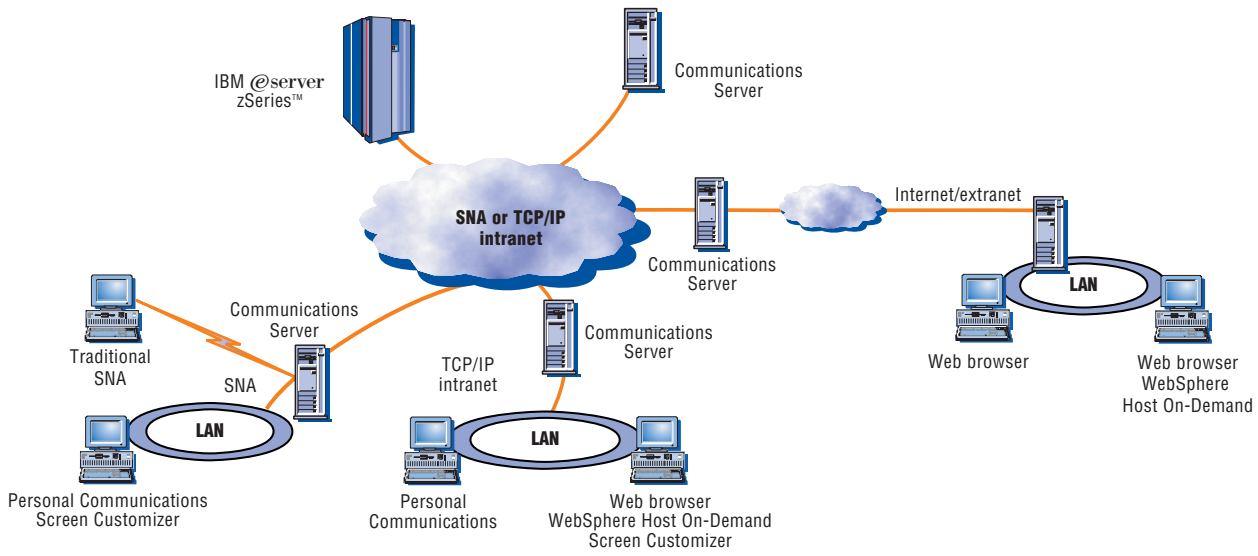
*A flexible solution for connecting your enterprise*

# IBM Communications Server




*IBM Communications Server provides a comprehensive connectivity solution.*

## Highlights

- ***Base application decisions on business needs, not on operating platforms or network protocols***
- ***Leverage current investments and run SNA applications over TCP/IP networks***
- ***Help reduce 3270 user ID and password administrator costs with the express logon function***
- ***Provide connectivity to the intranet or Internet with a scalable, high-performance gateway server***
- ***Help protect business information assets from security breaches***
- ***Help boost network availability, efficiency and performance with load balancing, hot standby and HPR***

e® business

As your business needs grow, chances are, so will your network. Explosive growth and constant change in the information management and delivery arena call for versatile technologies to meet your company's growing needs. IBM Communications Server meets the challenge—offering a comprehensive package of enterprise networking solutions to effectively connect your employees, customers and trading partners across multiprotocol networks.

**Power up for business flexibility**

No matter where your company wants to go to make existing host applications available through the Internet, IBM Communications Server takes you there quickly and easily. With IBM Communications Server, you can leverage network assets already in place, while making the transition at your own pace. IBM Communications Server can connect your employees, customers and trading partners to the information and applications they need, independent of the underlying network. Designed to meet your company's growing e-business needs, IBM Communications Server provides fast, efficient ways to extend data to Web users.

**A natural evolution**

IBM has long been a leader in communication software. With the introduction of Communications Server products, we've implemented functions and connectivity based on industry-standard solutions, tailored for a wide range of platforms. Acting as a multiprotocol gateway, IBM Communications Server enables applications to run over multiple network protocols. You can run TCP/IP applications over existing SNA networks without adding a separate TCP/IP network. And you can extend SNA applications to TCP/IP users without the addition of a separate SNA network.

**Reliability and flexibility**

IBM Communications Server also works as a Telnet server, providing SNA network access to client applications running anywhere in your TCP/IP network. Enterprise Extender, a leading-edge solution for accessing SNA applications over TCP/IP networks, offers levels of reliability, scalability and control similar to those provided by SNA networks. Enterprise Extender uses standard Internet Protocol (IP) technology and requires no new hardware or software in the IP backbone.

**IBM Communications Server at a glance**

| Platforms | Hardware requirements | Software requirements | Memory requirements |
|---|---|---|---|
| IBM AIX, Version 6.1 | • Any system supported by IBM AIX®, Version 4.3.3 or AIX 5L for POWER, Version 5.1<br>• Appropriate communication adapters, cables and device drivers<br>• 71MB–95MB of permanent space, depending on features installed<br>• At least 2MB of additional hard disk space for installation<br>• 4.1MB–6MB of hard disk space per language for messages, depending on language<br>• 16MB of hard disk space for softcopy documentation | • AIX, Version 4.3.3, or higher<br>• Motif level 1.2 support (part of AIX base operating system; required for Motif administration) | • 64MB of real memory for effective performance |
| Windows NT and Windows 2000 Version 6.1.1 | • Intel® Pentium® processor, minimum 166MHz for Windows® 2000, 100MHz for Windows NT | • Windows NT Server, Version 4.0 or higher, or Windows 2000 Server, Advanced Server or Professional Server | • Minimum of 32MB of real memory |
| IBM OS/2 WARP, Version 6.1 | • Intel 486 (or compatible microprocessor), minimum 166 MHz, or higher | • OS/2 WARP Server, Version 4.0 or OS/2 WARP, Version 4.0 | • Minimum of 32MB of real memory |

**Security**
IBM Communications Server offers TN3270E and TN5250[1] servers, supporting Secure Sockets Layer (SSL) authentication and encryption across the TCP/IP network. The built-in security of SSL helps protect your data from eavesdropping, tampering or message forgery over TCP/IP, utilizing SSL-enabled TN3270 and TN5250 clients connected to IBM Communications Server. Session-level encryption enables you to encrypt workstation data between the server and the host across SNA networks.

**Streamlined 3270 access**
With the express logon function of IBM Communications Server, a user running a 3270 client session can log on to a host system without having to enter the user ID and password as the means of authenticating the user. One advantage of using this function is that it reduces the time spent by an administrator maintaining host user IDs and passwords. It can also reduces the number of user IDs and passwords that users have to remember.

To take advantage of the express logon function, a TN3270 client, such as IBM WebSphere® Host On-Demand, Version 5.0 and IBM Communications Server for OS/390 as found in IBM OS/390®, Version 2 Release 10, is required.

**Network performance**
IBM Communications Server can help improve the availability and performance of your network. Using High-Performance Routing (HPR), it offers the ability to reroute traffic around network failures and congestion. Additionally, it provides highly intelligent session management to help minimize network congestion and maximize throughput.

The hot standby[1] function of IBM Communications Server helps improve network availability by triggering a backup server if your critical server ever fails. And, IBM Communications Server supports load balancing for TN3270E- and TN5250-connected clients of the same host resource, when clients also support Service Locator Protocol (SLP).

**Simplified administration**
IBM Communications Server allows you to perform server administration over an intranet or the Internet. From either a remote or local workstation, the administrator can manage IBM Communications Server through a Web browser.

IBM Communications Server is enabled for Tivoli® software to centrally manage the devices and applications in your network. IBM Communications Server is certified Tivoli Ready™ on IBM OS/2 WARP® and Microsoft® Windows NT®.

**Power programming**
IBM Communications Server provides a sophisticated programming interface, supporting a wide range of application programming interfaces (APIs) for the program developer. These APIs offer convenient ways for the programmer to access IBM Communications Server functions.

**For more information**
To learn more about IBM Communications Server, visit:

**ibm.com**/software/network/commserver

**IBM Communications Server features and benefits by platform**

| | IBM OS/2 WARP, Version 6.1 | Windows NT and Windows 2000, Version 6.1.1 | IBM AIX, Version 6.1 |
|---|---|---|---|
| **SNA support** | | | |
| SNA gateway | X | X | X |
| APPN® EN and NN function | X | X | X |
| Branch extender | X | X | X |
| **High-performance routing** | | | |
| Intermediate node routing ANR | X | X | X |
| HPR connection endpoint RTP | X | X | X |
| 3270 support over APPN | X | X | X |
| Data compression | X | X | |
| LU 6.2 synchpoint | X | X | X |
| SNA session level encryption | X | X | |
| **Multiprotocol support** | | | |
| TN3270E server | X | X | X |
| TN5250 server | | X | |
| SSL security | X | X | X |
| Express logon function | X | X | X |
| WebSphere Host Publisher | | X | X |
| Enterprise Extender (HPR/IP) | X | X | X |
| Sockets over SNA access node | X | X | X |
| APPC over TCP/IP access node | X | X | X |
| SNA over TCP/IP access node | X | X | |
| Sockets over SNA gateway | X | X | X |
| APPC over TCP/IP gateway | X | X | X |
| SNA over TCP/IP gateway | X | X | |
| IPX over SNA gateway | X | | |
| IPX over TCP/IP gateway | X | | |
| NetBIOS over SNA gateway | X | | |
| NetBIOS over TCP/IP gateway | X | | |
| Split stack for SNA over IP/IPX | | X | |
| Access features | X | | |

## Additional IBM Communications Server features and functions at a glance

### Supported communication services and protocols

- Asynchronous[2]
- ATM (LAN emulation)
- EIA-422A
- EIA-232D
- Ethernet
- IBM ESCON® channel, including multipath channel support and block multiplexer[3]
- FDDI
- Frame relay
- Hayes Autosync[2]
- IBM Token-Ring network
- ISDN[4]
- SDLC
- Smart Modem[5]
- Twinaxial[2]
- V.35
- X.21
- X.25
- V.25 bis

### Supported APIs

- LU application interface (LUA) request unit interface (RUI), supporting dependent LU types 0, 1, 2, 3
- Common Programming Interface for Communications (CPI-C) and advanced program-to-program communication (APPC) APIs supporting both dependent and independent LU 6.2
- Host Access Class Library (HACL)
- CPI-C for Java™ technology
- WinSock[1]
- Common Services
- Node operator facility (NOF)
- SNA management services



IBM Corporation
Software Group
Route 100
Somers, NY 10589
U.S.A.

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1 Supported only by IBM Communications Server for Windows NT and Windows 2000, Version 6.1.

2 Supported by IBM Communications Server for Windows NT and Windows 2000, Version 6.1.1 and IBM Communications Server for OS/2 WARP, Version 6.1.

3 Supported by IBM Communications Server for Windows NT and Windows 2000, Version 6.1.1 and IBM Communications Server for AIX, Version 6.1.

4 Supported by IBM Communications Server for OS/2 WARP, Version 6.1.

5 Supported by IBM Communications Server for AIX, Version 6.1.

Tivoli Ready

For OS\2 WARP and Windows NT