$2.50

MUUGlines

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October 13 Meeting: See Beowulf Clustering With Linux

Dr. Peter Graham of the Dept. of Computer Science will speak on the use of x86 family processors running Linux to build a “cluster parallel computer”. The so-called “Beowulf” design approach uses off-the-shelf components, increasingly cheap high-speed networks, and public domain software to build computer systems capable of performing computations which were previously only feasible using extremely costly proprietary parallel machines.

The results obtained using such machines are surprisingly good and the cost-performance ratio is excellent. Dr. Graham will describe the Beowulf software and hardware components, will talk about problems that can effectively utilize such technology, and, time & equipment permitting, will demonstrate a small scale Beowulf system.

As usual, 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 our meeting location: IBM Canada's offices in the TD Centre, at the corner of Portage and Main. We gather in the lobby on the main floor - please try to be there by about 7:15 PM. Steve Moffat will then take us up to the meeting room just before the meeting starts at 7:30. Don't be late, or you may not get in.

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

Linux Install Fest 1998 A Success

By Gilbert Detillieux

On September 25th and 26th, MUUG participated in its first Linux Install Fest, along with the University of Manitoba's Computer Science Student Association, as part of Canada's first national Install Fest, organised by the Canadian Linux Users' Exchange (CLUE).

The Best Laid Plans

We wanted to start small, since this was our first time trying a Linux install fest. So, we intentionally didn't go overboard with publicising the event, and targeted mostly (but not exclusively) the local University of Manitoba population.

We set up in a small 10-seat Linux lab, just down the hall from my office. (It was easy to get permission to use the space for free.) We expected to get somewhere between 20 and 30 people per day. (Being nonconformists, we decided to do this over two days, with the Friday being meant especially for University staff and students who might not be able to make it on Saturday.)

Our 10-seat lab was set up as follows: one registration station (web browser connected to the netmaster.ca site for the national registry), 3 demo stations (ApplixWare, WP8 for Linux, X-MAME, and various software development tools), 4 install stations (system units removed, but monitors, keyboards and mice remaining, in case they were needed), one IRC station to talk to the rest of the #installfest listeners, and one spare, just in case something else came up.

We had 14 volunteers, of which only 8 were available on Friday. We had about 4 of those with solid Linux installation experience, and counted on the rest to handle the other tasks (greeting, assisting with registration, handling the door-prize draws, making sure our free literature and samples table was stocked and tidy, and handling refreshments like coffee and pop).

We had also decided to burn our own CD-Rs, with Red Hat Linux/Intel 5.1, all the latest update packages merged in, plus the Power Tools 5.1 binaries. That way, installation would be simpler, and everyone would have the most current stuff. We pre-burned 20 discs, which we thought should cover us for Friday, and we could then decide on a quantity for Saturday.)

Pre-planned Chaos?

We accepted pre-registrations only for those planning on bringing in a system. (Those just coming in for a look didn’t have to book ahead.) Unfortunately, we were a little slow getting the web-based form set up, which may have affected the number of pre-registrations for Friday.

We only had two pre-register for Friday, and 20 for Saturday. (Our last “pre-registration” came in at 13:18 on Saturday, i.e. over an hour after the event had already started.)

We had the brilliant idea of allowing people to book time slots as they pre-registered, with a “stand-by” option if their favourite slot was full. The web form used an SSI script to build up a list of remaining available time slots. The slots were one hour long, which we (mistakenly) though should be sufficient for an average install, and we allowed a maximum of 4 people in any given time slot.

The purpose of this was to try to spread the load around, and not have everyone showing up at once, and then waiting all afternoon. I still think the idea has merit, but we need to refine our estimates to improve the scheduling.

The Numbers Game

We attempted a total of 21 installs over the two days, of which only about half went really smoothly. Two of those failed entirely. So, in the end we can claim to have 19 new systems running Linux in Winnipeg.

There were also 6 of the pre-registrations that never got done. Three of those we know showed up but had to be turned away. The other 3 may have been no-shows, or they may have just left without bothering to report in.

We also took a rough head count of total attendance: 60 on Friday, and 80 on Saturday, for a total of 140. I'm not sure how many of these bothered to register in the nationally registry, though.

We ended up burning 71 CD-Rs in total, and still had some people walk away empty-handed. (Of course, we also had some people walk away with our own installation copies, without paying for them, which left us in an interesting bind as we had to wait for more to be burned. We had two 4x burners working in parallel.)

When In Doubt, Wing It!

Well we didn't count on the numbers we got. (We also didn't count on the success of the national coverage, like CTV News-1’s story... Our local press seemed completely disinterested.) At least one attendee was there as a result of the CTV coverage - he said he was new in town, and wouldn’t have known about the InstallFest or our group otherwise.

Evan Leibovitch, one of the national coordinators with CLUE, indicated “But the result of locations bursting at the seams with people interested in Linux was a publicist’s dream (though an installer's nightmare).” That about sums up our experience in Winnipeg!

We would have needed a much bigger space than we had, and a far, far greater number of “install stations”. We ended up converting a demo station into another install station, and roped a few more people to help with installs. We also had a couple systems set up in the student lounge next door, and were doing installs there too.

We could have used even more volunteers, and particularly more people with installation and hardware experience. (In fact, that was the limiting factor more than lack of table space for installs. We sometimes had one volunteers ping-ponging between two or three stations.)

We also grossly underestimated the time required per installation, so our whole schedule was out the window. We also had problems dealing with weird hardware, and people not bringing in enough of their equipment or documentation. As I mentioned earlier, we had spare stuff of our own, but connector types sometimes didn't match, and adaptors (particularly for plugging our PS/2-style keyboard connectors into older motherboards) were in short supply.

Annoyances, Both New and Old

One of the most frequent frustrations was dealing with Window 98. On systems with large disks, it uses the new FAT32X, which our Partition Magic 3.0 couldn't resize (and we didn't have a copy of PM 4.0 handy). Also the MBR installed by Win98 seems to ignore which partition you set as the active one, so we had to install LILO in the MBR, rather than in the Linux root partition, to get it to boot. Thank you, Bill! ;P

Other frustrating things were dealing with some systems with pathologically complicated partitioning (I don't think I had seen a /dev/hdb9 before!), hardware that hadn't been fully assembled ahead of time, and hardware that hadn't been properly tested. We also had a couple instances where someone wanted almost everything installed on a 200 MB disk!

It's Alive!

Arne Grimstrup, a MUUG board member helping with the installs, dubbed one attendee's work “Franken-puter”! It was actually two separate cases, cobbled together from various spare parts the owner was able to beg, borrow, or buy, with a segment of coax ethernet connecting the two. The owner was doing hardware assembly and reconfiguration on the fly, as much as he was getting Linux installed on these two systems.

This persistent soul showed up at the start of Friday's Install Fest, and didn't get finished until mid-afternoon on Saturday. Fortunately, he stayed around and helped others with their installs afterward.

The Final Word

Although we all felt totally burned-out by the end of the day on Saturday, we're glad we participated in this event. It was nice to seem some people really pull together to help each other out. Even those who left without getting Linux installed seemed to understand, and appreciated what they had learned in the process. Despite the problems we had, and the fact that little went according to plan, we think we can call this event a success.

PartitionMagic 4.0 Now Available

OREM, Utah, Sept. 23 /PRNewswire/ -- PowerQuest Corp. announces the release of PartitionMagic 4.0, the easiest way to create, resize and move hard-disk partitions on the fly without destroying data. In version 4.0, PowerQuest includes its new BootMagic software for easily managing multiple operating systems. In addition, PowerQuest expands the use of PartitionMagic's patented technology to support drives over 20GB. Other new features include a wizard-driven interface, native Windows 95/98 and NT executables, batching functionality and **full support for Linux ext2 partitions**.

In version 4.0, users can experiment with “what if” scenarios, then “batch” all their different steps together. Prior to batching, partitioning was a step-by-step process since each change to the disk needed to be applied before additional changes could be made. Batching speeds up the partitioning process, allowing users to manipulate the partitions to determine the desired partition structure before actually applying the changes. Users can now store multiple commands and execute them in a single operation.

The inclusion of PowerQuest BootMagic allows users to safely install, run and switch between multiple operating systems. PartitionMagic will create and manipulate 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.

PartitionMagic 4.0 offers complete support for FAT16, FAT32, FAT32X, NTFS, HPFS and Linux ext2 partitions. PartitionMagic continues to convert from FAT16 to FAT32 and vice versa, and from FAT to NTFS and HPFS.

For more information, see PowerQuest's home page at http://www.powerquest.com or call 1-800-379-2566 or +1-801-437-8900, or send an e-mail message to magic@powerquest.com.

Caldera Systems Distributes Sybase Adaptive Server Enterprise for Linux

Orem, UT - Sept. 23, 1998 - Caldera® Systems Inc. today announced that it will distribute a version of Sybase® Adaptive Server® Enterprise for Linux. The Adaptive Server Enterprise release is immediately available for download from the Caldera Systems, Inc. Web site at www.caldera.com.

The Adaptive Server Enterprise for Linux software and related connectivity components will be included in Caldera Systems' new Linux-based business solution, OpenLinux 1.3. The inclusion of Adaptive Server Enterprise in OpenLinux will provide the first highly scalable, high-performance database engine available for the Linux platform in a proven, tested and fully supported Linux-based business solution.

“Sybase is committed to meeting the needs of enterprise customers who rely on data management solutions for their business applications,” said Raj Sehgal, director, product management, Enterprise Server Business, Sybase, Inc. “We are reinforcing this commitment by making a Linux version of our reliable, high-performance data management platform, Adaptive Server Enterprise, available through Caldera.”

Adaptive Server Enterprise

Adaptive Server Enterprise is optimized to provide scalable, high-performance on-line transaction processing capabilities for business-critical applications in unpredictable, mixed-workload environments.

Contact Information

Caldera Systems, Inc. can be reached at 888-GO-Linux [888-465-4689] or via E-mail at linux@caldera.com. Please bookmark http://www.caldera.com to access the Caldera Systems, Inc. Web site.

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IBM Announces DB2 for Linux

IBM recently announced it would support DB2 on Linux. The press release is lengthy; we’ve included the important part:

“The powerful DB2 Universal Database now supports SCO UnixWare7, SGI Clients and Microsoft Windows 98 platforms, and will be extended to Linux later this year. Also, DB2 Universal Database for OS/390(a) begins a customer beta program this month as scheduled.”

Alas, it won’t be available immediately, but the end of the year is fast approaching! Are there any major database vendors remaining who haven't announced support for Linux? We exclude, naturally, the Evil Empire (http://www.microsoft.com/) for obvious reasons.

Our favourite web sites

Take a look at Humorix (http://i-want-a-website.com/about-linux/), a parody of our favourite Slashdot (http://slashdot.org/). While you're at it, find the latest news on current Linux software at freshmeat (http://news.freshmeat.net), and of course, the Linux Weekly News (http://www.lwn.net/). Stay current! There's a lot happening.

Open Group Reverts X11 Licence

The Open Group has decided to revert X11 back to the old license. This should end an exercise where it looked as if they were trying to turn the X window system into a proprietary product. The license for X11R6.4 is short and clear:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE OPEN GROUP BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Except as contained in this notice, the name of The Open Group shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization from The Open Group.

X Window System is a trademark of The Open Group

That must be the shortest bit of legalese I've seen for a long time. Thus, apparently, ends the worry that the XFree86 group would have to go it alone, and the Linux world ending up with a different (and possibly incompatible) X server from every other Unix.

Red Hat Announces Release of Source For NeoMagic X server to XFree86

Research Triangle Park, NC--September 21, 1998--Red Hat Software, publisher of the Red Hat Linux Operating System, today announced that Neomagic, Inc. has authorized the release to XFree86 of the Red Hat funded Linux drivers for NeoMagic's family of laptop graphics chips. The release of driver source code is a major focus of Red Hat's XBF driver program.

Previously, NeoMagic binary-only drivers, developed by Precision Insight Inc., were released by Red Hat as part of their XBF program, but source code had been withheld pending authorization by NeoMagic. With this authorization, full source code for these fully accelerated, commercial quality drivers is available and will be included in the next release of the industry standard XFree86 X Server.

This new development with Neomagic attests to the power of the Open Source Community as mobilized through Red Hat's XBF program. The XBF program was designed to encourage hardware vendors to cooperate with the Open Source community by proving to them that Linux driver support for their products is good for their business.

Red Hat has ushered in a new level of driver support for graphics devices, augmenting the outstanding contributions already being made by XFree86 developers. Free software and commercial quality are now synonymous as Linux users can receive the highest quality software, full industrial strength product support, and uncompromising performance, all with freedom from dependence on any single vendor.

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. E-mail the editor at editor@muug.mb.ca.