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MUUGlines

The Manitoba UNIX User Group Newsletter

June 12, 2001: The Return of BSD

In the open source world, the word Linux is almost synonymous with Operating System. As of April 1999, 31.3% of the world's network-connected machines run Linux. Comparatively, 14.6% run BSD UNIX. Some of the world's largest web operations, such as Yahoo!, run BSD. The world's busiest FTP server, ftp.cdrom.com, uses BSD to transfer 1.4 TB of data per day. Even Microsoft's flagship Hotmail service used to run BSD. So what's the secret? Why isn't BSD more well known?

This month, Roberto Urrea, Senior UNIX/NT Administrator with the University of Winnipeg's Technology Solutions Centre, will be talking about FreeBSD, about how it differs from Linux, and about running Linux programs on FreeBSD. FreeBSD, NetBSD and OpenBSD all include options to allow Linux binaries to run on these systems (at least for the Intel x86 architecture).

For this month only, we will be meeting at the University of Winnipeg's Duckworth Centre, which is located on Spence Street, across from the rest of the U of W campus, between Portage Ave. and Ellice Ave. The meeting will be in room 3B03, on the 3rd floor of the Duckworth Centre, which should be easy to find from the Spence Street entrance. The campus map in this issue should help you find the way. Security personnel at the front of the main building at the U of W campus (Portage Avenue entrance) will be provided with information about this meeting, so you can always check with them if you're lost. There should be no parking problems after 5:30 PM.

This Month in Prizes

We have two copies of Win4Lin from Netraverse 2.0. From their website (www.netraverse.com):

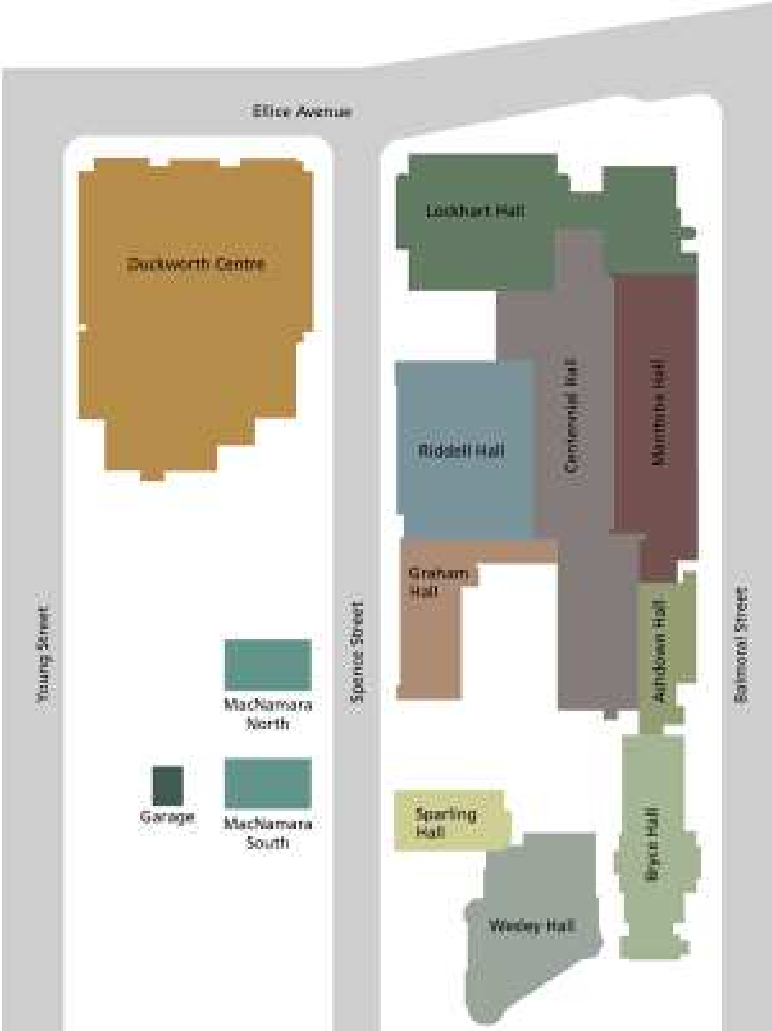
Imagine being able to run your favourite Windows® applications on the Linux® operating system in the fastest Windows 95/98 environment for Linux. NeTraverse Win4Lin enables Linux users to run popular Windows programs at native speeds without additional hardware or the need to dual boot, dramatically improving productivity and reducing hardware and OS license upgrade cost. Version 1.0 and 2.0 users are eligible for a complimentary upgrade to version 3.0. (See the website for details.)

We have the final two boxed sets of OpenLinux eDesktop 2.4 and the Linux Technology Preview Developer Release (featuring the 2.4 kernel) from Caldera Systems. Invite some friends who haven’t won these yet! OpenLinux eDesktop 2.4 comes as a boxed set with a 500-page User Guide, a boot diskette and four CDs: Binaries, Commercial Packages and Source Code, plus the OMNIS Studio Rapid Application Development tools. Also in the box you’ll find two “Powered by Caldera Systems” stickers for your computer AND a Caldera Systems bumper sticker! The Technology Preview box includes an Installation Guide, plus Installation Disk and a Source Code disk.

You Want a MUUG Shirt

Shawn Wallbridge is our MUUG T-shirt development co-ordinator. We are currently developing artwork for the Official MUUG T-shirts. If you would like to see what we have come up with, visit www.muug.mb.ca/tshirts/ and www.maximum-geek.com/muug-shirts/muug_shirts.html.

If you would like to comment on a design, or contribute a design of your own, send an e-mail to muug-shirts@home.com. The price is expected to be around $15. If you are interested in a shirt, e-mail us at the above address the address. We will take official orders once the design has been confirmed. A sample shirt design is shown at right. There are more designs on the website, but our space here is limited. If you are submitting a design, please ensure it doesn’t infringe on anyone’s copy-



rights. The last thing we want to do is deal with lawyers because of a few t-shirts! In some cases (BSD daemon?) the permission can be obtained just by asking.

The VideoLAN Project

VideoLAN is a project of second-year students at the École Centrale Paris. Its main goals are MPEG and DVD playing and broadcasting on the campus, but it also features a standalone multimedia player that can read DVDs and MPEG files. It will also eventually support streams from a satellite or from an MPEG2 compression card. VideoLAN is free software, and is released under the GNU General Public License (GPL).

More information can be found in the introduction section of the website (www.videolan.org). You can also check mailing-lists, and if you want more real-time interaction, you can meet the VideoLAN developers in #videolan on the OpenProjects network (irc.openprojects.net).

Features

Operating systems: all GNU/Linux flavours, most Unix flavours (Solaris, FreeBSD), BeOS, GNU/Hurd, MacOS X, QNX. Note that not all ports are fully functional; refer to a port's page to get information about its status. Input formats: DVDs (even encrypted ones), system MPEG streams, system MPEG2 streams (PS and TS). Additional decoders: DVD subtitles, Dolby AC3. Video output features: X11 (XShm, XVideo), SDL, Linux framebuffer, GGI, BeOS API, MacOS X API. Hardware YUV acceleration, arbitrary window scaling. Interfaces: Gnome, Gtk+, Qt, BeOS API, MacOS X API, text console. Navigation features: slow motion, fast forward, pause, arbitrary jumps within the stream, DVD chapter selection, on-the-fly language and subtitles selection.

O'Reilly Releases Python Standard Library

Python expert Fredrik Lundh has spent hundreds of hours in recent years answering questions posted by programmers on the popular Python newsgroup, comp.lang.python. Python, known for its clean syntax and object orientation, is a modular language that imports most useful functions from the extensive library of programming modules that is distributed with the language. These modules are a collection of commonly used procedures that can be pasted into a Python script rather than written from scratch. In his just-released book, "Python Standard Library," (O'Reilly, US $29.95), Lundh provides tested, accurate documentation of all the modules in the Python Standard Library, along with more than 300 annotated example scripts using the modules, based on the author's work with thousands of questions and answers from the Python newsgroup.

"Python Standard Library" distills the best parts from over 3,000 newsgroup messages. As Lundh explains in the preface of his book, "Maybe someone found a module that might be exactly what he wanted, but he couldn't really figure out how to use it. Maybe someone had picked the wrong module for the task. Or maybe someone tried to reinvent the wheel. Often, a short sample script could be much more helpful than a pointer to the reference documentation."

Lundh's specialty is providing short sample scripts that demonstrate the use of a module in a way that programmers can understand. Lundh explains, "I've worked hard to make the scripts both understandable and adaptable. I've intentionally kept the annotations as short as possible. If you want more background, there's plenty of reference material shipped with most Python distributions. In this book, the emphasis is on the code."

Lundh's book is a no-nonsense, no-fluff reference work for the serious Python programmer. "Python Standard Library" documents all the new modules and related information for Python 2.0, the first new major release of Python in four years, including:

- All major forms of data representation
- Support for threads and pipes
- All important file formats, including XML and HTML
- Support for major Internet applications like mail (MIME) and news
- Database and persistent storage

Fredrik Lundh, an active member of the Python community and a frequent contributor to the Python newsgroups, is an expert on the use of Python with images and graphics and is the creator of the Python Imaging Library (PIL). Lundh is a principal of Secret Labs, Inc. the creators of PythonWorks, and integrated development environment (IDE) for Python.

Chapter 5, "File Formats," is available free online at: http://www.oreilly.com/catalog/pythonsl/chapter/ch05.html. For more information about the book, including Table of Contents, index, author bio, and samples, see: http://www.oreilly.com/catalog/pythonsl/index.html.

Your Own MP3 Streaming Service

From Netsurfer Digest

Ignore for a minute the problems of complying with the Byzantine regulations regarding online broadcasting and intellectual property. Assume that you just want to set up your own online radio station using an inexpensive computer and a bunch of MP3s. These instructions will tell you how to set up an MP3 audio streaming service on Linux.

Anybody who wants to run an online radio station can follow these instructions and have at least the technical beginnings of a broadcast service. The instructions are part of a larger site that's worth exploring for its wide variety of Linux and open source topics. Good techie bookmark: http://www.linuxlookup.com/html/guides/streaming-mp3.html

Open Source is Here to Stay

Tim O'Reilly writes that this year's O'Reilly Open Source Convention and Perl Conference 5 is broader and deeper than ever before, with 250 sessions in 14 tracks that cover Linux, Apache, Perl, Python, PHP, MySQL, and more. Get the lowdown on the highlights at http://conferences.oreilly.com/oscon/tim_letter.html.

Sun Provides Gnome 1.4

Exploring the GNOME 1.4 Desktop is an introductory software package designed to allow workstation and Internet customers to test drive, explore, and evaluate an early version of the GNOME desktop for the Solaris™ Operating Environment, SPARC™ and Intel Architecture Editions.

GNOME, developed by the global open source community, is the future user environment for the Solaris platform. It employs an intuitive desktop interface that enables users to easily locate and access files and applications, manage workspaces, and run a broad range of productivity software.

Last August, Sun announced that it is adopting GNOME 2.x as a standard component of the Solaris platform. Since then, Sun has received an overwhelming response from customers and developers applauding its decision, along with numerous requests for early access to GNOME.

Although GNOME 2.x will not be available until mid 2002, Sun is making available an unsupported distribution of GNOME 1.4 that it has built and packaged. GNOME 1.4 serves as a prelude to GNOME 2.x, allowing customers to familiarize themselves with the advanced capabilities of GNOME and begin formulating plans for moving to this new desktop.

VMware Now On 2.4 Kernel

VMware, Inc., the leader in virtualization software for Intel computers, announced on May 22 updates of its market-leading VMware Workstation and VMware Express products that provide full support for new Linux 2.4 kernel-based operating systems, including RedHat Linux 7.1, SuSE LINUX 7.1 and Linux-Mandrake 8.0. The updates reflect the company's commitment to support new operating systems as soon as possible after they become available from vendors and can be fully tested.

Updates of Workstation and Express for both Linux and Microsoft Windows systems, designated 2.0.4, are available now for electronic download at http://www.vmware.com. All electronic updates are free to existing customers. The updates will appear in packaged versions of VMware products within 45 days of electronic download. New customers may purchase Workstation for $299 (electronic download) or $329 (packaged) and Express for $79 (electronic download) or $99 (packaged) (all amounts in U.S. dollars).

Based on VMware patent-pending MultipleWorlds technology, VMware software allows standard operating systems and their applications to run in secure and transportable virtual machines on physical computers -- from laptops to high-end servers -- with high performance. VMware Workstation enables technical professionals to streamline the development, testing and deployment of applications in today's complex computing environment, resulting in faster time to deployment, higher quality and lower cost. VMware Express is for Linux developers who need to run Microsoft Windows applications on Linux systems.

Monty Python and the Lego Grail

From Netsurfer Digest

The unbeatable Black Knight challenges Arthur eagerly, gleefully ignoring the fact that his arm is now lying on the ground next to him. A three-headed guard suspiciously boasting the Shell Oil logo on his - uh, their chest screws up trying to keep Brave Sir Robin from passing, instead focusing solely on a good cup of tea. Crafted with the single most captivating toy/tool ever invented, this Lego-modeled version of stills from "Monty Python and the Holy Grail" will equally captivate you. The Knights Who Say Ni and Tim the Enchanter are recreated with clever placement of their Lego players. Not to be upstaged, the vorpal rabbit also appears, in order to disprove any rumors that he's the most foul, cruel, and bad-tempered rodent you ever set eyes on. Or so Tim the Enchanter is known to advise you, but what does he know? Rabbits aren't rodents.... See http://www.geocities.co.jp/Hollywood/9060/holye.html

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. We will try to personally respond to your e-mail promptly, but please note that our group has a very small board of directors, consisting of a few very overworked volunteers. Please make sure you have used the right address, and are requesting information that is not found on our web site (www.muug.mb.ca).

For a full list and description of the addresses, see http://www.muug.mb.ca/pub/muuglines/pdf/muug0004.pdf.

We Like To Hear From You

So e-mail us with your comments on the newsletter, whether it's criticisms or commendations, or send in some interesting articles! Submit personal anecdotes, stories of your use of Unix, Linux, BSD or related operating systems to editor@muug.mb.ca. We really appreciate everything you send in!