Market Roundup

May 3, 2002

This Week

The Bionic Network System: IBM Thinks So
EMC Launches Centera: New Storage Solution Designed for Fixed Content
Digital TV Gets a Boost? What Follows is Much More Interesting

The Bionic Network System: IBM Thinks So

By Jim Balderston

This week marked the one-year anniversary of IBM's Project eLiza by rolling out a new series of features aimed at eventually providing a self-healing, self-managing computer and network environment. IBM has dubbed this over-arching goal as "autonomic computing," and its latest offerings are designed to ease IT manager hand-on intervention in ongoing system and network maintenance, management, and reconfiguration. Among the offerings announced were the Enterprise Workload Manager, Enterprise Identity Manager, and the ITS Electronic Service Agent. The Workload Manager automatically measures usage of applications and network capacity to balance and enhance performance among a group of servers. This technology is designed to not only work with IBM products, but also those running Microsoft, Linux, or UNIX operating systems. The Identity Manager allows IT to more easily assign rights and privileges to users, enabling them to move across a multi-server network without constantly have to re-enter authentication information. The Electronic Service Agent will allow for more automated delivery of diagnostic and repair solutions on IBM eServers. IBM said it would begin beta testing these new offerings with final delivery by the end of the year.

IBM seems to be listening to the market by offering technology that will improve the innate intelligence of enterprise networks. While others like Sun and HP have made announcements in this direction, none seem to have been able to put both real products and a coherent message behind those products. IBM's three latest additions to the Project eLiza initiative tell us that IBM understands enterprise networks have become simply too complex, and demand too much near-real-time flexibility to be managed manually. In other words, IBM recognizes that it is time to automate the traffic signals.

The present enterprise IT landscape is increasingly complex, but it is not at the point that it can't be managed (at least nominally) by hand. The good news for IBM — and bad news for those companies lagging behind in this space — is that the market for these products is just around the corner, driven by the intersection of the high costs of IT personnel and a languid economy demanding more capability at higher efficiency. We suspect the demands placed on IT infrastructure by business requirements like automatic software updating, video conferencing, mobile access, multi-form factor access, heterogeneous operating system environments, cross company partnerships, and integration are the kinds of things that make

836 W El Camino Real
Mountain View, CA 94040-2512
650·390·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Munich +49 (0) 89·4201·7144
Amsterdam +31 (0) 35·588·1546

sageza.com
info@sageza.com

enterprise IT managers wake up in the middle of the night in a cold sweat. Perhaps this is the lot of enterprise IT personnel for all eternity, regardless of the level of autonomic computing IBM delivers. But we suspect such nights will be less frequent for these folks. In the short term, we can foresee IBM's competitors losing more sleep as the value and need for such offerings turn from wistful daydreaming to outright commercial necessity.

EMC Launches Centera: New Storage Solution Designed for Fixed Content

By Clay Ryder

EMC this week announced EMC Centera, a software-driven, online storage architecture designed to address the unique information storage requirements of fixed content such as electronic documents, digital x-rays, movies, email, check images, and broadcast content. The company indicated this is the first Content Addressable Storage (CAS) solution to hit the market. EMC Centera employs content-based software that seeks to simplify management, reduce costs, and ensure content uniqueness while delivering the scalability needed for terabyte- to petabyte-level fixed content requirements. Notable Centera partners include Agfa HealthCare, Cap Gemini Ernst & Young, CommVault, Computer Science Corporation, Documentum, FileTek, Fujitsu, Hummingbird, IXOS, Kodak Medical Imaging, KPMG, Legato, Mobius, Sarnoff, Scientific Software, and Virage among others. EMC Centera is available immediately. List price starts at $101,500 for Centera hardware and $103,200 for Centera software, collectively representing $204,700 for a 5-terabyte protected or 10-terabyte raw capacity system configuration. Centera implementations scale from 5-terabytes (protected) to more than one petabyte, in 2.5-terabyte increments.

As growth in the number of network-based applications and interconnected networks continues, it is generally understood that there is a corresponding growth in computation and connectivity. Yet an oft-overlooked reality is that all of this computing and connecting results in more data that needs to be intelligently stored and managed. There have been many developments in NAS and SAN in recent years, and these have provided a valuable storage solution, but they are physically oriented in nature and require that the user have some understanding of where data is located in order to access it. At the same time Internet and Intranet deployments have driven the number of transactions upward, but these networks also drove a new type of content that is static in nature and whose usage patterns can tamper off dramatically yet need to be accessible at a moment's notice. This growth and changing nature of data can incur additional management burdens such as ensuring that appropriate data resides within the appropriate storage solution and that the solution is effectively utilized without approaching dangerous loading levels and so forth.

We believe the new approach taken by EMC Centera addresses many of the critical storage issues that enterprises face including ease of storage and retrieval, scalability, non-linear usage patterns, and the reality of network-based applications and Web Services. The growing complexity of network applications and content is driving the need for full service intelligent storage; in effect, storage that is as easy to use as any other network service. The coat check approach of Centera frees application developers and users from needing to know where data physically lies, which can in turn make data more easily accessible for additional applications and uses. Given the recent UC Berkeley study that found that the amount of electronic information continues to double every year and more than 50% of all new digital information is fixed content, this approach seems well positioned to meet the burgeoning demands for intelligent information storage, access, and management. Although there are storage specialists who would prefer to maintain the complexity (and anxiety) of many current storage solutions, we believe EMC's approach offers

836 W El Camino Real
Mountain View, CA 94040-2512
650·390·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Munich +49 (0) 89·4201·7144
Amsterdam +31 (0) 35·588·1546

a glimpse into a future where storage can be made simpler, more cost effective, and perhaps even transparent to the end user.

Digital TV Gets a Boost? What Follows is Much More Interesting

By Jim Balderston

Senator John McCain this week scolded television broadcasters for their failure to meet a federal deadline to broadcast digital television signals. McCain also threatened Congressional intervention if the broadcast television industry did not speed up the transition from analog signals to digital technology. Broadcasters have until 2006 to complete the transition to digital television and eliminate their analog (NTSC) transmissions. According to the National Association of Broadcasters, 324 television stations are broadcasting a digital signal, despite the limited market penetration of HDTV receivers. Meanwhile, cable television industry groups promised to meet a set of voluntary guidelines established by FCC chairman Michael Powell earlier this year. The ten largest cable operators — AT&T Broadband, AOL Time Warner, Comcast, Charter, and Cox among them — promised to offer HDTV capable services by January 1, 2003 to the 100 largest cable markets with more than 25,000 subscribers. The FCC guidelines ask cable companies and broadcasters to speed the adoption rates of digital television, as well as pushing manufactures to phase out NTSC TV sets by the end of 2006.

Senator McCain may have a beef with television broadcasters, or he may have political motivations, but it is clear that something has to drive the availability and hence market penetration of digital TV signals and capable receivers, be they TV, computer, or wristwatch. While Commissioner Powell's guidelines are voluntary, McCain's threat of Congressional intervention should serve as a motivating force. Often spoken of in hushed tones, the Holy Grail of a television/Internet convergence has largely been in the realm of fantasy, stymied in large part by a TV resolution standard set in 1939 when screen sizes were often 8 inches or less in size. If McCain and Powell are effective in speeding the adoption of digital TV, we believe that the grail might be attainable.

Digital TV not only means better picture quality, but more importantly it implies increasingly sophisticated and complex interactions between the broadcaster, cable/satellite provider, and the consumer. HDTV's significantly higher resolution provides not only a realistic platform for email (perhaps in a window on a wide screen set), it also portends the development and distribution of sophisticated set-top or integrated service boxes placed in consumers' homes. These boxes, which the cable industry pledged to begin purchasing, still have substantial evolution in order to not only enable digital TV and Internet convergence, but potentially to rewrite the rules for information and entertainment delivery and distribution within the home. Already HDTV capable TV sets are being offered with IEEE 1394 (Firewire) technology to allow other devices such as computers, sound systems, DVD players, VCRs, etc., to be connected with a single "plug-and-play" wire. Here the television has the potential to become a home server connecting a myriad of devices and new services. It's unclear whether Senator McCain sees the industry attempting to stall the complete cut-over to HDTV the way US auto manufacturers tried to delay the implementation of pollution standards in the 1970s, resulting in some of the worst operating vehicles of modern times. We wonder if too many tech companies have written off the Holy Convergence as pure fantasy. We believe the opportunity has much more form and substance than a myth. Foot dragging by the industry will not only hurt the entertainment industry, but will likely have a negative impact on telecommunications, computing, the Internet, and the adoption of Service Computing an integral part of our lives.

836 W El Camino Real
Mountain View, CA 94040-2512
650·390·0700 fax 650·649·2302
London +44 (0) 20·7900·2819
Munich +49 (0) 89·4201·7144
Amsterdam +31 (0) 35·588·1546