IBM Communications Server for Linux

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 boost network availability, efficiency and performance with HPR**

- **Provide HPR functionality over IP connections to support SNA applications over IP networks**

- **Provide passthru TCP/IP host access to TN clients**

- **Help reduce 3270 user ID and password administrator costs with the express logon function**

- **Help protect business information assets from security breaches through Secure Sockets Layer (SSL) support**

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 for Linux can meet 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 can take 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

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.

With the addition of IBM Communications Server for Linux, OS/2 Warp customers can enjoy increased confidence in considering the Linux operating environment for their future platform of choice.

Acting as a multiprotocol gateway, IBM Communications Server enables applications to run over multiple network protocols.

.**Internet Networking**
IBM Communications Server also works as a Telnet server, providing SNA network access to client applications running anywhere in your TCP/IP network. TN Redirector provides passthru TCP/IP host access to TN3270, TN3270E, TN5250 and VT clients, referred to collectively as Telnet clients. The Telnet user communicates with Communication Server for Linux over a TCP/IP connection; Communications Server then communicates with the host over another TCP/IP connection. This allows you to use Secure Sockets Layer (SSL) security checking where necessary, and not on the entire user-to-host connection.

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.

Security

IBM Communications Server offers TN3270E, supporting Secure Sockets Layer (SSL) authentication and encryption across the TCP/IP network. The built-in security of SSL helps to protect your data from eavesdropping, tampering or message forgery over TCP/IP, utilizing SSL-enabled TN3270 clients connected to IBM Communications Server.

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 can reduce the time spent by an administrator maintaining host user Ids and passwords.

It can also reduce 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 or later 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 can provide highly intelligent session management to help minimize network congestion and maximize throughput.

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 by telnetting into the desired server.

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:

http://www.ibm.com/software/network/ commserver

IBM Communications Server for Linux at a glance

Hardware requirements	Software requirements	Memory requirements
• 32-bit Intel™ system with at least a 100MHz Pentium processor (200 MHz recommended) • Appropriate communication adapters, cables and device drivers • 55MB of permanent space	• Redhat Linux V7.2 or V7.3 • Linux Streams Version 2.13.20 (Open Source) • OpenMotif Version 2.1 (optional, required for Admin GUI, Public License, available on Internet) • Java™ Runtime Environment 1.3 (required for CPI-C for Java API and SSL Management Tool)	• 64MB of real memory (128MB recommended) Note: Some hardware configurations may require 128MB)

IBM Communications Server features by platform

	Redhat Linux, V6.0	IBM OS/2 Warp, V6.1	Windows NT® and Windows 2000®, V6.1.1	IBM AIX, V 6.1
SNA Support				
SNA Gateway	x	x	x	x
APPN® EN and NN function	x	x	x	x
Branch Extender	x	x	x	x
High Performance Routing				
Intermediate node routing ANR	x	x	x	x
HPR connection endpoint RTP	x	x	x	x
3270 support over APPN (DLUR)	x	x	x	x
Data compression		x	x	
LU 6.2 synchpoint	x	x	x	x
SNA session level encryption		x	x	
Multiprotocol support				
TN3270E server	x	x	x	x
TN5250 server			x	
TN Redirector	x			x
SSL security	x	x	x	x
Express logon function	x	x	x	x
Enterprise Extender (HPR/IP)	x	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	

Additional IBM Communications Server features and functions at a glance

Supported communication services and protocols

- Ethernet (802.3 and standard)

- IBM Token-Ring network

Supported APIs

- LU application interface (LUA) request unit interface (RUI) and session level interface (SLI), 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

- CPI-C for Java technology

- Common Services (CSV)

- Node operator facility (NOF)

Limitations

Due to a limitation of the Linux kernel, the number of concurrent sessions using APIs (sum of CPI-C, APPC, NOF, and LUA sessions) is limited to 230. This limitation does not affect SNA gateway or TN3270 sessions.