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Big Blue's Big Strategy: Anything but Singing the Blues

By Clay Ryder

IBM today articulated its strategy to continue growing its position in the IT marketplace. At a press event in New York City the company stated it would deliver new secure technologies that facilitate the sharing of servers, storage, and networking gear with the aim of helping businesses collaborate more securely and efficiently. In addition, IBM expressed its belief that there has been a dramatic rise in collaboration between companies and institutions that has begun to blur the traditional lines of IT and will require traditional transaction processing to be augmented by a collaborative processing approach that more tightly and securely integrates technology, processes, and personnel.

The focal point of the strategy was the given in the following three announcements:

◊ **The IBM System z9 Mainframe:** The result of a three-year, $1.2 billion development effort is designed to act as an IT hub that can easily be interconnected to share information such as customer identities and personal data without comprising security. The System z9 is designed to protect confidential data through encryption not only on the mainframe, but wherever data is stored such as tapes. The new mainframe is able to encrypt tapes that are frequently shared between companies while providing a centralized facility to manage encryption keys.

◊ **Virtualization Engine 2.0:** Providing the ability to pool, manage, and optimize IT resources across servers, networking gear, and storage to improve the utilization of IT assets, VE 2.0 enables virtualization across the entire enterprise and beyond, through open interfaces, virtualization building blocks, and Web services to connect IBM and select non-IBM server and storage systems. The latest Virtualization Engine will integrate with technologies from industry players including Cisco, VMware, and Network Appliance, to expand the pool of information sharing across the datacenter.

◊ **Formation of Blade.org:** IBM stated its intention to form Blade.org, a collaborative organization focused on accelerating the expansion of solutions for the IBM BladeCenter. The organization is intended to spur development of blade technology in areas such as VoIP, vertical solutions, security, and other technologies. Companies that have expressed an interest in being founding members in the community include Brocade, Cisco, Citrix Systems, IBM, Intel Corporation, Network Appliance, Nortel, Novell, and VMware.

IBM indicated that it would focus on technologies such as virtualization, embedded open standards, and encryption to help ease interconnections of IT resources to enable organizations to share information securely and in real time. In essence, IBM is seeking to further the transition of organizations into demand-driven businesses, or in the parlance of Big Blue, on demand enterprises.

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Today's announcement is prime example of what can happen when a vendor has money and decides to invest it in R&D. A billion dollars or so later and suddenly there is a computer that out-performs, 2 to 1, one of the biggest, baddest systems ever, the T-Rex. Geeks and propeller heads rejoice: there are over 18 billion

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transistors in a fully configured 54-way System z9 and the ability to scale to stratosphere and perhaps a bit farther into outer space. This is a serious, rubber-burning, ultimate-performance IT racing machine.

But wait a minute, isn't the z9 akin to a formula racing car? Sure, these are terrific in a well defined and safely enclosed environment like the race track, but they are completely impractical as an everyday transportation solution. Well, if one thinks superficially about the z9 perhaps that is all there is. However, to us what is really compelling about the System z9 is that it transcends the box itself and speaks of a future full of technologies originally developed both on the z9 and its predecessor zSeries such as virtualization, centralized management, etc., that are being made ever more available to the general marketplace.

Virtualization represents one of the most significant achievements in IT during the last few years; that is, virtualization of IT resources: not just CPU cycles, but memory, storage, networking, and increasingly just about everything else IT. This is where, not surprisingly, the Virtualization Engine 2.0 with its many components including VE Console, IT Director, and Virtual Resource Manager to name a few, comes into play. By obscuring the physical properties of the computing environment, applications and data, users and their applications, are able to focus upon the business process rather than the underlying hardware. As a result, business process can dictate IT configuration and usage patterns, not vice-versa. While virtualization is not new to IBM, this latest offering raises the competitive bar for what constitutes state of the art virtualization. Implicit in the virtualization of resources is the virtualization of their management, and there is where the System z9 fits in nicely.

In a virtualized reality the z9 through its extensive virtualization support can become the centralized resource that manages all the virtual resources on the network, be they mainframes, other supported servers, Linux solutions, storage, or networking components. While some may see this as a dead ringer for the evil Master Control Program in the Disney movie TRON, we see the reality as far more benevolent. We believe that organizations grappling with server sprawl and cost pressures in maintaining their heterogeneous IT environments will welcome the centralized capabilities typified in the System z9 and the Virtualization Engine.

OK, this sounds good for the rarified high-end computing opportunity, but what about the rest of us mere computing mortals? We believe the impact of IBM's direction for its high end will be felt throughout IT given a little time. Virtualization has already made an impact in the mainstream of entry-level systems, consolidation remains a hot topic, and blades have become the state-of-the-art for scale-out solutions, even taking on an increasingly appliance-like form factor. So as we have noted many times before, there is natural migration of technologies originally developed for high end that moves these abilities to the mainstream over time. To our way of thinking, investments in R&D (an increasing rarity these days) such as those made by IBM in the System z9, virtualization, centralized management, and so forth, will bear fruit throughout the IT ecosystem.

While the strategy and technology announced today do not reflect the entirety of IT nor provide the solution to all of the challenges that organizations will continue to face, we believe the quest for innovation and the corresponding investment in R&D are the right answer to create long-term solutions to IT challenges. Although there remains much work to do in realizing a truly virtualized, centralized, and interconnected demand-driven computing environment (data storage architectures come to mind), the efforts of Big Blue manifest today should not be underestimated. The issue is not whether the mainframe is dead (we believe that it has proven itself to be far from a flat line), nor whether the mainframe is the right solution for every computing need. Rather, the realization that all IT resources ultimately need to work together in a seamless, secure, and painless fashion is what today's announcement is about. This is a laudable goal, not to mention a significant undertaking, but one with which we agree wholeheartedly. While other IT vendors may be singing the blues, we see Big Blue doing nothing of the sort.