



IBM Personal Communications V4.11 Now Fully Supports Windows NT

Overview

The industry-leading IBM Personal Communications family of emulators is enhanced to include full support for Windows NT for the client workstation.

For convenience and ease of use, Personal Communications is available in two packages: Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2® which provides 5250 emulation and connections to AS/400® and S/3X systems; and Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 which provides 3270 and 5250 emulation and connections to S/390®, AS/400, and S/3X systems. These packages are available on separately orderable CD-ROMs.

This family of Personal Communications products provide state-of-the-art multi-protocol communications client support for PCs running DOS (3270), OS/2, Windows 3.x, Windows NT, or Windows 95.

These products for Windows NT are available only via CD-ROM. You can select and install a single product from the CD-ROM for your preferred operating environment without dealing with multiple diskettes.

With Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 you can connect PCs with AS/400 or S/3X mid-range host computers. Once the systems are connected, you can interact with IBM mid-range host computers using an impressive array of features, including an up-to-date GUI, 5250 terminal emulation, and data transfer support.

Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 gives you GUI-based 5250 and 3270 terminal emulation capability in addition to a range of

SNA-based client APIs, offering flexibility in application implementation. This product also lets you simultaneously access and process information on AS/400 and S/390 hosts while providing a common look and feel across both environments.

The versatile connectivity of these products gives new and established AS/400 and S/390 customers greater flexibility in expanding LAN/WAN network capabilities including support for the mobile workforce using asynchronous communications.

Intended Customers

Customers installing Windows NT as a client workstation operating system can now install Personal Communications Version 4.1 for Windows NT and extend the emulator look and feel across multiple operating systems.

Customers who are currently licensed users of Personal Communications Version 4.1 CD-ROM can obtain via IBM Service a Corrective Service Delivery (CSD) CD-ROM which contains Personal Communications Version 4.1 for Windows NT.

Key Prerequisites

Personal Communications AS/400 and 3270 Version 4.1 and Personal Communications AS/400 Version 4.1 CD-ROMs provide a variety of features and connectivity options across multiple operating systems and some differences exist between these platform offerings. Additionally, there are differences between single-byte character set (SBCS) and double byte character set (DBCS) versions. You should carefully review the product **Description, Hardware Requirements, Software Requirements, and Limitations** sections for further details.

At a Glance

The Personal Communications family of emulators is enhanced to include a version that provides full support for Microsoft Windows NT.

The Personal Communications emulation products are available on CD-ROM for use in the DOS (3270 only), Windows, Windows 95, Windows NT, and OS/2 environments:

- Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 on one CD-ROM

The set of programs provided on this CD-ROM lets you connect to and use applications resident on IBM mid-range computers, such as an AS/400 or S/3x.

- Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 on one CD-ROM

The set of programs provided on this CD-ROM lets you connect to and use host applications resident on either IBM enterprise servers (mainframes) such as the S/390, or on IBM mid-range hosts, such as an AS/400 or S/3x.

The CD-ROM gives you:

- An easier, more convenient way to order, install, upgrade, and maintain Personal Communications products
- Simpler licensing options
- Product documentation in Postscript printable format

Planned Availability Date

February 28, 1997

This announcement is provided for your information only. For additional information, contact your IBM representative or call 800-IBM-4YOU.

Description

The CD-ROMs for Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 and Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 provides all the features and functions included on the diskette versions of:

- IBM Personal Communications AS/400 Version 4.1 for Windows
- IBM Personal Communications AS/400 and 3270 Version 4.1 for Windows
- IBM Personal Communications AS/400 Version 4.1 for OS/2
- IBM Personal Communications AS/400 and 3270 Version 4.1 for OS/2
- IBM Personal Communications AS/400 Version 4.1 for Windows 95
- IBM Personal Communications AS/400 and 3270 Version 4.1 for Windows 95

Personal Communications Version 4.11 CD-ROM provides an easy and convenient way to order and install the Personal Communications family of emulators for multiple operating system platforms.

Additionally, Personal Communications Version 4.11 provides a wide breadth of programming interfaces that allow other workstation applications to make use of applications residing on the host. These programming interfaces include:

- Emulator High-Level Language Application Programming Interface (EHLAPI)
- Dynamic Data Exchange (DDE)
- Server-Requester Programming Interface (SRPI)
- Personal Communications Application Programming Interface (PCSAPI)
- Common Programming Interface for Communications (CPI-C)
- Advanced Program-to-Program Communication (APPC)

The entire Personal Communications family of products is designed to provide you with a state-of-the-art, comprehensive set of tools for accessing applications and data that reside on either mid-range or IBM enterprise servers (mainframes). These products allow you to be more creative and more productive by masking the complexity of connecting to and using host applications.

In addition to spanning the major PC operating systems in use today, the Personal Communications family of products also supports enterprise server and mid-range host connectivity and provides a common look and feel across operating systems, enabling you to easily switch between operating systems and hosts. With the unequalled range of connectivity options offered by the Personal Communications family of products, you can have the same host interface in the office, at home, or even on the road. The productivity benefits include minimized retraining costs, the capability to easily switch between mid-range-based and enterprise server-based applications, and shared keyboard definitions. Other functions, such as enhanced edit functions, pop-up keypads, and macro support also help increase productivity.

The Personal Communications family of products offers a variety of standard programming interfaces for client/server-based applications, including support for CPI-C and APPC applications. These APIs allow you to access and process information on peer workstations or mid-range or host computers. This access to applications on other systems allows developers to create a common design for applications which is relatively independent of the operating system platform. This helps them to develop applications quicker.

Product Positioning

IBM Personal Communications AS/400 and 3270 Version 4.11 adds support for the Windows NT platform to IBM industry leading software.

Also, available as a separate offering, is IBM Personal Communications AS/400 Version 4.11, which includes the right solution for your 5250 emulation and AS/400 connectivity needs.

The IBM Personal Communications Family of Emulator products are IBM's response to the terminal-emulation needs of the PC marketplace. With these emulators, you are provided 3270 and 5250 emulation support for PCs running DOS/Windows, Windows 95, Windows NT, and OS/2.

These emulators provide many powerful, yet simple-to-use features, such as macro support, keystroke record and playback, iconic toolbar, DDE and enhanced clipboard editing. They have the same look-and-feel across operating system environments, as well as across 3270 and 5250 emulation environments. Personal Communications also supports configuration, installation and distribution (CID), to make management over a LAN easy. The Personal Communications family offers comprehensive support for a variety of LANs WANs, multiprotocol support, and key APIs.

...With Client Access/400

Client Access/400 and Personal Communications AS/400 provide the natural migration path from PC Support/400 which has long been the standard software solution for most customers wishing to link the AS/400 with PC workstations. The existing PC Support/400 product contains DOS, Windows and OS/2 solutions for 5250 emulation, Shared Folders, Data Transfer, Virtual Print, APPC API's, Submit Remote Command, Data Queues, and more. However, PC Support/400 no longer meets the needs of many users due to conventional memory constraints, new connectivity requirements, and a need for better integration into the Microsoft Windows for Workgroups desktop environment.

IBM understands that your networking needs, multi-platform operating needs, and budgetary constraints do not always allow one solution to satisfy all users' requirements. To address the needs of a diverse marketplace, IBM has developed two solutions as represented by Client Access/400 and Personal Communications AS/400.

Client Access/400 is the recommended solution for users of OS/400® Version 3 Release 1 who require AS/400 connectivity for PCs running Windows and OS/2. Client Access/400 brings together an impressive set of functions and clients into a single product. Client Access/400 offers a true Windows client (eliminating the conventional memory constraints under OS/400 V2Rx with PC Support/400), an OS/2 client that offers exploitation of the 32-bit operating system environment and a vast array of features. These features include e-mail enablement

(Vendor Independent Mail (VIM), Mail Application Programming Interfaces (MAPI)), Open Data Base Connectivity (ODBC), and Graphical Operations. Also included in Client Access/400 are IBM's Personal Communications 5250 emulators. IBM's Personal Communications 5250 is a state-of-the-art 5250 emulator that has a common look and feel in the Windows and OS/2 environments.

Personal Communications AS/400 is the recommended choice for customers who:

- Currently have OS/400 Version 2 Release 2 or Version 2 Release 3 installed and do not plan an immediate upgrade to Version 3 Release 1
- Do not require all the function provided by Client Access/400
- Require a quick/easy way to connect remote (dial) workstations to the AS/400

Personal Communications AS/400 (PC400) offers a state-of-the-art 5250 emulator based on the same technology as the emulator (Personal Communications 5250) found in Client Access/400. Personal Communications AS/400 is a PC program product (shipped via diskettes and CD-ROM). Personal Communications AS/400 provides native solutions for workstations running Windows, Windows 95, Windows NT, and OS/2 operating systems. PC400 provides 5250 display and printer emulation, as well as SNA APIs (APPC and CPI-C), Data Transfer support, AnyNet® (for Windows and OS/2), Shared Folders support (for Windows and OS/2), Virtual Print (for Windows) and ODBC (for Windows). PC400 provides a wide range of connection options including LAN (802.2 and TN5250), Async, Autosync (not available for Windows 95) Twinaxial, SDLC (and even PCMCIA support for Twinax, Async, and LAN environments).

As users' requirements grow beyond what is provided by existing OS/400 V2Rx, the solution provided by PC400 for Windows, OS/2, Windows 95, or Windows NT allows you to migrate seamlessly to Version 3 Release 1 of OS/400. You can continue to use PC400 with Version 3 Release 1 until you migrate your users to Client Access/400.

For the users who require 270 and 5250 emulation support for Windows, OS/2, Windows 95, or Windows NT, IBM offers the combined product Personal Communications AS/400 and 3270, which provides the latest in PC to enterprise server (mainframe) or PC to AS/400 connectivity. The combined product provides all the support found in PC400, but adds the award-winning features of its sister product Personal Communications/3270.

...With IBM Host On-Demand

The Internet or World Wide Web (WWW) reaches more and more users every day. In addition to the Internet, intranets are emerging as valuable internal assets for companies. IBM Host On-Demand is an Internet-to-SNA interconnectivity solution that provides 3270 application discovery and access through the WWW. Web users needing host applications, such as software applications, public catalogs, databases, and other resources can use Host On-Demand from inside their Java-enabled Web browsers to access central computer data.

Host On-Demand delivers network computing to the WWW by enabling Web-browser users to seamlessly access non-Internet-based 3270 applications, content, and services. Host On-Demand is currently in a beta test program.

Host On-Demand is recommended for intranet/Internet users requiring entry-level emulation function. For full-function emulation, programming APIs, and a wider range of protocols or connectivities, Personal Communications is recommended.

More information can be found on the IBM Host On-Demand home page on the WWW at:

www.raleigh.ibm.com/hex/hexprod_en.html

...With Other Emulators from IBM

The PCOMM family of clients also provides a natural migration path for users who require a full-function emulator and are currently using Personal Communications AS/400 Twinaxial Entry Level, Personal Communications/3270 LUA Entry Level (part of Communications Server Version 4.0 for OS/2 Warp), IBM 5250 Emulation for Windows Version 1.1 or one of the Telnet-3270 or Telnet-5250 products that ship with IBM's TCP/IP for OS/2, and TCP/IP for DOS and Windows.

The IBM Personal Communications family of emulation products offers price and functional advantages when compared to competitive emulation products. The enhanced functions and cross-family usability make these products very competitive in the host emulation and application programming environments.

Trademarks

- ® Registered trademark of International Business Machines Corporation in the United States or other countries or both. Microsoft and Windows are registered trademarks of Microsoft Corporation. Java is a trademark of Sun Microsystems, Inc. Other trademarks and registered trademarks are the properties of their respective owners.



IBM US Announcement Supplemental Information

February 4, 1997

The IBM Personal Communications family of products, included on two CD-ROMs, gives you everything available in the emulator market today, and more:

3270 Features

Feature/Function	OS/2 (R)	DOS/ Windows	Windows 95	Windows NT
Attachments				
IEEE 802.2	X	X	X	X
3174 Peer Communication	X	X		
IPX/SPX (NetWare for SAA (R))	X	X	X	X
NWSAA client				X
APPC				X
LUA				X
TCP/IP (Telnet 3270)	X	X	X	X
SNA Distributed Function Terminal	X	X	X	X
Non-SNA DFT	X	X	X	X
Control Unit Terminal (CUT)	X	X		
SDLC (autodial capable)	X	X	X	X
WAC (Wide Area Connector)	X			X
SNA over ASYNC	X	X	X	X
ASYNCH for IGN (IBM Global Network)	X	X	X	X
Home3270	X	X	X	X
Hayes Autosync	X	X		X
MS-SNA Server				X
FMI		Windows only	X	X
WinAPPC			X	X
WinLUA			X	X
APPC3270 (LU2 over APPC)	X	Windows only	X	X
AnyNet (R) — SNA over TCP/IP	X	X		X
3270 pass-through via AS400	X	Windows only	X	X
ISDN, X.25	X	DOS (X.25) only		
Installation/Customization				
Remote unattended install (CID)	X			
Silent Install			X via CSD	X
Installation and use from LAN Server	X	X	X	X
Uninstall	X	X	X	X
Automatic DFT connection	X	X	X	X
Dynamic addition/deletion of sessions	X	X	X	X
Simultaneous sessions with different code pages and keyboard languages	X	X	X	X
Rule Line	X	X	X	X
26 display/printer emulation sessions	X	X	X	X
Model 2, 3, 4, 5 display sessions	X	X	X	X
Menu bar customization	X	Windows only	X	X

Feature/Function	OS/2	DOS/ Windows	Windows 95	Windows NT
Network Management				
SNA data compression (Emulator session data)	X	X	X	X
Session Level Encryption	X			
VPD/EVPD, RTM, Alert	X	X	X	X
Graphical User Interface				
Graphical, customizable tool bar	X	Windows only	X	X
Pop-up keypad and hot keys	X	Windows only	X	X
3D Hotspots	X	Windows only	X	X
Macro function	X	Windows only	X	X
Graphical keyboard remapping	X	X	X	X
-NLS key-caps support	X	X	X	X
-122 key keyboard support	X	X		
Keystroke record by example	X	X	X	X
Customizable mouse	X	Windows only	X	X
Drag-and-drop color remapping	X	Windows only	X	X
Clear, crisp fonts, automatic	X	Windows only	X	X
Sizing, fixed font size		No auto-sizing for DOS		
Display, view, window setup	X	Windows only	X	X
Web browser launch from host session	X			X
Versatile Edit Functions				
Undo, cut, copy, copy append, paste	X	Windows only	X	X
Paste next, clear, copy, link, unmark, select all				
Clipboard viewer access	X	Windows only	X	X
Intelligent spreadsheet support only	X	Windows only	X	X
File Transfer				
Multiple file and session transfers	X	Windows only	X	X
Background file transfer, lists, templates	X	X	X	X
Import/Export	X	X	X	X

This announcement is provided for your information only. For additional information, contact your IBM representative or call 800-IBM-4YOU.

Feature/Function	OS/2	DOS/Windows	Windows 95	Windows NT
Programming Interfaces				
EHLAPI, DDE, PCSAPI, CPI-C, APPC	X	X	X	X
SRPI	X	X	X	X
Host Graphics				
GDDM (R) and GOCA	X	X	X	X
Programmed symbol set	X	X		
Vector	X	X	X	X
Copy graphics images	X	Windows only	X	X
Additional Features				
APL support	X	X	X	X
3174 port 0 utility	X	X		
Automation and scripting utility (CMOUSE)	X	X	X	X
ZIPPRINT	X	X	X	X
EasyREXX for HLLAPI	X	X	X	X
LAN device drivers	X	X	X	X
Administration tools	X	X	X	X
Accessibility for handicapped users	X	X	X	X
Host Print				
ASCII transparent Printer definition table (PDT)	X	X	X	X
	X	X	X	X
Advanced Networking Support				
APPN (R) End node	X		X	X
APPN LEN node		X		
HPR	X		X	X
DLUR	X		X	X
Gateway				
IEEE 802.2, SNA DFT, SDLC, and X.25		DOS only		

5250 Features

Feature/Function	OS/2	DOS/Windows	Windows 95	Windows NT
Attachments				
IEEE 802.2	X	X	X	X
IPX/SPX (NetWare for SAA)	X			
NWSAA client				X
APPC				X
TCP/IP (Telnet 5250)	X	X	X	X
Twinaxial	X	X	X	X
Console (asynch and twinaxial)	X	X		
SDLC (autodial capability)	X	X	X	X
SNA over ASYNC	X	X	X	X
Hayes Autosync	X	X		X
MS-SNA Server				
APPC			X	X
AnyNet - SNA over TCP/IP	X	X		X
S/3X	X	Windows only		

Feature/Function	OS/2	DOS/Windows	Windows 95	Windows NT
Installation/Customization				
Remote unattended install (CID)	X			
Silent Install			X via CSD	X
Installation and configuration from LAN Server	X	X	X	X
Uninstall	X	X	X	X
Dynamic addition/deletion of sessions	X	X	X	X
Simultaneous sessions with different code pages and keyboard languages	X	X	X	X
Automatic logon	X	X	X	X
Rule Line	X	X	X	X
26 display/printer emulation sessions	X	X	X	X
80 and 132 column support	X	X	X	X
Menu bar customization	X	X	X	X
Graphical User Interface				
Graphical, customizable tool bar	X	X	X	X
Pop-up keypad and hot keys	X	X	X	X
3D Hotspots	X	X	X	X
Macro function	X	X	X	X
Graphical keyboard remapping	X	X	X	X
-NLS key-caps support	X	X	X	X
-122 key keyboard support	X	X		
Keystroke record by example	X	X	X	X
Customizable mouse	X	Windows only	X	X
Drag-and-drop color remapping	X	Windows only	X	X
Clear, crisp fonts, automatic	X	Windows only	X	X
Sizing, fixed font size		No auto-sizing for DOS		
Display, view, window setup	X	Windows only	X	X
Web browser launch from host session	X			X
Versatile Edit Functions				
Undo, cut, copy, copy append, paste	X	Windows only	X	X
Paste next, clear, copy, link, unmark, select all				
Clipboard viewer access	X	Windows only	X	X
Intelligent spreadsheet support only	X	Windows only	X	X
File Transfer				
Multiple file and session transfers	X	Windows only	X	X

Feature/Function	OS/2	DOS/ Windows	Windows 95	Windows NT
Programming Interfaces				
EHLAPI, DDE, PCSAPI, CPI-C, APPC	X	X	X	X
Additional Features				
Automation and scripting utility (CMMOUSE)	X	X	X	X
LAN device drivers	X	X	X	X
Administration tool	X	X	X	X
Accessibility for handicapped users	X	X	X	X
Client Application Support				
File Transfer for AS/400 (R)	X	X	X	X
Virtual Print		X		
PC Organizer and Text Assist	X	X	X	X
Enhanced non- Programmable Terminal User Interface (ENPTUI)	X	X	X	X
Shared Folders		X	X	
Data Transfer (SQL file transfer)	X	X	X	X
Open database connectivity (ODBC) and database access		X		
Host Print				
3812 printer emulation	X	X	X	X
Host print transform	X	X	X	X
ASCII transparent	X	X	X	X
Printer definition table (PDT)	X	X	X	X
Advanced Networking Support				
APPN End node	X		X	X
APPN LEN node		X		
HPR	X		X	X
DLUR	X		X	X

Publications

All publications for these products are provided on CD-ROM. However, they can be ordered in hardcopy form via the order numbers listed below. To order, contact your IBM representative or call 800-426-7282. When ordering from your IBM representative, use the order number. When ordering through the 800 number, use the part number.

Title	Order Number	Part Number
-------	-----------------	----------------

OS/2 Personal Communications Publications

Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Up and Running	SC31-8258	39H3413
Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Tell Me About OS/2 Access Feature	SC31-8257	39H3315
Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Reference	SC31-8259	39H3412
Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Programming	SC31-8260	39H3320

Title	Order Number	Part Number
DOS and Windows Personal Communications Publications		
Personal Communications AS/400 and 3270 V4.1 for Windows Up and Running	SC31-8261	39H0507
Personal Communications AS/400 and 3270 V4.1 Full Function for DOS Up and Running	SC31-8262	39H0473
Personal Communications AS/400 and 3270 V4.1 Entry Emulator for DOS Up and Running	SC31-8263	39H0472
Personal Communications AS/400 and 3270 V4.1 for Windows Reference	SC31-8264	39H0506
Personal Communications AS/400 and 3270 V4.1 for DOS Reference	SC31-8265	39H0470
Personal Communications AS/400 and 3270 V4.1 for DOS/Windows Programming	SC31-8266	39H0428
Personal Communications AS/400 and 3270 V4.1 Entry Emulator for DOS Programming	SC31-8267	39H0468
APPC Networking Services for Windows Getting Started	SC31-8124	
IBM AnyNet Guide to SNA over TCP/IP for Windows	GV40-0113	

Windows 95 Personal Communications Publications

Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 Up and Running	SC31-8205	64H0669
Personal Communications AS/400 and 3270 for Windows 95 Reference	SC31-8206	64H0692
Personal Communications AS/400 and 3270 for Windows 95 Emulator Programming	SC31-8207	64H0493
Personal Communications AS/400 and 3270 for Windows 95 Client/Server Communications Programming	SC31-8208	64H0694
Personal Communications AS/400 and 3270 for Windows 95 System Management Programming	SC31-8199	64H0695

Windows NT Personal Communications Publications

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT Up and Running	GC31-8314	84H0569
Personal Communications AS/400 and 3270 for Windows NT Reference	SC31-8315	84H0570
Personal Communications AS/400 and 3270 for Windows NT Emulator Programming	SC31-8316	84H0571

Title	Order Number	Part Number
Personal Communications AS/400 and 3270 for Windows NT Client/Server Communications Programming	SC31-8317	84H0572
Personal Communications AS/400 and 3270 for Windows NT System Management Programming	SC31-8318	84H0573

Technical Information

Specified Operating Environment

Hardware Requirements: For installation, a PC capable of reading a CD-ROM is required. Other prerequisites are product dependent. For a list of prerequisites, refer to the applicable product announcement:

- Software Announcement 296-085, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows and Personal Communications AS/400 and 3270 Version 4.1 for Windows)
- Software Announcement 296-086, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows 95 and Personal Communications AS/400 and 3270 Version 4.1 for Windows 95)
- Software Announcement 296-087, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for OS/2 and Personal Communications AS/400 and 3270 Version 4.1 for OS/2)

Displayable Softcopy Publications: The following product manuals are offered in displayable softcopy form.

- Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Up and Running
- Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Reference
- Personal Communications AS/400 and 3270 Version 4.1 for OS/2 Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 Up and Running
- Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 Reference
- Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 Emulator Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 System Management Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows 95 Client/Server Communications Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows NT Up and Running
- Personal Communications AS/400 and 3270 Version 4.1 for Windows NT Reference
- Personal Communications AS/400 and 3270 Version 4.1 for Windows NT Emulator Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows NT System Management Programming
- Personal Communications AS/400 and 3270 Version 4.1 for Windows NT Client/Server Communications Programming

Requirements for Personal Communications for Windows NT

System Unit: Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT require workstations that support the Microsoft Windows NT operating system. These systems include IBM and IBM-compatible workstations. These workstations must have an adequate processor, memory, and fixed disk storage capacity to support Windows NT. If Personal Communications AS/400 and 3270 Version 4.1 for Windows NT or Personal Communications AS/400 Version 4.1 for Windows NT is to be locally installed, the workstation must also be capable of reading a CD-ROM. A system unit with a 486 processor, or faster, is recommended.

Keyboard

- Enhanced keyboard (101-key, 102-key, 104-key)
- Space Saving keyboard
- Microsoft Natural Keyboard

Display: Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT will use displays that are supported by Window NT. Refer to Windows NT publications.

Video Adapter: Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT support video adapters that are supported by Windows NT. Refer to Windows NT publications.

RAM and Fixed Disk

- 16MB RAM is the recommended minimum.
- 17 to 30MB minimum of fixed disk space above what Windows NT requires.

Communication Adapters: Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT support LAN and WAN communication adapters that have device drivers written to the network

All unlicensed manuals are included. The displayable manuals are part of the basic machine-readable material. The files are shipped on the same media type as the basic machine-readable material.

The publications listed for Personal Communications Version 4.1 for OS/2 or Windows are not available in displayable softcopy form for Japanese, Hangeul, Traditional Chinese, or Simplified Chinese.

The displayable manuals associated with the Windows 95 versions of IBM Personal Communications can be used with the BookManager® READ licensed programs. The displayable manuals associated with the OS/2 versions of IBM Personal Communications can be used with the included Information Notebook viewer. Terms and conditions for use of the machine-readable files are shipped with the files.

driver interface specification (NDIS 3.1). The MAC drivers for supported adapters will generally be available from the adapter vendor or they will be shipped with the adapters. Support for a number of communications adapters has been included with Windows NT.

The following are additional adapters supported by Personal Communications AS/400 and 3270 Version 4.1 for Windows NT for Windows NT:

For Non-Micro Channel Machines

- IBM SDLC Communications Adapter
- IBM Multiprotocol Adapter
- IBM PC 3278/79 Emulation Adapter (3270 only)
- Advanced IBM PC 3278/79 Emulation Adapter (3270 only)
- IBM Wide Area Connector (WAC)
- IBM Twinax and some non-IBM Twinax adapters are supported

For Micro Channel Machines

- IBM Multiprotocol Adapter/A
- IBM 3270 Connection (3270 only)
- IBM Asynchronous/SDLC V.32 Modem/A (MPA Card with modem)
- IBM Wide Area Connector (WAC)
- IBM Twinax and some non-IBM Twinax adapters are supported

For PCMCIA Release 2.0 Type II

- IBM 3270 Emulation Credit Card Adapter (3270 only)
- IBM Twinax and some non-IBM Twinax adapters are supported

Printers

- GDI print mode

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT support the printers which are supported by Windows NT via the GDI.

- PDT (raw data) print mode:

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT also support printing via the following Printer Definition Tables (PDT) for the following printers:

The following Printer Definition Files (PDF) are supported for both 3270/5250 sessions. (A PDF is compiled to create a PDT.)

Printer Name/Model	File Name
IBM 3812 Page Printer, Model 2	IBM3812.PDF
IBM 3816 Pageprinter II	IBM3816.PDF
IBM 3812 Pageprinter Model 2	PRN3812.PDF
IBM 3816 Pageprinter II	
IBM 3852 Color Printer	IBM38521.PDF
IBM 3852 Color Printer	PRN38521.PDF
IBM 3852 Color Jetprinter, Model 2	IBM38522.PDF
IBM 3852 Color Jetprinter, Model 2	PRN38522.PDF
IBM 4019 LaserPrinter	IBM4019.PDF
IBM 4019 LaserPrinter E	
IBM 4029 Laser Printer	
IBM 4019 LaserPrinter	PRN4019.PDF
IBM 4019 LaserPrinter E	
IBM 4029 Laser Printer	
IBM 4072 ExecJet® Printer	IBM4072.PDF

Printer Name/Model	File Name
IBM 4072 ExecJet Printer	PRN4072.PDF
IBM 4201 Proprinter®	IBM4201.PDF
IBM 4201 Proprinter II	
IBM 4201 Proprinter III, Model 3	
IBM 2380 Personal Printer Series 2	
IBM 4202 Proprinter XL, Model 1	IBM4202.PDF
IBM 4202 Proprinter XL, Model 2	
IBM 4202 Proprinter III XL, Model 2	
IBM 4202 Proprinter III XL, Model 3	
IBM 4216 Personal Pageprinter	
IBM 2381 Personal Printer Series 2	
IBM 4201 Proprinter	PRN4202.PDF
IBM 4201 Proprinter II	
IBM 4201 Proprinter III, Model 3	
IBM 4202 Proprinter XL, Model 1	
IBM 4202 Proprinter XL, Model 2	
IBM 4202 Proprinter III XL, Model 2	
IBM 4202 Proprinter III XL, Model 3	
IBM 4207 Proprinter X24	
IBM 4207 Proprinter X24E	
IBM 4208 Proprinter XL24	
IBM 4208 Proprinter XL24E	
IBM 4216 Personal Pageprinter	
IBM 2380, 2381, 2390, 2391 printers	
IBM 4207 Proprinter X24	IBM4207.PDF
IBM 4207 Proprinter X24E	
IBM 2390 Personal Printer Series 2	
IBM 4208 Proprinter XL24	IBM4208.PDF
IBM 4208 Proprinter XL24E	
IBM 2391 Personal Printer Series 2	
IBM 5152 Graphics Printer, Model 2	IBM5152.PDF
IBM 5152 Graphics Printer, Model 2	PRN5152.PDF
IBM 5182 Color Printer	IBM5182.PDF
IBM 5182 Color Printer	PRN5182.PDF
IBM 5201 Quietwriter® Printer, Model 1	IBM5201.PDF
IBM 5201 Quietwriter Printer, Model 2	
IBM 5202 Quietwriter III	IBM5202.PDF
IBM 5204 Quietwriter Printer	
IBM 5201 Quietwriter Printer, Model 1	PRN5202.PDF
IBM 5201 Quietwriter Printer, Model 2	
IBM 5202 Quietwriter III	
IBM 5204 Quietwriter Printer	
IBM 5216 Wheelprinter	IBM5216.PDF
IBM 5216 Wheelprinter	PRN5216.PDF
IBM 5223 Wheelprinter E	IBM5223.PDF
Epson Action Laser2 LQ2500 mode	ACTLZR2.PDF
Canon BJ300 CAPSL mode	BJ300.PDF
Canon LBP4 ISO mode	LBP4.PDF
Epson LQ870/1170	LQ870.PDF
HP LaserJet II Series	HPLJII.PDF

The following PDFs are provided only for 5250 sessions.

Printer Name/Model	File Name
Compaq PageMarq 15 HP Mode	CPQPM20.PDF
Compaq PageMarq 20 HP Mode	
Epson AP2250	EAP2250.PDF
Epson AP3250	EAP3250.PDF
Epson AP5000	EAP5500.PDF
Epson AP5500	
Epson FX1170	EFX1170.PDF
Epson DFX5000	EFX5000.PDF
Epson DFX8000	
Epson FX850	EFX850.PDF
Epson LQ570	ELQ1070.PDF
Epson LQ1070	
Epson LQ2550	ELQ2550.PDF

Printer Name/Model	File Name
Epson LQ510	ELQ510.PDF
Epson LQ860	ELQ860.PDF
Epson LX810	ELX810.PDF
Epson EPL7000 HP Mode	EPLPCL4.PDF
Epson EPL8000 HP Mode	EPLPCL5.PDF
Epson SQ1170	ESQ1170.PDF
HP DeskJet 500	HPDSKJT.PDF
HP DeskJet 550C	HPDJ550C.PDF
HP LaserJet III	HPLJIII.PDF
HP LaserJet IIIP	
HP LaserJet IIISi	
HP LaserJet IIID	HPLJIIID.PDF
IBM 4039 LaserPrinter HP Mode	
HP LaserJet 4	HPLJ4.PDF
IBM 4070 IJ	IBM4070.PDF
IBM 4070 IJ Epson Mode	IBM4070E.PDF
IBM 4212 Proprinter 24P	IBM4212.PDF
IBM 4226-302 Printer	IBM4226.PDF
NEC P6200 Pinwriter	NEC6300.PDF
NEC P6300 Pinwriter	
Panasonic KX-P4410 HP Mode	PANLBP4.PDF
Panasonic KX-P4420 HP Mode	
Panasonic KX-P4450i HP Mode	
Panasonic KX-P4430 HP Mode	PANLBP5.PDF
Panasonic KX-P4451 HP Mode	
Panasonic KX-P1123 Epson Mode	PAN1123.PDF
Panasonic KX-P1124 Epson Mode	PAN1124.PDF
Panasonic KX-P1624 Epson Mode	
Panasonic KX-P1180 Epson Mode	PAN1180.PDF
Panasonic KX-P1180i Epson Mode	
Panasonic KX-P1191 Epson Mode	
Panasonic KX-P1695 Epson Mode	PAN1695.PDF
Panasonic KX-P2123 Epson Mode	PAN2123.PDF
Panasonic KX-P2124 Epson Mode	PAN2124.PDF
Panasonic KX-P2180 Epson Mode	PAN2180.PDF
Panasonic KX-P1124i Epson Mode	PAN2624.PDF
Panasonic KX-P1654 Epson Mode	
Panasonic KX-P2624 Epson Mode	

Modems: Personal Communications for Windows NT supports modems as follows:

For Windows NT 3.51, Personal Communications has its own list of modems.

For Windows NT 4.0, Personal Communications uses modems configured through the Windows NT TAPI, except for Hayes AutoSync, for which it uses its own list of modems.

Personal Communications for Windows NT also supports SDLC modems (synchronous V.25bis modems) attached to SDLC, multiprotocol, or WAC adapters.

Software Requirements: Software requirements for Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT:

- Windows NT 3.51 or Windows NT 4.0

Software options for Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT:

- Novell Netware for SAA client
- Microsoft SNA Server client

Personal Communications will communicate with the following types of server or gateway:

- Communication Server for OS/2 Warp
- Novell NetWare for SAA Version 1.2, or later (3270 only) (IPX/SPX)

- Novell NetWare for SAA Version 2.0, or later (3270 and 5250) (SNA)
- Microsoft SNA Server

To communicate with an AS/400, Personal Communications requires AS/400 LPPs listed below (depending upon desired system configuration):

- OS/400® Version 2 Release 2.0, or later (5738-SS1, 5763-SS1, or 5716-SS1)
- OS/400 Version 2 Release 3.0, or later, is required for ENPTUI or Host Print Transform (5738-SS1, 5763-SS1, or 5716-SS1)
- OS/400 Version 3 Release 6.0, or later, is required for 132 column support
- For Text Assist features, cumulative PTF C3285220 with PTF SF14687 for Version 2 Release 2, PTF SF14495 for Version 2 Release 3.

Optional (for 3270):

The licensed programs required to be installed on the IBM System/390® host computers for file transfer are:

- For MVS®/TSO — IBM 3270 PC File Transfer Program, Release 1.1.1 (5665-311)
- For VM — IBM 3270 PC File Transfer Program, Release 1.1.1 (5664-281)
- For CICS™ — CICS to 3270PC File Transfer Program, Release 1 (5798-DQH)
- For VSE — VSE/SP™ Version 3 (5750-AAV), VSE/SP Version 4 (5750-ABF), or VSE/ESA™ (5750-ACD) (VSE/SP and VSE/ESA have no prerequisite programming requirements for file transfer)

System/390 host computers communicating SNA with Personal Communications AS/400 and 3270 Version 4.1 for Windows NT require the following:

- For the MVS environment:
 - ACF/VTAM® Version 3, or a later level release, or ACF/VTAM Version 3 Release 4.2 for Dynamic Definition of Dependent LUs and Data Compression.
 - ACF/VTAM V3 for MVS/XA™ (5665-289)
 - ACF/VTAM V3 for MVS/370 (5665-313)
 - ACF/VTAM V3 for MVS/ESA™ (5685-085)
 - ACF/VTAM V4R2 for MVS/ESA (5695-117) for APPC3270 and DLUR
 - ACF/VTAM V4R3 for MVS/ESA (5695-117) for HPR
 - ACF/NCP Version 4 Release 3.1 (5668-854) for Token-Ring connection
 - ACF/NCP Version 6 Release 2 (5688-231) for Data Compression of XRF sessions
- For the VM environment:
 - ACF/VTAM Version 3, or later level release, or ACF/VTAM Version 3 Release 4.0 for Dynamic Definition of Dependent LUs.
 - ACF/VTAM V3 for VM/9370 (5684-052)
 - ACF/VTAM V3 for VM/ESA® (5684-095)
 - ACF/VTAM V4R2 for VM/ESA (5654-010) for APPC3270 and DLUR

- ACF/VTAM Version 3 Release 4.1 for VM/SP and VM/ESA (5684-095) for Data Compression
- ACF/NCP Version 4 Release 2 (5668-854), or later level release for token-ring connection
- For the VSE environment:
 - ACF/NCP Version 4 Release 1.0 (5668-854), or later level release for token-ring connection
 - ACF/VTAM Version 3 Release 4 for VSE/ESA (5666-363) for Dynamic Definition of Dependent LUs
 - ACF/VTAM V4R2 for VSE/ESA (5686-065) for APPC3270 and DLUR

Refer to the individual host operating system information for the correct level of release that supports the above listed ACF/VTAM and ACF/NCP versions.

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT is datastream compatible with 3270 base datastream alphanumeric application environments that support the IBM 3278 Model 2, 3, 4, or 5 or the IBM 3279 Model 2 or 3, with certain restrictions. Refer to the **Limitations** section.

Compatibility: Compatibility information is product dependent. For detailed information, refer to the applicable product announcement:

- Software Announcement 296-085, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows and Personal Communications AS/400 and 3270 Version 4.1 for Windows)
- Software Announcement 296-086, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows 95 and Personal Communications AS/400 and 3270 Version 4.1 for Windows 95)
- Software Announcement 296-087, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for OS/2 and Personal Communications AS/400 and 3270 Version 4.1 for OS/2)

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT have been tested for compatibility with the following programs; however, compatibility should not be assumed for all environments (host connections and emulation functions provided by Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT). Users of Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT must verify the availability of sufficient application memory space based upon the host connection, emulation functions configured, and other Windows NT requirements and system extensions selected.

- Operating Systems:
 - Windows NT 3.51 or 4.0
- Microsoft SNA Server Windows NT Client
- Netware for SAA client
- Netware Version 3.12J (Japanese)

Limitations: Certain limitations may apply. For detailed information, refer to the applicable product announcement:

- Software Announcement 296-085, dated March 19, 1996 (Personal Communications AS/400

Version 4.1 for Windows and Personal Communications AS/400 and 3270 Version 4.1 for Windows)

- Software Announcement 296-086, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows 95 and Personal Communications AS/400 and 3270 Version 4.1 for Windows 95)
- Software Announcement 296-087, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for OS/2 and Personal Communications AS/400 and 3270 Version 4.1 for OS/2)

The following are the limitations for Personal Communications for NT in all language versions:

- S/3x attachment is not supported
- Console Support to an AS/400 is not supported
- Control Unit Terminal (CUT) is not supported
- 3174 Peer Communication is not supported
- Shared Folders is not supported
- Printer Definition Tables are supported by Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT.

Unless PDTs are used, the SCS control codes may not always be handled correctly, depending on the printer drivers and fonts being used.

Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT depend on the Windows NT printer device drivers to print data when the print driver is used. Some printer device drivers do not support all characters that are used. Such printer device drivers print an unsupported character as the most similar character or as the default character of the printer driver (for example “.”).

- Data Transfer does not support multiple invocations at a time.
- Commonly used 3274 Control Unit features and capabilities are supported. However, the following are not supported (3270 only):
 - APL characters are not copied to the clipboard by CUT, COPY, or COPY LINK functions as APL characters. They are copied to the clipboard as ANSI characters that have the same code points.
 - Configuration C features:
 - Structured field and attribute processing (SFAP) (EBCDIC only)
 - Decompression of PS load data
 - Attachment of local or remote R-Loop
 - Explicit partitions
 - X.21 communication protocol
 - Only a subset of Entry Assist functions are supported.
 - All IBM 3278 keyboard types except the IBM 3278 Typewriter keyboard.
 - Certain IBM 3278 keys:
 - Extended attribute selection keys: color, highlighting, and programmed symbols
 - Indent

- Magnetic stripe reader
- Certain IBM 3287 Printer capabilities:
 - Mono/dual case switch/light
 - Test switch/light
 - Reset switch
 - Setup switch
 - Index switch
 - Control unit signal light
- Security keylock
- Selector light pen
- Host direct printing with an APPC3270 connection
- Coexistence of IBM 3270 PCMCIA adapter and IBM 3270 AT®-bus communication adapter, or IBM 3270 connection adapter
- Change of Printer Control parameters when using a PDT file
- In addition to the restrictions above, when using DFT communications attachment, the following features and capabilities of the IBM 3274 or IBM 3174 Control Units are not supported:
 - Programmed symbols (PS) on attached workstations
 - Attachment to port 0 of the 3274
 - Data base operations
 - 3270 Diagnostic Reset Dump
 - Patch facility
- Home3270 and IBM Global Network attachments do not support the following:
 - Graphics
 - Passthru Print
 - SRPI
- Async IIN™ support is limited to the following:
 - 8-bit no parity
 - No compression
- The following attachments do not support multiple physical adapters, or two RS232-C ports:
 - Home3270
 - IBM Global Network
- Line speed:
 - SDLC, Async IIN, and SNA-over-Async line speed is up to 115.2 Kbps depending on the PC and configuration.
 - Home3270 line speed is up to 115.2 Kbps depending on the PC and configuration.
 - IBM Global Network line speed is up to 115.2 Kbps depending on the PC and configuration.
- TCP/IP connectivity has the following restrictions:
 - The following functions are not available:
 - SDDL (self-defining dependent LUs)
 - SNA session-level compression and decompression
 - The maximum packet size must be less than 8,000 bytes for the file transfer.
- IPX/SPX connectivity has the following restrictions:
 - The following functions are not available:
 - SDDL (self-defining dependent LUs)
 - SNA session-level compression and decompression

- APPC and CPI-C APIs are not supported for the following attachments:
 - TCP/IP
 - IPX/SPX
 - Coaxial
- EHLLAPI:
 - Storage manage function is not supported.
 - CONPHYS is not supported.
- The following capability of the IBM 3278 and IBM 3279 Display Stations and the IBM 3287 Printer is not supported:
 - Subsystem Local Copy
- The DDE API does not support code-page conversion. Applications must use the CSV API for code-page conversion.

Performance Considerations: Response time in a terminal environment depends on a variety of system unit and data-communication load factors. These include the types and speeds of system units processor, number and types of communication adapters installed, the line speed of the communication service, and the amount of processing done by the applications utilizing Personal Communications AS/400 and 3270 Version 4.1 for Windows NT or Personal Communications AS/400 Version 4.1 for Windows NT.

Planning Information

The Personal Communications AS/400 and 3270 Version 4.1 for Windows NT and Personal Communications AS/400 Version 4.1 for Windows NT can be set up to work in a server/client relationship. The approach used is to store the least amount of code necessary on the client workstation and to store the major portion of the run time code and configuration information on a LAN file server. This allows the customers to utilize their workstations for more applications.

Customer Responsibilities: You must provide the minimum hardware and software environments in which the specific IBM Personal Communications product will operate. It is recommended that an administrator be assigned to customize the program for the end users and/or to provide the end user with host information required to configure and install the selected product. For more detailed information on customer responsibilities, refer to the applicable product announcement:

- Software Announcement 296-085, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows and Personal Communications AS/400 and 3270 Version 4.1 for Windows)
- Software Announcement 296-086, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for Windows 95 and Personal Communications AS/400 and 3270 Version 4.1 for Windows 95)
- Software Announcement 296-087, dated March 19, 1996 (Personal Communications AS/400 Version 4.1 for OS/2 and Personal Communications AS/400 and 3270 Version 4.1 for OS/2)

Packaging: IBM Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 and Personal Communications AS/400 Version 4.11 for Windows, Windows 95,

Windows NT, and OS/2 program packages are each distributed with the following materials:

- Proof of Entitlement
- License Information
- International Program License Agreement
- Publications
 - All publications on CD-ROM
 - Guide to Installation
 - Personal Communications Toolkit/Host On-Demand brochure
- One CD-ROM

Security, Auditability, and Control

IBM Personal Communications products run under the control of the operating system for which they were designed and are subject to the controls that the operating system provides.

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

Ordering Information

Changes have been made to the terminology used for IBM software. These changes do not affect terms and conditions, charges, or ordering processes.

Key elements are:

- License: The license shows rights and obligations that complement copyright protection provided by law, and applies to all use of IBM software.
- Charging: IBM software is charged according to the number of Use Authorizations acquired. Definition of this Use and its associated charges for a given product are stated in the product announcement. Use Authorizations come with the program package or are available separately, and may be for users or resources. They are reflected as Proofs of Entitlement (PoE), provided by IBM. Use Authorizations continue to be available for some products in use-packs of 1, 5, 10, and 50.
- Supply of Code: The software program itself will be available in various forms; for example, on magnetic media, CD-ROM, or electronically. This supply is accompanied by a Use Authorization.

Key changes:

Previous Terminology	New Terminology
Program Package	Program Package
Additional License	Use Authorization for the right to copy and use the program, (for example, a PoE for 1 Server Install)
Use-Based Feature	Use Authorization for Users or Resources, (for example, a PoE for 5 Concurrent Users or 10 Connected Ports)
Distributed Feature	Use Authorization for Optional or Selectable Portions of a Program, (for example, a PoE for 5 Client Installs)

Orders for new licenses will be accepted now.

Shipments will begin on February 28, 1997.

To order these programs for order type, specify the order type number, feature number, part number, program name, media, and quantity.

Program Package: Program supply (for example, diskettes, CDs, and electronic programs) documentation and PoE.

Program Name	Feature Number	Part Number
Order Type 5801-AAR		
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2	1102	64H0720
Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2	0954	64H0736

Use Authorization for the Right to Copy and Use the Program — Non-Software Advantage: Authorization to copy and use the program package supply and documentation.

Program Name	Definition of Use	Feature Number	Part Number
Order Type 5802-AAR			
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 1 Pack	Copy and Use Program	1075	64H2608
Personal Communications AS/400 Version 4.11 for Windows NT, Windows, Windows 95, and OS/2 — Use Authorization 1 Pack	Copy and Use Program	1080	64H2614
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 5 Pack	Copy and Use Program	1076	64H2609

Program Name	Definition of Use	Feature Number	Part Number	Program Name	Definition of Use	Part Number
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 10 Pack	Copy and Use Program	1077	64H2610	Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 Use Authorization — Software Advantage	Copy and Use Program	64H0738
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 50 Pack	Copy and Use Program	1078	64H2611	Program Package Upgrade: Program supply, for example, diskettes, and CDs, electronic programs, with documentation and PoE.		
Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 5 Pack	Copy and Use Program	1081	64H2615	Program Name	Feature Number	Part Number
Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 10 Pack	Copy and Use Program	1082	64H2616	Order Type 5803-AAR		
Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 — Use Authorization 50 Pack	Copy and Use Program	1083	64H2617	Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 from any IBM or non-IBM 5250 or 3270 emulator program or APPC Networking Services for Windows	0403	64H0721
Use Authorization for the Right to Copy and Use the Program — Software Advantage: Authorization to copy and use the program package supply and documentation. PoE will be provided monthly as a report.				Personal Communications AS/400 Version 4.1 for Windows, Windows 95, and OS/2 from any IBM or non-IBM 5250 emulator program or APPC Networking Services for Windows CD-ROM	0405	64H0737
Program Name	Definition of Use	Part Number		Use Authorization for Upgrade — Non-Software Advantage: Authorization to copy and use the program package supply and documentation acquired as an upgrade.		
Order Type 5802-AAR				Program Name	Definition of Use	Part Number
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 Use Authorization — Software Advantage	Copy and Use Program	64H0722		Order Type 5804-AAR		
				Upgrade to Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, Windows NT, and OS/2 from any IBM or non-IBM 5250 or 3270 emulator program or APPC Networking Services for Windows Use Authorization for Upgrade	Copy and Use Program	0345 64H2612
				Upgrade to Personal Communications AS/400 Version 4.1 for Windows, Windows 95, Windows NT, and OS/2 from any IBM or non-IBM 5250 emulator program or APPC Networking Services for Windows Use Authorization for Upgrade	Copy and Use Program	0347 64H2618

Use Authorization for Upgrade — Software Advantage: Authorization to copy and use the program package supply and documentation acquired as an upgrade. PoE will be provided monthly as a report.

Program Name	Definition of Use	Part Number
Order Type 5804-AAR		
Upgrade to Personal Communications AS/400 and 3270 Version 4.1 for DOS/Windows, Windows 95, Windows NT, and OS/2 from any IBM or non-IBM 5250 or 3270 emulator program or APPC Networking Services for Windows Use Authorization for Upgrade for — Software Advantage	Copy and Use Program	64H0724

Upgrade to Personal Communications AS/400 Version 4.1 for Windows, Windows 95, Windows NT, and OS/2 from any IBM or non-IBM 5250 emulator program or APPC Networking Services for Windows Use Authorization for Upgrade for — Software Advantage	Copy and Use Program	64H0740
--	----------------------	---------

Software Advantage Media Packs and Documentation Packs

Program Name	Part Number
Personal Communications AS/400 and 3270 Version 4.11 for DOS/Windows, Windows 95, OS/2, and Windows NT — Software Advantage Media Pack	84H6185
Personal Communications AS/400 Version 4.11 for Windows, Windows 95, OS/2, and Windows NT — Software Advantage Media Pack	84H6187

Optionally available media packs and documentation packs are only available through an authorized Software Advantage remarketer.

Upgrade Protection (New Product): The following upgrade protection products are only available under the Software Advantage for Workstations offering:

Program Name	Part Number
Order Type 5809-AAR	
Upgrade Protection for Personal Communications AS/400 and 3270 Version 4.1 for DOS/Windows, Windows 95, and OS/2 —OTC ¹	64H0894

Program Name	Part Number
Upgrade Protection for Personal Communications AS/400 Version 4.1 for Windows, Windows 95 and OS/2 —OTC	64H0896
Upgrade Protection for Personal Communications AS/400 and 3270 Version 4.1 for DOS/Windows, Windows 95, OS/2 and —QC ²	64H0895
Upgrade Protection for Personal Communications AS/400 Version 4.1 for Windows, Windows 95, and OS/2 —QC	64H0897
¹ One-Time Charge	
² Quarterly Charge	

Upgrade Protection (Entitled Customers): Customers who have previously acquired Software Advantage Upgrade Protection part numbers listed below will automatically receive Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 part number 64H0720.

Description	Part Number
Personal Communications AS/400 and 3270 for OS/2 —OTC	33H6934
Personal Communications AS/400 and 3270 for Windows —OTC	33H6935
Personal Communications/3270 for OS/2 —OTC	33H6936
Personal Communications/3270 for Windows —OTC	33H6937
Personal Communications AS/400 and 3270 for OS/2 —QC	33H7121
Personal Communications AS/400 and 3270 for Windows —QC	33H7122
Personal Communications/3270 for OS/2 —QC	33H7123
Personal Communications/3270 for Windows —QC	33H7124
Communications Manager/2 DF —OTC	33H6887
Communications Manager/2 FR 1.x —OTC	33H6888
Communications Manager/2 DF —QC	33H7074
Communications Manager/2 FR 1.x —QC	33H7075

Customers who have previously acquired Software Advantage Upgrade Protection part numbers listed below will automatically receive Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 part number 64H0736.

Description	Part Number
Personal Communications AS/400 for OS/2 —OTC	33H6938
Personal Communications AS/400 for Windows —OTC	33H6939
Personal Communications AS/400 for OS/2 —QC	33H7125
Personal Communications AS/400 for Windows —QC	33H7126

Program Upgrade

The program package upgrade option allows upgrade to Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 from any of the following:

- IBM 3270 or 5250 emulator programs
 - Communications Manager/2 V1.x
 - Communications Manager/2 V1.x DF
 - OS/2 EE, ES, ES+DB — all versions
 - Personal Communications AS/400 and 3270 V4.0 for Windows
 - Personal Communications AS/400 and 3270 V4.0 for OS/2
 - Personal Communications/3270 for DOS/Windows — all versions
 - Personal Communications/3270 V4.0 for OS/2
 - Personal Communications/3270 V4.0 for OS/2 — IEEE 802.2 Entry Level
 - Personal Communications/3270 V4.0 for OS/2 — LUA Entry Level
 - 3270 PC any version
 - 5250 PC any version
 - 5250 Workstation Feature any version
 - Personal Communication/5250-Windows any version
 - Personal Communication/5250-OS2 any version
 - any other IBM 3270 or 5250 full function emulator program for OS/2 or Windows
- IBM APPC Networking Services for Windows Version 1.0
- any non-IBM 3270 or 5250 full function emulator programs including, but not limited to
 - EXTRA!
 - Rumba
 - IRMA Workstation
 - Rally
 - Rumba for AS/400
 - IRMA/400
 - CGS

The program package upgrade option also allows upgrade to Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 from any of the following:

- IBM 5250 emulator programs
 - Communications Manager/2 V1.x
 - Communications Manager/2 V1.x DF
 - OS/2 EE, ES, ES+DB — all versions
 - Personal Communications AS/400 and 3270 V4.0 for Windows
 - Personal Communications AS/400 and 3270 V4.0 for OS/2
 - Personal Communications AS/400 V4.0 for Windows
 - Personal Communications AS/400 V4.0 for OS/2
 - Personal Communications AS/400 V4.1 — Twinax Entry Level
 - Client Access/400 — all versions
 - Any other IBM 5250 full function emulator program for OS/2 or Windows
- IBM APPC Networking Services for Windows Version 1.0
- Any non-IBM 5250 full function emulator programs including, but not limited to:
 - Rally
 - Rumba for AS/400
 - IRMA/400

The program upgrade to Personal Communications AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 or Personal Communications AS/400 Version 4.11 for Windows, Windows 95, Windows NT, and OS/2 will be available February 28, 1997. Orders will be accepted after February 4, 1997.

These upgrades will be available through IBM Authorized Personal Computer Dealers and Industry Remarketers — Personal Computers certified to market IBM Authorized Advanced Products. The remarketer will require a Proof of License for each upgrade ordered. The original Proof of License is the colored front cover page (inside the hard binder) or the separate Proof of License page in the program package as identified by IBM to the remarketer. For upgrades from a 3270 or 5250 full function emulation program provided by other vendors, the customer must certify the current license for each upgrade or provide an original invoice or proof of acquisition (from the program package) with payment to the remarketer.

Customers can also order upgrades through the local IBM office. End user customers may acquire upgrades up to the number of qualifying programs for which they are currently authorized. Use Authorization for upgrades can be entered through the local IBM office or ordered through an authorized remarketer.

Terms and Conditions

Licensing: IBM International Program License Agreement. PoE are required for all authorized use.

Limited Warranty: Yes

Program Services: Program services will be available until March 31, 1999. The statement of service included with the program describes this service.

Guarantee: 30-day, money-back guarantee

Copy and Use on Home/Portable Computer: Yes

Program Transfer: Yes

Support Line: Personal Systems

Complimentary Introductory Support: Not available for OS/2 platform

Volume Orders: Contact your IBM representative

Software Advantage applies: Yes

Software Advantage: Optional Software Advantage Media and Documentation packs are only available through an authorized Software Advantage remarketer and do aggregate for Software Advantage credit but are not eligible for Software Advantage discounting.

Upgrades: Customers may acquire upgrades up to the quantity of the qualifying programs licensed to them.

Upgrade Protection Applies: Yes

Entitled Upgrade for Current Upgrade Protection Licensees: Yes

Variable Charges Apply: No

Educational Allowance: Yes, to qualified education customers.

Charges

Charges are unaffected by this announcement.

Use Authorization Charge for the Right to Copy and Use the Program: Customers who pay an OTC for use authorizations may copy and use machine-readable program materials and printed documentation previously acquired from IBM in a program package. One copy may be made for each use authorization ordered.

Upgrade Protection: Customers who acquire upgrade protection through an OTC or quarterly payment charges (when meeting minimum revenue criteria) will be entitled at no charge to future versions and releases when announced within their Software Advantage agreement period. Following availability of the new program, IBM will provide a program package (including media and documentation) and a PoE authorizing right to copy, distribute, and install equal to the number of programs protected.

Program Upgrade Charge: A program upgrade charge will apply for upgrades to Personal Communications/3270AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 from any of the following:

- IBM 3270 or 5250 emulator programs
 - Communications Manager/2 V1.x
 - Communications Manager/2 V1.x DF
 - OS/2 EE, ES, ES+DB —all versions
 - Personal Communications AS/400 and 3270 V4.0 for Windows
 - Personal Communications AS/400 and 3270 V4.0 for OS/2
 - Personal Communications/3270 for DOS/Windows —all versions
 - Personal Communications/3270 V4.0 for OS/2
 - Personal Communications/3270 V4.0 for OS/2 — IEEE 802.2 Entry Level
 - Personal Communications/3270 V4.0 for OS/2 — LUA Entry Level
 - any other IBM 3270 full function emulator program for OS/2 or Windows
- IBM APPC Networking Services for Windows Version 1.0
- any non-IBM 3270 or 5250 full-function emulator programs including, but not limited to
 - EXTRA!
 - Rumba
 - IRMA Workstation.
 - Rally
 - Rumba for AS/400
 - IRMA/400

A program upgrade charge will apply for upgrades to Personal Communications/3270AS/400 and 3270 Version 4.11 for DOS, Windows, Windows 95, Windows NT, and OS/2 from any of the following:

- IBM 5250 emulator programs
 - Communications Manager/2 V1.x
 - Communications Manager/2 V1.x DF
 - OS/2 EE, ES, ES+DB —all versions
 - Personal Communications AS/400 and 3270 V4.0 for Windows
 - Personal Communications AS/400 and 3270 V4.0 for OS/2
 - Personal Communications AS/400 V4.0 for Windows

- Personal Communications AS/400 V4.0 for OS/2
- Personal Communications AS/400 V4.1 — Twinax Entry Level
- Client Access/400 —all versions
- any other IBM 5250 full function emulator program for OS/2 or Windows
- IBM APPC Networking Services for Windows Version 1.0
- any non-IBM 5250 full function emulator programs including, but not limited to
 - Rally
 - Rumba for AS/400
 - IRMA/400

Trademarks

- ™ Trademark of International Business Machines Corporation in the United States or other countries or both.
 - ® Registered trademark of International Business Machines Corporation in the United States or other countries or both.
- Microsoft and Windows are registered trademarks of Microsoft Corporation.
- Other trademarks and registered trademarks are the properties of their respective owners.