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MUUGlines

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This Month: Red Hat 5.1 and WordPerfect for Linux

Due to unforeseen circumstances, the topic originally scheduled for this month has been moved to September 8. This month's meeting will therefore be back at the usual location (TD Centre).

We will have two short presentations. Gilbert Detillieux, of the University of Manitoba, will demonstrate some of the new features in Red Hat 5.1, such as the Gnome GUI, and linuxconf, the new set of standard Linux system administration tools. Arne Grimstrup, of Pollard Banknote Limited, will present Corel's WordPerfect for Linux.

There will be ten copies of Red Hat Linux/Intel 5.1 on CD-R, for sale to members for $5 per copy. (This is a snapshot of the free portion of the distribution, taken from MUUG Online's FTP mirror.)

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")!

Don't forget that we have door prizes to give away, too. This month two lucky attendees will go home with a copy of S.u.S.E. Linux 5.2.

Our meeting this month is Tuesday, the 8th of June. We will meet (as mentioned above) at IBM Canada's offices in the TD Centre, at the corner of Portage and Main. We'll 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. 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.

RED HAT LINUX 5.1 Turns Up The Heat For Summer

The Red Hat Press Release

Rumours have been swirling for months, and Red Hat Software added to the heat of summer by announcing the June 1 release of Red Hat Linux 5.1, a powerful update that includes enhanced installation features, as well as system configuring, web caching, window management features and an added value CD of applications for Linux.

Emphasizing the strength and rapid progress of the Linux development model, Red Hat Linux 5.1 continues to facilitate installation with several new features. With the internationalization of 5.1, users can choose between many languages during the installation. Back buttons have been fully implemented during installation to allow users to correct mistakes along the way. SMB has been reimplemented to allow installations from Microsoft based servers. DHCP networking, boot floppy creation, enhanced rescue mode, and an improved kickstart also highlight the 5.1 installer.

5.1 supplements its easier installation with the addition of a true Fortran77 compiler as a part of the egcs compiler package. Afterstep has been integrated into Anotherlevel to replace the previous cloned version. For sysadmins, linuxconf has been fully integrated into the Red Hat configuration process to allow for remote administration, text based administration and GUI administration. Also included in the 5.1 boxed set is the added value CD of software applications that work with Linux.

With 5.1, Red Hat Software increases the accessibility and usability of the Linux OS. As Red Hat continues to add new ease-of-use features to its already stable, advanced, award-winning Red Hat Linux, Linux proves itself ready, willing, and able to provide enterprise class solutions.

Red Hat Linux 5.1 comes with 3 CDs, including the software application disk, and an Installation Manual. Real Audio and BRU provide an additional value. Red Hat Software has extended the included installation support to 90 days. Red Hat Linux 5.1 can be purchased from Red Hat Software for $49.95 or from local resellers worldwide.

Review

Red Hat 5.1 - I'll Take Manhattan... To Go!

By Gilbert Detillieux

Red Hat Software has just officially released version 5.1 of their Linux distribution, code-named Manhattan, on June 1st. As usual, MUUG offers a complete mirror of the distribution on its FTP server, and has actually had the software available since May 26.

Although not as radical a change as 5.0 was compared to 4.2, version 5.1 does nonetheless offer a few substantial additions and improvements, not the least of which is the incorporation of the numerous update packages that have been release since 5.0 came out in December of last year.

The installation procedures have again been improved, with more automatic hardware detection than previously, and with the inclusion of "Back" buttons on most dialog boxes, to make it easier to correct errors and continue.

Some of the biggest changes in the included packages deal with GUI support. In addition to an improved version of AfterStep (as an alternative to the Win95-look-alike window manager provided by default), Red Hat 5.1 includes a current snapshot of Gnome, the GNU project to develop a standard, free GUI for UNIX systems.

Linuxconf, a new set of system administration tools for Linux, is also included. Linuxconf is a joint-venture between several of the providers of Linux distributions to provide a standard interface to common sys-admin tasks for all flavours of Linux. It comes with command line tools, a text-based window interface called Gecko (using the newt toolkit), a Gnome-based GUI, and a web-based interface as well.

The free web browser Arena has been dropped in favour of Netscape Communicator 4.04, which is now freely redistributable. (Red Baron is apparently still provided as well, with the commercial Red Hat Linux distribution.)

On the web server side, Apache is still provided, but its power has been augmented with several new additions. The old Apachecfg utility has been replaced with Comanche, a new X Window based configuration manager for Apache (with a rather contrived, but cute acronym). Two new Apache modules, mod_perl and mod_php, provide server-side scripting for dynamic web pages. Squid, a web proxy server, is also included. Finally, there's the wget command, which allows batch-mode recursive HTTP and FTP fetching.

Software developers might want to note the addition of the egcs suite of compilers as reverse-compatible replacements for the GNU gcc suite. Support for C, C++, Objective-C, and Fortran 77 is provided, in four separately selectable packages. (The old gcc command is still included as well.) Also, the newer libstdc++ is offered as a replacement for libg++ (although the libg++ shared libraries are also provided for compatibility).

Various other libraries have also been added. For graphics support, there's giflib, glib, and imlib. For text mode, there's the new ncurses3 libraries. GNU libtool, a set of scripts for building shared libraries, is another addition. Finally, for perl users, the perl-MD5 module is also new.

Various utilities and commands for system administrators are also new. SVGATextMode is a utility for changing text mode settings on the console. Creating a boot disk with your current kernel is now easier with the mkbootdisk utility. A power management daemon, apmd, which can provide battery-low alerts, and handle the suspend/resume functions for PCMCIA devices, might be of interest to laptop users. A Usenet spam filter for INN, called cleanfeed, will be of interest to those maintaining their own news feeds. For networked users who like to be on time, the xntp3 package provides a time protocol daemon to keep your system's clock in sync.

For regular users, the addition of the bzip2 compression utilities, and a free PDF file viewer called xpdf, might be of interest as well. All of these additions will likely keep users of Red Hat 5.1 so busy they won't even notice that Doom is missing!

All of the free portions of Red Hat 5.1 are available for downloading from the MUUG FTP site, at the following location:

ftp://ftp.muug.mb.ca/mirror/redhat/redhat/redhat-5.1/

A handy link to this location is available right on the MUUG Online home page (http://www.muug.mb.ca/). For those who don't want to download hundreds of megabytes worth of code, we'll be selling ten copies of Red Hat 5.1 for Intel systems on CD-R, at a cost of $5 per copy, at the June 9 meeting.

Where is Linux Headed?

The following is the editorial from the Linux Weekly News (http://lwn.net/) dated May 28, 1998:

Perhaps one of the more important events at Linux Expo will be the BOF [*Birds-of-a-Feather session – Ed.*] on the proposed Linux standard base. The LSB seeks to create a standard for Linux systems, such that an application that runs on one compliant system will run on them all. Please see the announcement [*see the next article – Ed.*] if you have not yet read it.

We need something like the LSB. Though the level of incompatibility between distributions is already pretty low, problems do occasionally crop up. More problematic is the sense among some software vendors that "Linux is the system where each user has their own version number." If application vendors can be assured that the full Linux market - at least those interested in buying software - will be available to them, they will be more interested in trying to sell to that market. Even for open source purists, the advantages of having a Linux system standard will be many. (See also Larry Augustin's

Freshmeat editorial [*found at http://freshmeat.net/ – Ed.*] for more words on the need for the LSB).

There are a number of concerns, clearly, that would have to be addressed in the process of defining and implementing the LSB. Hopefully at least some of these will be raised, and dealt with, at the Linux Expo BOF. A few that are worth considering include:

> Who decides ultimately what is in the LSB, and what is not? Will Bruce Perens (or whoever ends up leading the project) have the support and authority to work in a Linus-style mode and keep the LSB together?
>
> How will LSB compliance be tested and advertised? Should there be a funded group, complete with trademarked symbol, which can judge compliance claims? How will this group be paid for? Testing fees might normally be used, but non-funded distributions, such as Debian, must be able to qualify as well.
>
> How do we keep the LSB from slowing down Linux development? Consistency will be a requirement if the LSB is to have value, but Linux needs to be able to move forward. How would the LSB have handled the shift to ELF, or glibc2? Do we believe that changes of that magnitude are now behind us? One idea worth consideration is to tie major revisions of the LSB to major kernel releases, thus minimizing the number of major "Linux system" changes, and making it easy to know where any individual system is at.

The final concern has to do with how the LSB relates to other, existing projects, such as the Core/Layers specification and the FreeLinux project. It is often said that the nice thing about standards is that there are so many of them to choose from. It seems unlikely that Linux needs choices at this level, so it seems important that these groups talk to each other and come up with a single solution.

Project Proposal and Call for Participation: The Linux Standard Base (LSB) Project (V1.5)

The Linux(R) Operating System's rapid adoption by millions of computer users everywhere is direct recognition of the quality of the software and success of the freely distributable software development model. In order to ensure that large software application programs, from binary-only tools sold by the largest software companies, to freely distributable desktop environments built cooperatively over the net, run smoothly on as many Linux-based computers as possible - the Linux Standard Base (LSB) Project is an attempt to define the common core of components that can be expected to be found in any "Linux" system.

The signers of this proposal are most of the leading commercial Linux distributions, board members of Linux International, and key personnel like Linus Torvalds, the creator of Linux. We propose a set of goals and the organization for this project, and invite all other Linux distributions to join us in planning the project and carrying it out.

The "base system" is the set of programs, libraries and files that are essential to every Linux system. These objects and their related file formats play a supporting role for every application. Examples of this include (but are probably not limited to) the C library, the format and placement of system files, and other necessary interfaces. Linux distributions traditionally do not distinguish themselves on these interfaces, they distinguish themselves in other categories, such as the applications on their system, quality and ease of installation, and quality and ease of systems administration as well as support for users. Linux distributions should maintain the base system collectively, as the kernel is maintained, rather than individually.

The Linux Standard Base project will provide a vendor-neutral standard, backed by source code, upon which to build Linux distributions, much as the Linux kernel project provides a single kernel that is shared by all distributions. This standard base will be distributed as a reference platform from which Linux distributions may be derived and which application producers may use for testing, but it will *never* be targeted to be an end-user solution in itself, as that is the role of the Linux distributions that incorporate the standard.

The application of the standard will be that any program that runs successfully on the reference platform can be expected to run on all Linux systems. If they don't, the distribution creator must either fix a problem with their own distribution, or convince us that there's a bug in the sample distribution which violates the standards. This is not intended to prohibit distributions from making their own extensions to the base system, or even to use different source code from what is supplied in the reference platform - it's only meant to provide a common set of features that will be known to exist on every Linux system which ISVs can depend on.

Participation in the base standard will assure the distributions of compatibility with each other for the set of applications that depend only on the files and libraries in the reference

platform. As time passes, the standard will expand to include most of the files and libraries upon which a commercial application might depend.

The Linux Standard Base System will be 100% compliant with the Open Source Definition. This assures all distributions that they can derive from it without concern over licensing problems for themselves or their users. Development will be carried out in the public, with anonymous access to the CVS archive and the developer mailing lists. The core group will be a mix of high-quality developers from the Linux community and the staff of commercial distributions, with an organization similar to the tremendously successful Linux kernel development team. Attention will be paid to standards such as POSIX and the FHS (the successor to the Linux Filesystem Standard). However, the project goes far beyond the utility of these standards, because rather than produce only paper documents, it will provide a complete implementation of the standard, ready to be integrated into Linux distributions or used as a reference platform for application developers. This will provide the Linux distributions with improved time-to-market, lower cost, and much less duplication of effort than a paper standard which is defined to fully take into account side effects, undocumented issues, etc.

We propose Bruce Perens as the project leader. He has the experience of having run Debian for several years, during which he did extensive work on Debian's base system. He is a board member of Linux International, president of Software in the Public Interest, and a member of the 86open steering committee. He is the principal author of the "Open Source Definition" and its predecessor, the "Debian Free Software Guidelines". He has been a Unix systems programmer since 1981, and is currently employed by Pixar Animation Studios, makers of "Toy Story".

The Linux Standard Base System will implement some of the goals of the 86open project, which proposes to establish an interoperability standard for all Unix-like operating systems.

We, the undersigned, endorse this proposal, and ask that other distributions and ISVs also join us to help further define this proposal and then to help implement it:

Linus Torvalds, Creator of Linux
Jon A. Hall, Executive Director, Linux International
Bruce Perens, Director Linux International, proposed Project Leader
Ransom H. Love, Director Linux International, General Manager,OpenLinux Division, Caldera, Inc.
Roland Dyroff, Director Linux International, S.u.S.E. Linux
Mark Bolzern, Director Linux International, President Linux Mall and WorkGroup Solutions, Inc.
Phil Hughes, Director Linux International, Publisher, Linux Journal
Larry Augustin, Director Linux International, President VA Research
Kit Cosper, Director Linux International, President Linux Hardware Solutions, Inc.
Garry M. Paxinos, Director Linux International, Vice President Metro Link Incoporated.
Cliff Miller, Director Linux International, President, Pacific HiTech (TurboLinux)
Ted Cook, Director Linux International, President, Enhanced Software Technologies.
Tom Lang, Director Linux International, President, H&L Software
Eric S. Raymond, open-source evangelist and author of "The Cathedral and the Bazaar"
Sam Ockman, President, Penguin Computing, Chairman, LINC: the International Linux Conference and Exposition

Non-Linux Supporters:
Jordan Hubbard, FreeBSD project.

S.u.S.E. Linux 5.2

A brief review by Kevin McGregor

This is quite a package. S.u.S.E. Linux 5.2 (March 1998) includes a 430-page manual, four CDs, a boot diskette, and much that is interesting, educational and even funny. The CDs include 3 for installation and one "live" file system disc. The boot diskette (3.5", of course) features the 2.0.33 kernel.

The interesting part is twofold: The lengthy (but clear and detailed) discussion and diagrams of the 'quick' installation process, and the fact that it could use a good edit by someone proficient in the English language. It's clear enough, if you're careful. The educational is in places like the discussion on how to partition your hard drive, with more detail than I've seen anywhere else on this topic. The funny (to me!) is the amount of space given to the included emulators: DOS, Atari ST, Amiga, Sinclair ZX81 and Spectrum, ColecoVision/Adam, Commodore 64/128/PET, Atari VCS 2600, Gameboy, NES; and all the warnings not to copy the ROMs from the Internet! I hope to get a chance to install this myself!

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.