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MUUGlines

The Manitoba UNIX User Group Newsletter

May 9, 2000: Network Security at Home

Michael Doob, of the University of Manitoba's Math department, will be joining us again, to talk about home networks. First, this talk will address the following questions: what information about Internet security is already on my computer and how can I get more if necessary? Then we'll then look at some precautions and software available to check who's doing what. Finally we'll see how to set up and configure a firewall.

New Location: The meeting will be at the ISM offices, at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you may have to sign in at the reception desk, and then wait for someone to take you (in groups) to the meeting room.

Limited parking is available for free on the street, or in a lot across Ellice from ISM, for $1.00 for the evening. Indoor parking is also available nearby, at Portage Place, for $2.00 for the evening.

You want PySol

Admit it; you don't waste nearly as much time as you should, and you long to play solitaire using Linux.

PySol is an exciting collection of 173 solitaire card games. Among the supported games are classics like Aces Up, Baker's Game, Canfield, FreeCell, Forty Thieves, Golf, Klondike, Monte Carlo, Osmosis, Pyramid, Scorpion, Spider, Yukon, and many more... PySol may be freely distributed under the terms of the GNU GPL, and aims to be Commercial Quality Freeware.

Why yet another solitaire game? Here are some highlights of PySol:

- freely available
- distributed under the GNU GPL with full source code
- currently supports 173 (!) distinct solitaire variants
- based upon an extensible solitaire engine
- very nice look and feel including multiple cardsets and background table tiles
- sound samples and background music
- unlimited undo & redo
- load & save games
- player statistics and log files
- hint system and demo games
- support for user written plug-ins
- add your own solitaire variants
- integrated HTML help browser
- lots of documentation
- fully portable across Unix/X11, Windows 95/98/2000/NT and MacOS
- written in 100% pure Python

Just run it - no need to compile anything. Where can you get it? Point your browser to http://pysol.tsx.org. The PySol Gallery is awaiting your visit as well.

What do you need to start playing? PySol requires Python 1.5.2 and Tcl/Tk 8.0.5. Both packages are freely available for Unix, Windows 95/98/NT and Macintosh. There is no need to compile anything since the whole program is just a Python script. Just run it, and that's all. The Windows version ships as a completely self-contained setup file.

Delphi for Linux

With a new name and a new focus on CORBA, database drivers, and Microsoft Back Office applications, Inprise/Borland Delphi is staging a comeback with a growing user base of programmers who use Delphi for rapid development of enterprise computing applications. And that base is expected to mushroom with the release of a new version designed for Linux.

"Delphi for Windows is the best development environment for writing Windows Applications and libraries," says Ray Lischner, author of the just-released book "Delphi in a Nutshell" (O'Reilly, $24.95). "Later this year, Borland will release Delphi for Linux (code-named Kylix), and it is reasonable to expect that Delphi will become the premier development tool for Linux. Borland is moving into the Linux market in a big way, and their Delphi and C++ Builder products will be their most important steps. There are two major uses for Kylix: servers and desktop applications. I expect to see a wealth of new desktop applications, written in Kylix, making Linux easier than ever for everyday use."

"Ray Lischner's 'Delphi in a Nutshell' is a clear and concise reference to Delphi that should be a part of every Delphi developer's bookshelf," said Ben Riga, Director of Product Management at Inprise/Borland. "With the excitement and interest surrounding the forthcoming Kylix project, this book also becomes a primer for Delphi on Linux.

"Developers interested in RAD Linux development would be doing themselves a favour by learning Delphi for Windows today with Lischner's new book. 'Delphi in a Nutshell' is also significant because it brings O'Reilly's reputation as the leading publisher of books for Linux into the world of Delphi development and vice versa. Developers interested in either Windows or future Linux Delphi application development should keep this book close at hand."

Chapter 2, The Delphi Object Model, is available free on-line at: http://www.oreilly.com/catalog/delphi/chapter/ch02.html

For an article by Ray Lischner, describing Kylix, go to: http://www.oreilly.com/news/kylix_0400.html

For more information about the book, including Table of Contents, index, author bio, and samples, see: http://www.oreilly.com/catalog/delphi/

For more information about Delphi, see: http://www.borland.com/delphi/

IDC Says Linux Is Red Hot

According to the latest release of IDC's Worldwide Quarterly Server Tracker, Linux server shipments increased 166% to 72,422 units in Q499 from Q498, representing the fastest- growing operating environment in the server market.

"Even though Linux represents a small portion (approximately 6%) of the entry server market in unit shipments, it will become an important area of growth within the server market as more and more branded vendors come out with Linux server offerings and as end users select Linux servers not just because of price but because of reliability, availability, and performance as well," said Hoang Nguyen, senior research analyst for IDC's Worldwide Quarterly Server Tracker.

For the quarter, Compaq held tight to its number-one position worldwide with $84 million in factory revenue. IBM is in the second position with $33 million. Dell was third with $24 million, and Hewlett-Packard was close behind with $23 million. (In terms of unit shipments, Hewlett-Packard finished third slightly ahead of Dell.) Fujitsu Siemens rounded off the top five vendors with $13 million.

In a recent IDC survey of 200 Linux users (Linux Servers: What's the Hype, and What's the Reality? IDC #B21610), the majority of participants estimated that their Linux servers offered at least 4 9s in availability, which translates to less than one hour of unexpected downtime per year. The study also found that Linux servers are overwhelmingly deployed to support Web applications, such as Web hosting, proxy/caching services, and e-mail. "More than 40% of all spending on Linux servers is for Internet-related applications. Linux servers are now embedded in the Internet infrastructure and are strong competition for NT and Unix entry servers," said Michelle Bailey, research manager for IDC's Commercial Systems and Servers program.

Vote Linux With Dallas Semi

Dallas Semiconductor announced it supplied Internet components for a low-cost, secure electronic voting system.

iButtons(TM) — computer chips in stainless steel cans — provide registered, private ballots. The Tiny InterNet Interface (TINI(TM)) will relay real-time voting results over a live network. The system was operational April 8, when the North Carolina Federation of Young Republicans conducted a straw poll to highlight a three-way race among candidates seeking the Republican nomination in North Carolina's May 2 primaries.

The brainchild of the North Carolina Federation of Young Republicans, the TINI/iButton voting system was developed as a low-cost alternative to the time-consuming human effort and errors associated with paper ballots and hand counting. A small group of techno-volunteers spent less than one month and less than $55 per booth to install the miniature network interfaces in the voting booths.

Alvin Phillips, event organizer, said, "As Director of Information Services for Interim HealthCare for the Morris Group, Inc., I was familiar with how iButtons are used for physical asset tracking, and I realized we could adapt them for electronic voting."

An iButton is a computer chip housed in a stainless steel, button-shaped case that makes portable data extremely durable through everyday wear and tear. To initiate instant communication with the chip inside, the user simply presses a computer interface called a Blue Dot receptor with the iButton. In this election, the Blue Dot interfaces to the TINI miniature embedded computer that supports multitiered networking and runs Java. TINI's small size, low price and portability made networking feasible for an application beyond the reach of traditional networks.

Each registrant at the straw poll receives an iButton as a voting credential. The iButton's stainless steel, button-shaped case makes this portable data carrier extremely durable through everyday wear and tear. At the voting booth, the voter presses the iButton to the Blue Dot receptor that corresponds to their voting intentions — in this case, the Blue Dot located next to a picture of the candidate of choice.

The Blue Dot is connected to TINI, which time-stamps and relays the vote to a central server. The central server accepts the iButton registration number and checks for duplication; associates the candidate with the Blue Dot; checks the time-stamp on the ballot; then logs the vote. An on-line computer tabulates the votes in real-time for projection on a viewing screen. Further demonstrating the flexibility of the iButton/TINI technology, the "central server" in this election is nothing more than a laptop running Linux. This one computer provides all vote collection, calculation and results.

At the ballot box, iButtons enforce the rule of one person, one vote. Each of the 37 million iButtons currently in use worldwide has a guaranteed-unique number laser-engraved in the silicon. If a voter at the ballot box were to inadvertently or intentionally attempt to vote twice, the duplication of address would be detected and only the last vote would be accepted.

While the North Carolina straw poll will be conducted at a local polling site, iButton technology also provides the security needed for Internet voting. Dallas' most sophisticated iButton, the DS1957 Java-powered crypto iButton, integrates in one chip the functions necessary for secure Internet transmission: a microprocessor for generating the secure message digest used in digital signatures, a high-speed math accelerator to perform public key digital signatures and secure storage for the private keys used in public key cryptography.

"The Java-powered crypto iButton was designed for endpoint-to-endpoint authentication and security for sensitive Internet transactions like electronic funds transfer," said Bolan.

"The next edition of iButton voting will be conducted through a Web browser, so that we can give voters a more professional presentation and a way to accurately measure their opinions on multiple elections and referendums. Using the iButton's encryption engine, we can deliver the trust essential for wide deployment, even voting from a home PC."

TINI is scheduled for commercial release June 6, 2000. The 1.25-inch x 4.05-inch circuit board includes a processor, nonvolatile SRAM, real-time clock, Flash ROM and multi-tiered network interfaces of 10Base-T Ethernet, 1-Wire net, RS232 serial, parallel and control area net (CAN). TINI is an “instant-on” computer that runs Java for embedded Internet applications.

The TINI board, model 390 beta release, is available on-line at www.iButton.com for $50.00. The DS1990 iButton used in the North Carolina straw poll is also available on-line for $1.27 each in quantities of 1,000.

CorelDRAW 9 for Linux To Ship Early

Corel Corporation announced impressive developments on its Linux graphics initiatives. CorelDRAW 9 for Linux will be available in July, two months earlier than scheduled. In addition, Corel VENTURA Publisher 8.5 for Linux and Windows will be available by the end of this year and the free download of Corel PHOTO-PAINT 9 for Linux will be available in June.

CorelDRAW 9 Graphics Suite for Linux will be the first robust, mature and full-featured graphics suite for the Linux platform. It will give Linux users access to the same outstanding graphics tools currently only available on the Macintosh and Windows platforms.” We promised to bring our two flagship products to Linux by the end of this year and we’re delivering,” said Dr. Michael Cowpland, president and CEO of Corel Corporation.

“We are the leading applications vendor for Linux and now we’re broadening the scope of applications available for Linux on the desktop.” Corel VENTURA Publisher 8.5 will be available for Linux and Windows by the end of the year. This is the first update to this product since 1998. Major refinements in this release include strengthening PDF (Portable Document Format) and Web functionality. Increased focus on PDF and Web capabilities will provide Linux and Windows users with powerful multi-use publishing alternatives.”

This expedited date is a credit to the cooperation between our engineers and the open-source WINE community,” said Derek Burney, executive vice president of engineering and chief technology officer of Corel Corporation. “Our inventive and aggressive Linux and Windows initiatives have enabled us to develop simultaneous versions of CorelVENTURA Publisher 8.5 for Linux and Windows.” The first beta of CorelDRAW 9 for Linux was sent to beta sites April 7. This beta includes Corel PHOTO-PAINT 9 for Linux, which will be released as a stand-alone free download in June. Corel also released WordPerfectOffice 2000 for Linux in March.

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). The following contact addresses are available, for the stated purposes only:

<membership@muug.mb.ca> For inquiries related to membership
<info@muug.mb.ca> For info ABOUT THE GROUP ITSELF.
<board@muug.mb.ca> For contacting the MUUG board of directors
<editor@muug.mb.ca> For matters related to the newsletter
<program@muug.mb.ca> For matters related to the monthly meeting program
<vendor-contact@muug.mb.ca> For information and offers from vendors of hardware or software
<www@muug.mb.ca> For matters related to our web server
<ftp@muug.mb.ca> For matters related to our FTP server.

For a full description of each of these, see http://www.muug.mb.ca/pub/muuglines/pdf/muug0004.pdf.