

June 11, 2002: BSD Network Security and Virtual Private Networks

Continuing on from last month's presentation on OpenBSD, this month Shawn, Chris and Sean will be setting up an OpenBSD firewall. They will be talking about 'pf', the new firewall built into OpenBSD 3.0. Also discussed will be VPNs and setting up an IPSEC VPN using OpenBSD's 'isakmpd'.

Meetings are held at the IBM offices at 400 Ellice Ave. (between Edmonton and Kennedy). When you arrive, you will have to sign in at the reception desk, and then wait for someone to take you (in groups) to the meeting room. Please try to arrive by about 7:15 PM, so the meeting can start promptly at 7:30 PM. Don't be late, or you may not get in.

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

Mozilla/Netscape News

Dawn Endico (endico@mozilla.org) reports: "The MOZILLA_1_0_RELEASE branch has been cut and while there is some tiny chance that we will need to take further changes, it is highly probable that this is the source we will release as Mozilla 1.0. Binaries created from this tag will live here: http:// ftp.mozilla.org/pub/mozilla/nightly/latest-1.0/ Try them out. Note that these are just test builds. Mozilla 1.0 has not been released yet. If you look at the user agent or the about: page you'll see a browser that claims to be Mozilla 1.0, but don't be fooled."

In related news, Netscape 7.0 Preview Release 1 is also available. Netscape unveiled Netscape 7.0 Preview Release 1 on May 22, the first beta of its successor to Netscape 6. The preview is based on the recent Mozilla 1.0 RC2 build and features most of the enhancements that have been added to Mozilla since Netscape 6.2 was released, including tabbed browsing, print preview, the ability to save complete web pages, email return receipts, message labels and S/MIME support.

Netscape's proprietary components have also been improved. An enhanced Instant Messenger now supports file transfers, buddy icons and communication with ICQ users (though you cannot be signed on to both AIM and ICQ at the same time). Also new is Radio@Netscape, a streaming audio service powered by Spinner.

Netscape 7.0 Preview Release 1 is available from Netscape's web site (http:// channels.netscape.com/ns/browsers/7/ download.jsp) or FTP server (ftp://ftp.netscape.com/ pub/netscape7/).

Reciprocity

According to Jeff Waugh (jdub@perkypants.org), "The GNOME 2.0 Desktop Beta 5 release, "Reciprocity", is ready for your bug-busting and testing pleasure! It is available for immediate download here: http://ftp.gnome.org/pub/GNOME/pregnome2/releases/gnome-2.0-desktop-beta5/ The GNOME 2.0 Desktop is a greatly improved user environment for existing GNOME applications. Enhancements include anti-aliased text and first class internationalisation support, new accessibility features for disabled users, and many improvements throughout GNOME's highly regarded user interface."

PHBs And... Lisp?

Paul Graham gave a keynote lecture at the International ICAD User's Group conference in May 2002. He explained how a language developed in 1958 manages to be the most powerful available even today, what power is and when you need it, and why pointy-haired bosses (ideally, your competitors' pointy-haired bosses) deliberately ignore this issue.

The paper he presented was titled "Revenge of the Nerds", and he has an expanded version of it at

his web site (http://www.paulgraham.com/ icad.html). In it he explains "the pointy-haired boss miraculously combines two qualities that are common by themselves, but rarely seen together: (a) he knows nothing whatsoever about technology, and (b) he has very strong opinions about it.

Suppose, for example, you need to write a piece of software. The pointy-haired boss has no idea how this software has to work, and can't tell one programming language from another, and yet he knows what language you should write it in. Right: he thinks you should write it in Java."

Fans of Lisp will like this paper; others may take some exception to it. One of his last points: If you want to trick a pointy-haired boss into letting you write software in Lisp, you could try telling him it's XML.

Reuters Supports Adoption Of Linux

Reuters, the global information, news and technology group, is working with HP, Intel Corporation and Red Hat to make Reuters Market Data System (RMDS) available on Intel-based servers with Linux. The move supports financial institutions using Intel® Architecture (IA) to reduce the cost and improve the flexibility and performance of their market data platforms.

Reuters decision to run RMDS on Linux comes in response to a growing interest and deployment of the operating system within the financial services industry. Tom McDonald, Executive Director at Morgan Stanley said, "Linux on Intel is an important evolutionary platform for Morgan Stanley. Support for this platform from Reuters is important to our efforts and is strategic to Morgan Stanley."

The four companies will jointly participate in the porting, testing and optimization of RMDS on IA with Red Hat Linux. The service will run on Intel® Xeon processor and Intel® Itanium® processor family-based servers from HP. A version of RMDS on this platform is due to begin testing in the third quarter of this year.

Reuters Consulting, working with HP Services, will assist customers to ensure its migration to Linux on Intel-based servers delivers maximum benefit. Services will cover a range of areas including initial review and application audit, development of Linux application architecture and migration, through to ongoing support.

RMDS integrates the crucial real-time data and news that a financial institution uses to make its trading decisions and interact with the markets. The system delivers information to thousands of users and applications throughout the financial institution and across the Internet. RMDS combines the best elements of the most widely installed market data systems, Reuters Triarch and the TIB Market Data Distribution System, while enhancing them with components that improve cost of ownership, scalability, and business flexibility.

Virus Filtering With Exim

In his article on LinuxOrbit (www.linuxorbit.com) John Gowin takes a look at "using Exim's mail filtering properties to aid you in your quest for a virus free email system. To begin, we'll take a look at some of the basic configuration options for Exim located in the main configuration file /etc/exim.conf.

Then we'll show you how to configure Exim to filter attachments based on their file type. We'll also take a look at the email filter file provided for your use at the Exim Web site, and show you how to use it as a template for your network mail filter. We'll then demonstrate how to install the filter, and also show you where to look if it doesn't work properly. Finally, we'll look at keeping up with new email viruses and how to add their file extensions to your filter to keep your mail users safe."

See the full HOWTO at http://www.linuxorbit .com/modules.php?op=modload&name=Sections &file=index&req=viewarticle&artid=526.

AreYou A Linux Fanatic?

In the spirit of the old MTV show *Fanatic*, the Linux Journal will be hosting a contest to discover the most dedicated (rabid) Linux devotee (fanatic). If you can prove to them that you are the superlative Linux zealot, you will win complimentary passage on the Linux Lunacy 2002 Caribbean cruise and a chance to meet some of the most renowned people in the Linux and Open Source communities, including Linus Torvalds, Ted Ts'o, Guido van Rossum and our own Phil Hughes. Ports of call include Jamaica, the Cayman Islands and Holland-America's private Caribbean island, Half Moon Cay.

To enter, simply submit some kind of physical evidence of your Linux ardour to:

Linux Journal

Fanatic Contest

PO Box 55549

Seattle, WA 98155-0549

Submissions must be received by July 5, 2002. The grand prize winner and two runners-up will be announced in the September issue of *Linux Journal*. For more details, see http:// www.linuxjournal.com/fanatic [I love those short URLs!]

Free Software In Spain

In our continuing series of stories on governments with intelligence switching to free software, we have this note:

Hispalinux, the Spanish Internauts Association, and Esquerra Republicana de Catalunya have given a proposed law (http://www.hispalinux.es/ modules.php?op=modload&name=Sections&file=index &req=viewarticle&artid=53) to governmental representatives which would promote the use of free software in the Spanish administration.

For an English translation, visit http:// babel.altavista.com/ or find someone who can read Spanish. This gist of it is similar to that of the bill proposed in Peru, as mentioned in last month's newsletter.

Free Software In Germany

But wait, there's more:

According to the BBC (http://news.bbc.co.uk/ hi/english/business/newsid_2023000/ 2023127.stm): Germany has signed up IBM for a major public sector computer contract, dealing a blow to software giant Microsoft in the process.

IBM announced it will offer German Government offices deep discounts on computer systems based on Linux, rather than Microsoft's near-ubiquitous Windows operating system.

Germany's Interior Minister, Otto Schilly, said the move would help cut costs and improve security in the nation's computer networks. "We are raising computer security by avoiding a monoculture, and we are lowering dependence on a single supplier," he said in a statement. "And so we are a leader in creating more diversity in the computer field." Neither the government nor IBM would disclose the terms of the agreement. A spokesman for SuSE, the German company supplying the version of Linux involved in the deal, said the deal was directed at the interior ministry, which oversees law enforcement in Germany.

Your Own Mainframe

Have you been longing to experience the joy you had back in the day, working on IBM mainframes? Your wish has come true. Hercules (http://www.conmicro.cx/hercules/) is a software implementation of the System/370, ESA/390 and z/ Architecture hardware written for Linux (and ported to BSDs and Windows).

This means that your PC can emulate an IBM mainframe processor. The mainframe can range from a 360 to a z900 - running in "System/370" mode, "ESA/390" mode, or "z/Architecture" mode. Hercules executes S/370, ESA/390, and z/Architecture instructions and channel programs. It emulates mainframe I/O devices by using PC devices. For example, 3390 DASD devices are emulated by large files on your hard disk, and local 3270 screens are emulated by tn3270 sessions. (Note: Not all 370 and 390 features have been implemented in Hercules. Also, certain non-standard models, 360/20s, and the 360/67 virtual memory mode are not emulated.)

Hercules implements only the raw S/370, ESA/ 390, and z/Architecture instruction set; it does not provide any operating system facilities. This means that you need to provide an operating system or standalone program which Hercules can load from an emulated disk or tape device. You will have to write the operating system or standalone program yourself, unless you can manage to obtain a license from IBM to run one of their operating systems on your PC, or use IBM programs and operating systems which have been placed in the public domain.

Is it functional enough for production work? Not yet, though it's rapidly becoming good enough to run a wide range of software without problems. It will run on a lowly Pentium 200 with 32 MB RAM, though Hercules does not depend on the Pentium architecture. The author has built and run it successfully on a 500 MHz Alpha 21164, and others have run it on SPARC and S/390 (!) Linux systems. (One guy has even run OS/360 under Hercules under Linux/390 under Hercules under Linux/390 under VM/ESA!)

Getting a copy of a bootable IBM operating system legally will cost you, except if you use Linux for System/390 (Linux/390) or z/Linux. SuSE sells a bootable Linux CD that you can IPL from. OS/360 (PCP, MFT and MVT), is believed to be in the public domain. The status of OSes for which IBM did not charge a license fee is somewhat murky; these include MVS 3.8, VM/370 R. 6, and DOS/VS R. 34.

TakeThe Linux Pill

Price Hikes? Forced Upgrades? Audit Threats? Legal Hassles? We have the cure for your pain.

Cybersource, an Australian IT professional services firm now in its 12th year of operation, has been conducting informal discussions with many clients in recent months, which have led to the realisation that considerable numbers of their clients, and most likely other organisations worldwide, are suffering the increasing impacts of software licence compliance costs.

They have designed a poster that addresses these issues, and have declared that others can freely download and modify the poster to adapt it to their needs. See http://www.cyber.com.au/cyber/ about/cybersource_linux_pill.html for details.

Samba 2.2.4

The Samba Team has announced the release of Samba 2.2.4. This is the latest stable release of Samba, and is the version that all production Samba servers should be running for all current bug-fixes. There have been several fixes and internal enhancements which include:

- More/better SPOOLSS printing functionality for Windows NT/2k/XP clients.
- Several fixes relating to serving PC database files such as (Access and FoxPro) from a Samba file share.
- Several improves in Samba's VFS layer which can be seen in the inclusion of a "Recycle Bin" vfs module. See examples/VFS/ README for more details on this.
- Addition of a tool (tdbbackup) for backup/ restore of Samba's tdb's
- Continued improvements to winbind for greater scalability and stability
- · Several fixes related to Samba's MS-DFS

support

• Rpcclient's various printer commands now work (again)

Binary packages will be released shortly for major platforms. The source code can be downloaded from ftp://ftp.samba.org/pub/samba/.

Join Our (E-)Mailing Lists

Nearly every MUUG meeting includes a "round table", an open question-and-answer period in which every attendee can ask about something they would like help with or information about. In addition, there is a corresponding MUUG-managed mailing list where more questions can be asked and follow-ups posted. It seems that not everyone has been made aware of the existence of the latter.

Some of you have already signed up at http:// www.muug.mb.ca/mailman/listinfo/roundtable. The more people there are on the list, the more valuable it becomes. Even if you don't currently have questions or answers, sign up today and join in when you see an opening!

While you're there, sign up at an additional cost of nothing to the MUUG-Announce list, which is used to notify list-members of upcoming meetings, other events and last-minute changes. Traffic on this list is low, so don't worry about your Inbox filling up on account of this one!

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. Why not look at http://www.muug.mb.ca/ about.html#contacts first?

We Like To Hear From You

So e-mail us with your comments on the newsletter, whether it's criticisms or commendations, and continue to send in some ideas for articles. We will happily accept complete articles, too. If you have a How-To or other idea, and aren't ready to give a presentation at MUUG, an article is a great alternative! If you can write better than the editor, that's terrific; if you can't, submit it anyway and we'll get it into shape for publication. We know that many of you have some great ideas and lots of knowledge. Why not share? Mailto: editor@muug.mb.ca.