
Market Roundup

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Fujitsu Introduces Itanium-Based PRIMEQUEST Mainframe Systems for Linux and Windows

By *Rob Kidd*

Fujitsu, with Intel, Microsoft, Red Hat, and Oracle, this week unveiled Fujitsu's PRIMEQUEST high-performance mission-critical server line, combining enterprise data center high availability and scalability in an Itanium-based Linux and Windows Server solution. PRIMEQUEST servers are designed for large-scale database applications and online transaction processing environments. The PRIMEQUEST server chip set delivers two key high-availability technologies: System Mirror and Flexible I/O (FIO). System Mirror allows memory modules and crossbar interconnects to operate in duplex mode and isolate errors without causing systems faults. FIO allows redirection of I/O to specific processing tasks, matching realtime performance requirements, to avoid operations disruption. Fujitsu is also committed to providing optimal infrastructure for business agility through its TRIOLE strategy, encompassing virtualization, automation, and integration. Fujitsu will introduce TRIOLE PRIMEQUEST server templates, enabling customers to easily integrate 64-bit mission-critical Linux and Windows technology into the datacenter. The new product line offers the PRIMEQUEST 440 with up to sixteen CPUs, and the PRIMEQUEST 480 with up to thirty-two CPUs. The product will ship in June 2005. No pricing information was announced.

PRIMEQUEST products are positioned to capitalize on Fujitsu's strong mainframe heritage, and are likely critical to Fujitsu's future success in the server market. The PRIMEQUEST offering may help offset potential declines and lackluster performance in other Fujitsu server segments. In the past Fujitsu has sold one- to- four-way Itanium servers with marginal success; for example, in 2003-2004 the company shipped less than 250 Itanium systems. PRIMEQUEST servers extend the Fujitsu portfolio of SPARC64/Solaris-based PRIMEPOWER servers, Intel based PRIMERGY industry standard servers, and IBM plug-compatible mainframes (PCMs). It is our opinion that the PRIMEPOWER, PRIMERGY, and PCM offerings will contribute less to Fujitsu's future server revenues. Putting this in perspective, Fujitsu estimates that over the next several years the market for the PRIMEQUEST category of open mainframe will be \$2-\$3 billion. This is certainly an attractive revenue stream, but Fujitsu's thrust in this market will face strong competition from IBM and potentially HP, depending on the latter's strategy under new CEO Mark Hurd. PRIMEQUEST servers are targeted toward enterprises wishing to lower TCO without compromising performance, scalability, and availability.

Fujitsu's partners have and will continue to benefit from the Fujitsu PRIMEQUEST relationship. Providing mission-critical software is a key strength of the global Fujitsu alliance. Fujitsu has collaborated with Red Hat and contributed to the hardening of the open operating system for business-critical usage through the contribution of 500 Fujitsu Linux developers. Under the Global Alliance Partnership, Fujitsu is working closely with Microsoft around the development of mission-critical RAS features and the optimization for industry-leading performance benchmarks. Both Linux and Windows are being treated relatively equally by Fujitsu in this high-end space. Microsoft certainly likes equality, but will likely attempt to leverage benchmarks to their advantage over Linux and open source. Oracle is to some degree being acknowledged as the de facto database for PRIMEQUEST open mainframe applications and high-end mission critical environments.

Intel may derive the greatest leverage from the Fujitsu alliance. Intel has positioned Itanium as the component solution for high-performance computing, a RISC replacement, and the core for enterprise high availability and performance in mission-critical computing. In June 2003 Intel and Fujitsu announced their plans to develop mission-critical mainframe class servers for delivery in 2005; to their credit both companies have delivered on schedule. PRIMEQUEST products released in June will be based on Intel Madison, but by the end of the year they will be deploying Intel's new high-end Montecito dual core processors and virtualization, and future Itanium processor generations such as Montvale and Tukwila will be at the PRIMEQUEST core. The expected result will be a continuing future revenue stream for Intel from its high-end processor line. This has the potential to challenge IBM's POWER in the high-end mission-critical processor market. Hopefully, Intel will quickly translate the lessons learned with Fujitsu across its enterprise-oriented business initiative.

IBM is Lighting the LAMP

By Jim Balderston

Speaking at the Open Source Business Conference this week, IBM vice-president of technology and strategy Irving Wladawsky-Berger discussed the importance of open source technology as part of a larger discussion on coming IT developments. Wladawsky-Berger told the audience that that open source technology was changing the culture of businesses and warned that those failing to adopt open source innovations would be at substantial risk of failure in the near future. Wladawsky-Berger told the audience that a revolution in business process was in the offing from ongoing open source development. Earlier this year, IBM announced a partnership with Zend Technologies to develop and deploy applications built on the PHP Web development language using IBM's open source Cloudscape database which is derived from the Apache Web Server.

To many, the open source development movement is seen as being completely about Linux and its prospects. But other offshoots of the open source community are also making waves, as evidenced by the growth of application development using a Linux, Apache, MySQL, and Perl/PHP/Python (LAMP) stack as the base of developing new Service Oriented Architecture (SOA) offerings. Wladawsky-Berger's observations come at a time when companies like IBM are keeping a close eye on these developments, as noted in a recent Linux-focused IBM analysts' event, at which LAMP and its associated technologies was discussed in depth.

We have maintained in the past that de facto IT technology standards radiate outward from large enterprises down through the food chain to mid-tiers and SMBs. We see no reason to reconsider that observation. Yet with the development of the LAMP ecosystem, we see an intriguing opportunity to watch how IT vendors can balance the competing interests of selling established IT products while at the same time taking note of and assimilating emerging technology trends like open source development in general and LAMP in particular. Clearly companies like IBM have decided to keep an eye on these developments, but much more will be needed to ensure that they are poised to identify and adopt those emerging technologies to make the most of existing market momentum. IBM has experience in this regard with its early endorsement of Linux, which allowed the company not only to be an early mainstream member of that particular bandwagon, but also to add velocity to Linux by certifying with the full faith and credit of old Big Blue. We are looking forward (in both senses) to watching how IBM sorts and picks out which of these new emerging technologies to assimilate, certify, and then disseminate outward from the heights. Such an effort may become a standard business school example of how to, or not to, remain relevant in an ever changing IT landscape. Pass the popcorn.

IBM Gets NAS-ty with NetApp

By Joyce Tompsett Becknell

IBM and Network Appliance (NetApp) have announced an agreement for IBM to become an OEM of NetApp's network attached storage (NAS) and iSCSI IP/SAN products, including the NearStore and NetApp V-Series (NAS Gateway) systems. The deal will also include the software associated with these products. As part of the agreement, the companies will also promote enhanced integration of NetApp's software into IBM's Tivoli Storage Manager, IBM's backup and recovery software. NetApp will also position IBM's tape products as its preferred tape offering to NetApp customers. IBM-branded products are expected later in Q2 and Q3.

IBM is continuing to reshape and hone its storage portfolio, to make it worthy of standing alongside the robust eServer family. Over the last year, IBM has launched new high-end and upper mid-range products, as well as enhancing SAN and software products. The agreement with NetApp enhances the company's credibility by providing an industry-leading NAS solution to complement the recent xSeries-based entry-level NAS offerings. The move will help IBM's overall competitive positioning. NetApp meanwhile has had a good position for the mid-market and channel delivery. Opening up a channel through IBM means significantly more enterprise exposure from IBM, who seems to have salespeople everywhere imaginable. Getting access to IBM's deep R&D pockets is no small gain either. Although IBM and NetApp are cautious about committing to future joint development, it is safe to assume that technical interaction will blossom where they find common opportunity. Partnering has a much shorter time-to-market shot than developing a product from the ground up. Both companies believe they will be in a better position to compete against the likes of EMC and truthfully, there is safety in numbers.

For end users who are inclined to use one company or the other, the implications are fewer vendors to purchase from and better integrated service for the range of storage products. Although IBM's Tivoli products already support NetApp, this cozy relationship should drive better guarantees of performance from both companies. Rumors may arise, but we don't believe it matters from a customer or end-user viewpoint whether IBM ultimately purchases NetApp. EMC and Dell have demonstrated that cohabitating in a market space can often be more harmonious as strongly independent parties can maintain their own space and still have good partner relationships. The benefits for customers are built in with the technical and marketing interaction occurring now. For the channel, the degree of overlap of partners will determine the course of action. Bi-relationship partners will probably side with the dominant vendor, and NetApp in particular could benefit from increased exposure to IBM's partner base.

Sun to Elect Final Members of the Governing Board for OpenSolaris Initiative

By *Rob Kidd*

In late 2004 Sun announced plans to open source the Solaris operating system and other pertinent intellectual property. Over the last few months the company has been working on technical, licensing, and other issues with respect to the initiative. This week the Sun open source initiative announced the creation of the OpenSolaris Advisory Board and selected the first five board members. The selection includes an independent consultant, an engineer from the community at large, Apache Software Foundation co-founder Roy Fielding, and two Sun employees. Sun Operating Platforms Group Vice President Glenn Weinberg said the board was created to steward the evolution of the OpenSolaris community towards self-governance.

Sun is perhaps unique in the industry in trying to drive a company proprietary technology, Solaris, as an industry standard via a formal standards initiative that the company establishes and enables. This is in contrast to its past efforts to drive Java as a standard through ISO, but which were abandoned once the company was not able to control the process to the extent it desired. Nevertheless this represents another try by Sun to drive a company-specific set of technologies to a more formal standard. To some extent Apache achieved its open status by a similar approach, if not a different implementation. We believe that this effort may succeed, if developers will step up to the plate and architect applications that work with the broader body of open source technology. However, given Sun's historic proclivity to stack the deck in its favor, it would be well advised to avoid the urge to populate the OpenSolaris Advisory board with Sun employees or independents with a Sun bias. One of the first Advisory board goals should be to create governance that sets the rules for the OpenSolaris community to oversee its own operation from meeting frequencies and protocols on how to manage the contribution process without dictation by Sun. In order to make this effective, board members should bring expertise in setting up open-source communities but have diverse backgrounds, experience, and collegial networks. Support and involvement in other open source projects will also be key to the OpenSolaris Advisory Board goals.

There is a lot in this for Sun should it succeed. OpenSolaris could help drive growth and adoption of a diverse open source community that could help fuel Sun with opportunities for value-added offerings. OpenSolaris effort could help drive the company's long-term viability. The developer and user community would benefit in that they gain mature, supported technology that they can effectively build on, and that offers an attractive economic

proposition. Of course, Sun is not the only vendor taking this approach, and in many respects is late to the start. Whether the company is successful or not in its quest for long term viability and marketplace relevance will be determined by developers and users in the marketplace who have many options, most notably Linux and other 64 bit hardware platforms. Winning the mindshare of these individuals will be key to Sun's success in driving OpenSolaris. Without this support from the developer community, OpenSolaris may find itself no more relevant to the open source community than Solaris x86 is for the commercial marketplace.