January 1999 Volume 11, Number 5

January 12: A twofer

This month, we have two presentations for the price of one! Kevin McGregor will be giving a concise review of his experiences setting up his RedHat Linux 5.1 system with the Shaw@Home cable Internet service. Gilbert Detillieux will be providing a look at the basics of setting up networking on a Unix system, specifically PPP and related services *and* X Window System configuration with XFree86 (presumably).

As usual, we will also have a round-table discussion, in which anyone can raise questions regarding their experiences (or lack thereof) with all things Unix. We realize that it can be a little intimidating, but please be assured that no question is too easy (or "dumb")!

Please note our meeting location: IBM Canada's offices in the TD Centre, at the corner of Portage and Main. We gather in the lobby on the main floor - please try to be there by about 7:15 PM. Steve Moffat will then take us up to the meeting room just before the meeting starts at 7:30. Please don't be late, or you may not get in.

Parking is available either in the parkade behind the TD building, off Albert Street, or in the ground level lot just north of the TD building. Entrance to the lot is from Albert Street, behind the parkade. Either way, parking is a \$1.25 flat rate for the evening. You must purchase your ticket from a dispenser, so make sure you've got exact change - a loonie and a quarter, or 5 quarters.

Corel and KDE

Ottawa, Canada — November 25, 1998 — Corel Computer and the K Desktop Environment (KDE) Project today announced a technology relationship that will bring the KDE graphical user interface (GUI) to desktop versions of the NetWinderTM Linux-based thin-client and thin-server computers.

The alliance between Corel Computer and KDE, a non-commercial association of Open Source® programmers, provides NetWinder users a sophisticated front-end to Linux, a stable and robust UNIX®-like operating system.

"The KDE GUI is a key piece of our strategy to deliver highly compatible, high-value, Linux-powered desktops to our corporate customers," said Ron McNab, vice president and general manager of Corel Computer. "This is part of our ongoing commitment to our customers by providing easy-touse management and productivity tools for the NetWinder."

Corel Computer intends to participate with the KDE

Project to bring new skills and technology to this phenomenal desktop environment. Corel Computer has shipped a number of NetWinder DM, or development machines, to KDE developers who are helping to port the desktop environment. Additionally, NetWinder.Org developers, Raffaele Saena and John Olson, were responsible for championing development of KDE on the NetWinder.

"Through the collaboration of KDE and Corel Computer, networking with the NetWinder will now be as easy as toasting your bread in the morning," said Uwe Thiem, the African-region representative of the KDE Team. "This collaboration and the port to the NetWinder gives us an opportunity to deliver our free desktop to even more users. We are confident KDE will gain widespread acceptance of users because of its outstanding functionality and ease of use."

Corel Computer plans to make desktop versions of the NetWinder running KDE available in early 1999. Early demonstrations of the port, such as the one shown at the Open Systems fair in Wiesbaden, Germany, in September, have been enthusiastically received by potential customers.

Based on the Open Source model, Corel Computer is devoting internal development resources to the improvement of the KDE project including rigorous testing of the environment on the NetWinder. As a developing partner, Corel Computer will release its work back to the KDE development community.

Corel WP8 — Free!

Ottawa, Canada — October 23, 1998 — Corel Corporation today announced that president and chief executive officer, Dr. Michael Cowpland will announce a special nocharge download version of Corel® WordPerfect® 8 for Linux® Personal Edition during his keynote speech at tomorrow's Linux Expo in Atlanta. Information about the download version will be available from linux.corel.com. Interested users can preregister at this site for the application, which is expected to be available in November. When the download is available users will be contacted by e-mail with notice of where they can go to download the application.

This download version is the first stage of Corel's strategy to address the needs of the Linux community with high quality software applications for personal use only. The download version of Corel WordPerfect 8 for Linux Personal Edition is the first in the Linux product series that also will include a shrink wrapped version, a Server Edition and, in the future, a full suite of applications. Further details and pricing will be announced in November.

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"We have always been dedicated to creating software for multiple platforms and we are very happy to offer our customers a wide range of technological choices. We believe the development of software for emerging operating systems such as Linux will serve to create a fair playing field for all software developers," said Dr. Michael Cowpland, president and chief executive officer of Corel Corporation.

Editor's note: as of today, there have been over 210,000 downloads of WordPerfect 8 from Download.Com. This puts WP8 for Linux as #2 on their list of most popular downloads!

XFree86-3.3.3

There are quite a few bug fixes in this release. If you are having problems with a prior release, please try XFree86-3.3.3 first before asking for help.

Highlights of the new release include:

Security enhancements including several buffer overrun fixes and other changes to fix security problems reported to us.

New chipsets supported including 3Dlabs, Rendition, Weitek P9x00, Cyrix MediaGX, Matrox G100/G200, SiS 5597/98 + 6326, Trident 975AGP, NeoMagic, more Mach64 chipsets, C&T 69000, Riva TNT, EPSON SPC8110, Linux vesafb.

All XFCom servers from SuSE and Precision Insight have been included. LynxOS 3.0 support.

FreeBSD/ELF support.

New XInput drivers for AceCad ADVANCEDigitizer, MicroTouch TouchPen, SGI dial box.

Numerous bug fixes.

Support for the Matrox G100- and G200-based cards to the MGA driver. Makes extensive use of the graphics accelerator. This server is very well accelerated, and is one of the fastest XFree86 3.3.3 Xservers.

Editor's note: This last is especially significant for me, as my latest computer came with an 8MB Matrox Millennium G200 card in it, and it's nice to see timely support for the latest hardware. Now if only there was direct support for Mesa, the OpenGL library...

News Items To Be Happy About

SuSE has released version 6.0 of their distribution, in German only. It will be available later this month in the English version. It's based on kernel 2.0.36 and is described as "2.2 ready", whatever that means. Is this any more valuable than a PC advertised as "cable-modem ready"? It is also the first SuSE distribution to use the glibc libraries. Thanks to RedHat for paving the way.

LinuxPPC Inc is exhibiting at MacWorld Expo:

LinuxPPC Inc. will be exhibiting at booth #3555, right across from Developer Central. Applix will be joining us to show Applixware Office for LinuxPPC, and we'll have LinuxPPC Release 5 on display. We'll be taking pre-orders, but won't have CDs ready for a few weeks. Release 5 is a port of Red Hat Linux 5.0, which will bring Linux on PowerPC to par with its Intel-based counterparts.

Product Announcements: We will be formally announcing LinuxPPC 5.0, and the first commercial distribution of LinuxPPC Lite. Applix, Inc. will be announcing Applixware Office for LinuxPPC.

Conference Sessions: LinuxPPC Inc's Jeff Carr and Jason Haas will be participating in a Pro-level conference track entitled "The Value Proposition of Linux on the Macintosh," to be held on January 7. Jason will also be speaking at the "Other OSes on the Mac" User-level conference, which will be on January 6.

If you have been ignoring the Linux news for the last couple of weeks, you won't have noticed that the Linux kernel is now in the "pre-2.2" phase. What does this mean? Well, 2.0.36 is the current stable release. While this version has been in use, kernel developers have been working on the 2.1.x 'development' series of kernels, with the goal of producing the next stable version of the kernel for production use. This will be version 2.2. Linus Torvalds, the kernel maintainer, feels comfortable with the level of development of the 2.2 kernel, and hence has switched from the 2.1.x numbering scheme to the 2.2pre-y scheme. The current version is 2.2pre4. This may be equivalent to Microsoft's "RC" or Release Candidate numbering for their operating systems. Linus is tying up loose ends, and we should see the 2.2 Final version by the end of this month.

Have you been wondering what's really going on in kernel development? You should look in on the kernel development newsgroups. In the meantime, here's a sample of what's left to do in the kernel as of December 29, 1998: Date: Tue, 29 Dec 1998 01:46:20 GMT

From: Alan Cox <alan@terrorserver.swansea.linux.org.uk>

To: linux-kernel@vger.rutgers.edu, torvalds@transmeta.com

Subject: 2.2.0 Bug summary

Ok this is the collated 'bad bug set', also the -ac diffs divided up into the relevant sections

Unfixed and definitely needing fixes TCP slow performance problem is still not merged from January 1999 Volume 11, Number 5

DaveM

Run two processes that keep rejoining multicast groups on an SMP box - crash

Spam the box remotely with syn floods and other crap, it leaks memory

select/poll magically break at some number of handles without an error

Procfs has locking errors on mm's

IDE probe often guesses wrong. Linux is impossible to install on these ranges of PCs. Needs fixing badly.

isdn4linux is old not CVS version. Basically unusable. If its not changing for 2.2.0 it should be commented out or deleted

eata-dma driver crashes the machine if at any instant it cant grab atomic is a dma memory. (Possible fix mark it obsolete and use eata.c which works fine)

Video4linux bttv tends to crash machines grabbing - fix around needs merging and the driver updating

You can't mount an ext2fs cdrom. (Block size error). Works in 2.0

generic_file_mmap and MSDOS/UMSDOS disagree over who clears blocks

bootp autobooting stuff corrupts other hosts arp stuff it

DaveM reports a pile of VMA operations done without locks held.

IDE defaults to multimode on causing serial problems, corruption with some drives, and hangs on boot with others.

Dual 486 boards won't boot SMP kernels

Tulip driver/fast routing stuff needs to be resolved. If they cant be merged the default tulip should be a current one.

Unfixed but not vital

NFS client over tcp doesnt work

NFS readahead is too low

NFS performance to 8K page sized BSD boxes sucks rocks, 2.0.x is about 5 times faster

Linus VM is still 20% slower than sct vm on an 8Mb machine [benchmarks kernel build and netscape]

fchmod on AF_UNIX sockets doesnt work like BSD

IPv6 calls set multicast list in the wrong context

TCP fails to handle small SO_SNDBUF/RCVBUF settings Make xconfig needs layout fixes

Need to review all CONFIG_EXPERIMENTAL tags

Fixed in -ac patches

For Linus:

AVL tree vm avoids bad perfomance problems MediaGX crashes on boot

Certain numbers of scsi disks dont seem to work VFS clears setuid/gid flags wrongly on directories COSA credited twice

string.h egcs fixes

Some further time fixes

Various time fixes submitted

KNFSD patches. With them knfsd seems to work ok. With the current tree it doesnt work at all. Probably this is "Experimental for 2.2"

AMD stepping ident, K6 ident

What the hell is going on in time.c, on a low memory box

586 gives better performance for a 486 and several other chips without TSC registers. That patch piece is a bad way to save 1K

Various config combinations don't build

FTAPE doesnt work in .132/2.2.0pre

Various of the time_* changes to net/* are one out Ted's last serial patch is missing (setserial crashes box) IBMMCA doesnt work on the model 77 internal scsi Trond's last NFS fix

include/linux/sysctl.h is exposed to user tasks even with glibe, but isnt strictly ANSI compliant

SYS5 shm debugging slows stuff down measurably -ifdef

DVD's trip an isofs sanity check wrongly

Unsure:

Large file array support (will be required by vendors for several big name products). This is a tricky one. Im wearing too many hats to judge this objectively. Vendors will probably ship this anyway or something similar.

Linus doesnt want:

QlogicFC - no big problem, its seperate its clean and vendors can ship it and other driver addons easily as they do now. Its a nobrainer to install of the net.

Stale ?:

ADFS updates

Load unversioned modules into versioned kernels when doing request module etc.

Crashes and zero page scribbles using ptrace.

Richard M. Stallman (rms@gnu.org) has put out a call for help with documenting the GNU software:

Date: Thu, 31 Dec 1998 09:50:35 -0500

From: Richard Stallman <rms@gnu.org>

To: info-gnu@gnu.org

Subject: Needed: proofreaders and English writing helpers

The GNU project is looking for people who are good at writing English to help programmers improve the documentation in GNU packages. (This is especially important when Volume11, Number 5 January 1999

programmers are not native speakers of English.)

If you volunteer, we'll put you on a mailing list, and occasionally send that list requests for people to help. Some of the jobs will be small, and some large; even if you can only work on small jobs, your help will be useful.

If you want to volunteer, please send me mail.

In the GNU vein, Aladdin has released Ghostscript under the GPL:

Date: Mon, 28 Dec 1998 14:53:18 -0800

From: "L. Peter Deutsch" <ghost@aladdin.com>

To: gnu@gnu.org

Subject: Re: Does info-gnu@gnu.org post to gnu.announce?

Aladdin Ghostscript 5.10, originally released in November 1997, has now been released with the GPL as GNU Ghostscript 5.10. It is available for downloading from

ftp://ftp.cs.wisc.edu/ghost/gnu/gs510/and also

ftp://ftp.gnu.org/pub/gnu and mirrors of that site (see list below).

Please DO NOT report problems with GNU Ghostscript 5.10 to Aladdin, unless we accidentally did something really stupid like omit a crucial file. To the best of our ability and subject to the constraint that there are only 24 hours in a day, problems in Ghostscript 5.10 have been fixed in Ghostscript 5.50, released in September 1998 with the Aladdin Free Public License and scheduled for re-release in September 1999 with the GPL. If you have a problem with GNU Ghostscript 5.10, we suggest you seek help on the gnu.ghostscript.bug newsgroup.

Linux History

Riley Williams has completed his collection of Linux kernels. You, too can have a piece of history. Longing for the days of 0.96b? Go get it here: http://ps.cus.umist.ac.uk/~rhw/kernel.versions.html. The earliest kernel on record dates back to September 17, 1991, and was version 0.01, a huge 63,362 bytes. The latest is 2.2pre4, January 3, 1999 at over 10 MB (these are both .tar.bz2 format).

CDL?

This is an intriguing new project: The Corporate Desktop Linux project (see http://www.welcome2.com/cdl/).

Linux is one of the most powerful and reliable operating systems in the world today. Because of this, Linux has already made inroads as a platform for power users and in the enterprise server arena.

Beyond the server room and the power user's workstation, however, is a vast array of ordinary business computers. Because of their large number and diverse locations, Information Technology (IT) departments struggle daily to maintain and support these machines on a minimum budget. The recent interest in Thin Client computers and the Total Cost of Ownership (TCO) speak to the need for the ordinary business computer to be both easily supported and reliable in order to cut costs and provide the service end users expect.

Linux, however, doesn't provide all of the services many corporate I.T. departments need to efficiently manage their computers. Below is a brief list of the primary features that I.T. departments need Linux to provide:

Remote desktop configuration & lock down Automatic software distribution and update Support for remote users (i.e. automatic file synchronization, etc.)

Asset Management (automatic inventory of hardware and software)

Software metering (for commercial software)
Support for enterprise computing standards such as the
Desktop Management Interface

The ability to utilize existing corporate applications and files (Lotus Notes, Microsoft Office, etc.)

The goal of the Corporate Desktop Linux initiative is to address each one of these items and provide the information, software and support I.T. departments need to deploy Linux on the desktop. We will focus on organizing and tweaking existing Linux utilities, developing new software as necessary and finally providing a library of documentation which creates a 'road map' to implementing Linux on the desktop. All information and programs developed under this initiative will be released under open source software licenses (GNU, Artistic, etc.) so businesses can start implementing Linux desktops as quickly, easily and cost effectively as possible.

If you are interested in helping out or just getting more information, please e-mail us at our address: cubit@unicomp.net. We will be creating a mailing list to keep people informed as the project progresses.

MUUG Contact Information

To contact the MUUG board for membership information or anything else, send e-mail to board@muug.mb.ca. We have a Web presence as well, at http://www.muug.mb.ca/, where you can find all kinds of information, including details of upcoming and past meetings and presentations and references related to them. E-mail the editor at editor@muug.mb.ca.