**Software Announcement**
**May 31, 2005**

# IBM Communications Server for Linux V6.2.1 extends kernel support and expands support to additional POWER platforms

## Overview

Communications Server for Linux™, V6.2.1 adds support for more Linux distributions, Linux platforms, and client platforms. It includes the same industrial-strength features and functions you have come to rely on for your mission-critical, core business applications for the distributed Communications Server product line. These features and functions of Communications Server have been well proven in the OS/2®, AIX®, and Microsoft™ Windows™ environments across a wide variety of server systems — from relatively small single-processor systems to high-end multiprocessor systems.

Communications Server for Linux, V6.2.1 includes these additions:

- Linux 2.6 Kernel Enterprise distributions from SUSE and Red Hat
- Linux on POWER™ (OpenPower™ and POWER5™ platforms)
- AIX Remote API client
- Primary LU support
- Remote API client updates

Communications Server for Linux can provide all-in-one communications services between workstations and host systems, as well as other workstations. It features:

- Full-function system network architecture (SNA) gateway
- TN3270E server
- Telnet Redirector
- Advanced Peer-to-Peer Networking® (APPN®), including end node and network node
- Dependent LU Requester (DLUR)
- High Performance Routing (HPR)
- Enterprise Extender (HPR over TCP/IP)
- Branch Extender
- Support for many types of connections, including Ethernet and token ring
- Rich set of APIs

Communications Server for Linux can open the door wide to protocol-independent networking with support for workstations communicating across SNA and TCP/IP networks.

## Key prerequisites

- Workstation with Intel™ Pentium™ II, or higher, processor
- OpenPower or POWER5 processor-based server
- Linux or Windows operating system

Refer to the **Hardware requirements** and **Software requirements** sections for details.

***Planned availability dates***

- June 17, 2005: Electronic software delivery
- July 1, 2005: Media and documentation

## At a glance

Communications Server for Linux delivers all-in-one communications services, including these new functions:

- Linux 2.6 kernel support
- Linux on POWER platforms (OpenPower and POWER5)
- Enhanced AIX Remote API client
- Remote API client updates
- Primary LU support



  

## Description

Communications Server for Linux, V6.2 and V6.2.1 is an evolution of all the previous versions of the Communications Server family of products. For details about features and functions, visit

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

### *New functions*

***Linux 2.6 Kernel support:*** Communications Server for Linux (5724-I33) and Communications Server for Linux on zSeries® (5724-I34) now support server installations on the Linux 2.6 kernel distributions from Red Hat and SUSE. For Communications Server for Linux on an Intel system, the kernel must be a 32-bit Linux distribution. For installation on a POWER (OpenPower or POWER5) system, the kernel must be a 64-bit Linux distribution.

The Communications Server for Linux on zSeries can be installed on a 31-bit or 64-bit Linux kernel.

***Linux on POWER:*** Communications Server for Linux has multiplatform support that now includes Linux on OpenPower and IBM @server® pSeries® servers.

Support for these POWER platforms requires either Red Hat or SUSE distributions.

***AIX Remote API client:*** Communications Servers running in a domain of servers that support Remote API clients can now provide support for SNA applications running on AIX V5 platforms. When writing applications for the AIX platform, use the same description for compiling and linking found in the Communications Server for AIX. Visit

**http://www.ibm.com/software/network/commserver/library/AIX**

The connection between the AIX client and the Linux servers is over TCP/IP. Any SNA application on AIX that uses the CPI-C, APPC, LUA, and some NOF interfaces for the Communications Server for AIX V5, and later, can use this AIX Remote API client. Interfaces for the previous version, Communications Server for AIX V4.2, are not supported by the Remote API client.

***Primary LU support:*** LUA applications usually connect to host mainframes as secondary LUs. This means that the definition for the sessions is controlled by the host application, which sends the BIND to start a session. Communications Server for Linux can now act as a primary LU to downstream SNA-dependent devices over LAN interfaces using the RUI_INIT_PRIMARY interface. Using this interface, an application can connect downstream dependent LU sessions without the need for a host mainframe.

To use primary LU applications, the node must be configured with downstream LU (or a downstream PU template) that has a host LU name of #PRIRUI#. This indicates to the server that the applications using RUI_INIT_PRIMARY control these PUs and the LU resources assigned to them. The PUs can be used only on LAN ports.

### *Remote API client updates*

The following updates are included.

***Name change:*** Communications Server for Linux Client is now called Remote API client.

***Linux and AIX client installation:*** When installing the Communications Server client or server on a system that already has a previous version of the code installed, you must uninstall the server or the client first. Configuration files are not deleted or modified by this process.

***Windows clients:*** When installing the Communications Server client on a system that already has a previous version of the code installed, you must take the following steps to retain your current configuration:

- Stop the Communications Server client service by issuing the **net stop sxclient** command.
- Close the Windows client monitor icon.
- Install the product without removing the previous version.

If you remove the existing Windows client, the configuration information is deleted from the Windows registry database. You must enter the configuration again after the later version is installed.

The Remote API Client for Windows now includes a diagnostic tool for service. This tool creates a compact file that is self-extracting. The problem determination file contains:

- Relevant registry contents
- Directory contents of everything in and below the install directory
- File version information of all installed binaries
- Locations of all log and trace files
- Output from commands

The tool copies all log and trace files into snapd. When directed to gather the problem determination information, you should send a snapd.exe file to the Communications Server for Linux service organization. This information can help provide service for reported problems.

### *Documentation updates*

The following documentation has been updated:

- LUA Programmer's Guide
- Administration Guide
- NOF Programmer's Guide

### *Communications Server for Linux V6.2.1 offerings*

Communications Server for Linux and Communications Server for Linux on zSeries are functionally the same products delivered for different platform support. Platform offerings provided by these products include:

Communications Server for Linux:

- Communications Server (Linux, i686, Intel — SLES 8, SLES 9, RHAS 2.1, RHEL 3, RHEL 4 )
- Communications Server (Linux on POWER, ppc64 — SLES 9, RHEL 4)
- Remote API Client (Windows, Linux (Intel), Linux on POWER, Linux on zSeries, AIX )

Communications Server for Linux on zSeries:

- Communications Server (Linux on zSeries, s390, s390x —SLES 8, SLES 9. RHEL 3, RHEL 4)
- Remote API Client (Windows, Linux (Intel), Linux on POWER, Linux on zSeries, AIX )

## Product positioning

Communications Server for Linux is a business solution that can enable you to create an integrated enterprise-wide network with a mix of operating systems and computer hardware to connect business resources over wide geographic areas.

Communications Server for Linux is the solution for companies that:

- Run multiprotocol or multiple networks
- Have existing SNA applications that they want to extend over TCP/IP networks
- Have existing sockets applications they want to extend over SNA networks
- Need to support users in a variety of locations —in the office, at home, or traveling
- Want to:
  - Improve data security over the Internet/intranet while improving network availability
  - Use Branch Extender or Enterprise Extender advanced networking technologies to implement more cost-effective networks
  - Consolidate or change their backbone networks
  - Provide SNA 3270 host access to TCP/IP users and any Java™-enabled Web browser
  - Access data from virtually anywhere using familiar interfaces and protocols

# IBM US Announcement Supplemental Information

May 31, 2005

## Offering Information

Product information is available via the Offering Information Web site

**http://www.ibm.com/common/ssi**

Also, visit the Passport Advantage® Web site

**http://www.ibm.com/software/passportadvantage**

## Publications

No publications are shipped with this product.

## Technical information

***Hardware requirements***

***For Intel™ Linux™ server*** A workstation with an Intel Pentium™ II, or higher, processor (32-bit) supported by one of the Linux distributions listed in the **Software requirements** section.*:* Use the "uname -m" Linux command to verify the CPU class. For Intel systems, i686 indicates a Pentium II, or higher, system.

***For Intel Linux Remote API client:*** A platform that can run i686 or x86_64 Linux distributions. Only 32-bit Remote API libraries are supported on Intel systems.

***For OpenPower™ or POWER5™ server or client:*** A 64-bit platform system supported by one of the Linux distributions listed in the Software requirements section. For OpenPower or POWER5, the "uname -m" command will verify the CPU class to be ppc64 to indicate a Linux platform that supports a pSeries® server.

***For Windows™ client:*** A workstation with Intel Pentium II, or higher, processor (32-bit) supported by one of the Microsoft™ operating systems listed in the **Software requirements** section.

***Software requirements:*** The following table shows the operating system support for Communications Server for Linux (5724-I33) and the Communications Server for Linux on zSeries® products (5724-I34):

| Platform | RHAS 2.1 | SLES 8 | RHEL 3 | SLES 9 | RHEL 4 | AIX(R) V5 |
|---|---|---|---|---|---|---|
| Linux on Intel | | | | | | |
| Client (i686–32 bit) | X | X | X | X | X | |
| Client(1) | | X | X | X | X | |
| Server (i686–32 bit) | X | X | X | X | X | |
| OpenPower or POWER5 (64–bit kernel, ppc 64) | | | | | | |
| Client | | | | X | X | |
| Server | | | | X | X | |
| Linux on zSeries (S390, 31–bit) | | | | | | |
| Client | | X | X | X | X | |
| Server | | X | X | X(2) | X(2) | |
| Linux on zSeries (S390x, zSeries, 64–bit) | | | | | | |
| Client | | X | X | X | X | |
| Server | | X | X | X | X | |
| AIX | | | | | | |
| Client — 32–bit | | | | | | X |
| Client — 64–bit | | | | | | X |

1 x86_64, 32-bit API only
2 Support that may be deprecated in future Linux releases.

***For AIX:*** A pSeries system that can run AIX V5.1, V5.2, or V5.3.

***For Intel Linux server***

- One of the following Linux operating systems:
  - Red Hat Enterprise Linux 2.1 (i686 only) (AS, ES, or WS)
  - Red Hat Enterprise Linux 3 (AS, ES, or WS)
  - Red Hat Enterprise Linux 4
  - SUSE LINUX Enterprise Server 8 (SLE 8)
  - SUSE LINUX Enterprise Server 9, Service pack 1 (SLES 9-SP1)
- Linux Streams (LiS) 2.18.0

  LiS package can be obtained from ftp://ftp.gcom.com/pub/linux/src/LiS/LiS-2.18.0.tgz

*This announcement is provided for your information only. For additional information, contact your IBM representative, call 800-IBM-4YOU, or visit the IBM home page at: http://www.ibm.com.*

***For Intel Linux client:*** The Remote API Client has been tested with the following Linux operating system versions. It may also run satisfactorily on other Linux distributions.

- Red Hat Enterprise Linux 2.1 (i686 only) (AS, ES, or WS)
- Red Hat Enterprise Linux 3 (AS, ES, or WS)
- Red Hat Enterprise Linux 4
- SLE8
- SLES 9-SP1

**Note:** On x86_64 Intel systems, only 32-bit Remote API client libraries are supported. No 64-bit server or 64-bit libraries are available on Intel platforms.

***For Linux on POWER™ server***

- One of the following Linux on POWER operating systems:
  - Red Hat Enterprise Linux 4
  - SLES 9-SP1
- LiS 2.18.0

  LiS package can be obtained from ftp://ftp.gcom.com/pub/linux/src/LiS/LiS-2.18.0.tgz

***For Linux on POWER client:*** The remote API Client has been tested with the following Linux operating system versions. It may also run satisfactorily on other Linux distributions.

- Red Hat Enterprise Linux 4
- SLES 9-SP1

***For Windows clients***

One of the following operating systems:

- Microsoft Windows 2000 Professional, Server, Advanced Server
- Windows XP professional
- Windows Server 2003 Standard Edition, Enterprise Edition

***For AIX clients***

One of the following AIX operating systems:

- AIX V5.1
- AIX V5.2
- AIX V5.3

For the latest technical requirements, visit

**http://www.ibm.ibm.com/software/network/commserver/linux/sysreqs/**

### *Planning information*

***Customer responsibilities:*** The customer is responsible for acquiring all prerequisite software and hardware associated with this program.

***Packaging:*** Communications Server for Linux is shipped with the following:

- IBM International Program License Agreement (IPLA)
- IBM IPLA Pointer Sheet
- Product CD

### *Security, auditability, and control*

Communications Server for Linux does not include any security and auditability features

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communication facilities.

## Ordering information

This product is only available via Passport Advantage. It is not available as shrinkwrap.

**Product information**

| License function title | Product group | Product category |
|---|---|---|
| IBM Communications Server for Linux | IBM Communications Server | Communications Server |

The Communications Server for Linux has one charge unit —per concurrent user.

A user is defined as a person. A concurrent user is any user that accesses and uses the program at any given time. You must acquire a user authorization for every concurrent user that will directly or indirectly access and use the program. Under this license, you may allow multiple concurrent users, up to the number of user authorizations acquired, to access and use the program either directly or indirectly (such as by accessing the program via an intermediate machine or piece of software).

As an example, if a multiplexing program or application server (that is, Transaction Server, DB2®) connects to the program providing access on behalf of multiple concurrent users, then one authorization for each of these multiple concurrent users is required.

In addition, for application programs that are not associated with actual users, but still use Communications Server services such as TN3270, SNA (APPN®, DLUR), and Enterprise Extender, a user authorization is required for each active upstream or downstream connection established to the Communications Server. In an APPN environment, a connection is an active link to an adjacent nodes.

The license to the program includes an authorization for one concurrent user. Authorizations for additional concurrent users may be acquired separately.

The intent of the concurrent user pricing with no server fee is to base cost on each user receiving value from Communications Server for Linux, while allowing flexibility in defining and modifying the number of servers used. For example:

- When TN3270 clients are connected to Communications Server for Linux TN3270 server, each concurrent TN3270 client is one user. If one person has multiple emulation sessions that are connected in through the same IP address, that is still one user; if multiple people go through one proxy to connect to the server, each person is a user. Some specific examples for TN3270 clients are as follows:
  - When 100 end users using TN3270 clients for display and printer go through Communications Server for Linux TN3270 server, it is 100 user licenses.
  - When 100 end users go through two Windows Terminal Server with TN3270 clients and go through Communications Server for Linux TN3270 Server, it is 100 user licenses.
  - When end users use Web browsers via Host Access Transformation Services (HATS) to access the Communications Server for Linux TN3270 Server, it is the number of concurrent TN3270 clients (that is, Host On-Demand (HOD) is used by HATS to communicate to the Communications Server for Linux TN3270 server). Therefore, if 100 HOD clients are defined to HATS, then it is 100 user licenses.
- User scenarios include downstream SNA clients, Web clients, Remote API client/server, SNA Gateway, network node, and application clients using Communications Server for Linux application interfaces to connect to host mainframe or other SNA applications. In these scenarios, each end-user client is one user. When multiple people go through one proxy or go through middleware applications to Communications Server for Linux application interface, each person is a user. Some specific examples for SNA clients are as follows:
  - When 100 end-user SNA clients running HACP (Personal Communications) go through Communications Server for Linux SNA Gateway, network node, or remote API client/server, it is 100 user licenses. If those 100 end users go through two Linux Communications Servers for load balancing or backup, it is still 100 user licenses
  - When 100 end-user TCP/IP clients go to a single TCP/IP-based middleware application server that uses Communications Server for Linux application interface to communicate to CICS®, IMS™, or some other SNA applications, it is 100 user licenses. When 5000 end users using a Web browser go to a middleware Web Server-based application server that uses 100 SNA sessions through Communications Server for Linux application interface to communicate to CICS, IMS, or some other SNA application, it is still 100 concurrent user licenses.
  - When 100 end users go to a middleware application server using a remote API client and another set of 100 end users go to a different middleware application server also using another remote API client, both middleware application servers go through a common CS Linux Server; it is 200 user licenses.

### *Passport Advantage program licenses*

The following license part numbers have been previously announced and are included here for reference.

**Communications Server for Linux**

| Description | Part number |
|---|---|
| IBM Communications Server for Linux | |
| Comm Svr Linux Users License & SW Maintenance 12 Months | D53SBLL |
| Comm Svr Linux Users SW Maintenance Annual Renewal | E01A4LL |
| Comm Svr Linux Users SW Maintenance Reinstatement 12 Months | D53SCLL |
| Comm Svr Linux Users TRDUP License & SW Maintenance 12 Months | D53SDLL |

**Passport Advantage supply**

| | |
|---|---|
| Comm Svr Linux V6.2.1 | |
| Media Pack Multilingual(English International, French, Korean, Chinese — Simplified, Spanish, Portuguese-Brazilian, German, Japanese, Chinese — Traditional) Linux for x86Series Intel-based servers CD-ROM Digital Disk — ISO 9660 Standard V6.2.1 | BM03BML |

### *Passport Advantage customer: Media pack entitlement details*

Customers with active maintenance or subscription for the products listed are entitled to receive the corresponding media pack.

**Comm Svr Linux V6.2.1**

| Entitled maintenance offerings description | Media packs description | Part number |
|---|---|---|
| IBM Communications Server for Linux Per User | Comm Svr Linux Multilingual(English International, French, Korean, Chinese — Simplified, Spanish, Portuguese—Brazilian, German, Japanese, Chinese — Traditional) Linux for x86Series Intel—based servers CD—ROM Digital Disk — ISO 9660 Standard | BM03BML |

## Terms and conditions

This product is only available via Passport Advantage. It is not available as shrinkwrap.

***Agreement:*** IBM International Program License Agreement. Proofs of Entitlement (PoE) are required for all authorized use.

Part number products only, offered outside of Passport Advantage, where applicable, are license only and do not include Software Maintenance.

***License information form number***

| Program name | Program number | Form number |
|---|---|---|
| Communications Server for Linux | 5724-I33 | L-DDCA-5WJLND |

***Limited warranty applies:*** Yes

***Money-back guarantee:*** If for any reason you are dissatisfied with the program and you are the original licensee, return it within 30 days from the invoice date, to the party (either IBM or its reseller) from whom you acquired it, for a refund.

For programs acquired under the IBM International Passport Advantage offering, this term applies only to your first acquisition of the program.

***Copy and use on home/portable computer:*** Yes

***Volume orders (IVO):*** No

***Passport Advantage applies:*** Yes and through the Passport Advantage Web site at

**http://www.ibm.com/software/passportadvantage**

***IBM Operational Support Services — Support line:*** No

***iSeries™ Software Maintenance applies:*** No

***Educational allowance available:*** Not applicable

## Prices

***Passport Advantage:*** For Passport Advantage information and charges, contact your IBM representative or authorized IBM Business Partner. Additional information is also available at

**http://www.ibm.com/software/passportadvantage**

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