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MUUGlines

The Manitoba Unix User Group Newsletter

November 9, 1999: Wireless and beyond!

Bill Reid of the University of Manitoba will be demonstrating a wireless LAN, and giving an overview of where networking is going in the short to medium term. Included will be cable, ADSL, wireless, optical networking, Voice Over IP, and more!

As always, we're open to suggestions for meeting programmes, not to mention presenters! Feel free to convince someone you know to give a talk at on of our meetings, and be sure to mention that it's very informal. We're not expecting professional public speakers here. Contact any of the board at board@muug.mb.ca or in person at our meeting if you have an idea!

We will also have a round-table discussion, in which anyone can raise questions regarding their experiences (or lack thereof) with all things Unix. We realize that it can be a little intimidating, but please be assured that no question is too easy (or "dumb")!

Please note **the change in our meeting location**: The Ramada Marlborough, 331 Smith at Ellice (very close to the usual TD Centre). The change is in effect for **this month only**. Look for the sign in the lobby to determine the location of our meeting room.

Parking is available either in the parkade behind the TD building, off Albert Street, in the parkade across the street, or in the ground level lot just north of the TD building. Entrance to the lot is from Albert Street, behind the parkade. For the first and last options at least, parking is a $1.25 flat rate for the evening. You must purchase your ticket from a dispenser, so make sure you've got exact change - a loonie and a quarter, or 5 quarters.

Gigabit Linux!

Intel Corporation recently announced it will add its Linux Gigabit driver to the Intel(R) PRO/1000 Gigabit Server Adapter to bring Gigabit Ethernet performance to Linux-based Internet and intranet Web servers, databases, and e-mail servers.

Intel is the first to combine both a Gigabit server adapter and a Linux Gigabit driver into one product for customers who use Linux as their primary operating system.

The Linux Gigabit driver for the Intel PRO/1000 Gigabit Server Adapter is an open source software driver. The Linux driver's source code is available free of charge to the Linux development community on Intel's Web site, allowing developers to customize the driver to meet their individual company needs.

Linux is the fastest growing operating system and, according to industry analyst Miller Freeman, more than 90 percent of Linux installations are located on Intel(R) Pentium(R) processor based computers.

"As Internet Service Providers (ISPs) and other Web-based companies adopt Linux on Intel Architecture-based platforms, the need to provide Linux networking solutions grows," said Tim Dunn, director of marketing, Intel's Network Interface Division. "With our new Linux Gigabit solution, customers attain the benefits of high-bandwidth connections and have the confidence of knowing the driver is designed by Intel to work on our adapter."

"We are excited that Intel is supporting the Linux developer community with this open source software driver," said Erik Troan, director of engineering, Red Hat, Incorporated. "The new driver will help bring high performance solutions to bandwidth-hungry Web servers."

"The new Intel Linux Gigabit driver is great news for Linux customers who need high speed connectivity to drive their e-business," added Phil Hester, chief technology officer, IBM Personal Systems Group. "The new Intel driver will bring even more high-end solutions for Web serving and high performance computing on IBM Netfinity servers and will give our customers additional confidence in industry standard hardware support when they deploy mission critical applications on Linux."

In addition to announcing Linux Gigabit driver support for the Intel(R) PRO/1000 Gigabit Server Adapter, Intel is also working with the open source community to foster innovation and satisfy strong customer demand for Linux. Intel has also announced the Intel Internet Service Provider Program, which delivers purpose-built server, networking and remote access products for the Internet economy. This new program also provides comprehensive worldwide support for Internet service providers through a dedicated sales team and online resources. For more information on this program, please visit the Intel ISP Web site at http://www.intel.com/isp.

Available for download, the Linux driver for the Intel PRO/1000 Gigabit Server Adapter can be found at http://www.intel.com/support/network/adapter/1000/software.htm. In addition, support for the Linux driver may be obtained at http://support.intel.com/newsgroups/netwadap.htm, as well as at many newsgroups on the Internet today supporting the Linux community.

Lotus Domino on Linux

A powerful new generation of advanced e-business and collaboration solutions from IBM's Lotus Development Corp. will enable enterprises to achieve new levels of competitive advantage in the networked global economy. At Lotusphere Europe 99 in Berlin, Germany, Lotus unveiled an array of solutions that will tightly integrate knowledge management and collaboration tools into complete solutions that businesses can deploy quickly and comprehensively.

"Lotus customers have been the trailblazers for this new generation of offerings," Papows said. "They know knowledge management is a strategic tool, not an end in itself. Having witnessed the power of knowledge shared across teams, organizations and enterprises, they want to infuse knowledge management capabilities into all their e-business processes. The solutions we are presenting here in Berlin will lead to successive waves of e-business transformation and organizational effectiveness."

Those offerings are led by a new Knowledge Management suite code-named "Raven" that will provide a fully integrated platform containing all the elements to enable efficient knowledge creation, sharing and collaboration.

Lotus also announced its Unified Messaging strategy that will enable customers to access voice, e-mail, fax and paging messages from any device.

Addressing the demand for pervasive computing functionality, Lotus announced the delivery of Mobile Services for Domino 1.0, which expands Domino's services to include a broad range of mobile devices and e-business applications. Lotus also announced the **imminent availability of Domino Release 5 for Linux** which will deliver Domino's capabilities on the rapidly growing Linux operating system. The company also unveiled the Lotus Enterprise Solution Builder, an application development environment that enables high-performance Domino access to any enterprise application or data, such as relational databases, transaction processing systems and enterprise resource planning (ERP) systems.

Additionally, the company announced a recent major sale to Royal Philips Electronics of the Netherlands, one of the world's largest electronic companies and the largest in Europe. Philips has successfully deployed more than 100,000 Lotus Notes seats after an ambitious two year program with Lotus and IBM.

PartitionMagic 5.0

PowerQuest(r) Corporation announced the release of PartitionMagic(r) 5.0, the latest version of its partitioning software. In version 5.0, PowerQuest includes the ability to merge FAT and FAT32 partitions and expands PartitionMagic's patented technology to convert additional partition file systems. Other new features include an improved wizard-driven interface, a list of pending operations, improved error checking in partition tables, and an improved user-interface for scripting in the professional version.

Computer users now have an additional level of control over their hard drives with the ability to merge FAT and FAT32 partitions. In addition to converting FAT to FAT32 and back again, PartitionMagic 5.0 allows users to convert NTFS partitions to FAT32 and primary partitions to logical partitions. Logical partitions can also be converted to primary.

Partitioning allows computer users on all levels to increase computer efficiency, better organize data and protect that data from harm. Experimenting with new operating systems like Linux and Windows 2000 is safe when using PartitionMagic to help boot and run multiple OSs. The ability to merge partitions eliminates the need for copying data to another partition prior to creating, moving and resizing another partition. The ability to convert partitions from logical to primary is valuable when users want to install a new OS or change the manufacturer's primary and logical partition settings on new computers.

The professional version of PartitionMagic 5.0, available through PowerQuest's corporate licensing program, allows users to write scripts and view them while running PartitionMagic, thus saving time for IS managers needing to partition multiple drives.

PartitionMagic 5.0 includes BootMagic(tm) software to safely install, run and switch between multiple operating systems. PartitionMagic creates and manipulates the partitions in which multiple operating systems can reside, while BootMagic allows the user to switch from one OS to another without worry of compatibility problems. The latest version of BootMagic allows users to password protect a menu item, giving greater security to operating systems and preferences.

PartitionMagic continues to support drives larger than 20GB and offers complete support for FAT16, FAT32, FAT32X, NTFS, HPFS and Linux ext2 partitions. Both DriveMapper, which updates drive letter references for partitions, and MagicMover, which moves applications and their related files from one partition to another, are also included in the latest upgrade.

PartitionMagic 5.0 will continue to save hard-disk space lost due to inefficient cluster sizes on partitions by bringing them down to a more efficient level, reclaiming up to 40 percent of the hard disk space.

ATI Fully Supports Linux

ATI Technologies Inc. announced that it is fully supporting the development of drivers for the Linux Operating System and is endorsing the open source movement by releasing 2D, 3D and multimedia programming specifications for its industry-leading RAGE graphics technology.

Recognizing the phenomenal growth and increasing popularity of Linux, ATI is committed to ensuring that the open source development community has access to technical development information on all its key components.

"ATI has made tremendous strides in the past year working with key developers on our support for Linux and we are on target to become the graphics company of choice among Linux users," said Henry Quan, vice president of corporate marketing, ATI. "We will continue to provide the hardware and software support developers need to help ensure the success of Linux."

"ATI's opening of the programming specification for their graphics chips will allow unhindered development of open source drivers that exploit the full potential of the hardware, and also gives curious developers a look inside the workings of modern 3D accelerators," said John Carmack, co-founder and lead programmer of id Software.

ATI has had long standing 2D support for all its current and legacy products through XFree86, a not-for-profit organization that develops a freely distributable implementation of the X-Window system.

ATI is aggressively expanding on this support by releasing previously unreleased development information. This includes:

- 3D development information for the RAGE(TM) Pro and RAGE(TM) 128 product families.
- Video capture and TV-Tuner multimedia development information for the RAGE(TM) II, RAGE Pro and RAGE 128 product families.

"I am happy to see the support from ATI for XFree86 and the Linux community," said Dirk Hohndel, Vice President of Strategic Development at SuSE and Vice President of The XFree86 Project. "Without this support it would be nearly impossible to provide good drivers, and good drivers for the key hardware components are necessary for Linux to continue its success."

"I acknowledge and am grateful for ATI's many contributions to the furtherance of the XFree86 software, in terms of hardware, documentation, information and time," said Marc La France, a prominent XFree86 developer of ATI drivers. "I feel the relationship between The XFree86 Project Inc. and ATI that has been built up over the years has been, is, and will continue to be very beneficial to both parties."

To spear-head support for Linux, ATI has contracted Precision Insight (PI), a leading edge Linux software development company based in Texas, to develop an open source 2D and 3D driver for the RAGE 128. PI developed the Direct Rendering Infrastructure (DRI) for use with XFree86 and will develop a RAGE 128 driver under this new architecture. DRI will bring 3D features and performance, which were previously only available on expensive workstations. The source code for these drivers will be donated to the OpenSource community and is expected in Spring 2000.

Instant ASP on Linux

Web developers, ISPs, and server administrators can now easily migrate, build and deploy Microsoft(R) Active Server Pages (ASP) applications on Red Hat(R) Linux.

Halcyon Software announced that their Instant ASP(TM) migration servlet is now available to Red Hat Linux and Apache developers as part of the workstation edition of Linux Applications Library in Red Hat Linux 6.1.

"This is a major milestone in greatly assisting Microsoft developers that intend to migrate their applications to the Red Hat Linux platform," said Don Hsi, President & CEO of Halcyon. "From what we've seen so far, there is a lot of interest and pent-up demand for technology that lets developers convert and migrate their applications quickly to the Linux OS."

Halcyon's Instant ASP (iASP(tm)) lets developers migrate, build and deploy ASP applications on any Java(tm)-enabled Web Server, Application Server, or Operating System platform. As a cross-platform deployment framework, iASP has also been designed to support JavaBeans, Enterprise JavaBeans (EJB), CORBA components, and other industry open standards. In general, iASP provides full support for Java on Linux as well as provides the ability to migrate MS NT-based applications to Java and Linux.

"Instant ASP is Active Server Pages on Steroids," Hsi added. "Leveraging Java on the server side, we can provide more features and functionality than basic Microsoft ASP, as well as achieve a high degree of portability across disparate platforms."

Active Server Pages has quickly become the Web-application development methodology of choice for Microsoft NT/IIS developers since its release. Active Server Pages gives developers the ability to use standard front-end tools, components, programming/scripting languages, and database access to build Web-based, enterprise-scale applications faster. More than one million developers are now building ASP applications.

However, a significant percentage of ASP developers anticipate moving their applications to new platforms within the next 12 to 18 months, with Linux/Apache as the most popular target configuration.

In the past six months, more than 20,000 developers have downloaded Halcyon's migration tools and platforms. In registering for the developer version, users are asked which platform they are working on and which platform do they intend to migrate to. According to Halcyon officials, 99% of those responding are Microsoft NT developers and 60% of them indicated that the Linux/Apache platform is their next targeted deployment. After Linux/Apache, Halcyon said Sun, Netscape, IBM and "others" follow in order of importance.

"When we ask them why they want to migrate, they associate the term reliability with the Linux/Apache move and scalability is used in regards to moving to Sun and other high-performance platforms," Hsi noted. "I'm not sure if there are any political statements to read into this, but there is no doubt that having the ability to deploy an application on multiple platforms is a key issue with most developers. Developers are tired of being locked in by vendors."

MUUG Contact Information

To contact the MUUG board for membership information or anything else, send e-mail to board@muug.mb.ca. We have a Web presence as well, at http://www.muug.mb.ca/, where you can find all kinds of information, including details of upcoming and past meetings and presentations and references related to them. We're always interested in article submissions. Submit your articles and ideas to editor@muug.mb.ca.