

# **IBM Communications Server**

#### **Highlights**

Reach new customers and business partners by publishing host applications on the Web

Make application decisions based on business needs, not on operating platforms or network protocols

**Provide connectivity to** the Internet or intranet with a scalable, high-performance gateway server

Leverage current investments and run SNA applications over TCP/IP networks

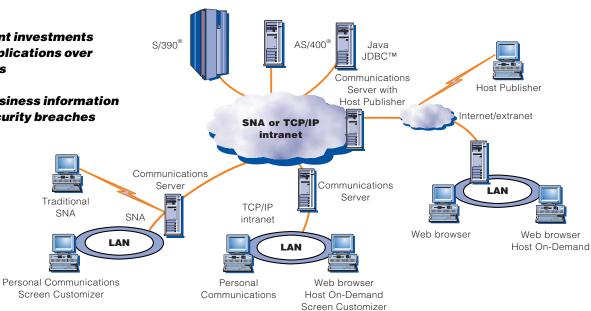
Help protect business information assets from security breaches

Help boost network availability, efficiency and performance with load balancing, hot standby and HPR

Help reduce application development time with a wide variety of industry-standard APIs

Perform Web-based server administration

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 critical business partners across multiprotocol networks.



IBM Communications Server provides a comprehensive connectivity solution.



### Fast, reliable access to the information you need

#### Power up for business flexibility

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

#### A natural evolution

IBM has long been a leader in communications software. With the introduction of Communications Server products, we've implemented functions and connectivity based on industry-standard solutions and tailored for a wide range of platforms. Acting as a multiprotocol gateway, 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**

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.

#### **Extend your business to the Web**

Integrating diverse host applications and publishing them to the Web is a major step toward building your e-business allowing fast, efficient delivery of products to the marketplace. Using Host Publisher<sup>1</sup> with Communications Server, you can combine information from multiple sources into convenient, Web-based applications without rewriting your existing applications. Host Publisher delivers a competitive advantage by extending your sales channels, providing new Web browser-based services and helping improve user productivity with new interfaces for your current applications. Additional Web-to-host integration features include:

- IBM Host On-Demand Entry
- IBM Host Access Class Library (HACL)

#### **Security**

Communications Server offers TN3270E and TN5250² 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 Communications Server. Session-level encryption enables you to encrypt workstation data between the server and the host across SNA networks.

#### **Network performance**

Communications Server can 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 function of Communications Server helps improve network availability by triggering a backup server if your critical server ever fails. And, 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**

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 Communications Server through a Web browser.

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

#### **Power programming**

Communications Server provides a sophisticated programming interface, supporting a wide range of APIs for the program developer. These APIs offer convenient ways for the programmer to access Communications Server functions.

#### For more information

To learn more about IBM Communications Server, visit: www.ibm.com/software/network/ commserver

#### IBM Communications Server at a glance

#### **Platforms**

IBM AIX® Version 5

#### UnixWare 7 Version 5

Windows NT and Windows® 2000

OS/2 WARP

Hardware requirements	Software requirements	• 32MB of RAM	
RS/6000, IBM POWERserver® Power PC, Powerstation computers, IBM 9076 SP2® Scalable POWERparallel® Systems or other AIX platform  Appropriate communication adapters, cables and device drivers  32MB to 36MB of permanent space, depending on features installed  At least 2MB of additional hard disk space for installation  2.5 to 4MB per language for messages, depending on language  8MB for softcopy documentation	<ul> <li>AIX, Version 4.1.5 or higher</li> <li>Motif level 1.2 support (part of AIX base operating system; required for Motif administration)</li> </ul>		
<ul> <li>Intel Pentium processor, minimum 100MHz         (may vary depending on network environment)</li> <li>Appropriate communication adapters,         cables and device drivers</li> <li>A minimum of 23MB of available hard disk space</li> <li>At least 2MB of additional hard disk space for installation</li> <li>Additional 10MB of available hard disk space for softcopy documentation</li> <li>Additional 2.5MB of available hard disk space for each language</li> </ul>	SCO UnixWare 7 TriTeal Enterprise Desktop, a Common Environment (CDE) to install the GUI administrative tool Windows NT or Windows 95 to run the SNA API Client 42MB to 150MB of disk space At least 20MB of additional hard disk space for installation	• 32MB of RAM Desktop	
• Intel Pentium processor, minimum 166MHz for Windows 2000, 100MHz for Windows NT (can vary depending on network environment)	Windows NT Server, Version 4.0 or higher, or Windows 2000 Server, Windows 2000 Server, Advanced Server, or Professional	Minimum of 32MB of real memory	
Intel 486 (or compatible microprocessor)     or higher	OS/2 WARP Server, Version 4.0 or OS/2 WARP, Version 4.0	• 4MB to 9MB of RAM	

	IBM OS/2® Version 6.0	Window NT and Windows 2000 Version 6.1	AIX Version 5.0	UnixWare 7 Version 5.0
NA support				
SNA gateway	X	X	X	X
APPN® EN and NN function	Х	X	Х	X
Branch Extender	X	X		
High Performance Routing				
Intermediate node routing ANR	X	X	Х	X
HPR connection endpoint RTP	Х	X	Х	X
3270 support over APPN	X	X	Х	X
Data compression	Х	X		
LU 6.2 synchpoint	Х	X	Х	X
SNA session level encryption	Х	X		X
Aultiprotocol support				
TN3270E server	Х	X	X	X
TN5250 server		Х		
Host On-Demand Entry	Х	X	X	X
Host Publisher		Χ		
Enterprise Extender (HPR/IP)	Х	X		
Sockets over SNA access node	Х	X	Х	
APPC over TCP/IP access node	Х	X	Х	
SNA over TCP/IP access node	Х	X		
Sockets over SNA gateway	Х	X	Χ	
APPC over TCP/IP gateway	Х	X	Х	
SNA over TCP/IP gateway	Х	X		
IPX over SNA gateway	Х			
IPX over TCP/IP gateway	Х			
NetBIOS over SNA gatway	Х			
NetBIOS over TCP/IP gateway	X			
Split stack for SNA over IP/IPX		X		X (IP only)
Access features	X			

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

## Supported communication services and protocols

- Asynchronous
- ATM (LAN emulation)
- EIA-232D3
- Ethernet
- IBM ESCON® channel, including multipath channel support and block multiplexer
- FDDI
- Frame relay
- Hayes Autosync
- IBM Token-Ring network
- ISDN
- SDLC
- Smart Modem<sup>3</sup>
- Twinaxial
- V.35<sup>3</sup>
- X.213
- X.25
- X.25 bis<sup>3</sup>

#### **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 APPC APIs supporting both dependent and independent LU 6.2
- Host Access Class Library (HACL) and Host Access
- JCPI-C
- WinSock
- Common Services
- Node operator facility (NOF)
- SNA management services



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Printed in the United States of America 3-00

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- Host Publisher is not currently available for the Windows NT platform user.
- <sup>2</sup> TN5250 server is available in Communications Server for Windows NT and Windows 2000 only.
- <sup>3</sup> Supported only by Communications Server for UnixWare, Version 7.

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For OS/2 WARP and Windows NT.



3325-3986-00