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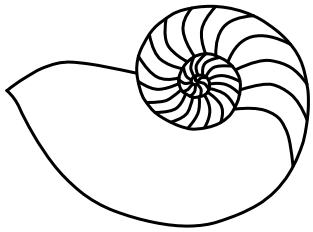

MUUGlines

The Manitoba UNIX User Group Newsletter

Novell Speaks: November 11

Novell In The UNIX Market

Speaker Michael Subasic is the Senior Technology Architect for Novell Canada. He will take us through what Novell is doing in the Unix market. Topics included will cover the adoption rate of Unix/Linux and how Novell is supporting open source. Recent press on the SCO lawsuit and Novell's acquisition of Ximian will also be covered.

Where To Find The Meeting

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.

Novell Acquires SUSE

To whet your appetite for the upcoming meeting, here's the announcement of Novell's latest acquisition (as of this writing).

Novell Announces Agreement to Acquire Leading Enterprise Linux Technology Company SUSE LINUX

- Novell expands its open source commitment and will become the first to offer comprehensive Linux solutions for the enterprise from the desktop to the server - Novell will be the only $1 billion software company with a Linux distribution and the worldwide technical staff to support it
- Novell/SUSE LINUX to become the world's largest supplier of desktop-to-server Linux solutions and technical support
- Customers to gain worldwide technical support for enterprise Linux solutions from a company with more than 20 years of operating system experience
- IBM and Novell to negotiate extensions to commercial agreement with Novell/SUSE LINUX to support the IBM eServer line

PROVO, Utah — Nov. 4, 2003 — Novell announced it has entered into an agreement to acquire SUSE LINUX, one of the world's leading enterprise Linux companies, expanding Novell's ability to provide enterprise-class services and support on the Linux platform. With the open source expertise of SUSE LINUX and Novell's world-class networking and identity solutions and support, training and consulting services, Novell will be able to deliver Linux and all its components — from the server to the desktop — and give organizations a secure, reliable and mature Linux foundation. Novell will pay $210 million in cash to complete the acquisition. The transaction is subject to regulatory approval and the winding up of shareholder agreements. Novell expects the transaction to close by the end of its first fiscal quarter (January 2004).

This latest move follows Novell's August purchase of Ximian, a leader in Linux server and desktop solutions, and further demonstrates Novell's ongoing commitment to provide customers a full range of Linux solutions. Both the Ximian and SUSE LINUX acquisitions affirm Novell's commitment to promoting the open source model and developer community.

Novell today also announced that IBM intends to make a $50 million investment in Novell convertible preferred stock. In addition, Novell and IBM are negotiating extensions to the current commercial agreements between IBM and SUSE LINUX for the continued support of SUSE LINUX on IBM's eServer products and middleware products to provide for product and marketing support arrangements related to SUSE LINUX. Both of these agreements will be effective when the acquisition of SUSE LINUX by Novell is completed.

"Responding to customer demands for open, standards-based computing, Novell has been dedicated to a cross-platform vision for four years now, and Linux is an increasingly important part of that strategy," said Jack Messman, chairman and CEO of Novell. "The

acquisition of SUSE LINUX will complete Novell's ability to offer enterprise-class Linux solutions to our customers from the desktop to the server. No other enterprise Linux vendor has the operating system experience and the worldwide technical support capabilities that Novell will be able to deliver. Novell is bringing our significant resources to bear to help customers adopt Linux with more confidence, giving them the freedom of choice Linux provides without the anxiety over whether an open source solution can truly be relied on for mission-critical functions."

"Novell understands the power of open, standards-based computing, and has been moving in that direction for some time," said Richard Seibt, CEO of SUSE LINUX. "Novell's global reach, marketing expertise and reputation for security, reliability and global enterprise-level support are exactly what we've been seeking to take SUSE LINUX to the next level. We've also been impressed by the incredible loyalty and competence of Novell customers and business partners, and we're looking forward to joining forces to help customers gain the benefits of Linux and to help Novell continue to expand its role in the open source community."

SUSE LINUX Offerings Complement Novell Linux Services

SUSE LINUX offers a range of Linux server and desktop solutions designed to meet the diversified needs of different organizations. SUSE LINUX Enterprise Server 8 for midsize to large companies provides a range of core networking services with the high-availability and scalability features needed for mission-critical environments. SUSE LINUX is the leading enterprise Linux company in Europe. In addition, through its relationships with Conectiva and Turbolinux, SUSE LINUX has been a leader in Latin America and Asia, as well. SUSE LINUX is also one of the top providers of Linux to enterprises in the United States and North America. Novell's extensive global sales and channel programs, proven and reliable technical support capabilities, as well as ongoing Novell and SUSE LINUX relationships with key partners like IBM, Oracle, SGI, Fujitsu-Siemens, Dell, Intel, AMD, SAP, HP and others, provide a powerful business network to promote more rapid Linux adoption around the globe.

Novell's Linux Strategy

The acquisition of SUSE LINUX will be an important step in Novell's efforts to accelerate enterprise adoption of Linux. Novell began building solutions for Linux in early 2000, when it made its flagship eDirectory™ technology available on Linux. In April of this year, Novell announced it would make all the services that run on its NetWare® operating system run on both the NetWare and Linux kernels in the future with the full range of Novell's worldwide technical support. In August, Novell acquired Ximian with its leading Linux desktop management solutions and its visionary leadership to promote Linux desktops and to enable Microsoft .NET applications to run on Linux.

In September, Novell announced the open beta of Novell® Nterprise™ Linux Services (NLS), an offering that runs on SUSE LINUX and Red Hat and provides a variety of networking services for Linux environments. IBM, HP and Dell have all licensed the NLS technology for resale to their customers. With SUSE LINUX, Novell expands its reach to developers and ISVs looking for a complete Linux solution. Today's announcement of Novell's plans to acquire SUSE LINUX strengthens Novell's already proven set of Linux offerings by allowing Novell to distribute the underlying Linux platform itself, in addition to the many value-added services for Linux that Novell already offers.

"We chose SUSE LINUX because they are a clear market leader in Linux technology for the enterprise," Messman said. "With this acquisition, Novell will be the only billion-dollar software company with a Linux distribution and a worldwide ecosystem around it. A worldwide technical staff of more than 600 has been trained to support Linux. The acquisition of SUSE LINUX completes our technology stack from the desktop to the server."

Beyond the technology, the acquisition will also expand Novell's strategic commitment to the open source community. The combination of SUSE LINUX and Novell will deliver not only complete enterprise Linux software solutions, but also worldwide channels and industry-leading partnerships. The combined company will help promote a thriving, global open source ecosystem that creates innovation and choice for developers, users and organizations alike. **Novell is firmly committed to open standards and maintaining the existing open source kernel development efforts.** From advocacy and development resources to events and support of open source efforts like kernel projects, XFree86, ReiserFS, KDE, GNOME and Mono, Novell stands side-by-side with the open source community.

For SCO News

If you're following the SCO vs. Everybody sane news, you should also be regularly reading Groklaw (www.groklaw.net). Groklaw is a site maintained by Pamela Jones, a paralegal. A paralegal is one who does legal research for lawyers, but is not a lawyer. P.J., as she is known, provides detailed legal analysis on the SCO case. Her writing is very informative and quite entertaining. A recent sample of her style:

"It looks like the judge is putting SCO on notice that they have a real deadline now, and should they fail to meet the November deadline without a mighty good excuse, the Motion is already set for oral arguments. She could instead have said that she wanted both sides to report back to her in November and then she'd see what to do. Instead, she set a firm date for oral arguments, so it's a kind of a warning that they've delayed as long as they can get away with. Oral arguments on a Motion to Compel — well, that is, to say the least, what you want to avoid, if you are SCO."

Red Hot OpenBSD 3.4

Hot off the CD presses is OpenBSD 3.4. Just some of the great enhancements and new features are:

• The i386 architecture has been switched to the ELF executable format.

• Further W^X improvements, including support for the i386 architecture. Native i386 binaries have their executable segments rearranged to support isolating code from data, and the CPU CS limit is used to impose a best effort limit on code execution.

• ld.so(1) on ELF platforms now loads libraries in a random order for greater resistance to attacks. The i386 architecture also maps libraries into somewhat randomized addresses. Together with W^X and ProPolice, these changes increase the difficulty of successfully exploiting an application error, such as a buffer overflow.

• A static bounds checker has been added to the compiler to perform basic checks on functions which accept buffers and sizes. The checker aims to find common mistakes in the use of library functions such as strlcpy(3) or sscanf(3) without emitting any false positives. Running it over the source and ports trees revealed over a hundred real bugs, which were fixed and submitted back to the original authors where possible.

• Privilege separation has been implemented for the syslogd(8) daemon, making it much more robust against future errors. The child which listens to network traffic now runs as a normal user and chroots itself, while the parent process tracks the state of the child and performs privileged operations on its behalf.

• Many unsafe string functions have been removed from the kernel and userland utilities. This audit is one of the most comprehensive OpenBSD has ever done, with thousands of occurrences of strcpy(3), strcat(3), sprintf(3), and vsprintf(3) being replaced with safer, bounded alternatives such as strlcpy(3), strlcat(3), snprintf(3), vsnprintf(3), and asprintf(3).

• Many improvements to and bugs fixed in the ProPolice stack protector. Several other code generation bugs for RISC architectures fixed.

• ProPolice stack protection has been enabled in the kernel as well.

• Privilege separation has been implemented in the X server. The privileged child process is responsible for the operations that can't be done after the main process has switched to a non-privileged user. This greatly reduces the potential damage that could be caused by malicious X clients, in case of bugs in the X server.

• Emulation support for binary compatibility is now controlled via sysctl(8). Emulation is now disabled by default to limit exposure to malicious binaries, and can be enabled in sysctl.conf(5).

• Manual pages have been greatly cleaned up and improved.

• The ports tree now supports building programs under systrace(1), preventing the possibility of applications harming the system at compile-time via trojaned configuration scripts or otherwise.

• Symbol caching in ld.so(1) reduces the startup time of large applications.

• Replacement of GNU diff(1), diff3(1), grep(1), egrep(1), fgrep(1), zgrep(1), zegrep(1), zfgrep(1), gzip(1), zcat(1), gunzip(1), gzcat(1), zcmp(1), zmore(1), zdiff(1), zforce(1), gzexe(1), and znew(1) commands with BSD licensed equivalents.

• Addition of read-only support for NTFS file systems.

• Import of growfs(8) utility, allowing expansion of existing file systems.

• Improvements to Linux emulation enabling more applications to run.

• Significant improvements to the pthreads(3) library.

• ANSIfication and stricter prototypes for a large portion of the source tree.

• Over 2400 ports, 2200 pre-built packages.

• A large number of bug fixes, changes, and optimizations to our packet filter pf(4) including:

• packet tagging (e.g. filter on tags added by bridge based on MAC address)

• stateful TCP normalization (prevent uptime calculation and NAT detection)

• passive OS detection (filter or redirect connections based on source OS)

• SYN proxy (protect servers against SYN flood attacks)

• adaptive state timeouts (prevent state table overflows under attack)

Improved hardware support, including:

• Kauai ATA controllers (Apple ATA100 wdc) kauaiata(4) enabling support for Powerbook 12" and 17" models.

• Support for controlling LongRun registers on Transmeta CPUs.

• Many fixes to aac(4), ahc(4), osiop(4), and siop(4) SCSI drivers.

• New it(4), lm(4), and viaenv(4) hardware monitor drivers.

• New safe(4) driver for SafeNet crypto accelerators.

• More ethernet cards supported by sk(4), wi(4), fxp(4), and dc(4).

• Massive overhaul and sync with NetBSD of the entire usb(4) support system.

• New and better support for various controllers in pciide(4), including experimental support for Serial ATA.

• New drivers to support mgx(4) and pninek(4) SPARC framebuffers. The vigra(4) driver also supports more models.

• pcmcia(4) support for Tadpole SPARCBooks and SPARCs with pcmcia-sbus bridges.

• Watchdog support for elansc(4) and geodesc(4) as used on Soekris boards.

The system includes the following major components from outside suppliers:

• XFree86 4.3.0 (+ patches, and i386 contains 3.3.X servers also, thus providing support for all chipsets)

• Gcc 2.95.3 (+ patches)

• Perl 5.8.0 (+ patches)

• Apache 1.3.28, mod_ssl 2.8.15, DSO support (+ patches)

• OpenSSL 0.9.7b (+ patches)

• Groff 1.15

• Sendmail 8.12.9 (+ parse8.359.2.8 security patch)

• Bind 9.2.2 (+ patches)

• Lynx 2.8.4rel.1 with HTTPS and IPv6 support (+ patches)

• Sudo 1.6.7p5

• Latest KAME IPv6

• OpenSSH 3.7.1 (now with GSSAPI support)

Latest Netcraft Results

In the **November 2003** survey, Netcraft received responses from **44,946,965** sites.

Apache has a significant percentage gain this month as register.com, a leading domain registrar with a domain parking system serving responses for over one million domains eliminated its Windows front end, and reverted to Linux and Apache which it ran previously. Barely weeks ago its largest rival, Network Solutions made a similar switch from Microsoft-IIS back to SunOne, nee Netscape-Enterprise, for its own domain parking system.

During 2001 and the first half of 2002 several companies hosting very large numbers of hostnames including Webjump, Namezero, Homestead, register.com and Network Solutions migrated to Microsoft-IIS. Subsequently these businesses have either failed, significantly changed their business model, or reverted to their previous platform, and Microsoft-IIS share is now in line with its long term pre-summer 2001 level of around 20%.

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?

Share Your Thoughts

E-mail us with your comments on the newsletter, whether it's criticisms or commendations, and continue to send in articles or ideas for same. **Specifically**, what sort of material would you rather see: Announcements, technical articles, new products, or...?

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.

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