
Market Roundup

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Pros and Cons in Blade Server Commitment

By AJ Dennis

In his keynote at OracleWorld, Michael Dell acknowledged that he believes the market for blade servers has real potential over time and proposed that Dell lead an industry-wide effort for blade standards that would help drive blade servers into a high-volume market. In a separate announcement, IBM indicated it will expand its blade platform by turning to its BladeCenter alliance partners to offer high-speed network connections from Myricom and a special rack-mount Layer 2-7 Ethernet switch from Nortel Networks as options for its eServer BladeCenter solutions. The Myricom Myrinet Cluster Expansion Card allows IBM blade servers to connect to high-speed Myrinet networks as well as to existing SANs. These cards will also use IBM's Optical Pass-Thru module to connect servers to existing networks without using a switch. Lastly, IBM announced enhanced blades featuring the 3.06GHz Xeon as opposed to the previously available 2.8GHz chips.

Although we would be among the first to applaud industry standardization, Dell's late entry into the blade market may make its standards initiative a tough sell. At the same time, it smacks of a hedge bet indicative of the reality that Dell is not quite ready for the blade games. Besides, in addition to IBM's own partnership alliance with the BladeCenter program, IBM and Intel have already formed an effort to standardize the construction of blade servers. At this point in the game, we believe that a standards effort from Big Blue and Intel would be seen as an attempt to create a higher common denominator platform to enhance interoperability as opposed to Dell, who realistically is far less concerned about higher denominator than widespread commoditization, not standardization, in the quest to obtain the lowest manufacturing costs. These two approaches illustrate the underlying differences amongst vendors that seek to differentiate on value add as opposed to price alone.

While Dell has successfully recast much of the PC business model, the conditions for this were ripe: a mature market, availability of standardized components, and a healthy dose of all PC technology being "good enough," this is not the case with blade servers, at least not at present. We would be very surprised if the competition is eager to forgo their value-added differentiation through the ruse of singing Kumbaya around the standards campfire only to set themselves up for a Dell-driven commoditization of the marketplace. One shortcoming of Dell's market following approach is an inability to see beyond the current quarter financials to develop new markets and opportunities. As Dell seems to range from a bottom feeder to a follower in the innovation space, this is an opportunity to see if a standard for standards' sake has any viability or if in fact the market (both customers and vendors) are more interested in new and creative application of value-added technology and business opportunity as opposed to simple sale price on yet another IT commodity.

Slow and Easy Goes the Revolution

By Jim Balderston

News reports indicate that wireless networking chips based on the 802.11b standard are being looked at as not competitive to cell phones, but instead complementary. Broadcom and Royal Phillips Electronics have both developed new WiFi chips that would enhance throughput to wireless devices, as well as cell phones, with the idea that the combination would allow for large amounts of data to be delivered over short distances through WiFi while smaller amounts of data would be delivered to devices in larger areas through next-generation cell phone networks. News reports indicate that such a combination is being seriously considered for future products. In other news, a number of companies are working on creating tiny computers that broadcast low-power, low-bandwidth signals that could be used for a variety of applications. The small broadcasting computers would be part of a larger

network, which they would connect to through a larger hub. These devices could be used to monitor and locate failed components on things like electrical grids, refinery machinery, or other complex technology installations.

The idea that making hybrid devices combining the best of both WiFi and cellular networks should not come as any real surprise; we don't see this as being any kind of inflection point. Considering that the cell phone is evolving into the all-in-one organizer, camera, wallet and, yes, communication device would seem to argue that such developments are a foregone conclusion. Making more functionality in the devices is not the real problem; it is building the networks that make them operational that really presents the big headaches. While we expect that such networks will come to be, we can't say that we are especially surprised or that these new networks indicate the further reach of the Internet revolution.

Instead, we see the advent of ubiquitous low-power, low-speed wireless networks as the kind of development that does have real change capacity. These small, inexpensive, simple, and single-function devices proffer the potential to greatly expand the reach of networks beyond the limits of complex and relatively expensive end-use devices. Mounting such transmitters on things like electric or gas meters, heart rate monitors, light poles, traffic lights, utility infrastructure and the like brings large, dumb objects onto the network, giving them a bit more "intelligence" than they have ever had in their past. What we see here, in the slow, simple networks that these devices could provide, is what might be called "backfill technology innovation," which, in short, takes a step back from the bleeding edge of a particular technology and actually addresses real needs instead of the holy grail of speeds and feeds. In this sense, these low-watt, low throughput networks offer the very kind of invisible and unnoticed extension of the network that, in our minds at least, is the evidence of the revolutionary impacts of the Internet and information networks in general. While sure to never show up in a Sharper Image catalogue, these dumb, non-bleeding edge network nodes may in fact make life safer, more predictable, and less prone to abrupt interruptions that can wreak havoc on modern life. We'd say that's pretty revolutionary, indeed.

Mid-tier Storage Attention from Microsoft

By Jim Balderston

Microsoft has announced the availability of Windows Storage Server 2003 along with a number of OEMs who would be selling it including Dell, EMC, Fujitsu, Siemens, HP, Iomega, and NEC, among others. Microsoft positions the product as a means to consolidate servers and upgrade data availability. The Storage Server 2003 offers Volume Shadow Copy Services, Virtual Disk Service, and failover clustering for Network Attached Storage (NAS). Storage Server 2003 is available in two versions: Enterprise Edition and Standard Edition. HP and Veritas announced that they will be actively selling the product immediately.

Microsoft has had a version of a storage server for the NAS market for some time now, the 2003 version being an upgrade of that product. For OEMs such as HP, a Microsoft storage server product could be a viable means to move more forcefully into the low end of the SMB market, providing customers with much-needed storage functionality within the familiar Windows environment.

That said, we are not sure how much further up-market this type of offering can really go. Companies of all sizes — especially medium tier and up — are feeling the pressures of data glut. With the amounts of stored data worldwide doubling every couple of years or so, it is not surprising that data storage has become a hot topic these days. Nor is it surprising to see a large number of storage vendors setting their sites on the mid-tier market. When one considers that a mid-sized company today probably has as much data stored in one fashion or another as a large, Fortune 500 company did just a few years ago, this trend line should be easy to understand. And there are no signs that the rate of increased data storage needs is going to abate anytime soon. Given this, we suspect that this offering from Microsoft will not only not make inroads beyond the low end of the SMB market, but in many cases become outdated for many of the customers it might now serve, who facing ever-increasing piles of bits, and who seek more reasonable and efficient means to manage and access their data, such as SANs. SANs may scare off some folks due to their relative complexity, but the unrelenting accumulation of data up and down the enterprise food chain makes the SAN option more and more appealing each day. Given the efforts in this regard by storage vendors, we predict that while Microsoft may make market share gains in the low end, most mid-tier enterprises will find themselves looking elsewhere for their storage and storage management needs.

 **The Joy's Gone Out of Sun**

By Joyce Tompsett Becknell

Sun Microsystems has announced that Bill Joy, Co-Founder and Chief Scientist, was leaving. Joy has been part of the brain trust at Sun, and took part in many technology developments at Sun including the SPARC microprocessor as well as the Solaris operating system. Recently he had been working on the teams responsible for Jini, technology which connects distributed systems, and Jxta, which is peer-to-peer technology. Joy will be replaced by current CTO, Greg Papadopoulos.

It's always a bit of a surprise to hear that a company legend is leaving. Sun went through a similar event last year when Ed Zander departed. Zander was perceived by many as the business driver of Sun, and Joy as the technological driver. With Sun continuing to struggle in the technology sector, one naturally wonders about the effects of Joy leaving on the company overall. Currently, the popular sentiment for Sun is one of outright gloom and doom; daily predictions of Sun's certain demise are easy to find. On top of this for months the financial markets have entertained rumours that everyone from IBM to Dell to Apple is considering buying or being bought by Sun in the next sexy mega-merger. While these are mostly wistful longings of creative (or bored) analysts, other industry titans including Michael Dell (a man whose company has been the subject of more M&A speculation than possibly anyone else except IBM) are quick to point out that Sun is a has-been and ready to join the legions of once-great companies that fell by the wayside. We do not believe the hyperbole that Sun is on its deathbed, but rather take the position that Dell's comments highlight the problems Sun is facing. Dell believes that Sun sells proprietary products that people aren't going to buy anymore. Dell of course is the vanguard of the Commoditeez-R-Us branch of the industry. In this modus operandi, a company such as Sun that focuses on home-grown technology and innovation will certainly struggle with the volume opportunities in the industry standard market. Sun have spent significant time addressing these problems with their Cobalt products, their ongoing love/hate relationship with Intel, and their awkward relationship with Linux. Bill Joy's leaving will have no impact on these ongoing issues as he lived in the rarified world of technology visionaries who are looking at the future, not the mundane minutiae of driving quarterly numbers.

At the same time, Sun position themselves as a technology innovator and believe that the future belongs to the innovators, which places it squarely in the R&D camp (along with companies such as IBM.) If this is true, then Sun have just lost a great innovator, and that could be a concern. For years Scott McNealy told the analysts that one of his goals was to find and retain a portion of the best brains in the industry. When one of the best brains is a co-founder and decides he's had enough, it's obvious that this is not positive for those left behind. For customers however, it should have no impact on the products and services they purchase from Sun. Certainly customers in Europe are less affected by Joy's leaving than by other issues as Sun continue to be strong in Germany, partially due to their relationship with Fujitsu Siemens, who traditionally build better performing Sparc/Solaris products than Sun do. Fujitsu Siemens is one of the few potential suitors that make sense, but this is not likely as long as McNealy stays at the helm being McNealy. Sun's problems are clearly business issues that require them to re-establish leadership through solutions (rather than boxes): strong software, services, and storage, as well as Unix and Linux systems, articulated through a laser-precise go-to-market strategy that will play well outside of Silicon Valley addressing midmarket customers as well as Sun's traditional stronghold of financial services and telecom.