

Market Roundup

September 14, 2001

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The Internet and Our Nation's Tragedy

By Jim Balderston

Like most Americans, as well as many people of the world, we at Sageza were presented by this week's horrific events in New York City and Washington D.C. with terrible images, conflicting emotions and a quest for understanding. While we find ourselves stricken by these events, we believe they offer an interesting opportunity to note the role of the Internet in this tragedy's aftermath. In many ways, this week offers a milestone for the growing influence of Internet in our daily lives and points to a much greater degree of integration into our lives in the near future. In the hours after the terrorist attacks, we saw the Internet become a primary source for people seeking three distinct types of interaction. While related, they served very different purposes. We note these activities as communication, information and community.

People sought to communicate with loved ones. AOL noted that it processed over one billion instant messages following the events in New York and Washington. People used email to track down others as well and to provide assurances (in most cases) that everyone is all right. People also went to the Web for information. Web sites like MSNBC and CNN had record amounts of traffic as people sought out specific information that may not been delivered in a timely fashion on other media outlets. Information about survivors also became paramount to the populace, as Web sites sprouted offering what amounted to a bulletin board of messages for those seeking missing loved ones. No other media could accommodate such and undertaking with the necessary timeliness required in this situation. The Internet also became the place where condolences and expressions of community were formed in a matter of hours. People from around the world could co-mingle and offer or find comfort to or from others. This relatively new medium became the go-to option for those with access to it.

Yet while the Internet stood and did not reach its capacity — like many phone networks — it did feel the strain. Performance degradations were the norm in the hours after the attacks; some sites like CNN stripped their content down to allow for great numbers of page views. While we see the populace's reliance on the Internet as a real gauge of its increasingly important role in the fabric of our daily lives, it is also clear from the strain put on the system that much more work needs to be done to make it as reliable as we clearly desire it to be. While the system stood, it should be noted that it was not a direct target of this attack, and such an attack very well could have severe impacts upon it in the future. While we search for military answers to this tragedy, we believe that further investment in infrastructure — like

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the Internet – will be an equally essential task as we attempt to navigate this new and unknown landscape we have been so dramatically hurled into.

EMC Advances Symmetrically

By Charles King

EMC announced a series of upgrades in its Symmetrix 8000 systems that the company claimed would help customers achieve "hyper-consolidation" of information resources in mainframe and open systems computing environments. The changes include introduction of three new Symmetrix models, the 8230, 8530 and 8830, raging in capacity from 3.5TB to 69.5TB in single cabinets, which can be configured with up to eighty 333MHz PowerPC processors (up from a total of thirty-two 266MHz PowerPC chips in previous models). A new version of the Enginuity operating system (5568) supports up to 64GB of global cache and up to 8000 addressable volumes, and the new Symmetrix Global Cache Director allows cache memory to be partitioned into sixteen independent and concurrently accessible memory regions to support storage multi-tasking. Also new is the company's 12-Port Fibre Channel Director, which enables a single Symmetrix unit to be connected with up to ninety-six direct hosts. In addition, EMC announced software enhancements designed for IBM's z/OS and OS/390 mainframe environments, including improved FICON support, support for IBM's GDPS proprietary clustering and failover solution and RAID-10 configurations for the OS/390. The new Symmetrix 8000 products are currently available, with pricing depending on the model and configuration chosen.

EMC's Symmetrix 8000 announcements provide an interesting window into a pair of developing storage industry trends. Over the past year or so, many have asserted that storage is moving firmly onto the network, a situation where distributed storage devices use conventional Ethernet or high performance networking solutions such as Fibre Channel to move enterprise data and applications closer to the employees who most need them. Conventional wisdom holds that NAS devices' dramatically lower cost and capacity for deployment via Ethernet has given them a leg up against more expensive, if robust centralized storage solutions such as EMC's Symmetrix products. At the same time, despite the tech industry and general economy's ongoing case of the vapors, the market has seen continuing bursts of activity in the enterprise storage sector, with high profile pairings (such as Sun Micro and Hitachi's recent agreement) vying for headlines against IBM's revitalized forward surges.

Faced with constant attacks on multiple fronts, what does enterprise storage leader EMC do? While the company has appeared to be moving lugubriously of late, the new Symmetrix announcements suggest EMC is back on the offensive, focusing on the performance and market fundamentals that took it to the head of the pack in the first place. By significantly enhancing the power, capacity, connectivity and flexibility of its top line storage products, EMC is clearly throwing down a gauntlet to the "NAS is God" crowd by implicitly suggesting that at the enterprise level, performance trumps price. Additionally, by offering integrated software and support for z/OS and OS/390 mainframe environments, EMC is casting a similar gauntlet Big Blue's way, where IBM's storage group has been aggressively selling its Shark product line to EMC's enterprise customers. Producing key software for z/OS and OS/390 might simply be EMC's way of suggesting that turnabout is fair play, but the company is also obviously positioning itself for a run at IBM's mainframe clients. What the customers will make of the new Symmetrix products is anyone's guess, but if nothing else EMC's announcements suggest that the company is ready and willing to take the battle for storage leadership back to its competitors.

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Telecommuting the Target of Cisco/Verizon Initiative

By Jim Balderston

Cisco Systems and Verizon announced a joint effort to deliver what they termed a "teleworker" solution to Fortune 1000 companies and government offices. The initiative is designed to offer DSL and ISDN-related products and services for the home office of Fortune 1000 and government employees. Cisco will provide its 800 Series DSL and ISDN routers, which include firewalls, VPN services, quality of service features and remote management capabilities. Verizon will contribute connectivity offerings and network management services to the joint effort. The stated goal of this initiative is to provide "identical business-class network access at home and the office."

While telecommuting is nothing new to many employees, to date it has been largely an ad hoc affair, with employees installing various forms of high-speed access connections at their homes and subsequently embarking on an ongoing support wrangle with IT personnel in the mothership. We see this initiative as an early stage attempt to address demands created by the ever-evolving work environment. Offering employees viable alternative work environments that are standardized and responsive to employee needs is a step in the right direction. It is certainly high time that technology offerings begin to focus on end user needs, instead of the gee-whiz aspects of the technology itself. While the Cisco/Verizon partnership begins this process, much more is needed to provide the end-users with tools and technology designed to seamlessly allow them to do the job at hand. This ideal is far from realized. End users of present day IT offerings still spend a significant percentage of their energies getting up to speed on the latest technology or application thrown in their direction. Simply stated, vendors of these products are going to have to abandon the position that they know what is best for customers and begin to mold their offerings around a much finer granularity of user needs. We're not there yet, but that's where IT vendors must be heading if they expect to be successful in the coming years.

Clouding Sun's Day? IBM Introduces New Midrange eServer

By Charles King

IBM introduced a new UNIX-based, eight-way midrange server aimed at the Web server, Java applications, telecommunications and corporate data center customers. The rack-mounted IBM eServer p660 Model 6M1 is available with from two to eight processors, and can be ordered with either the company's new copper and silicon-on-insulator 750MHz RS 64IV chipsets or earlier 500MHz RS 64IV model chips. The new servers come equipped with self-managing and self-healing technologies developed from IBM's larger UNIX and mainframe systems, including Dynamic Processor Deallocation, and Chipkill, an error checking and correction (ECC) technology that IBM claims is designed to virtually eliminate memory-based system failures. Additionally, the Model 6M1 meets NEBS Level 3 standards for disaster resistance, and also supports IBM's Capacity Upgrade on Demand capabilities, which allows customers to activate additional processors as they are needed. The p660 runs IBM's AIX 5L OS, which features a strong affinity for Linux applications. Prices for the new machines start at \$61,995.

Virtually every technology product release targets the competition in some way, and the obvious figure in IBM's crosshairs this time around is Sun Microsystems' popular Sunfire 4800 midrange server, which sports up to 12 UltraSPARC III processors. In one sense, how IBM's and Sun's products stack up against one another technically depends entirely on whose benchmark tests you choose to believe. Both products utilize 750MHz chipsets, but IBM's new copper and silicon-on-insulator technology likely puts it a step ahead of the older UltraSPARC III technology. While the Sunfire 4800 boasts higher total RAM capacity

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(96GB to the 6M1's 64GB), the IBM machine's clustering and PCI expansion capabilities could prove especially attractive to large enterprise clients.

But the p660 6M1 announcement contains two intriguing points that will likely define IBM's server strategy vis-à-vis Sun over the near and long term. The first of these revolves around the self-managing and self-healing capabilities that IBM is transferring from its high-end server and mainframe systems to smaller, less complex UNIX systems. If successful, these technologies could offer IBM's midrange UNIX products levels of stability and endurance that are critically important in ebusiness, data center and telecommunications computing environments. Additionally, while companies including HP and Compaq share IBM's strategic embrace of Linux, Sun's support of open source is cursory at best, and is focused largely on lower-end offerings such as its Cobalt server appliances. Overall, we believe IBM's devotion to Linux offers a clear delineation between its products and Sun's that will grow ever wider over time. To our way of thinking, the company's introduction of its new midrange servers offers ample evidence of continuing, solid steps in that direction.