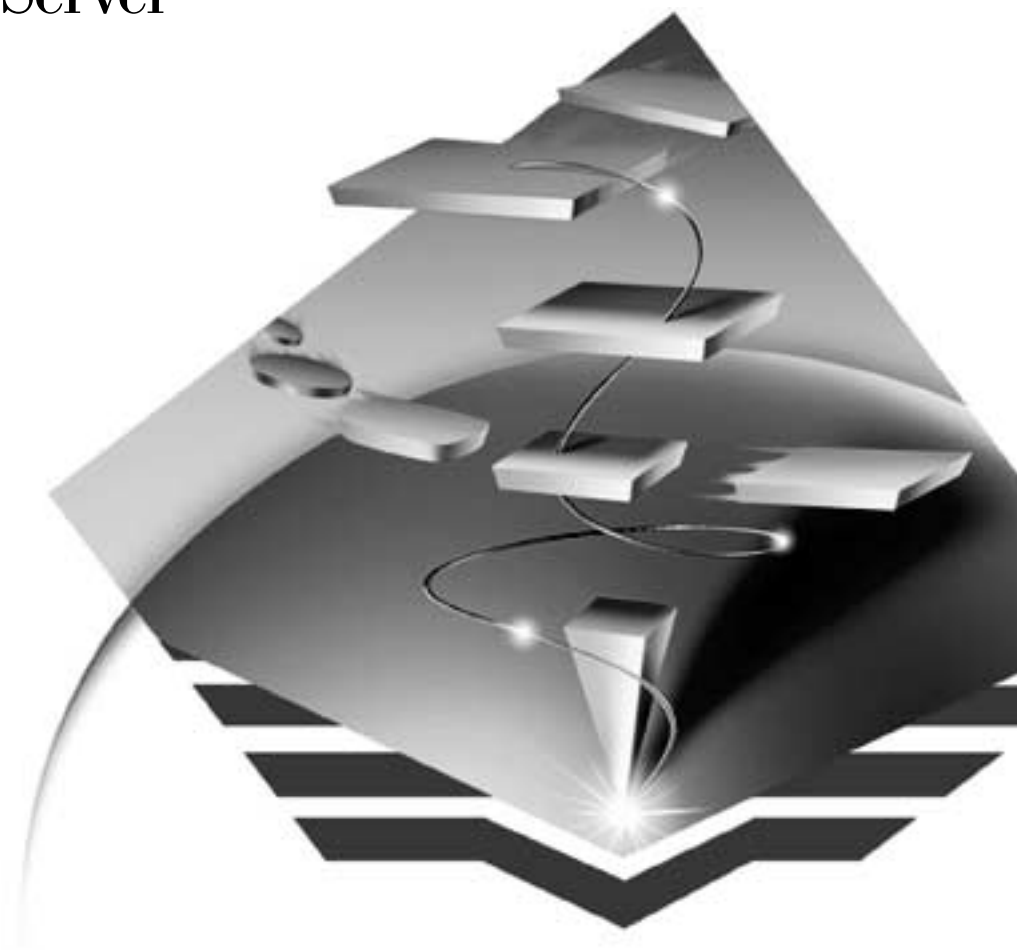
An IBM Software Server

Communications Server



Highlights

Make application decisions based on business needs, not network protocols

Access the information you need—when you need it—from a large computer or LAN, whether you're in the office or on the road

Discover a powerful gateway server for SNA and TCP/IP clients

Improve your network systems management through consolidated traffic and reduced need for parallel networks

Enable remote, integrated cross-server administration capability through the Web

Get the widest range of connectivity in the industry

Provide TCP/IP users access to 3270 central computer applications through TN3270E server

Provide easy SNA 3270 application access from any Java-enabled Web browser

Bolster user productivity with a proven, reliable product

The solution for a changing environment

IBM Communications Server, part of the IBM Software Servers line, meets the challenge of today's changing business environment. Communications Server offers Internet and intranet solutions that allow your company to take advantage of network computing advances—like information access, electronic commerce, and collaboration.

With Communications Server, you choose applications based on your business needs, not on your network. With various local area networks (LANS), mergers, consolidations, and changes to organizational structure, is your network still able to connect applications, data, and people—regardless of where they are? Communications Server brings you true networking, interconnecting people and applications, even when platforms and network configurations are diverse.

Communications Server brings you the reliability, open standards, scalability, and security you've come to expect from IBM. Communications Server is the solution to meet your needs of today and tomorrow.

Meeting your communication requirements
The Communications Server is designed to meet your networking requirements, so you can concentrate on making your business a success. Communications Server lets workstation users and applications communicate with other workstations and large-computer applications, enabling commerce, encouraging collaboration, and managing your content. The Communications Server provides easy access to the information and people you need in today's diverse multiprotocol network computing environment.

Enjoy new Web-based server administration
Communications Server provides a new Web-based tool that gives you remote integrated cross-server administration capability. IBM takes Web-based server administration to a new dimension. A simple graphical user interface provides a convenient, at-a-glance status of Communications Server, while a user interface that's consistent across server platforms preserves a common look and feel.

Increase productivity, while keeping costs in control
Communications Server is the solution for companies that:

- Need to expand the use of applications, yet protect current network investments
- Need to reduce operation and management costs by connecting networks without impacting existing applications
- Must reduce costs of central computer systems and peer-to-peer connectivity by sharing communication resources
- Want to improve network availability and response time by assigning priority to short, interactive data transmissions rather than to batch-oriented bulk data traffic

Welcome to protocol independence
The Communications Server opens the door to protocol-independent networking, with seamless support for workstations communicating across SNA, IPX, NetBIOS, and TCP/IP networks. This interoperability gives you the freedom to be responsive to changing business applications, without disrupting your network. Delivering data where it's needed, when it's needed is a fundamental challenge in today's networked environment. Communications Server lets you exploit the newest technology to maintain your competitive edge.

Mobile computing
With the IBM Communications Server and a laptop computer, you can take your applications on the road. In addition, remote personal computers can easily access information on central computer systems and other personal computers attached to a LAN. Either way, you gain productivity by staying connected in today's mobile work environment.

Growth capacity
Communications Server has proven itself in critical, bet-your-business environments for reliability, performance, and capacity. Communications Server handles networks of all sizes—from small workgroups or remote branch offices to large corporate environments.

SNA services
The Communications Server provides all-in-one SNA communication services from workstations to an S/390 system, an AS/400 system, or other workstations. Its capabilities include a full-function SNA gateway, the most Advanced Peer-to-Peer Networking in the industry, support for many types of connections, and a rich set of application programming interfaces (APIs). Of particular significance is the support of SNA, which is based on IBM's long experience as the architect and developer of this important networking protocol.

Multiprotocol support
The Communications Server provides powerful, multiprotocol gateway support for SNA, TCP/IP, IPX, and NetBIOS networks. Communications Server connects applications on many platforms across heterogeneous networks. AnyNet technology, based on open standards, provides the capability to run sockets TCP/IP applications over SNA; SNA applications over TCP/IP; and, with Communications Server for OS/2, you can run IPX- or NetBIOS-applications over TCP/IP and SNA networks. You can mix and match SNA and TCP/IP-based network protocols as you expand or combine networks. Applications written for SNA, sockets, IPX, or NetBIOS can run without change on mixed network backbones. For diverse networks, Communications Server gives you the breadth of function, connectivity, and capacity to support future needs.

TCP/IP access to 3270 applications

In addition, Communications Server provides TN3270E server function. This allows TCP/IP users easy access to 3270 applications. With the standard extensions, users can print to their workstations or to printers in the TCP/IP network. Also, requesting a resource (LU or pool of LUs), responses, and Attn and SysReq keys are supported. TN3270E support is compliant with industry standard Request For Comment (RFC) 1576, RFC 1646, and RFC 1647.

This function is integrated as part of the Communications Server for OS/2 and Windows NT. For Communications Server for AIX, this function is provided by SNA Client Access for AIX (an optional licensed program). SNA Client Access also includes TN5250 server support and dynamic load-balancing capabilities.

Internet-to-SNA solution

Continuing to advance our strategy of providing network computing solutions, Communications Server provides Host On-Demand. Host On-Demand gives you fast and easy access to central-computer information from intranets or the Internet. It is a Java-based solution that incorporates industry-standard Telnet 3270 protocols. Host On-Demand provides a high-performance, low-cost solution for intranet and Internet users who need occasional access to their central-computer applications or databases. Users on any Java-enabled platform can take advantage of this feature with a simple mouse click—no customer programming or additional hardware is required.

Advanced Peer-to-Peer Networking

Communications Server acts as a subarea node and an Advanced Peer-to-Peer Networking (APPN) node (both network node and end node). Communications Server APPN support includes SNA networking facilities that connect distributed computing applications, peer applications, and client applications to their servers.

The Communications Server also includes support for High-Performance Routing (HPR), which improves availability and throughput for network communication. It provides error recovery, connection awareness, sophisticated flow control, and segmentation at the end points of a connection, freeing intermediate nodes to move data.

On the Communications Server for OS/2 or Windows NT, if an intermediate link or node in a connection route fails, HPR can determine a new connection route and resume transmission without disrupting your users' sessions.

Support for your business decisions

With its robust communication and systems management features, the IBM Communications Server provides the support you need to make business decisions.

Communications Server:

- Supports workstations running OS/2, Windows 3.1, Windows NT, Windows 95, DOS, or AIX
- Provides SNA over TCP/IP and Sockets over SNA network communication
- Features APPN network node, end node, including support for HPR and dependent LU requester (DLUR)
- Delivers a rich set of APIs to develop applications for distributed computing, including support for APPC, Common Programming Interface for Communications (CPI-C), and LUA
- Supports TN3270E server functions
- Enables easy 3270 SNA access to any Java-enabled Web browser with Host On-Demand
- Accommodates a broad range of LAN and wide area network (WAN) protocols, including Fiber Distributed Data Interface (FDDI), Synchronous Data Link Control (SDLC), asynchronous transfer mode (ATM), and X.25. The OS/2 and Windows NT Servers also support integrated services digital network (ISDN), integrated data link control (IDLC), and frame relay.
- Provides S/390 channel and ESCON support with efficient, high-capacity access to multiple large computers (available for AIX and Windows NT)
- Offers remote access to SNA applications over asynchronous, synchronous, Hayes AutoSync, digital, and cellular connections
- Supports a wide range of IBM and OEM adapters and modems
- Enables remote installation and configuration
- Allows easy-to-use Web-based, remote cross-server administration

Saving with SNA API client support

Communications Server for Windows NT allows TCP/IP-attached clients to access SNA APIs, without requiring SNA protocols to flow between the clients and the server. This allows most SNA configuration to take place at the central server. Communications Server supports SNA API clients on Windows 95, Windows NT, Windows 3.1, or higher, and OS/2. With this configuration the server handles the processing while reducing the storage and workload at the client PCs.

Access features for OS/2 and Windows

The IBM Communications Server for OS/2 Warp provides two freestanding components that can be licensed and installed separately to support application development in OS/2 or Windows environments. These components provide SNA services and application programming interfaces for LAN-attached workstations and can function independently from the Communications Server for OS/2 Warp gateway server.

- OS/2 Access Feature consists of 32-bit and 16-bit APIs, LAN and WAN connectivity, APPN end node, and multiprotocol support for the desktop. This allows Sockets applications over SNA and SNA applications over TCP/IP to communicate with each other through the multiprotocol gateway.
- Windows Access Feature consists of the APPC Networking Services for Windows product (NS/Windows) and the multiprotocol support, which lets APPC and CPI-C applications communicate through the SNA over TCP/IP gateway to IBM and other computers. NS/Windows provides the CPI-C application programming interface and APPC support for APPN low-entry network (LEN) end node.

IBM Software Servers line

IBM Software Servers provide you with the most comprehensive set of client/server products in the industry. Easy-to-obtain, easy-to-install, and easy-to-use, these servers provide unrivaled function, openness, and scalability, laying the basis for IBM's vision of networked computing. With IBM Software Servers, you can build a high-function, reliable environment for e-mail, messaging, decision support, groupware, transaction processing, and other client/server functions vital to today's businesses.

IBM Software Server products include:

- IBM Communications Server
- IBM DATABASE 2 (DB2) Database Server
- IBM Directory and Security Server
- IBM Internet Connection Server
- Tivoli Management Servers
- IBM Transaction Server
- Lotus Domino Server

Fast, expert installation customized to suit you

IBM offers IBM SmoothStart Service for Communications Server—specifically designed to help install and integrate the server as part of your environment. You'll be in production and back to business—fast!

For more information

To learn more about IBM Communications Server, contact your local IBM marketing representative or IBM Business Partner. Or visit us on the World Wide Web at URL

http://www.software.ibm.com/is/sw-servers

IBM Corporation
Research Triangle Park, NC
USA

Printed in the United States of America
2-97

G325-3565-02