IBM @server Brand Synergy
May 2001

IBM @server

Putting all the pieces together to solve the IT puzzle

Contents

2 Executive Summary
3 Why IBM @server ?
6 How Does it all Work Together?
10 Why Should You Sell xSeries?
11 Technology Leadership
16 Moving Forward
16 Conclusion

Executive Summary

Initially, the mainframe enabled IT managers to control all aspects of their computing needs from one central location. Over the years, other types of computers have entered the scene, including midrange systems, supercomputers, Intel® processor-based servers, desktop PCs and mobile computers. Today, a thriving business must take advantage of the strengths of all types of systems – from the ultra reliability and channel throughput of the mainframe and the number-crunching ability of super computers – to the Microsoft® Windows® compatibility of Intel architecture servers and portability of notebook and handheld computers.

The challenge for businesses using a heterogeneous IT infrastructure continues to be figuring out how to make different platforms, networks, operating systems and applications work together effectively without over extending the time and resources of IT staff.

The best solution? Work with one company to minimize the potential for incompatibilities and bottlenecks. Call one phone number for technical assistance regardless of which piece of hardware or software needs attention. And go to one company that can provide installation, performance-tuning or ongoing management assistance for the entire infrastructure.

Most system vendors cannot offer these capabilities across all hardware and software platforms. But IBM does offer flexible, cross-platform capabilities and makes them available through you, our Business Partners. For this reason, customers can turn to IBM Business Partners for everything from mainframes to entry-level Intel processor-based servers. IBM has a flexible set of products and offerings from which Business Partners can choose to include in solutions sold to customers. This includes an impressive range of operating systems to meet all your customers' needs—including enabling LINUX® across the IBM @server platform.

In addition, IBM has the largest and best[1] services organization in the world to support your service offerings. IBM Global Services can help plan a transition from Windows NT® to Windows® 2000 or Linux, set up and optimize a clustering solution, design a Metropolitan Area Network or even run an entire IT organization. Furthermore, you can leverage world-class business recovery services from IBM as part of your offerings. IBM services offerings

[1] For example, *Sm@rtPartner* magazine rated IBM the #1 services company in its May 7, 2001 issue.

Highlights

IBM @server spans the breadth of the entire IBM corporation to quickly deliver everything needed to build and manage an integrated e-business infrastructure.

are there to help you round out your service offerings, to help you differentiate yourself from the competition, and to help you sell and install solutions faster.

Recognizing that customers operate in heterogeneous IT environments, the IBM @server brand brings together servers, storage, software and services to deliver real business advantage to customers.

The purpose of this paper is to help Business Partners and IBM sales representatives understand the importance of xSeries as part of many solutions. In addition, it communicates the IBM interoperability story as an advantage that IBM and our Business Partners should leverage when working with our customers.

Why IBM @server?

IBM @server offers a wide range of servers designed to be integrated into a robust, flexible infrastructure. Responding to the unprecedented demands being made on technology in the new economy, the brand provides extreme performance and unmatched scalability along with the IBM reliability and security customers and Business Partners have come to expect.

But the brand is about much more than offering the industry's most advanced hardware. It represents a new vision of how information technology can deliver value to customers. IBM @server spans the breadth of the entire IBM corporation to quickly deliver everything needed to build and manage an integrated e-business infrastructure.

To make that vision a reality, IBM @server systems deliver three critical elements:

- Choice in selecting, building and deploying applications = Application flexibility
- New ways to manage end-to-end growth, risks and costs = Advanced tools for managing e-business
- Extreme performance and unmatched scalability, combined with IBM reliability and security = Innovative technology

Application flexibility

You see the direction in which your customer's business needs to grow. You identify possible solutions. Then there is a myriad of questions to answer: Will it run in your customers existing environment? Do you need to introduce different servers? How can your customer connect to his or her existing corporate data?

First, IBM has fully embraced the open industry standards — such as Java™, XML and Linux® — which are at the heart of e-business.

IBM **@server** supports the industry's broadest range of platforms – hardware, operating systems and databases. As a result, customers can extend their existing investments, while integrating new systems and new capabilities as needed to create the most flexible, efficient solutions for their businesses.

That flexibility is achieved through a number of IBM initiatives. First, IBM has fully embraced the open industry standards – such as Java™, XML and Linux® – which are at the heart of e-business. Furthermore, IBM provides the tools and expertise that allow you to build a flexible infrastructure based on those standards.

IBM **@server** is embraced by the industry's widest range of solution providers. There's a complete selection of Solution Offerings from IBM: pre-tested, integrated solutions from industry-leading developers such as Ariba, Baan, Hyperion, JD Edwards, Logility, PeopleSoft, SAP, Siebel and more. And the portfolio of offerings continues to expand.

New tools for managing e-business

With IBM @server, you have access to a new set of tools that help your customers manage the dynamic, unpredictable growth, risks and costs associated with business.

In the past, managing computers when they were in the data center was relatively easy. Today, personal computers are everywhere; employees take their laptops on the road; suppliers have systems that need to be integrated; and customers from all over the world access servers via the internet. With IBM **@server** systems, you have access to a new set of tools that help your customers manage the dynamic, unpredictable growth, risks and costs associated with business.

- *Capacity Advantage:* Provides processing power to your customer's e-business on an as-needed basis, without disrupting the flow of work. Because payment is based on capacity usage, your customers pay for only what they need.
- *Availability Advantage:* IBM **@server** systems are designed for availability. The added value is that IBM High Availability Services can help ensure the entire infrastructure – including middleware, applications and network devices from all your suppliers – is up and running when your customer needs it.

Free and fee-based packaged services and offerings for customers and Business Partners.

- *Customer Care Advantage:* Industry-leading remote service delivery capability enables IBM, with permission, to link to your customer's system to ensure optimum performance to round out Business Partners service offerings when needed. Several IBM @server systems have integrated modems that enable Web-based capacity and performance monitoring.
- *Solutions Assurance Advantage:* Free and fee-based packaged services and offerings for customers and Business Partners are designed to help minimize risk and ensure successful implementation of e-business solutions, especially B2B, B2C, e-commerce and CRM.
- *Financing Advantage:* Technology upgrades, total solution financing, trade-ins (IBM and other vendors) and other financing programs help your customers manage server, software and staffing costs, even in the unpredictable e-business environment.
- *Systems Management Advantage:* Tivoli® e-business systems management solutions for IBM @server systems are designed to manage all the critical components of your customer's e-business infrastructure – security, storage, servers and even wireless devices.

Innovative technology

As reported by Ideas International, IBM is consistently among the leaders in a broad range of industry benchmarks.

According to International Data Corporation,[2] IBM sells more servers, in terms of revenue, than anyone on the planet. And it's been estimated that nearly 70 percent of the world's business data and transactions are managed by IBM servers. There's a good reason for those facts – IBM invented business computing, and companies around the world recognize IBM as the undisputed leader in developing technology that delivers greater business value.

The IBM @server brand builds on technology innovations – in microprocessor design, systems management, clustering, remote system monitoring, wireless device support – to deliver exceptional performance. As reported by Ideas International, IBM is consistently among the leaders in a broad range of industry benchmarks. More importantly, IBM @server is a leader in every area critical to your customer's business: the world's most scalable servers; the world's most reliable servers; the world's most secure servers; the world's first self-managing server; world-class storage solutions and more.

[2] The IDC Year 2000 overall server market report, International Data Corporation

Backed by an unrivaled Research and Development investment that has resulted in record numbers of patents over the past eight years, IBM @server will continue to set the pace for the industry. The recently announced Project eLiza is a major initiative to deliver systems that manage themselves, and the billions of devices that will be connected to them via the Web is also just a few years away. We're also pushing ahead in areas ranging from end-to-end security to the ability to manage work across different types of servers.

We're also pushing ahead in areas ranging from end-to-end security to the ability to manage work across different types of servers.

IBM is the only company with the expertise, the vision and the drive to undertake commitments of this scope.

How Does it all Work Together?

Customers often ask, "What about interoperability? How are these platforms going to work together? How are they going to be able to communicate?" Over the years, IBM technologies have focused on strengthening the interoperability among server platforms. The announcement in October 2000 of the all-inclusive IBM @server brand was the first step toward providing a complete solution. As a single server strategy, IBM @server incorporates all levels of server needs, from server appliances for less than $1,000, to multimillion dollar mainframes.

Meanwhile, there has been a dramatic increase in demand for Intel architecture servers. Some of that demand is a result of new technology enhancements that have created more reliable Intel processor-based servers. And the low relative cost has added momentum to the trend. To facilitate interoperability, IBM has announced several adapters that provide high-speed interconnects, data sharing and other capabilities among our server platforms.

Leveraging high-speed LAN technology to connect IBM @server xSeries and zSeries can facilitate the transfer of data between application and database servers.

High Performance

Leveraging high-speed LAN technology to connect IBM @server xSeries and zSeries can facilitate the transfer of data between application and database servers. The IBM @server zSeries OSA-Express Gigabit Ethernet, Fast Ethernet and ATM adapters provide a ready match for the xSeries high-speed LAN adapters. Attaching servers directly or via a LAN switch can provide data transfer rates into the zSeries far above the traditional ESCON connection. Customers have the opportunity to now step up performance and use a Gigabit Ethernet adapter on both xSeries and zSeries as the preferred method for a faster application to database server connection.

To facilitate xSeries systems interconnectivity with zSeries servers, IBM offers the IBM ESCON® (Enterprise System Connectivity) adapter. ESCON is a PCI adapter designed to enable multiple xSeries servers to access multiple zSeries systems. One of the advantages of its high-performance design is the ability to minimize delays and offload much of the processor burden required to access the mainframe server. As a result, xSeries and zSeries servers are able to spend more of their valuable processing cycles on application execution, rather than transferring data back and forth between servers. And if customers require even faster communication, they can add a second ESCON adapter to existing xSeries systems to enable full-duplex processing.

One of the advantages of its high-performance design is the ability to minimize delays and offload much of the processor burden required to access the mainframe server.

The ESCON adapter opens a high-capacity, reliable, bi directional data highway (called a Multipath Channel) between the xSeries servers and the zSeries mainframe server where the data resides. When fully implemented, the Multipath Channel protocol can yield up to a 40 percent improvement in data transfer and up to a 60 percent reduction in zSeries CPU cycles used. To let your customers confidently run mission-critical applications on xSeries servers using data on the mainframe server, the ESCON adapter provides nondisruptive and fail-safe recovery, low error rates across the channel, 200Mbps data transfer rate and up to 64,000 bytes per block.

With both the xSeries and zSeries systems realizing high-speed data access and bi-directional data exchange, you can consolidate multiple distributed LAN-to-mainframe gateways into a single, centralized channel-attached xSeries server. This greatly simplifies network administration, network management and change control for your customers.

By providing both a mainframe server and an Intel architecture server from IBM and tying them together with the ESCON adapter, you can eliminate considerable integration challenges for both you and your customers.

Some examples of environments where xSeries servers using the ESCON adapter are ideal are in the area of enterprise resource planning (ERP) applications such as SAP, JD Edwards, Peoplesoft and Baan. xSeries servers using the ESCON adapter are also an excellent choice for business intelligence applications such as data mining and data warehousing.

To further enable our sales and technical staffs (both IBM and Business Partners) with installation and configuration of the ESCON adapter in xSeries servers for connection to a zSeries system, we have published a Redbook entitled "Nefinity to S/390 Connectivity using ESCON[3]." By providing both a mainframe server and an Intel architecture server from IBM and tying them together with the ESCON adapter, you can eliminate considerable integration challenges for both you and your customers.

[3] It can be downloaded at no charge from our IBM Redbook Web site, at http://publib-b.boulder.**ibm.com** (use the search engine to find "connectivity using ESCON"); or you can order a printed copy of form number SG24-5284-00 by calling 800-879-2755 in the U.S., 800-IBM-4YOU in Canada, or +45 4810-1540 internationally.

Using IBM @server iSeries and xSeries servers provides the best of both worlds.

Cost-effective Server Consolidation

Using IBM @server iSeries and xSeries servers provides the best of both worlds. The Integrated xSeries Adapter (IXA) is a unique product that directly connects a 4-way xSeries system to an iSeries via a high-speed link with a rated speed of 1GBps. iSeries systems using the IXA add value to Windows 2000 servers by leveraging the storage consolidation and data protection advantages of iSeries servers in addition to integrating user and server management. This solution can help reduce the costs associated with managing Windows 2000 servers.

Depending on the iSeries model used, up to 16 xSeries servers can be attached. With the IXA, all disk storage for the xSeries server – up to 2TB – is contained in the iSeries server. With the Storage Area Network (SAN) facilities provided by iSeries, customers have a simple and cost-effective alternative to server farms.

Not only does the IXA help with consolidation of xSeries servers and storage, it also helps centralize management of iSeries and xSeries servers for customers with remote offices. By enabling essential tasks to be performed from a single management console, the IXA can improve central control and remote operations. As a result, customers can experience lower cost of user administration in addition to reduced costs related to operations and skill development. Through this server consolidation, customers can get the best performance from both servers, as well as the flexibility required to run the best applications for their business needs.

By enabling essential tasks to be performed from a single management console, the IXA can improve central control and remote operations.

Some software providers, such as JD Edwards and Siebel Systems, deliver applications that span multiple platforms. The IXA provides an excellent vehicle for deploying these applications on OS/400 and Windows 2000 using an integrated IBM @server solution.

Rapid Application Deployment

Business Partners combining xSeries with the IBM @server pSeries product line can expect a flexible solution that offers rapid application deployment and management consolidation, which saves on system resources.

The ultimate benefit of implementing a pSeries solution combined with xSeries servers is the rapid application deployment environment that is created. By combining these platforms, Business Partners can deploy the widely available and fast-to-implement Windows applications using powerful UNIX

backend servers from IBM to support large, complex databases in a mixed mode environment. As a result, your customers gain greater access to the applications that they need to deploy for business advantage. They also get the legendary support from IBM and the consolidation of a single vendor for all tiers in the environment–plus consolidated and centrally managed storage and backup/recovery.

We need to help customers consolidate resources and IT intellectual capital wherever possible (i.e., SAN, systems management, and inter tier communications).

In addition, an xSeries and pSeries solution provides management connectivity using IBM Director, which enables Windows/Intel and AIX/Power-based servers to be managed as a single systems complex. For those using this management software and full fibre SAN capabilities, they achieve footprint and management consolidation. We need to help customers consolidate resources and IT intellectual capital wherever possible (i.e., SAN, systems management, and inter tier communications). This saves resources, especially when both the UNIX and Windows "tiers" can store data on enterprise-class, single footprint devices like Shark, and related tape libraries.

When buying a solution that includes xSeries and pSeries, your customers are able to deploy an N-tier capable architecture that gives their architects and applications developers great flexibility. The architect defines an environment that may require a multi tier, multi-OS, centralized/distributed solution. IBM, along with our Business Partners can deliver all that coherently and ultimately more cost effectively. That environmental flexibility allows the application developer more free reign. And the provider of service levels gets the benefit of IBM experience in managing across different devices.

The architect defines an environment that may require a multi tier, multi-OS, centralized/distributed solution. IBM, along with our Business Partners can deliver all that coherently and ultimately more cost effectively.

Customer Solutions

While it is one thing to talk about interoperability, it is another to implement it. IBM has been rolling out heterogeneous solutions to our customers for years. Some examples are:

- **Lexis-Nexis.** Needed to integrate internal business processes with external customers and suppliers and also be able to handle high volumes with scalability, manageability and availability. The hardware used included of zSeries, pSeries and xSeries.

- **Lockheed-Martin.** Required scalability, multilevel security with a trusted OS, integration of an IBM DB2® backend and IBM MQSeries® for messaging with ERP systems, and the desire for secure business-to-business transactions using "off the shelf" components. The solution included a mix of zSeries, pSeries and xSeries.
- **Sea Island Resort.** Needed to embrace a number of unique solutions that required Microsoft operating systems. Having iSeries servers already installed, they decided to maintain their existing investment and integrate xSeries using the Integrated xSeries Adapter (IXA), which was a cost-effective and easy-to-manage solution.

Intel architecture server purchases are growing exponentially as a percentage of total server sales. IBM intends to capture a large share of this market.

These are just a few examples of customers who have deployed multiple IBM @server platforms. To find out more about other solutions from IBM and Business Partners see:

- Case Studies: **ibm.com**/software/
- New pre tested IBM @server solutions: **ibm.com**/servers/solutions
- IBM Global Solutions Directory of 30,000+ solutions: www.software.**ibm.com**/solutions/isv
- ClusterProven™ Solutions: **ibm.com**/servers/clusters

Why Should You Sell xSeries?

Intel architecture server purchases are growing exponentially as a percentage of total server sales. IBM intends to capture a large share of this market. Now is the time to ensure our success in leading the Intel architecture market space by selling xSeries servers in tandem with zSeries, pSeries and iSeries. Windows consolidation initiatives are underway at our top 500 global customers. The industry's adoption of Linux for Web serving and other applications puts IBM in a prime position to utilize our Linux expertise. Many companies are looking for a vendor who leads in both Linux and Windows project delivery. IBM is that vendor. When you sell zSeries, pSeries and iSeries servers, the purchase order should include xSeries for a complete solution.

Partnering with IBM gives you the unique capability of providing a full range of offerings to your customers. This includes the fastest growing segment of the server market: Intel processor-based servers. In many cases, customers work in a mixed platform environment. xSeries servers are essential to capturing the important and growing Intel architecture server market. IBM has the tools, products, services and partnerships to help you master this growing market.

Partnering with IBM gives you the unique capability of providing a full range of offerings to your customers. This includes the fastest growing segment of the server market: Intel processor-based servers.

Technology Leadership

Business Partners should feel comfortable recommending xSeries systems: the industry's most innovative Intel processor-based servers. These servers are based on X-architecture—an initiative begun by IBM in September 1998 to incorporate state-of-the-art technologies from other industry-leading IBM server platforms into xSeries. After surpassing our goals for delivering leading-edge technologies that enhanced the mission-critical capabilities of the xSeries server product line, IBM is now accelerating the advancement of xSeries to support the rapidly changing requirements for a new generation of applications and operating systems.

The trend to pervasive computing—information anywhere, anytime—will provide information access to millions of new users and devices (cell phones and Web-enabled PDAs included). These new services will require continuous uptime and will demand more from the systems supporting them. Server infrastructures will require new capabilities for communicating and managing ever larger amounts of information in a more dynamic and cost-effective manner than before.

The trend to pervasive computing—information anywhere, anytime—will provide information access to millions of new users and devices (cell phones and Web-enabled PDAs included).

In addition, the adoption of e-business technologies for business-to-consumer, business-to-business and intra-business applications is accelerating, which is placing higher demands on technology platforms. More significantly, businesses are increasingly turning to industry-standard technologies such as Intel processors, along with Microsoft Windows 2000, Novell NetWare, SCO Unixware and Linux operating systems for the new e-business foundation.

The Industrie Forum awarded the x220, x260, x330, x340 and x350 with its seal for outstanding quality of design.

By building robust capabilities into xSeries servers and working on new technologies to enhance our industry-leading capabilities for the future, IBM X-architecture addresses these requirements and helps prepare customers for the next wave of e-business. The key to success is experience—experience in software and hardware capabilities, experience in procedures and practices, and experience in supporting high-availability platforms. IBM has a long heritage of experience in these areas, and xSeries systems capitalize on that experience through IBM X-architecture.

Award-winning Products

IBM Netfinity and IBM @server xSeries systems have received outstanding recognition from customers, IBM partners and the industry for innovations and leadership in bringing enterprise levels of performance, scalability and reliability to this rapidly growing market.

In January 2001, five xSeries models won international design awards. The *Industrie Forum* awarded the x220, x260, x330, x340 and x350 with its seal for outstanding quality of design. In fact, the x330 received the *Network Computing* Editors' Choice award in May 2001. The x330 was recognized for its innovative features like Cable Chaining Technology (C2T), Light Path Diagnostics™ and the Advanced System Management processor. In addition, the x240 was recognized for its performance by making *Smart Business* magazine's A-List four consecutive months this year.

Here are just a few of the many recent awards our Intel architecture servers have won (May 2000 through May 2001):

Publication	Award	Server	Award Date
Internet Shopper (International) magazine	Best Midrange Server	Netfinity 5600	May 2000
Network News (International)	Best Server	Netfinity family	May 2000
PC Dealer (International)	Best Hardware Product of the Year	Netfinity family	May 2000
Smart Business magazine	Enterprise Server A-List	Netfinity 5600	May - December 2000
PC Expert (International) magazine	'Must' 2-Way Server	Netfinity 5600	July 2000
PC Quest (International) magazine	Users Choice Award	Netfinity family	August 2000
PC Magazine	Editor's Choice	Netfinity 5100	November 2000
InfoExame (International) magazine	Best Server	Netfinity 7100	November 2000
Windows 2000 (Australia) magazine	Editor's Award — 2-way Server of the Year	IBM @server x330	December 200
Windows 2000 (Australia) magazine	Editor's Award — 4-way Server of the Year	Netfinity 8500R	December 2000
PC Magazine	Best Products of 2000 - Small Business Solutions	Netfinity family	January 2001
Industrie Forum	Design Award	IBM @server x220, x260, x330, x340, x350	January 2001
Smart Business magazine	Enterprise Server A-List	IBM @server x240	January - April 2001
Network Computing magazine	Editor's Choice — 1U server	IBM @server x330	May 2001

These awards confirm that IBM is demonstrating a clear difference between xSeries servers and other Intel processor-based servers in the market. Even more important is the faith our customers are placing in the xSeries products. IBM Intel processor-based server sales have grown dramatically since we introduced IBM X-architecture. Such growth demonstrates that customers see the value xSeries servers deliver to businesses of all sizes.

Even more important is the faith our customers are placing in the xSeries products.

Performance Leadership

Our focus on designing xSeries systems for enterprise-class reliability, availability and serviceability has led to significant achievements in performance as well.

Benchmark records have come to be expected for IBM Intel architecture servers. In 1999, IBM Netfinity® systems achieved 42 number-one benchmark records. In 2000, Netfinity and xSeries servers added 33 more records to the tally. And in March 2001, a cluster of xSeries 370 servers with X-architecture set a new TPC-C™ (TPC Benchmark C) record[4], surpassing the previous record for any hardware, operating system and database configuration. The x370 cluster's TPC-C performance was 56 percent better than the world record achieved by an IBM Netfinity 8500R cluster just eight months earlier (in July 2000).

When you need answers, you need them quickly. IBM is committed to giving customers a fast response for all their information and service needs on xSeries systems.

In addition, the IBM @server x350 *also* set a record, in the 4-way enterprise server class, beating the previous record for the TPC-H (TPC Benchmark H) benchmark of Business Intelligence[5] by a striking 46 percent.

Award-winning Service and Support

With over 40 years of service and support expertise, IBM provides unparalleled service and enterprise-class support for all IBM @server customers. Now more than ever, time is money.

When you need answers, you need them quickly. IBM is committed to giving customers a fast response for all their information and service needs on xSeries systems. The key to advanced service and support is enabling

4 Current as of 3/23/01. The IBM x370 cluster (running Microsoft Windows 2000 Datacenter Server and Microsoft SQL Server 2000 Enterprise Edition) achieved a record TPC-C score of **688,220.90** transactions per minute C (tpmC) at **$28.89** per tpmC. Go to *http://www.tpc.org* for details of the TPC-C benchmark.

5 Current as of 3/23/01. The 4-way IBM **x350** achieved a top TPC-H score of **1169 Queries/hour @100GB** at a cost of $166/QphH@100GB. Go to *http://www.tpc.org/* for details of the TPC-H benchmark.

xSeries servers with features—such as Advanced System Management processors, Predictive Failure Analysis (PFA), Light Path Diagnostics and IBM Director software—which for enhanced service and support.

Going far beyond merely providing a warranty and technical support, IBM offers an unrivaled breadth of testing, consulting services and other service and support offerings.

The IBM three-year on-site limited warranty[6] provides hardware problem-determination on-site and remotely, with the latest IBM technology and tools. This limited warranty offers far more than the typical industry-standard warranty, including parts identified during PFA and the installation of required engineering changes. International warranty service is also available. The IBM warranty supports your customers 24 hours a day, seven days a week[7]. Going far beyond merely providing a warranty and technical support, IBM offers an unrivaled breadth of testing, consulting services and other service and support offerings.

IBM HelpCenter®. More than 1,800 support specialists make up the award-winning IBM HelpCenter. These specialists can answer your customers' questions about IBM servers, network equipment, storage options and other IBM products—in 22 languages. They also handle OEM operating systems and applications supported on IBM systems. Your customers can reach IBM experts by phone, fax and the Internet, including interactive Web-based forums monitored by IBM specialists. You—as a valued Business Partner—have access to a special 800 number that puts you directly through to Level 2 specialists. This saves you time when you have already been through the basic problem diagnostic procedures and need expert help to resolve an issue.

A single, centralized database helps IBM technicians share customer information and solutions worldwide to provide fast, accurate responses to customers.

The HelpCenter is available 24 hours a day, seven days a week, 365 days a year, and spans 12 facilities around the world[8] that provide backup and overflow support for one another as needed. A single, centralized database helps IBM technicians share customer information and solutions worldwide to provide fast, accurate responses to customers.

IBM service. If you or your customers should ever need assistance from trained technicians, more than 132,000 IBM service professionals are available in 164 countries.

6 For terms and conditions or copies of the IBM Statement of Limited Warranty, call 1 800 772-2227 in the U.S. In Canada call 1 800 426-2255. Limited warranty includes International Warranty Service in those countries where this product is offered. Telephone support may be subject to additional charges. For warranties including on-site labor, IBM sends a technician after attempting to resolve the problem remotely.

7 Response time varies. May exclude some holidays.

8 HelpCenter response times vary and support hours may vary by geography.

Maintenance parts. When replacement parts are needed, IBM can ensure that parts are made available from 471 stocking locations worldwide, so that your customers' servers remain up and running.

With more than 148,000 consultants worldwide, IBM has the global reach necessary to help you effectively design, implement and manage international operations, if you need us.

IBM Global Services. With more than 148,000 consultants worldwide, IBM has the global reach necessary to help you effectively design, implement and manage international operations, if you need us.

Moving Forward

Our customers have told us they want IBM to focus on a few key areas as we strive to improve the capabilities of the Intel processor-based server as a business-application platform. In response, we continue to add advanced X-architecture features into our systems to raise the bar for Intel processor-based servers across the industry. Those focus areas are:

- Designing xSeries servers with a goal of providing uninterrupted computing
- Bringing down the cost of enterprise computing, which you will see with the recent announcement of eLiza and self-managing servers
- Becoming a leader in establishing industry-wide collaboration
- Making servers easier to deploy and use
- Continued enhancements in the area of interoperability across platforms

Conclusion

The first generation of e-business gave customers an unprecedented degree of choice over how, when and with whom they did business.

The first generation of e-business gave customers an unprecedented degree of choice over how, when and with whom they did business. The next generation of e-business will only increase those choices. The rate and pace of change keeps accelerating.

For customers to thrive in this new environment, IBM and IBM Business Partners need to quickly and easily help adapt customer business models to meet the changing needs of *their* customers. Customers can't do that if they are locked into a one-size-fits-all technology model.

The advantage of the IBM @server approach is that it gives customers the ability to build a technology infrastructure customized to meet their business needs today and flexible enough to adapt seamlessly to tomorrow's challenges. In the months since IBM @server was introduced, we've responded to

those needs with new processor technology and the industry's most advanced clustering solutions for UNIX® and Linux as well as aggressive new financing options for companies of all sizes. And that's just the beginning.

These advances are driven by IBM research, innovation and real business expertise that is undisputed in the marketplace, new tools created to manage the dynamic e-business landscape, and our commitment to offering choice and openness in all our operating systems. When you combine this with IBM storage, software, services, support, financing and with IBM Business Partners' capabilities, we offer customers an end-to-end solution that no other competitor can match.

Additional Information

Visit our Web site at **ibm.com**/eserver/xseries for more information on IBM @server xSeries servers direction, products and services. From the xSeries server home page, select **Library** and you will see links to available documentation.

IBM Corporation
Integrated Marketing Communications
Server Group
Research Triangle Park, NC 27709

Published in the United States of America
05-01

GM13-0079-00