Vol. 14 No. 2

October 2001
$2.50

MUUGlines

The Manitoba UNIX User Group Newsletter

October 9, 2001: Consolidated Storage – SAN/NAS or something else?

Although most I/T professionals agree on the benefits of consolidating storage, there is some discussion as to whether a Storage Area Network (SAN) or Network Attached Storage (NAS) is the best strategy. The answer is that it depends; but making the choice, especially in the face of new emerging technologies is difficult.

This session will explain the concept of Consolidated Storage and its benefits. Then we will explore a few of the technologies available and on the near horizon for implementing a centralized storage infrastructure. Terry Baydock, Technical Sales Specialist with the Storage Systems Group at IBM Canada Ltd., will be our presenter for this session

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.

Dump IIS?

The analysts at The Gartner Group have a history of being unsympathetic toward Linux, and don't seem to have much understanding of it either. However, the recently came out with a report that urges companies to seek a "Plan B" from the Plan A of Microsoft's Internet Information Server (IIS). To wit:

> Gartner recommends that businesses hit by both Code Red and Nimda immediately investigate alternatives to IIS, including moving Web applications to Web server software from other vendors such as iPlanet and Apache. Although those Web servers have required some security patches, they have much better security records than IIS and are not under active attack by the vast number of virus and worm writers.

Yes, Apache isn't a "vendor". Nonetheless, it will be interesting to see if that has any effect on the statistics kept by Netcraft (http://www.netcraft.co.uk/survey/). The most recent survey show that the trend for the number of computers hosting websites is Windows holding steady at around 50%, and Linux is at 30%, gaining ground at the expense of other Unix-like operating systems.

Netcraft noted that 150,000 sites (hosted on 80,000 computers) were taken offline as a result of Code Red and Nimda, but only 2,000 can be readily determined to have actually switched platforms.

MiniNewsNotes

B. Schwartz

24 technology suppliers to cable, satellite, and telecommunications operators have allied to form the TV Linux Alliance. The idea is to define a standard-based Linux environment to improve products, shorten time to market, and speed up development cycles in the digital set-top box market. http://www.TVLinuxAlliance.org

Maxtrox Graphics announces the Maxtrox PowerDesk for Linux. Controls multi-display, clone, and TV output, and allows monitor adjustments such as changing resolution, pixel depth, and refresh rates. Compatible with Maxtrox G200, G400, and G450 graphics cards and can be downloaded from http://www.matrox.com/mga/support/drivers/home.cfm

The NetLinOS initiative, created by Cyclades Corp. has launched its NetLinOS Web portal. Visitors can access a database of hardware and software components used in developing Linux-based network connectivity products. There are also "how-to-build" tutorials for all products listed that have been designed and tested by the NetLinOS team. http://www.netlinos.org

SuSE has announced that its Linux OS has been validated for Oracle's Oracle9i database technology. The validation means that SuSE can now offer its e-business infrastructure to customers using the Oracle9i database. SuSE also announces the release of its OS for Intel's Itanium based systems. SuSE Linux 7.2 for Itanium is based on the 2.4.4 kernel and the package features 1,500 applications on 6 CD-Roms. http://www.suse.com/

PowerPC Set-Top Box IBM and MontaVista Software are working together to make MontaVista's Hard Hat Linux 2.0 OS available for IBM's PowerPC based single-chip Set-Top Box (STB) Controller.

More Linux on z900

IBM announced that it shipped its 1,000th IBM eServer z900 today to Boscov's, the largest family-owned department store company in the U.S.. Boscov's plans to consolidate its Windows NT server farm on a single z900 running Linux.

Boscov's, which operates 35 department stores in Pennsylvania, Delaware, New Jersey, New York and Maryland, will initially move its print and file server workloads from up to 44 servers to Linux virtual servers on the z900. The company also has plans to move its e-commerce and database applications to Linux on the mainframe and replace four Web servers with WebSphere Commerce Suite Pro Edition for Linux for z900. In addition, it will boost data storage throughput and application flexibility and scalability by connecting the z900 to the Linux-enabled IBM Enterprise Storage Server (code named "Shark").

"A mainframe running Linux is a winning solution for our business," said Harry Roberts, CIO, Boscov's Department Stores, LLC. "Over the last several years, we've added one server per month to our server farm. This meant adding a new server administrator for every 10 servers. The increasing complexity and difficulty of backing up the large and growing server farm was becoming a major concern."

"Selling the 1,000th IBM eServer z900 is a major milestone for us," said John Morris, vice president, IBM eServer zSeries. "More and more businesses are using Linux on the mainframe to help them achieve dramatic savings in space, energy and support costs. The power and reliability of the z900, the cost savings benefits of Linux and the ease of management when compared to a server farm are prompting customers like Boscov's to explore how Linux on the mainframe solves business problems with unmatched flexibility and efficiency."

Interest in Linux on the mainframe for server consolidation has helped drive three consecutive quarters of double-digit growth in IBM mainframe sales. In addition, industry analyst firm IDC recently released its 2Q 2001 worldwide server market share report, which showed that IBM gained 5.3 points of worldwide server market share, while Sun, HP and Compaq all lost share. IBM also recently launched a national television commercial to promote the advantages of Linux for server consolidation on the eServer z900 mainframe.

IT analyst firms Hurwitz Group and Matterhorn Group have concluded that the mainframe provides a cost-effective, energy-efficient alternative to the server farm for businesses. While a typical configuration of 750 Sun servers costs approximately \$620/day in electricity to run, a single z900 — running the same workload — costs only \$32/day, a power saving ratio of nearly 20-1. The savings are even more dramatic when floor space requirements of a server farm are considered. The average server farm requires some 10,000 square feet of floor space compared with only 400 square feet for a single z900. At an average of 100 Watts per square foot, the savings can be significant. The z900 began shipping to customers around the world in December 2000.

Good News at Red Hat?

Red Hat Inc. said it posted a slim second-quarter loss before one-time items as the company struggled to adjust to a slowdown in technology spending. Red Hat, which declined to provide guidance in June when its first-quarter results were released, said it expects to at least break even in the third and fourth quarters.

"We are projecting modest growth in our revenues for the remainder of the fiscal year," added Chief Financial Officer Kevin Thompson in a conference call with investors. However, he said that because of the uncertain economic effects of the Sept. 11 attacks on the World Trade Center and the Pentagon, "we are not able to provide revenue guidance at this time."

Red Hat's second-quarter adjusted loss totalled $100,000, or nil cents per share, compared with a loss of $4 million, or 2 cents per share, in the year-earlier period. Analysts had expected the company to break even in the second quarter, according to research firm Thomson Financial/First Call. Red Hat posted its first-ever profit of $600,000, or nil per share, in the first quarter.

Red Hat's second-quarter net loss including items was $55.3 million, or 33 cents per share, compared with a loss of $20 million, or 12 cents per share, in the year-ago period.

The company took a restructuring charge of $37.2 million in the quarter as it shifted its emphasis to business clients and embedded computer systems, comprised of $33.8 million for goodwill and amortization related to acquisitions and $3.4 million in severance expenses.

Revenues for the second quarter fell 15 percent to $21.1 million. Thompson cited a "softening IT spending environment" in the conference call, saying the company had several projects cancelled and delayed in the quarter.

Site of the Month

This is not a traditional news item in this newsletter, but we thought this should get mention. Do you work in a business that might be able to take advantage of Linux? IBM says Linux is "Ready for Business". Do check out their website: http://www-4.ibm.com/software/is/mp/linux/software/.

The Root of All Evil

The third compilation of the online hit comic, User Friendly, takes readers back to Columbia Internet for the continuing story of the "friendliest, hardest-working and most neurotic little Internet Service Provider in the world".

In "The Root of All Evil" (O'Reilly, US $12.95), author J.D. "Illiad" Frazer probes the worldviews of sales staff, execs, and caffeine-fuelled techies whose universe includes the Dust Puppy—offspring of a combination of dust, lint, and quantum events inside a network server—and Erwin, the Artificial Intelligence.

Considered one of the most off-beat, original and funny comic strips to come along in years, User Friendly has captured the attention of the worldwide audience of IT professionals and computer hobbyists alike. Proving that humor is often most successful when it approaches its subject matter with unflinching honesty, Frazer has managed to poke fun at the world of hard-core geeks and their issues, drawing a massive following of readers who call themselves "UFies."

Frazer claims "The Root of All Evil," was published "for the same reason that I publish the comic strip on a daily basis—to share the pain and anguish experienced in the IT world." Whether or not this is true, UFies regularly laugh at themselves through the antics of Greg, Jeff, Miranda, and the other members of Columbia Internet."

It's unverified," Frazer adds, "but I hear that the number of user-homicides committed by frustrated IT people drop dramatically after they've had their morning UF fix." The cast of "The Root of All Evil" is Quake-obsessed techies, self-absorbed sales staff, well-meaning execs, and assorted almost-humans. The background: too little office space, warring operating systems, and eternally clueless customers. In this third collection of comics, geeks go camping, Mike finds a new use for silly putty, and Stef decides to beef up his Quake skills with the

"Acme Forced-Feedback Enemy-Denial Smackdown Ergonomic Game Chair."

The User Friendly community is truly global: the comic's one-million-plus readers log on from Israel, Brazil, Iceland, New Zealand, and Greece, among other far-flung locations. Frazer's cartooning style shares a sense of broader cultural identity in a sometimes cutthroat and humorless business where the ability to laugh at oneself is often a survival skill. Since this is true of most work environments, chances are readers won't have to know Unix or be able to log in as "root" in order to get the jokes.

Bitstream Font Server

Bitstream Inc. announced the beta release of btX™, a font server for Linux®. btX gives Linux the same font presentation as that found on the Macintosh® and on Windows®. With btX, developers can render hinted, anti-aliased, and kerned characters, producing great looking text on screen.

Most importantly, btX renders not only high-quality characters in industry-standard TrueType® and Type 1 formats, but also high-quality text in compact PFR (portable font resource, an industry-standard format), T2K®, and stroke-based Asian font formats. Bitstream btX supports Unicode encoding and can render international fonts. On the front end, btX uses the X font server protocol for X11 Windows, Release 6 (X11R6), with Bitstream's extensions for character outline access, anti-aliasing, and kerning. On the back end, btX relies on the fastest font engine on the market, Font Fusion™.

Without btX, applications can use only the X11 API (i.e., the X libraries or Xlib) to manage the windowing system and to draw graphics and text on the screen. For some applications, the functions in Xlib that accomplish this are sufficient, but for most they do not provide enough functionality, particularly with fonts.

The btX Font API, however, includes a number of functions that give applications finer control over the display of fonts. The API allows an application to communicate directly with the font server, giving you effects that standard X server mechanisms cannot provide. These include accessing and processing scalable outlines in different font formats, applying kerning (intercharacter spacing), and rendering anti-aliased characters.

Developers can embed the Font API directly into an application, giving you an Embedded Font Server. With an Embedded Font Server, you do not need to make font calls to the X Server or a Remote Font Server. This makes the process of reading and rendering fonts much faster.

"With btX, Bitstream has developed a leading-edge font rendering technology for Linux devices and applications," said Anna Chagnon, President of Bitstream. "btX can render eight font formats — not just two — including compact fonts that can fit in embedded Linux devices where space and memory are at a premium. With our font rendering technology, we can deliver well-hinted, anti-aliased characters to the screen, resulting in text that looks great anywhere, even on LCD displays and other low-resolution devices for Linux. What's more, btX includes Font Fusion, a high-quality, fast font engine, including the fastest TrueType rasterizer on the market."

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. We will try to personally respond to your e-mail promptly, but please note that our group has a very small board of directors, consisting of a few very overworked volunteers. Please make sure you have used the right address, and are requesting information that is not found on our web site (www.muug.mb.ca).

For a full list and description of the addresses, see http://www.muug.mb.ca/pub/muuglines/pdf/muug0004.pdf.

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