



What s New in PCOMM v4.3:

Following is a list of the new features of IBM eNetwork Personal Communications, version 4.3 for Windows 95, Windows 98 and Windows NT.

The Key Features for this release are: ActiveX Controls, EHLLAPI Performance Improvements, Euro Currency Sign Support, Java Beans, Java Interface for HACL, ODBC v3.0 Support, Hot Standby and Load Balancing Support, Secure Sockets Layer (SSL) v3.0, Tivoli Support, VB Script Macros, VT340, and Windows 98 compliance.

PCOMM v4.3 continues PCOMM s tradition of providing industry leading Terminal Emulation capabilities, by adding many new features to enhance ease-of-use, *including* interface enhancements, menu item restructuring, toolbar customization improvements and a new Status bar with connection messages for constant information on connection status and progress.

For *customization and development*, PCOMM s API set has further enhanced traditional EHLLAPI by improving performance and adding industry standard 32-bit EHLLAPI APIs and WinHLLAPI APIs. Building on PCOMM s leadership in object-oriented programming, the HACL API has been enhanced to provide a Java programming interface and the Host Access Beans for Java, the Java Beans found in IBM s Java-based emulator, eNetwork Host On-Demand. IBM is the only provider of Java Beans for Host communications programming that delivers the power of Java without requiring in-depth programming or Java knowledge. Not only are Java Beans supplied in this version of PCOMM, but through the JavaBean functions, version 4.3 adds ActiveX controls, leading to rapid development of Visual Basic applications. PCOMM v4.3 provides most comprehensive solution set for component-based customization currently available.

For *Network Managers and Administrators*, PCOMM v4.3 further enhances the strongest feature set available in any communications platform. Tivoli support is just one of the improvements for Administrators. Other features include the ability to enable users to send problem resolution information to IBM via the Internet, and enhanced logging capabilities to reduce help desk calls. Support for Hot Standby/Load Balancing, provided by Netware for SAA and eNetwork Communications Server, provide for expanded network management capabilities found in few competing products today. Additionally, support for SSL v3.0 and ODBC 3.0 strengthen PCOMM s leadership position in Standards-Based Networking.



Business areas:

Networking

ODBC V3.0 Support
Support for IBM Global Network SLP (Hot Standby/Load Balancing)
Secure Sockets Layer (SSL) V3
Model_Name support for LU0-3
Adjacent CP Type modifications
Enterprise Extender
Firewall: NVT Support
IBM PCI 3270 Terminal Emulator Card Support
Link Reactivation
PCI MPA Adapter
FMI Autoreconnect

Programming

ActiveX Controls
Java Beans
Java Interface for HACL
EHLLAPI Performance Improvements
Record Visual Basic Scripts as Macro/Script
EHLLAPI Print Notification
Industry Standard 32-bit EHLLAPI
Rexx session control support
VT Code page 437 Support
WinHLLAPI Support

Country Specific

Brazilian Code Page 275 Support
Code Page 1252 and 1254 Support
CStar and RichWin Support
Euro Currency Sign Support
Japanese Code page 943 Support
PCS Mincho Font
Polish Keyboard 457 Support
Postal Barcode for Japan

Administrator

Tivoli Support: Install/Remote Commands

Enhanced Log Viewer
Configuration Update File Support
'Confirm on Exit' Prompt
DDE Convert Support
File Transfer Buffer Defaults
Initial Configuration Definitions
Migrate utility for Communications Manager/2 users
SLI API
Service Support via the Internet

User

Euro Currency Sign Support
VT 340 Text Terminal Support
VT 340 Graphics
Windows 98 Support
Copy/Paste Enhancements
Improved Connection Messages
SSL Certificate wizard
User Interface Enhancements

****Bold** indicates key features for v4.3*



PCOMM v4.3 New Feature Descriptions:

ODBC V3.0 Support

PCOMM v4.3 extends on v4.2 s ODBC v2.0 support by adding SNA support for ODBC v3.0 via the inclusion of the DB2 Connect ODBC product on the PCOMM v4.3 CD. Support for additional connectivities (such as TCP/IP) is available from the full DB2 Connect product, available separately.

Support for IBM Global Network

PCOMM v4.3 includes updated support for new features in IGN, previously known as Advantis.

In particular it is now possible to request updated phone number lists at any time.

SLP (Hot Standby/Load Balancing)

PCOMM v4.3 includes support for the SLP API found on IBM eNetwork Communications Server v6.0 and NetWare for SAA v3.0. This SLP support provides automatic host location and load balancing across multiple hosts using TCP/IP protocol. PCOMM v4.3 TN3270, TN5250 and 3270 sessions via NWSAA connectivity using IPX/SPX or TCP/IP protocol can be used to discover and connect to the least loaded server for better resource utilization.

Secure Sockets Layer (SSL) V3

PCOMM v4.3 includes support for SSL v3 encryption. IBM eNetwork Communications Server v6.0 and Netware for SAA version 3.0 or greater are just a few of the products available that provide SSL support.

Model_Name support for LU0-3

This feature allows an administrator to match a VTAM definition to a PCOMM definition of terminal model types for ease of network management.

A MODEL_NAME keyword has been added to the LU_0_TO_3 section of .ACG files. This value keyword is a 1-7 byte string of SNA type A characters.



Adjacent CP Type modifications

SNA Node configuration panel changes have been made for better ease of use.

The following changes have been made:

- APPN Node is now Learn
- Back-level LEN is now Subarea LEN
- HOST-XID3 is now Host - Dependent LU Only.

The old values are still allowed in .ACG files.

In addition emulator configurations that would have generated in a HOST-XID3 type will now generate a Subarea LEN type.

Enterprise Extender

Enterprise Extender is HPR over IP, a significant network system performance feature found in eNetwork Communication Server for NT v6.0 and soon to be available Communication Server/390.

This function allows the dynamic routing, congestion control, and failure recovery capabilities of HPR to be used on an IP backbone.

Firewall: NVT Support

PCOMM v4.3 add support for dialing into TN3270 / TN5250 server with a Firewall Node, allowing full logon, including auto-logon support.

This support allows users to read the prompts from the Firewall to be able to provide the necessary ID and password.

IBM PCI 3270 Terminal Emulator Card Support

PCOMM provides support for IBM s new PCI 3270 Terminal Emulator Card.

Link Reactivation

PCOMM v4.3 will auto-recover from a Host or Links failure on a SNA network. Once the Host or Links are available again, PCOMM will reactivate the connection.

With this support, emulator sessions will return to an initial screen when communications can be reestablished. This support can be enabled by .ACG file changes and can be tailored to recover from failures or deliberate termination of the remote end of the connection.

PCI MPA Adapter

PCOMM v4.3 supports this new MPA SDLC adapter.



FMI Autoreconnect

PCOMM v4.3 will autoreconnect to Microsoft SNA Server FMI. FMI is Microsoft SNA Server's alternative to RUI for 3270.

Tivoli Support: Install/Remote Commands

PCOMM v4.3 supports Tivoli TME10 remote install and administration of a SNA node. A TME 10 Plus Module is included on the PCOMM CD. (Note: PCOMM v4.3 does not support remote configuration of the SNA node, nor does it support network condition alerts to the administrator. However, administrators can query PCOMM v4.3 for SNA Node status.)

Remote SNA node administration capabilities include being able to query the status of any SNA resource on a node, as well as start and stop these resources when necessary.

Enhanced Log Viewer

In PCOMM v4.3, both trace logs and message logs can be viewed. You can now also merge, sort and filter the logs as well.

Configuration Update File Support

System Administrators can distribute a generic SNA configuration file, plus a specific user file. Once the user edits for his or her specific CP name, PCOMM will merge the two files and create a configuration file, further simplifying administration of workstation installed PCOMM.

An include statement can be put in a generic .ACG file that names the workstation specific file. The configuration verification utility is then used to merge the two files in the actual file to be used on the workstation.

'Confirm on Exit' Prompt

PCOMM v4.3 provides a switch that when enabled will ask a user if they wish to quit PCOMM. Frequently, users may quit PCOMM by mistake, when they really wished to end the session, or they may quit before logging off of their host account.

New configuration options on the File->Exit Options menu item allow for prompts on session exit and/or Exit All invocation.



DDE Convert Support

PCOMM v4.3 includes support for the DDE conversion implementation found in Windows v3.1. This will allow easier application migration from PCOMM v4.1 for Windows 3.

Details on this ASCII-EBCDIC conversion function can be found in the Emulator Programming publication.

File Transfer Buffer Defaults

PCOMM v4.3 has been fine-tuned for increased file transfer performance.

The default buffer size is now 8000 for most connectivities.

Initial Configuration Definitions

PCOMM v4.3 includes new enhancements to aid in the administration of PCOMM across multiple desktops. PCOMM v4.3 includes the ability to provide users with standardized configuration files that will be maintained as the default configurations for any new sessions the user may wish to create. This will result in fewer help desk calls from users having difficulty connecting to the host system.

PCOMM v4.3 allows customizable WS\$ and AC\$ files for distribution to users, specifying configuration definitions and parameters that are automatically predefined whenever they create a new configuration. A user/administrator simply renames any working configuration files to PCSINIT.WS\$ and/or PCSINIT.AC\$ and places the files in the Private sub directory. When a user runs Start or Configure Session or SNA Node Configuration, the values in those files will appear to user as already defined in the new configuration. The user then makes modifications if needed and saves.

Migrate utility for Communications Manager/2 users

4.3 provides a utility that migrates Communications Manager/2 response files (*.RSP) to Personal Communications configuration files (*.WS and *.ACG).

Not all possible configurations in CM/2 are supported in PCOMM. The utility allows you to migrate a whole directory of these files at once.

SLI API

PCOMM v4.3 includes the CM/2 SLI API, to easy application migration for CM/2 customers, and to facilitate conversion to PCOMM v4.3.

This API is a higher level interface for developing LU0-3 applications than RUI. Therefore it is easier to develop this type of application with SLI than it is with RUI.



Service Support via the Internet

In PCOMM v4.3, PCOMM Information Bundler packages traces and important configuration and user information and submits the information to IBM Support via the FTP and the Internet, simply with a PCOMM utility.

128-bit encryption is provided in North America and 40-bit encryption is provided world-wide.

ActiveX Controls

ActiveX Controls are component packaging technology for the Web, specifically for Windows platforms. PPCOMM v4.3 includes 8 ActiveX controls, created from the functionality of the Host Access Bean for Java, which allows VB developers the flexibility of native ActiveX controls, while benefiting from the technology of the JavaBeans. The included Controls are: Screen, Session, Terminal, Macro, Macro Manager, FileTransfer, Keypad, and KeyRemap. For a more detailed description of the functionality of each control, please see JavaBeans below.

JavaBeans

JavaBeans, or Beans, are reusable Java software components that can be manipulated visually in a builder tool. Beans can be combined to create traditional applications, or their smaller web-oriented brethren, applets. In addition, applets can be designed to work as reusable Beans.

PCOMM v4.3 includes 8 JavaBeans, called Host Access Beans for Java for full-function terminal emulation application development. PCOMM v4.3 is the only traditional emulator on the market to offer JavaBeans for component-based application development.

The Host Access Beans are also provided in HOD v3.0. Host Access Beans can be accessed using any Java visual tool, including IBM Visual Age for Java or Lotus BeanMachine.

Screen: Screen provides the "green screen" and all of the usual features, except the toolbar, which is not currently supplied.

Session: Session provides the underlying connectivity. Connectivity depends on whether you are using PCOMM or HOD. This has no GUI, it is just a back-end support.

Terminal: A combination of both Screen and Session.

Macro: This Bean supplies the facility to record/play/ macros.

Macro Manager: This Bean manages multiple macros and invokes Macro to play a selected macro.

FileTransfer: File Transfer provides file transfer function.

Keypad: This Bean provides the equivalent of the extended keys GUI, specifically for the PF keys

KeyRemap: This provides full keyboard remap, using the HOD style remap facility.



Java Interface for HACL

PCOMM's industry leading, object-oriented programming interface can now be programmed using the popular Java language.

All objects and methods available in HACL can be accessed from Java.

EHLLAPI Performance Improvements

PCOMM v4.3 enhances the performance of EHLLAPI applications, providing even greater performance than found in earlier versions of PCOMM.

Record Visual Basic Scripts as Macro/Script

Previously, PCOMM v4.2 provided support for creating macro scripts using VBScript. PCOMM v4.3 supports recording macros in VBScript as well, which allows export to VBScript editors for further customization, or for a quick start on a PCOMM macro application.

This support includes a utility to convert existing macros to VBScript to open the richer application development environment to existing macros without having to start over.

EHLLAPI Print Notification

For EHLLAPI applications using Host print, PCOMM can send a notification of completion of print job, making it easier for users who rarely have host printers located nearby.

Details on this notification can be found in the Emulator Programming publication.

Industry Standard 32-bit EHLLAPI

PCOMM v4.3 includes the latest Industry Standard 32-bit EHLLAPI API, providing the same application interface as the previous 16-bit standard interface, but for 32-bit applications. Existing applications written to the Industry Standard API will work as normal in PCOMM v4.3.

Rexx session control support

Provides Rexx programs with 7 new functions to allow sessions to be started, stopped, queried, etc. from within a Rexx program.

VT Code page 437 Support

PCOMM v4.3 supports the VT line drawing code page for additional support of VT emulation.



WinHLLAPI Support

PCOMM v4.3 includes support for WinHLLAPI, the EHLLAPI commonly found in Windows, for easy application migration from products that utilize this API.

Euro Currency Sign support

PCOMM v4.3 provides support for the Euro currency sign, including display of the Euro currency sign in the emulation window. This support is dependent on host or host based application support for the Euro sign.

This support includes support code pages 923, 924, and 1140 - 1149, as well as the new symbol in code page 1252. It also includes keyboard support for entry of the Euro currency sign.

VT340 Text Terminal Support

PCOMM v4.3 supports the VT340 text mode

VT 340 graphics mode**

PCOMM v4.3 will provide base support for ReGIS and Sixel graphics protocols.

**Available Q1 1999

Windows 98 Support

PCOMM v4.3 is designed not only for Windows 95 and Windows NT, but also for Windows 98.

Copy/Paste Enhancements

A switch is provided in PCOMM v4.3 that when enabled, will copy only selected content from a screen. Previous behavior copied the entire screen if nothing was selected. Customers have asked for this change in behavior. Users may switch to this behavior, or the original, full screen when no selection behavior.

A new configuration option on the Edit->Options menu item allows this behavior to be enabled.

Improved Connection Messages

Textual information messages about the status of a connection are displayed on the new Status bar. (see User Interface enhancements)



SSL Certificate Wizard

This new wizard helps the user to manage certificates sent by a similarly compliant SSL server.

This allows a user to add server certificates to the set accepted by PCOMM v4.3 as authentic.

User Interface enhancements

Page Setup:

PCOMM v4.3 includes a new Page Setup Property Sheet for controlling printing. This replaces the Print control cascading menus.

Status Bar:

PCOMM v4.3 now has a status bar for each session, displaying connection messages, menu help and macro indicators. There is also a history window for review of status messages.

Emulator Configuration:

PCOMM v4.3 has a new configuration panel for increased usability and easier configuration by users.

Windows 98 support

PCOMM v4.3 has been designed and tested to work with Windows 98, for those users that wish to upgrade, or for new PC s that have Windows 98 installed.

Brazilian Code Page 275 Support

This host code page is now supported.

Code Page 1252 and 1254 Support

For European and Turkish customers, PCOMM v4.3 supports the native code pages that Windows uses for some languages.

This will correct inconsistencies with certain characters that occurred during file transfers. In addition, these code pages are now the default PCOMM code page where appropriate.

CStar and RichWin Support

PCOMM v4.3 provides support for the extended support shells that are added to the English version of Windows to support Chinese language.



Japanese Code page 943 Support

New support for additional Japanese characters.

PCS Mincho Font

PCOMM v4.3 supports display and printing with this Japanese font on Windows 95 and Windows 98.

Polish Keyboard 457 Support

PCOMM v4.3 supports this keyboard.

Postal Barcode for Japan

Support for printing the Japanese UPC style zip code.



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