

# MUUGlines

The Manitoba UNIX User Group Newsletter

### Next Meeting: May 8th, 2007: Gordon Meyer's Smart Home Hacks



Learn how to put your computer to work around the house. Gordon's presentation will get you started with the basics of do-it-yourself home automation, then cover the most practical, fun, and interesting techniques culled from around the globe. Drawn from the best of Smart Home Hacks, you're sure to find at least one that suits your

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lifestyle. If you're new to home automation, you'll get on the fast track to the most useful methods. If you're an old hand, you'll leave with tips and inspiration for upgrading your home.

Gordon Meyer is a Chicago-based writer and speaker who has authored dozens of software manuals, numerous articles for computer users and technical writers, and O'Reilly's Smart Home Hacks, a leading book on do-it-yourself home automation techniques.



Gordon, an amateur magician and a frequent speaker at technical conferences, touts a practical,

lighthearted, and humanized approach to integrating technology with daily life.

# Where to find the Meeting

**For this month only**, the meeting will be held at the Millennium Library, in the Carol Shields Auditorium (on the second floor). The Millennium Library is at the corner of Graham Ave. and Donald St. (251 Donald St.) Parking is \$5 for the evening in the Library's underground lot, and \$2-\$5 elsewhere in the area. Meeting time is 7:30pm, as usual.

#### Google Releases Patches that Enhance the Manageability and Reliability of MySQL

Monday, April 23, 2007 By Mark Callaghan, Software Engineer - Google

Though you may think of us as simply a company with a big search index, Google uses MySQL, the open source relational database, in some of the applications that we build that are not search related.

We think MySQL is a fantastic data storage solution, and as our projects push the requirements for the database in certain areas, we've made changes to enhance MySQL itself, mainly in the areas of high availability and manageability.

We would love for the some of these changes to be merged with the official MySQL release, but until then we felt strongly that anyone should have access to them, thus we have released the changes with a GPL license for the MySQL community to use and review (http://code.google.com/p/google-mysqltools).

What have we added and enhanced?

The high availability features include support for semi-synchronous replication, mirroring the binlog from a master to a slave, quickly promoting a slave to a master during failover, and keeping InnoDB and replication state on a slave consistent during crash recovery.

The manageability features include new SQL statements for monitoring resource usage by table and account. This includes the ability to count the number of rows fetched or changed per account or per table. It also includes the number of seconds of database time an account uses to execute SQL commands.

# Linux: ZFS, Licenses and Patents

#### http://kerneltrap.org/node/8066

A recent discussion on the lkml examined the possibility of a Linux implementation of Sun's ZFS. It was pointed out that the file system is released under the GPL-incompatible CDDL, and that Sun has filed numerous patents to prevent ZFS from being reverse engineered. Max Yudin pointed out, "according to Jeff Bonwick's blog Sun issued 56 patents on ZFS, but I have no idea what they patented. Sorry, binary compatible ZFS reimplementation with GPL license might not be legal." David Litwin noted that he had been told by a ZFS developer to talk to Linux developers to see about getting non-GPL'd code included with the kernel. Theodore T'so replied, "that was totally useless answer from the ZFS developers. What he should have told you is to contact Sun management, since they are the only ones who can decide whether or not to release ZFS under a GPL license, and more importantly, to give a patent license for any patents they may have filed in the course of developing ZFS."

Alan Cox suggested, "the real test of whether Sun were serious about ZFS being anywhere but Solaris is what they do to license it – they've patented everything they can, and made the code available only under licenses incompatible with other OS products. Their intent is quite clear, and quite sad. Compare it to what the old Sun company did with NFS, which is now a standard used everywhere." Theodore T'so added, "given that Sun has reportedly filed a huge number of patents covering ZFS and has refused to make them available for anything other than Solaris --- and there are senior Sun programmers who have on record stated that one of the reasons why Sun picked the CDDL was precisely because it was incompatible with GPL and Sun fears Linux ---- I wouldn't bet on Sun being willing to making a patent license available to a hypothetical alternate implementation of the ZFS format for Linux." He went on to note, "of course, this is all open source. If someone wants to work on reimplementing ZFS from scratch, either in userspace or in the kernel, certainly the Linux community won't stop them. Given the patent issues Linus might not feel comfortable including it in the mainline sources without a promise from Sun that they won't sue the pants off of him and The Linux Foundation, but again, that's Sun's decision, and no one else can help you there."

#### **GNOME** Foundation and Industry Leaders Join to Create GNOME Mobile & Embedded Initiative

Embedded Linux Conference, Santa Clara, USA --April 19, 2007 -- The GNOME Foundation announced today the creation of the GNOME Mobile & Embedded Initiative (GMAE), and a software platform for user experience development across a wide range of device profiles.

"GNOME continues to drive the cutting edge of Open Source and Free Software innovation. With the GNOME Mobile & Embedded Initiative, GNOME expands the reach of Software Freedom to new devices, new markets, and new audiences", said Jeff Waugh, founder of the GNOME Mobile & Embedded Initiative and a director of the GNOME Foundation board. "Developers will not only have the means to create great mobile and embedded software, but the freedom to envision and create fundamentally new kinds of devices, for entirely new markets."

Mobile, embedded and converged devices comprise one of the most rapidly growing segments of the technology landscape, accounting for sales of billions of units per year. Analysts estimate that by 2010, one out of two smartphones will be based on Free and Open source software, and growth in this space is already faster than that of proprietary devices (Canalys, 2006). The mobile and embedded device space represents an unprecedented opportunity for third-party developers.

#### Mission

The GNOME Mobile & Embedded Initiative will advance the use, development and commercialization of GNOME components as a mobile and embedded user experience platform. It brings together industry leaders, expert consultants, key developers and the community and industry organizations they represent. The initiative aims to:

- Increase community and commercial visibility of GMAE technology and participating organizations.
- Coordinate investment in the GTK+ and GNOME platform, documentation and developer tools.
- Increase development focus on the "mobile experience", particularly the integration of GNOME desktop and GMAE technology.
- Facilitate healthy development collaboration between participating organizations, the GNOME community and related projects; and between GNOME platform, desktop and GMAE developers.
- Pursue standardization opportunities for the platform, and potentially at the user experience level.
- Ensure that Software Freedom is a reality beyond the desktop, and available in the hands of users around the world.

# Platform

The GNOME Mobile & Embedded Platform is a subset of the proven, widely used GNOME Platform. In addition to the core user experience toolkit (GTK+), the platform includes crucial functionality such as multimedia support (GStreamer), instant messaging and presence (Telepathy), Bluetooth (BlueZ), contacts and calendaring (E-D-S), and network service discovery (Avahi). APIs are available for developers using C, C++ or Python.

Following GNOME's highly successful licensing strategy, the GNOME Mobile & Embedded Platform is distributed under the terms of the LGPL, which allows for royalty-free use in proprietary software products, but encourages contribution of platform code changes back to the community. This, combined with a thriving open development process supported by industry and community, makes the GMAE Platform uniquely suited to the needs of mobile and embedded developers.

The platform definition announced today represents components that are currently shipping in production devices, but GMAE participants are planning to grow the platform aggressively in the next twelve months, to enable new technologies and functionality. Components already under consideration include the Java Mobile & Embedded platform (Java ME), a geolocation service (GeoClue), a hardware information system (HAL), an audio management service (PulseAudio), and a mobile email framework (Tinymail).

The GNOME Mobile & Embedded Platform is already a key technology component in a wide range of products and projects, including those from GMAE participants such as the Intel Mobile Internet Device (MID), the Nokia N770 and N800 web tablet, the One Laptop Per Child XO laptop, the OpenMoko Neo1973 mobile phone, the Vernier LabQuest; the Sugar, Hildon and GPE user interfaces; and the ACCESS Linux Platform.

# Wikipedia 0.5 available on a CD-ROM

The Wikimedia Foundation and Linterweb announces the release of Wikipedia Version 0.5, a compact disc collection of around 2,000 articles from the English Wikipedia. The project paves the way for many such collections, with larger releases planned in a variety of languages. Articles were chosen based on criteria for quality and importance set by the Wikipedia community. Topics covered include, among others, geography, arts, literature, science, history, and natural sciences. Users can browse articles using a built-in search engine or by surfing navigational pages.

Martin A. Walker, a chemistry professor at the State University of New York at Potsdam, played a central role in the production of Wikipedia Version 0.5, and in setting criteria for article selection.

"Although this is only a test release, we really tried to produce something the Wikipedia community could feel proud of. We wanted to cover the major topics, while also including a selection of articles considered to be the very best of Wikipedia. These 'featured articles' aim to be well written and comprehensive, and also free from errors, bias, vandalism and marketing ", states Walker.

The community members are welcome to take part in this innovating project, either by helping for the selection process, or by helping at the development of the open-source project Kiwix, which is the software part of the CD. "We hope that everyone is able to participate at the future development of the Encyclopedia, and be proud of its reach.", Pascal Martin emphasizes.

Wikimedia France was at the forefront of bringing the CD collection to fruition, and securing the deal with Linterweb, a French technology company. In the future, Wikimedia France also aims to produce a French language CD through Linterweb. The French/English collaboration has proved very successful, and the two groups continue to share ideas and resources.

The Wikipedia Version 0.5 CD is compatible with Windows (back to 98), Macintosh (Intel) OS X and Linux x86. It can be purchased at the price of \$13.99 (http://www.wikipediaondvd.com/site.php?temp=buy)

# 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? Send Mail to: **editor@muug.mb.ca**.

