

IBM Communications Server Family



Energize your business network.





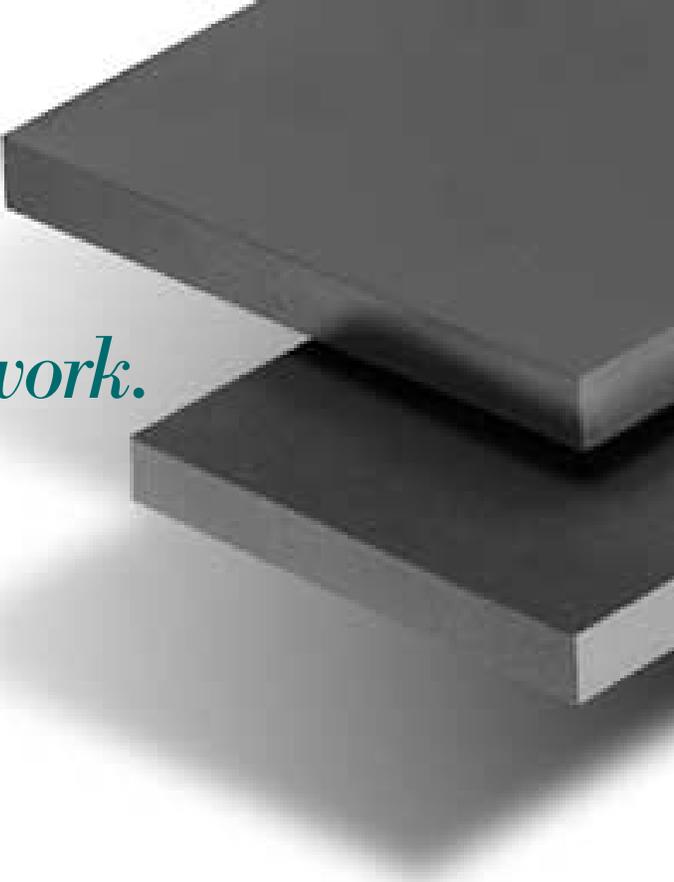
*Networking:
Challenges
or
opportunities?*

Your users demand to know why the system isn't responding. Others are clamoring for new applications to meet today's business objectives, client/server, multimedia, intranet, and Internet access, and collaborative computing. As if that wasn't enough, you're trying to build a coherent networking strategy when your multiple network protocols are incompatible.

The challenge is to design a network that meets changing application requirements and meets service level agreements, as well as provides round-the-clock availability and responsiveness in today's fast-paced business environment.

Give your business the power to take off.

You can turn all of your networking challenges into opportunities to energize your business. The IBM Communications Server provides solutions for business flexibility, network optimization, and application growth.



Turbocharge your network.

Where protocols were once rigid, you get network independence. Where bandwidth was once stretched, you get optimized data flows. Where applications were once limited, you get maximum flexibility.

The Communications Server is:

- A powerful communication gateway for connecting diverse applications and network environments.
- A strategic vehicle for enabling rapid deployment of new and enhanced business applications.
- A flexible platform for developing distributed and client/server applications.

A natural evolution.

IBM has long been a leader in communication software. With the introduction of the Communications Server family, we've implemented the broadest functions and connectivity, all based on industry-standard solutions and optimized for the platform of your choice.

The Communications Server family is fully interoperable with OS/400 and NetWare networks, and includes solutions for OS/390, AIX, and OS/2. A broad range of clients is supported, including OS/2, DOS, Windows, Windows 95, Windows NT, AIX, HP, Sun, DEC, Macintosh, and NetWare.

Fundamental to today's client/server and networked computing environments, the Communications Server builds on the leading peer-to-peer networking protocols of TCP/IP and Advanced Peer-to-Peer Networking (APPN).

Distributed applications are typically bound to a single communication protocol. This could mean expensive rewrites or the purchase of expensive hardware and software to accommodate new applications. The Communications Server breaks this bind, allowing you to roll out new applications quickly and economically, regardless of the type of network they were designed to use.

1

Power up for business flexibility.

Choose your applications

The Communications Server lets you choose applications, whether Sockets-, IPX-, NetBIOS-, or SNA-based, without regard to the underlying protocol. This expands the reach of your existing applications and allows you to easily support new applications, without impacting your existing users and without new hardware requirements.

- SNA applications, such as Information Management System (IMS), Customer Information Control System (CICS), DATABASE 2 (DB2), and emulator programs, can run over SNA and TCP/IP.

- TCP/IP Sockets applications, such as file transfer protocol (FTP), SAP R/3, simple network management protocol (SNMP), Lotus Notes, and Web browsers, can run over TCP/IP and SNA.

- IPX NetWare applications can run over SNA or TCP/IP networks.

- NetBIOS applications, such as Lotus Notes, cc:Mail, and LAN Server, can run over SNA or TCP/IP networks.

- TCP/IP users have easy access to 3270 applications and print services with TN3270E Server support.

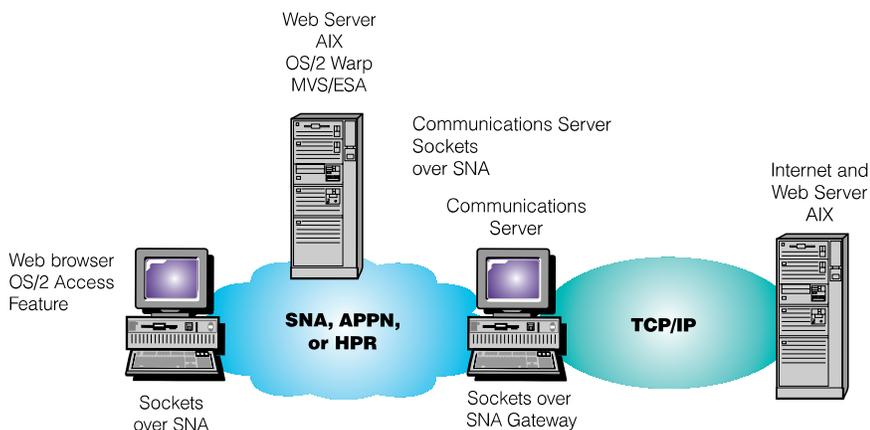
Choose your network

Two or more unlike networks can be connected, enabling them to function as a single network. For example, the Communications Server can act as a gateway between your internal network and the Internet, bringing Internet access to your users—whether they're running over an SNA or a TCP/IP network. Likewise, Web browser applications running on SNA or TCP/IP desktops can use Communications Server to get connected to an intranet server.

Similarly, an SNA-based application, such as CICS or DB2 running on an SNA network, can communicate across a TCP/IP network with a like application on another network.

Choose your workplace

All of this can be accomplished with the flexibility of supporting your users from anywhere—whether they're working in the office, at home, or on the road.



Revitalize your network.

2

Now that all of your users can get access to any applications they need, you know you'll be expected to provide them with the same response time and availability as always—and with continuing pressure to control costs.

Communications Server support for High-Performance Routing (HPR) provides these services and helps you provide guaranteed service level agreements, while keeping within budget. HPR offers improved availability and support for high-speed multiprotocol distributed networks, including asynchronous transfer mode (ATM).

Improved response time

Application-specific prioritization ensures that interactive sessions take precedence over batch traffic, while keeping link utilization high.

Highest availability

Network failures are automatically rerouted, without disrupting the application or user.

Maximum efficiency

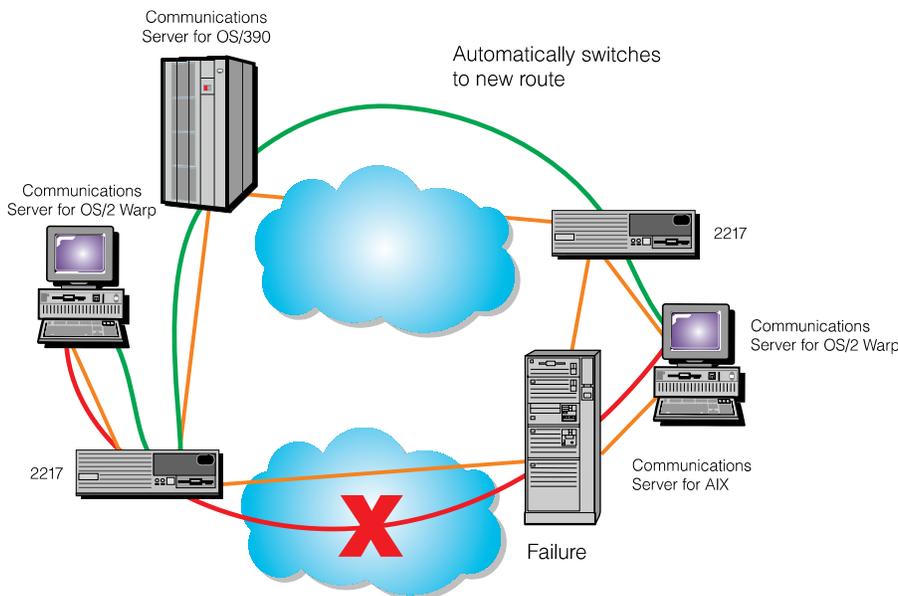
During periods of congestion, incoming data is throttled back to prevent data loss, while at the same time ensuring maximum link utilization.

A smooth transition to ATM

HPR was specifically designed for high-speed environments and positions your network to move to ATM in the future.

Reduced complexity and cost

Network complexity and cost are reduced because you don't need to maintain parallel networks to run applications of different types.



Reroutes without disruption

Launch new applications.

3

The Communications Server supports all key distributed and client/server application programming interfaces (APIs), for example, advanced program-to-program communication (APPC), Sockets, Common Programming Interface for Communications (CPI-C), X.25, and others.

As the evolution continues through client/server and networked computing toward more network resource-intensive applications, such as multimedia, and collaborative computing, the demands on your network increase.

The Communications Server was designed with this in mind. It provides the level of network performance and stability that will be demanded by new applications, while giving you assurance that existing applications run at top performance.

The Communications Server positions you for this evolution, letting you exploit new applications, like ATM, in the future.



*Everyone
benefits
from the
Communications
Server.*

The user

Users have a wider choice of new applications because the Communications Server expands the reach of existing applications. Applications can be deployed to all users quickly and economically.

The administrator

Administrators can focus on optimizing the network environment for availability and response time, confident they are always ready to support new application requirements and can still manage costs.

The application provider

Application writers can select the APIs they use based on functions the API provides, without regard to the underlying network. Existing applications can be run over additional network types, expanding the market for those applications. In this way, application providers can concentrate on improving their products rather than on developing different versions to run on different protocols.



What are you waiting for?

IBM Communications Server meets all your networking needs with one easy answer.

Position your business for every opportunity.

For business flexibility

- Roll out new applications quickly and inexpensively
- Integrate SNA and TCP/IP networks with SNA, TCP/IP, IPX, and NetBIOS applications
- Get connected fast to your intranet or the Internet

For a cost-effective network

- Assure the highest performance and availability
- Save money and time

For a competitive advantage

- Exploit today's leading applications
- Get ready for the networks and applications of tomorrow

*The Communications Server family...
positively energizing!*

Communications Server for OS/2Warp

An advanced multifunction gateway providing flexible, reliable communication for networks of all sizes

Communications Server for AIX

A powerful gateway with the capacity and performance that can be provided by channel-attachment

Communications Server for OS/390

A powerful, open enterprise server for mission-critical, business-to-business, business-to-consumer communication across LAN, WAN, intranet, and the Internet

NetWare for SAA

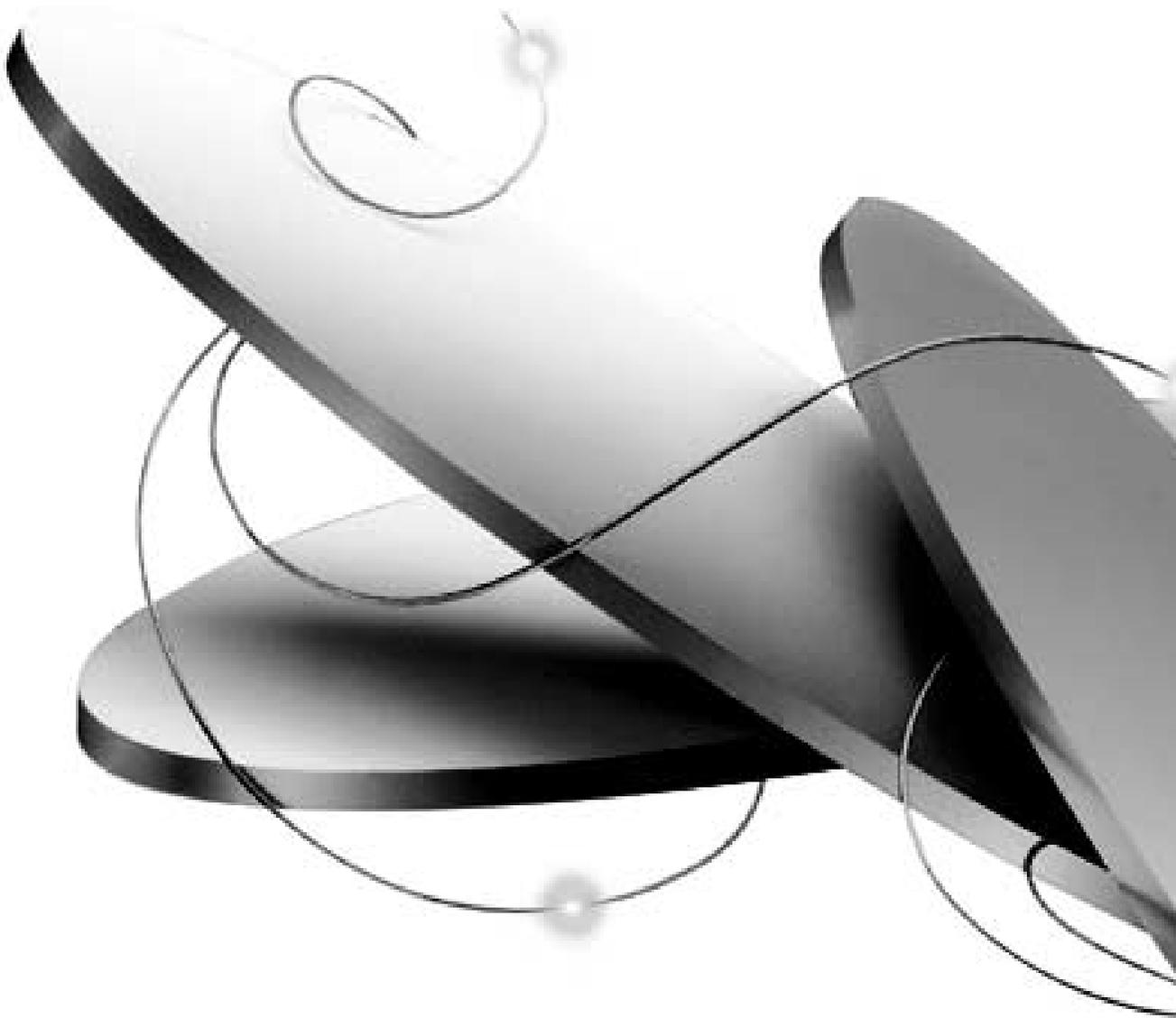
The industry's leading NetWare communication gateway, jointly developed and supported by Novell and IBM

NetWare for SAA: AS/400 Edition

A complete gateway server created uniquely for the AS/400 environment

Additional products

The Personal Communications products for the AS/400 and 3270, Version 4.1, line are IBM's premier application development and terminal emulation offerings for the OS/2, DOS, Windows 3.1, and Windows 95 environments.



For more information

To learn more about IBM's Communications Server line of products, contact your IBM marketing representative or authorized reseller. Or, look for us on the World Wide Web at URL

<http://www.raleigh.ibm.com>.

Related publications

Other publications are available for your interest.

- IBM Communications Server, G325-3565-01
- IBM Communications Server for OS/390, G325-5206-00
- IBM Communications Server for AIX, G325-3572-01
- IBM Communications Server for OS/2 Warp, G325-3596-01
- IBM Communications Server for OS/2 Warp, OS/2 Access Feature, G325-3568-01
- IBM Communications Server for OS/2 Warp, Windows Access Feature, G325-3566-00
- NetWare for SAA 2.0, G325-6575-00
- NetWare for SAA: AS/400 Edition, G325-6581-00
- Use your SNA network for Internet access, G325-5102-00
- Integrate SAP R/3 and your SNA or APPN network, G325-3650-00
- IBM Personal Communications AS/400 and 3270 Family of Desktop and Emulation Products, G325-3475-00



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P.O. Box 12195
Research Triangle Park, NC 27709
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Printed in the United States of America
9-96
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G325-5207-01