1.

# **SIG Sideline**

### By Bary Finch, SIG Coordinator

Many people are getting Linux set up on their machines. One of the most popular topics with Linux users is UUCP (UNIX-to-UNIX Copy Program). It is a (typically) free set of programs bundled with all UNIXs. It allows automated copying files to / from UNIX systems, remote execution, and UUCP is often the underlying protocol for dial-up email. As such UUCP is a popular topic for all Linux users, and a basic tool for system administration.

The last SIG meeting gave a great introduction to UUCP for everyone. Greg Moeller was the presenter and he gave a kind of "multimedia" presentation. He had a general overview presentation of UUCP that he showed using an overhead projector. The overhead presentation gave details of the original Berkeley UUCP as well as the newer HoneyDanBer version, also know as BNU (Basic Networking Utilities). Greg went over specifics of UUCP for Linux users as he gave the presentation.

To complete the "multimedia" effect Greg again brought his portable PC, running Linux. This time he had it connected to a second overhead projection unit. With this he could display specific Linux files that are used to implement UUCP. Greg showed the customization that he had done to set up UUCP for his PCs to connect to Mona. He also brought printouts of example files for customizing UUCP which people could take home.

Linux has an even newer version of UUCP, Taylor. This version is slightly different to configure than BNU, but generally easier. This makes Linux a great platform to learn the UUCP implementation from.

The group that attended this meeting was split about half and half between Linux users and people interested in System Administration. The information gained from this presentation should help a few of them get started with UUCP, and also help those having some troubles with their UUCP configurations.

Greg once again brought the 3.5" and 5.25" diskette sets of Linux that he has made up for loaning out. The version on these diskettes would be good for anyone wanting to try out Linux for the first time. This is the same distribution as is on MONA.

If anyone is interested in borrowing either set of diskettes, contact Greg Moeller (gkm@calvin.muug.mb.ca), or come to the next SIG meeting. Whichever of the sets of diskettes are available will be brought to the meeting for distribution to other interested people. Currently both versions are lent out to people that attended the last SIG meeting, showing the popularity of Linux!

There is no specific presentation scheduled for the next meeting so far. If nothing becomes available we will continue with the roundtable format.

The next meeting is scheduled for Tuesday, November 16, at 7:30 p.m. This meeting will again be held at ISM, 400 Ellice Avenue, behind Portage Place. Our host is Wolfgang von Thuelen. He will be waiting in the lobby as of 7:15 p.m. to let everyone in.

Looking forward to seeing you at the November meeting!

# **Agenda**

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Tuesday, November 9, 1993, 7:30 PM Samuel N. Cohen Auditorium St-Boniface Hospital Research Centre Main Floor, 351 Taché

7:30

President's Welcome

2.	Round Table	7:35
3.	Business Meeting <ul><li>a) Old Business</li><li>b) New Business</li></ul>	8:00
4.	Coffee Break	8:30
5.	Presented Topic Novell and UNIX by Owen Sagness Stay tuned for details — watch muug.general for updates, as they become available.	8:45

6. Adjourn 9:30

**Note**: Please try to arrive at the meeting between 7:15 and 7:30, to avoid disrupting the meeting in progress.

### **Coming Up**

#### Meeting:

Next month's meeting is scheduled for Tuesday, December 14, at 7:30 PM. Meeting location will be the St-Boniface Research Centre, as usual. The December meeting has traditionally been a wine and cheese, and last year featured a show & tell. Stay tuned for details.

Got any ideas for meeting topics? Any particular speaker or company you'd like to see at one of our meetings? Just let our meeting coordinator, Paul Hope, know. You can e-mail him at <phope@muug.mb.ca>.

#### **Newsletter:**

If you are interested in a particular topic, let me know. I'm sure I could coerce you into writing an article! I could use a few articles — especially shorter ones — half a page to one page (400 to 1000 words) would be fine

Monsieur Ex has also let me know that his mail-box has room for more of your wonderful queries again – please submit your questions to the old guy via e-mail to <m-ex@muug.mb.ca>. He may be old, but he's not ready for retirement yet!

НΛ	N	De		N
	W		U	N

	HAND	3-0N		
adh	K&R or)	mtools	- support for reading and writing DOS disks	
gdb	- The Gnu debugger	1		
gdbm glibc	<ul><li>a dbm replacement</li><li>gcc library</li></ul>	oleo	<ul> <li>Spreadsheet system for Unix supporting X and ASCII</li> </ul>	
gnats	- software bug tracking utility	recode	- perform character translation (recoding)	
indent	- pretty print C code - indent replacement	recode	on files	
m4	- macro preprocessor - m4 replacement	termcap	- replacement for the termcap library	
make	- much enhanced make utility	tput	- termcap facilities for shell scripts	
nihel	- portable collection of classes for OO	ιραι	Text Processing	
IIIICI	-	onty	- generate permuted indexes	
libatt	programming - g++ library	gptx groff	- includes troff, pic, eqn, tbl, etc replace	
libg++		gron		
rcs	- sccs replacement - much enhanced		ments	
smalltalk	- smalltalk OOPL and system	ispell	- interactive spelling corrector	
tile-forth	- forth language implementation	mm	- the 'mm' macro package from groff	
time	- time a program's execution - time	ms	- the 'ms' macro package from groff	
	replacement  Compiler Development	texinfo	<ul> <li>hypertext documentation facility (used in Gnu products)</li> </ul>	
bison	- LALR parser generator - yacc replacement		Compression	
cperf	- generate perfect hash tables - use in	gzip	- license free compression - replaces compress,	
	compilers or	0 1	etc	
flex	- regular expression scanner - lex replacement	uuencode	- encode a binary file in ASCII, uuencode	
superopt	- if you don't know, don't ask ;-)		replacement	
	X Related		Editing	
fontutils	- font utilities (e.g. creation, conversion,	elvis	- a vi replacement	
	etc)	emacs	- the emacs extensible editor (and news reader,	
ghostscript	- PostScript interpreter and X driver		mailer)	
ghostview	- Nice front end to ghostscript	calc	- extensible desk calculator for emacs	
xboard	- X interface to chess program with cute	elib	- emacs lisp library	
	features			
xinfo	- Gnu info widget for X	shellutils	- contains replacements for basename, date,	
xless	- X interface to less for file browsing	SHOHAMIS	dirname, echo, env, expr, and MANY more	
	Games		difficine, ceno, env, expr, and in ivi more	
gnuchess	- chess program with X, ASCII and other	5) How/where d	o I get it? A large number of anonymous FTP sites	
	interfaces	(Archie lists ove	er 64) archive the Gnu software. My favourite is	
gnugo	- go program	prep.ai.mit.edu l	because it is always up to date with the latest	
nethack	- networked adventure game	versions and res	ponse times to/from it are good. ftp to	
	Special Purpose		and log in as userid anonymous sending your e-mail	
ecc	- Reed-Solomon error correcting code		sword. cd to /pub.gnu and go wild.	
fax	- group 3 fax transmission for fax-providing	Well, that's it for this month. Next month we will get down to		
	systems	the reviews then	nselves. I'll try to start out slow with simple	
gmp	- multiprecision arithmetic library	software that all	can make use of. Those who want to go and get the	
graphics	- plot, graph replacements supporting X,	software can do so, install it, and try it out. We'll leave the big		
	PostScript, etc.		ater so people get used to the Gnu installation	
gnuplot	- Plotting software for various platforms	routines, etc. 🧨		

MUUG Lines Newsletter Deadlines for 1993-1994

			Deadlines		MUUG Monthly
Issue Number	Month	Articles	Final Copy	Mailing	Meeting Date
Volume 6, No. 01	November	October 16	October 23	October 30	November 9, 1993
Volume 6, No. 02	December	November 20	November 27	December 4	December 14, 1993
Volume 6, No. 03	January	December 18	December 25	January 1	January 11, 1994
Volume 6, No. 04	February	January 15	January 22	January 29	February 8, 1994
Volume 6, No. 05	March	February 12	February 19	February 26	March 8, 1994
Volume 6, No. 06	April	March 19	March 26	April 2	April 12, 1994
Volume 6, No. 07	May	April 16	April 23	April 30	May 10, 1994
Volume 6, No. 08	June	May 21	May 28	June 4	June 14, 1994
Volume 6, No. 09	September	August 20	August 27	September 3	September 13, 1994
Volume 6, No. 10	October	September 17	September 24	October 1	October 11, 1994

Mailing deadline is always 10 days prior to meeting date, to ensure sufficient advance notice of motions, etc. All copy (ads, columns, meeting notices, etc.) must be submitted by noon on the final copy deadline date, which is one week prior to the mailing deadline. Articles and any other material that isn't time sensitive must be submitted by the articles deadline, which is one week prior to the final copy deadline.

### **Gnu Review**

### By Peter Graham

Greetings everyone! If all goes well this will be a new regular column in your monthly newsletter. I am excited about writing this column and hope you will look forward to reading it.

The idea behind the column is to review either a single Gnu product or a group of related products each month in order to give people a feel for the usefulness of the software for their own particular needs. With the increased accessibility to the Internet in Manitoba, I thought it was about time that people were introduced to the high quality of Gnu (and perhaps some other "PD" software) available on the net.

My personal reasons for writing the column are several. I have been very pleased with the quality of the Gnu software I have used and would like to share my good experiences with others. I have also been slow to pick up on some of the software which subsequently turned out to be most useful. The reason for this was primarily a lack of motivation on my part to get the software and install it. Writing this column will give me ample motivation to try out the new software. Finally, I appreciate the FSF (Free Software Foundation's) outlook on distributing source code. Its nice to be able to fix things that don't work rather than having to work around them — just a part of my psyche I guess:-).

For the most part, Gnu software replaces similar facilities provided by most conventional Unix distributions. Thus it is helpful to compare the features of Gnu software to their normal Unix equivalents. This is often easier said than done. Due to the sometimes significant differences between various flavours of Unix, comparisons may not always be as meaningful as they should be. The Unixes with which I interact regularly are SunOS4.1.3 and Ultrix4.3. As such, these will be the systems I make comparisons with. The chief drawback of using these two particular systems is that they are both derived from BSD Unix and not System V. While regrettable, this situation is also unavoidable.

In this first column I won't actually review any software but will instead given you some information about what is out there, where it is, and how to go about getting it. This will be sort of a mini FAQ (Frequently Asked Questions) list about Gnu software.

- 1) What is GNU? GNU stands for (Gnu's Not Unix). The Gnu project of the free software foundation (FSF) is Richard Stallman's pet project to replace licensed Unixes with a free version which is distributed complete with source code. As a part of this effort (now purported to be nearly complete) all of the major Unix utilities and programming tools have been re-implemented. In most cases the re-implementations exceed both the performance and features of the originals. For the purpose of this column, it is these applications programs that we are interested in. Since they are designed to eventually run under a free Unix, they now run under non-free Unixes such as SunOS, Ultrix, AIX, etc.
- 2) Why use Gnu software? There are a number of reasons. First of all, its free! This is important to many people (like impover-ished universities). It is widely used which means that it is probably good software and that most of the bugs are out of it. In the unlikely case that you do find a bug in it, source is provided so you may be able to fix it yourself. Gnu software always offers a superset of the features offered by their Unix counterparts. Why would anyone not want to use an enhanced version? Furthermore, due to the availability of source code, if there is a feature you really want that even Gnu doesn't provide, you can add it. Gnu versions of programs are faster than the existing versions in most cases. Speed of software

increases productivity which hopefully increases wages:-). Gnu software is easy to install. The installation scripts provided with the software, support many different platforms and are highly automated. I have never had a problem installing Gnu software under SunOS or Ultrix. Finally the use of Gnu software promote openness; "shared source code is the ultimate form of openness".

- 3) Is Gnu software public domain? No it is not. It is free and redistributable but it is copyrighted (actually "copylefted") in order to protect the code from being abused. See the copyleft agreement that comes with all Gnu software for details but don't worry, most people find the copyleft agreement one they can easily live with. It basically only precludes you from making any profit from their code and from failing to redistribute it without source code.
- 4) What software is offered? Lots of it so I'll be kind and try to group the software into a few areas and give you a 1 liner for each.

#### System Administration autoconf - generates config scripts for a software package cpio - copy file archives in and out - cpio replacement - apply system patches - patch replacement patch - advanced scripting/pattern-matching perl language - tar replacement - slightly incompatible tar with POSIX 1003.1 uucp - implementation of uucp protocol and programs Day to Day Use bash

 Bourne Again Shell - Bourne shell replacement
 arbitrary precision arithmetic language -

bc replacement
dc - Desk Calculator - dc replacement
diff - Much enhanced diff including side by

side diffs

bc

fileutils

- contains replacements for chgrp, chmod, chown, cp, dd, df, du, ln, ls, mkdir, mv, rm, rmdir, touch, and MANY more

find - find replacement
finger - finger replacement
gawk - an awk replacement
grep - high speed replacement for grep

less - "more" replacement

screen - window manager for ASCII terminals

sed - stream editor - sed replacement textutils - contains replacements for cat, sort, tail,

wc and MANY more

ae - Code profiling system for use with gcc binutils - contains ar, ld, nm, size, strip, & gprof

replacements

cvs - high level version management using rcs

dejagnu - program testing support

dld - provides dynamic link editing at run

time

f2c - Convert Fortran 77 to C or C++

gas - The Gnu assembler

gcc - The Gnu C and C++ compiler (ANSI or

#### **INDUSTRY**

### **Multimedia Comes to UNIX**

### By Marc Mousseau

On October 19, Sun Microsystems Computer Corporation (SMCC) announced their first line of Multimedia machines. This line includes the SPARC 10sx, SPARC 10M and SPARCclassic M. These machines come fully configured for high-end image processing and multimedia. They contain the industry's lowest cost real-time video capture/compression technology as well as other revolutionary imaging capabilities.

#### Image Processing

The SPARCstation 10sx provides industry-leading image processing performance, full 24-bit colour, 3-D graphics and hardware accelerated video playback. The SPARCstation 10M is a 10sx bundled with a real-time video capture/compression board and a camera.. The SPARC classic is touted as the industry's most inexpensive, fully configured multimedia workstation. It includes a real-time image capture/compression card and camera enabled multimedia conferencing over a standard network.

#### **Hardware**

These new machines use a new imaging ASIC (Application Specific Integrated Circuit) which is integrated right into their memory subsystems that can manipulate images as large as 300 MB in real-time. These imaging functions include panning, rotating and zooming as well as sharpening, blurring and edge detection. The SX chip from SMCC is the

only accelerator that doesn't force data over a slow speed bus.

Network Conferencing

The new M class machines from SMCC bring a new level of video conferencing and multimedia authoring functionality to the desktop. They come equipped with SMCC's new SunVideo<sup>TM</sup> SBus card featuring video capture and compression at 30 frames per second (the same speed at which your television works). The real-time compression makes it possible for high-quality, full-frame video conferencing over a standard network. The SunVideo<sup>TM</sup> card supports MPEG, JPEG and CELL video compression. CELL is SMCC's own proprietary compression algorithm.

To take advantage of all this new hardware, SMCC has introduced Solaris LIVE! which is a extensive array of multimedia tools that support work group collaboration, video conferencing and more. LIVE! is available as part of Solaris 2.3.

#### **Upgrade Path**

If you already have a SPARCstation that will run Solaris 2.x you can obtain these new multimedia capabilities by purchasing SMCC's multimedia upgrade package which includes the SunVideo card, video camera and multimedia CD-ROM disc. SMCC has also announced a new CD-ROM drive called the SunCD Plus which sports double access speed as well as Kodak Photo CD compatibility.

### **INDUSTRY**

# Surviving the "OS-Shootout"

### By Andrew Trauzzi

At the very recent MUUG/CIPS fall seminar (actually, one hour ago!), I had the fortune of attending the Operating Systems Panel Discussion seminar. The featured speakers were Bill Evelyn of Microsoft (who denies that all Microsoft employees are forced to change their name to Bill!), Phil Turner of IBM Canada, and Neil Miles of Hewlett-Packard Canada. The moderator was Gilbert Detillieux.

First of all, I will officially declare "open" and "open systems" as the new popular buzzwords (surpassing client-server and object-oriented).

Bill was the first speaker, touching on Microsoft's commitment to their current large customer base, and the proliferation of Windows into consumer electronics. He emphasized the fact that Microsoft sits on several "open" committees. Is it just me, or does Microsoft sitting on a standards committee sound a lot like the Bloc Quebecois sitting in parliament?

Next was Phil of IBM. He described IBM's current "open" project — a heterogenous microkernel based on the Carnigie-Mellon MACH project (which, ironically, Microsoft purchased). Basically, the vendor-specific kernel would hide any machine-specific details, allowing a common interface to sit on top of it. Sounds promising.

Neil, the last speaker, was representing UNIX. He

pointed out that UNIX had been around for 20 years, and had the scars to prove it! His main focus was the Common Operating System Environment (COSE) initiative. The main advantage of COSE is that all the participating vendors had years of experience with open systems, and could quickly agree on standards. To sum up, UNIX had the experience, the people, and the knowledge to make open systems work seamlessly.

Neil was the crowd favourite, eliciting large amounts of laughter with his quick, observant humor. There really was no clear winner, because each speaker presented very effective arguments for their view on how open systems should evolve. They all admitted that their plans also had shortcomings.

I spoke to Gilbert after the presentation, and he had an interesting observation. He noted that to him, being binary compatible across platforms was not as important as the different platforms being invisibly interconnectable. People will always be OS-biased (except yours truly, of course) because they will want to use the OS that they know the best, and thus, feel most comfortable with. If all platforms could effortlessly talk to each other, maybe we would stop arguing the benefits and drawbacks of an OS, and concentrate on better communication with each other.

### **MUUG ELECTIONS**

### **MUUG Gets A New Board**

### By Andrew Trauzzi

During our last MUUG meeting, the new MUUG board was formed by acclamation. The eight members met (along with the previous members of the board) to determine which position each member would fill. The 1993/1994 MUUG board is as follows:

President - Bary Finch

(Previously Susan Zuk)

**Vice President - Ramon Ayre** 

(Previously Bary Finch)

Treasurer - Rick Horocholyn

(Previously Rick Horocholyn)

Secretary - Brad West

(Previously Roland Schneider)

Newsletter Editor - Andrew Trauzzi

(Previously Gilbert Detillieux)

**Publicity - Rory Macleod** 

(Previously Gilles Detillieux)

Membership - Greg Moeller (Previously Richard Kwaitkowski) SIG Coordinator - Bary Finch (Previously Bary Finch) Meeting Coordinator - Paul Hope

(Previously Paul Hope)

Looks like another great bunch! (And I'm not just saying that because I am in the list!)

If you wish to contact the board through e-mail, there are three different aliases:

- **board@muug.mb.ca** includes both the current and past year's board members
- old-board@muug.mb.ca includes the past year's board members
- new-board@muug.mb.ca includes the current board members

Feel free to use the one that suits your needs.

### THE FORTUNE FILE

### Submitted by Gilbert Detillieux (originally by Chuck Tomasi)

I heard a good one at work today and thought I would pass it on. One of the engineers who is working on a project involving PCMCIA asked me what it stood for. I thought about it for a minute, but before he let me spit out my definition, he quipped "People Can't Memorize Computer Industry Acronyms."

I laughed pretty hard since it is one of the worst acronyms to hit the industry in a long time and his definition was so appropriate.

### **CORPORATE MEMBERSHIPS**

Are there other people at your office who wish to join

# The Manitoba UNIX User Group?

Well now is a better time than ever before with MUUG Corporate Memberships!

- Ten employee minimum
- Memberships are twenty dollars each
- Two members will have voting rights
- Corporate MONA access is not available, but
- Personal MONA accounts are available

For details, contact any MUUG board member.

### PRESIDENT'S CORNER

# A Change

By Bary Finch

Here it is. My first President's Corner, as I was just elected to President a couple of weeks ago. Thank you to everyone who came out to Annual General Meeting to elect the new board. I know I am going to have a tough time replacing Susan Zuk as President, with all the contributions she made to MUUG. So November comes with some change for MUUG.

I am looking forward to this coming year, as I see a well established group that is getting an excellent reputation in the Winnipeg IT community. We will continue to provide the presentations at our meetings that will give our membership the information that it needs to remain aware of the coming trends in the UNIX world. Hopefully we will also give you a view into some areas that you haven't seen before.

To get us there we have a great group sitting on the new board. Susan Zuk, now Past President, will continue to give her insight and commitment to MUUG. We welcome Ramon Ayre of CSB Systems as the new Vice President. He will provide MUUG with a different perspective, from that of a partner in a UNIX based business. Rick Horocholyn will continue on for another year as Treasurer, keeping us always in a good position financially. Another new addition to the board this year is Brad West of Freshwater Fish Marketing Corp. Brad will join us in the position of Secretary. A name that will be familiar to many of us is Greg Moeller, who has done a lot for the Linux / System Administration SIG. He will be joining the board in charge of Membership. A familiar face returns in the role of Meeting Coordinator, as Paul Hope continues to find new speakers and make sure all the meetings run smoothly. Andrew Trauzzi, of the City of Winnipeg, is new to the board this year, and will be the newsletter editor, a position of respect but perhaps not envy (just kidding). [Hey this is fun! — ed.] In the position for

Publicity is again a new person to the board, Rory Macleod of Xerox Canada Ltd.

For all the people returning to the board, thanks for a great year last year, and looking forward to working with you again this year. For all the new people on the board, welcome! You'll enjoy working to help MUUG grow.

I know with the group we have working together on the board that we will continue the strong growth we have seen in MUUG. We are getting more "high profile" speakers to present for us, and are always looking for new directions to go in. "Leave no Xstone unturned" or something like that.

With the CIPS / MUUG Survival Seminar now just past, we again helped provide a forum for people to better understand what's happening in today's technologies. Also a specific view of what's going on in Winnipeg's IT community.

These are the kinds of activities MUUG will continue to sponsor and represent. I am excited about the possibilities for MUUG within the coming year, as our new board members add their ideas to MUUG's future.

I will continue on with established functions, such as working with Susan Zuk on the Corporate Sponsorship program, and being a liaison to many of the other organizations in Winnipeg that MUUG works with. In addition I will look for new opportunities for MUUG.

I also welcome any comments from our members as to what directions they would like to see MUUG go in, or if they're just happy with the way things are now! You can contact me, preferably by email at bfinch@muug.mb.ca, or by phone at 934-2723 (work) if you don't have email access.

I'm looking forward to seeing you at the November meeting!

### **CORPORATE SPONSORS**

# The Manitoba UNIX User Group

gratefully acknowledges the generous support of the following

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University of Manitoba

## Kudos!

### By Andrew Trauzzi

Welcome to the sixth volume of MUUG Lines! I will kick off my stint as MUUG editor by congratulating all of the new board members on their appointments. I would like to thank the previous board members for all their help (and all their future help) during our 'transition phase'. I would personally like to thank Gilbert Detillieux for his help, insight, and PageMaker Templates. They all make my job a great deal easier.

In this issue, I will outline what I intend to accomplish over the next year, what equipment I use, and how you can get a hold of me.

#### **New Monthly Columns!**

Peter Graham has started a new GNU column, and other monthly columns such as Beginning UNIX, The Internet Forum, a product review column, and Access — a database column (I hope Microsoft didn't copyright that), should appear within the next few months. If you have an idea for a new column, drop me a line, or accost me after a meeting. Specifically, I would like to see an X-Window user/programmer column. Any takers?

### **The 1993-1994 Executive**

President:	Bary Finch	(W) 934-2723
	•	` '
Vice-President:	Ramon Ayre	(W) 947-2669
Treasurer:	Rick Horocholyn	(W) 474-4533
Secretary:	Brad West	(W) 983-0336
Membership Sec.:	Greg Moeller	
Mailing List:	Roland Schneider	1-482-5173
Meeting Coordinator:	Paul Hope	(W) 237-2361
Newsletter editor:	Andrew Trauzzi	(W) 986-6009
Publicity Director	Rory McLeod	488-5168
Information:	Bary Finch	(W) 934-2723
(or)	Andrew Trauzzi	(W) 986-6009

### **Advertising Rates**

Quarter page	\$50
Half page	\$75
Full page	\$100
Insert (1-4 pages)	\$100

Above prices are per issue. The first ad is charged at the full price; each successive month is 1/2 price.

Ad copy must be submitted by the final copy deadline for an issue (usually 3 weeks prior to the monthly meeting) in a format acceptable to the editor. (Please make arrangements with editor beforehand.)

Internet E-mail: editor@muug.mb.ca

#### **Hardware**

This newsletter is now being produced on my home equipment which includes a Macintosh Quadra 700 with 20 MB RAM, 1.2 GB HD, CD-300, and a networked DOS PC. I also have easy access to a 600 DPI scanner, so if anyone out there is feeling adventurous, I could scan in a monthly cartoon. For printing, I have a VaporHardware LaserWriter (hopefully the real thing comes in soon).

#### Software

I utilize a variety of packages to convert and compose pictures and text. The majority of the work is achieved using PageMaker 4.2 and FreeHand 3.1.

#### **Submissions**

Articles can be submitted in almost any manner (writing on cornflakes notwithstanding). I prefer them in an electronic format submitted through MONA, but if you don't have an account, give me a UNIX, DOS, or Mac diskette. All MONA submissions should be mailed to the editor account (editor@muug.mb.ca). I will attempt to check my mail daily, but I may lapse a few times.

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### **Group Information**

The Manitoba UNIX User Group meets at 7:30 PM the second Tuesday of every month, except July and August. Meeting locations vary. The newsletter is mailed to all paid-up members one week prior to the meeting. Membership dues are \$25 annually and are due as indicated by the renewal date on your newsletter's mailing label. Membership dues are accepted at any meeting, or by mail.

Manitoba UNIX User Group P.O. Box 130, Saint-Boniface Winnipeg, Manitoba R2H 3B4

Internet E-mail: membership@muug.mb.ca

(FAX) 986-5977

# MUUG Lines

**Newsletter of the Manitoba UNIX® User Group** 

# **Novell Attempts to Mainstream UNIX**

By Andrew Trauzzi

This month's guest speaker is Owen Sagness of Novell. If he was speaking to us a year ago, you may have wondered what Novell had in common with UNIX. Today the scenario is very different. During the summer, Novell bought Unix System Laboratories (USL) and set UNIX in a new direction. It remains to be seen whether or not Novell has read its compass correctly.

Soon after its purchase of UNIX, Novell formed a subsidiary — Univel. It is Univel's mandate to produce a single, mass-market version of UNIX titled UnixWare (after it's DOS counterpart — NetWare). UnixWare is a 32-bit multitasking network operating system based on System V Release 4.2. It combines features of UNIX, NetWare, and DR-DOS. UnixWare is reported to have the power of UNIX, the modularity of DOS applications, and the ease of use of the Macintosh. It will contain support for many flavours of UNIX, Motif, Open Look, X Windows, and Windows. The major complaint from UNIX users is that UnixWare does not include TCP/IP. Instead, it supports IPX/SPX. Novell's reasoning is that there are 20 to 30 million installed IPX/SPX nodes, while only 4 million TCP/IP nodes. Furthermore, a Novell representative stated that "All UNIX in the future will include IPX and SPX." Needless to say, that does not sit well with the current vendors of UNIX. After all the smoke clears, Novell wants all UNIX machines to run one binary — UnixWare. Can Novell reach this lofty goal given the current size and number of UNIX vendors?

UNIX is currently enjoying its highest popularity level

### This Month's Meeting

#### **Meeting Location:**

Our next meeting is scheduled for Tuesday, November 9, at 7:30 PM. Once again, the meeting will be held in the auditorium of the St-Boniface Hospital Research Centre, just south of the hospital itself, at 351 Taché. You don't have to sign in at the security desk – just say you're attending the meeting of the Manitoba UNIX User Group. The auditorium is on the main floor, and is easily found from the entrance.

Meeting Agenda: See inside for details.

ever. This is largely due to the client-server initiatives that large corporations have undertaken. Novell saw the gaining popularity of UNIX and decided to purchase USL, thereby giving UNIX instant corporate backing. Or did it? Novell knew that the majority of corporations would not buy a non-standard operating system — so they decided to standardize it. This elicited an immediate response from the UNIX community. Their basic complaint was that if companies bought UNIX for its openness, why close it?

The seemingly age-old question remains. Should UNIX be standardized, thus gaining corporate acceptance, or should it be allowed to continue as a medium for the creative minds of the computer industry? Novell definitely wants (and needs) to standardize UNIX through UnixWare, but they realize that any standards they set would not be taken seriously by other large UNIX vendors. It's no secret that each vendor has a different vision for the future of UNIX. With so many corporate egos, it's practically impossible for the different UNIX companies to agree on a common standard. To tackle this problem, Novell turned the rights to the UNIX name over to the X/Open consortium (a non-profit organization). With the help of X/Open, a standard Novell UNIX has a better chance of being accepted by companies such as SUN and SCO.

Will Novell's UnixWare undertaking end up as just another flavour of UNIX, or does it offer a real, unified threat to the Microsoft juggernaut? Will other companies embrace a closed, corporate UNIX? This remains to be seen.

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