



Market Roundup

February 8, 2002

This Week

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Sun Announces Broadened Support for Linux

By Charles King

Sun Microsystems has announced that it will broaden its support of Linux by planning to ship a full implementation of the Linux operating system, to expand its line of Cobalt Linux appliances and to introduce a new family of Linux/x86-based systems. Sun will also freely offer key components of its Solaris operating environment software to the Linux community. In addition, Sun announced that it is shipping built-in Linux compatibility with Solaris today, and that GNOME will become its preferred Linux desktop when GNOME 2.0 ships later this year. Sun plans to eventually deliver the entire Sun ONE infrastructure software suite on the Linux platform, will support Linux on the company's StorEdge line of storage systems and software, and will support the development of Linux on UltraSPARC for the telecommunications and embedded markets. Finally, Sun declared that it will continue to contribute intellectual property to the Linux and open source communities, and will offer contributions to the Linux kernel.

Our initial response to Sun's apparently chummy embrace of the penguin runs along the lines of, "It's about time." As we have discussed previously and at some length, Sun's tepid support for Linux, compared to the whole hearted open source enthusiasm of its major competitors including IBM and Compaq, left Sun in the unenviable position of seeming to fiddle while Linux set the rest of the IT world on fire. That said, Sun's announcement appears specifically designed to silence critics of the company's Linux strategy (or lack thereof). This new decree addresses most of the major Solaris/Linux compatibility and support issues that come to mind, and expands Sun's focus on its low-end Cobalt Linux appliances, sweetening the pot with plans to add x86-based Linux servers to its future product line-up. Perhaps the most telling single element of the announcement is Sun's vocal plans to support Linux on UltraSPARC for telecom and embedded markets. Over the past year, Sun has suffered a number of embarrassing losses among telecom customers who have eliminated racks of Sun equipment for Linux-based replacements, notably IBM's zSeries servers running scores of virtual Linux servers. The embedded sector is an emerging hot spot where a number of vendors, including Microsoft and embedded Linux specialists such as MontaVista Software, are developing traction in markets including telecom, making it a natural area of interest for Sun.

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Given those points, we looked more closely at Sun's announcement in order to determine, to paraphrase Gertrude Stein, if there is any there there. That is, if the announcement is as truly extraordinary as some might think. The answer is that there is more and less to the announcement than meets the eye. On what we see as the plus side, Sun has figuratively exited the proprietary closet and blown the open source community a kiss. Given Sun's solid position as a leading IT vendor, the move should also please those of its clients who are interested in incorporating or migrating to Linux solutions. At the same time and not surprisingly, the announcement appears to solidify Sun's view of Linux as a technology primarily suited for low-end desktop and appliance devices, but incapable of delivering the stability and performance required for high end computing. While this Linux strategy is distinctly at odds with the ones pursued by IBM, Compaq and others, it is perfectly in keeping with Sun's current and historic opinion of itself, its competitors and the market. Consistency, it is said, can be a virtue, but it is seldom, if ever, surprising.

IBM Announces New Workstation Products/Consolidation

By Charles King

IBM has introduced new UNIX, Windows and Linux workstations that will all be marketed under the IntelliStation brand. The new IntelliStation POWER Model 265 is the first of the new products that will replace the company's RS/6000 workstation brand. The Model 265 contains one or two 450MHz 64-bit Power3 processors, 512MB to 8GB of ECC memory and five PCI slots, and can support up to 291.2 GB of storage inside the workstation. The Model 265 includes new enhanced 3D IBM graphics cards, as well as IBM Project eLiza technology that the company's claims will increase reliability, availability and manageability. IBM's new IntelliStation Pro models include enhancements including Intel Pentium 4 and XEON processors at 2.2 GHz and 512KB L2 cache. The Pro models offer a new line of 2D and 3D graphics adapters from 3Dlabs, ATI Technologies, Matrox and NVIDIA. In addition, IBM now offers the same level of support on IntelliStation products for Linux as it does for Windows and UNIX. General availability for IBM's new IntelliStation products will be later this quarter. No pricing information was included in the announcement.

On a practical level, the IntelliStation announcement proclaims a simple performance boost across IBM's Intel-based workstation line and the introduction of a new mid-range UNIX-based machine for the higher-octane crowd. It offers a couple of intriguing inclusions, such as the availability of XEON processors, 512KB L2 cache and increased Linux support in the Pro models, and the new graphics accelerators and eLiza technologies in the POWER Model 265. However, what makes this announcement interesting is what might be called its unspoken strategic points. First, IBM has had a lower profile in the technical workstation market than competitors including Silicon Graphics (AKA: SGI), HP and Sun. The thing to remember about the workstation market is the sector's intrinsic PR value. Motion picture special effects are a technology that many non-techies follow with interest. For years, SGI was known as the company that enabled the special effects wizardry in Hollywood classics including Star Wars and Jurassic Park, an association the company profited from enormously. It is interesting to note that just last week IBM announced a deal to sell and install 400 Linux-based IntelliStations to Pixar, the high-profile producer of Toy Story and Monsters, Inc.

IBM's push into the workstation market is hardly unexpected, especially given the technology's importance in the automotive, microprocessor, chemical, petrochemical and other industries. But where does IBM's re-shuffling of its UNIX, Windows and Linux products into the IntelliStation brand fit in? If one considers IBM's decision to re-launch its four server product lines under the eServer brand, a pattern

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begins to emerge. IBM's eServer branding was not just a PR move, but a conscious effort to reinvent the way the company perceived, marketed and sold its most essential and best-known products. Along with the new brand came a more disciplined sales approach, and an effort to better IBM's hardware, software and service products. The IntelliStation announcement suggests that IBM is making the same sort of strategic effort with its technical workstation products. As such, we expect IBM will continue the strategy that has served it well over the past year; leveraging workstation price/performance points with integrated sales and service offerings. If that is the case, things could become decidedly uncomfortable for the sector's other vendors.

NetGear Announces New 802.11a Product Line

By Clay Ryder

NetGear has announced the availability of its new wireless local area networking (LAN) solution based on the IEEE 802.11a standard. These WLAN products offer data transfer rates up to 54Mbps and 72Mbps in turbo mode, and feature the company's Smart Wizard technology that automatically installs and configures the necessary network components. IEEE 802.11a wireless networking offers a clean 5 GHz spectrum, providing a clear signal with no interference from IEEE 802.11b, Bluetooth devices and other 2.4 GHz products. The NetGear products support 64-bit/128-bit/152-bit WEP encryption and are compatible with most versions of Windows, including Windows XP. NetGear indicated that it will seek Wi-Fi5 interoperability and logo certification for the IEEE 802.11a products when the interoperability test program has been established by WECA, the certification body for 802.11 wireless products. The product family currently includes the HA501 Wireless PC Card (\$179), the HE102 Wireless Access Point (\$429), the HR314 Cable/DSL Wireless Router (available in Q2) and the HA301 Wireless PCI Adapter (available in Q2). In a separate announcement, the company indicated that it has partnered with eBay to offer potential buyers the opportunity to bid on the first production units of NetGear's 802.11a wireless solutions. The two units involved in the auction are the HA501 802.11a Wireless CardBus Adapter and the HE102 802.11a Wireless Access Point, and the bundle will include a certificate of authenticity signed by NetGear President and CEO Patrick Lo. The auction will take place from February 4, 2002 through February 8, 2002.

Press releases in general are an exercise in the art of painting grand visions and portraits of products or service that often turn out to be less revolutionary than the shimmer of their marketing verbiage. Yet in this case, we find ourselves looking at the converse, since 802.11a is a technology that proffers some very interesting possibilities for SOHO and SMB organizations. The lack of physical network tethers for laptops, PDAs, and other handheld devices is vital for realizing their full potential as mobile workforce solutions. At the same time, the elimination of cabling for office desktops, printers, and other devices could represent a significant savings in IT deployment and moving costs. With speeds of 54 Mbps to 72 Mbps, 802.11a can supply organizations with an "almost as good as" alternative to traditional 100 Mbps Ethernet over wire. Suddenly the convenience and versatility of the cordless phone has been brought to the networked computer user, which is and of itself in our opinion is pretty cool.

Given the significant potential for 802.11a to bring WLAN to organizations where the relatively low capacity of 802.11b was a constraint, the eBay auction strikes us as a rather self-indulgent exercise in corporate ego stroking. But in all fairness, this is not be the first time such a path has been beaten. Not all that long ago, Oracle CEO and Redwood Shores' resident PC hater Larry Ellison announced the second incarnation of his largely failed NetPC vision. Here too eBay was the launch pad for the auction of 10 of these new NetPCs at the princely sum of \$3000 each (for a \$400 retail-priced product). In an even

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grander dose of ego inflation the purchaser then announced the donation of said devices to schools in the Boston area. However, subsequent to this event, few noticeable shipments of the improved NetPC came to pass. We expect the marketing hubris of NetGear and eBay may turn out to be little more than short-term hype. Indeed, we believe that 802.11a products fare a much better chance of long term success than the little-lamented and less-missed NetPC, since they have the potential to simplify network cabling for many, and are frankly capable of standing on their own without resorting to auction bidding hype.

Sun Announces New Storage Hardware/Software Offerings

By Charles King

Sun Microsystems has announced a range of new scalable storage software and hardware solutions optimized for Sun products, but capable of supporting heterogeneous storage environments. Based on Storage ONE, the company's new integrated storage management architecture; the solutions include Sun StorEdge QFS and SAM-FS software, new file systems that can scale to 252+ TB and offer complete file sharing in a SAN environment. The company is also offering new StorEdge software suites including StorEdge Availability for point-in-time copy and remote mirroring capabilities, StorEdge Resource Management, a capacity, database, global and file reporter, and StorEdge Performance and Utilization, which include the file systems mentioned above. The company's new mid-range systems include the Sun StorEdge 3900 Series, which the company describes as ideal for HPC and decision support systems, and the StorEdge 6900 Series, which is built on the same architecture as the 3900 Series, but which offers integrated virtualization and load balancing across a SAN. Sun's StorEdge 9900 has been updated to include the company's new StorEdge L6000 tape library and support for director-level switches from Brocade, McData and Inrange. In addition, Sun is expanding its storage service offerings to include remote response; three new storage centers; and consolidation, migration and integration services. Prices for Sun's midrange storage products start at under \$80,000, with advanced features such as virtualization spanning multiple arrays beginning at approximately \$100,000.

The big news here, of course, is that Sun has decided to become an enterprise storage vendor. That may come as a surprise to many Sun watchers, who have regarded the company, not inaccurately, as primarily a server vendor. The fact is that while Sun has offered storage solutions in the past, its software products tended to be provided by ISVs including Veritas, and its hardware was overshadowed by specialists such as EMC who provided enterprise storage solutions to Sun's customers. So what has sparked this new evolution? Sheer necessity. Over the past two years, vendors including Compaq and HP, and most especially IBM, have prospered with top to bottom enterprise product sets, eating the breakfasts of more narrowly-focused vendors. At the same time, storage was the last technology sector to be injured by the current economic climate, though it has certainly taken its lumps of late. Taken as a whole, Sun's new offerings set matches up pretty well, at least on paper, against its competitors'. It is obvious that Sun has spent a good deal of time and effort developing a solution set aimed at SAN users in general and the company's existing customer base in particular.

The challenge we see here is not with Sun's products or strategic approach, but in how the market for storage is currently shaping up. Like every other hardware sector, storage is exhibiting the pains of commoditization. The fact is that as hardware performance continues to improve and costs are driven down, it becomes increasingly difficult for hardware vendors to make a buck, which is an especially tough scenario for a company like Sun. At the same time, vendors including IBM have been presenting storage customers with a hard to resist combination of solid products and aggressive pricing. This is a game that IBM, which has been injured far less by the downturn than its competitors, can afford to pursue. Overall,

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we expect that Sun's new storage solutions will play well among the company's traditional enterprise customers. However, we believe the company is likely to find the going harder when it attempts to invade the turf of experienced, well-funded storage players.

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