



# MUUGlines

The Manitoba UNIX User Group Newsletter

## Next Meeting: February 13th, 2007: Syslog to a Database

Kevin McGregor had a common problem: He could generate lots of interesting system logging data and direct it to a common logging system to be recorded, but he wanted to perform more sophisticated analysis than could be done with text files and `grep`. Also, managing log rotations and old data was a concern, as was automatic report generation for management.

This month, Kevin will explain how he put together the combination of `syslog-ng` and PostgreSQL to solve this problem.

### 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 (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. (But don't come too early either, since security may not be there to let you in before 7:15 or so.)

Limited parking is available for free on the street, either on Ellice Ave. or on some of the intersecting streets. Indoor parking is also available nearby, at Portage Place, for \$3.00 for the evening. Bicycle parking is available in a bike rack under video surveillance located behind the building on Webb Place.

### New Daylight Saving Time Rules

Starting this year, at 2am on March 11<sup>th</sup> to be exact, new rules come into effect for Daylight Saving Time (DST) in most of the U.S. and Canada. Will your UNIX system

know what to do? That depends on whether or not your “`tzdata`” and/or system libraries are up to date or not.

According to Wikipedia, “DST was first put into practice by the German government during the First World War, between April 30, 1916 and October 1, 1916... Newfoundland became the first North American jurisdiction to adopt DST with the passing of the Daylight Saving Act of 1917.” The U.S. followed in 1918, and Canada also did eventually. By the late 1960's, most Canadian provinces had synchronized their observance to correspond to the U.S. in equivalent time zones.

That synchronization was broken in 1974 and 1975, when most (but not all) of the states temporarily extended DST. A permanent change was made in the U.S. in 1987, to start DST a week earlier, on the last Sunday in March. Most Canadian provinces followed. Then with the Energy Policy Act of 2005, the rules changed again: effective in 2007, DST will now begin on the second Sunday in March, and will end on the first Sunday in November. (Ostensibly, these changes have all been done as energy conservation measures, and curiously, all under Republican administrations.)

### What is TZData?

Under almost all UNIX variants today, time zone and DST conversions to local time are done using the `tzdata`, or `zoneinfo`, database. (It is sometimes called the Olson database, after Arthur David Olson, its prominent founding contributor.) This consists of a series of files, grouped in various subdirectories, typically under the directory `/usr/share/zoneinfo/` OR `/usr/share/lib/zoneinfo/`. Each file corresponds to the set of rules for a given time zone jurisdiction, and is specified either according to the geopolitical region (e.g. `Canada/Central`), or a major city—usually a capital—in that region (e.g. `America/Winnipeg`).

So, how do you know if your database is up to date? A good way to test it is to use the `zdump` command. For example:

```
zdump -v Canada/Central | fgrep 2007
```

If this shows the transitions on March 11 and November 4, then you're up to date. If not, you'll need to get a new copy of the database.

## Getting Updates

For many Linux distributions, a package called `tzdata` will likely exist. Its version number should be 2006a or more recent. Red Hat has issued updates for Enterprise versions 3 and 4, as well as all Fedora releases. In older Red Hat Linux versions, `tzdata` was part of the `glibc-common` package; a Fedora Legacy update may be available for those versions.

For Solaris systems, patches have been issued for all supported versions. Actually, you'll likely need two patches, one for the `tzdata` itself, and one to upgrade various libraries for POSIX compatibility. Apple has issued updates for Mac OS X 10.4, but earlier versions may not be supported.

So, what if you find yourself with an old, unsupported system with old `tzdata`? Well, the simple, quick fix is to simply copy the whole `zoneinfo` tree from an updated system over to the old system. As long as they're binary compatible, this should work. Another alternative is to get the source from <http://www.twinsun.com/tz/tz-link.htm> and compile it for your system.

So, you've done all this, and `zdump` now reports the correct transitions, but you're still getting the wrong conversion for local time? You may have an out-of-date `localtime` file. On many systems, this is stored as `/etc/localtime`, and is typically just a symbolic link to the appropriate `zoneinfo` file. However, on some systems (like Red Hat and Fedora distributions), the file is a copy of the `zoneinfo` file, made at the time of the system installation or last upgrade. If this file is now out of date, simply copy the updated one there, or make it a symbolic link:

```
ln -sf /usr/share/zoneinfo/Canada/Central /etc/localtime
```

## Java Runtime Environment and Apps

OK, so this should cover the system itself, but what about your applications? It turns out that Sun's JRE has its own way of computing DST, so you'll need to be sure that's updated as well. You may also have to worry about other specific applications too, such as calendaring software.

You can find out more about Canadian time zones, and DST legislation for 2007, here:

[http://www3.sympatico.ca/c.walton/canada\\_dst.html](http://www3.sympatico.ca/c.walton/canada_dst.html)

## MUUG Financial Statements 2005-2006

### Balance sheet

Assets	
Cash	\$1,525.78
Investments (GICs)	\$18,269.31
	-----
Total	\$19,795.09
Equity	
Retained Earnings	\$19,795.09
	-----
Total	\$19,795.09

### Income Statement

Income	
Linux Compact Discs	\$135.00
Interest on GICs	\$269.31
Interest on Savings	\$0.27
Membership sales	\$1,140.00
	-----
Total income	\$1,544.58
Expenses	
MUUG Online	\$188.05
Newsletter and Mailbox	\$750.54
Service Charges	\$5.46
	-----
Total expenses	\$944.05
Net Income	\$600.53

## Linux Media Arts to Open Research and Development Center in Manitoba

*The Manitoba Media Centre for Open Source Entertainment Engineering Innovation and Production Research*

BURBANK, Calif. – December 15, 2006 – Linux Media Arts, Inc. (LMA), a developer of award winning media production software and systems in partnership with the Government of Manitoba, Canada introduced a plan for a new Open Source product research and development center in Winnipeg that will serve the global media industry that emanates from California.

The Honourable Premier of Manitoba, Mr. Gary Doer, congratulated Linux Media Arts on its leadership in developing the plans to open the Manitoba Media Centre at an event organized as a joint effort by the Government of Manitoba and Linux Media Arts, at the Kodak Theater in Hollywood, California.

"We are very excited to share the vision and enthusiasm of Linux Media Arts who has emerged as a leader in Open Source media technology. The establishment of the Manitoba Media Centre in cooperation with LMA provides the perfect combination of technical innovation, leadership excellence, open access, and business savvy, which will greatly contribute to the economy of Manitoba

and add an important body of technological knowledge for the global film, television, Internet, and media industries," said The Honourable Premier of Manitoba, Mr. Gary Doer; he added that "the MMC is a perfect fit for Manitoba, Canada and its partners in the United States to access markets and we have high hopes for it to become a worldwide centre for technological excellence and progress."

Mr. Michael Collins, Founder and CEO at LMA stated: "The Manitoba Media Centre will be established through investments from the private and public sector totaling \$20 million. The energy behind this important partnership underscores LMA's and Manitoba's commitment to building a successful product research and development center with an international focus to serve the media industry."

The goal of the Manitoba Media Centre will be tri-fold: to release an Open Source Media Distribution for the Linux Operating System; to further develop and refine Open Source media management applications and tools; and to

carry out extensive research and development of Open Source media management and archiving tools. Linux Media Arts and their development partners have been working extensively in these areas for several years and have achieved International recognition for their efforts and intend to continue in this line of development.

Vice-Admiral Walter Davis, USN (Ret.), of CommNexus in San Diego and Principal in LMA stated the importance of the partnership to the further development of advanced and flexible tools for the media industry.

The Manitoba Media Centre will support the Misipawistik First Nation (formerly known as Grand Rapids First Nation) in the development of their knowledge economy. Chief Ovide Mercredi highlighted that "students and graduates from the community will be delighted to take advantage of the Centre's media technology tools and utilize these tools for their own production of intellectual property and business ventures in the knowledge economy".

Additionally, the MMC will work with Red River College in Winnipeg to explore training opportunities in the entertainment engineering field which would lever the experience of LMA's network of professionals. Red River College's President & CEO, Mr. Jeff Zabudsky, explained that "Open Source is an increasingly important part of today's development environment, so training in these advanced tools for the media industry will add to the comprehensive skill sets of RRC graduates and help them succeed in this exciting sector."

"The creation of MMC is an innovative activity that fits well with Winnipeg's economy and growing new media sector and we congratulate MMC for focusing on creating opportunities for talented students and professionals in the global media industry" said Mr. Stuart Duncan, President of Destination Winnipeg Inc. The MMC will also partner in R&D projects with the Experimental Media Centre at the University of Manitoba.

Dr. Jose A. Rueda, a respected Winnipeg-based entrepreneur, computer scientist, and industry expert will lead the development and organization of MMC and serve as the Founding President. "It has always been my goal to make advanced technologies accessible and useful for applications, as well as to be part of the vibrant growth and innovation available in Manitoba today", said Dr. Rueda. Collins added "under the leadership of Dr. Rueda, with his

proven track record of innovation and his passion for technology, research, and economic development, the Manitoba Media Centre will achieve its goals.”

The MMC intends to release technologies at key broadcasting and media events and will issue a call for White Papers to be presented at the Open Source Media Technology Conference in Winnipeg, Manitoba in the fall of 2007.

*Linux Media Arts is a trademark of Linux Media Arts, Inc. All other company and product names may be trademarks of the respective companies with which they are associated.*

For more info: <http://www.manitobamediacentre.org>

## **SGI IRIX & MIPS Are Officially Dead, Using Linux on Intel Instead.**

*Submitted by Adam Thompson*

The last MIPS-based systems from SGI shipped at the end of 2006, with the remaining stock held in reserve for OEMs and integrators. This signals the end of an era - SGI's IRIX version of Unix was available for MIPS platforms only, so this also means IRIX is dead as of 2006. Security fixes will continue to be made available until December 2013 for customers who can't migrate to the newer Linux-based systems yet.

MIPS Technologies continues as an independent company and is not directly affected by this.

The last release of IRIX was 6.5, in 1998. Nine years later, they're up to 6.5.30, ably demonstrating the longevity of commercial Unix systems. Owners and collectors of SGI hardware take note - that old system sitting in the basement might be worth more for parts than as a working system now. (And maybe you should hold on to all those IRIX media sets in the filing cabinet, too!)

This leaves HP/UX, AIX, Solaris, SCO OpenServer and SCO UnixWare as the only remaining commercial Unix variants on the market. Note that all of those have Linux-compatibility modules or options, either at the API or ABI levels. On a related note, SGI exited from bankruptcy protection only a few days before the announcement that they were dropping MIPS and IRIX.

## **Adobe Flash Player 9 for Linux (Finally!)**

January 17th – “Adobe Systems Incorporated (Nasdaq:ADBE) today announced the availability of Adobe® Flash® Player 9 for Linux...”

So far, only Red Hat Enterprise Linux 3 & 4 and SuSE 9.x & 10.1 are supported. Only Firefox >= 1.5.0.7, Mozilla >= 1.7.x, and SeaMonkey >= 1.0.5 are supported. Only ALSA is supported for sound output, legacy OSS users are out of luck. Only browsers compiled with GTK2 are supported, GTK1-based builds will not work.

Adobe recommends an 800MHz or faster CPU, 512Mb of RAM and 128Mb of video memory under Linux. Not sure what Flash application needs 128Mb of video memory - last I checked, that sort of graphics horsepower was only needed for 3D gaming and 3D visualization. Maybe Adobe wants people to start using Flash for 3D work?

The download is available in RPM and TAR.GZ formats. We'll probably see Fedora RPMs in the near future; if you get it working on any other platforms, share your success with our roundtable mailing list!

## **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](mailto:editor@muug.mb.ca).