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MUUGlines

The Manitoba UNIX User Group Newsletter

March 12, 2002: GNU Privacy Guard (GPG)

GnuPG allows multiple parties to communicate over e-mail in a secure manner. Using strong cryptography, not only can it protect documents from being read by other parties, but it can verify the integrity and sender.

This talk will cover the problems associated with ensuring the security of e-mail, and the use of GnuPG to solve them. Sean Walberg will be presenting this month's topic.

Upcoming Meetings

April 9, 2002: LTSP - Linux Terminal Server Project

The Linux Terminal Server Project (LTSP) is a set of packages that allows you to turn older Intel-based hardware into thin-client X Window stations, with support for local devices. LTSP supports most Unix or Linux based servers, and hardware for the terminals ranging from 486-level boxes with 8 megabytes of RAM on up. Scott Balneaves, who's been working with the LTSP for a while, will describe and demonstrate an LTSP setup in action.

May 14, 2002: BSD Installation (details TBA)

June 11, 2002: BSD Network Security and VPN (details TBA)

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.

OS-Free PCs – At Wal-Mart

We recently noticed that Wal-Mart is selling Microtel PCs on-line, without an operating system. The lowest-priced model is $399 (we assume U.S. dollars), and it includes the following: 1 GHz Duron, 128 MB RAM, 40 GB hard drive, integrated video (up to 8 MB of shared main memory) and audio, PCI modem, CD-ROM, and the usual assortment of ports, including 2 USB. There are 2 PCI and 1 ISA slot available in this configuration.

The debate surrounds who is going to buy it. According to The Register (www.theregister.co.uk): "The idea of the Windows-free promo is to attract tech-savvy custom at a time when consumer PC sales are flatter than a flat pancake. The idea is that buyers can install their own operating system - maybe open source, maybe a license from an dead PC ..."

Two common opinions are either customers will be surprised when they find out just what "no operating system" when they get it home, or they'll just install a pirated version. The former group will be fairly unhappy when they go to purchase Windows XP Home at retail prices. As for the "Open Source-savvy" individuals, most of them would be comfortable with putting together their own system from parts anyway.

The Price Of Star/Open Office

A number of articles, some panicky, have written about the impending "closing" of Star Office, Sun's free alternative to Microsoft Office. Cries have been heard about Sun imminently making Star Office a "proprietary" product.

The fact is Star Office, currently at version 5.2, has never been really Open Source. The confusion stems from the difference between Open Office and Star Office. Star Office is a product that Sun has been giving away for free, but without complete (or any) source, since it contains a few parts which are licensed by Sun from other companies and which it does not have permission to redistribute the source for.

Open Office is an Open Source project managed by Sun which is almost identical to Star Office, but without the aforementioned licensed bits. See http://www.openoffice.org/FAQs/mostfaqs.html#7 for details. Open Office will continue to be free and Open Source, and some people will have to pay a reasonable amount for Star Office 6.0 when it comes out in May.

2000 Linux Instances

Not long ago, we reported that an IBM employee had managed to start up over 40,000 instances of Linux concurrently on an IBM mainframe (without using the full resources of the machine).

SWsoft, Inc., an advanced server and networking software company, recently announced testing results for Virtuozzo 2.1, which set a new standard in enterprise-class Linux performance by supporting over 2000 instances of Linux on a low-cost Dell 8450 PowerEdge server.

As companies like Sun scramble to virtualize their proprietary operating systems with their the N1 strategy and IBM offers scaled-down mainframe functionality on the mid-sized z800 Raptor, SWsoft offers highly scalable virtualization technology for Linux that will both provide Web-hosting companies unparalleled efficiency and scalability and enable enterprises to consolidate servers in the data centre and better manage the rapid proliferation of unconnected, underutilized servers.

Virtuozzo technology brings mainframe-inspired Linux functionality, including high scalability, QoS guarantees and increased security, within the reach of tens of thousands of SMBs, enterprises and hosting providers.

Virtuozzo 2.1, available now for beta download, will officially be launched in Q2 ‘02. New features include VZMC — a full GUI management tool, support for up to 64GB physical memory, name-based hosting, security enhancements, improved Service Level Management features such as advanced bandwidth management, improved bandwidth accounting and smart migration of VEs. Virtuozzo 2.1 features a new web accelerator which utilizes the latest Linux kernel features (like zero-copy sendfile() and TCP_CORK options. These new features improve the high-end performance of Web servers and are increasingly being used by enterprises to consolidate servers in the data centre and save valuable time and man-hours.

Tim Smith, systems administrator for hosting service provider Usonyx (www.usonyx.com), agrees. “Virtuozzo allowed us to offer highly flexible dedicated hosting functionality for our demanding small business customers for as low as $20 a month. The performance and scalability have surpassed my expectations. I anticipate (Virtuozzo) 2.1 will further reduce our system administration and hardware costs, which is critical in this tenuous economy.”

Virtuozzo is used by enterprise customers for server consolidation and by service providers to both better manage resources and customers across a network and to affordably offer a wide range of service plans and value-added services. The technology is also used by a wide range of businesses for storage virtualization, demos/trials and in testing environments.

Performance testing was conducted by the SWsoft development team, which includes Alexey Kusnetsov, who maintains the networking code of the Linux kernel. Virtuozzo achieved these staggering results using the Dell 8450 PowerEdge™ servers running RedHat Linux 7.2.

Virtuozzo is available now for purchase beginning at $250 (without installation.) A complete solution of Dell 8450 hardware, software, OS, and implementation that allows scaling to 2,000 Linux instances starts at only $25,000. For more information on the Virtuozzo™ technology, please see www.virtuozzo.com or www.sw-soft.com or contact sales@sw-soft.com.

Opera 6.0 for Linux: Beta 1

Opera Software ASA has just announced Opera 6.0 for Linux Beta 1 with a wide range of speed-boosting functions and exclusive features only available to Linux users. The earlier version of the Opera for Linux browser, Opera 5 for Linux, has already been downloaded and installed a record one million times.

In addition to greater speed and ease of use, Opera for the first time displays non-Roman alphabets for Linux users, opening up the local markets in the Asia/Pacific and Eastern European region to true browser competition.

Opera 6.01 for Linux Beta 1 is available immediately from www.opera.com. Some new features:

Contact List Keep information about your friend and colleagues in the new contact list. Visit their Web pages and with the use of an external mail client, send an e-mail to your contacts.

Cookie Management Manage your cookies with the new cookie editor. [exclusive]

Mouse Gestures Perform almost any operation with mouse gestures such as the ones found in Opera 6.0 for Windows, as well as some Linux-specific mouse gestures like the middle-click on windowbar to open clipboard URL in new window. [some exclusive]

Import You can import bookmarks, contact lists, window setup files and pages. [partly exclusive]

Bookmark import Kde1/Kde2 paths and Kde2 XML Netscape/Mozilla Path [partly exclusive]

Bookmark management Easily move bookmarks around. Drag bookmarks to folders and the Personal Bar. When dragging bookmarks to the Opera workspace, a window or the windowbar Opera will go to the bookmark URL.

Quick Preferences Quick access to some of the most frequently changed preferences.

E-mail links Advanced mailto links often include subject and body. With Opera's new and more advanced invoking of an external e-mail client such links now work perfectly. [exclusive]

Plug-in support Improved Opera plug-in support. Most Netscape plug-ins are supported such as Macromedia Flash, Acrobat Reader, Real Player, Java, Plugger, TCL 2.0, Codeweaver Crossover (Apple Quicktime).

New look Opera has a new default button set, skin and panels. Change to classic Opera look or set your own under Preferences > Browser layout. Find more buttons, skins and panels at my.opera.com.

Hotclick Double-click a word or right-click a selected phrase and display a pop-up menu full of powerful features such as search, encyclopedia look-up, and translation.

Bookmarks Search bookmarks or sort them by title, date created, when visited or customize your own ordering.

Unicode For the first time, Opera supports the Unicode Worldwide Character Set, making Opera available in local languages for the Asian/Pacific and Eastern European regions when users have the correct fonts installed.

Ditch NT 4.0: Sun

Sun Microsystems, Inc. announced an aggressive upgrade program to enable current Microsoft Windows NT Server 4.0 customers to easily trade up to Sun Cobalt RaQ™ server appliances or Sun Cobalt Qube™ appliances. The Sun program, which follows Microsoft's recently announced end-of-life plans for Windows NT Server 4.0, enables users of the Microsoft operating system to migrate to select Sun Cobalt™ server appliances at reduced rates, thereby ensuring uninterrupted operation of their IT infrastructures while increasing the reliability and security of their computing environments.

Hundreds of Sun Cobalt units can be managed from a single Control Station management console, giving system administrators the ability to manage multiple Web-serving systems easily and effectively.

To ease the transition from Windows NT Server 4.0, Sun Cobalt server appliances provide a unique integration of secure, Linux-based application and system functions in a unified, easy-to-use, browser-based interface that shields the administrator from technical complexities and minimizes the need for trained staff. This software layer also enables installation in minutes, thereby minimizing downtime and increasing productivity. Because all system components are tightly integrated, Sun Cobalt server appliances are highly reliable, with uptime measured in months and years rather than days or weeks. Support for RAID 1 software increases data and site availability, thereby reinforcing the reliability of Sun Cobalt server appliances.

Sun Cobalt server appliances also include 128-bit SSL for secure remote administration and provide secure authentication through a global leader in the digital certificate marketplace. In addition, built-in web access control in Sun Cobalt server appliances not only safeguards users from objectionable Internet material but also reduces disruptions to online productivity. Customers also can leverage the firewall technology included with the Sun Cobalt Qube appliance to prevent unauthorized access to company systems and data.

Sun Cobalt server appliances come pre-loaded and pre-configured with a comprehensive assortment of Internet service software, including e-mail, FTP, web publishing, file-sharing, and more. Additionally, Sun Cobalt server appliances allow customers to continue using their existing tools, such as Windows clients and Web Development Tools. Sun Cobalt server appliances also include built-in software tools and monitoring agents that minimize the need for ongoing system management and support efforts. The elimination of licensing fees for LAN users further decreases the cost of using Sun Cobalt server appliances.

The NT Upgrade Campaign ends June 30, 2002. Qualified customers will be offered select Sun Cobalt RaQ server appliances and Sun Cobalt Qube appliances at discounts up to 20 percent. Additional program details are available at www.cobalt.com/upgrade. Sun Cobalt Qube 3 server appliances will start at $1,349 and Sun Cobalt RaQ server appliances will start at $1,399, providing a complete turnkey server solution-including the operating system-for less than $1,400.

FreeBSD 4.5 Released

The FreeBSD developers have announced the availability of FreeBSD 4.5-RELEASE, the very latest release on the FreeBSD-STABLE branch of development. Since FreeBSD 4.4 was released in September 2001, they have made hundreds of fixes, updated many system components, made several substantial performance improvements, and addressed a wide variety of security issues.

In particular, there have been significant enhancements in the areas of network communications and filesystems. FreeBSD 4.5 contains improvements to the TCP stack to provide better throughput. In addition, TCP performance is aided by larger default buffer sizes. Finally, FreeBSD 4.5 contains new mechanisms to mitigate the effects of TCP Denial of Service attacks.

The FFS filesystem benefits from a new directory layout strategy that has demonstrated significantly better performance for operations traversing large directory structures. Various bugs were located and fixed in the FFS and NFS code with the help of a filesystem exercising program originally developed at Apple Computer, Inc.

Those users doing fresh installations of FreeBSD should note some changes for newly created filesystems, intended to improve the "out of the box" performance of FreeBSD. In particular, sysinstall(8) now enables Soft Updates (a strategy for improving both performance and reliability of on-disk data structures) for new filesystems it creates and the newfs(8) program will now, by default, create filesystems with larger block sizes.

For more information about the most significant changes with this release of FreeBSD, please see the release section of their web site: http://www.FreeBSD.org/releases/

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! Submit personal anecdotes, stories of your use of Unix, Linux, BSD or related operating systems to editor@muug.mb.ca.