

## Market Roundup

February 15, 2002

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#### Microsoft Releases Visual Studio .NET and the .NET Framework

By Clay Ryder

Microsoft launched Visual Studio .NET and the .NET Framework t, at the VSLive! 2002 Conference in San Francisco this week. In a keynote address, Bill Gates hailed the two products as key to the development experience that will drive the phenomenon of XML Web services. Visual Studio .NET and the .NET Framework are the cornerstones of .NET and represent a major milestone for the company in bringing its vision of XML Web services to the marketplace. With these products developers can create and deploy XML Web services to enable businesses to seamlessly interoperate across disparate systems and platforms through their support for more than twenty programming languages. The company stated that more than 125,000 developers participated in the beta adoption phase, and more than 3.5 million copies of Visual Studio .NET and the .NET Framework were distributed during beta testing. Visual Studio .NET is offered in three editions: Visual Studio .NET Enterprise Architect is designed for software architects and senior developers to build large-scale applications for infrastructure development, and has an estimated retail price of \$2,499. Visual Studio .NET Enterprise Developer enables development teams to build XML Web services and enterprise applications that target any device, and has an estimated retail price of \$1,799. Visual Studio .NET Professional is targeted at developers who build XML Web services and next-generation applications for any Internet device, and has an estimated retail price of \$1,079. Standard editions of Visual Basic .NET, Visual C++ .NET and Visual C# .NET are available for a suggested retail price of \$109.

In some ways, this announcement almost feels redundant. Given the sheer amount of discussion generated over Web Services, XML and the competing universes of .NET and Sun ONE, one could easily think that all this technology has been out in the marketplace for a very long time. However, the reality is that awareness of .NET is more a testimony to effective marketing and public saber rattling as opposed to long entrenched usage of the technology. With this announcement, we witness the availability of an important developer technology for the masses that is well positioned to help drive the market's desire for Web Service and next generation Web applications, as well as Microsoft's specific desire that these new services and applications are deployed on its .NET infrastructure. Visual Studio is arguably one of the

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leading developer tools currently, and its extension to fully support the .NET framework brings the needed tools to develop Web Services to the many millions of existing users within the already familiar VS environment.

While it is always nice for Microsoft to have tools to sell to developers, the price points and extent of these new tools do shed light on a continuing trend for the company, i.e., the continued cultivation of serverand enterprise-focused software. Obviously, \$2,500 software rarely finds itself in the hands of home users, but more notable is the continuing roll out of enterprise-specific applications from a company that pioneered the sub-\$100 consumer software market. But even more important for Microsoft is the interlocking nature of its enterprise products. If the corporate user wants to create a Web service for an existing MS database application, it will ultimately touch enterprise-focused operating systems, enterprise database solutions, directories, authentication systems, .NET and so forth; the result being that if Microsoft is successful in driving .NET as the architecture of choice, it will be much more than VS .NET that is licensed, but rather a substantial amount of software up and down the value chain. This fact is what alarms many who complain of Microsoft's grip on the PC with its attending eyes on the department, division and enterprise. But alarms aside, it also demonstrates the forward and far-reaching look of the Redmond giant, which many once disparaged as a mere desktop software vendor. This week's announcement is another arrow in the company's quiver. More important, it is a reminder that Microsoft is not just a desktop software leader, but a company that has every intention to aggressively compete in the market for Web Services as well as next generation and Internet and enterprise applications.

#### Intel Introduces New XScale Wireless Chips

By Charles King

Intel has introduced the first general purpose processors based on the Intel XScale microarchitecture for the wireless device market. The new processors are intended to power devices including multimedia cell phones, PDAs and in-vehicle (telematics) systems, and include new micro-power management features that could potentially allow the new processors to use less than half the power at the same performance levels as Intel's current StrongARM SA-1110 applications processor. The Intel PXA210 applications processor will run at speeds up to 210MHz, and is designed to deliver an integrated, low power solution for cell phones and entry-level handheld and wireless devices. The Intel PXA250 will run at speeds up to 400MHz, and is designed to deliver the advanced integration, multimedia performance and improved power savings required for many full-featured handheld communicators, telematics systems and PDAs. Sample quantities of both the PXA210 and PXA250 are available today, and products using the new processors are expected to be available to consumers by mid-2002. Manufacturers endorsing the new processors include Compaq, HP, Casio, Hitachi, NEC and Fujitsu. Operating systems supporting the new processors include Microsoft Windows CE.Net, Windows PocketPC, PalmOS, SymbianOS and embedded Linux from multiple vendors.

The new Intel application processors arrive at an interesting time for the handheld and wireless markets. Though Palm built its long commanding market share by producing inexpensive, accessible devices, the company has faltered as the sector matured, losing significant ground to PalmOS competitor Handspring and to Windows-based devices from companies including Compaq and HP. In the business sector, especially, Palm-based devices are giving way as users realize the benefits offered by PDAs that are more thoroughly integrated with their Windows desktop and laptop machines. We expect that dynamic will continue as wireless Internet access becomes more realistic and robust. At the same time, affordable wireless LAN solutions for home and office are readily available, and oft-predicted but seldom-delivered

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high speed wireless networks are finally seeing successful, if small, deployment in some urban areas. What does this all mean to Intel? First, the company appears to have skillfully timed its product release to coincide with and take advantage of a market that is finally beginning to achieve its promised potential. Additionally, while the PXA210 and PXA250 have individual capabilities aimed at specific market segments, the power-saving technologies they share are germane to wireless/handheld users of every type. Overall, we see Intel's new XScale application processors as both contributing to and benefiting from continuing developments in the wireless access market.

### Colt Matures: IBM Introduces New Addition to p610 Stable

By Charles King

IBM has introduced a new entry-level addition to its p610 (AKA: Colt) family of UNIX-based servers. The p610 6C1 (rack-mounted) and 6E1 (tower) sport 333MHz Power3-II processors and can be configured as a one- or two-way machine. Like the previous editions of the p610, the new machine includes 512 MB ECC memory, two integrated 10/100 MB Ethernet adapters and five PCI expansion slots, and can accommodate up to 291 GB of internal storage. Additionally, IBM has included an integrated RAID 5 disk controller across the p610 line, allowing the six separate internal disks to be treated as a single storage device. Along with offering significant gains in server reliability, IBM claims that the addition of RAID 5 delivers dramatic energy and space savings by eliminating the need for separate storage devices. The p610 runs AIX 4.3.3, AIX 5L and Linux. IBM also announced that it has ported a collection of Open Source and GNU software tools into a bundled software toolbox for AIX, opening areas of Linux to AIX users, and allowing Linux developers easy methods of delivering their software on AIX. The new IBM eServer p610 Model 6C1 and 6E1 is priced starting at \$5,995. Planned availability is February 22, 2002.

When we originally considered the p610 on its introduction last October, we noted that the new server family offered further proof that IBM's continuing interest in the UNIX market (and in actively engaging Sun) extended across the market. The company has taken the time (and made the effort) to develop its UNIX product set from high-end, high-profile machines (such as the recently launched Regatta) to the low-end bread and butter servers that every vendor depends on for sustenance. The primary target of the p610 family is the rack-mounted Sun Fire 280R, which Sun focuses at Ecommerce, SP and financial service customers. While the new entry-level p610 may well find a place in these markets (especially given its thrifty price) and others, we believe that some details in the announcement suggests IBM is grooming this new Colt for a different sort of race.

Of particular interest to us is the inclusion of RAID 5 technology and the energy cost savings it potentially delivers. The addition of RAID 5 should make Colt a stable, flexible and powerful stand-alone server for enterprise work groups and remote locations, and could also offer a compelling TCO argument to SMBs that are contemplating a move from Intel- to UNIX-based boxes for some chores. One key for energizing demand in this market is Linux, whose popularity as a low-end server OS seems unstoppable. That is why we find IBM's inclusion of an AIX/Linux toolbox fascinating, since it could inspire the solutions that businesses need to ease such a migration. We also believe that IBM's apparent willingness to pair its proprietary AIX and Linux illuminates a new style of strategic positioning we see across the market. On one side of an imaginary centerline are a shrinking number of vendors who pursue the "Our processor, our OS, our way" strategy with missionary zeal. On the other side is a growing crowd of vendors that offer clients an agnostic selection of technologies that can be deployed across a variety of purposes. With its release of the new eServer p610 6C1 and 6E1, IBM not only places itself firmly in the agnostic camp, but

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also suggests that the company believes the target audience for its signature products and services includes companies of virtually every size.

# Seeking Network Amnesia: Comcast to Stop Collecting Network and Customer Traffic Info

By Clay Ryder

Comcast has announced that it will no longer collect usage information from customers of the company's cable-based Internet service. The company indicated that the information that was being stored temporarily in aggregate form only for purposes of network performance management to ensure an optimal Internet network experience had never been connected to individual subscribers and was purged automatically to protect subscriber privacy. Comcast indicated that effective immediately it would stop storing this individual customer information, in order to completely reassure its customers that their privacy is secure.

1984 was a long time ago, and turning back the calendar is beyond the power of mere mortals. OK, so Comcast was collecting traffic data on its new IP network, one that was spun up rapidly after the demise of Excite@Home. For some people, the mere thought that any of their Internet activity is being logged represents the most heinous of invasions of personal liberties and privacy. To others, the collection of aggregated performance data indicates that a company is trying to improve customer satisfaction through effective monitoring and management of its product. And never the twain shall meet. Perhaps.

Although the Internet remains an easy target for privacy advocates to bash, the reality is that far more invasive data collection has and will continue to take place with every transaction that one makes with a credit card. Ever wonder where all those annoying telemarketing calls that disturb your dinner come from? Look no farther than the plastic cards in your wallet. Nonetheless, while Comcast's activities do not strike us as maniacal attempts to invade the dark closets of its customers' lives, the mere perception that the company might do so was apparently chilling enough for Comcast to forgo any further data collection. While this may cause many to breathe a collective sigh of relief, this contentment may come at the price of a better product. Although many Internet users would like to believe that they are actively and judiciously protecting their privacy and themselves against the ravages of Big Brother, the reality is that this privacy is far from absolute. The simple acts of participating in a modern society, through electronic banking, credit cards, the Internet and other common activities may, in fact, ultimately render irrelevant preconceived notions of anonymity and absolute privacy.