MUUGlines

The Manitoba UNIX User Group Newsletter

October 10, 2000: ACeDB: An O-O DB

ACeDB is a freely-distributed object-oriented database package that was developed for genome projects, but is a very general purpose system. It is available for most computer systems (Unix, Mac, NT, etc.), and binaries for ACeDB are available for most systems. Brian Fristensky, from the Department of Plant Science at The University of Manitoba, has used ACeDB in his lab for several years, and in his recent Bioinformatics course. This month, he will be describing and demonstrating this database for us.

Hey! Different Location!

For this month only, the meeting will be held at the University of Manitoba's Fort Garry Campus, in the Carolyn Sifton Auditorium, Room 130 Agriculture (Building 38, see map below). Next month's meeting will once again be at the TD Centre.

From Fort Garry and points North, enter the campus from Pembina Hwy. at University Crescent. From Winnipeg South and West, enter the campus from Pembina Hwy. at Chancellor Matheson Road. Go East on Matheson to University Crescent. Go south on University Crescent, and East on Dafoe Road. The Agriculture Building is on the right at 66 Dafoe. On-campus parking is free in the evening, and is available in lots off of Dafoe Road, or off of service roads near Agriculture. Winnipeg Transit buses 36, 60, 61, 62, 63, 72, 75, 76 and 78 all stop on the U. of M. campus on Dafoe Road.

November 14, 2000: Vulnerability Scanning

Do you want to know what the 'Bad Guys' can find out about your computer? There is no better way to find out what they can see than to use the same tools they use.
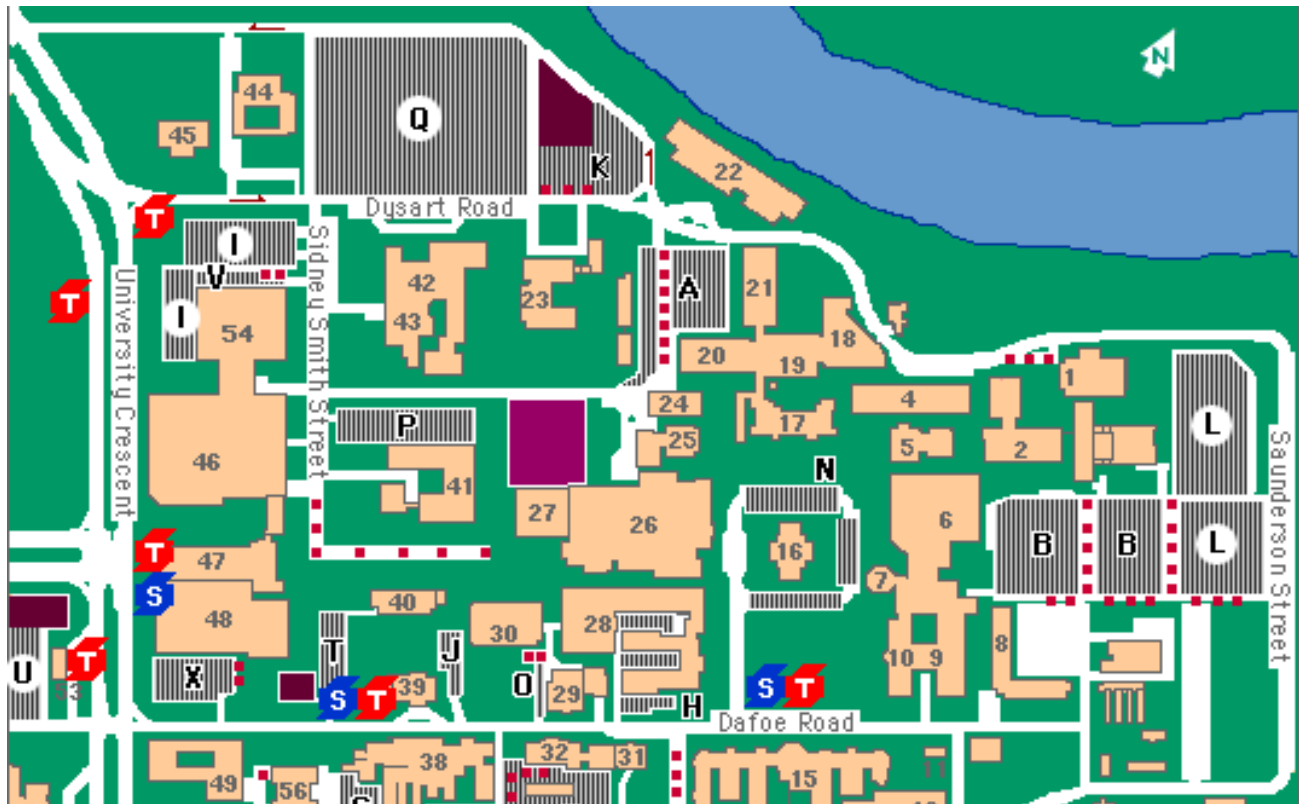
This month, MUUG member Shawn Wallbridge will cover the basics of Vulnerability Scanning using Nmap, Nessus, Whisker and Hping. With the proliferation of high-speed, always-on Internet connections, security is becoming more of a concern for the average home user.

Yes, More Games

What would a MUUGlines issue be without some comment on games for Linux? SimCity 3000 Unlimited for Linux is now in production. The first copies will roll off the assembly lines late next week for shipment to our on-line store and other distributors. SimCity 3000 by developer Maxis is the critically-acclaimed strategy game that gives players the power to build and control a city.

Gamers can recreate the world's greatest cities using landscapes such as San Francisco or Berlin and landmark building like the Empire State Building or Big Ben, or use the SimCity Building Architect Tool to create their own unique structures. Budding Big Brothers can zoom in on their growing metropolis as it comes to life with people and traffic in living colour and full 3D sound. For more challenges, players may unleash disasters, and can negotiate and barter with neighbouring cities.

There's even a demo available! Whet your appetite for this latest instalment in the classic series by playing the newly-released demo. Visit http://www.lokigames.com/products/sc3k/ demo.php3 for download information. SimCity 3000 Unlimited for Linux has an MSRP of $49.95. See http://www.lokigames.com/orders/ resellers.php3 for a list of resellers and distributors.

Loki has been at this for a while now, and their ports just keep improving. Check out their web site for many more games, such as Unreal Tournament and Descent3. Don't forget there are other companies producing games for Linux. Look for more information in next month's MUUGlines.

Real, Legal DVD

InterVideo, Inc. has taken the wraps off its Linux software DVD player. InterVideo is currently engaged with many top computer, Internet appliance, and set top box manufacturers that need the highest quality DVD playback for their devices. LinDVD is now available to manufacturers for evaluation and integration.

At the Linux World tradeshow in Taipei (Sep 7-9, 2000), InterVideo demonstrated fully functional platforms using LinDVD, demonstrating high quality video running at the full video frame rate with integrated CSS copy protection [*I'm not sure what this means, unless I get cynical -Ed.*].

The platforms demonstrated at the tradeshow were: An Internet appliance box based on the SiS630 chip set, a VA Linux 420 Station with the i810 chip set, and a Dell Inspiron 5000 notebook with ATI Rage Mobility graphics.

Support for the following video graphics vendors and devices was also announced: SiS 630, Intel i810, ATI Rage family, and Matrox G200 and G400.

InterVideo is actively engaged with the Linux community, Linux platform manufacturers, and DVD content providers to deliver a robust, high quality DVD software player solution, and is committed to providing outstanding multimedia software solutions for the Linux operating system. InterVideo is actively recruiting talented Linux gurus to develop sophisticated multimedia applications that will make Linux fun and accessible to everyone.

No mention was made of support for hardware DVD decompression using boards like Creative Labs' Dxr3 or Sigma Designs' Hollywood Plus. Keep your fingers crossed!

Big Disk O' GNU

Yggdrasil Computing has shipped the world's first Linux DVD9-ROM, a successor format to CD-ROMs, with over twelve times the capacity. Linux DVD Archives (MSRP $24.95) contains over eight billion bytes of open source software (over 23 billion bytes uncompressed), giving Linux users a new level of convenience and access to open source software.

Linux DVD Archives is the first DVD-ROM made from dvdtape, a program released under the

GNU General Public License by Yggdrasil. Because of the high level of technology risk inherent in building the first DVD-9, and building it from a new development system, we chose to begin with a very simple product. A user cannot install Linux from Linux DVD Archives, so it is only useful as an accessory for current Linux users. What the product does provide is the largest collection of software from the metalab.unc.edu and ftp.gnu.org archives ever assembled on a single mass produced medium.

DVD-9 is the state of the art in disc manufacturing, requiring equipment that can bond together layers with two different metals: the conventional aluminum used on CDs and single-layer DVDs, with a layer of gold, giving the discs their distinctive look: silvery on top and gold underneath. Although the manufacturing process may be more exotic than with smaller DVDs, Linux DVD Archives should be compatible with all DVD-ROM drives.

There have been other DVD-ROMs produced for Linux, but these have been "DVD-5" discs, which consist of a single aluminum layer like a conventional CD and have to 55% of the capacity available per side with DVD technology. Yggdrasil's DVD-9 product enables use of the full capacity. The bigger difference, in terms of which event will improve products available to end users, is that Yggdrasil has released its internally developed software for making DVDs under the GNU General Public License, eliminating an expensive proprietary barrier throughout the Linux industry for DVD production, an act which will likely presage more widespread development of DVD-ROMs.

SGI Open-sources Digital Media SDK

SGI, a leading provider of solutions for the digital media industry, announced that it will soon release the source code for its SGI(TM) digital media software development kit (dmSDK) for the Linux(R) operating environment. The dmSDK toolkit shortens the time required to create digital media applications across the SGI(TM) product line by allowing SGI software partners to write to a single application programming interface (API).

dmSDK provides developers with the first professional, comprehensive digital media API for Linux, making the toolkit a key enabler to allow people in the digital media industry to use this increasingly popular OS. Equally important, the cross-platform capability of dmSDK creates an easy bridge for current SGI developers wanting to leverage their IRIX(R) operating system software development to quickly bring Linux products to market.

"The dual-platform capability of dmSDK is a very positive step toward our ability to develop applications that are IRIX and Linux cross-platform capable," said Michael Hughes, vice president of Product Development, Discreet.

"Software companies are able to easily have similar applications running on IRIX and Linux because dmSDK provides a common interface," said Andy Hendrickson, director of Systems Development, Industrial Light & Magic. "That ability allows companies to more quickly and thoroughly take advantage of new features in hardware as they're introduced."

Releasing the source code for dmSDK, a third-generation product, is SGI's most recent demonstration of dedication to the open source community. SGI also recently released Open Inventor(TM), a widely adopted 3D graphics API, to the open source community, demonstrating SGI's commitment to providing hardware and software technologies that are relevant to graphics developers.

SGI's dmSDK is supported by the Khronos Special Interest Group (SIG) as the basis for the proposed OpenML(TM) standard. This standard is being developed to enable application developers to more easily integrate audio, video and graphics content across a wide range of platforms.

The dmSDK source code will be available for download from SGI's open source developer Web site at http://oss.sgi.com/projects in November 2000.

SGI Releases XFS, Too

SGI has announced that the first beta of XFS, a high-performance journalling file system, is now

available. XFS is the high-end file system used on SGI's IRIX workstations and servers.

XFS Features: Sub-second filesystem recovery after crashes or power failures (never wait for long fscks again); 64-bit scalability: millions of terabytes, millions of files, and a million files per directory (no more 2 GB limits); High reliability and performance from journalling and other advanced algorithms.

A complete Linux 2.4.0-test5 tree including the XFS filesystem is available for CVS checkout. The code is Beta quality and although the basic functionality is operational, it may hang or crash your machine. Note two distinct trees are available: linux-2.4-xfs: fast moving development tree; linux-2.4-xfs-beta: stable bug-fix-only tree.

This release has been awaited for some time. The first announcement that SGI was going to do this came in May, 1999. IBM is also working on a Linux version of its journalling file system. ReiserFS, developed from scratch in the open-source fashion, has been available for some time, although it hasn't made it into most Linux distributions yet.

More To Read

As if there weren't enough news sites in your bookmarks: Open Source Development Network (OSDN.com), a division of VA Linux Systems, Inc. announced the launch of NewsForge(TM) (www.newsforge.com), an online, round-the-clock global newspaper covering news stories, announcements, reviews, opinion columns, press releases and meeting notices that relate to Open Source, Linux, BSD, commercial UNIX and Free Software.

"Communicating news and information quickly is essential for successful collaborative development in the Open Source community," said Derek Carroll, vice president of business development, OSDN. "NewsForge offers hyperlinks to Open Source-related news all over the Internet, as it breaks."

The NewsForge "NewsVac Links" section is updated 24 hours a day, seven days a week, by a corps of experienced editors who evaluate articles published by over 200 major online news provid-

ers, as well as stories and links submitted by NewsForge readers, whose contributions are eagerly accepted as a vital part of the NewsForge mix.

NewsForge also publishes exclusive, daily NewsForge Reports, filed by staff members and selected freelancers, that contain timely Open Source business and community information.

In addition, NewsForge carries a daily full-colour comic strip, Kevin & Kell, drawn by internationally-syndicated artist Bill Holbrook.

OSDN is the leading Linux and Open Source destination on the Internet. OSDN is a network and community outreach organization committed to accelerating Open Source software development, which also serves as a gateway for individuals and organizations worldwide to understand and join this revolution.

Sending Us E-Mail?

Due to the increase in the amount of e-mail MUUG receives, we've set up an auto-reply filter to give immediate feedback, and hopefully 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.

In order to make our job easier, and save yourself unwanted delays, 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.And while I'm at it, send me 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, and when we publish it, you will get the credit! Wouldn't you like to see your name in print? Your mother will be proud! Okay, I'm getting a bit silly, but don't forget, the more you contribute to our group, the more you and the other members will get out of it! And have a Happy Hallowe'en!