



Market Roundup

January 11, 2002

This Week

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We Don't Need No Stinkin' PCs

By Jim Balderston

Gateway Computer saw its stock price erode this week as Moodys, which hinted at further downgrades in the future, reduced its bond rating to junk status. Gateway warned on Monday that earnings would be down and shipments were off 15% in the fourth quarter. Meanwhile IBM announced that it will outsource its NetVista desktop PC manufacturing business to Sanmina-SCI in a three-year, \$5 billion deal that includes, for an undisclosed sum, the purchase of IBM's desktop manufacturing facilities in the U.S. and Scotland by Sanmina-SCI. IBM will continue to directly manufacture laptop computers, and will guide development and design of the NetVista line. Finally, Microsoft announced a deal between MSN Hotmail and Telefonica Moviles which will allow Hotmail users to access email over Telefonica Moviles' wireless network in Spain and Latin America. Telefonica Moviles has 24 million cell phone users, while Hotmail claims 18 million subscribers in the markets that Telefonica Moviles serves.

There's an elephant in the living room and it's getting harder to ignore. If you still don't believe the PC is becoming a mere commodity, these stories should serve as a wake-up call. Gateway is having a hard time making money with increasingly thinner margins on a product that can be bought almost anywhere, and in many cases, for less. IBM has decided that it can see the handwriting on the wall, but unlike Gateway, it has a broader product and service offering and can strategically afford to outsource this portion of its business and actually have a chance of coming out ahead. Microsoft, the king of desktop PCs operating systems, is recognizing that it too must continue to expand its horizon if it wishes to create new revenue streams.

Underlying these developments is the emerging reality of Service Computing, which simply states that end users must be able to access the information they need regardless of where that information resides, what its format is, and the type of device used to access it. While in absolute terms access devices are becoming more powerful, in relative terms they are less powerful than desktop PCs, which means reading email can be done on a cell phone that has a fraction of the computing power of a desktop. What this implies is the need for more flexible, heterogeneous and autonomic computing environments that can deliver information as the user sees fit. In other words, the computing environment adjusts to the end user, not the other way around. Gateway is trapped by the fact that the PC is the last generation's access device, and much of its basic utility is being usurped by smaller form factors. Hence, the PC is no longer the anchor

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for all information access and the new opportunity revolves around delivering information to people in the means that most suits their needs; i.e., Service Computing. IBM sees the strategic limit of its PC business; more importantly it also sees the limitless potential of offering much of the back-end infrastructure of the Service Computing environment. Microsoft sees the need to expand beyond the PC and to offer services, including the relatively simple Hotmail example, which may be just one example of a broader variety of .NET services that will add layers of complexity, and in all probability profits, in the coming years. Nonetheless, the common theme is clear: the future of access is about much more than the PC.

Red Hat Announces Linux for Alpha and Itanium

By Charles King

Red Hat has announced the porting of Red Hat Linux 7.2 to Compaq Computer's Alpha processors with a target availability of Q1 2002. The port will support the same features as the recently released Red Hat Linux 7.2 for the 64-bit RISC-based AlphaServer platform. Compaq voiced support for the plan, and the port will be available directly from Compaq's public Web site. In a separate announcement, Red Hat announced the availability of Red Hat Linux 7.2 for the Intel Itanium processor, featuring the Red Hat 7.2 operating system with the 2.4 kernel and ext3 journaling file system. The company described the product as appropriate for developing or porting applications for high-end servers or workstations. The configuration supports the large address space of Itanium systems and can scale to systems with eight or more processors running as a single image. Red Hat Linux 7.2 for Itanium is currently available for purchase or download from Red Hat and will become available through the company's hardware partners in coming weeks.

Though not huge events, Red Hat's embrace of Alpha and Itanium reveals additional evidence concerning the shape of Linux's migration into mainstream computing while providing insight into Linux's intent to play in notable new venues. On the migration side, Red Hat's announcements provide further proof (if any were needed, and to the continuing consternation of the Open Source faithful) that Linux has little, if any, role in desktop computing as we currently use it. That situation is unlikely to change anytime soon, though we believe Linux could play an increasingly important role as computing becomes distributed across an ever widening array of locations and access devices. However, this week's Red Hat announcements and the company's release of Linux for IBM servers and s390 mainframes late in 2001 shows that Linux's growing importance in data center computing just keeps rolling along.

To our way of thinking, developing Linux 7.2 for Alpha and Itanium shows that Red Hat can play a subtle game when it wants to. Compaq's Q2 2001 announcement that Alpha would be retired over the next decade and eventually be replaced with Itanium-based products provoked howls of outrage from Alpha's fans. Despite the continuing discussions regarding high-end Itanium solutions, actual products are still some way off, and the notion that the venerable Alpha would eventually be replaced by a technology untested in the marketplace was greeted with a modicum of disbelief. From a purely practical standpoint, however, Alpha is now and Itanium is sometime later. But Red Hat's announcements, in concert with Compaq's long-standing support of Linux across its server products, have strengthened that unsteady balance. A robust Linux port to Alpha now, along with the promise of future 64-bit Linux solutions for Itanium, likely extends Compaq's product roadmap and also clarifies a logical migration path from Alpha to Itanium that should settle the nerves of antsy Alpha owners and perhaps buoy short term sales. If Red Hat delivers on its promise of solutions for Alpha and Itanium, they will significantly enhance their own

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products, along with polishing Compaq's and Intel's. In all, we regard these announcements as potentially good news for all three companies, as well as for their current and future data center customers.

Sun Micro Delays Solaris 9 for Intel

By Charles King

Sun Microsystems has announced that the company would defer the production and release an Intel-compatible version of its upcoming Solaris 9 operating system, focusing instead on products and services that will have the greatest effect on the company's bottom line. Sun had originally planned to release two versions of Solaris 9, one for its own UltraSparc chips and another for 32-bit Intel Xeon and Pentium processors. The company will now only release the UltraSparc version of Solaris 9 when the OS is delivered later in 2002, but said it would retain the option of producing an Intel-compatible version of Solaris at some future date. Additionally, Sun will honor service agreements with customers using previous Intel-compatible versions of Solaris, and continue to sell and support its Intel-compatible version of Solaris 8 until mid-2004.

At one level, this announcement hardly qualifies as news. Sun's original strategy behind the development of Solaris for Intel products was to capture mind share and seed the ground for future sales of its own products. But the primary users of Solaris-on-Intel solutions were universities, where Linux has increasingly become the dominant UNIX-based development platform of choice. In early 2000, Sun and Intel terminated an alliance designed to bring Solaris to the 64-bit Itanium processor, and it was only a matter of time before one company or the other walked away from the deal, making evident what has been apparent for years; that Solaris on Intel has virtually no commercial support.

So what does all this mean in the end? For one thing, it emphasizes the growing popularity of Linux, as well as the virtually total eclipse of proprietary UNIX operating systems in active development for the Intel platform. At this point, only Caldera's UnixWare OS and SCO's OpenServer are still technically in the hunt, though little has been heard from either company in recent memory. At the same time, every major UNIX vendor except Sun is actively pursuing Itanium strategies, often at the expense of their proprietary chipset and OS products. Where does this leave Sun? Increasingly isolated, in our opinion. As we have stated previously, the company's continual refrain concerning the superiority of its Solaris and UltraSparc products sounds eerily similar to the strategy Apple Computer has ridden to 3%+/- market share. A short analysis of this situation is that Sun is either incredibly smarter or considerably dumber than the competition. Given the company's considerable achievements, we have difficulty believing the latter, and we hope Sun will soon enlighten us by revealing a workable, believable long-term business strategy.

Safety, Not Security

By Jim Balderston

The Computer Science and Telecommunications Board (CSTB)—a part of the National Research Council (NRC)—has released a new report indicating that telecommunications networks are not properly secured despite the fact that existing technology, if deployed, would greatly improve this situation. The Board made a similar pronouncement almost a decade ago. The report argued that there was not so much a need for additional federal funding for Internet security research as for simply deploying existing solutions. The report indicated one incentive for improving security would be to make software vendors, systems vendors and systems operators legally liable for security flaws that are exploited.

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The CSTB report lays out a familiar theme, one that we have, in fact, heard for years. While it is clear that more could be done to secure individual computers, systems and network infrastructures, it also clear that the seminal elements of the message of this report and its decade-old predecessor are not being heard in the industry. The CSTB report expresses obvious frustration with that reality, yet at the same time appears to use language that we believe may help make security issues resonate more clearly and broadly, both within enterprises and among consumers. After considering the implications of the CSTB report, we will make this modest proposal: Stop talking about security and start talking about safety. At first glimpse this may seem like a relatively minor vocabulary alteration, but in it we see the seeds of actually getting past the single largest barrier to better security on access devices, networks and the infrastructure supporting those networks: people.

It is no secret that many security breaches – ranging from virus dissemination to easily accessed holes in security perimeters – are the products of human activities rather than machine failures. In the enterprise space, many security deployments are implemented because they are essentially on a checklist, though one suspects that the glib reading of a completed checklist is not sufficient to properly answer the question of how safe an enterprise actually is. Security is a means to safety, not the end. In fact, the term “computer security” means different things to different people. For most, from end users on up the food chain, computer security is an abstract term that is largely, if not completely, someone else’s problem, and a notion that most people simply cannot grasp in a meaningful way. However, “safety” is an idea people take to quickly, since they are familiar with the numerous precautions they take to make sure they are safe in their day-to-day lives. If discussions about computer security can be successfully couched in terms of safety, we believe that much of the frustration expressed in the CSTB report could be mitigated as a greater awareness develops from individual users to enterprise decision-makers.

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