



## Market Roundup

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November 16, 2001

This Week

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### Compaq Launches Grid Computing Thrust

*By Jim Balderston*

Compaq announced it has launched a worldwide Grid Computing Solutions Program that is designed to “enable users to share computing, storage, data, software and other resources” within the Grid Computing framework. Compaq says it has formed an alliance with Platform Computing Inc., which offers distributed computing technology allowing hardware resources to be aggregated and redistributed to applications depending upon demand. The alliance between Compaq and Platform is designed to integrate a Grid solution using Compaq’s Tru64 UNIX Alphaservers and Compaq’s ProLiant servers running UNIX. Compaq has positioned the Grid solution as a means of providing supercomputing capacity using distributed computing resources.

Does Grid computing translate into “a supercomputer on every desktop”? Maybe, maybe not. We now see desktop computers offering the computing power found only in huge, water-cooled monstrosities just a few years ago; computing power that was unimagined by all but a few visionaries. In one way, Grid computing promises to offer the full resources of a vast network of hardware to individual desktops, and for the time being Compaq has positioned this initiative as one for the uber-geeks in engineering and technical folks. Those, of course, were the first people to have access to the big iron in days of yore, and served as the vanguard of a revolution that indeed did bring supercomputing power to the desktop. Here and now, we see a similar evolution unfolding. Grid computing provides some of the essential infrastructure of what we call Service Computing, where computing resources and applications on a network can be deployed and accessed in a fashion that fits the ebb and flow of daily business needs.

We think it is notable that Compaq is positioning Grid computing as a means to “enable users to share computing, storage, data, software and other resources,” with the emphasis on the term “users.” Service Computing is all about changing the end user’s experience in accessing and using custom applications that are designed to meet their day-to-day computing needs. While we suspect that Grid computing will become popular with those having processor-heavy tasks to perform, we don’t think such capability should – or will – remain locked in the windowless rooms of engineers and techno-weenies. Instead, like every other advance in computing technology, it will find ways to ooze out and make itself more readily

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available to line-of-business workers that have business-critical tasks to perform. In fact, that oozing will in all probability be helped along significantly by LOB personnel, who are going to find ways to use Grid computing in the same way they found ways to side-door PCs and networks on an ad hoc fashion. This is a very good first step for Compaq. We believe that the company should go with the inevitable flow of such developments and look to a broader audience for Grid computing offerings, most notably the non-technical end users who dominate in numbers every enterprise IT deployment in the world.

## IBM Introduces Pre-Packaged Linux Clusters for Business

*By Charles King*

IBM has announced two pre-packaged Linux cluster products for e-business processes. The Cluster 1300 can be ordered with the company's x330 or x342 Intel processor-based servers, running Red Hat Linux 7.1. The new products are designed for e-business processes and environments including transaction processing, collaboration and email, and database processing. The clusters are connected with IBM's Clustered Systems Management for Linux, which was derived from clustering technologies developed for the company's RS 6000 product line. IBM claims it is already building Linux clusters with more than 1000 nodes. An eight node IBM eServer Cluster 1300 including eight cluster server nodes, one management server node, the Red Hat operating system, switching and factory integration costs \$85,000 and will be available November 26, 2001. Additionally, the company announced the eServer Cluster 1600, which leverages IBM's cluster and file management software and switching technologies across the company's pSeries UNIX server product line. Pricing and availability for the Cluster 1600 was not included in the announcement.

While Linux is making a bigger splash in the business world than it is on desktops, we do not imagine that IBM's new products will set choruses of business tongues wagging or inspire a crowd of enterprise IT managers to squeeze clustered Linux products into this year's budgets. Though it is a powerful tool for wringing maximum power from groups of smaller servers, using clustering for common business processes is still relatively rare. Instead, we would expect IBM's Linux clustering solutions to follow the same sort of migratory pattern as RS6000 cluster, with earliest adopters among high-end university and research laboratories, who tend to control their source code internally, and in a handful of industries interested in leading-edge technologies such as Linux-based volume visualization for petroleum exploration.

But the IBM announcement is notable for the further shape it brings to the company's well-groomed reputation as a Linux pioneer. Where do these new pre-packaged solutions fit into IBM's overall Linux strategy? First, the lower end Cluster 1300 offers an easy and affordable solution to businesses interested in experimenting with clustered and/or Linux business solutions. The availability of IBM's WebSphere and DB2 for Linux provides the Cluster 1300 solid solutions that could be attractive to ISPs and telcos alike, as well as ASPs looking for a quick way to scale distributed applications. We would also expect to see some interest among e-commerce specialists and financial services providers investigating Linux-based solutions. The pSeries Cluster 1600 is likely to resonate among larger enterprises with a commitment to UNIX, but who are interested to see if and how open source might fit into their organizations. By offering powerful and highly capable Linux products in affordable, off-the-shelf configurations, IBM is helping to normalize open source solutions that many business users consider suspect, and make them more easily accessible and useful to interested corporate customers.

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## Intel Releases New Low-Power Server Products

*By Charles King*

Intel has announced a new series of low-power products for space-saving, ultra dense "blade" servers. The products include the Ultra Low Voltage Pentium III processor at 700MHz, which runs at 1.1 volts, and includes 512 KB of on-chip cache memory. Additionally, the new Intel 440GX chipset offers server-specific features including error-correcting code and memory support of up to two gigabytes. The chips come in Intel's uFCBGA package, designed for smaller systems such as high-density servers. System pricing for the complete combination of products varies by manufacturers, who are expected to begin shipping systems based on the chips starting in Q4 2001.

The release of Intel's new low power products is as interesting from a strategic business standpoint as it is technologically. Ultra dense "blade" servers are so called because thin server motherboards are stacked vertically, like books on a shelf. Due to their low power consumption and space saving features, blade servers are used for basic but necessary processes such as Web serving, firewall protection and Web caching. But while blade servers are gaining in popularity, the uptake has been far from swift. Chipmaker Transmeta achieved some initial success with blade server chips, but the vendors the company works with have faltered, with some switching to Intel products and others ceasing operations entirely.

We expect that Intel's new Ultra Low Voltage chips, and products based on them including Compaq's QuickBlade and HP's PowerBar servers, are likely to increase Transmeta's woes and place additional pressure on the company's partners. That should place Intel in the catbird seat just about the time blade servers come into their own among the greater industry. Given companies' continuing focus on reducing expenditures, and the huge parts operations and management costs play in server total cost of ownership, we believe blade servers will become increasingly popular and important in enterprise IT deployments. If energy price spikes such as those seen in California earlier this year become commonplace, expect blade servers to migrate into corporate data shops at an even faster pace.

## You Can Never Escape the Phone Company

*By Clay Ryder*

SBC Communications and Yahoo! announced on Tuesday that they have formed a strategic alliance to provide broadband access to consumers in SBC's service area and to provide co-branded dial-up service nationwide. Together, the companies will promote the co-branded service to attract new customers as well as transition SBC's existing customers. For Yahoo!, the agreement will provide monthly per-subscriber payments from SBC; promotion through SBC's sales channels, and the ability to offer bundled premium services by leveraging SBC's communications and billing infrastructure. One such planned service is Unified Messaging, which enables users to check, store, manage and reply to voicemail, faxes and email received from multiple sources through an interface on their home/start page. SBC would receive a share of Yahoo! non-subscriber revenues from advertising, e-commerce, and premium features and services on the portal, and from Yahoo!'s commitment to DSL as its preferred broadband solution. The co-branded products are expected to launch in mid-2002. In a separate announcement on Monday, Covad Communications announced the signing of a loan agreement and the restructuring of its resale and marketing agreement with SBC, which would provide a \$150 million cash infusion to Covad. This new agreement would not increase SBC ownership in Covad, but allows SBC to offer a more diverse portfolio of DSL products to customers inside and outside SBC's home service area. The agreement replaces the

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previous resale and marketing agreement between the companies, and is subject to the bankruptcy court's approval and the consummation of Covad Communications Group's reorganization plan.

These two announcements are further illustrations of the simple fact that despite all of the promise of the Internet fundamentally changing communication – and yes, it did – one cannot discount the power and omnipresence of the phone company. Although many speculated not all that long ago that the Internet would displace the telcos, the economic reality is that those with the deep pockets, and arguably in some cases little else, are the ones who could and would make the Internet work in the long haul. Covad is a striking example of one of those Davids who were supposed to topple Goliath, but instead have found themselves leaning on the Big Guy for lunch money. But in this case, Goliath also gains access to some of the neat tricks that David has up his sleeve. So while ironic on many levels, we can understand the long term value proposition of this relationship.

On the other hand, the teaming of SBC with Yahoo! seems to raise more questions than it answers. Yahoo! without a doubt owns one of the strongest Internet brands, but it is a content brand, not an access brand. Although Yahoo! has penned access deals in the past, they are hardly at the forefront of most people's minds. Given the current state of Yahoo!'s affairs, its reorganization, and likely jettisoning of ancillary business activities, another thrust into access seems counterintuitive. But perhaps this announcement is more about SBC than Yahoo! By rubbing against the Yahoo! Brand, SBC may think it can polish itself into an Internet content provider in hopes of being viewed as more akin to AOL or MSN than like a simple ISP. But again, it seems like we have been here before. Brand management is a tricky sport where the rules are more often dictated by the spectators than by the players. Successfully morphing Yahoo! into a access brand or SBC into a content brand is non-trivial, and not something that we believe will occur simply by virtue of a sales and marketing agreement. Perhaps SBC is eyeing the potential of delivering DSL to Yahoo! users who otherwise may not even know how DSL is spelled. If so, this would be a logical approach, but it does not change SBC into a content provider, but rather a connectivity player seeking a wider audience for its wired wares.

## Comdex Redux: The Calm before the Storm

*By Jim Balderston*

The IT industry's big annual event, Comdex in Las Vegas, has been a quieter affair than prior events. The event did feature keynote addresses from the list of the usual suspects, with Bill Gates, Larry Ellison and others bringing their latest messages to the smaller than usual audiences. Actual product announcements of significance seemed slim on the ground, with most of the attention focused on wireless initiatives, including BlueTooth, from a range of companies. Instant messaging also got some play out of the event, which featured a lot of non-enterprise announcements, including Gates showing off of the new Xbox game console. Meanwhile, cab drivers reported a significant drop in business from prior years, hotels offered discount room rates up to and after the show's opening, and major technology players had lower or no profile on the show's main floor.

What gives? Is this the offshoot of the events of September 11? Or of the tech bubble bursting? Is IT now on a steady downward slide? Are the best years behind us? Well, to answer the last question first, the answer is decidedly "no." And we would argue, the answer for the rest of the questions is probably in the negative column as well. What we see at this year's Comdex is an industry re-trenching, with technologies that will extend existing enterprise IT investments further down the food chain to the end users making the most news. As well they should. Enterprise IT is looking for technology; any technology that will help them capture some of the oft-promised ROIs that their prior investments have failed to deliver in a

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meaningful way. Wireless extensions of existing deployments is one way to get information and applications to end users in a format and form factor that makes the information and applications useful; ROIs and productivity gains can actually be realized in such an environment.

This is not to say that the evolution of enterprise IT will reach its highest point as wireless networks become more ubiquitous. As the industry retrenches, the groundwork for the next evolutionary step is already in place in the form of things like Web services. Web services are not the be all and end all, but provide us a glimpse of the changes the IT industry is about to undergo; changes that we believe will once again fill Comdex Las Vegas to overflow and make taxicabs harder to find than reasonably priced real estate in the San Francisco Bay Area. As the industry comes out of its retrenchment period, a new framework will make itself more apparent, that framework being what we call Service Computing. It will offer end users the flexibility and custom productivity tools that so many enterprise CIOs are trying to capture with the incremental gains found in the integration of wireless connectivity to networks. Service Computing – with the likes of IBM’s “autonomic computing,” Microsoft’s .NET, Sun’s SunOne and Compaq’s GRID computing initiative, among others – is going to take front and center stage at Comdex events in the future. You read it here first.

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