

# You can't build an e-business without a strong foundation

## **e-business is right here, right now**

Every so often, a critical mass of technology makes profound changes possible in a very brief period of time. Ford's Model T ended the isolation of the farm family in a few short years. The Wright brothers' airplane has made it possible to have breakfast in Paris and lunch in New York. Goddard's rockets enabled satellite transmission systems, global positioning satellites, snapshots from Mars, and men walking on the moon. The advent of highly reliable, affordable, high-capacity digital networks have put the possibility of e-business at our feet. Technology has paved the way to a fundamentally different - and more exciting - way of structuring our organizations and running our institutions.

## **IBM leads the way in network inventiveness**

And IBM technology is at the heart of these networks. In the past five years, we've been awarded nearly 800 U.S. patents for networking inventions. That's four times the number of patents awarded to Cisco, 3Com and Bay Networks combined - including those awarded to their respective acquisitions.

IBM's Networking Hardware Division understands e-business because it is part of one of the largest e-businesses in the world. IBMers around the world are connected to each other through LANs, intranets, extranets and the Internet. Employees in NHD labs in Research Triangle Park, North Carolina and La Gaude, France collaborate on projects, share databases and work together with customers around the globe to build the networking products that support the largest public and private data networks in the world.

But e-business is not just about large multinationals gluing their worldwide populations together with the network and its killer applications. e-business is everybody's business. From the entrepreneur with his computer on the dining room table to the consultant setting up his office away from home in a different hotel room every night, the networking revolution of the last decade has extended the power and influence of the network to everyone.



# Changing everything

*“Every now and then, a technology or idea comes along that is so profound, so powerful, so universal that its impact changes everything...Network computing will transform every institution in the world. It will create winners and losers. It will change the way we do business, the way we teach our children, communicate and interact as individuals.”*

– Louis V. Gerstner

## **Why is e-business different?**

e-business is not just the Internet. Rather, it is the integration of private networks to incorporate the Internet and increase the access from any business to the rest of the world. The Internet, the Web and the IP infrastructure are all coming together so that companies of all sizes can extend their networks outward to other companies, to their remote employees, and to their customers, suppliers, and business partners. This extended network creates a 24-hour-a-day marketplace that extends from the home to the office or the hotel room. Information is readily available from anywhere at any time. Collaborative work applications such as Lotus Notes let people from around the globe contribute freely to a project. Global videoconferencing allows colleagues from around the world to meet face-to-face without ever leaving home. University students in California can sit in on a special class in Buenos Aires or Singapore without leaving their dorms.

The network has become as omnipresent as the telephone. And getting connected is becoming as easy as dialing a phone number.

## **The invisible - but very real - foundation**

You don't have to understand the telephone to use it, and you shouldn't have to understand the networks that support e-business to exploit them to your organization's advantage. For small businesses, IBM offers networking products that are as simple as plugging in a new phone at home. Instant access to the network. Instant resource and information sharing in the organization. Instant access to new markets and suppliers worldwide.

For larger organizations with more complex networks and more difficult problems such as bandwidth allocation, elimination of bottlenecks at critical resources, and 24-hours-a-day, 7-days-a-week, 52-weeks-a-year availability, the user must still be provided simple access to the resources of the network. And the IT professionals responsible for the network must have an infrastructure that is easy to modify, fault-tolerant, and simple to manage. Let's look a couple of examples of how IBM products have combined with the know-how of IBM and its business partners to bring e-business to our customers.

# IBM delivers

## **e-business solutions**

*to buy and sell, provide customer service, manage supply chains and connect teams.*

**e-business expertise** *based upon a deep understanding of our customers' needs, and the skills and resources to design, implement and maintain superior solutions.*

**e-business building blocks** *consisting of the technologies, hardware, software and services that are fundamental to this new Cyber-marketplace.*

## **Networking while the whole world watches**

When organizations put together networks that the whole world will watch, IBM is the proven choice. The networks for the Nagano Winter Olympics and the British Open Tennis Tournament at Wimbledon set new records for activity. During Wimbledon our site recorded over 145 000 hits in a single minute. And the networks functioned flawlessly, providing instantaneous information about the national heroes of sports from around the world.

## **Whose network would you trust your networking trade show to?**

When Mecklermedia, a rapidly growing firm of 150 people, had two days to assemble a network at Internet World to support every major vendor of Internet products — over 600 of them — they called on IBM. Who else would you call to get a network built in two days to show to over 55 000 attendees.

We installed over a quarter of a million feet of cabling and multiple Ethernet LANs to connect users to the IBM Global Network supplying Internet access for hundreds of vendors and thousands of attendees.

Carl Pugh, group president of Mecklermedia, knows that his company is serving some of the most technically demanding and astute customers in the world. Many of them are also Internet access providers. Yet the choice of a network provider for Internet World came down to a careful examination of a few basic principles.

"We're not a Fortune 500 company," says Pugh. "We're a small company running the fastest growing trade shows in history. We don't have the internal expertise to take on a job like this, but our very savvy customers demand the best. Our network must be transparent, like electricity. I don't want it keeping me awake at night.

"It comes down to a trusted brand — integrity, reliability and hardware that's proven. And, of course, the people you work with to get the job done. Only IBM had it all in one package."

# Building an e-business upon a strong foundation

**e-business is about business, not just technology.** *IBM and its business partners can help transform a business by combining Internet simplicity and networking technologies with core applications to run today's businesses on a standards-based infrastructure.*

**Start simple. Grow fast.** *IBM, Lotus and our business partners team together to help customers get started now and grow their applications fast.*

## **Ready, Set, Go!**

e-business can and should be at the heart of almost every business—from the single store retailer who uses the Internet to contact customers and suppliers to the largest multinational financial institution doing business around the world and around the clock. No matter what the business, the demands of e-business on the network are both similar and stringent.

- *The network has to meet the capacity demands of rush hour—no matter what the hour.*
- *The equipment and software must be standards-based, rock-solid reliable and simple to install and maintain.*
- *The experts in networking need to be available to help when you need it.*

We believe that the products described in this new edition of the IBM Networking Hardware Product Guide lead the industry in these qualities. They deliver value, security and durability to our customers, making it easy for them to operate and maintain their networks if they choose to do it themselves, or affordable for us to do it for them. And we can be confident in these claims because our own world-spanning networks, among the largest in the world, are built with our equipment.

If it wasn't good enough for us, we wouldn't sell it to you.

**Build on what customers have.** *Delivering cross-platform, standards-based solutions helps customers build securely on what they have and increases the value of their investments in networking infrastructure.*

**Expertise you can trust.** *IBM leverages its unique technological expertise across the Information Technology spectrum to provide the e-business solutions and the networking products fundamental to those solutions. Our customers get the business systems and networks they need to provide the security, scalability and transaction integrity required for e-business.*

#### **What's new?**

This edition of the *Product Guide* contains information about all Networking Hardware Division product announcements through September 1998. In addition to information about individual products, the *Guide* now also contains discussions of IBM solutions for the networks of the future and comparative information about our products. Additional printed copies can be obtained by calling 800 879-2755 in the U.S. only.

A CD-ROM version is also available.

The entire *Product Guide* is also available to you on the Web at [www.networking.ibm.com](http://www.networking.ibm.com). This online version will be updated for every Networking Hardware Division product announcement.