If the current economic slowdown has a silver lining, it is lower priced hardware—especially lower priced servers and PCs. Still, you have to wonder where the current price wars will lead and how these price wars will affect the vendors on which you rely to power your company's network. Novell Connection recently got one vendor's perspective on today's server market. In this interview, James A. Gargan, vice president of Marketing for the IBM eServer xSeries, explains why IBM can compete in today's price wars and why consumers continue to choose quality over price. In addition, Gargan comments on the Novell-IBM relationship and Novell's soon-to-be-released NetWare 6.

Q Your competitors say that they are poised to thrive, despite the fierce competition in the hardware market. How is IBM going to compete in the current price wars?

A I think that IBM has never been better positioned to win in the marketplace. We're on the verge of redefining high-end computing in the Intel marketplace with our Summit architecture. I think that our real strength has always been in the value of the offerings that we bring to the market. Some of our competitors are certainly trying to persuade customers that price is all that matters, but I personally believe that customers are smarter than that—they want value. It's a hero who fixes a server when it crashes, but it's a genius who figures out how to avoid the crash altogether. That is part of the mentality we are taking with our servers. We design them to be the most reliable on the face of the earth.

Q If price is the only thing a customer is looking for, will IBM be able to compete?

A One of the popular misconceptions of the IBM corporation is the perception of being a high-cost provider in the Intel marketplace. The fact of the matter is that we are highly competitive on price. Let me give you a few base points: Compared to Compaq in the marketplace, we are anywhere from 12 percent to 33 percent less expensive than comparable Compaq systems. Compared to Dell, we are actually below Dell or equal to Dell in many categories.

Q Where do you think that the current price wars are going to lead?

A I think that the current price wars are going to lead to a demise of the white box and the second-tier vendors. If
you take a look at the recent history from 1997 to 2000, the white box and second-tier vendors have actually declined from about 44 percent of the market to today being about 30 percent. This is really a 14-point reduction in share. This is really leading toward a flight to quality. Customers are beginning to look at what vendors are capable of delivering in their end-to-end solutions. The worst situation for customers is getting halfway through a deployment of a major rollout and finding out that the partner they have teamed with is too junior to complete the work.

**Q** What is the Summit architecture?

**A** Summit is a continuation of our X-A architecture strategy that we've developed for the Intel marketplace. This architecture begins to take many of the mainframe-inspired attributes that you see in the rest of the eServer product line and, for the first time, migrate them down into the industry-standard marketplace. By delivering mainframe capabilities at PC pricing models, we are essentially redefining the industry-standard marketplace.

**Q** What capabilities is IBM migrating to PCs?

**A** Summit is a scalable architecture that allows a customer to physically connect nodes together to build large SMP systems. It is going to have a mirrored-memory capability that will allow for features such as hot-add memory.

Today's server paradigm is that we build monolithic, scale up systems. We believe the future of server computing is one that looks more like stereo components, where each part is very modular. Customers will have to pay only for the capabilities as they need them. It's the pay-as-you-grow scalability story.

**Q** How much of the Summit architecture has been deployed, and what is your time frame for deploying the rest of it?

**A** The Summit architecture will be introduced in its first shipping products in the fourth quarter of this year. Additionally, we've designed the Summit architecture to be incredibly flexible and critically scalable. The same architecture will not only support today's IA 32 processor but will also support the future IA 64 processor, which is code-named McKinley.

**Q** What is IBM doing to increase the speed and storage capacity of servers?

**A** We're actually taking this in a very comprehensive approach. Although speed is part of the equation, the Summit architecture will dramatically improve the performance of the Intel architecture. You can think of Summit as the personal trainer who gets the maximum performance out of the athletes—in this case, the athlete is the Intel microprocessor. Summit is specifically designed to get maximum performance out of that in a domino way that allows the customer to start with really small building blocks and then to add them together to scale up to large SMP capabilities. We are actually architecting into the Summit chip set an L4 level of cache. We believe this will help to deliver between 15 and 20 percent faster performance compared to competitive servers in the marketplace.

On the storage front, we have been a leader in getting the InfiniBand standard in the marketplace. We've been a leader in helping to promote faster I/O through today's technology called PCIX.

**Q** How is IBM supporting NetWare 6?

**A** IBM is very excited about NetWare 6. We are planning to support NetWare 6's new features and embedded clustering support across our entire product line. We also continue to work closely with Novell to ensure that all of the NetWare operating systems are able to take advantage of our X-A architecture features, which ultimately increases the reliability, availability, and the performance of each of our servers.

One of the things that we have done historically to compete, and will do in the future, is to maintain NetWare as a tier-one operating system. With NSS being able to support larger files and volumes—up to 8 TB each—we have been working with Novell to ensure our storage products, such as our FAStT500 Storage Server, our expansion units, and our Fibre Channel Host Bus Adapters work well with NetWare 6.

**Q** What is the status of the Novell/IBM relationship?

**A** I think that the Novell/IBM relationship is very strong. We have been working together for more than 18 years, and we continue to work closely. As I mentioned, we are very excited about NetWare 6. NetWare is currently using an extremely rack-dense, 32-node cluster configuration of our xSeries servers as part of their NetWare 6 pre-release testing. The Fibre Channel Host Bus Adapters work well with NetWare 6. We are very eager to work with Novell and our customers in deploying this in their environment.

The IBM/Novell partnership has grown as Novell's one Net strategy embraces a cross-platform environment with NetWare services software that run on a variety of operating systems. For example, our eServer family provides a range of platforms for deploying Novell solutions such as NDS eDirectory in NetWare, Linux, Windows, and UNIX environments.