
Market Roundup

June 16, 2006

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HP Announces BladeSystem c-Class

By *Clay Ryder*

HP has announced the HP BladeSystem c-Class that features innovations in virtualization, power and cooling, and system management, which seek to reduce operational, and capital expenditure costs for the data center. The company stated that with the new design, an average enterprise data center can realize over a three-year period system acquisition cost savings of up to 41%; data center facilities savings of up to 60%; and initial system setup time cost savings of up to 96%. New c-Class server blades include the HP ProLiant BL460c and the BL480c, which matches the features of the HP ProLiant DL380. The HP Virtual Connect Architecture enables customers to wire just once; administrators can manage resources dynamically through virtualized Ethernet and Fibre Channel connections that feature 5Tbps of aggregate throughput. The BladeSystem c-Class and StorageWorks SANs can simplify IT consolidation by integrating the server-to-storage interface with 4Gbps Fibre Channel SAN switches and redundant, embedded 4Gbps Fibre Channel HBA. This also provides a high-availability connection to existing SANs while reducing the number of Fibre Channel cables required by up to 60%. HP Thermal Logic Technologies allow for high density and high cooling so that organizations can minimize energy costs and ensure application availability through thermal control at the component, enclosure, and rack levels. The company also stated that the c-Class architecture can deliver power savings of up to 40% or more over traditional rack-mount servers. In addition, HP Insight Control Management along with the new HP Onboard Administrator brings simplified system management through word and graphics based interface so organizations with any level of IT expertise can set up, control, monitor, troubleshoot, and repair the c-Class infrastructure through a web browser or two-inch, interactive LCD window. HP indicated it plans to upgrade product roadmaps for the current BladeSystem p-Class through 2007 and ProLiant p-Class server blades will be supported through 2012. BladeSystem p-Class systems are interoperable with c-Class through common management tools, networking interfaces, power, and racks. The HP BladeSystem c-Class is expected to be available in July, with pricing to be released at that time.

Blades are one of the most innovative, if not exciting, technological advancements of the past few years. The potential for reduced server sprawl, improved real estate efficiency, and enhanced system performance and flexibility is considerable. While IBM was an early proponent of this technology, it is certainly not the only vendor that has embraced the form factor; HP has been plying its wares for sometime as well. With this latest HP announcement, we see focus around some key capabilities that the company has been promoting in its other server offerings, namely cooling, management, and operational efficiency. Of particular note, the system management capabilities aim to let non-IT wizards be able to configure, deploy, and monitor the new BladeSystem. This will likely prove a popular feature with SMBs, which of course are a logical customer base for blade solutions overall. In addition, the focus on reduced cabling, even in the context of blade servers in general, illustrates the desire of HP to enable what are physically as well as philosophically tidy solutions. By embedding switching within the frame itself, interconnections between processors and storage are further simplified as well as allowing for flexible movement of components between enclosures without consideration to storage access. Further, HP's recent focus on improved cooling and power consumption shines on the c-Class as well. In this age of increased concern about operational and energy costs as well as longer term environmental sustainability, this will likely become a serious differentiator as server consolidation initiatives continue to progress.

It is clear that HP has put a lot of thought and commensurate design resources into the c-Class, and we suspect that the engineering teams will feel proud of their achievements, and rightly so. HP has always excelled at engineering, and there is little reason to believe this would not be the case with its BladeSystem. One concern we have is that with the new blade chassis, it seems that HP is placing existing BladeSystem customers in a quandary. While the p-Class blades and chassis will be supported for some time, customers who want to take advantage of the c-Class features could find themselves owners of two sets of blades and chassis that do not appear to be interchangeable.

Granted, over time technology refresh is inevitable and most all equipment will be replaced, but if an organization buys into the notion of consolidation and simplification, it would seem that a single consolidated blade standard would be preferable to maintaining two (or more). But perhaps more important is what impact this might have on potential greenfield blade customers. Would a customer willfully embrace a situation that would imply that standard enclosures and blades are subject to incompatible change in the future or instead opt for a solution with a record of cross chassis compatibility? Time will tell. Nevertheless, we are encouraged by HP's enthusiasm for the blade form factor and look to see how its will continue to bolster its competitiveness in the marketplace.

IBM Introduces 10-Gigabit Ethernet Switch

By Susan Dietz

IBM has recently introduced the Nortel 10G Uplink Ethernet Switch Module for BladeCenter. It was developed to provide performance for applications with high bandwidth demands, such as video on demand, Internet protocol television (IPTV), and other mission-critical and realtime applications. The new switch is designed to work in BladeCenter, BladeCenter H, and BladeCenter T systems, Blade Network Technologies (BLADE), and new open management capabilities for IBM BladeCenter. The unit also boasts three 10-Gigabit uplink ports with an aggregate throughput of 90Gbps full duplex. It also offers security, claiming easy-to-configure Layer 2 and Layer 3 filters, as well as improved quality of service through traffic queue prioritization. The price point starts at \$4,999.

Previously, a 1Gbps switch was a top seller for IBM; 10Gbps may outperform sales as computing needs become more demanding. Developed mainly for enterprise solutions, 10 gigs may be overkill for the average SMB computing solution, but isn't that what was said concerning 14.4k modems? The 10G Switch Module may have been developed as an answer to HP's ProCurve 4200 Switch family, the ProCurve 6200 switch, and a new media-flexible 10-Gigabit module for the ProCurve 8100 series, which were announced in February of this year by HP.

It's early in the game, but while not all organizations will be able to employ the full capacity of a 10Gb switch—anywhere other than in their backbone networks in the data center—this class of switch may very well become both more pervasive and more commonplace over the next few years. However, a major factor in any network has to be the ability of organizations to manage their network infrastructure securely without having to expand great manpower, especially as network skills are not very common and therefore can be expensive. Adding heavyweight switches into the mix may increase network bandwidth, but it may also complicate infrastructure management exponentially as the increased bandwidth will undoubtedly beg more devices be connected through it. Although this in itself might be an opening for IBM to offer additional network related services along with the switch, we see the adoption of steroid-induced, heavy-hitting switches as inevitable, picking up speed as they become less of a novelty and more the fulfillment of a need.

IP Telephony is The Future

By Tony Lock

The last week has witnessed a flurry of product announcements in the increasingly competitive area of IP Telephony. First out of the traps came Avaya Inc. with announcements on its latest range of IP Phones that have been designed to be as simple to use as a cell phone/mobile handset along with details of an expanded array of offerings from a large number of partner applications to run on the Avaya one-X Deskphone Edition IP Phones. The new Avaya one-X Deskphone Edition is a range of simple-to-use IP telephony handsets that also supports a wide range of advanced applications allowing organizations to increase the productivity of their staff. In addition

the new IP handsets are amongst the first to offer high-fidelity audio, a feature that makes a significant difference to the sound quality and that can greatly enhance the interaction process. At the heart of the phone is its simplicity. All of the functionality is available in a very intuitive fashion considerably simplifying, almost removing, the need for training to allow previously complex tasks and applications to be accessed in a very straightforward fashion. When combined with the company's central IP Telephony software, Avaya Communication Manager, it becomes easy to handle the many functions available including multi-party conferencing, automatic dialling, missed call details and transferring a live call to another handset, even direct to a cell phone, without losing the connection. Avaya simultaneously released details of expanded ISV application support for the new handset range. Amongst the ISV applications available will be time reporting, automated conference call reminders along with integrated corporate directory access, contact search and solutions created explicitly for education and healthcare environments. Partner companies that have already created software for the new range of handsets include Citrix, CalAMP and Millenigence amongst others with more coming on board. There are several new handsets available in the range including the 9630 IP, 9620 IP, 9650 IP and the 9610 I. Different levels of functionality are available categorised into four profiles ranging from power communicators to those who require basic telephony capabilities. The phones have an international design to serve users around the world, and screen prompts will be available in 14 different languages.

There is no doubt at all that Voice over IP has caught the attention of organizations large and small. Indeed, it is fair to say that the question today is not one of whether IP telephony will become accepted in the big wide world but rather one of when it will become the norm. The number of telephone lines that now run on IP is growing at a much faster rate than traditional lines and by some estimates 50% of all telephone lines will be running on IP technology some time around 2008/2009. It is calculated that IP telephony already accounts for well over a tenth of all lines in use and is growing by somewhere between 35% and 40% a year.

There is still a degree of fear of the "unknown" in some organizations about IP telephony but it is fading fast as VoIP clearly transitions from being perceived as leading edge and untested into becoming a mainstream solution. However, IP telephony is about much more than making calls more cheaply. To get the maximum value from IP communications organizations must consider integrating applications more closely into their IP telephony environment. To fully exploit the potential in the new systems simplicity of use is of crucial importance. The new handsets from Avaya when coupled with the company's central management solutions have taken this to heart. It is clear that the simplicity of use that they provide to even the most complex of functions will appeal to organizations large and small. The simplicity of the installation and management of their solutions, while less visible, are of at least equal importance. IP telephony is still young but it is maturing very quickly. There is tremendous business value to be had in these solutions, much more than just reducing costs. IP telephony integrated tightly, but flexibly with applications will become the way to push new business functionality and thereby to deliver increasing value. It is the future.

Eurovision Summer 2006: Not iTunes as It Is Today

By Joyce Tompsett Becknell

Recently in the Scandinavian countries of Denmark, Norway, and Sweden various consumer-rights protection agencies have written to Apple with claims that their iTunes service in those countries breaches Scandinavian consumer laws. They announced that Apple has until August 1 to respond to their claims. Specifically, the consumer agencies allege that customers have to relinquish their rights to freely use legally purchased products in order to download music from iTunes. Norway in particular has indicated that it is prepared to take the issue to court. The issues surround Apple's end user license agreement (EULA) and the implications of its implementation of its FairPlay DRM. The Danes have indicated they will watch the Norwegians carefully as their laws are close to Norway's in this area.

One of the best ways to incite flame wars on the net is to talk about Apple's iPod. Consumers, pundits, and analysts either love or hate the device, the company, and its approach. Of course similar statements can be made concerning any vendor with a digital rights management (DRM) scheme. Some view DRM as annoying

but necessary to protect intellectual property. Others view it as infringement on consumer rights, while a third group views DRM as a challenge to be overcome. The truth lies somewhere in between.

In addition to the Scandinavian battle front, Apple is facing potential legal skirmishes with the French and with the EU over their UK pricing. The issue really isn't isolated to Apple. The truth is that we have relatively new technology that allows us to deliver intellectual property in a commoditized manner and this presents challenges in allowing customers to use what they've purchased on one side in balance with protecting the legal right of the artist and the parties involved with bringing that IP to market on the other. Precedent discussions are hazy. Some people argue that gaming should be regarded as a precedent. No one expects Microsoft Xbox games to be usable on a Sony PlayStation, or vice versa. However, we reject that because from the start games from each vendor have been unique to that medium. Certainly that same Microsoft game if available in a PC edition will work equally well on a Dell PC as on an HP PC, or as on one created from a kit. Also, games are only played on a game system. Music now gets used in many places, and it is inherently more portable than a video game. Music traditionally has been available on media that was standardized. In this case, we haven't agreed on a standard because each vendor believes it can be more creative than the others.

That is where the real problem lies: not in the fact that we should be able to play our music in multiple places, but that vendors should actively seek to make multiple protection schemes or delivery mechanisms possible. Apple should make profit through having superior players and a superior iTunes store experience and not through an exclusive delivery mechanism that shuts out rival players' and some other technologies. A file is a file: it is a commodity. The content in that file is certainly not a commodity, but the bit of format delivery technology, whether it is an MP3 file or AAC or any of the others out there is. Can you imagine if you had to buy a book that could only be read by a special Random House or Penguin reader?

The other difficult argument involves purchasing. In reality all one has ever purchased is a right to listen to that IP in the dominant format. In essence the same is true with the current Apple schema. What is different now is the increased portability of music and the range of devices and formats on which music can be played. Instead of building a vinyl collection or a CD collection, people in essence want to purchase a license collection and have that license applicable across a range of media. In the past there was a dominant medium and a period of transition between the incumbent and new technology. MP3s are to CDs in many ways what cassettes were to albums. The difference today is that there are many competing technologies and most consumers use more than one depending on the environment. Users do not want to pay for multiple licenses of the same piece. This is a rational desire. The problem is that the music industry has chosen to be reactive rather than proactive and the technology vendors have exploited that recalcitrance for their own gain. These legal challenges are not going to solve these core problem, but they are going to provide the momentum that prevents the industry from settling into a comfortable rut.