Personal Communications for Windows, Version 13.0

Installation Guide

IBM

Personal Communications for Windows, Version13.0

IBM

Installation Guide

Fourteenth Edition (April 2016)

This edition applies to Version 13.0 of Personal Communications (program number: 5639–I70) and to all subsequent releases and modifications until otherwise indicated in new editions.

Contents

Tables

Chapter 1. Introduction

Personal Communications for Windows® provides 3270, 5250, and VT emulation, connecting to z/OS®, z/VM®, eServer™ i5, iSeries®, System i5®, zSeries®, and ASCII systems.

Personal Communications uses Microsoft® Windows Installer technology for all installation procedures. This book details how to successfully install and customize installation of Personal Communications using the Windows Installer service. For more information on the Windows Installer service, see "Microsoft Windows Installer" on page 9. For detailed information on the Personal Communications product functionality, refer to *Quick Beginnings*.

You can link directly to the Personal Communications Web site at http://www.ibm.com/software/network/pcomm.

What's New

You will notice the following change in the installation of Personal Communications Version 6.0 and above.

Installing or migrating Personal Communications with Communications Server
> If you have both Personal Communications and IBM Communications Server for Windows installed on a system, you should not use automatic migration when installing a newer version of Personal Communications.
>
> First, remove both Personal Communications and Communications Server for Windows from the system. You should then reinstall Communications Server, before installing the new version of Personal Communications.

Where To Find More Information

The Personal Communications documentation is available in the installation image (e.g. DVD-ROM) under the \publications directory. You can copy any of these PDF or HTML files to your workstation, for viewing at your convenience. The Personal Communications library includes the following publications:

PCCDC.PDF	*Installation Guide* (this book)
PCCSP.PDF	*Client/Server Communications Programming*
PCMOUSE.PDF	*CM Mouse Support User's Guide and Reference* (English only)
PCCFR.PDF	*Configuration File Reference*
PCEP.PDF	*Emulator Programming*
PCECL.PDF	*Host Access Class Library*
PCQB.PDF	*Quick Beginnings* (HTML version is installed by default)
PCEMREF.PDF	*Emulator User's Reference*
PCADMIN.PDF	*Administrator's Guide and Reference*
PCSMP.PDF	*System Management Programming*
ECLReference.html	*Host Access Class Library Reference for Java* (HTML format only)

The README.HTML file contains supplemental product information. The installation process offers the opportunity to view the English and other language-specific versions.

Refer to the IBM® Glossary of Computing Terms at http://
www.networking.ibm.com/nsg/nsgmain.htm for definitions of technical terms
used throughout this book.

Viewing Documentation

The Personal Communications books are included on the installation image in
Portable Document Format (.pdf). Books can be accessed directly from the Personal
Communications installation image or from the Launchpad welcome panel.

To view the Personal Communications documentation in PDF format, select **View
Documentation** from the main panel of the Launchpad on the installation image.
Clicking **View Documentation** invokes Adobe Acrobat Reader from your system to
view the books. Personal Communications documentation and README, in HTML
format, can be viewed using any Web browser.

Note: You can copy the book files from the installation image to a local or network
   drive to view at a later time.

The following sections discuss getting help when you are installing, configuring, or
using Personal Communications.

Information Center

You can find documentation and links to other resources at the Personal
Communications Information Center, at the following address:

  http://publib.boulder.ibm.com/infocenter/pcomhelp

The Information Center contains reference material that is not found in this book,
such as keyboard layouts and host code page tables. The Japanese Information
Center also contains FAQs and troubleshooting tips.

The Personal Communications Information Center provides information in English
and Japanese.

Support Options

If you determine that you need to contact IBM, you can do any of the following:

- Access the Personal Communications Web page at the following URL:

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

- To find the phone number for IBM Software Support, U.S. customers can call
  1-800-IBM-4YOU. International customers that have access to the U.S. "800" toll
  free numbers can reach the International Support Center by calling
  1-800-IBM-4YOU and asking to speak with the International Support Center
  (ISC) in Atlanta. International customers without access to the U.S. toll free
  numbers can call the ISC directly at 770-863-1234. The ISC's FAX number is
  770-863-3030 and is available 24 hours a day.

Subscribing to Support News

To receive Personal Communications support news flashes, complete the following
steps:

1. Go to the Personal Communications support Web site, at the following address:
   http://www.ibm.com/software/network/pcomm/support

2. Under **Personal Support**, click **My Support**. If you are already have an IBM Registration ID, you can sign in. If not, you must register.
3. After you sign in, select **Networking** from the product family list.
4. Select the products for which you would like to receive news flashes. Click **Save and Return**. Your support profile is listed on the next screen.
5. For your mail preference, you can choose to receive e-mail flashes, downloadable files, or both. Click **Submit**. You will receive a message indicating that your profile has been updated.
6. Click **Sign out** to end the session.

Support Assistant

The IBM Support Assistant enables you to easily resolve software questions. The Support Assistant provides the following components:

- **Search**

  Enable search of the software information database.

- **Service**

  Assists customers who choose to submit a PMR by providing access to the Electronic Service Request Web site.

- **Support Links**

  A consolidated list of IBM web links, organized by brand and product.

Help desk personnel and Personal Communications administrators might want to install Support Assistant in order to better support end users. The Support Assistant can be downloaded from the following address: http://www.ibm.com/software/support/isa/index.html

Chapter 2. Planning to Install Personal Communications

This chapter describes the companion products provided with Personal Communications and topics that should be considered before installing Personal Communications Version 6.0.

Considerations Before Installing

Java Runtime Environment

Personal Communications provides a Java™ Runtime Environment (JRE) to support its Java APIs and applications. For all supported Windows operating systems, JRE 1.6.0 is installed.

Device Drivers

Personal Communications provides communications device drivers for some legacy adapters. For Windows XP and later Windows operating systems, the device driver package requires a separate installation and removal process. See Appendix A, "Communication Adapter and Device Driver Installation in Windows XP," on page 37 before installing Personal Communications for use with communication adapters on Windows XP systems. In addition, some communication adapters may not be supported For Windows XP and later Windows operating systems. Refer to the attachments and adapters information in *Administrator's Guide and Reference* for more information.

Disk Space Requirements

Installation of Personal Communications to a drive other than the Windows volume (the drive containing the Windows folder) may still require as much as 180 MBs of available free space on the Windows volume. This is due to the installation of files to the Windows and system folders, as well as the caching of the Installer database by the Windows Installer service, and the use of temporary disk space by the Windows Installer service during the installation.

Migration Considerations

Personal Communications offers several migration options. To ensure that your session profiles, batch files, and other configuration information are migrated so you can use them with Version 6.0, see "Custom Installation" on page 13 and the details on automatic migration options at "Automatic Migration Options" on page 17.

When migrating, you might be prompted to close all active Personal Communications sessions and actions.

Multi-Boot Environment Installation

If you want to install Personal Communications into a Personal Communications subdirectory that was originally installed under another operating system, you must remove the previous version first. Failure to do this may cause unpredictable results, including not being able to run Personal Communications from either operating system.

National Language Support (NLS) Considerations

Personal Communications provides a multi-language installation image that contains all supported languages including Korean, Simplified Chinese, and Traditional Chinese.

The CM Mouse utility program comes with the Japanese, Korean, Traditional and Simplified Chinese install, but the application's messages do not have native language support and are only in English.

Additionally, each package is enabled for Triple DES (168-bit) encryption.

For information on multiple language support directories and language codes, see Appendix C, "National Language Support (NLS) Abbreviations and Language Codes," on page 45.

National Language Support Font Files

Personal Communications continues to provide multiple font files. In order to reduce the size of the installed product, the feature selection process has been enhanced to allow deselection of certain fonts.

Personal Communications Client Installation

Personal Communications supports the following SNA client installations:
- IBM Communications Server for Windows
- IBM Communications Server - SNA API Client
- Microsoft SNA

Note: If you plan to install IBM Communications Server for Windows or SNA API Client, or Microsoft SNA clients, install them prior to installing Personal Communications.

The installation process detects any of the SNA products listed above that are installed on your system. If any of the listed SNA software is detected, the Personal Communications install will not install SNA protocol-related modules; instead it will use the SNA stack provided by the above products.

iSeries Access coexistence support

Coexistence support for iSeries Access PC5250 component is no longer provided. The iSeries Access PC5250 component must be removed prior to installing Personal Communications.

Windows x64 Platform Support

The x64-based versions of Microsoft Windows Server 2003, Microsoft Windows server 2008, Microsoft Windows 7, and Microsoft Windows XP Professional x64 Edition are optimized to run native 64-bit programs, but do not support 32-bit drivers or 16-bit applications.

For these platforms, Personal Communications does not install the following features and libraries.
- IBM SNA protocols
- DOS EHLLAPI
- 16-bit API support:
  - Standard EHLLAPI 16-bit interface

– WinHLLAPI 16-bit interface
– PCSAPI 16-bit interface
– SRPI 16-bit interface

Chapter 3. Installing Personal Communications

Personal Communications for Windows provides four installation options:

- Installation to a local hard drive, including installing to run from source, where source medium is a installation image. See "Installing to a Local Hard Drive" on page 10 for more information.
- Administrative installation, including installing or running from source, where source medium is a network server. See Chapter 5, "Administrative Installation," on page 27 for more information.
- Remote installation using Microsoft Systems Management Server (SMS). See Chapter 7, "Remote Installation of Personal Communications," on page 33 for more information.
- Remote installation using Tivoli® Software Distribution. See "Considerations for Tivoli Software Distribution Support" on page 33, for more information.

Personal Communications also offers the ability to customize the installation procedure. For information on customizing with initialization file processing, including performing silent installations, see Chapter 4, "Installing Personal Communications Using an Initialization (response) File," on page 21.

This chapter describes the general installation procedure for all options and the specific procedure for installing to a local hard drive. Typical and custom setups are described in this chapter, as well as silent installation options. Additionally, this chapter provides an introduction to the Microsoft Windows Installer service.

Microsoft Windows Installer

Personal Communications utilizes the Windows Installer service. When the Personal Communications installation image is first run, it examines the target system and, if necessary, automatically installs the proper version of the Windows Installer service.

Setup.exe is the bootstrap loader that calls the Windows Installer service (msiexec.exe) and launches the installation dialogs. For a detailed description of the Microsoft Windows Installer service, refer to the Windows Installer SDK available online at http://www.msdn.microsoft.com. For more information on setup.exe, see Appendix B, "InstallShield Command-Line Parameters," on page 41.

Note: The following should be taken into account when installing Personal Communications:

- In some cases, installation of Windows Installer triggers a reboot of the system. If you are required to reboot, upon subsequent startup you are taken immediately back to Windows Installer to continue installation of Personal Communications.
- After Windows Installer has been successfully installed, if the installation of Personal Communications fails or is cancelled by the user, Windows Installer rolls back all partially installed Personal Communications files and returns the system to its original state.

Note: Start menu icons from previous versions of Personal Communications are not rolled back if installation fails. If this occurs, Personal Communications start menu icons will no longer be available.

- You must be a member of the Administrator's group to perform these installations.
- Before you begin installation, make sure all other applications are stopped. If you are reinstalling Personal Communications or are upgrading Personal Communications, make sure that Personal Communications is not running before you start setup.

Installing to a Local Hard Drive

To install Personal Communications, begin by inserting the installation image into the drive. If AutoPlay is on, inserting the installation image automatically invokes the Launchpad welcome dialog.

Note: If AutoPlay is off, do the following:
1. Click **Run...** on the Windows **Start** menu.
2. Type

   `E:\launchpad`

   in the Command Line box (where E: is the installation image drive).

From the Launchpad welcome dialog for Personal Communications, you can choose from the following options:

- **Install Product** invokes the Windows Installer service and begins the installation process.
- **View Documentation** allows you to view the books available in the Personal Communications library and the Personal Communications README file. For more information about viewing documentation, see Viewing Documentation on page 2.
- **Visit Our Web site** contains a link that takes you directly to the Personal Communications Web site.

To begin the installation of Personal Communications select **Install Product** from the Launchpad welcome dialog, then select the appropriate **Launch Setup for Personal Communications** link based on the language pack you wanted to install.

After the installer determines the system configuration, the installation process begins.

1. The Windows Installer welcome dialog for Personal Communications opens. Click **ReadMe** to open a window with the README text or click **Next** to continue.
2. The License Agreement dialog opens. Click the button to accept the terms of agreement. You can print the license agreement by clicking **Print**. If you decline the license agreement, the installation process terminates. Click **Next** to continue.
3. The Customer Information dialog opens. Type in your user name and organization information. Choose whether you want to install Personal Communications for use by all users that log on to the workstation or only for yourself. Click **Next** to continue.

4. The Setup Type dialog opens. You are given an option to choose a **Typical** (default) or **Custom** installation.

The following sections describe Typical and Custom installation choices.

Typical Installation

Typical installation selects all default features for installation. Features are defined as the specific functions of a program. See "Feature Selection" on page 14 for a list of default features. You can customize Personal Communications features by selecting the custom installation option (see "Custom Installation" on page 13).

To start a typical installation, click **Next** in the installation type panel. A panel appears, indicating that Personal Communications is computing the disk space requirements.

Note: Once the installation has passed this point, you cannot change the installation type. You would then need to cancel the installation on the Application Data panel, and begin a new installation.

To continue with the typical installation, use the following installation procedure.

1. The Application Data Location dialog opens. Select from the following application data location options:
   - User's application data folder ([UserProfile]\Application Data)
   - All users' common application data folder (All Users\Application Data)
   - Classic private directory

   Personal Communications uses multiple configuration files: user-class files can be stored individually by user profile, while system-class files are stored in a common location. Refer to *Quick Beginnings* for more information about user-class and system-class files and locations.

   If the [UserProfile]\Application Data location is selected, the following profile paths are used:

Operating System	User-Class Directory (Current User)[3]	System-Class Directory
Windows Server 2003, XP	C:\Documents and Settings\ %USERNAME%\Application Data\IBM\Personal Communications	C:\Documents and Settings\All Users\Application Data\IBM\ Personal Communications
Windows Vista, Windows 7, Windows server 2008	C:\Users\%USERNAME%\ AppData\Roaming\IBM\Personal Communications	C:\ProgramData\IBM\Personal Communications

   If the All Users\Application Data location is selected, the following profile paths are used:

Operating System	User-Class Directory (Current User)[3]	System-Class Directory
Windows Server 2003, XP	C:\Documents and Settings\All Users\Application Data\IBM\ Personal Communications	C:\Documents and Settings\All Users\Application Data\IBM\ Personal Communications

Operating System	User-Class Directory (Current User)[3]	System-Class Directory
Windows Vista, Windows 7, Windows server 2008	C:\ProgramData\IBM\Personal Communications	C:\ProgramData\IBM\Personal Communications

If the classic Private directory location is selected, the following profile paths are used:

Operating System	User-Class Directory (Current User)[1, 2, 3]	System-Class Directory
Windows Server 2003, Windows XP, Windows Vista, Windows 7 & Windows Server 2008	C:\Program Files\IBM\Personal Communications\Private	C:\Program Files\IBM\Personal Communications\Private

[1]If the User Preference Manager (UPM) was set to a directory other than the default directory, Personal Communications will utilize that directory to store the user–class files. System–class files are always stored in the Private directory.

[2]For the classic Private directory locations, `C:\Program Files\IBM\Personal Communications` is the drive where Personal Communications is installed.

[3]The FTP Client configuration files are stored in the profile path mentioned the above, under the **FTP** folder.
Note: For installations on Windows x64 platforms, the directory path `Program Files` is replaced by `Program Files (x86)`.

After selecting your application data location, click **Next** to continue with the installation.

2. The Ready to Install the Program dialog opens. Click **Back** to change your previous settings, or click **Cancel** to terminate the installation process. Click **Install** to continue with installation.

The typical setup uses the C:\Program Files\IBM\Personal Communications directory for program installation.

Note: If there is not enough disk space on the C: drive, you are prompted to choose the custom installation setup type in order to choose an alternate installation destination.

After installation is complete, the Installation Complete dialog opens. Click **Finish** to exit the installation process.

After installation is complete, you are prompted to reboot the computer. You must reboot the computer before configuration changes take effect and you can use Personal Communications.

Notes:
1. **Typical** installs the most common features for the applicable emulators.
2. **Typical** does not include CM Mouse or API sample programs.

Custom Installation

Though the default feature selection for a custom setup is the same as for a typical setup, a custom configuration allows you to modify feature selection for your system. To continue with the custom installation setup:

1. Click the button to choose **Custom** setup type. Click **Next** to continue.

2. The English language product is automatically installed. Only the system default language locale and English are default. Select any additional languages that you want to install. Click **Next** to continue. A panel appears, indicating that Personal Communications is computing the disk space requirements.

   Note: Once the installation has passed this point, you cannot change the installation type. You would then need to cancel the installation on the Application Data panel, and begin a new installation.

3. The Custom setup dialog opens and asks you to select the program features that you want to install. Some features have subfeatures available. To view the subfeatures for a particular feature, click the plus sign (+) to the left of the feature name.

   Included in the Custom Setup window are **Feature Descriptions**. You can view the description of any feature by clicking on that feature and then reading the description section to the right of the feature selection tree. The feature description gives basic information about each feature, as well as the disk space required for installation. For more detailed information on disk space requirements for each feature, click the **Disk Space** button. For a description of available features, see "Feature Selection" on page 14. For a description of feature installation options, see "Feature Installation Options" on page 16.

4. From the Custom Setup dialog, you can change the directory where Personal Communications is installed. Click the **Change** button to choose another installation directory.

   Note: If you have an earlier version of Personal Communications installed and you install Version 13.0 to a different directory, Personal Communications configuration files are moved to the new directory location upon reboot.

5. After making your feature selection choices and confirming the installation directory, click **Next** to continue with the installation.

   Note: If there is not enough space on the destination drive, you are prompted to choose another location.

6. The Application Data Location dialog opens. Select from the following application data location options:
   - User's application data folder ([UserProfile]\Application Data)
   - All users' common application data folder (All Users\Application Data)
   - Classic private directory

   See "Typical Installation" on page 11 for information on the profile paths used for each application data location. For more information about the location of application data, including workstation profiles, refer to *Quick Beginnings*. Click **Next** to continue.

7. The Automatic Migration Options dialog opens. By default, the **Automatic Migration of Profiles** box is checked. If you clear this check box, no migration occurs. The migration choices that are available to you are based on the information that you provided in the Application Data Location dialog. For information on the Application Data Location dialog, see "Installing to a Local Hard Drive" on page 10.

By default, the highest level of migration available for your application data
location is selected. This is the recommended level of migration for your
configuration. You can proceed with the installation using the default migration
option, or you can choose another level of migration. For a description of the
different levels of migration available for each Application Data Location, see
"Automatic Migration Options" on page 17.

Click **Next** to continue with the installation.

8. The Ready to Install dialog opens. Click **Install** to complete the installation.

Feature Selection

The features and subfeatures available for Personal Communications are described
in Table 1. This table also identifies which features are installed by default.

Note: In the custom setup window, if the icon to the left of the feature name is
white, that feature and all of its subfeatures will be installed. If the icon
appears grey, that feature or one or more of its subfeatures will not be
installed.

Table 1. Feature Selection Tree Contents

Feature	Description	Subfeatures Available	Default
3270 Emulation and Services	Your workstation can emulate a zSeries terminal (display, printer, or both). The emulator APIs (such as EHLAPPI, PCSAPI, DDE and SRPI) and utilities (such as Multiple Sessions, Menu Bar, CM Mouse, and Zip Print) are installed.	ZipPrint	Yes
3270 Emulation and Services	Your workstation can emulate an TN3270, TN3270E terminal (display, printer, or both). The emulator APIs and utilities (such as Multiple Sessions, Menu Bar, CM Mouse, and Data Transfer) are installed.	ZipprintDefaultYes	
5250 Emulation and Services	Your workstation can emulate an iSeries, eServer i5, or System i5 terminal (display, printer, or both). The emulator APIs and utilities (such as Multiple Sessions, Menu Bar, CM Mouse, and Data Transfer) are installed.	Data Transfer • iSeries Connection Configuration	Yes
VT Emulation	Your workstation can emulate an ASCII terminal. The emulator APIs (such as Multiple Sessions, CM Mouse, and Menu Bar) are installed.	None	Yes
Fonts	Additional fonts are available, such as special 3270, bidirectional, and certain Asian languages.	Fonts listed in dialog	Yes

Table 1. Feature Selection Tree Contents (continued)

Feature	Description	Subfeatures Available	Default

IBM SNA Protocols	This feature includes the APPC and CPI-C programming interfaces, and the device drivers that let you use SNA communications.
	Note: This selection is not available for Windows x64 platforms.
		• AnyNet® SNA over TCP/IP
		• Utilities
		  – Check Connection APING
		  – Database Access
		• Administrative and PD Aids
		  – Display SNA Sense Data
		  – SNA Node Configuration
		  – SNA Node Configuration Verification
		  – SNA Node Operations
			Yes

Secure Sockets Layer	Allows encryption and authentication customization.	• IBM Global Security Kit
		  – Certificate Management
		  – Certificate Migration
		• MS CryptoAPI Security
			Certificate Migration is not installed by default.

Administrative and PD Aids	Diagnosis and update tools are included.	• Log Viewer • Information Bundler – Internet Service	Yes
Utilities	Optional product utilities that can be installed.	• CM Mouse • Convert Macro • DOS EHLLAPI **Note:** This selection is not available for Windows x64 platforms. • Menu Bar Customization Utility • Multiple Sessions • User Preferences • FTP client	All but **CM Mouse** are installed by default.
Emulator Programming APIs	APIs and sample programs.	.NET Interops • Register to GAC • Interops Sample Sample Programs for APIs • Host Access Class Library for C++ • Visual Basic • Miscellaneous APIs	No

Notes:

1. The .NET Interops **Register to GAC** option is only available if the installation program detects that the .NET framework is present. However, the primary FTP client assembly will not be registered in the GAC.

   FTP Client requires .NET Framework v2.0 or higher to be installed on the system.

2. If you want to make any of the following attachments, you must install **IBM SNA Protocols**. However, if another SNA protocol stack is already installed on your machine, this feature is hidden and not available for installation.

   - LAN via IEEE 802.2
   - APPC 3270
   - 3270 via iSeries (3270 Passthru)
   - Microsoft SNA client over FMI
   - SDLC
   - SNA over Async
   - IBM Global Network® SNA-over-Async
   - Hayes AutoSync
   - AnyNet SNA over TCP/IP
   - Dependent Logical Unit Requester (DLUR)

Feature Installation Options

Each feature and subfeature allows several installation options. To view the options available for each feature, click on the drop down icon to the left of the feature name. Select the desired installation type by clicking on it in the drop down menu. A description of each possible installation option follows:

- **This feature will be installed on local hard drive** selects this feature for installation to the local hard drive.
- **This feature, and all subfeatures, will be installed on local hard drive** selects the main feature and all of its associated subfeatures to be installed on the local hard drive.
- **This feature will be installed to run from CD** selects the feature to run from source where source medium is the installation image at the local workstation. This option is only available for top-level features and installs only the base files needed to run the feature.

  Note: If you are installing from a network, this option instead displays as, **This feature will be installed to run from network**. For more information on running from a network server, see "Installing to Run from Source, Where Source Medium Is a Network Server" on page 28.

- **This feature, and all subfeatures, will be installed to run from the CD** selects the main feature and all associated subfeatures to run from source where source medium is installation image at the local workstation. This installation option installs only the base files needed to run the features.

  Note: If you are installing from a network, this option instead displays as, **This feature, and all subfeatures, will be installed to run from the network**. For more information on running from a network server, see "Installing to Run from Source, Where Source Medium Is a Network Server" on page 28.

- **This feature will be installed when required** places a shortcut on the Personal Communications menu allowing the feature to be installed when the shortcut is selected. This installation option is also called *advertisement*.
- **This feature will not be available** deselects the feature for installation or advertisement.

Note: If no installation choice is made, features are installed to the local hard drive.

Automatic Migration Options

Note: If you have both Personal Communications and IBM Communications Server for Windows installed on a system, you should not use automatic migration when installing a newer version of Personal Communications.

First, remove both Personal Communications and Communications Server for Windows from the system. You should then reinstall Communications Server, before installing the new version of Personal Communications.

Personal Communications allows you to customize the automatic migration process when updating from previous versions of Personal Communications. All profile references are updated to the current path for profiles that are moved during automatic migration. There are three general levels of migration that are available to you:

- **Level 1** migrates desktop icons only.

  Note: Start menu icons from previous versions of Personal Communications are removed during the installation of Personal Communications Version 6.0. You can use the Start or Configure Sessions icon to start sessions. For more information on starting or configuring a session, refer to *Quick Beginnings*.

- **Level 2** migrates system-class profiles and desktop icons. Table 2 describes the system-class profile file extensions and file types.

Table 2. System-Class Profile File Extensions

Extension	File Type
.acg	SNA Configuration
.mlg	Default Message Log
.trc	Unformatted Trace
.tlg	Formatted Trace
.cfg	FTP Client Configuration
.pub	Client/Host public key
.dat	FTP Client data file

  Note: Level 2 also migrates user-class profiles when migrating profiles to either All Users or the classic Private directory. For a list of user-class profile file extensions, see Table 3 on page 18.

- **Level 3** migrates user-class profiles, system-class profiles, and desktop icons. Table 3 on page 18 describes the user-class profile file extensions and types.

Table 3. User-Class Profile File Extensions

Extension	File Type
.ws	Workstation Profile
.bch	Multiple Sessions
.ini	Session Size and Location
.pmp	Popup-Keypad Configuration
.kmp	Keyboard Configuration
.srl	File Transfer List
.ndc	iSeries Connection Configuration
.upr	iSeries User Profile
.tto	iSeries Data Transfer Request (Receive)
.tfr	iSeries Data Transfer Request (Send)
.bar	Toolbar Setup
.mac	Macro
.mmp	Mouse Setup
.xlt	Translation Table
.xld	DBCS Translation Table
.cert	Certificate
.sth	Password Stash
.adu	Automatic Dial Utility
.kdb	Certificate Management Database
.der	Binary DER

Based on the information provided in the Application Data Location dialog, a Level 3 migration may not be available. The highest level of migration available, based on your application data location, is the recommended level of migration. A description of how the migration levels function for each data location is provided in the following sections.

Note: If an administrator performs a remote installation, some migration does not occur until users log on to the workstations.

Migration to [UserProfile]\Application Data Directory

If you have chosen to migrate your profiles from your previous profile directory to the [UserProfile]\Application Data directory, migration levels 1, 2, and 3 are available to you. The migration levels function as follows:

Level 1

Desktop icons are migrated. This is the lowest level of migration.

Level 2

- Desktop icons are migrated.
- System-class profiles are migrated from the previous profile directory to the All Users\Application Data directory.

Level 3 (Recommended)

- Desktop icons are migrated.
- System-class profiles are migrated.

- User-class profiles are migrated from the previous profile directory to the [UserProfile]\Application Data directory. As each new user logs on to the workstation, the user-class profiles associated with that user are migrated until all user-class profiles are copied into the [UserProfile] directory.

Migration to All Users\Application Data Directory

If you have chosen to migrate your profiles from your previous profile directory to the All Users\Application Data directory, migration levels 1 and 2 are available to you. The migration levels function as follows:

Level 1
Desktop icons are migrated. This is the lowest level of migration.

Level 2 (Recommended)
- Desktop icons are migrated.
- All system-class and user-class profiles are migrated from the previous profile directory to the All Users\Application Data directory. As each new user logs on to the workstation, the user-class profiles associated with that user are migrated into the All Users\Application Data directory.

Migration to Private Directory

If you have chosen to migrate your profiles from your previous profile directory to the private directory which under the installed directory, migration levels 1 and 2 are available to you. The migration levels function as follows:

Level 1
Desktop icons are migrated. This is the lowest level of migration.

Level 2 (Recommended)
- Desktop icons are migrated.
- All system-class and user-class profiles are migrated from the previous private profile directory to the private directory. As each new user logs on to the workstation, any user-class profiles associated with that user, set by the User Preference Manager, are migrated in place.

Silent Installation

Personal Communications is installed silently by passing command-line parameters through setup.exe to the MSI (Windows Installer database) package. When running a silent installation, the user does not provide input via dialogs or see a progress bar during the installation process. Instead, installation occurs automatically using either a typical configuration or a custom configuration created during initialization file processing.

Note: When migrating through silent installation, all active Personal Communications sessions and actions will be closed without any prompting.

For details on initialization file processing, see Chapter 4, "Installing Personal Communications Using an Initialization (response) File," on page 21. For information on performing a silent installation using setup.exe command-line parameters, see Appendix B, "InstallShield Command-Line Parameters," on page 41.

Chapter 4. Installing Personal Communications Using an Initialization (response) File

Personal Communications provides an optional method of customization that allows property values and feature installation choices made during one installation to be automatically applied during subsequent installations. The initialization file (.ini) contains the properties and options for Windows Installer to use as initialization choices so that subsequent installations do not require users to provide installation input using dialogs. Then, future installations can be set to run silently using an initialization file.

Administrators create, save, and implement initialization files using command-line parameters. Personal Communications provides four command-line parameters:

- SAVEINI
- ONLYINI
- USEINI
- REMOVEINI

Each parameter, with a corresponding usage description, is described in the following sections.

Two sample initialization files are included on the Personal Communications installation image. These sample initialization files can be used during the installation if your workstation configuration matches the definitions in the sample. Personal Communications includes the following sample .ini files:

- **typical.ini** installs a typical setup
- **custom.ini** installs a custom setup to a user-defined path and includes the installation of French in addition to English

The samples are defined for a first-time installation of Personal Communications. If you already have Personal Communications, AnyNet, or Microsoft SNA Server previously installed, the samples will not work; you will need to create a unique initialization file to match your workstation.

Note: To ensure successful initialization file processing, use all syntax examples exactly as described.

Parameter Descriptions

Parameters are passed through setup.exe to the MSI (Windows Installer database) package using the /v command-line parameter. Within the /v"..." argument, you can specify parameters such as SAVEINI, ONLYINI, and USEINI which all take a file path. If a path containing spaces is specified, it must be in quotes and preceded by a backslash within the /v"..." argument, as shown in the following examples. For more information on the /v command-line parameter, see Appendix B, "InstallShield Command-Line Parameters," on page 41.

SAVEINI

This parameter designates an initialization file to be created and installs Personal Communications. To create an initialization file without installing Personal Communications, see the description of the command-line parameter "ONLYINI" on page 22

on page 22 The .ini file that is saved contains property values and feature installation choices that can be passed on to future installations of Personal Communications. By default, the .ini file is not removed when Personal Communications is uninstalled. The following command creates the .ini file and installs Personal Communications:

Syntax

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
  SAVEINI=%temp%\pcomm.ini\""
```

where:
- `E:` is the installation image drive and the .ini file is saved in the system `temp` directory. If the directory does not exist, the .ini file will not be created.
- `xxx` can be `mls`, `chs`, `cht` or `kor` depending on the PCOMM language to be installed.

Usage Description

An administrator creates an initialization file by using the SAVEINI command-line parameter and running either a typical or custom Windows Installer service installation for Personal Communications (see "Installing to a Local Hard Drive" on page 10). Upon completion of the installation, the .ini file containing all of the property values and feature installation choices designated during the custom setup is saved in the directory specified in the SAVEINI parameter.

Note: Based on the information provided in the Customer Information dialog during setup, the default .ini file is saved in either the All Users\Application Data or the [UserProfile]\Application Data directory. For more information on the Customer Information dialog, see "Installing to a Local Hard Drive" on page 10.

ONLYINI

This parameter designates that a .ini file be created without installing Personal Communications. Upon completion of the custom setup, Windows Installer prompts you to exit the installation program without installing Personal Communications.

Syntax

```
pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v \"%temp%\pcsinst.log\"
  SAVEINI=\"%temp%\pcomm.ini" ONLYINI=1"
```

where:
- `E:` is the installation image drive and the .ini file is saved in the system `temp` directory. If the directory does not exist, the .ini file will not be created.
- `xxx` can be `mls`, `chs`, `cht` or `kor` depending on the PCOMM language that needs to be installed.

When ONLYINI is set to 1, the .ini file is created without the product installation. When ONLYINI is set to 0, the parameter is inactive, and product installation occurs.

Usage Description

An administrator can use this parameter to create several unique .ini files to meet the needs of different types of users without performing an installation each time an initialization file is created.

Note: The SAVEINI and ONLYINI parameters can be used to create a .ini file for either a custom or typical installation. If using ONLYINI, installation of Personal Communications is always suppressed after creating the .ini file regardless of installation choice.

USEINI

This parameter designates that a previously created .ini file be used to determine property values and feature installation choices for a current installation.

Syntax

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
  USEINI=\"%temp%\pcomm.ini\""
```

where:

- `E:` is the installation image drive and pcomm.ini is the initialization file you wish to designate.
- `xxx` can be `mls`, `chs`, `cht` or `kor` depending on the PCOMM language that needs to be installed.

Usage Description

In order to apply the initialization file you created using SAVEINI, or one of the sample initialization files included with Personal Communications, you must use the USEINI command-line parameter. USEINI can be used to run either a typical or custom installation for Personal Communications (see "Custom Installation" on page 13). If you choose custom setup, all property values and feature installation options designated in the specified initialization file are selected for installation.

Note: Unless installation is set to run silently, users can override values designated in the .ini file by running either a custom or typical installation setup. Any changes made during setup will alter the .ini file for future installations. See "Silent Installation Using Initialization File Processing" on page 25 for details on running a silent installation.

Though you can specify a particular initialization file to be applied with the USEINI parameter, use of initialization files is not required for remote installations. If no initialization file is specified during a remote installation, a typical installation results.

REMOVEINI

This parameter designates that the .ini file be removed when Personal Communications is uninstalled from the system. If this parameter is not set or if any value other than that designated in the syntax is used, the initialization file remains on the system after Personal Communications has been removed.

Syntax

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\" REMOVEINI=1"
```

where:
- `E:` is the installation image drive.
- `xxx` can be `mls`, `chs`, `cht` or `kor` depending on the PCOMM language to be installed.

Usage Description

This parameter can be used at any time after you have created the .ini file. It removes the .ini file when Personal Communications is uninstalled from the system. The .ini file is only removed if the occurrence of Personal Communications that is being uninstalled was originally installed using the .ini file that is designated for removal.

Using System Variables and UNC Paths with Parameters

Parameters can be set to use a system variable instead of a directory path—for example, the variable `%pcomm_ini%` can replace the `C:\temp\pcomm_ini` path.

SAVEINI

In the following syntax examples, the ONLYINI parameter is set to active. The TRANSFORMS parameter launches the setup GUI in the specified language.

Using an environment variable:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
 SAVEINI=%pcomm_ini%\
 MyCustom.ini ONLYINI=1 TRANSFORMS=\"1033.MST\""
```

where xxx can be `mls`, `chs`, `cht` or `kor` depending on the installed PCOMM language.

Using UNC path names:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
  SAVEINI=\\MachineName\pcomm_ini\MyCustom.ini ONLYINI=1
  TRANSFORMS=\"1033.MST\""
```

where xxx can be `mls`, `chs`, `cht` or `kor` depending on the installed PCOMM language.

The shared UNC path must have write access.

USEINI

Using an environment variable:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
  USEINI=%pcomm_ini%\MyCustom.ini ONLYINI=1 TRANSFORMS=\"1033.MST\""
```

where xxx can be `mls`, `chs`, `cht` or `kor` depending on the installed PCOMM language.

Using UNC path names:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /v"/L*v
 \"%temp%\pcsinst.log\"
  USEINI=\\MachineName\pcomm_ini\MyCustom.ini ONLYINI=1
  TRANSFORMS=\"1033.MST\""
```

where xxx can be `mls`, `chs`, `cht` or `kor` depending on the installed PCOMM language.

The shared UNC path must have write access.

Silent Installation Using Initialization File Processing

In order to ensure that property values and feature installation options designated in the initialization file are not overridden by users or to enhance the ease of installation, you can apply initialization files during silent installations.

To perform a silent installation using initialization file processing, type the following command:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /s /v"/L*v
 \"%temp%\pcsinst.log\"
  USEINI=\"C:\Program Files\IBM\Personal Communications\pcomm.ini\" /qn"
```

where xxx can be `mls`, `chs`, `cht` or `kor` depending on the installed PCOMM language.

This process passes the silent installation command-line parameter (/qn) through setup.exe to the MSI package. For more information about setup.exe command-line parameters, see Appendix B, "InstallShield Command-Line Parameters," on page 41. This parameter can also be added to commands that use system variables instead of path names.

Chapter 5. Administrative Installation

An administrative installation copies a source image of Personal Communications installation files onto a network drive. The resulting location of this source image is called the installation point. After you complete an administrative installation, any user connected to the network can install Personal Communications to their own workstation by pointing to the installation point and running the setup. An administrative installation offers two installation choices to users:

- Installation directly to their system from the network server
- Installation to run from the network server

To begin an administrative installation, disable the AutoPlay function on your system or simply close the Personal Communications welcome window when it opens. With the installation image in the drive:

1. Open a command prompt and switch to the Personal Communications installation directory by typing

   ```
   E:
   ```

   where E: is the installation image drive.

2. At the command prompt, enter:
   - `cd pcomm_pkgs\mls\install\pcomm`

     for languages such as English, Japanese, Spanish, etc.
   - `cd pcomm_pkgs\chs\install\pcomm`
   - for Simplified Chinese
   - `cd pcomm_pkgs\cht\install\pcomm`

     for Traditional Chinese
   - `cd pcomm_pkgs\kor\install\pcomm`

     for Korean

3. From this directory, type

   ```
   setup.exe /a
   ```

4. The Windows Installer welcome dialog for Personal Communications opens. Click **Next** to continue with the installation.

5. The License Agreement dialog opens. Click the button to accept the terms of agreement. You can print the license agreement by clicking **Print**. If you decline the license agreement, the installation process terminates. Click **Next** to continue.

   Note: Windows administrators have the option to accept the license agreement on behalf of all users. This allows users who install Personal Communications from the network server to skip the license agreement window during installation.

6. The Network Location dialog opens. You can type the desired network installation point in the command line or click **Change** to browse for a location.

7. Click **Install** to complete the installation process.

   Note: To remove the source image of Personal Communications from your network server you must manually delete the source image directory from the network location.

Installing from Network Server

After the administrative installation is complete, any user connected to the network can install Personal Communications from the network server. To install from the network server:

1. Click **Run...** on the Windows **Start** menu.

2. Type

   `X:\MyLocation\setup.exe`

   in the command line (where X: is your network server and MyLocation is the installation point designated in the administrative installation) or click **Browse** to browse for the location on the network.

3. The Windows Installer welcome dialog opens. Proceed with the installation as described in "Installing to a Local Hard Drive" on page 10.

Installing to Run from Source, Where Source Medium Is a Network Server

After the administrative installation is complete, any user connected to the network can install Personal Communications to their workstation and designate any available features to run from source, where source medium is a network server (see "Feature Selection" on page 14 for a description of available features). In this scenario, feature shortcuts are placed on the Personal Communications menu but are not installed to the local hard drive. To install and run from the network server:

1. Click **Run...** on the Windows **Start** menu.

2. Type

   `X:\MyLocation\setup.exe`

   in the command line (where X: is your network server and MyLocation is the installation point designated in the administrative installation) or click **Browse** to browse for the location on the network.

3. The Windows Installer welcome dialog opens. Proceed with the installation as described in "Installing to a Local Hard Drive" on page 10, selecting **Custom** as your setup type.

4. In the Feature Selection dialog, click on the icon to the right of a desired feature to view its available installation options.

5. To select the feature to run from the network server, click on one of the following two options:

   - **This feature will be installed to run from network** to select a single feature to run from the network.

   - **This feature, and all subfeatures, will be installed to run from the network** to select the feature and all of its associated subfeatures to run from the network.

6. After making feature selection choices, proceed with the installation as described in "Custom Installation" on page 13.

Note: If you choose to run from source, all subfeatures are available, regardless of which subfeatures were selected or deselected using the feature tree.

Installing Patches

The recommended method for installing Personal Communications fix packs in conjunction with administrative installation images is as follows:

1. Install Personal Communications from an administrative installation image that has no fix packs applied.
2. Distribute the fix pack patch (.msp) files to the client machines.
3. Install the patch files locally on the client machines.

This procedure significantly reduces the data that need to be transferred to each client machine. This also avoids the restriction detailed in "Applying Fix Packs to a Local Client." If the recommended procedure cannot be used, see "Applying Fix Packs to an Image" for the necessary conditions.

For more information on using Windows Installer command-line parameters to install patches, refer to the Microsoft Windows Installer SDK at http://www.msdn.microsoft.com.

Applying Fix Packs to an Image

In order to apply a fix pack to an administrative installation image, you must begin with an image with no fix packs applied. That is, you must restore the image to the base release and manufacturing refresh level. You do not need to revert to an earlier manufacturing refresh level.

For example, you must restore Version 5.7, Manufacturing Refresh 2, Fix Pack 1 (V5.7.2.1) to a level with no fix packs applied (Version 5.7.2.0). You cannot apply a fix pack to an image that includes any prior fix pack.

Applying Fix Packs to a Local Client

You cannot apply a fix pack on a machine where Personal Communications was installed with an administrative installation image that had a fix pack applied. In addition, you cannot use the Personal Communications Product Update Tool to commit an update.

You must apply the fix pack to the administrative installation image (using the procedure indicated in "Applying Fix Packs to an Image") and reinstall the client on the machine.

This restriction does not exist for client installations using an administrative installation image that has had no fix packs applied—local updates can be applied in that situation. The restriction is also not applicable for installations from the product CD.

Chapter 6. Maintenance Installation of Personal Communications

After you have successfully installed Personal Communications on your system, users can perform maintenance installations to their Personal Communications program. The maintenance installation utility has three functions:

- **Modify** allows users to change their feature selection options. For details on changing feature tree selections, see "Feature Selection" on page 14.
- **Repair** analyzes the current configuration of Personal Communications and either repairs or reinstalls damaged features.
- **Remove** allows users to remove Personal Communications from their system.

   Notes:

   1. When removing Personal Communications from your system, you are given the option to save the current program configuration for future installations of Personal Communications. If you choose to save the current settings, when you reinstall Personal Communications you are asked if you would like to use the previous settings to reinstall the product.
   2. To remove a source image of Personal Communications created during an administrative installation, you must manually delete the source image directory from the network drive.

When the **Program Maintenance** dialog opens, select **Modify**, **Repair**, or **Remove** and click **Next**.

Note: To successfully run maintenance installation, the Personal Communications installation image must be available on either the installation image or on the network server. If you installed from a network server, the installation image must still be present at the original network location. If the installation image is not present, when you use the Modify or Remove utility to add features or to remove Personal Communications from your system, you may receive one of the following error messages:

- The feature you are trying to use is on a installation image or other removable disk that is not available.
- The feature you are trying to use is on a network resource that is not available.

To continue with maintenance installation you must either insert the installation image or browse the network to find the new location of the installation image.

Chapter 7. Remote Installation of Personal Communications

Personal Communications supports remote installation using either Tivoli Software Distribution or Microsoft Systems Management Server (SMS) 2.0 Service Pack 2, or higher. Remote installation and uninstallation can be performed in a normal mode (attended) or silent mode (unattended).

Considerations for Tivoli Software Distribution Support

This section provides information about creating a software package for Personal Communications and customizing it, using the Software Package Editor. This information is intended for administrators and software package authors only.

With Tivoli Software Distribution, software packages can be created from Microsoft Software Installer (MSI) installation packages. This feature is part of the Tivoli Software Package Editor. MSI packages or MSI patches can be imported into the Software Package Editor, and can be edited, reconfigured, and built as Tivoli software packages. The MSI support in the Software Package Editor simplifies the configuration steps that were necessary in previous versions of Tivoli.

The Personal Communications installation image is distributed from a central repository to the target's temporary image repository (for example, C:\Temp). The product is then installed from the temporary repository. Generally, the images are not retained at a target after the successful distribution because of disk space considerations. However, you can configure to save the images at the target.

Creating the Installation Object

Use the following procedure to create the Personal Communications MSI installation object, using the Tivoli Software Package Editor.

1. From the Software Package Editor menu, click **Tools → Importer → Install MSI Product**.
2. The first screen shows general information about the MSI import procedure. Click **Next**.
3. Enter the location and the name of the MSI Installation package. Use the IBM Personal Communications installation CD location or copy the contents of the CD into a local folder.

   The Importer tool then reads the information from the MSI package. The settings of the package can be changed after this operation.
4. The product name, version, and manufacturer fields are shown in the next panel. Click **Next** to proceed.

   Note: The installation destination path on the target workstation (where Personal Communications is to be installed) cannot be selected in this wizard panel. This information must be set in the package properties (see "MSI Installation Package Properties" on page 34).
5. In the next panel, you can specify the target image path, which is the location where the installation images are to be copied on the target workstation. For example, you can set the target path as C:\Temp\PCOMM. You must also specify the source image path, which defines the current location of the installation image.

Notes:

   a. If you select the **Redirected Installation** option, you should ensure that the target image path can be accessed by the target workstation at the time of installation.

   b. If you select the **Keep Images** option, the installation image will not be deleted from the target workstation after the installation.

   c. If you select the **All Users** option, the installed Personal Communications product will be available for use by all users on the workstation. If it is not selected, only the user who is logged on at the installation time can use the product.

Click **Next** to proceed.

6. The next panel shows the features of the MSI image in an expandable tree format. Changes to the image can be made now or at a later time. Click **Finish** to create the Personal Communications MSI installation object.

MSI Installation Package Properties

Once the MSI installation package is added to the installation objects, you can set the properties of the package. In the installation objects list, right-click on the MSI package that you added to display the properties panel.

You might need to customize the following items in a Personal Communications software package:

- Features to be installed.
- The product installation directory.
- The user's application data directory, for user-class files: **Classic Private**, **User's Application Data**, or **All Users**. See "Typical Installation" on page 11 for information about default system and user data directories for the supported Windows operating systems.
- The languages to be installed.

Features

To select the features to be installed, click the **Features** tab. Right-click on the leaf of the expandable feature tree. You can then select or deselect features from those displayed.

Product Installation Location

To set the Personal Communications installation directory, click the **Properties** tab. The install location is defined by the property INSTALLDIR, which must be defined in order to have a successful installation. For example, you can set the property as follows:

INSTALLDIR="C:\Program Files\IBM\Personal Communications"

In addition, software package variables like $ (system drive) can be used to define the **INSTALLDIR** property.

There is no default value for this property.

User's Application Data Directory

On the Properties tab, you can set the default directory in which to save users' application data, such as workstation profiles, keyboard map files, and macros. This location is defined by the **APPDATALOCATION** property. The following example sets the Personal Communications classic ...\private directory:

APPDATALOCATION="PcsPrivateDir"

The APPDATALOCATION can take the following values:

- **UserAppData**

  Files are stored in each specific user's application data directory.
- **CommonAppData**

  Files are stored in the All Users application data directory.
- **PcsPrivateDir**

  Files are stored in the classic Personal Communications ...\private directory.

Installing Languages

By default, Personal Communications is installed with English language support. You can add the languages listed below from the Properties tab.

Language property value	Language to be installed
LANG_CSY	Czech
LANG_DAN	Danish
LANG_DEU	German
LANG_ESP	Spanish
LANG_FIN	Finnish
LANG_FRA	French
LANG_HUN	Hungarian
LANG_ITA	Italian
LANG_JPN	Japanese
LANG_NLD	Dutch
LANG_NOR	Norwegian
LANG_PLK	Polish
LANG_PTB	Portuguese (Brazilian)
LANG_PTG	Portuguese
LANG_RUS	Russian
LANG_SLV	Slovenian
LANG_SVE	Swedish
LANG_TUR	Turkish

Set the value to **1** to add the language, For example, **LANG_ESP=1** adds support for Spanish.

When you have completed the Features and Properties modifications, click **OK** in the Properties panel and save the software package (as a .SP or .SPD file). The software package can then be imported into a Tivoli profile and distributed to the endpoints.

Remote Installation Using SMS

A remote installation using SMS consists of the following steps:

1. Perform an administrative installation to copy Personal Communications installation files to the network (see Chapter 5, "Administrative Installation," on page 27).

2. Create an SMS package containing the Personal Communications installation software.

3. Create an SMS job to distribute and install the software package.

Note: Personal Communications provides a sample SMS file, IBM Personal Communications.sms, for use in creating the SMS package. You can also create your own SMS file. An SMS file is the same as a Package Definition File (PDF) used in previous versions of Microsoft SMS.

For detailed and up-to-date instructions on installing and deploying Personal Communications using SMS, refer to the SMS product documentation provided at http://www.microsoft.com/smsmgmt.

Remote Installation Using Active Directory Group Policy

Personal Communications can be distributed automatically to client computers or users via Microsoft Active Drirectory group policy.

For more information on how to distribute Personal Communications with Active Directory group policy, please refer to the Microsoft Windows knowledge base article at http://support.microsoft.com/kb/816102.

Appendix A. Communication Adapter and Device Driver Installation in Windows XP

This appendix discusses how to install device drivers for supported IBM communications adapters (Coax, Twinax, MPA, SDLC, WAC) in Windows XP. For those operating systems, the Personal Communications installation program does not copy the required device driver files and .INF files onto the system. Instead, these files are located on the Personal Communications product installation image, in the \admin\drivers subdirectory.

For information about configuring and using communications adapters, refer to the attachments chapter in *Administrator's Guide and Reference*.

Following is a support list of communications adapters in Windows XP.

Table 4. Adapter support in Windows XP

IBM PCMCIA 3270 Emulation Adapter	PCMCIA	Yes	Yes
MPA/SDLC			
IBM PCI Multiprotocol Adapter	PCI	Yes	Yes
IBM PCI Multiprotocol Adapter II	PCI	Yes	Yes
IBM PCMCIA SDLC Adapter	PCMCIA	Yes	Yes
IBM PCMCIA SDLC Modem	PCMCIA	Yes	Yes
IBM PCMCIA SDLC Modem-2	PCMCIA	No	Yes
MCA MPA	MCA	No	No

Following is a list of adapter files provided with Personal Communications.

INF files

- IBMSLDCA.INF (for SDLC/MPA adapters)

SYS files

- PDLNAW2P.SYS (PnP-compliant common device driver)
- PDLNAMPA.SYS (SDLC/MPA adapter device driver)

These files are located on the Personal Communications product CD or installation image, in the \admin\drivers subdirectory.

Communication Adapter Installation

This section describes how to install a device driver for an IBM communications adapter to be used with Personal Communications Version 13.0 in Windows XP.

New Installation of Personal Communications

Installing Device Drivers for Plug-and-Play Adapters

Installing Personal Communications before installing adapter hardware and software (recommended)

Install Personal Communications; then install the adapter hardware and reboot the system. The Windows Found New Hardware wizard should

recognize the new adapter. Follow the wizard steps to install the adapter software. The required files are in the \admin\drivers subdirectory on the Personal Communications CD or installation image, or are downloadable from the product Web site.

Installing the adapter hardware and software before installing Personal Communications

Install the adapter hardware. When you boot the system, Windows should recognize the hardware and start the Windows Found New Hardware wizard. To provide the device drivers, you can then do either of the following procedures.

Provide the drivers now (recommended)

Follow the Found New Hardware wizard steps to install the adapter software. The required files are in the \admin\drivers subdirectory on the Personal Communications CD or installation image, or are downloadable from the product web site.

Provide the drivers later

If you select this method, cancel the Windows New Hardware wizard. When you are ready to provide the device drivers, you should use the following procedure.

1. Start the Windows Device Manager.
2. Find the adapter in the Device Manager under **Other devices**. At this point, the adapter name that is displayed may be generic, such as *PCI communications adapter*.
3. Look at the **Properties** for the device.
4. Click the **Device** tab, and click **Update Device**. The required files are in the \admin\drivers subdirectory on the Personal Communications CD or installation image, or are downloadable from the product web site.

Troubleshooting

If the Windows Found New Hardware wizard does not recognize the hardware, follow the procedure in the section "Provide the drivers later."

Installing Device Drivers for Non-Plug-and-Play Adapters

Installing Personal Communications before installing adapter hardware and software (recommended)

Install Personal Communications, then install the adapter hardware and reboot the system. Windows will not recognize the adapter, because it is a non-Plug-and-Play adapter. Now follow the steps in "Creating a device and installing a device driver."

Installing the adapter hardware before installing Personal Communications

Install the adapter hardware and reboot the system. Windows will not recognize the adapter, because it is a non-Plug-and-Play adapter. Now follow the steps in "Creating a device and installing a device driver."

Creating a device and installing a device driver

Use the Windows Add Hardware wizard (Windows XP) to create a device for the adapter and install a device driver. The procedure is described in detail for Windows XP, as follows:

Windows XP

1. From the Windows Control Panel, start the Add Hardware wizard. Let the wizard search for new hardware.

2. When asked whether you have already connected the hardware to the system, click **Yes**.

3. When prompted to select an installed hardware device, select **Add a new hardware device**. Click **Next**.

4. When prompted to search for new hardware, select the **Advanced** option, which allows you to select the hardware from a list. Click **Next**.

5. When prompted to select a hardware category, select **Show All Devices**. Click **Next**.

6. When prompted to specify the manufacturer and model, click **Have Disk**.

7. Browse to the \admin\drivers subdirectory on the Personal Communications CD or installation image. Click **OK**.

8. From the list of IBM communications adapters, select the non-Plug-and-Play adapter for which you want to install a driver.

9. Click **Next** to install the device driver.

10. Reboot the system when prompted.

11. Open the Device Manager and verify that a device for the adapter has been created under *Other devices*.

Troubleshooting

If a problem occurs or you make a mistake, look in the Windows Device Manager to see if a device has been created for the adapter under *Other devices*. If a device has not been created, or if a device was created but is not working properly, then remove the device from the Device Manager and reinstall it using the procedures for the specific operating system.

For each adapter, you should review the documentation provided by the adapter vendor. Using the Personal Communications adapter configuration menus, assign the resources that the adapter will use (IRQ, Memory, I/O, and possibly DMA). Reboot the system and go into the system setup provided by the machine vendor. Using the system setup, reserve the required resources so that Windows will not assign them to some other device.

When you try to start a session, if Personal Communications cannot acquire a system resource needed by an adapter, an error panel is displayed, identifying the unavailable resource. To resolve this resource conflict, use the Personal Communications configuration panel to select another I/O address, memory address, or IRQ. If a conflict still exists, reconfigure the device that is currently using the resource to use some other resource.

Installing Personal Communications Version 13.0 over a Previous Version

The Personal Communications Version 13.0 installation program removes prior program versions, which will cause any communications adapter drivers to become disabled. Therefore, if you are using any IBM communications adapters (MPA and SDLC) with the prior versions, and you plan to continue using these adapters, you must update the devices using the device drivers provided with Version 6.0.

For a Plug-and-Play adapter, update the device driver. Use the following procedure.

1. Start the Windows Device Manager.
2. Look under **Other devices** and find the adapter (for example, *IBM PCI 3270 Emulation Adapter*).
3. Select the adapter and click the right mouse button. Click **Properties** on the menu.
4. Click the **Driver** tab and wait for the driver information to be displayed.
5. Click **Update Driver**.
6. Follow the steps in the Upgrade Device Driver wizard. This wizard is similar to the Add/Remove Hardware wizard.
7. When prompted to specify the manufacturer and model, click **Have Disk**.
8. Use the newer driver in the \admin\drivers subdirectory on the Personal Communications CD or installation image.

For a non-Plug-and-Play adapter, there will not be a device already created from Personal Communications Version 5.5 or Version 5.0. Instead, you must install the device driver. See "Installing Device Drivers for Non-Plug-and-Play Adapters" on page 38 for the correct procedure.

If no device drivers were previously installed, use the procedure for a new Personal Communications installation (see "New Installation of Personal Communications" on page 37).

Communication Adapter Removal

When Personal Communications product removal is performed, the installation program checks for any installed communications adapters and removes the appropriate drivers. In order to remove the device driver package, the entire Personal Communications product package must be removed.

Uninstalling Plug-and-Play Adapters

If you uninstall the device driver through the Windows Device Manager and no other device drivers are using the Personal Communications Plug-and-Play-compliant common driver, then Windows will uninstall the common driver.

If you then start a communications adapter session, you will get a message indicating that the device driver is not loaded. To remove the remaining adapter software, you must uninstall Personal Communications.

Uninstalling Non-Plug-and-Play Adapters

If you start a communications adapter session after removing a non-Plug-and-Play adapter, you will get a message indicating that the device driver is not loaded. To remove the remaining adapter software, you must uninstall Personal Communications.

Appendix B. InstallShield Command-Line Parameters

InstallShield uses setup.exe as the bootstrap loader to call the Microsoft Windows Installer service. Setup.exe can accept command-line parameters that allow you to perform administrative installations, run silent installations, and complete other administrative tasks. Using the /v parameter, other parameters can also be passed through setup.exe to the Windows Installer database (MSI package). For information on using the /v parameter to perform initialization file processing, see Chapter 4, "Installing Personal Communications Using an Initialization (response) File," on page 21.

By default, setup.exe creates a verbose installation log with the file name pcsinst.log, and places it in the folder named by the environment variable %temp%. This behavior is overridden when command-line arguments are passed to the Windows Installer using the /v parameter, as described in "Parameter Descriptions."

Note: If %temp% points to a nonexistent folder and the /v flag is not used to override the default parameters passed to the Windows Installer, then setup.exe will fail.

Setup.exe accepts the command-line parameters listed in Table 5. Descriptions of each parameter are listed in "Parameter Descriptions."

Table 5. InstallShield Command-Line Parameters

Parameter	Description
/v	Passes parameters to MSI package.
/s	Causes setup.exe to be silent.
/l	Specifies the setup language.
/a	Performs administrative installation.
/j	Installs in advertise mode.
/x	Performs setup uninstall.
/f	Launches setup in repair mode.
/w	Setup.exe waits for the installation to finish before exiting.
/qn	A Windows Installer MSI parameter that causes everything but setup.exe to be silent. This sets the user interface level to zero.

Parameter Descriptions

Passing parameters to the MSI package

/v

The /v command-line parameter enables you to pass parameters supported by Windows Installer through setup.exe to the MSI package. For example, you can create and save a verbose log file to a location of your choice by passing the /L parameter through setup.exe to the MSI package. To create the log file, type:

```
E:\pcomm_pkgs\xxx\setup.exe /v"/L*v\"%temp%\pcsinst.log\"
```

where:

- `E:` is your installation image drive.
- `xxx` can be `mls`, `chs`, `cht` or `kor`, depending on the installed PCOMM language.

For more information on supported command-line parameters and specific usage examples, refer to the Web site http://www.msdn.microsoft.com.

Note: The /v argument must be the last InstallShield parameter on the command line. Though supported Windows Installer parameters may be passed through to the MSI package, no InstallShield command-line parameters can follow the /v argument.

Running setup.exe silently

`/s`

To prevent setup.exe from displaying a progress bar, use the /s command-line parameter. To have setup run silently with no dialogs, pass the Windows Installer /qn command-line parameter through setup.exe using the /v parameter. Refer to Microsoft's documentation of command-line parameters for other /q user interface options. To run a silent installation, type:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /s /v"/L*v
 \"%temp%\pcsinst.log\" /qn"
```

where:

- `E:` is your installation image drive.
- `xxx` can be `mls`, `chs`, `cht` or `kor`, depending on the installed PCOMM language.

This example performs a typical installation of Personal Communications to your local hard drive without showing a progress bar or input dialogs. For information on property values and features included in a typical installation, see "Typical Installation" on page 11 and "Feature Selection" on page 14.

Note: You can pass an initialization file to the MSI package and run the installation silently using the /s /v /qn parameters in the following command:

```
E:\install\pcomm_pkgs\xxx\install\pcomm\setup.exe /s /v" /L*v
 \"%temp%\pcsinst.log\"
USEINI=\"C:\Personal Communications\pcomm.ini\" /qn"
```

where xxx can be `mls`, `chs`, `cht` or `kor`, depending on the installed PCOMM language.

For more information on initialization file processing see Chapter 4, "Installing Personal Communications Using an Initialization (response) File," on page 21.

To install silently from source, where source medium is a network server, use the /s /v /qn parameters after pointing to the installation point in the command line. See Chapter 5, "Administrative Installation," on page 27 for more information on performing administrative installations and installing from a network server.

To uninstall Personal Communications silently, use the /s parameter in conjunction with the /x parameter as shown in the following example:

```
X:\install\pcomm\setup.exe /s /x
```

where X: is the location of the Personal Communications installation directory.

Specifying the setup language
/l

The /l command-line parameter enables you to specify what language to use during setup by using the appropriate decimal language identifier. For a list of language identifiers, see Appendix C, "National Language Support (NLS) Abbreviations and Language Codes," on page 45. For example, to change the setup language to Czech, type:

```
E:\installpcomm_pkgs\xxx\install\pcomm\setup.exe /l"1029"
```

Administrative installation
/a

Administrative installation installs a source image to the network server. This enables users with access to the network to install Personal Communications directly from the network server.

Advertise mode
/j

Advertisement enables users to install features of Personal Communications when they need them rather than during setup. Features that are available for installation are advertised with shortcuts on the user's system for later installation.

Uninstall mode
/x

Uninstall mode removes Personal Communications from your system.

Repair mode
/f

Launching setup.exe in the repair mode checks the key file of every installed feature and reinstalls any feature that is determined to be missing, corrupt, or an older version.

Appendix C. National Language Support (NLS) Abbreviations and Language Codes

Table 6 lists the abbreviations and language codes that are shipped with Personal Communications. These codes are used in conjunction with the /l command-line parameter and in language string tables and dialogs. For more information on the /l command-line parameter see Appendix B, "InstallShield Command-Line Parameters," on page 41.

Table 6. National Language Support Abbreviations and Language Codes

Language	Abbreviations (installation image)	Language Codes (shipped as *.mst transform files)
Czech (Czech Republic)	cs_CZ	1029
Danish (Denmark)	da_DK	1030
Dutch (Netherlands)	nl_NL	1043
English (United States)	en_US	1033
Finnish (Finland)	fi_FI	1035
French (France)	fr_FR	1036
German (Germany)	de_DE	1031
Hungarian (Hungary)	hu_HU	1038
Italian (Italy)	it_IT	1040
Japanese (Japan)	ja_JP	1041
Norwegian (Bokmål)	no_NO	1044
Polish (Poland)	pl_PL	1045
Portuguese (Brazil)	pt_BR	1046
Portuguese (Portugal)	pt_PT	2070
Russian (Russia)	ru_RU	1049
Slovenian (Slovenia)	sl_SI	1060
Spanish (Traditional-Spain)	es_ES	1034
Swedish (Sweden)	sv_SE	1053
Turkish (Turkey)	tr_TR	1055
The following languages are provided in separate, single-language, packages:		
Korean (Korea)	ko_KR	1042
Simplified Chinese	zh_CN	2052
Traditional Chinese	zh_TW	1028

For more information on using transform files, refer to http://www.msdn.microsoft.com.

Appendix D. Abbreviations Used in This Book

API	Application Programming Interface
APPC	Advanced-Program-to-Program Communications
CPI-C	Common Programming Interface for Communications
EHLLAPI	Emulator High Level Language Application Programming Interface
IEEE	Institute of Electrical and Electronics Engineers
IP	Internet Protocol
LAN	Local Area Network
LSP	LAN Support Program
MSI	Windows Installer Database
MSP	Windows Installer Patch
MST	Windows Installer Transform
SNA	Systems Network Architecture
SRPI	Server-Requester Programming Interface
TCP/IP	Transmission Control Protocol/Internet Protocol
WAN	Wide Area Network

Appendix E. Notices

This information was developed for products and services offered in the U.S.A. IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing
IBM Corporation
500 Columbus Avenue
Thornwood, NY 10594
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

IBM World Trade Asia Corporation
Licensing
2-31 Roppongi 3-chome, Minato-ku
Tokyo 106, Japan

The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law: INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Corporation
Department T01
Building B062
P.O. Box 12195

49

Research Triangle Park, NC 27709-2195
U.S.A.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this information and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

Trademarks

The following terms are trademarks of the IBM Corporation in the United States, other countries, or both:

AnyNet	IBM Global Network
DB2	iSeries
DB2 Connect	MVS/ESA
Distributed Relational Database Architecture	System i5
DRDA	z/OS
IBM	z/VM
	zSeries

Java, JavaBeans™, and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Tivoli is a trademark of Tivoli Systems Inc. in the United States and/or other countries.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, product, and service names may be trademarks or service marks of others.

Index

A

administrative installation
    install from network server   28
    install to run from network server   28
    InstallShield command-line parameters   43
    overview and procedure   27

C

command-line parameters
    administrative installation   43
    advertise mode   43
    InstallShield, setup.exe   41
    language setup   43
    passing to MSI package   41
    repair mode   43
    silent installation   42
    uninstall mode   43
    Windows Installer service   21
customization
    initialization file processing   21
    transform files   21

F

feature installation options   16
feature selection   14

I

initialization file processing
    general   21
    ONLYINI   22
    REMOVEINI   23
    SAVEINI   21, 24
    silent installation   25
    system variables   24
    USEINI   23, 24
installation
    administrative   28
    administrative installation
        InstallShield command-line parameters   43
        overview and procedure   27
    customization   21
    feature installation options   16
    feature selection   14
    initialization file processing   21
    install from network server   28
    install to run from network server   28
    maintenance installation
        modify   31
        remove   31
        repair   31
    migration   17
    patches   28
    remote
        using SMS   33
        using Tivoli   33
    silent   19

installation *(continued)*
    to local hard drive
        custom   13
        typical   11
installation, remote
    using SMS   33
    using Tivoli   33

L

language, specifying
    using command-line parameters   43
    using transforms   45

M

maintenance installation
    modify   31
    remove   31
    repair   31
    repair using command-line parameters   43
Microsoft Systems Management Server (SMS), remote
  installation   33
migration
    general   5
    options   17
    procedure   13

N

national language support (NLS)
    font files   6
    language codes   45

O

ONLYINI   22
operating systems, multi-boot   5

P

patches   28

R

remote installation
    using Launchpad   36
    using SMS   33
    using Tivoli   33
REMOVEINI   23
run from source
    installation image   16
    network server   28

S

SAVEINI   21, 24
setup.exe   41

IBM®

Program Number: 5639–I70

Printed in USA