

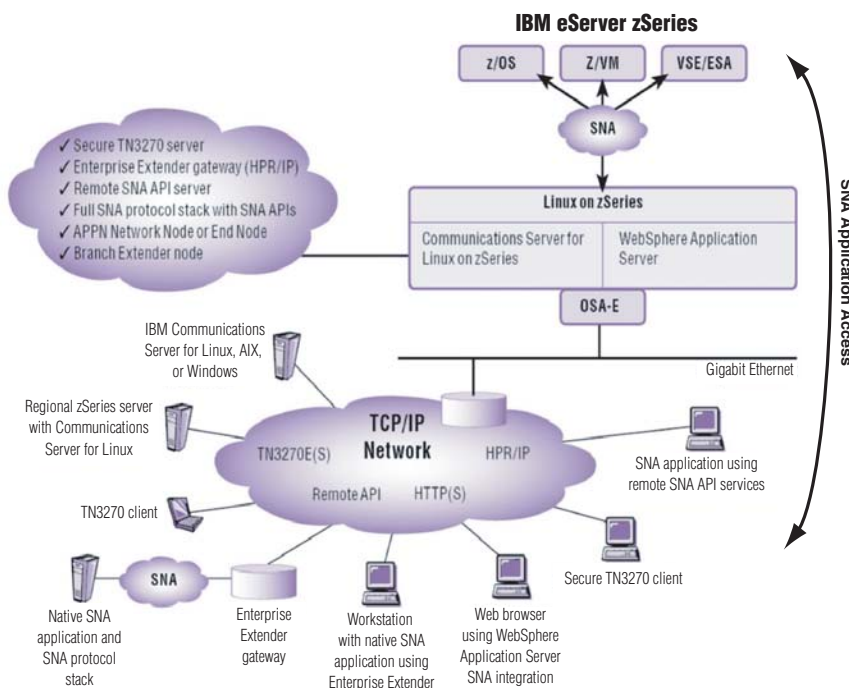
IBM Communications Server for Linux on zSeries V6.2

Highlights

- **Helps reduce the network infrastructure cost by consolidating SNA network protocols and skills to the data center on IBM @server® zSeries®.**
- **Enables SNA traffic over an IP network using high-speed OSA-Express and gigabit Ethernet technologies.**
- **Integrates with WebSphere® Application Server and Host Access Transformation Server to provide an optimal solution for accessing 3270-based SNA applications.**
- **Provides additional security and performance options for zSeries operating systems that deploy a TN3270E server themselves using Telnet Redirector.**
- **Extends use of Enterprise Extender to z/VM® and VSE/ESA™ that do not natively support those SNA enhancements.**

Networking technology is exploding both in terms of speed and reduced prices, but your SNA applications still require older networking technology, which has prevented your exploitation of these benefits. Communications Server for Linux on zSeries V6.2 provides new configuration options that permit you to exploit today's most current IP networking technology, while continuing to leverage your application investment. Also, you can consolidate your SNA skills to your data center because Communications Server for Linux on zSeries V6.2 provides Enterprise Extender and Remote API support that remove any requirement for SNA protocol flows outside of your zSeries data center.

Communications Server for Linux on zSeries V6.2 helps reduce your total costs by enabling your business-critical SNA applications to exploit the highly reliable, security-rich and scalable zSeries platforms, and connect to the network using high performance Internet Protocol through the IBM OSA-Express.



IBM Communication Server for Linux on zSeries V6.2 provides a comprehensive SNA over IP connectivity solution portfolio that can be used to consolidate SNA networking components and skills to the data center.

Consolidate your SNA skills

SNA skills are increasingly scarce, but Communications Server for Linux on zSeries V6.2 permits you to consolidate those skills to your data center and no longer requires them at your remote locations. With Enterprise Extender (EE) and Remote API, the SNA networking protocols are confined strictly to your data centers, and Internet Protocol (IP) is exploited for all communications.

Enterprise Extender for z/VM and VSE/ESA Customers

Enterprise Extender enables High Performance Routing to connect your APPN® resources across the IP network. Enterprise Extender is available on z/OS, but other operating systems like VSE/ESA and z/VM have been unable to exploit this technology. With Communications Server for Linux on zSeries V6.2, Enterprise Extender can now bring high-speed ethernet connections into a Linux on zSeries partition and exploit a direct SNA connection between LPARs to communicate with VTAM® on VSE or VM/ESA®. This connectivity flexibility

not only allows SNA applications on the VM and VSE operating systems to exploit the bandwidth of the gigabit ethernet connectivity of the OSA-Express, but also enables the consolidation of SNA skills and the confinement of SNA protocol to the data center.

IP Connectivity for Remote SNA applications

With the remote API server provided in Communications Server for Linux on zSeries V6.2, your remote SNA applications continue to operate as they have in the past, but the SNA protocol stack is no longer required in those remote workstations. Instead, the function calls to SNA APIs that are made by those applications are packaged in TCP/IP and carried to the Remote API Server in your data center where they are executed on a full SNA protocol stack. Performance is significantly improved over previous technologies offering similar function, such as AnyNet®. You may locate your Remote API Server in your central data center and bring all API calls into the SNA stack located

only in your data center. Alternatively, you may locate your Remote API Server in your regional server and employ EE to connect to your central data center. Either way you choose, Communications Server for Linux on zSeries V6.2 can provide the flexibility you need to help make the right decision for your business.

Secure flexible SNA3270 communications

Communications Server for Linux on zSeries V6.2 provides a secure and high-performance TN3270E server that can be deployed to replace existing SNA gateways or channel-attached SNA control units with minimal or no changes to the zSeries operating systems' VTAM definitions. This server supports Secure Sockets Layer (SSL) connections from clients for both client and server authentication and encryption of the entire TN3270E data stream between the TN3270E client workstation and Linux on zSeries. This leaves only the last hop inside the security-rich zSeries server unencrypted between the Linux on zSeries operating system

and the SNA application. Communications Server for Linux on zSeries V6.2 also provides a Telnet Redirector function, which enables the passthru of TN3270E connections between your regional office and your data center. Certificate management is greatly simplified by only requiring a single certificate for your regional data center. In addition, each connection between your data centers is individually secured with SSL, thereby providing enhanced security for your connections.

Optimal integration with WebSphere Application Server

Communications Server for Linux on zSeries V6.2 can be combined in a Linux for zSeries environment with WebSphere Application Server and Host Access Transformation Server (HATS), allowing workstation clients to access zSeries SNA 3270 applications using a standard Web browser and HTTP or security-rich HTTPS protocols over the IP network. HATS can transform the SNA 3270 dialog to HTTP/HTML using out-of-the-box transformation rules, or application

developers can use the standard integrated WebSphere Application Server development environment to enhance and modernize the user interface without changing the SNA 3270 application. When using HATS, there is no need for users to pre-install or to download a TN3270 client to their workstation. A standard Web browser is all that is needed on the users' workstations.

A natural evolution for branch consolidation

SNA servers in your branch office house many very important applications and the fiscal policy of your company does not permit you to completely rewrite those applications. SNA APIs on both OS/2®, Microsoft® Windows®, and AIX® are usually based on common legacy APIs. Therefore, SNA applications on any of these platforms can readily be ported to Linux. Additionally, IBM Communications Server for Linux preserves your investment in EHALLAPI applications by providing support that enables the migration to Host Access Class Library using Java™

on Linux. No matter which platform you are coming from, Communications Server for Linux on zSeries V6.2 and the IBM @server zSeries 800 or zSeries 890 provide a natural and economical regional platform on which to consolidate your branch applications while maintaining the autonomy of each branch. This solution enables the isolation of SNA infrastructure to the data center and removes any requirement for remote APPN infrastructure, such as the IBM 22XX or the 3746-950 frame. Since there is no remote SNA infrastructure, you may significantly reduce your overall operation and maintenance costs by consolidating your server staff and exploiting the scalability, reliability and availability of zSeries while continuing the autonomous operation of your branches.

For more information

To learn more about IBM Communications Server for Linux on zSeries V6.2, visit www.ibm.com/software/network/commserver/z_lin.

IBM Communications Server for Linux on zSeries V6.2 at a glance

Component or Related Application	Features
Advanced Peer-to-Peer Networking (APPN)	<ul style="list-style-type: none">• Network Node (NN) and End Node (EN) support for peer networking with dynamic routing, simplified configuration and maintenance• Branch Extender simplifying networks with large numbers of ENs• Peer network support for existing APPC, CPI-C & 3270 applications
High Performance Routing (HPR) and Enterprise Extender (EE)	<ul style="list-style-type: none">• Improved routing performance and reliability with nondisruptive routing around network outages• Allows many SNA clients to access multiple zSeries through one or more physical connections, keeping line costs down• Extends the reach of SNA applications through IP networks while maintaining the level of reliability and performance of SNA users
TN3270 Server	<ul style="list-style-type: none">• Provides easy access to 3270 applications and services through TCP/IP networks• Supports Secure Sockets Layer (SSL) authentication and encryption to provide secure access through TCP/IP networks
TN Redirector	<ul style="list-style-type: none">• Provides passthru TCP/IP host access to TN3270, TN3270E, TN5250 and VT clients• Enables selected SSL security checking, rather than forcing it on all user-to-host connections
SSL Data Encryption	<ul style="list-style-type: none">• Strong encryption support between the Telnet server and client
Application Programming Support	<ul style="list-style-type: none">• Robust platform for programming and application integration• CPI-C extensions support Java, as well as C applications• Includes Host Access Class library for Java providing a core set of classes and methods assisting platform-independent application development• Provides LUA request unit interface (RUI) and session level interface (SLI) APIs, supporting dependent LU types 0, 1, 2 and 3• Provides CPI-C and APPC APIs supporting both dependent and independent LU 6.2 to simplify cross-platform application development• Node operator facility (NOF) is provided to enable custom applications to perform system administration tasks• Includes an APPC Application Suite that demonstrates the distributed processing capabilities of APPN, including AFTP, APING, AREXEC, ATELL, ACPY and ANAME• Remote SNA API client/server support to enable remote SNA applications to execute with no local SNA stack
Advanced Program-to-Program Communications (APPC)	<ul style="list-style-type: none">• Delivers distributed process capabilities by enabling different network nodes to share resources and tasks• Provides peer-to-peer interaction and communication among various systems• Supports multiple logical units (LUs) and multiple concurrent tasks• Provides persistent verification to improve communications security
Common Programming Interface for Communications (CPI-C)	<ul style="list-style-type: none">• Offers APPC in a consistent form across multiple CPI-C system platforms• Simplifies movement of applications from system to system (e.g. from a Communication Server for Windows platform to a Linux platform)• Supports CPI-C Release 2
Configuration, Installation and Administration Options	<ul style="list-style-type: none">• Easy to install, configure and use Motif-based Administration interface• Internationalization provided for native language support• Support for zSeries 64-bit processors
Problem Determination and Systems Management	<ul style="list-style-type: none">• Provides quick access to integrated problem determination (PD) functions• Allows PD and systems management under program control through the NOF API• Facilitates remote server management; no need for local operators

IBM Communications Server for Linux on zSeries V6.2 at a glance

Requirements

Features

Hardware

Communications Server for Linux on zSeries V6.2 requires either a 31-bit or 64-bit zSeries system supported by one of the Linux distributions listed below in the Software Requirements section.

Alternatively, you may use the 'uname -m' command to verify the CPU class of one of your machines. The response must be either 's390' to indicate a 31-bit environment or 's390x' to indicate a 64-bit environment.

Software

Requirements Communications Server for Linux on zSeries V6.2 has been tested with the following Linux operating system versions:

- Red Hat Enterprise Linux 3 for S/390
- Red Hat Enterprise Linux 3 for zSeries
- SUSE LINUX Enterprise Server 8 for IBM Mainframe (SLES8)

Storage

- 125 MegaBytes of permanent storage is required
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Integrated Marketing Communications,
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05-04
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