you want to download. The Lat and Long displayed should be where your GPS unit is currently saying you are. The scale you chose will change how large of an area the map covers and how much detail is shown. I like to have a higher resolution and a lower resolution. You can download a map and see how you like it, if you want more or less resolution, you can always download another one. One thing to note, these maps are downloaded from Expedia, so they may not be perfect.

You will want to zoom in and out of the map(s) you have downloaded to see how usable they are. You can also change between the maps you have downloaded by clicking the << and >> buttons on the main page. That will switch between the maps you have downloaded. You can enable 'Auto Best Map' to have gpsdrive choose the best map for the area you are currently displaying (this disables the << and >> buttons).

As you may have noticed, this is a pain to do for a large area, so you can use the gpsfetchmap.pl file that comes with gpsdrive. You can mass download maps fairly quickly. A basic command to run it is....

```
gpsfetchmap.pl -la 49.891 -lo \
-97.104 --mapserver expedia \
-a 10 -sc 5000 -p
```

This will download maps for a 10km square (-a 10) around the coordinates at a scale of 5000 (-sc 5000) from expedia (--mapserver expedia) and wait a second for each new map (-p). That should get most of Winnipeg. If you have customized your installation of gpsdrive too much, you may need to add a few things to this to make sure the files end up in the right place.

More Features

If you want to save a record of where you have gone, you can click the save track option, which will save a log file in ~/.gpsdrive/ called trackXXXX.sav (the actual file name will be listed in the map window). This will have the lat, long and elevation for every second.

The display window also shows you the number and strength of the GPS satellites you are currently receiving a signal from, your speed, direction and altitude.

Conclusion

So, how did gpsdrive compare to the commercial offerings? Well, it was really handy to have, but because it doesn't have any built in data, it has many limitations compared to MS Pocket Streets or MS Streets and Trips. With Pocket Streets, I can enter in an address and it will show me where it is. But Pocket Streets doesn't record where you are going, or display speed, etc. Having to download maps is also a big limitation with gpsdrive. Since I can't see gpsdrive being able to compile the kind of data a commercial product can, I can't see it completely replacing PocketStreets for me, but it is still very nice to have and I will use it regularly.

ChessBrain

On January 30th, 2070 computers around the world combined their processing power to play a game of chess with Grandmaster Peter Nielsen. After 34 moves the match ended in a draw, but in doing so, they set the Guinness World Record for the largest number of machines used to play a game against a single human opponent.

The ChessBrain project (<http://www.chessbrain.net>) has clients that run on Linux, Windows and OSX. Each client (called a PeerNode) connects into a SuperNode (running Linux) using encrypted (using AES) Simple Object Access Protocol (SOAP) over http.

During the match, the project members were almost taken off the net by the volume of clients, but they were able to modify both the SuperNode source code and the kernel parameters on the SuperNode to handle the additional load.

DeCSS no longer a trade secret

The California Appeals court has decided (<http://www.courtinfo.ca.gov/opinions/documents/H021153A.PDF>) that the DeCSS code is not longer a trade secret in the DVD CCA case against Andrew Bunner. The DVD CCA had actually dropped the charges fearing they would lose, but Bunner opposed the motion to dismiss and ultimately won a small victory for free speech.

Xfree86 license issues

Xfree86 4.4 (<http://www.xfree86.org>) was released on Feb. 29th, and has caused quite a stir. Some changes to the license have caused Debian, OpenBSD, Gentoo, Mandrake and RedHat to decide not to ship 4.4. They will all stick with 4.3 and possibly fork the code unless the matter is resolved. Fedora is planning to start supporting multiple X11 implementations.

The issue comes down to the fact that the new license isn't GPL compatible.

The GIMP 2.0

The GIMP 2.0 is nearing release; they released the third preview on the 25th of February. The big changes appear to be in the new Text tool and the addition of CMYK color space.

Xbox 2 SDK

Microsoft has started shipping Xbox 2 developer SDK's to select companies. The big surprise is that they are Apple Dual G5's running a custom Windows NT Kernel.

IBM vs. SCO

SCO has tacked on a few more charges to it's lawsuit against IBM. These new charges are for copyright infringement, but they are most specific. They specifically mention licenses granted to Sequent, which IBM purchased.

Novell has also used a clause in the purchase agreement with SCO that requires SCO to dismiss use restrictions of Sequent's (now IBM) SVRX license. This could be an interesting twist.

Sun and IBM ‘meeting to discuss opening source to Java’

Sun has agreed to meet with IBM to discuss the issue of opening the source code to Java. In Sun’s words “Sun is closely evaluating the effectiveness of the process.”. Sun and IBM are planning on meeting by March 5th. IBM is offering to donate code and to provide resources to the effort.

VMWare Offer

Last chance to have your name submitted for the VMWare offer.

“If you send us a list of your members’ names and email addresses (with their permission!), when they support our Linux development efforts by purchasing a copy of VMware Workstation, we will send them a \$100 rebate. The program for Linux group members will begin on December 22, 2003.

In the next 6 weeks, we’ll also be providing all registrants with a referral code. This code will both provide your colleagues with a 5% discount off of VMware Workstation and provide you with 15 VMware Points when they purchase it on our web site. Approximately every 6 weeks, we’ll send you a statement of your points earned, at which point you can redeem them for various product and merchandise.”

If you are interested in this promotion and want us to submit your name and email to VMWare, please send us an email to vmware@muug.mb.ca

MUUG Shirts

We have spare MUUG Golf Shirts if people are interested, we have various sizes available for \$40 at the regular MUUG meetings.

Sending Us E-Mail?

Due to the amount of e-mail MUUG receives, we’ve set up an auto-reply to give you immediate feedback, and redirect some of the e-mail to the appropriate places. Why not look at <http://www.muug.mb.ca/about.html#contacts> first?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it’s criticisms or commendations, and continue to send in articles or ideas for the same. Specifically, what sort of material you would rather see: Announcements, technical articles, new products, or...?

If you have a How-To or other idea, and aren’t ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that’s terrific; if you can’t, submit it anyway and we’ll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share?

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