PowerTerm® Pro Series Terminal Emulator

Version 10.2

User's Guide

Windows Edition

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Table of Contents

1. INTRODUCTION

PowerTerm Pro is a fully functional terminal emulator for Microsoft Windows. Supported emulation types include IBM, UNIX, HP, VMS and Tandem. PowerTerm Pro enables connections to a single or to multiple hosts at the same time. PowerTerm Pro has two main features to emulate a traditional "dumb" host terminal:

- **Terminal display emulation,** PowerTerm Pro emulates the exact display of the chosen terminal. It presents host applications precisely as they would appear on the terminal. Once the PC connects to a host computer, all host operations can be performed as if the PC is an actual host terminal.
- **Terminal keyboard emulation,** PowerTerm Pro enables you to emulate the selected terminal's keyboard by mapping the PC keys to match the host keys. Keyboard mapping definitions are stored in a **.ptk** file.

PowerTerm Pro also provides various options to customize and optimize the working environment such as:

- **Power Pad,** a programmable floating keypad. (Windows edition only.)
- **Soft buttons,** programmable buttons located at the bottom of the PowerTerm Pro window.
- **PowerTermScript Language (PSL),** a full-featured programming language, which enables you to create scripts for automating tasks. For example, you can create a PSL script for automatic login. Scripts can be used at startup of PowerTerm Pro, or can be utilized any time during a PowerTerm Pro session. PSL commands can also be assigned to the Soft buttons and the Power Pad to enable additional functions with a click of the mouse.

What is new in 10.2?

PowerTerm Pro Version 10.2 includes the following additions:

- Support for Windows 8, Windows Server 2012

PowerTerm Pro Features

PowerTerm Pro features include:

- 32 and 64-bit support for XP/Vista/Windows 7/Windows 8; Windows Server 2008 / 2008 / 2008 R2 / 2012
- File transfer for Xmode, Ymodem, Zmodem, Kermit, Ascii, Binary, and IND$FILE
- Supports TCP/IP WinSock, DECnet (CTERM), and LAT

- Supports RS-232 (both direct and via modem), PPP/SLIP, SNA, and APPC connections
- Supports Ethernet and Token ring networks.
- PowerTerm Script Language (PSL)
- String functions, including sub-string, index and concatenation
- Enables you to save parameters for all sessions
- High-level API enables access from other environments, such as C++, Visual Basic, and Power Builder. Also supports HLAPI, EHLLAPI, and WinHLLAPI.
- Language support for most Western and Eastern European languages
- Modem dialing
- Multi-session capabilities
- User programmable Soft buttons
- Floating Power Pad with programmable buttons
- Control of color selection and screen attributes
- Supports printing including Auto Print mode and Slave Printing. Also supports Advanced Printing capabilities, including TN5250 Host Print Transform, specifying the orientation of the printed output, setting values for CPI/LPI/FONT parameters, printer rows and columns.
- Supports Kermit *get* command
- Easy to use keyboard mapping
- DDE communication for client or server
- Compatible with Microsoft Office and Windows 2000 GUI
- Web and email enabled
- Script recorder for automation of tasks

System Requirements

- Microsoft Windows® XP or higher.
- Connection parameters to a host computer.
- Free space on hard disk:
  - PowerTerm Pro - 14 MB on disk
    PowerTerm Pro Enterprise - 72 MB on disk

PowerTerm Pro Setup

To enable PC-host interactions, define two sets of parameters:

- Terminal parameters

- Communication parameters

All parameters are saved in a Terminal setup file where the default is called ptdef.pts. Setup file extensions are:

pts for the Terminal setup file

ptc for the Communication setup file

ptk for the Keyboard definitions file

ptp for the Power Pad definitions file

PowerTerm Pro provides the option to work with a single host or with multiple hosts. You can create different setup configurations for working with each host to enable each user a customized working environment. (For more information about specifying and saving parameters, see chapters *Defining Emulations* and *Defining Connections*.)

Working with a Single Terminal Connection

If you only need to connect to a single host connection, you should use the default terminal setup and communication file. PowerTerm Pro automatically uses the parameters in the setup file to start the system.

Working with Multiple Terminal Connections

If you are working with multiple terminal connections, you may need to use a different setup file for each emulation type. To create a setup file, you first need to define the terminal setup and communication parameters, and then save these parameters to a terminal setup file.

Connection Overview

Step 1: Start PowerTerm Pro

Select **Start menu | Programs | Ericom Software | PowerTerm Pro** and click the PowerTerm Pro icon to launch the application.

When PowerTerm Pro is used for the first time, the PowerTerm Pro window is automatically displayed together with the **Connect** dialog. After the connection parameters have been defined, the **Connect** dialog will be displayed according to your selected option.

PowerTerm Pro opens with the default terminal setup file. You can also open PowerTerm Pro using a customized setup file, or script.

The major feature of the PowerTerm Pro window is its work area, which emulates a host terminal screen by displaying data entered on your terminal data received from the host.

Step 2: Select a Terminal Emulation

Select a terminal emulation for the current session or open a previously defined terminal setup file.

➔ **To select terminal settings:**

1. Select Terminal | Setup. The Terminal Setup dialog appears.
2. Select the Emulation tab.
3. Click one of the Terminal Types. The emulation type that you select changes the number of setup tabs and, for IBM emulations, the PowerTerm Pro windows display.
4. Define terminal settings by clicking the relevant Property page tab and define setup parameters.
5. Click OK.
6. Save the settings by selecting File | Save Terminal Setup or Save Terminal Setup As. The file is saved.

➔ **To open a previously defined Terminal setup file:**

1. Select **File | Open Terminal Setup**. The **Open File** dialog appears.
2. Select your desired setup file and click **OK**.

Or,

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Click **Setups**. The **Setup** dialog appears.
3. Type your desired setup file name or alternatively click the browse button and select the desired file in the **Select File** dialog.

Step 3: Connect to Host

After you have selected a terminal emulation, you need to define communication parameters for the current session, or select a previously saved session from the session list. PowerTerm Pro also provides an option to run a script file before you connect to a host

➔ **To connect to a host:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Define communication parameters or select a session with previously defined connection parameters from the **Session** list.
3. Click **Connect**. A connection is established to a host computer.

Step 4: Work with the Host

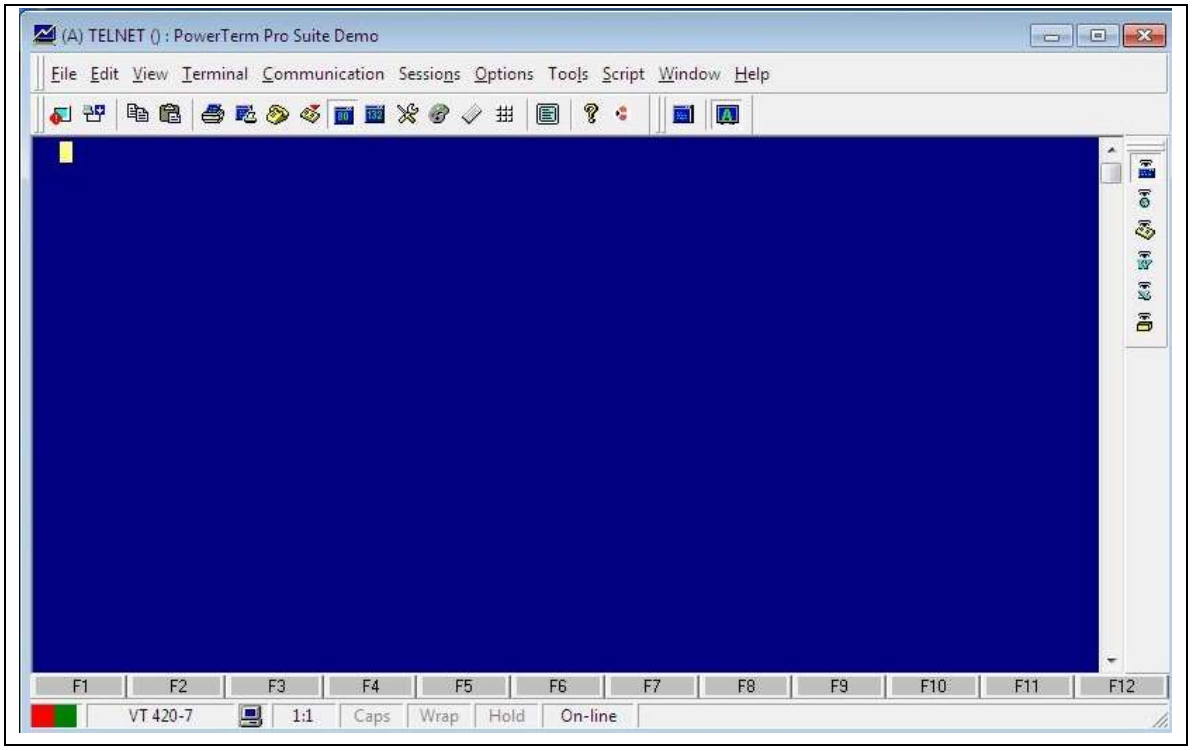
Once you have connected to a host, PowerTerm Pro enables you to work as if you are working from a terminal. PowerTerm Pro enables you to transfer files to and from a host as well as define print parameters, and print the terminal screen or data transferred from the host application.

Step 5: Exiting PowerTerm Pro

PowerTerm Pro provides different options when exiting PowerTerm Pro. You can end a session automatically or be prompted with a confirmation message prior to closing a session.

Select **File | Exit** or press both **<Alt>** and **<X>** on the keyboard. If you have changed terminal settings, PowerTerm Pro displays a warning message asking if you want to update the terminal settings file. The message will point to the name of the setup file currently loaded (ptdef.pts, if you use the default settings). Click **OK** to update the terminal settings, or **No** to cancel the latest changes and restore the default setup.

2. THE POWERTERM PRO INTERFACE



The following is a list of the PowerTerm Pro window components as they appear from top to bottom. You can configure all the components, except the work area, to be displayed or hidden as will be convenient for you.

Control Menu Box	*Provides standard Windows commands and enables you to redisplay the **Menu** bar.*
Title Bar	*Displays the application name. During a communication session, the **ID** type and/or host name is displayed next to the application name, for example, (A) PowerTerm Pro.*
Minimize button	*Closes the window, but not PowerTerm Pro.* Click the **PowerTerm Pro** icon appearing in the **Taskbar** to reopen the PowerTerm Pro window.
Maximize button	*Enlarges the window so that if fills the entire screen. The button is then replaced with the **Restore** button. This button is used to restore the window to its previous size.*

Close button	*Closes the application.*
Menu Bar	*Contains dropdown menus, which enable the user to perform most PowerTerm Pro operations.*
Toolbar	*Contains icons, which can be used as shortcuts to access frequently used menu commands.*
Work Area	*Displays the data entered on the PC terminal or received from the host. During an emulation session, this work area emulates a terminal display. For IBM terminal types, the background of the work area is displayed in black.*
History Scroll Bar	*For non-IBM emulations only.* *Enables you to scroll up and down through the PowerTerm Pro window to view previously displayed data. Default: displayed.*
Soft Buttons	*Contains a series of buttons displayed above the Status bar that you can program to execute specific script commands.*
Communication LEDs	*Indicates communication activity.*
Emulator Type	*Displays the current terminal emulation type selected from the* ***Emulation*** *tab in the* ***Terminal Setup*** *dialog.*
Cursor Position Counter	*Displays the current line and column position of the text cursor in the work area.*
Caps	*Indicates whether the keyboard is in Caps lock mode.*
Hold	*Indicates whether the screen is in hold or frozen mode.*
Status Indicator – On Line, Off Line, Printer, Auto Prt	The status indicator reads **On Line** when communication is established. The indicator reads **Printer** when data is transmitted with a printing request to the slave printer. The color of the indicator is the same as when PowerTerm Pro is in On Line mode, for example, the printer will appear in red if the system was On Line when the printing request

	arrived. The data is sent to the screen and printer, and the indicator reads **Auto Prt**, when the terminal is in Automatic **Printing** mode.
Macro/Message Display Area	*Displays system messages or a script sequence, as you type it in the work area.*
Window border and corners	*Changes the size of the window. The characters that appear in the work area are scaled up or down so that all the information always remains in view.*

Menu Bar

The PowerTerm Pro Menu bar displays the main PowerTerm Pro functions in dropdown menus. The following is a brief description of each menu and the functions that it can perform.

File Menu

The File menu provides options to create, save and restore a terminal setup file, as well as to create an icon for your current PowerTerm Pro settings, also open keyboard and Power Pad settings and save them. You can also use this menu to set printing parameters, print, and to open a new instance of the PowerTerm Pro window.

New Terminal Setup	*Restores the default parameters including the terminal display colors. If you have changed terminal parameters since the last save, PowerTerm Pro displays a warning message asking whether or not to save the latest changes. The message point to the terminal settings file currently loaded.*
Open Terminal Setup	*Opens the **Open File** dialog, which enables you to select and open an existing setup file.*
Save	*Saves both terminal setup and communication parameters to the current setup file.*
Save As	*Opens the **Save File As** dialog, which enables you to save the current setup configuration under a different name.*
Save as Shortcut	*Opens the **Save as Icon** dialog to create an icon for the current PowerTerm Pro settings file. This enables you to start a session automatically with the desired parameters either by accessing the icon from the Windows **Start** menu or by double-clicking*

	it on your desktop.
Open Keyboard File	*Opens the* ***Open Keyboard File*** *dialog, which enables you to open keyboard mapping settings that have previously been saved.*
Save Keyboard file	*Opens the* ***Save Keyboard File*** *dialog, which enables you to save separate keyboard mapping settings in a separate file and open them at a later date.*
Open Power Pad file	*Opens the* ***Open Power Pad File*** *dialog, which enables you to open Power Pad settings that have previously been saved.*
Save Power Pad File	*Opens the* ***Save Power Pad File*** *dialog, which enables you to save Power Pad settings in a separate file and open them at a later date.*
Print Screen	*Prints the contents of the work area, or the selected text.*
Print Setup	*Displays the* ***Print Setup*** *dialog, which contains printing parameters. Displayed parameters change according to the printer you selected.* The **Default Printer** parameter enables you to send the output to the default printer selected. The **Specific Printer** parameter allows you to select one of the currently installed printers.
Start/Stop Auto Print	*Prints all the data displayed in the work area. This option toggles between* ***Start*** *and* ***Stop Auto Print****.*
Form Feed	*Executes a form feed on the printer.*
Line Feed	*Executes a line feed on the printer.*
Send Mail	*Launches the default e-mail program and opens a new mail message, with or without attaching a desired setup file or screen capture.*
Exit All Sessions	*Exits all PowerTerm Pro sessions at once.*
Exit	*Exits the current PowerTerm Pro session.*

Edit Menu

The Edit menu provides options to select, clear, and reverse text in the

PowerTerm Pro window and delete the contents of the history buffer. The Edit menu also provides standard editing commands (e.g. cut/copy/paste), in addition to commands that enable you to copy data to a file and copy data automatically to the clipboard.

Select Screen	*Selects the contents of the entire work area.*
Clear Screen	*Captures the entire PowerTerm Pro screen and erases it.*
Clear History	*Deletes the entire contents of the history or scroll back buffer. This command is only available when the history buffer is in use.*
Reverse Screen	*For RTL languages only.* *Reverses the screen so that you can type from left to right or right to left, depending on the language you use.*
Cut	*for IBM emulations only.* *Cuts the selected text and places it on the clipboard.*
Copy	*Copies marked text to the clipboard when the **Automatic Copy** option in the **Edit** menu is not active.*
Paste	*Pastes the clipboard contents into the work area. Right-click sends data stored on the clipboard to the host. Equivalent to actually typing the contents of the clipboard on the host screen.*
Multisheet Print/Paste Setup	*Enables printing/pasting of data that does not fit onto one page, which Print Screen would accommodate. It is very useful for printing/pasting long records in the same screen format.*
Copy as Bitmap	*Copies the screen or screen selection as a bitmap. By default the screen capture will appear in color but you can also save it in black and white.* The screen capture can also be automatically copied into an untitled email in your Outlook program.
Copy to File	*Copies selected information to a file. If no text is selected, the entire screen is written to the file.*

Automatic Copy	*Automatically copies selected text to the clipboard with no need to select the* ***Copy*** *option.*
Copy Right to Left	*For RTL languages only.* *Reverses the order of the letters in the work that was copied to the clipboard when displayed.*

View Menu

The View menu provides options to allow you to hide or show the Menu bar, Toolbars, Status bar and Function Buttons.

Menu	*Hides/ shows the Menu bar.* *To restore it, right-click on the title bar and choose Restore Menu.*
Toolbars	*Hides/Shows the Toolbar.*
Status bar	*Hides/Shows the Status Bar.*
Function Buttons	*Hides/Shows the Soft buttons.*

Terminal Menu

The Terminal menu provides options to define and reset connection parameters, set the system to be online or offline, and freeze or unfreeze the screen. You can also select the fonts and languages (in versions that support it) to be displayed in the PowerTerm Pro window.

Setup	*Opens the* ***Terminal Setup*** *dialog in which you can define settings for terminal emulation. This dialog contains different tab pages that enable you to define all aspects of your terminal setup.*
Colors	*Displays color parameters for data displayed in the work area.*
PowerTermFonts	*Displays the default PowerTerm fonts. These fonts are scaleable so that if the window shrinks, the fonts will shrink in relation to the size of the window.*
System Fonts	*Displays the PowerTerm Pro window with system fonts. These fonts remain the same size, no matter what the size of the window when*

	Unscaled Screen (from the Display Property page) is selected. When you select your own system fonts, you can only select fixed size font.
Reset	*Resets the VT terminal defaults. This command does not apply to PowerTerm Pro's exclusive terminal parameters (such as color).*
Online	*Sets the system to be online or offline.*
Hold Screen	*Stops communication and freezes the screen. To unfreeze the screen, reselect the command.*
Multisheet Print/Paste Setup	*Enables printing/pasting of data that does not fit onto one page, which Print Screen would accommodate. It is very useful for printing/pasting long records in the same screen format.*
Hotspots Setup	*Specifies which menu rows will be activated as hotspots.*
Language option	*Selects the user interface language to appear in English, German, French, Italian, Spanish, Greek, or Czech.*

Communication Menu

The Communication menu provides options to define and modify the communication (session) parameters, and to connect/disconnect a communication session. The Communication menu also provides file transfer options. It enables you to set and clear Data Terminal Ready (DTR) and Ready to Send (RTS) signals as well as select a modem from a list of existing modems.

Connect/ Disconnect	*Displays the* ***Connect*** *dialog, which enables you to define session parameters and connect to a host.*
Modify Connection	*Displays the* ***Modify Connection*** *dialog, which enables you to modify connection parameters for COM type communication.*
Modem Setup	*Opens the* ***Modem Setup*** *dialog, which enables you to select a modem from a list of existing modems and initialization strings. It also enables you to add customized modem definitions and edit the initialization string provided.*

Reset Communication	*Resets the communication port for COM type communication.*
Run FTP	*Launches the PowerTerm Pro FTP client, capable of transferring files from one computer to another.*
Receive File	*Receives a file from the host via Kermit, Zmodem, Ymodem, Xmodem, Ascii or Binary.*
Send File	*Sends a file to the host via Kermit, Zmode, Ymodem, Xmodem, Ascii or Binary.*
SSL Setup	*Implements SSL security in your connections.*
Data File Transfer	*Launches As400 Data File Transfer Client*
Utilities	*Displays signal options:* ***Dial****, enables you to dial a specific phone number for COM type communication.* ***Break****, sends a break for COM type communication. Equivalent to <Ctrl>+<Break>.* ***Set/Clear DTR****, sets/clears DTR (Data Terminal Ready) signals.* ***Set/Clear RTS****, sets/clears RTS (Ready To Send) signals.* ***AUX: Modify Connection****, enables two-way slave printing to a serial printer.*

Sessions Menu

The Session menu lists all the active PowerTerm Pro sessions and enables you to toggle between them. The first session generated is automatically named Session A, the next Session B, and so on.

Options Menu

The Options menu enables you to map your keyboard and define the Power Pad display. It also enables you to store a session in a log file as well as provides options to customize your PowerTerm Pro screen.

Keyboard Map	*Displays the* ***Keyboard Mapping*** *dialog, which enables you to map your PC keys to host keys on the terminal keyboard.*

Power Pad Setup	*Displays the **Power Pad Setup** dialog, which enables you to adjust the number of buttons in the Power Pad.*
Start/Stop Trace	*Stores received data in the **Trace.log** and **Capture.log** files. These files are located in the PowerTerm Pro folder. The menu command toggles between **Start Trace** and **Stop Trace**.* ***Capture.log** stores raw data, as received from the host.* ***Trace.log** stores formatted data with readable escape sequences.*
Hide/Show Power Pad	*Hides/Shows the floating Power Pad.*
Customize	*Enables you to customize the menu bar and the toolbars.*
General Settings	*Enables you to determine how you want to access Ericom Software Web pages, the Script Editor, and other External Applications.*
Insert Object	*Hides/Shows the Soft buttons.*
Show Full Screen	*Hides/Shows the Status Bar.*

Tools Menu

The Tools menu allows you to create macros or VBA scripts to be run in the PowerTerm Pro Enterprise.

Macro	*Creates a new name for a macro and then launches the VBA editor.*
User Tools	*Customizes the Tools menu with any particular application.*

Script Menu

The Script menu provides options to create and run PSL commands.

Run Script	*Displays the **Run Script** dialog, which enables you to select and run a script.*

Edit Script	*Displays the **Edit Script** dialog, which enables you to edit an existing script or to create a new one.*
Script Command	*Displays the **Script Command** dialog, which enables you to run individual script commands.*
Start/Stop Script Recording	*Records a script automatically. After requesting **Start Script Recording**, the manual operations you perform in the emulation screen are recorded into a script file until you choose the **Pause** or **Stop Script Recording** command.*
Pause/Continue Script Recording	*Pauses or resumes the script recording. This enables you to exclude certain operations from recording.*
Activate Recorded Script	*Activates the script currently recorded in memory. The script is saved in memory while the PowerTerm Pro session is active.*
Save Recorded Script	*Enables you to save a script from memory to a specific file to be used at a later date.*

Window Menu

The Window menu allows you to open a new terminal window which you can use to connect to the same or different host.

Help Menu

The Help menu provides options for accessing the PowerTerm Pro online help and product and license management information.

Help Topics	*Accesses the table of contents for the PowerTerm Pro online help.*
Tip of the Day	*Displaying useful tips and hints.*
Ericom Software on the Web	*Links to Ericom Software's products.*
About PowerTerm Pro	*Displays product and contact information.*

Toolbar

The PowerTerm Pro Toolbar contains icons, which provide shortcuts to frequently used menu options. The following is a brief description of the icons. You can also place the cursor over the icon to display its description as a tool tip.

☞ Some emulation types display only part of the icons.

Hold Screen/Release Hold		*For non-IBM emulations only.* *Suspends and resumes communication with the host. After you click the Hold Screen icon, it turns red. After you click the icon again, it changes back to green and update of the PowerTerm Pro window resumes.* *Equivalent to* ***Terminal | Hold Screen****.*
Connect/Disconnect		*Opens the* ***Connect*** *dialog where you define session communication parameters and connect to the host.* *Disconnects an open session.* *Equivalent to* ***Communication | Connect (Disconnect)***
Cut		*For 5250 emulations only.* *Cuts the selected text.* *Equivalent to* ***Edit | Cut****.*
Copy to Clipboard		*Copies the selected data displayed in the work area to the clipboard.* *Equivalent to* ***Edit | Copy****.*
Paste from Clipboard		*Pastes data from the clipboard to the host application.* *Equivalent to* ***Edit | Paste****.*
Print		*Prints selected text from the history buffer or the entire contents of the work area.*

		*Equivalent to **File | Print Screen**.*
Start/Stop Auto Print		*For non-IBM emulations only.* *Prints incoming data as it is displayed on the screen. Click the icon again and the automatic printing stops.* *Equivalent to **File | Start Auto Print**.*
Dial		*For non-IBM emulations.* *Dials a specific telephone number for COM type communication.* *Equivalent to **Communication | Utilities | Dial**.*
Start/Stop Script Recording		*Records manual operations in script form. Click the icon again and the script recording stops.* *Equivalent to **Script | Start Script Recording**.*
Change to 80 Columns		*For non-IBM emulations only.* *Specifies an 80-column display for the work area.* *Equivalent to **Terminal | Setup | Display**.*
Change to 132 Columns		*For non-IBM emulations only.* *Specifies a 132-column display for the work area.* *Equivalent to **Terminal | Setup | Display**.*
Terminal Setup		*Displays the **Terminal Setup** dialog in which you can define terminal setup parameters.* *Equivalent to **Terminal | Setup**.*
Colors		*Displays the Colors dialog box in which you can define the color of data in the work area. Equivalent to*

		Terminal | Colors.
Keyboard Mapping		*Opens the **Keyboard Mapping** dialog in which you can map PC keys to host keys.*
Show/Hide Power Pad		*Displays the **Power Pad**. Click the icon again and the Power Pad closes.* *Equivalent to **Options | Show Power Pad**.*
Full Screen		*Displays the PowerTerm Pro on a full screen. Equivalent to Options | Show Full Screen.*
Help Contents		*Displays the PowerTerm Pro online help. Equivalent to Help | Contents.*
About PowerTerm Pro		*Displays product information.* *Equivalent to **Help | About PowerTerm Pro**.*
New Terminal Window		*Opens a new instance (window) of PowerTerm Pro.*
Session		*Click the session's icon to bring it to the front.*

Hot Keys

Hot keys are keyboard shortcuts that you can use instead of selecting menu commands. These hot keys refer to your standard PC keyboard keys, **before** they are mapped to terminal keys. Once hot keys are mapped, they lose their original function and reflect the newly mapped terminal key. For example, if you map <Alt F4> to the <Backspace> key on the terminal keyboard, it performs the function of a <Backspace> key.

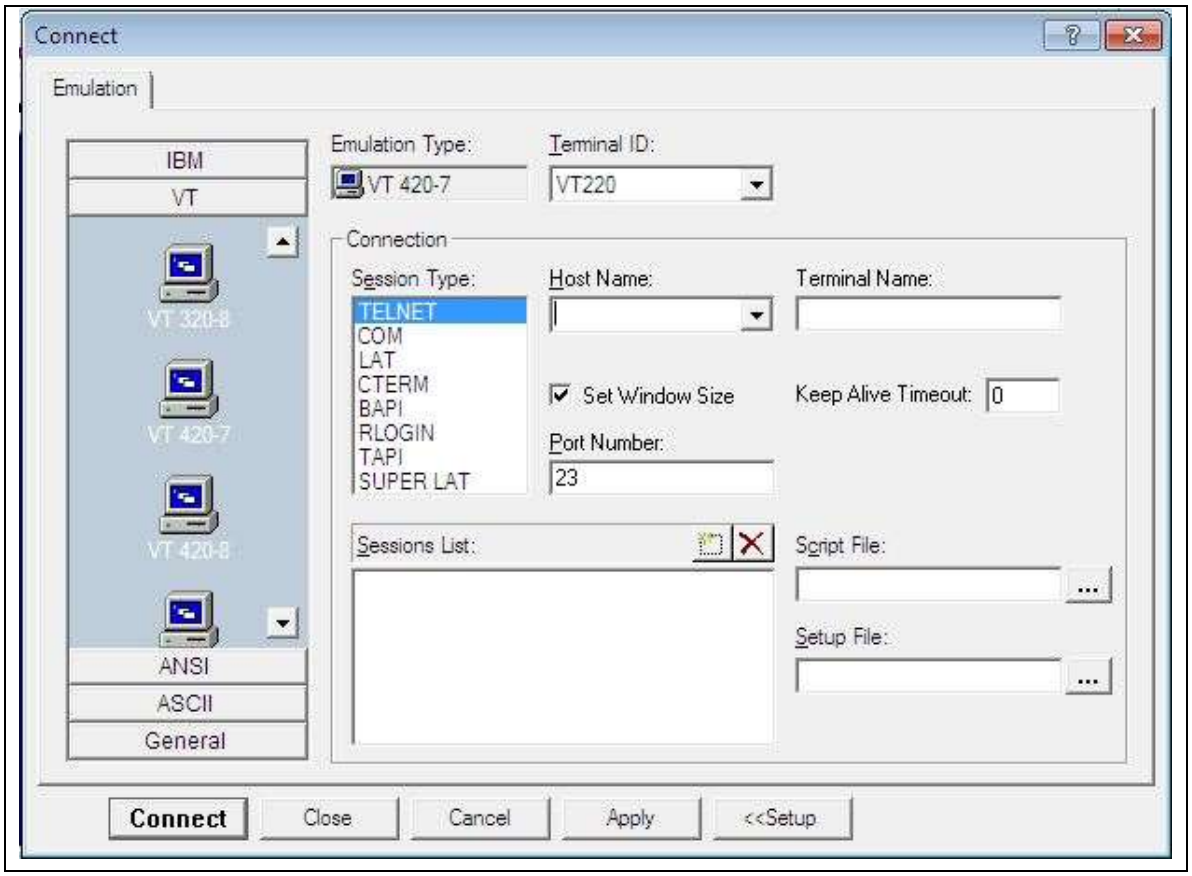
The following table lists the default PowerTerm Pro hot keys:

Alt F4	*Exit*
Alt F6	*Open a new terminal window*

Alt F9	*Activate script*
Ctrl+Alt+F9	*Start/Stop script recording*
Ctrl+Shift+P	*Activate recorded script*
Alt F10	*Select screen*
Alt F11	*Clear screen*
Alt F12	*Reverse screen.* *IBM 5250 emulations not included.*
Scroll Lock	*Hold screen*
Pause	*Change the cursor shape*
Ctrl Up Arrow	*Scroll up one line*
Ctrl Down Arrow	*Scroll down one line*
Ctrl Home	*Scroll to the beginning of the history buffer*
Ctrl End	*Scroll to the end of the history buffer*
Ctrl Page Up	*Scroll up one page*
Ctrl Page Down	*Scroll down one page*
Shift+Ctrl+X	*Switch focus to session X* *X is the session letter (A…Z) displayed in the PowerTerm Pro windows Title bar.*
Ctrl+Spacebar	*Switch to next active session*

Connection Dialog

The parameter options change according to emulation and Session Type (protocol) selected.



Session Type	***Parameters***
TELNET	*Uses the Telnet protocol over TCP/IP for network communication.* Specify the host computer name or the IP address in the **Host Name** text box. Specify the TELNET **Port number** (default 23). The **winsock.dll** file must be in the search path.
COM	*Uses serial communication with the PC's COM ports.* Define the **Baud Rate**, **Port Number**, **Parity**, **Stop Bits** and **Flow Control** Optionally, specify a telephone (**Dial**) number. Optionally, specify if you want to check for parity errors.
BAPI	*For TCP/IP connections with parameters similar to those of TELNET.* Verify that the BAPI support software is installed on your PC before you use this option.

CTERM	*Uses the DIGTAL CTERM protocol for network communication with a remote or local VAX/Open VMS host via DIGITAL PATHWORKS 32.* Specify the host computer name in the **Node Name** field.
LAT	*Uses DIGITAL LAT protocol for network communication with a VAX/Open VMS host via DIGITAL PATHWORKS 32.* Specify **Service** and a **Password** (if required).
TN3270	*TELNET for 3270 emulations.* Select **Use TN3270 Protocol** if you want to work with TELNET SNA extensions. Specify the **LU Name** of the host (LU name or LU pool).
MS SNA Server	*For connection via Microsoft SNA Server.* Specify the **LU Name** (or LU pool).
NWSAA (IPX)	*For connection via IPX to Novel Netware for SAA. The Service Name is the same as Novel's Profile.* Select an **LU Category**. Specify an asterisk (*), as the **Server Name** and PowerTerm Pro will connect to the appropriate Netware for SAA server.
NWSSA (TCP/IP)	*Same as previous for TCP/IP connection.* Specify the server's IP address or host name in the **Server Name** field.
TN5250	*TELNET for 5250 emulations.*
APPC	Specify the appropriate AS/400 names in **Host Name** and **Device Name** fields. Select **Auto SignOn** if you want to skip the sign on stage.
RLOGIN	*Uses the RLOGIN protocol over TCP/IP for network communication.* Specify the host computer name or IP address in the **Host Name** field. You can also specify the port number in the Host Name field.
TAPI	Enables PCs running Microsoft Windows to use telephone services.
SUPERLAT	*This is a version of the LAT protocol for network communication with a VAX/Open VMS host, which*

	requires Meridian's SUPERLAT. Specify **Service Name** and **Password** (if required).
NSVT	*For HP emulations.*

Terminal Setup Dialog

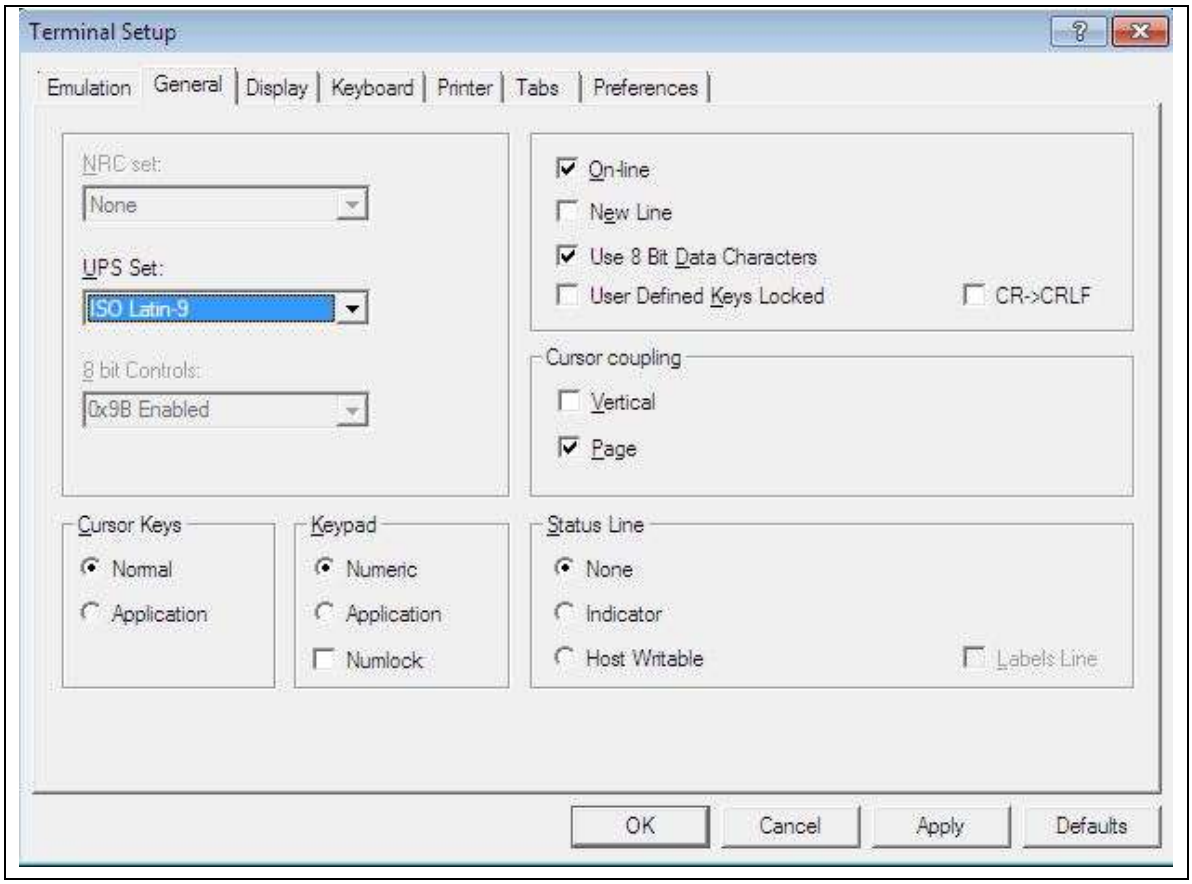
☞ The emulation type that you select changes the tabs (property pages) displayed in the Terminal Setup dialog and their options.

Property Page	***Description***
Emulation	*Displays supported terminal emulations and enables you to select a terminal type.*
General	*Defines parameters for the terminal emulation type.*
Display	*Defines display settings for the PowerTerm Pro window.*

Keyboard	*Defines keyboard setup parameters.*
Printer	*Defines printer parameters.*
Tabs	*For VT emulations only.* *Defines tab stops in the work area.*
Colors	*Defines color settings for the PowerTerm Pro window.*
Preferences	*Defines parameters that determine PowerTerm Pro behavior and automate processes.*

General Property Page

Non-IBM Emulations

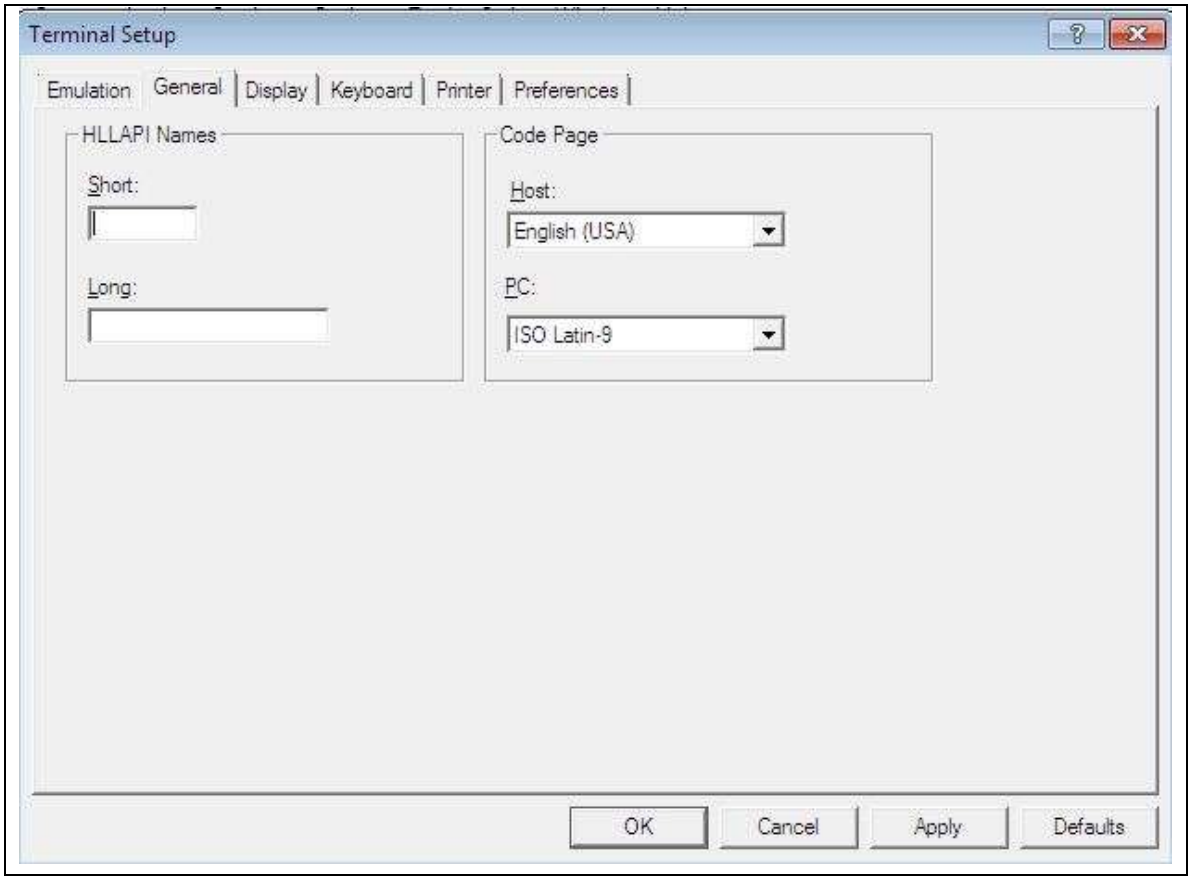


Option	***Description***

Terminal ID	*Determines the ID returned by the emulation program to the host. Verify that you select an ID that the host application/system recognizes.*
NRC Set	*Determines the communication and keyboard character set for 7-bit data only.*
UPS Set	*Determines the communication and keyboard character set for 8-bit data only.*
8 bit Controls	*Enables when UPS Set is specified as Code Page 437 and up.* ***Disable,*** *determines if 0x80 to 0xAF are displayed characters.* ***Enable,*** *determines if 0x80 to 0xAD are control characters.* ***0x9B,*** *all characters are displayed characters except 0x9B, which is a control character.*
Online	*Equivalent to* ***Terminal | On Line (Off Line)****.*
New Line	*Determines whether the* ***<Enter>*** *key generates only a carriage return or a carriage return/line feed combination.*
Use 8 Bit Data Characters	*Select this parameter if the communicated data is in 8-bit character format. Clear it for 7-bit characters. When cleared, the 8th bit is truncated. If you receive 7-bit data, you can convert it to 8-bit data for printing on the slave printer.*
User Defined Keys (UDK)	*Determines whether applications on the host system can override your user-defined keys (UDKs) when you have defined a function key that conflicts with how the host wants to use this key. UDKs let you use a single key for multiple keystrokes. To program the 15 UDKs, 256 bytes are available. The key definitions are loaded sequentially (from F6 to F20) so that if you reach the 256-byte limit, more definitions cannot be loaded.* ***Locked,*** *prevents UDKs from being overridden.* ***Unlocked,*** *allows UDKs to be overridden.*
Cursor Keys	*For VT emulations only.* *Determines the behavior of the four arrow keys.*

	***Normal**, generates ANSI-standard control sequences for moving the cursor.* ***Application**, generates customized application program functions.*
Keypad	*For VT emulations only.* *Determines the effects of the numeric keypad on your keyboard.* ***Numeric**, keypad keys insert numbers. For example, pressing <7> on the numeric keyboard is the same as typing '7' on the keyboard.* ***Application**, keypad keys generate control sequences that can be used by some applications.* ***(Use) NumLock**, enables or disables the NumLock keyboard function in respect to the above Numeric and Application modes:* ***"NumLock"** checkbox **not checked**, the NumLock key is a regular emulation key that has been mapped/defined as PF1 (default) or any other key. The NumLock key will not change the NumLock keyboard status.* ***"NumLock"** checkbox **checked**:* ***Numeric Keypad Mode**, the NumLock key toggles between function states: enabling numeric keys (when lit) or arrow keys (when not lit).* ***Application Keypad Mode**, the NumLock key toggles between function states. Enabling numeric keys (when lit) or application keys (when not lit).*
Cursor coupling	***Vertical**, determines whether the user window pans with the cursor when the cursor moves past the top or bottom border of the user window.* ***Page**, determines if a new page appears in the display when the cursor moves to a new page.*
Status Line	***None**, displays an emulation screen without the status line.* **Indicator**, displays the status line. **Host Writeable**, displays the status line sent by the host.
Label Line	*For ASCII emulations only.* *Displays a status line on the top and bottom line of the emulation screen.*

IBM Emulations

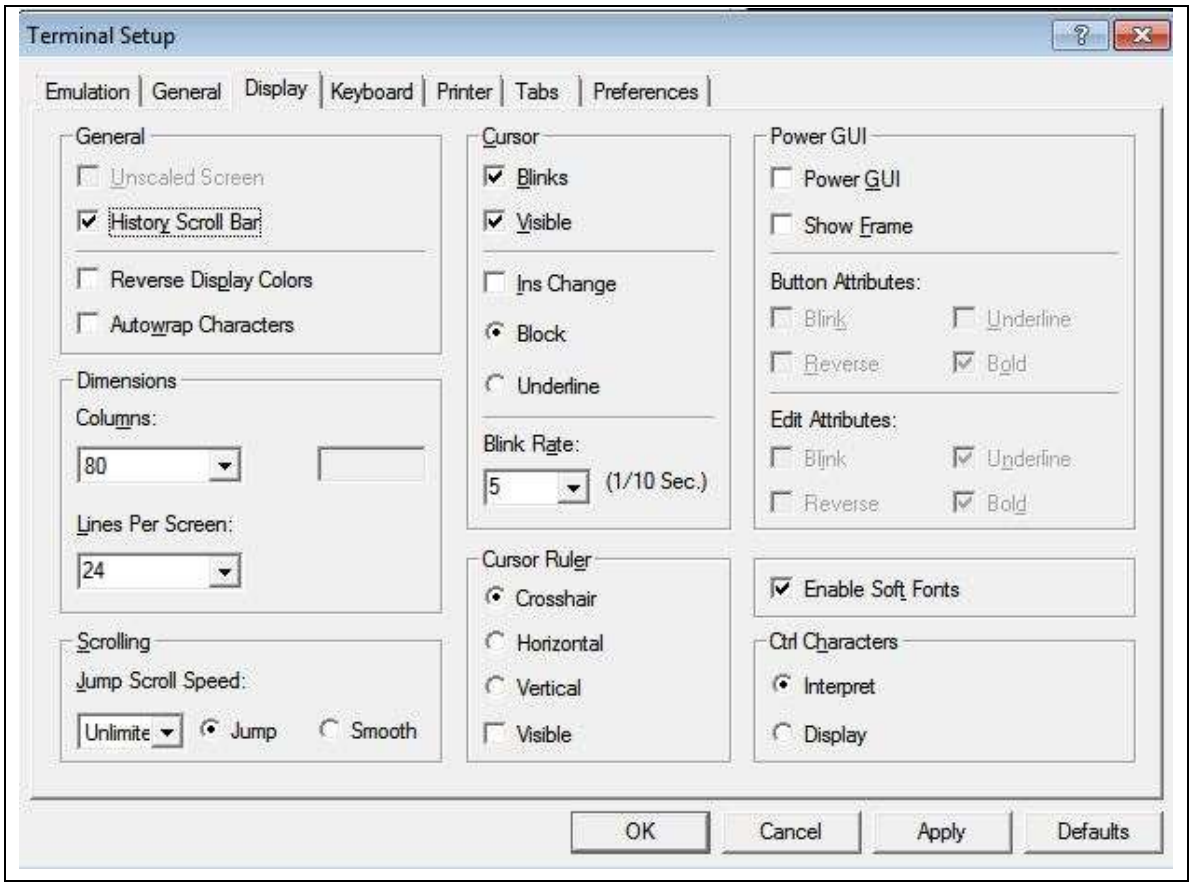


Option	***Description***
General	***ID,*** *determines the ID returned by the emulation program to the host. Make sure you select an ID that the host application recognizes.* ***Unscaled Screen,*** *when this parameter is cleared, the characters appearing in the work area are scaled. A change in the size of the desktop causes the fonts to shrink in relation to the size of the window. Select this parameter if you want to disable this feature.* ***Show Respone Time,*** *displays the number of seconds that elapsed between the time data was sent to the host and the host response time.*
Cursor Ruler	*Select* ***Visible*** *to display full-screen, vertical or horizontal lines as a cursor ruler (cross hair guide).* ***Cross Hair,*** *displays the cursor ruler as a horizontal and vertical line.*

	Horizontal, *displays the cursor ruler as a horizontal line only.* ***Vertical,*** *displays the cursor ruler as a vertical line only.*
Cursor	*Controls the cursor appearance and functionality:* ***Block/Underline/Visible/Blink,*** *controls the cursor appearance.* ***Ins Change,*** *when selected it enables toggling the cursor between underline and block appearance, by clicking the Ins (insert) button.*
Appearance	***Power GUI,*** *displays data in a window with 3D look & feel. Use system fonts larger than 10 pt. for optimized results.* ***Show Frame,*** *places a frame around the text area of the emulation.*
HLLAPI Names	*The names of an hllapi session can either be short or long.* ***Short and Long,*** *enables you to specify the short and long hllapi names.*
Code Page	*Specifies the host and PC (keyboard) character sets.*
Alternate Size	***Enable,*** *select to override the terminal alternate size with a specific size.* ***Rows/Columns,*** *type the required number.*

Display Property Page

For non-IBM emulations only.

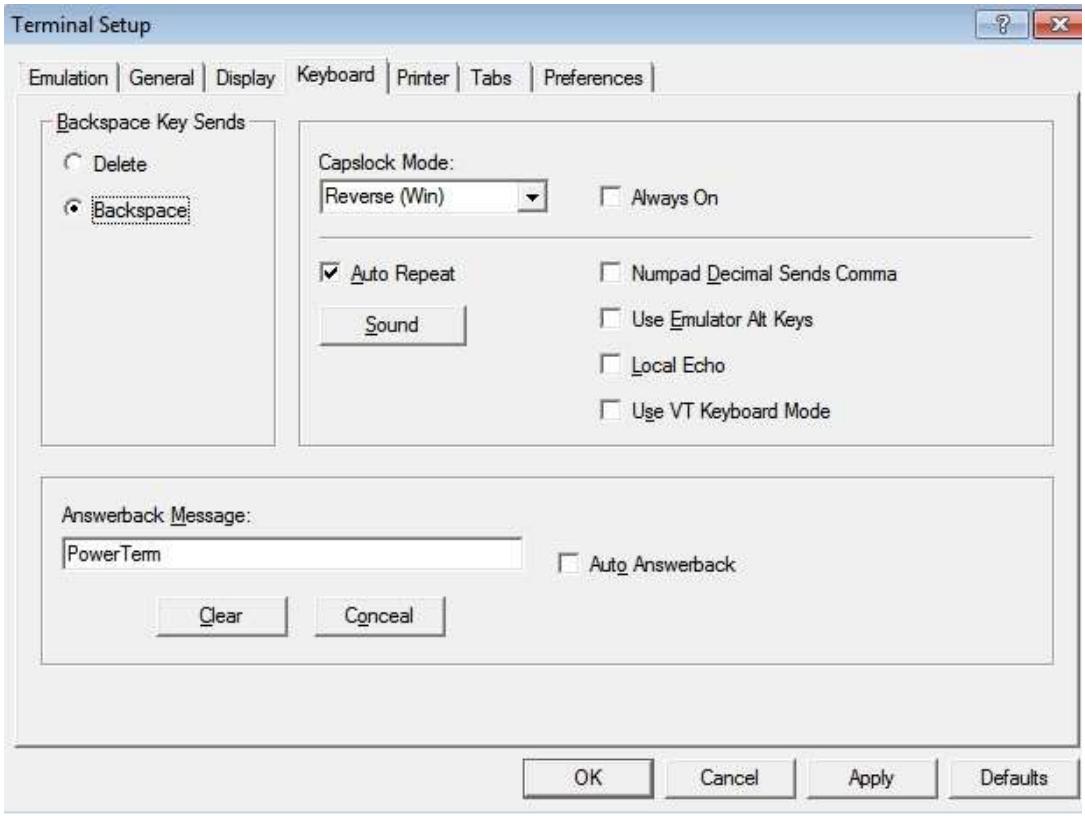


Option	***Description***
General	***Reverse Display Colors,*** *reverse the text and background colors in the work area.* ***Unscaled Screen,*** *when this parameter is cleared the characters appearing in the work are scaled. A change in the size of the desktop causes the fonts to shrink in elation to the size of the window. Select this parameter if you want to disable this feature.* ***Autowrap Characters,*** *wraps words at the end of a line and the cursor moves to the next line.* ***History Scroll Bar,*** *displays the vertical history scroll bar along the right edge of the PowerTerm Pro screen. This enables you to scroll through the data displayed previously on the screen. If the host transmits during scrolling, the display automatically scrolls back to its current position.* ***NOTE*** *Selecting* ***Clear History*** *from the* ***Edit*** *menu can erase the History buffer.*
Cursor Ruler	*Select* ***Visible*** *to display full-screen, vertical or horizontal lines as a cursor ruler (cross hair guide).*

	Cross Hair, *displays the cursor ruler as a horizontal and vertical line.* ***Horizontal,*** *displays the cursor rules as a horizontal line only. Vertical, displays the cursor ruler as a vertical line only.*
Cursor	*Controls the cursor appearance and functionality:* ***Block/Underline/Visible/Blink,*** *controls the cursor appearance.* ***Ins Change,*** *when selected, it enables toggling the cursor between underline and block appearance by pressing the* ***Insert*** *key.*
Ctrl Characters	***Display,*** *displays the control characters.* ***Interpret,*** *performs the regular terminal behavior as affected by control characters.*
Power GUI	*Displays data in a window with 3D look & feel. Use System fonts larger than 10 pt for optimized results.*
Show Frame	*Places a frame around the text area of the emulation.*
Dimensions	*Determines the number of characters (columns) per displayed line, and the number of lines to be displayed in the work area. Characters are scaled according to the selected values. Type a different value in the* ***Other*** *box instead of choosing one of the standard options (80 and 132).* Limit Font Size Allows PowerTerm Pro fonts to use only the optimal font size, especially for frames. **Note:** Not recommended for normal text on large screens.
Scrolling	*Determines the pace at which data is displayed in the work area as it arrives. If you select* ***Jump****, you should determine the* ***Jump Scroll Speed*** *that is measured in number of line units. The higher the value, the faster the scrolling.* ***Unlimited,*** *displays data without delaying communication.* ***Page,*** *scrolls data by full screens.* ***Smooth,*** *is equivalent to a Jump Scroll Speed of 1.*
Enable Soft fonts	*Enables you to work with VT soft fonts. The fonts will be loaded from the host application.*

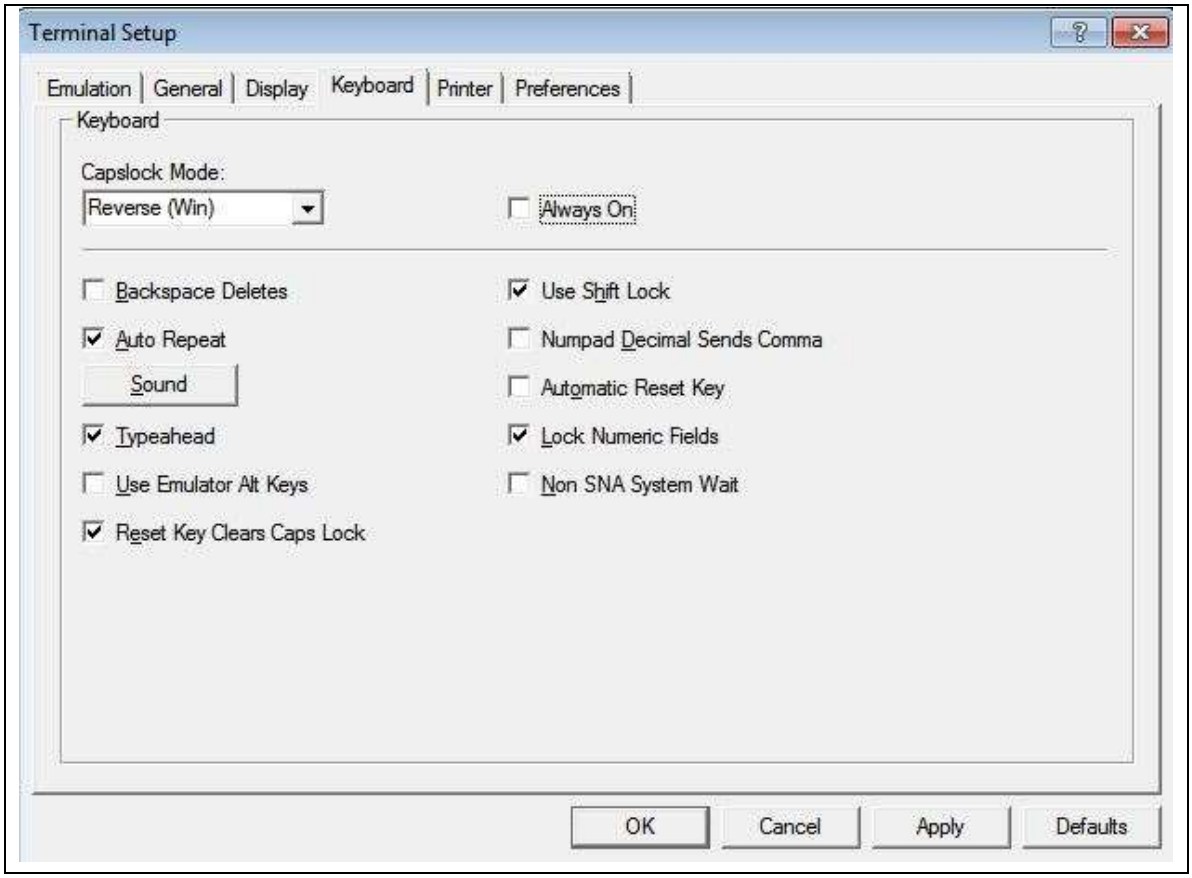
Keyboard Property Page

Non-IBM Emulations



Option	***Description***
Capslock Mode	*Determines the behavior of the Caps Lock key.* ***Caps (Unix)**, locks alphabet keys on main keypad in uppercase.* **Shift**, locks alphabet and numeric keys on main keypad in shift setting. Pressing the shift button on your keyboard will release shift-lock mode. **Reverse (Win)**, Same behavior as Caps Lock, however pressing the shift button on your keyboard reverses the caps operation. ***Always On**, enables you to toggle to a different application and turn Caps Lock mode off. On return to PowerTerm Pro it will automatically revert to Caps Lock on.*
Backspace Key	*Determines whether the <Backspace> key sends **Delete***

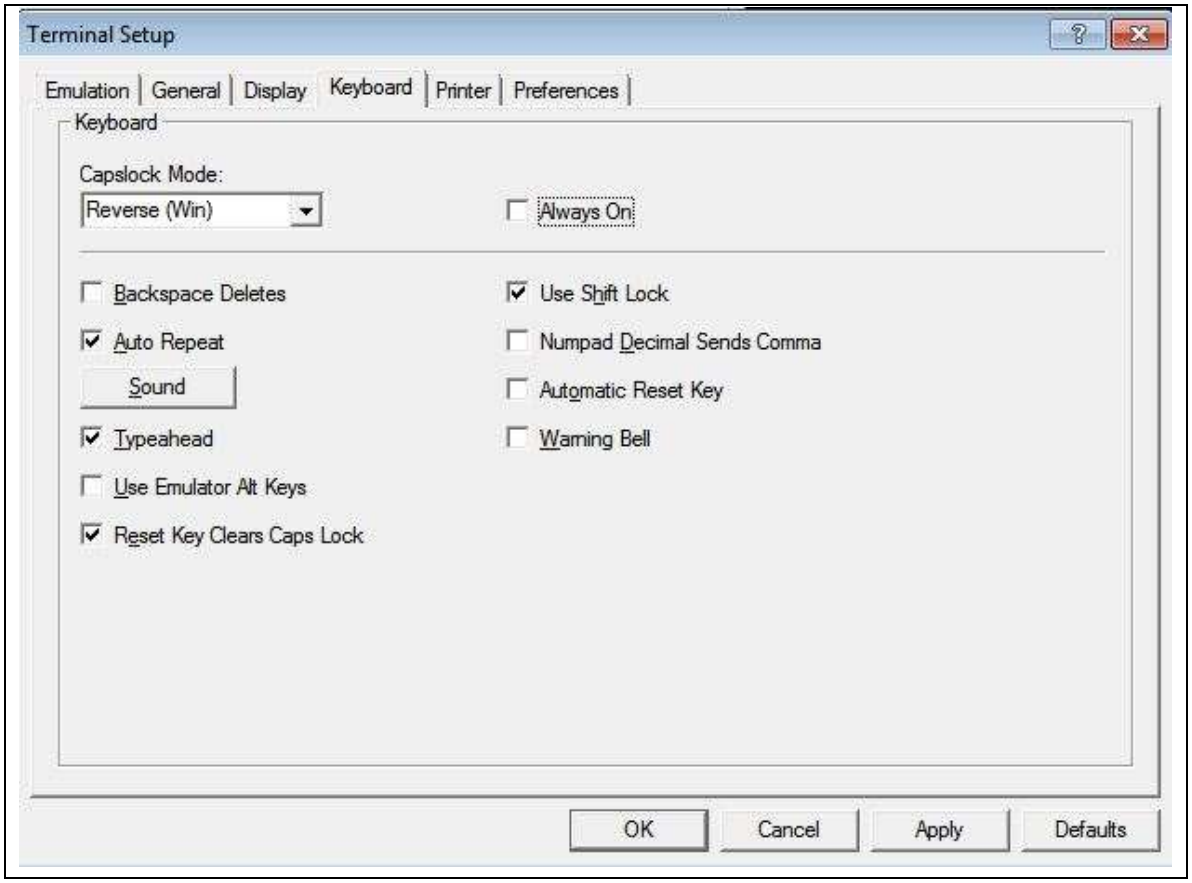
Sends Delete	*or an actual* ***Backspace****.*
Auto Repeat	*Repeatedly displays the character whose key is being continuously pressed down.*
Numpad Decimal sends Comma	*Specifies that the Numeric Pad's decimal key sends a comma instead of a decimal.*
Use Emulator Alt Keys	*Select to make an <Alt> key perform the terminal operation even if Windows OS has an operation mapped to the same key.*
Local Echo	*Determines whether keyboard input is displayed (echoed) on your screen.* ***Select****, to display the keyboard input even if the host system does not echo your input.* ***Clear****, to send the keyboard input to the host system without being displayed on the screen (unless, invariably, the host system automatically echoes the characters).*
Use VT Keyboard Mode	*Changes your keyboard into a Digital VT keyboard mode. In this mode, the PC keyboard operates as close to a VT keyboard as possible, and takes full advantage of LK450 Digital keyboards.*
Answerback Message	*Specifies an answerback message and its display.* ***Clear****, deletes the message.* ***Conceal****, hides the message without being deleted.*
Auto Answerback	*Determines whether the terminal automatically sends the message to the host system after you make the connection. This is useful if your answerback message is a command to the host system.*



Option	***Description***
Capslock Mode	*Determines the behavior of the Caps Lock key.* ***Caps (Unix)****, locks alphabet keys on main keypad in uppercase.* **Shift**, locks alphabet and numeric keys on main keypad in shift setting. Pressing the shift button on your keyboard will release shift-lock mode. **Reverse (Win)**, Same behavior as Caps Lock, however pressing the shift button on your keyboard reverses the caps operation. ***Always On****, enables you to toggle to a different application and turn Caps Lock mode off. On return to PowerTerm Pro it will automatically revert to Caps Lock on.*
Backspace Deletes	*Select to delete characters by pressing the*

	***Backspace** key on your keyboard.*
Auto Repeat	*Repeatedly displays the character for which its key is being continuously pressed down.*
Lock Numeric Field	*Determines whether the keyboard is locked when you try to enter non-numeric data.*
Typeahead	*Types data ahead, before the host responds.*
Automatic reset Key	*If the Keyboard is locked, a reset key sequence is generated prior to when you click on the tab key to advance to the next field.*
Numpad Decimal Sends Comma	*Determines whether the Numeric Pad sends a comma instead of a decimal.*
Use Emulator Alt Keys	*Select to make an <Alt> key perform the terminal operation even if Windows OS has an operation mapped to the same key.*
Non SNA System Wait	*Determines whether the System Wait in the IBM 3270 emulation will act as a System Wait in a non-SNA terminal.*

IBM 5250 Emulations

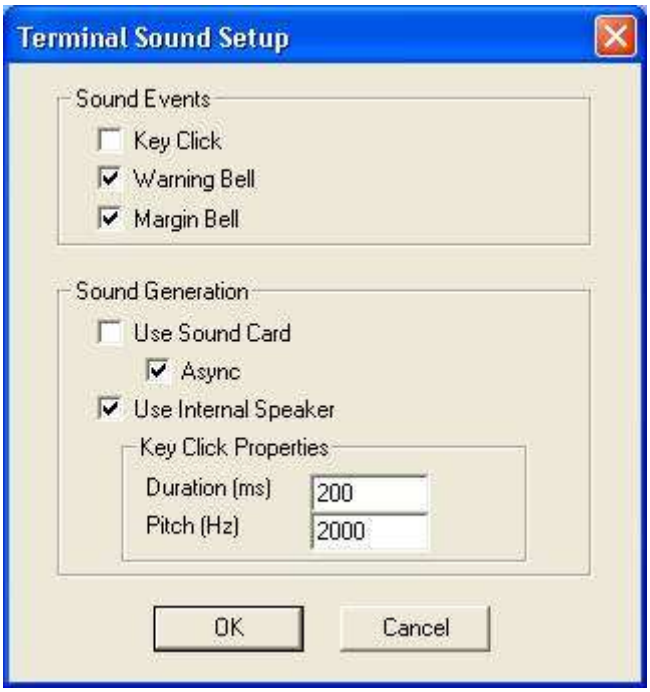


Option	***Description***
Capslock Mode	*Determines the behavior of the Caps Lock key.* ***Caps (Unix),*** *locks alphabet keys on main keypad in uppercase.* **Shift**, locks alphabet and numeric keys on main keypad in shift setting. Pressing the shift button on your keyboard will release shift-lock mode. **Reverse (Win)**, Same behavior as Caps Lock, however pressing the shift button on your keyboard reverses the caps operation. ***Always On,*** *enables you to toggle to a different application and turn Caps Lock mode off. On return to PowerTerm Pro it will automatically revert to Caps Lock on.*
Backspace Deletes	*Select to delete characters by pressing the* ***Backspace*** *key on your keyboard.*

Auto Repeat	*Repeatedly displays the character for which its key is being continuously pressed down.*
Typeahead	*Types data ahead, before the host responds.*
Automatic reset Key	*If the Keyboard is locked, a reset key sequence is generated prior to when you click on the tab key to advance to the next field.*
Numpad Decimal Sends Comma	*Determines whether the Numeric Pad sends a comma instead of a decimal.*
Use Emulator Alt Keys	*Select to make an <Alt> key perform the terminal operation even if Windows OS has an operation mapped to the same key.*

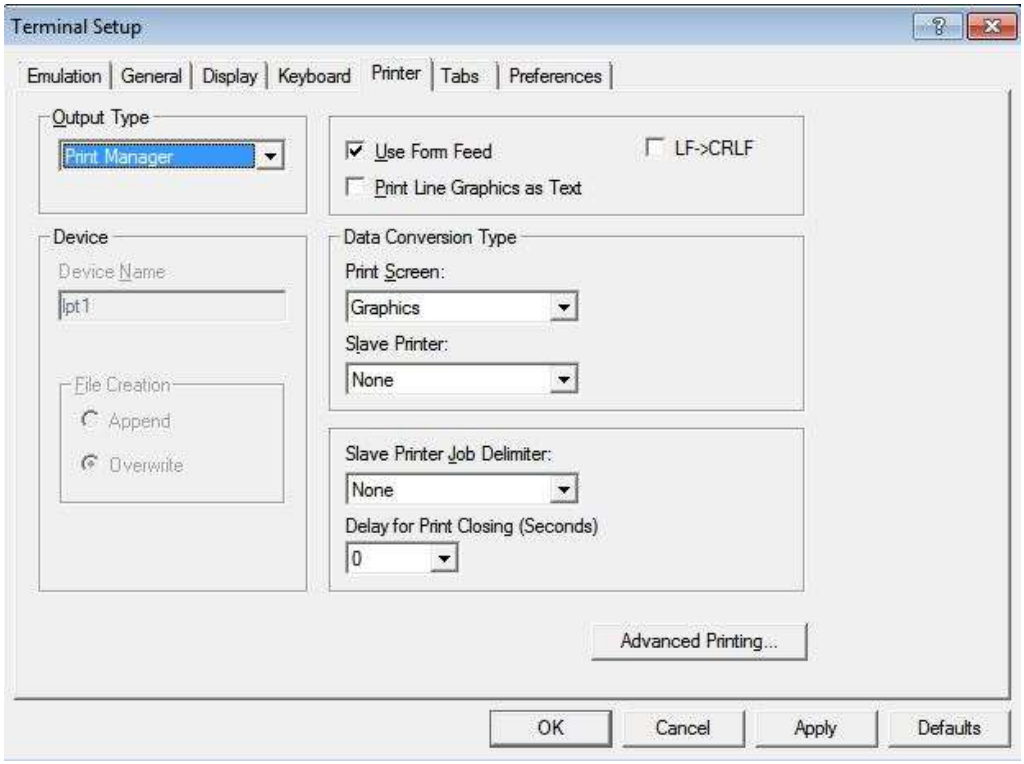
Sound:

Terminal Sound Setup



Option	*Description*
Sound Events	*Determines the behavior of the sound.* ***Key Click,*** *Emits a click sound when a key on the keyboard is pressed.* **Warning Bell**, Determines whether the terminal sounds a bell tone when receiving the "bell" (ASCII 7) character. For operating errors, mail messages, etc. **Margin Bell**, Determines whether the terminal sounds a bell tone when the cursor reaches the right margin.
Sound Generation	*Allows the user to choose whether to play sound through the sound card (speakers) or through the internal PC speaker.* ***Use Sound Card,*** *will play sounds through the speakers using the sound card. When using the sound card, PowerTerm will play keyclick.wav and warning.wav.* **Async**, determines whether to use synchronic and asyncronic sound. Asynchronic sound allows the application to continue executing while the sound is being generated. If the sound is not played asynchronously (that is, sychronously) the application will wait until the entire sound has finished playing before executing the next statement. **Use Internal Speaker**, will play sound through the internal speakers.
Key Click Properties	*Specifies the sound duration and pitch for the Key Click.* **Duration (ms),** determins the length of time the Key click sound will be played (in Mili- seconds) **Pitch (Hz)**, determines the perceived frequency of a sound between 1 to 10000 Hertz). * For playing the warning bell, PowerTerm will always use the following settings: Duration: 750 Pitch (frequency): 150

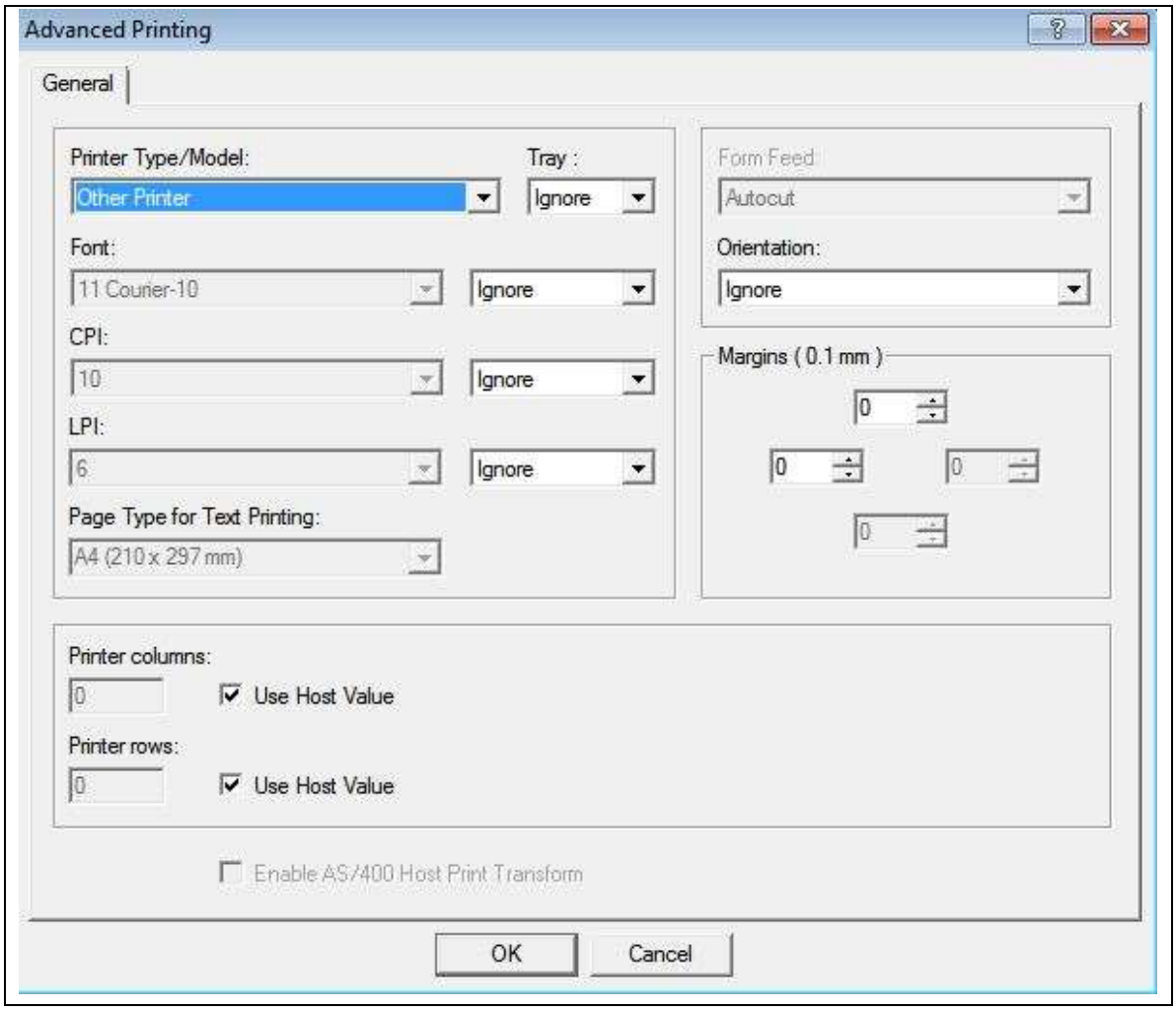
Printer Property Page



Option	***Description***
Print Device	*Allows you to select a printing output channel.* ***None**, no destination was assigned. The Device Name is disabled. Printer data is received by the terminal, but discarded (not printed).* ***Device**, sends printing to the device you designate in the Device Name text box. This can be a device such as COM1, COM2, COM3, etc. in the Device Name text box, you can also specify communication parameters. For example: COM 1:9600,8.* ***Network**, sends printing to the network printer. You must hen perform the following:* *1. Select File | Print Setup.* *2. Select Network from Port field.* *3. Type UNC (Universal Naming Convention) in the Net Path. For example, \\net1\hp4000* ***File**, sends printing to the file specified in the **File Name** text field.* **AUX**, sends printing to the auxiliary port.

Device Name	*The available printing devices are: LPT1: (default) COM x:*
File Name	*Specify if you want* ***Append*** *or* ***Overwrite*** *mode.* ***NOTE:*** *lpt1 is a saved word and cannot be used as a file name.*
Use Form Feed	*Adds a form feed (page eject) after each printing job. This depends upon the available connections on your PC.*
Print Line Graphics As Text	*Converts line graphics to text. This speeds up printing on a slow dot-matrix printer.*
LF->CRLF	*Adds a line feed after each single carriage return (one that has no line feed following it) when in slave printing mode.*
Print Screen Data Conversion	Converts data to **Host** or **UTF-8** character sets or prints in **Graphics** mode. **None**, does not convert data. ***NOTE:*** *Text mode is designated by selecting* ***Host, UTF-8*** *character sets or* ***None****.*
Slave Printer Data Conversion	Converts data to **Host** or **UTF-8** character sets or prints in **Graphics** mode. **None**, does not convert data. ***NOTE:*** *Text mode is designated by selecting* ***Host, UTF-8*** *character sets or* ***None****.*
Slave Printer Job Delimiter	*For non-IBM emulations only.* *Specifies the job delimiter character that will divide the data into print jobs, thus disabling the escape sequences arriving from the host application.*
Delay for Print Closing	*The command to close the printer queue is delayed by the number of seconds that you determine. This command only takes effect if no open command is issued in the meantime. Important for printing to cut sheet printers (for example, inkjets/lasers) and network printers.*

Advanced Printing Setup



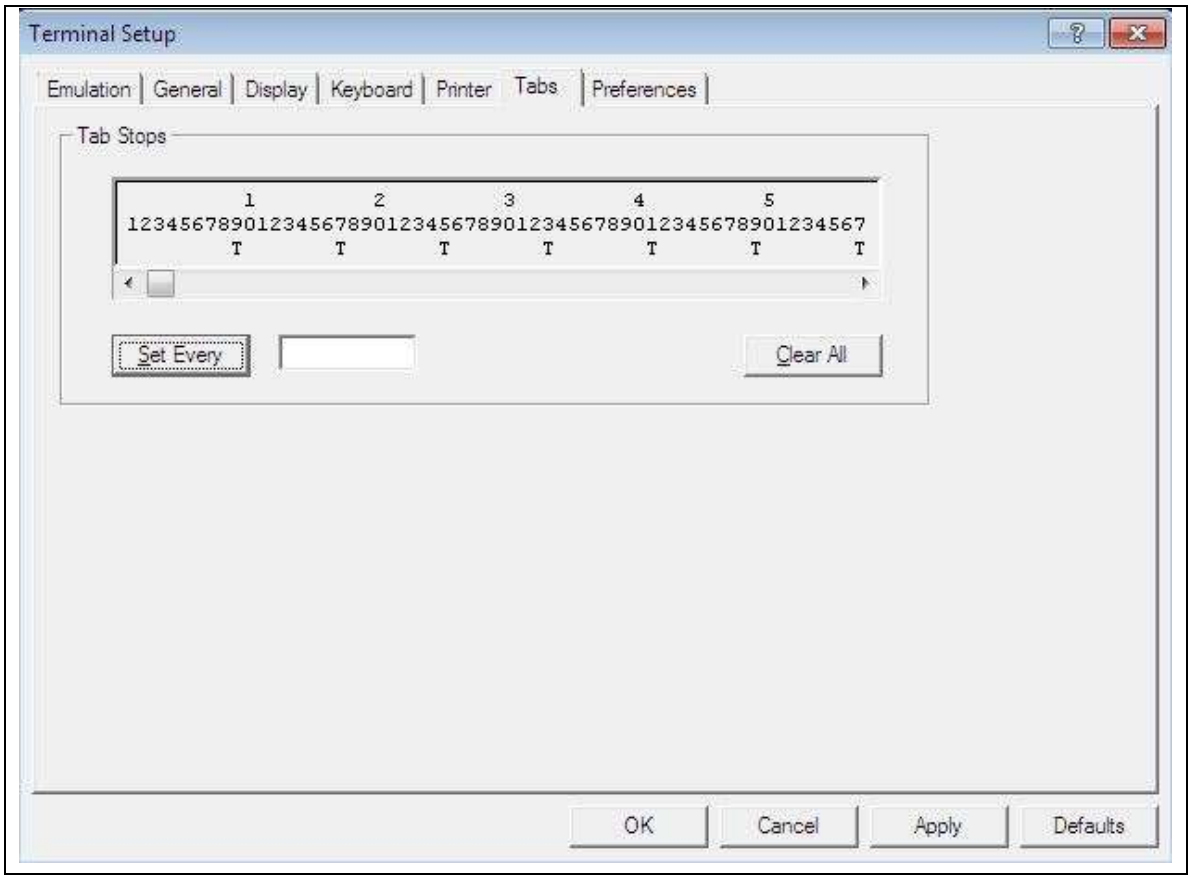
Option	***Description***
Printer Type	*For text printing only.* *Specifies the destination printer.* ***Edit*** *enables you to edit the printer configuration file.*
Margins	*Specifies the space between the edge of the printout page and the border of the printing.*
Font	*For text printing only.* *Printer default font and size will be applied to the output when* ***Ignore*** *is selected. Otherwise,* ***User*** *input will be*

	applied. ***Use Host Value*** *(5250 printer only) – AS/400 selects the font.*
CPI (Characters per Inch)	**User defined,** You select the CPI. **Use Host Value,** (5250 printer only) AS/400 selects the font CPI. You need to select **None** for **Slave Printer Data Conversion**. **Ignore,** Does not send escape, i.e. prints in the printer default font (typically 10 CPI). **Auto,** Default printer values are used. **Auto (Printer sizes),** Fits to page but uses only the predefined printer font sizes (i.e. 5,10,10,12,15,17,20 CPI).
LPI (Lines per Inch)	**User defined,** You select the LPI. **Use Host Value,** (5250 printer only) AS/400 selects the font LPI. **Ignore,** Does not send escape, i.e. prints in the printer default font (typically 6 LPI). **Auto,** Default printer values are used. **Auto (Printer sizes),** Fits to page but uses only the predefined printer font sizes (i.e. 2,3,4,6,8,10 LPI).
Printer Columns/Rows	*For graphic printing only.* *Determines the number of printer columns/rows in the output. Select Ignore to apply the number of columns on your emulation screen to the output.*
Page Type for Text Printing	*Specifies the page type (for example, A3, A4, A5 etc.)*
Form Feed	*Defines the form type of the printer. PowerTerm Pro provides the following three types:* ***AUTOCUT****, single-cut sheets are automatically fed into the printer. Most printers require a sheet feed attachment.* ***CONT****, continuous sheets are used by printers that have a tractor feed attachment on the device.* ***CUT****, single-cut sheets are manually fed into the printer.*

Orientation	*Specifies the orientation of the printed output. The default depends on your printer' settings. Options are:* ***Host,*** *receives escape sequence from the host about the page orientation.* ***Auto,*** *if the width is greater than the length then it will print in Landscape otherwise in Portrait orientation.* ***Ignore****, does not send any escape sequence.* ***Portrait****, A vertical page orientation in which the page height is greater than the page width.* ***Landscape****, A horizontal page orientation in which the page width is greater than the page height.*
Enable AS/400 Host Print Transform	*For IBM 5250 printer emulations only.* *Enabled, pass through (transparent) mode. The host sends (ASCII) command and text directly to the printer. Non-graphic printing only. Disabled, the host sends (EBCDIC) 5250 SCS format commands and text to the emulation. The emulation, in turn, translates to printer specific commands.*
Customizing Object	*Specifies the object name that you have previously defined on the AS/400. Enabled only for "Other" printer models.*
Library	*Specifies the customizing object's library on the AS/400. Enabled only for "Other" printer models.*
Drawer 1	*Specifies the size for the paper in Paper Source 1.*
Drawer 2	*Specifies the size for the paper in Paper Source 2.*
Envelope Hopper	*Specifies the size of the envelope.*
Supports ASCII Code-Page 899	*Specifies whether the printer has Code Page 899 installed.*

Tabs Property Page

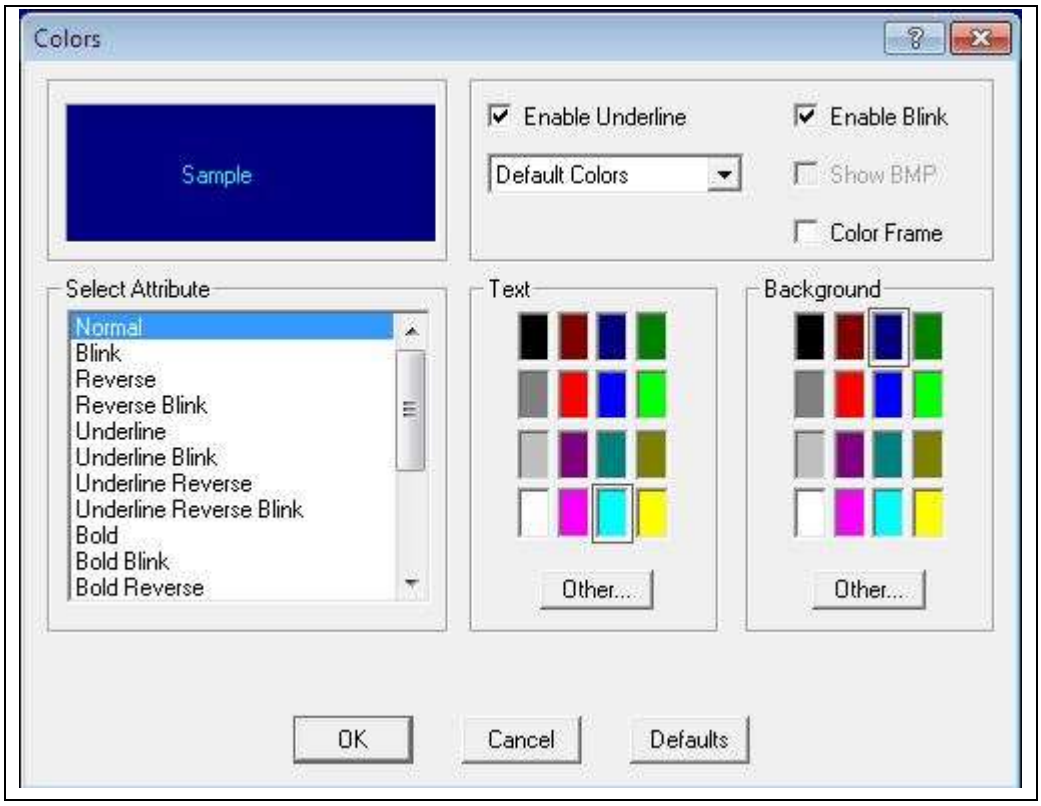
For VT emulations only.



Options	***Description***
Tabs Stops	*Click anywhere within the* ***Tab Stops*** *area to set tab stops manually.*
Set Every	*Sets a tab stop in increments of a number typed in the adjacent text field.*
Clear All	*Clears all tab stops.*

Colors Property Page

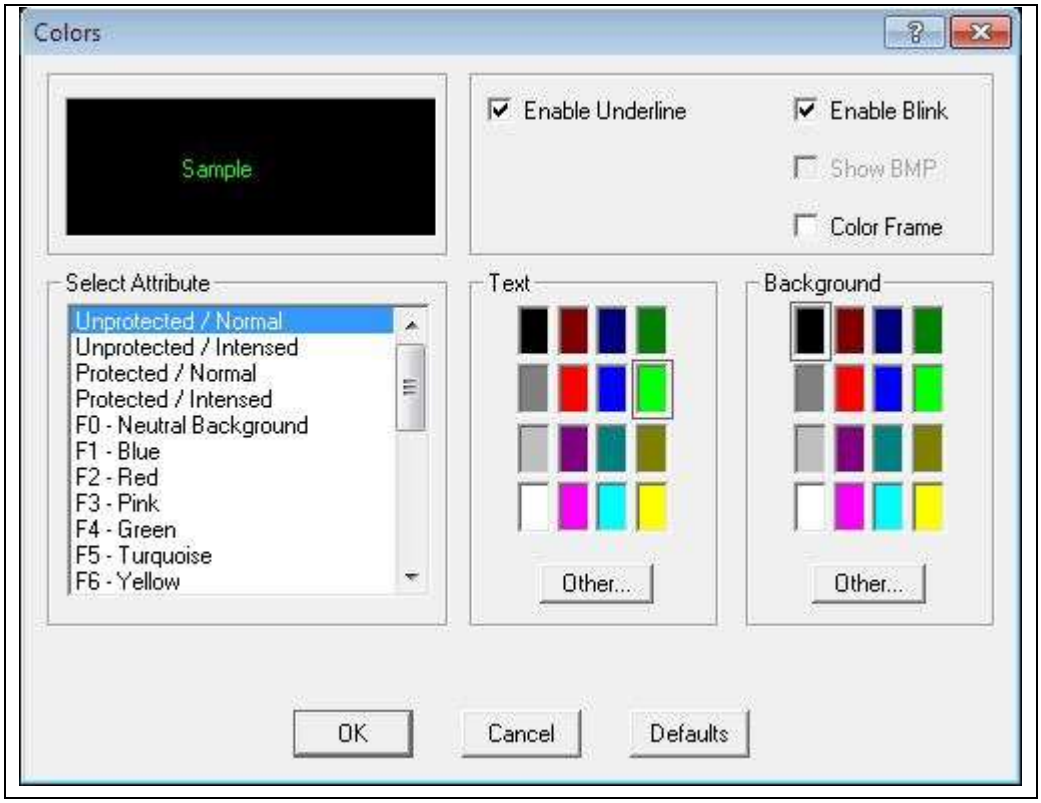
Non-IBM Emulations



Option	***Description***
Preview Box	*Shows the result of your selections.*
Enable Underline	*Enables underlined characters.* *For data transmitted from the host with the Underline attribute, clear to disable displaying data with the underline.*
Enable Blink	*Enables blinking.* *For data transmitted from the host with the blink attribute, clear to disable blinking data.*
Coloring method dropdown list	***Default****, uses the default color type for each emulation type:* *VT and Siemens – Attribute & ANSI colors* *ANSI and HP – ANSI colors* *All others – Attribute colors (i.e. not affected by setting*

	to a different value). ***Attribute**, colors based on the attributes. For example, you can select different colors for bold, for underline, and for bold/underline.* ***ANSI**, colors based on host-defined colors. For example, the host sends "red foreground on blue background" however you can select the default ANSI color. Different attributes do not affect colors.* ***Attribute & ANSI**, uses both Attribute and ANSI colors as explained above.*
ANSI 8 Color Mode	*For ANSI emulations only.* *A regular terminal has 16 colors (8 colors with the Bold attribute applied to them and 8 colors without the Bold attribute applied to them). The Background color never has the bold attribute (therefore it is "dark") while the Text (foreground) is always mapped to the color with the Bold (bright, light) attribute.* ***Non-selected**, each entity (text, background) can have any of the 16 colors mapped to them.* ***Selected**, each entity (text, background) can have any of the 8 colors mapped to them.*
Color Frame	*Select to draw a color frame on the screen.*
Select Attribute	*Select the attribute for which you want to define foreground and background colors. Attributes change according to the emulation type you selected in the Connection properties dialog. Generally, the attribute of the entire screen is **Normal**. The color for the Normal attribute determines the color of the entire work area.*
Text	*Select the color that will apply to the text (foreground) of the display.*
Background	*Select the color that will apply to the background of the text.*

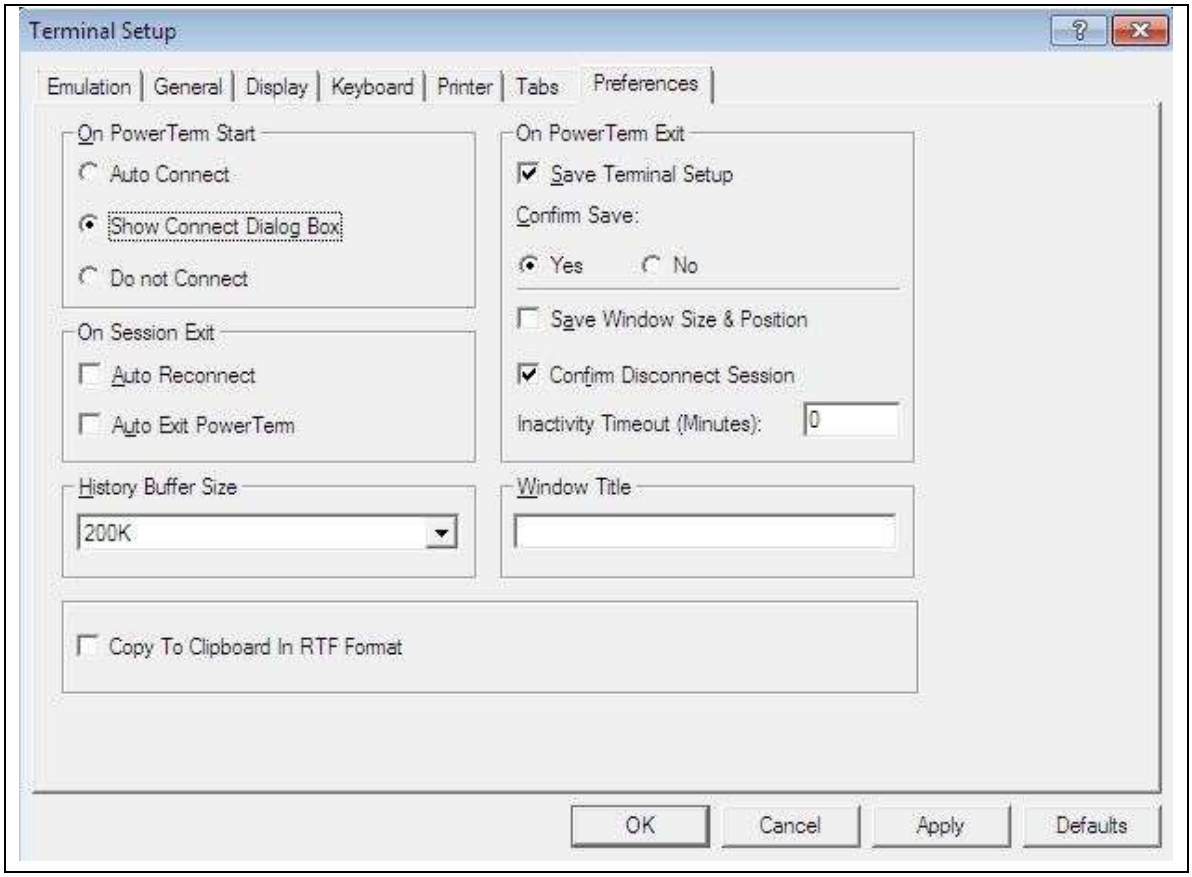
IBM Emulations



Option	***Description***
Preview Box	*Shows the result of your selections.*
Enable Underline	*Enables underlined characters.* *For data transmitted from the host with the Underline attribute, clear to disable displaying data with the underline.*
Enable Blink	*Enables blinking.* *For data transmitted from the host with the blink attribute, clear to disable blinking data.*
Column Separator	*For IBM 5250 emulations only.* *Displays a period as a column separator in fields with the column separator attribute.*
Color Frame	*Select to draw a color frame on the screen.*

Select Attribute	*Select the attribute for which you want to define foreground and background colors. Attributes change according to the emulation type you selected in the Connection properties dialog. Generally, the attribute of the entire screen is* ***Normal****. The color for the Normal attribute determines the color of the entire work area.*
Text	*Select the color that will apply to the text (foreground) of the display.*
Background	*Select the color that will apply to the background of the text.*

Preferences Property Page



Option	***Description***
On PowerTerm Start	***Auto Connect****, establishes a connection immediately with the parameters saved in the terminal parameters file.* ***Show Connect Dialog Box****, does not establish a*

	connection immediately, rather the Connect dialog opens and enables you to select required connection. ***Do not Connect**, opens only the PowerTerm Pro window.*
Window Title	*Specifies a customized name that appears on the title bar.*
History Buffer	*Specifies the size of the buffer in which data is stored, by selecting an option from the dropdown list.*
On PowerTerm Exit	***Save Terminal Setup**, the new terminal parameters (if you changed them during the session) are saved to the current terminal setup file.* ***Confirm Save**, terminal parameters are not saved automatically. PowerTerm Pro displays a dialog where you can decide whether or not to save any changes you did to the settings during the session.* ***Confirm Disconnect Session**, if you close PowerTerm Pro during a session, you will be required to confirm disconnect.* ***Save Window Size & Position**, saves the size and position of the emulation window. The next time you open PowerTerm Pro, the window appears with the desired size at the set position.* ***Inactivity Timeout**, specifies the time limit for keyboard inactivity, after which PowerTerm Pro shuts down.*
On Session Exit	***Auto Reconnect**, re-establishes communication if the line was disconnected.* ***Auto Exit PowerTerm Pro**, closes PowerTerm Pro altogether on disconnect.*

Security Settings Dialogs

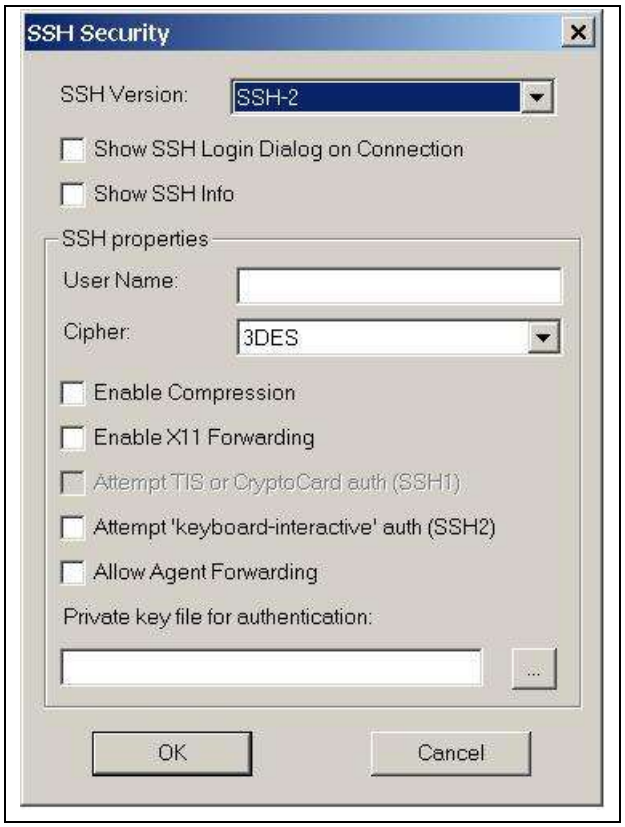
SSL Security

In the SSL Security Setup dialog you specify your SSL security behavior. You may select to accept only certificates that exist in the certificates path or any incoming certificate. You can also specify if you want to display unknown certificates at connection time and whether you want to

save them.

SSH Security

In the SSH Security dialog you can specify what type of SSH properties you require.



3. STARTING AND STOPPING SESSIONS

When PowerTerm Pro is used for the first time, the PowerTerm Pro window is automatically displayed together with the **Connect** dialog. After the connection parameters have been defined, the Connect dialog will be displayed according to your selected options.

You can determine PowerTerm Pro behavior and automate processes in the **Preferences property pages**. These remain active until you change them. For example, if you select to connect automatically at PowerTerm Pro startup, you will always be connected when you open PowerTerm Pro. Other behaviors you can customize are for example auto-reconnect and keyboard inactivity time limit.

PowerTerm Pro opens with the default terminal setup file. You can also open PowerTerm Pro using a customized setup file, or a script file.

Once you have defined terminal and communication parameters, you can then connect to a host. For more information on connections, see chapter *Defining Connections*.

The communication mode appears beside the application name on the PowerTerm Pro window title bar. When communication ends, the mode name disappears from view.

When working with more than one host, PowerTerm Pro enables you to connect to a host using customized PSL scripts. You need to define a different script with the name of each host. This option provides you with a Windows shortcut to a host. For more information about scripts, see chapter *Scripts*.

PowerTerm Pro also provides the option to modify connection parameters for COM type communications. This option is only available once you are connected to a host.

➔ **To start PowerTerm Pro:**

1. Click the **Start** button in the **Task** bar.
2. Select **Programs | Ericom Software | PowerTerm Pro | PowerTerm Pro**. The application is launched.

➔ **To define preferences:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Preferences** tab. The **Preferences property page** is displayed.
3. Select the parameters that you require.

Starting PowerTerm Pro Using a Setup File

PowerTerm Pro can be started using a default or customized setup file. A setup file contains both communication session parameters and terminal setup parameters. It is in text format and can be edited using a text editor.

The Default Setup file, called **ptdef.pts**, is used with single host connections. When you open PowerTerm Pro, it automatically uses this file to initiate terminal setup and connection parameters.

A customized setup file is used with multiple host connections and when you want to start PowerTerm Pro with predefined communication and terminal setup parameters for a specific connection. This can be done by using a command or creating a Windows shortcut. Before you create a shortcut to a setup file, you first need to create and save the setup file in PowerTerm Pro. For more information about creating and customize setup files, see chapter *Defining Connections*.

➔ **To start PowerTerm Pro with a customized setup file:**

Double-click the PowerTerm Pro shortcut icon on your desktop or access it from the Start menu. You session starts automatically with the predefined parameters.

➔ **To use a setup file during PowerTerm Pro session:**

A terminal setup file can also be opened during a PowerTerm Pro session to run a session using predefined terminal setup and communication parameters. There are two options to use a setup file:

Select **File | Open Terminal Setup**. The **Open File** dialog appears in which you can select a setup file.

Select **Communication | Connect**. The **Connect** dialog appears in which you can specify the name of the setup file to be run before communication is established.

Starting PowerTerm Pro Using a Script

You can also launch PowerTerm Pro and run a script immediately upon launching. Scripts are created with PowerTerm Pro Script Language (PSL) and enable you to automate tasks. For example you can use a script to automatically connect to a specific host. For more information about scripts, see chapter *Scripts*.

Starting PowerTerm Pro with Auto Connect

The Auto Connect option enables you to automatically connect to a specific terminal using the parameters in the default setup file.

➔ **To access the Auto Connect option:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Preferences** tab. The **Preferences Property** page is displayed.
3. Select **Auto Connect**.
4. Click **OK**.

Starting a New PowerTerm Pro Session

PowerTerm Pro enables you to run two or more sessions concurrently by opening a new instance of the PowerTerm Pro window. Each session is identified by a letter (starting with A), which appears in the session window title bar. A session is assigned the first available letter. For example, if A, B and D are opened the next session opened is assigned C.

➔ **To open a new instance of the PowerTerm Pro window:**

- Select **File | New Terminal Window**. A new instance of the PowerTerm Pro window opens.

➔ **To toggle between open sessions:**

- Press **<Ctrl>+<Spacebar>**.

➔ **To switch to a specific session:**

You can either:

- Press **<Shift>+<Ctrl>+<X>**, where X is the session letter. For example, if you want to work in session C, you would press <Shift>+<Ctrl>+<C>.
- Click the desired session's icon in the Toolbar.
- Select **Sessions |** the desired session.

Ending a PowerTerm Pro Session

You need to end the session(s) before exiting the PowerTerm Pro application. There are a few options to end a session:

Automatic closing - PowerTerm Pro enables you to close PowerTerm Pro automatically when you close a session. If you have modified terminal parameters during a session, a message displays asking if you want to save the setup file before closing.

User-initiated closing – Manually closing a session at any time.

User-initiated fast exit – Sometimes you require a fast exit while communication is in progress. PowerTerm Pro then

reacts according to the parameters selected in the Preferences property page in the **Terminal Setup** dialog.

You also have the options such as to require a confirmation when closing PowerTerm Pro during a session and to immediately re-connect again, automatically or manually (for non-IBM emulations only).

➔ **To manually close a session:**

Select **Communication | Disconnect**.

➔ **To exit PowerTerm Pro:**

1. Select **File | Exit**. If you have changed the terminal settings, PowerTerm Pro displays a warning message asking if you want to update the terminal settings file. The message will point to the name of the setup file currently loaded.
2. Click **OK** to update the file, or **NO** to cancel the latest changes and restore the original settings of the current setup file.

➔ **To fast exit the current session:**

Press **<Alt>+<F4>** on the keyboard.

➔ **To confirm disconnect:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Preferences** tab.
3. Select **Confirm Disconnect Session**.
4. Click **OK**.

➔ **To define parameters for automatic closing PowerTerm Pro when disconnecting a session:**

Close PowerTerm Pro altogether on disconnect.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Preferences** tab.
3. Select **Auto Exit PowerTerm Pro** in the **On session exit** section.
4. Click **OK**.

➔ **To manually reconnect to a PowerTerm Pro session after exiting the current session:**

PowerTerm Pro displays the following message at session termination when **Auto ReConnect** and **Auto Exit PowerTerm Pro** in the **Preferences** tab are **cleared**:

```
"Session Closed (0)

Hit ENTER to Restart Session"
```

where the exit code (in this example '0') may have one of the following values:

Zero (0)	Communication ended successfully.
Any number (other than 0)	Communication aborted. The **exit code** points to the error that caused the problem.

Press **Enter** on the keyboard.

➔ **To automatically reconnect a PowerTerm Pro session after exiting the current session:**

Re-establish communication if the line was disconnected.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Preferences** tab.
3. Select **Auto Reconnect** in the **On Session Exit** section.
4. Click **OK**.

➔ **To specify keyboard inactivity timeout:**

Specify the time limit for keyboard inactivity, after which PowerTerm Pro shuts down.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Preferences** tab.
3. Enter the amount of minutes for **Inactivity Timeout**.
4. Click **OK**.

4. DEFINING EMULATIONS

PowerTerm Pro enables you to define the terminal settings for connecting to a host. Once you have defined terminal settings, you can save them as a setup file. This file can be activated at startup or opened manually during a PowerTerm Pro session. You first have to select an emulation type and then define the other settings.

The **Emulation property page** displays the emulation terminal types available with your version of PowerTerm Pro. The emulation type that you select changes the tabs (property pages) displayed in the Terminal Setup dialog. Some emulation types also change the look of the PowerTerm Pro desktop. For example, for IBM 3270 and 5250 terminal types the work area is black and the toolbar contains fewer icons.

The **General property page** enables you to define parameters for the selected emulation type, such as:

- The ID returned by the emulation program to the host.
- Communication and keyboard character sets for both 7-bit and 8-bit data.
- The behavior of the <Enter> key.
- Whether applications on the host system can override your user-defined keys (UDKs).
- Determines the effects of the numeric keypad on your keyboard. (VT emulations only.)


The selected host application will usually determine the default option.

➔ **To define emulation parameters:**

1. Select Terminal | Setup. The Terminal Setup dialog appears.
2. Select the Emulation tab. The Emulation property page is displayed.
3. Select the terminal type that you require from the list of supported emulations.
4. Select the General tab. The General property page is displayed.
5. Select the emulation parameters you require.
6. Click OK.

General parameters

➔ To define host's ID response:

This option is disabled when you are connected to a host.

In the **General** tab, select **Terminal ID** from the dropdown list.

➔ To specify type of Cursor coupling:

In the **General** tab, select **Vertical** to move the cursor past the top or bottom border of the user window, or **Page** to move the cursor to a new page.

Non-IBM specific parameters

➔ To define communication and keyboard character set:

The available character sets change according to emulation type selected.

In the **General** tab, select the **NRC/UPS** set required from the dropdown list.

➔ To prevent the host to override your function keys:

In the **General** tab, select **User Defined Keys Locked**.

➔ To set the terminal to be online/offline:

In the **General** tab, select or clear **Online**.

➔ To define the Enter key behavior:

In the **General** tab, select **New Line**.

➔ To show a status line:

Specify if you want your session's or the host's status line.

In the **General** tab, select **Indicator** or **Host Writable**.

IBM specific parameters

➔ To define scaled/unscaled screen:

In the **General** tab, select or clear **Unscaled Screen**.

➔ To display host response time:

In the **General** tab, select **Show Response Time**.

➔ **To define cursor appearance:**

In the **General** tab, select if you want a **Block** or **Underline** display.

➔ **To define GUI appearance:**

In the **General** tab, select **Power GUI** or **Show Frame** to display a "different" look of the work area.

➔ **To define the code page:**

In the **General** tab, select **Host** and **PC Code Pages** in the dropdown lists.

➔ **To specify the alternate size:**

In the **General** tab, select **Enable** and enter the **Rows** and **Cols** (columns) sizes.

VT specific parameters

➔ **To define the numeric keypad mode:**

The Num Lock key toggles between numeric keys or arrow keys.

In the **General** tab, select **Numeric** and **Numlock**.

➔ **To define the application keypad mode:**

The Num Lock key toggles between numeric keys or application keys.

In the **General** tab, select **Application** and **Numlock**.

ASCII specific parameters

➔ **To show the labels line:**

Display a status line at the top and the bottom of the emulation screen.

In the **General** tab, select **Labels Line**.

5. DEFINING CONNECTIONS

You can create different connections according to your needs. The connection parameters that you define will remain active only for the current session, unless you save them.

The default setup name is the name of the connection. Customized settings should be saved with a name other than its current name when the PowerTerm Pro session is running.

You can also delete connections that are no longer in use.

➔ **To define a connection:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select **Session Type** and enter required parameters.
3. Select the **Terminal Type** and **ID**.
4. Select the desired **Security** to be employed in the connection.
5. Specify, if necessary, the **Script** and/or **Setup** files to be run upon connection.
6. Click **Connect**.

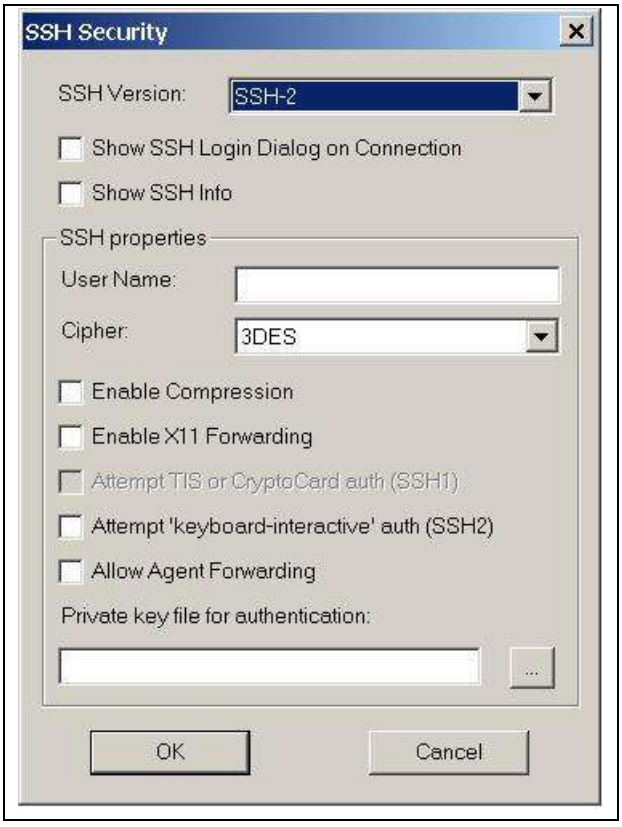
➔ **To specify SSL Security parameters:**

1. Select **SSL** in the **Security Type** dropdown list and click **Details**. The **SSL Security** dialog is displayed:

7. Select the desired SSL Version and click OK.

➔ **To specify SSH Security parameters:**

1. Select **SSH** in the **Security Type** dropdown list and click **Details**. The **SSH Security** dialog is displayed:



2. Select the desired SSH Version.
3. Specify the SSH properties.
4. Click OK.

➔ **To save a connection:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select **Session Type** and enter required parameters.
3. Select the **Terminal Type** and **ID**.
4. Select the desired **Security** to be employed in the connection.
5. Specify, if necessary, the **Script** and/or **Setup** files to be run upon connection.
6. Click **Add Session button**.
7. Enter a **Session Name** and click **Apply**. The connection is displayed in the **Sessions List**.

➔ **To use an existing connection:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select the desired session from the **Sessions List**.
3. Click **Connect**.

➔ **To modify connection parameters:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select the desired session from the **Sessions List**.
3. Make desired changes in the parameters.
4. Click **Apply**.

➔ **To rename a session:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select the desired session from the **Sessions List**.
3. Double-click on the session name to **rename**.
4. Enter a new **Session Name** and click **Apply**

➔ **To delete a connection:**

1. Select **Communication | Connect**. The **Connect** dialog appears.
2. Select the desired session from the **Sessions List**.
3. Click the **Delete Session button**. A confirmation notification is displayed.
4. Click Yes. The connection is deleted.
5. Manipulating the Desktop and Selecting Text

PowerTerm Pro enables you to customize the PowerTerm Pro window by displaying or hiding desktop components and changing the display colors

for different text attributes. The color attributes change according to the emulation type you have selected.

This chapter also presents specific text selection techniques that you may find useful in different emulations.

Show/Hide Desktop Components

Most components are displayed or hidden according to your selection in the Options menu.

➔ **To show/hide the Menu bar:**

1. Select **View | Menu**. This conceals the **Menu** bar.
2. Right-click on the title bar and choose Restore Menu. The Menu bar is shown again.

Or,

Map a Soft button with the following PSL command: `menu restore`

➔ **To show/hide the Soft buttons:**

Select **View | Function Buttons**. Select again to redisplay the Soft buttons bar.

➔ **To show/hide the Status bar:**

Select **View | Status Bar**. Select again to redisplay the Status bar.

➔ **To show/hide the Power Pad:**

Select **Options | Show Power Pad**. The menu option becomes **Hide Power Pad**.

Select again to hide the Power Pad.

➔ **To show/hide the History Scroll bar:**

For non-IBM emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab. The **Display property page** is displayed.
3. Select or clear **History Scroll Bar** in the **General** section.
4. Click **OK**.

Changing the Desktop Display

You can customize your desktop display in numerous ways, for example

change colors of background and/or text, change the cursor display, change the work area dimensions, as well as select fonts and GUI language.

➔ **To change the GUI language:**

In the **Terminal** menu, select the desired language.

Setting Fonts

PowerTerm Pro enables you to use standard system fonts or select special PowerTerm Pro fonts to be displayed in the PowerTerm Pro window.

System fonts are standard general-purpose fonts, which different attributes can be set.

PowerTerm Pro fonts are scaleable fonts, automatically calculated according to the screen size of the host application and whether the **Unscaled** screen option is selected or not.

➔ **To work with PowerTerm Pro fonts:**

Select **Terminal | PowerTerm Pro Fonts**. The PowerTerm Pro window will now display PowerTerm Pro fonts.

➔ **To work with system fonts:**

1. Select **Terminal | System Fonts**. The **Font** dialog appears.
2. Select the font, style, and size as you desire.
3. Click **OK**. The PowerTerm Pro window will now display the selected system font.

➔ **To work with VT soft fonts:**

For VT emulations only.

The fonts will be loaded from the host application.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab. The **Display property page** is displayed.
3. Select **Enable soft fonts**.

➔ **To lock font size:**

Characters appearing in the work area are scaled and their size will change proportionally when changing the desktop size.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab for non-IBM emulations and the **General** tab for IBM emulations.

3. Select **Unscaled Screen** to lock the font size.

➔ **To wrap words at the end of a line:**

For non-IBM emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab. The **Display property page** is displayed.
3. Select **Autowrap Characters**.

Setting Color

➔ **To change the display color of the PowerTerm Pro window:**

The color for the **Normal** attribute determines the color of the entire work area. The box above the **Select Attribute** parameter shows the result of your selections. The Select Attribute of the entire screen is generally Normal for non-IBM emulations.

1. Select **Terminal | Color**. The **Color property page** is displayed.
2. Select the **attribute** for which you want to define foreground and background colors. Notice that the attributes change according to the emulation type you selected previously.
   In the **Text** area, select the color that you want to apply to the text (foreground) of the display.
   In the **Background** area, select the color that you want to apply to the background of the text. The preview box above the Select Attribute parameter shows the result of your selections.
3. Click **OK**.

➔ **To reverse display colors:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab. The **Display property page** is displayed.
3. Select **Reverse Display Colors**.

➔ **To specify ANSI/Attribute colors:**

For non-IBM emulations only.

Select **Terminal | Colors**. The **Colors property page** is displayed.

1. Select your preference in the **Default Colors** drop down list.

Setting work area

➔ **To specify dimensions of screen:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.

2. Click the **Display** tab. The **Display property page** is displayed.
3. Select if you want **80** or **132 Columns** or enter your own number of columns in **Other**.
4. Select how many **Lines per screen** you want, from the dropdown list.
6. You can also specify if you want to Limit the font size.

➔ **To change the appearance of the PowerTerm Pro window:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab for non-IBM emulations and the **General** tab for IBM emulations.
3. Select **Power GUI** or **Show Frame** as desired.

➔ **To specify pace at which data is displayed:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab. The **Display property page** is displayed.
3. Select if you want **Smooth** or **Jump** scrolling.
4. Select **Jump Scroll Speed** from the dropdown list.

➔ **To set tabs in the work area:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Tabs** tab. The **Tabs property page** is displayed.
3. Click in the ruler where you want to set a tab. A 'T' will appear.
4. Click the 'T' to clear it.
5. You can also specify a certain interval between the tabs by entering a number and then click **Set Every**.

➔ **To set cursor coupling:**

For non-IBM emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **General** tab. The **General property page** is displayed.
3. Select **Vertical** and/or **Page** for when the cursor moves past the top or bottom border of the user window or to a new page respectively.

➔ **To display a cursor ruler:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab for non-IBM emulations and the **General**

tab for IBM emulations.

3. Select **Visible** to display the cursor ruler.
4. Select **Crosshair/Horizontal/Vertical** appearance of the cursor ruler.

To change cursor appearance:

For IBM 3270 and 5250 display emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Display** tab for non-IBM emulations and the **General** tab for IBM emulations.
3. Select in **Cursor** the desired appearance (Block or Underline).
4. Select Ins Change to enable toggling the cursor between underline and block appearance. This will impact the behavior of the Ins (Insert) button on your keyboard.

To display the status line in the emulation window:

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **General** tab. The **General property page** is displayed.
3. Select desired option in the **Status Line** dropdown list.

To display the Labels line in the emulation window:

For ASCII emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **General** tab. The **General property page** is displayed.
3. Select **Labels Line**.

To show host response time:

For IBM emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **General** tab. The **General property page** is displayed.
3. Select **Show Response Time.**

To disable/enable underlined data:

If data is transmitted with the underline attribute, you can disable the underline by clearing this parameter.

Select **Terminal | Colors**. The **Colors property page** is displayed.

1. Select/Clear **Enable Underline** as desired.

➔ **To disable/enable blinking data:**

You can choose whether to enable blinking of data, which was received from the host with the blinking attribute.

Select **Terminal | Colors**. The **Colors property page** is displayed.

1. Select/Clear **Enable Blink** as desired.

➔ **To set column separator:**

For IBM 5250 emulations only.

1. Select **Terminal |** Colors. The **Colors property page** is displayed.
2. Select **Column Separator**.

Selecting Text

General selection techniques

➔ **To select a word:**

In the work area, just click a word to select it.

<Ctrl> + clicking the word will select the word and any punctuation marks or other symbols, up to the first space that follows them.

If the **Automatic Copy** option in the **Edit** menu is active (default), selecting text also copies the selection to the clipboard.

➔ **To select full lines:**

Point to a line, hold down the **<Shift>** key on the keyboard and drag the mouse to the last line you want to include in the selection.

➔ **To select a string:**

1. Point to the first character that you want to include in the selection.
2. Drag the mouse to the last character that you want to include in the selection and release the mouse button.

➔ **To select the entire screen:**

Select **Edit | Select Screen**.

VT emulations' specific techniques

➔ **To select a block:**

A block is any rectangular section or the work area.

Point to one corner of the block, hold down the **<Ctrl>** key on the keyboard and drag the mouse to the opposite corner of the block you want to include in the selection.

➔ **To select a menu entry:**

Double-clicking on a word sends that word to the host followed by an **<Enter>** signal. Use this feature to select a menu entry. For example, if the emulation screen displays the menu of an application residing on the host, click a menu entry to activate the program that the menu entry represents.

IBM emulations' specific techniques

➔ **To select a block:**

A block is any rectangular section or the work area.

Point to one corner of the block and drag the mouse to the opposite corner of the block you want to include in the selection.

➔ **To map arrow keys that enable Shift + arrow key combination to perform text selection:**

1. Run psl command 'set select-key-highlight on'.
2. Click on the Shift key in the PC keyboard.
3. Click on the Shift key in the 3270 keyboard. The SelUp, SelDN, SelLf and SelRt keys are visible.
4. Drag the SelUp, SelDN, SelLf and SelRt keys on the 3270/5250 keyboard to their respective arrow key positions on the PC keyboard as shown below:

➔ **To activate light pen support:**

For IBM 3270 emulations.

In certain fields double-click on the screen is equivalent to touching the screen with a light pen.

6. KEYBOARD SETTINGS

PowerTerm Pro enables you to map PC keys to host keys in order to emulate the host terminal keyboard. The keyboard mapping definitions are stored in a file with the same name as the current terminal setup file, with the extension .ptk. For example, the default keyboard mapping definitions are stored in a file called ptdef.ptk.

You can also modify your keyboard to behave in certain ways such as having the Backspace key send either backspace or delete, or letting the Numpad send a comma.

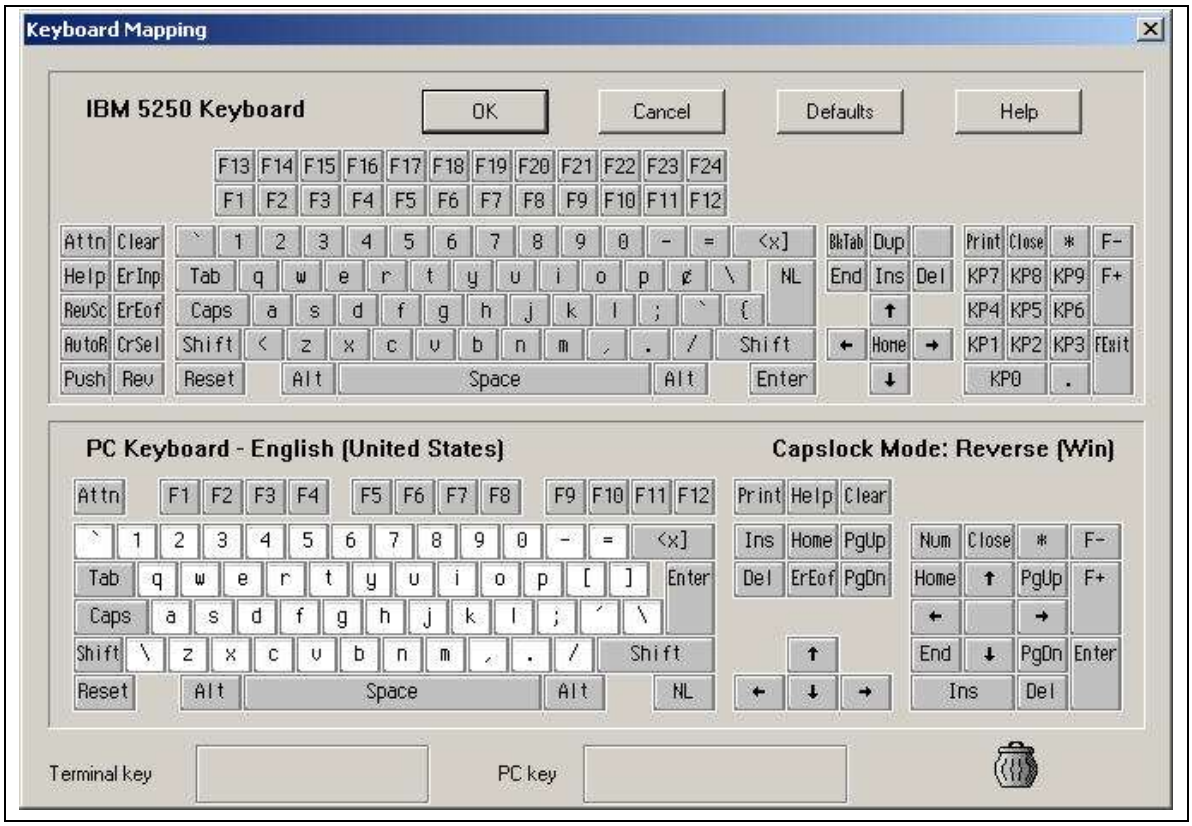
Mapping Keys

The Keyboard Mapping dialog is presented in three colors:

Gray, is a virtual (terminal) key

White, is an OS character

Yellow, is an OS dead character



➔ **To view the keyboard mapping:**

1. Select **Options | Keyboard Map**. The **Keyboard Mapping** dialog appears.

2. Slide the mouse pointer over the different keys. The bottom line of the dialog shows you the corresponding PC and terminal keys. For example, if you point to the "t" key of the VT keyboard, you see that the corresponding PC key is "T".

➔ **To map a PC key:**

Drag a key from the upper terminal keyboard to a PC key on the lower keyboard.

Click the **<Shift>** or **<Ctrl>** keys on the terminal keyboard to display additional key functions. For example, if you click the <Shift> key, the alphabet keys on the terminal keyboard are displayed in upper case. You can then map (drag) these keys to your PC keyboard keys.

➔ **To assign a script command to a PC key:**

1. Right-click a key on the PC keyboard that you want to assign a command and select **Enter Script Commands**. The **PC Button** dialog appears.
2. Enter the desired script command and click **OK**. The PC key has now been assigned a script command.

➔ **To map combinations of keys that include Alt, Ctrl, and Shift:**

Click the **<Alt>**, **<Ctrl>** or **<Shift>** key (or any combination of them) on your PC keyboard. Then map keys by following the procedure described previously.

Click the required **<Alt>**, **<Ctrl>** or **<Shift>** key (or any combination of them) to view the mapped keys.

➔ **To cancel a key definition:**

Drag the PC key definition that you want to cancel to  . This restores the default function of the PC key.

➔ **To replace a PC key with another PC key:**

PowerTerm Pro enables you to move the functionality of a mapped PC key to another PC key. For example, you can drag the F6 key on the PC keyboard to the spacebar on the PC keyboard to give it F6 functionality.

Drag the desired PC key onto the PC key that it will replace. The functionality of the PC key has been replaced.

Drag the original key back to its initial position to restore the values.

➔ **To copy a PC key to another PC key:**

PowerTerm Pro enables you to copy the functionality of one PC key to another PC key.

1. Select the PC key whose function you want to copy to the required PC key and right-click **Copy**.
7. Select the PC key to where you want to copy the function and right-click Paste. Both keys now have the same functionality.

➔ **To restore the default keyboard mapping of all mapped keys:**

Click **Defaults** in the **Keyboard Mapping** dialog.

Saving and Opening Keyboard Mapping Settings

PowerTerm Pro enables you to save keyboard-mapping settings separately and open them at a later date.

➔ **To save keyboard mapping settings:**

1. Select **File | Keyboard File > Save**. The **Save Keyboard File** dialog is displayed.
2. Enter a **File Name**.
3. Click **Save**.

➔ **To open a predefined keyboard mapping settings:**

1. Select **File | Keyboard File > Open**. The **Open Keyboard File** dialog is displayed.
2. Select the required keyboard settings from the list.
3. Click **Open**. Parameters defined in the selected keyboard settings are now applied to the current session.

Keyboard Behavior

You can customize your keyboard.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Select the behaviors you desire and click **OK**.

➔ **To lock alphabet keys in uppercase:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.

2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Select **Caps (Unix)**.

➔ **To lock alphabet and numeric keys in shift setting:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Select **Shift**.

➔ **To reverse the Caps Lock:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Select **Reverse (Win)**. Pressing Shift on your keyboard reverses the caps operation.

➔ **To keep Caps Lock mode On:**

You can turn Caps Lock Off in a different application and keep it On in PowerTerm Pro.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Select **Always On**.

➔ **To set the Backspace key:**

The Backspace key can either send **Delete** or an actual **Backspace**.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select or clear **Backspace Key Sends Delete** as you desire and click **OK**.

➔ **To automatically repeat a character:**

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Auto Repeat** and click **OK**. The character will display repeatedly when you continuously press its key on the keyboard.

➔ **To emit a sound when certain actions are taken:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.

2. Click the **Keyboard** tab. The **Keyboard property page** is displayed.
3. Click **Sound > Key Click** to emit a click sound when you press a key on the keyboard.
4. Select **Margin Bell** to emit a bell tone when the cursor reaches the right margin.
5. Select **Warning Bell** to emit a bell tone when receiving the "bell" (ASCII 7) character.

➔ To set the effects of the numeric keypad:

For VT emulations only.

1. Select **Terminal | Setup** and click the **General** tab.
2. Select **Numeric** if you want the keypad to insert numbers.
3. Select **Application** if you want to generate control sequences.
4. Select or clear **Numlock** to set the NumLock key behavior: **Cleared**, the NumLock behaves as a regular emulation key. It will not change the NumLock keyboard status. **Selected**, the NumLock will toggle between function states, enabling either numeric keys or arrow keys.
5. Click **OK**.

➔ To set the numpad decimal:

The numeric pad's decimal key can send either a decimal or a comma.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select or clear **Numpad Decimal Sends Comma** as you desire and click **OK**.

➔ To use emulator Alt key:

Let the <Alt> key perform the terminal operation even if Windows OS has an operation mapped to the same key.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Use Emulator Alt Keys** and click **OK**.

➔ To display keyboard input:

Display the keyboard input even if the host system does not echo your input. The input will not be displayed if this option is cleared unless the host system echoes the characters.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Local Echo** and click **OK**.

To set an LK450 Digital keyboard:

For non-IBM emulations only.

Change your keyboard to work in Digital VT keyboard mode.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Use VT Keyboard Mode** and click **OK**.

To display an answerback message:

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Specify your desired **Answerback Message**.
3. **Clear** to delete the message.
4. **Conceal** to hiding the message without erasing it.
5. Select **Auto Answerback** to let the terminal automatically send the message to the host system.
6. Click **OK**.

To lock numeric fields:

For IBM 3270 emulations only.

Lock the keyboard to avoid entering non-numeric data.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select Lock Numeric Fields and click **OK**.

To unlock numeric fields:

For IBM 3270 emulations only.

You can enter non-numeric data in numeric fields in two ways.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Lock Numeric Fields** twice so it becomes selected but grayed out. Non-numeric data can be typed in the field only if **<Shift>** is pressed at the same time.
3. Clear **Lock Numeric Fields**. All data can be typed in the field.

To type ahead:

For IBM emulations only.

Continue to type data before the host responds.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Typeahead** and click **OK**.

To set automatic reset:

Generate a reset key sequence prior to advance to the next field.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Automatic Reset Key** and click **OK**.

To set SNA system wait:

For IBM 3270 emulations only.

1. Select **Terminal | Setup** and click the **Keyboard** tab.
2. Select **Non SNA System Wait** and click **OK**.

7. SOFT BUTTONS AND POWER PAD

Along the bottom of the PowerTerm Pro window are twelve programmable **Soft buttons**, by default named from F1 to F12. These can be renamed and programmed to execute customized scripts or to send individual commands to the host. For example, clicking the F1 Soft button is equivalent to sending F1 to the host.

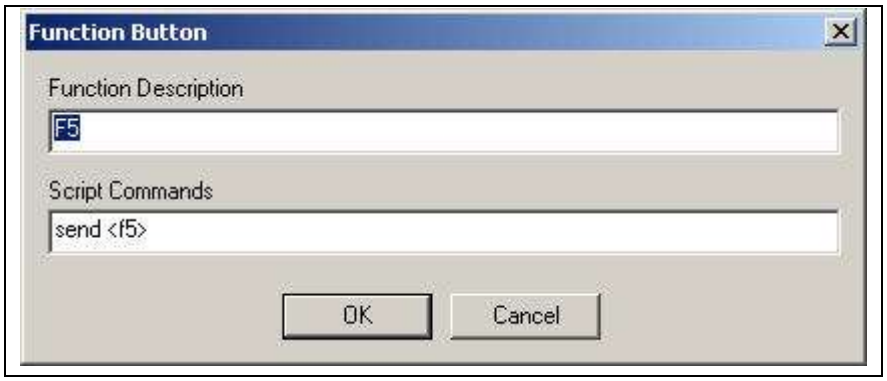
Soft buttons settings are saved automatically in the terminal setup file.

The **Power Pad** is a floating keypad that contains buttons, which can be programmed to execute customized PSL scripts. You can also change their names and adjust the number of buttons displayed in the Power Pad. Power Pad buttons are named by default F1, F2, F3 and so on, with a few default function names, such as **Clear**, **Enter**, and **Insert**. For example, clicking on the F1 button is equivalent to sending F1 to the host.

Power Pad settings are saved in separate files with the .pad extension.

➔ **To program Soft buttons:**

1. Right-click the Soft button that you want to program. The **Function Button** dialog is displayed:

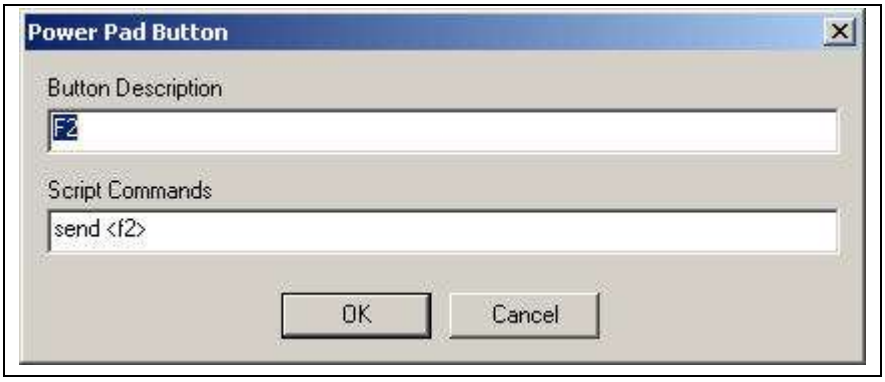


2. Enter the Function Description (the new name that will appear on the button).
3. Enter a Script Command, or script commands separated by semicolons.
4. Click OK. The Soft button is now displayed with its new name. Clicking on it will execute the newly defined script command.

➔ **To program the Power Pad:**

1. Select **Options | Show Power Pad** or click  . The **Power Pad** is displayed.

2. Right-click the Power Pad button that you want to program. The Power Pad Button dialog is displayed:



3. Enter Button Description (the new name that will appear on the Power Pad button).
4. Enter a Script Command, or script commands separated by semicolons.
5. Click OK. The Power pad button is now displayed with its new name. Clicking on it will execute the newly defined script command.

➔ **To adjust the number of buttons in the Power Pad:**

You can display a maximum of 10 rows and 10 columns in the Power Pad. The default number of buttons is 9 rows and 4 columns.

1. Select **Options | Power Pad Setup**. The **Power Pad Setup** dialog is displayed:

6. Click the dropdown list to select the number of rows and columns that you want the Power Pad to contain.
7. Click OK. The Power Pad is displayed with the specified number of rows and columns.

➔ **To save your Power Pad settings:**

2. Select **File | Power Pad File > Save**. The **Save Power Pad File** dialog is displayed.

3. Enter a **File name** and click **Save**.

➔ **To open predefined Power Pad settings:**

1. Select **File | Power Pad File > Open**. The **Open Power Pad File** dialog is displayed.
2. Select the required Power Pad file and click **Open**. Parameters defined in the selected Power Pad setup are now applied to the current session.

8. PRINTING

Printer emulation is the printing of data from a host to personal printers connected to personal computers (PC). Host applications generate print jobs that can be printed on host attached printers or printers attached to PCs. The actual location of the printer is transparent to the host application. Print emulation is the receiving of data in host format or languages and converting it to printer format and languages.

PowerTerm Pro InterConnect enables you to define print parameters in order to print the terminal screen or data transferred from the host application.

PowerTerm Pro InterConnect supports three methods of printing host information to local or network-accessible printer resources:

- Screen printing, allows printing what is on the display using 'print screen' features of the client operating system. You can direct the printer output to a printer attached to the client computer or to a network-accessible resource.
- Client-redirected printing, delivers a host printer data stream to the appropriate emulation application running on a client computer. The client software converts the data stream into data that can be output to a locally attached or network-accessible printer resource.
- Server-based redirected printing, uses a server process to convert SNA host printer data streams into data that can be redirected to a locally attached or network-accessible printer resource defined with the Windows NT Server Printer Manager.

In most cases, you do not have to modify the standard printer stream before sending it to a defined printer. If you need to change, the Printer property page and Advanced Printing setup dialogs enables you to define printing parameters.

Printing can be done in either Text or Graphic mode. For IBM 5250 printing emulations there is also the option to enable Host Transform printing.

Advanced Printing

More specifically in regards to Advanced Printing setup, if the user wants to format line data in a format other than that which was originally generated by the application, additional information must be provided in the page format. This additional information defines the following:

Locations and lengths of fields in the input record

Placement, direction, and font for each field, as it is mapped into page format

Suppression of fields, which is usually specified if multiple-

page copies are printed with field suppressions on selected copies.

The two different modes, Text and Graphic, impact which fields are functional in the Advanced Printing Setup dialog:

Text mode is designated in the Printer property page by setting the two data conversion combo boxes (**Print Screen** or **Slave Printer**) to non-graphic values (**Host**/**None**/**UTF-8**). Either the host instructs the printer or you specify the desired print escape sequences in a .ped file.

Graphics mode is graphic printing. It is designated in the Printer property page by setting the two data conversion combo boxes (**Print Screen** or **Slave Printer**) to **Graphics**.

General Printing Operations

➔ **To define a printer via the Windows Print Manager:**

1. Select **File | Print Setup**. The **Print Setup** dialog appears with a set of printing parameters. The displayed parameters change according to the printer you select. For details, consult your printer documentation.

Specify desired printer parameters and click OK

➔ **To print accumulated data displayed in the work area:**

2. Select File | Start Auto Print. The Start Auto Print command starts accumulating incoming data while it is displayed on the screen, and the menu option changes to Stop Printing.
3. Select File | Stop Printing. The Stop Printing command prints all the data accumulated in the printing buffer of the slave printer, or in the auto print buffer. If data was buffered with a printing request and communication failed before the data was sent to the slave printer, select this command to print the accumulated data.

➔ **To define printing parameters:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer tab. The Printer property page is displayed.
3. Select the parameters that you require.

➔ **To select a specific device or file as the printing output channel:**

> When **Graphics** is selected for **Print Screen Data Conversion/Slave Printer Data Conversion**, the **Print Manager** is automatically used as the printing output channel, regardless of the **Print Device** that has been selected.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer tab, and from the Print Device dropdown list select Device or File.
3. Enter your print communication port or file in the Device Name field and click OK.

➔ **To configure the OS default printer as the printing output channel:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer tab, and from the Print Device dropdown list select Print Manager.

➔ **To add a form feed after each printing job:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer tab, and select Use Form Feed.

➔ **To define the form type of the printer:**

PowerTerm Pro provides three types of form type:

Autocut	Single-cut sheets are automatically fed into the printer. Most printers require a sheet feed attachment.
Cont	Continuous forms are used by the printers that have a tractor feed attachment on the device.
Cut	Single-cut sheets are manually fed into the printer.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer property page.
3. Click Advanced Printing. The Advanced Printer Setup dialog appears.
4. Select the desired Form Feed.

➔ **To add a line feed after each carriage return:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer tab, and select LF->CRLF.

➔ **To convert line graphics to text:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab, and select **Print Line Graphics as Text**.

➔ **To specify the character or symbol to separate one printing job from another:**

For non-IBM emulations only.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab, and select **Slave Printer Job Delimiter**.

➔ **To delay print closing:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab, and select **Delay for Print Closing**.

➔ **To change page orientation:**

Default orientation depends on your printer's settings. The options are: Ignore, Portrait and Landscape.

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the Printer property page.
3. Click Advanced Printing. The Advanced Printer Setup dialog appears.
4. Select desired page Orientation in the dropdown list.

➔ **To set an LU/Device name:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. From the Emulation tab, select either IBM 3270 or 5250 Display, and click OK.
3. Select Communication | Connect. The Connect dialog appears.
4. Select your Session Type and enter the IBM Host Name.
5. In the LU/Device Name field, specify the device name for the emulation session. The maximum length of the assigned LU name is 8 characters, while that of Device name is 10 characters.
   When using multiple sessions, enter a plus sign (+) after the

name (e.g. John+) and each session will automatically be assigned a new name (John1, John2, etc.).

LU Rules

"lu-rule" is any valid data that can be put in the lu/device-name field such as DEV*, DEV+++, DEV3-, etc. These rules can be applied for multiple hosts as follows:

`host1(lu-rule1a,lu-rule1b,...),host2(lu-rule2a,lu-rule2b,)...`


Maximum of 10 lu-rules for each host.

Automatic Name Generation according to User's Rules

TN3270 LU Name and TN5250 Session Device Name Options

Device Name

Entered	Assigned
DEV-	DEV0 to DEV9
DEV--	DEV00 to DEV99 And so on …
DEV+	DEV1 to DEV9
DEV++	DEV01 to DEV99 And so on …
Session Pool device name (3270 and 5250)	
*DEV**	*DEV1 to DEV9*
*DEV***	*DEV01 to DEV99 And so on …*
DEV-3	*DEV0 to DEV3DEV-30*
DEV-30	*DEV00 to DEV30 And so on …*
*DEV+3 or DEV*3*	*DEV1 to DEV3*
*DEV+30or DEV*30*	*DEV01 to DEV30 And so on …*

The difference in behavior between specific LU/Device naming, specific LU/Device naming by Session ID and pool LU/device naming can be demonstrated in the following examples:

Specific LU/Device Naming

A specific name like SALES1 is entered. If it is not available, the connection attempt fails.

Specific LU/Device Naming by Session ID

DEV+ (a session ID) was entered as the device name when session E (a local non-unique identifier) was opened. It will try to connect only as DEV5, and will fail if that LU/device name is not available since each session has its own unique name.

DEV- (a session ID) was entered as the LU/device name when session E (a local non-unique identifier) was opened. It will try to connect only as DEV4, and will fail if that LU/device name is not available since each session has its own unique name.

Pool LU/Device Naming

DEV** was entered as the LU/device name when session E (or any other session) was opened. It will try to find an available LU/device name between DEV01 and DEV99, starting with DEV01, then DEV02, etc. Only if none of these LU/device names are available will it fail.

IBM 5250 Printer Session Data Conversion

Graphic Mode

A graphic is a pictorial representation of data which is processed differently than text by the emulation.

➔ **To achieve the best fit for the page:**

1. Set **Slave Printer Data Conversion** to **None.**
2. Set CPI to **Auto/Auto Printer**.
   Note: Whenever the **CPI** or **LPI** field is set to **Auto/Auto Printer** you must specify the desired page type for text printing.
3. Select desired **Page Type for Text Printing.**

➔ **To use the host's CPI value:**

For 5250 Printer emulations only.

1. Set Slave Printer Data Conversion to Graphics.
2. Select Use Host Value in the CPI field.
3. Verify that Enable AS/400 Host Print Transform is not selected.

➔ **To set the margins:**

Printout margins are the space between the edge of the printout page and the border of the printing. Modifying the top and left margins will determine the position at which printing will begin.
You can minimize/maximize the margins or alternatively shift the print margins (i.e. 30 in the right margin and -30 in the left margin).

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab.
3. Select **Graphics** for Slave Data Printer Conversion.
4. Click the Advanced Printing button. The Advanced Printer Setup dialog box is displayed.
5. From the Printer/Type Model drop down list, select the desired printer.
6. Note If your manufacturer Printer Type and Model are not listed, then choose one that is compatible.
7. Define the Margins. For example, to shift the margin 1 cm type in 100.
   Note When **Auto/Auto (Printer Sizes)** is selected (the default printer values are used) for CPI, then the right margin field is enabled. When either of these values is selected for LPI, the bottom margin field is activated.

Text Mode

Text mode is designated in the Printer Property Page by setting the two data conversion combo boxes (Print Screen or Slave Printer) to non-graphic values (**Host**/**None**/**UTF-8**).

In text mode, a printer selection is useful since PowerTerm Pro requires the printer specific escape sequences to instruct it how to format the document to be printed.

Page orientation is relevant to non-graphic mode, as long as you select the correct printer in Advanced Printer Setup.

Recommended for dot matrix printers.

Host Print Transform

The Host Print Transform feature allows the SCS-to-ASCII data stream conversion to take place on the host server instead of by PowerTerm Pro InterConnect.

The Printer settings/properties impact the data stream prior to reaching the output destination. Therefore any changes following this made in Windows will have no effect on the PowerTerm Pro printer settings.

When Host Print Transform is enabled, SCS data is transformed to ASCII data and passed through PowerTerm Pro to the specified ASCII printer. If the data stream is ASCII, the data is sent directly to the printer, and not converted by PowerTerm Pro. This is relevant when printing to a specific printer such as barcode or in an environment which has limited memory. Insufficient memory could be due to several factors, for example there is no Print Manager installed, the .ped files cannot be installed, or you cannot print in Graphic mode.

➔ **To set values for IBM 5250 host print transform:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab.
3. Select a text mode (**Host**/**None**/**UTF-8**) for Slave Data Printer Conversion.
4. Click **Advanced Printing**. The **Advanced Printer Setup** dialog appears.
5. Select **Enable AS/400 Host Print Transform** and select the parameters you require.

➔ **To use the host's CPI value:**

For 5250 Printer emulations only.

1. Set Slave Printer Data Conversion to None.
2. Select the correct printer.
3. Select Use Host Value in the CPI field.

Typically AS/400 sends the CPI escapes to the terminal however if you selected "Other Printer" then you must create "other.ped" file with all the relevant escapes.

4. Verify that Enable AS/400 Host Print Transform is not selected.

Non-IBM 5250 Printer Session Data Conversion

Graphic Mode

A graphic is a pictorial representation of data which is processed differently than text by the emulation.

➔ **To achieve the best fit for the page:**

1. Select **Terminal | Setup**. The **Terminal Setup** dialog appears.
2. Select the **Printer** tab.
3. Set **Slave Printer Data Conversion** to **Graphics.**
4. Set CPI to Auto.
   Note Selection of **Auto** is the best fit for the page, while **Auto (Printer Sizes)** is best fit for the page using only the pre-defined printer font sizes.
5. Select the desired **Page Type for Text Printing.**

Text Mode

Text mode is designated in the Printer Property Page by setting the two data conversion combo boxes (Print Screen or Slave Printer) to non-graphics value (Host/None/UTF-8).

Page orientation is relevant to non-graphic mode, as long as you select the correct printer in **Advanced Printer Setup**.

Escape Sequences

An escape sequence is a series of characters used to trigger some sort of command state in computers and their attached peripherals. A text editor (like VI) can display lines of text in a terminal window by simply writing those characters to the window. However, in order to perform such functions as moving the cursor, making text brighter, or erasing part (or all) of the screen you must send escape sequences: special strings of characters meant to control the terminal. A terminal observes each input character and, if it is a part of an escape sequence, it interprets that character string as a command instead of displaying it as text.

You can record the necessary escape sequences in a number of ways:

.prt files

.ped files

Via keyboard mapping

Printer Configuration Files (.prt)

The Printer Configuration Files (.prt) enables the user to manipulate the printer output (for example: bold, italic, underline). Typically you would use the escape sequences in the PowerTerm Pro supplied prt file. However, there are circumstances that would warrant you referencing alternative escape sequences.

Typical Use

1. Verify the existence of the .prt file in the folder where ptpro.exe resides.
2. Create a PSL file with the following name: open-printer file yourfilename.prt

Referencing alternative escape sequences

There are times when the printer will print an unnecessary escape sequence. To avoid this situation, the following solution will enable you to have the emulation program reference an alternative sequence, thus replacing it with a more effective sequence.

The source.prt and customized prt files be located in the same folder as the PowerTerm Pro product executable.

1. Edit the source.prt file in the following manner: blank = X1B escapesequence (which the emulation should ignore)
2. Save the file.
3. Create the file ignore.prt with the following line: blank =
4. Save the file ignore.prt to the PowerTerm Pro folder.
5. Create a PSL file with the following line: open-printer file ignore.prt
6. Save the PSL file to the PowerTerm Pro folder.
7. Edit the PowerTerm Pro InterConnect shortcut by adding the newly created PSL file name after the exe (preceded by a space).
8. Double-click the shortcut icon.

Modifying Printer Settings via the .PED file

The .ped files are very useful when you want to modify a particular print setting: page orientation, LPI (Lines Per Inch) or CPI (Characters Per Inch).

The .ped files are located in C:\Program Files\Ericom Software\PowerTerm Pro\printers

You must insure that the Printer Properties Page parameters are set correctly before applying the .ped settings:

➔ **To Print Screen:**

1. Select Terminal | Setup. The Terminal Setup dialog is displayed.
2. Select the Printer tab. The Printer properties page is displayed.
3. Set Print Screen Data Conversion to "None".

➔ **To use Slave Printing:**

1. Select Terminal | Setup. The Terminal Setup dialog is displayed.
2. Select the Printer tab. The Printer properties page is displayed.
3. Set Slave Printer Data Conversion to "None".

If the value "Graphic" is left in the above fields then OS Print manager takes control and decides how to print the job.

➔ **To change the default (if necessary):**

1. Open up the desired PED file in a text editor such as Notepad.
2. Locate the section entitled "[Printer Escapes]".
3. Add a line starting with "init = ". Note: This will initialize the printer for this specific setting which may be overwritten by a subsequent modification in the user interface.
4. Type list of desired escape sequences (separating each one with a ";").
5. Save the PED file. The new escape sequences will be applied to future outputs.

Troubleshooting Printing Issues

If you have any difficulties with PowerTerm Pro InterConnect printing, refer to the following checklist:

'Timeout on printer' message	*Select File | Print Setup, and set the 'device' as 'Print Manager' or 'Network'.*
Unsuccessful printing to default printer	*Employ the use-default-printer PSL script.*
Prints end of line text onto the next line	*Open Terminal | Setup | Display and click the General tab.* *Clear the Autowrap Characters check box.* *Click the OK button.* *Click File | Save Terminal Setup*
132 column reports are resulting in 80 column format. *Changing CPI as well as print columns with no result.*	*In the Printer properties page, assign the following values:* *Print Screen Data Conversion – Graphic* *Slave Printer Data Conversion – Graphic* *Delay for Print Closing – 5* *In the Advanced Printing dialog, assign the following values:* *CPI – user defined 17, 132 columns*

	LPI – auto
The user requires 13x11 inches paper size for an Oki Microline 3321 printer. This is for slave printing where Print Device is defined as File and Device name as lp1. *The print output is only letter size (8.5 inches).*	*In the Advanced Printing dialog, select the printer which is most compatible to your printer and set CPI and LPI to 'Auto (paper size)'.*
The user's printer name does not appear in the Print Setup.	*Delete the ptw_prt1.cfg and ptw_prt2.cfg files from the Windows directory and restart PowerTerm Pro.*
Lines are printed on top of each other.	*Change the End-of Medium parameter CR to CRLF in the pts file.*
Cannot open the print setup file.	*Delete *.prt files in the Working directory and *.cfg files in the Windows directory.*

9. SCRIPTS

PowerTerm Pro enables you to create scripts for automating tasks. For example, you can create a script to login to a PowerTerm Pro session, execute a file, display a message, etc. Scripts can be run upon startup or during a PowerTerm Pro session. They can be written in any standard text editor, like Notepad, and are saved with a .psl extension. This chapter describes how to create, edit, run, save and activate script in PowerTerm Pro.

The PowerTerm Pro Script Language (PSL) is PowerTerm Pro's own programming language. For a full description of the different PSL commands, see the "PowerTerm Pro Script Language, Programmer's Reference".

PowerTerm Pro provides the following script options:

Create a Script, creates a script to run upon startup or at any time during a PowerTerm Pro session.

Edit a Script, edits and modifies an existing script file.

Record a Script, creates a script by recording all the actions that you perform in the PowerTerm Pro window. Actions can include selecting a menu option, typing an entry on the screen, making selections in a dialog, and so on.

Run Scripts, runs specific scripts or individual commands, upon startup, connection to a host, or during a PowerTerm Pro session, to automate specific tasks, you can only run saved scripts.

Activate a Recorded Script, executes a non-saved script from the current memory.

Save a Recorded Script, saves your script to be used at a later date.

Assign Scripts, to the Power Pad and Soft buttons.

➔ **To create a script file:**

1. Select **Script | Edit Script**. The **Edit Script** dialog appears.
2. Type a name for the new script in the script Name text box.
3. Click Edit. The PowerTerm Pro Script Editor appears.
4. Type the script and click Save from the File menu to save your new script. The next time you run or edit a script, this new file will appear in the Scripts List.
5. Select File | Exit to exit the editor.

➔ **To edit a script file:**

1. Select **Script | Edit Script**. The **Edit Script** dialog appears.
2. Select the required script file and click OK. The PowerTerm Pro Script Editor appears.
3. Edit the script and click Save from the File menu to save your changes.
4. Select File | Exit to exit the editor.

➔ **To record a script:**

1. Select **Script | Start Script Recording** or click  . Your actions start to be recorded and the menu option changes to **Stop Script Recording**.
2. Perform the manual operations that you want to record. For example, select a menu option, enter parameters in a dialog, or type a password.
3. Select Script | Pause Script Recording if you do not want to record certain operations. The script recording process pauses and the menu option changes to Continue Script Recording.
4. Select Script | Continue Script Recording to resume the recording.
5. Select Script | Stop Script Recording or click  when you have performed all the operations to be stored in the script. You can also save the script that you just created, so that you can run it at any time to repeat the operations.

➔ **To activate a recorded script:**

Select **Script | Activate Recorded Script** (<Alt>+<F9>). The script currently recorded in memory is now activated.

➔ **To save a recorded script:**

1. Select **Script | Save Recorded Script**. The **Save Recorded Script** dialog appears.
2. Enter a script name.
3. Click OK. The script will be saved with the specified name.

➔ **To run a specific script:**

1. Select **Script | Run Script**. The **Run Script** dialog, which lists all the saved scripts, appears.
2. Double-click the script that you want to run. The selected script

is executed.

➔ **To run individual script commands:**

1. Select **Script | Script Command**. The **Script Command** dialog appears.
2. Type the name of the script command you want to run. Include parameters if necessary.
3. Click OK. The specified script command is executed at once.

➔ **To run a script at startup:**

This option creates a Windows shortcut to PowerTerm Pro and a specific script file. It can be used to connect to different hosts using different scripts.

The following procedure describes one way to create a shortcut. Consult your Windows documentation for a description of other available options.

1. Locate the file **ptpro.exe** on your computer.
2. Right-click and select **Create Shortcut**. The **Shortcut to ptpro.exe** appears in the current install folder.
3. Right-click the created shortcut and select **Properties**. The **Shortcut to ptpro.exe Properties** dialog appears.
4. In the **Target** field, add a space after the .exe file name and then type the name of the required script (.psl) file. You can also add parameters to the script file. These determine communication parameters, for example the name of the host to which you want to connect, or the Port number. In the **Target** field, add a space after the .psl script file and then type the required parameters. Parameters should be separated by a space. Example:
   `\PTPRO\PTPRO32.EXE COMM.PSL 1 9600 xonxoff`
   PowerTerm Pro recognizes Windows file naming conventions, including spaces in a file name. If you have a setup file with a space in the name, PowerTerm Pro ignores the space and looks directly for the .psl extension.
5. Click **OK**. When you start PowerTerm Pro, the script file is automatically executed and you are connected to the host that you specified in your setup file.

➔ **To run a script file upon connecting to a host:**

1. Open the **Connect** dialog.
2. Click the browse button next to **Script File** in **Upon Connection Run**.
3. Select the desired file.

4. Click **OK**. The designated script will be executed upon connection.

➔ **To run a script file during a PowerTerm Pro session using Soft buttons:**

Click the **Soft button** that has the desired script assigned. The script is executed. For more information, see chapter *Soft Buttons and Power Pad*.

➔ **To run a script file during a PowerTerm Pro session using the Power Pad:**

Click the **Power Pad button** that has the desired script assigned. The script is executed. For more information, see chapter *Soft Buttons and Power Pad*.

10. POWERTERM PRO ENTERPRISE - VBA

The PowerTerm Pro Enterprise allows you to use Visual Basic for Applications (VBA) to add programmability to your application.

VBA is an attractive alternative to the PowerTerm Power Script Language (PSL), approaching acceptance as the industry standard. VBA is common to many programming applications, including Microsoft Office products. The programming knowledge acquired in any of these products will be immediately applicable to any other product that uses VBA. If you already have an application installed that uses VBA, PowerTerm Pro Enterprise uses that component.

With VBA you can:

- Create custom dialog boxes and forms.
- Integrate with Internet and intranet solutions.
- Create instances of OLE (ActiveX) objects within your code.
- Create classes (reusable custom software objects).
- Store and retrieve data from the Windows registry.
- Detect and handle errors.
- Incorporate ActiveX controls into the application interface.
- Pass data between VBA-enabled applications with a minimum of programming and fuss.
- Drive a second VBA-enabled application from within the initial VBA-enabled application.
- Control the Office application. (In theory, 100% of the functionality of Office products is exposed as objects/properties/methods, which means that, with occasional exceptions, you can programmatically do anything from the application's interface.)

Automation is the key technology that makes individual Microsoft Office applications programmable. This technology allows a developer to use VBA code to create and control software objects exposed by any application, dynamic-link (DLL), or ActiveX control, which supports the appropriate programmatic interfaces.

The key to controlling an OLE automation application is a firm understanding of the application's object model. The object model is a hierarchy of objects that the application exposes. It acts to describe the application to you, the developer. Each application's object model is different, and the amount of control you have over the application varies accordingly. The application also exposes the object's methods and properties with which the user works.

This chapter will describe:

- PowerTerm Pro Enterprise VBA editor
- PowerTerm Pro Enterprise VBA Sample Scripts
- A List of VBA Commands

PowerTerm Pro Enterprise VBA Editor

The PowerTerm Pro Enterprise VBA editor enables you to write VBA scripts, which can access and manipulate PowerTerm Pro Enterprise objects and attributes.

VBA's IntelliSense™ natural-language technology makes it easier for users to finish their tasks. Previously, a user had to guess the technical description of a task in order to get help for it. Statement Completion acts as a guide leading you through the object's hierarchy as you are coding by displaying only those objects, methods, properties, and events that are available for the code you are currently writing, thus helping to speed up the development of VB applications. Debugging is accomplished with a minimum of effort assisting the programmer with the required syntax. Online help is also available.

To start the VBA editor:

1. Select Tools | Macro.
2. Select Visual Basic Editor. The Microsoft Visual Basic screen appears.

Reference

By adding an object reference to your project, you expose the class's type library to the VBA environment, allowing the details of its class hierarchy to be displayed as you enter your code. By default, PowerTerm Pro Enterprise is referenced by your project. You can confirm this by selecting References from the Tools menu.

Objects, Properties and Methods

The objects, properties and methods are the means in which you can interact with the PowerTerm Pro Enterprise. The Object Browser displays the classes, properties, methods, events, and constants available from the object libraries and procedures in your project. You can use it to find and use objects you create, as well as objects from other applications.

To view PtPro objects, properties and methods:

1. Select Tools | Macros.
2. Select Visual Basic Editor. The Microsoft Visual Basic screen appears.
3. Select View | Object Browser (or press F2). The Object Browser

dialog appears.

4. Select the Pterm Pro library from the library list.
5. Select the desired object from the Classes list. The members, methods and properties of the selected object are displayed.
6. Click on any object to display the prototype of the method or property and its definition.

Example

This example will show how to create a dialog box that will facilitate a connection with a host:

1. Open the PowerTerm Pro Enterprise VBA editor.
2. Select View | Project Explorer. The Project Explorer dialog box appears.
3. Select Project and right-click.
4. Click Insert | Userform. A blank Userform is displayed.
5. Select View | Toolbox. The Toolbox is displayed.
6. Click the Label icon in the toolbox. Drag it onto Userform and drop it.
7. Repeat previous step three times for the three labels you are creating.
8. Select Label1 and right-click Properties.
9. Change Caption to "Host".
10. Select Label2 and right-click Properties.
11. Change Caption to "User".
12. Select Label3 and right-click Properties.
13. Change Caption to "Password".
14. Click the Textbox icon in the toolbox. Drag it to the right of the Host label in the Userform and drop it.
15. Repeat previous step for both the User and Password labels.

The following code for the Auto login dialog is automatically generated:

```
Private Sub cmdconnect_Click()
On Error GoTo errorhandler
If main.host = "" Then
MsgBox "Please enter Host name", vbExclamation, "Host"
main.host.SetFocus
Exit Sub
End If
```

```
Session.HostName = main.host
Call Session.Modify

Call Session.Open("")
PtermPro.WaitForText user, 5, 0, 0
PtermPro.Send user & "<enter>"

Exit Sub
errorhandler:
MsgBox Err.Description, vbCritical, "Error"
End Sub
```

Creating a VBA Macro from an Existing PSL Script

It is not necessary to create VBA macros from scratch if you already have PSL scripts. An example of a PSL script:

```
#
# Opens a TELNET connection (Via TCP/IP WINSOCK api).
#
# Parameters : $p1 - host name.
# $p2 - telnet port number.
#
set comm-type telnet
set host-name 126.0.0.200
set telnet-port 23
session open
```

Following is an example that will show how to create a dialog box that would facilitate making a connection with the Host via PowerTerm Pro Enterprise:

1. From within the Microsoft VBA editor, click on the Project Explorer icon on the toolbar (or alternately select View menu | Project Explorer). The Project Explorer dialog appears.
2. Select Project from the right-hand pane and right-click.
3. Click Insert | Userform. A blank Userform is displayed.
4. Click on the Toolbox icon from the toolbar (or alternately select View menu | Toolbox) The Toolbox appears.
5. Click on the Label icon from the toolbox. Drag it to Userform

and drop it.

6. Repeat Step 5 three times.
7. Select Label1 and right click to Properties.
8. Change Caption to "Host".
9. Select Label2 and right click to Properties.
10. Change Caption to "User".
11. Select Label3 and right click to Properties.
12. Change Caption to "Password".
13. Click the Textbox icon from the toolbox. Drag it to the right of the Host label in the Userform and drop it.
14. Repeat Step 13 for both the User and Password labels.

The following code for the Auto login dialog is generated:

```
Private Sub cmdconnect_Click()


On Error GoTo errorhandler
If main.host = "" Then
      MsgBox "Please enter Host name", vbExclamation, "Host"
      main.host.SetFocus
      Exit Sub
End If


Session.HostName = main.host
Call Session.Modify
Call Session.Open("")
PtermPro.WaitForText user, 5, 0, 0
PtermPro.Send user & "<enter>"
Exit Sub
errorhandler:
MsgBox Err.Description, vbCritical, "Error"
End Sub
```

PowerTerm Pro Enterprise VBA Sample Scripts

PowerTerm Pro Enterprise provides several sample scripts designed for frequent tasks. The following table lists the sample scripts and their

parameters:

Script	Parameters	Parameter Values
APPC	System name	Specify the name of the system.
	Device name	Specify the name of the device.
BAPI	Host name	Specify the name of the host.
COMM	Port number	1 – 4
	Baud rate	300 – 115200
	Protocol type	none, xonxoff, hardware
	Phone number	
CTERM	Node name	Specify the name of the CTERM node.
LAT	Service name	Specify the name of the service.
MSSNA	LU name or LU pool name	Specify the LU name or LU pool name.
NWLAT	User name (a NetWare user name without password)	Specify the user name.
	Service name	Specify the name of the service.
NWSAA	Server name (a NetWare for SAA server name)	Specify the name of the server.
	User name (a NetWare user name without password)	Specify the name of the user.
	Service name (profile)	Specify the name of the service.
	LU category	Public, pooled, dedicated
	LU name of LU pool name	Specify LU name or LU pool name.
TELNET	Host name	Specify the name of the host.
	Telnet port number	Specify the telnet port number.
TN3270	Host name	Specify the name of the host.
	Telnet port number	Specify the telnet port number.
	LU name	Specify LU name.
TN3270E	Host name	Specify the name of the host.
	Telnet port number	Specify the telnet port number.
	LU name	LU name.
TN5250	Host name	Specify the name of the host.
	Telnet port number	Specify the telnet port number.

NOTE All parameters must be typed in lowercase letters.

PowerTerm Pro Enterprise VBA Commands

The PowerTerm Pro Enterprise VBA commands can be divided into the following groups:

Application Class Objects

Application Class Properties

Application Class Methods

Session Class Properties

Session Class Methods

Setup Class Properties

Enumerations

The following is a short description of each:

Application Class Objects

Application Defines an object representing the entire PowerTerm Pro Enterprise application.

Session Returns an object representing PowerTerm Pro Enterprise current session.

Setup Returns an object representing PowerTerm Pro Enterprise current setup.

Application Class Properties

ExcelEmbedded Microsoft Excel embedded in PowerTerm Pro Enterprise.

Height The height (in pixels) of the PowerTerm Pro Enterprise window.

InternBrowserEmbedded Internet browser embedded in PowerTerm Pro Enterprise.

Left The location of the left margin of the PowerTerm Pro Enterprise window (in number of pixels from the left margin of the screen).

Parent Returns an object representing the entire PowerTerm Pro Enterprise application.

Session Returns an object representing PowerTerm Pro Enterprise current session.

Setup Returns an object representing PowerTerm Pro Enterprise current setup.

Top The location of the top of the PowerTerm Pro Enterprise window (in number of pixels from the top margin of the screen).

Width The width (in pixels) of the PowerTerm Pro Enterprise window.

WordEmbedded Microsoft Word embedded in PowerTerm Pro Enterprise.

Application Class Methods

AutoUpdatePrinter	Updates the printer setup from windows.
ClearDtr	Clears the Data Terminal Ready signal.
ClearRts	Clears the Ready To Send signal.
ClearScreen	Clears screen.
Display	Display a string on the current cursor position.
ExecEmbedded	Runs the specified program embedded in the PowerTerm Pro Enterprise container view.
Exec	Executes a command.
Exit	Exits PowerTerm Pro Enterprise.
GetEnv	Get an environment variable.
GetCursorPosition	Receives cursor position coordinates.
GetPrinterName	Returns the name of the printer you select.
GetRectText	Copies the text found in the specified rectangle.
GetScreenText	Copies complete lines from the starting position (startRow, startCol) up to and including the end position (endRow, endCol).
GetWindowTitle	Sets the text of the PowerTerm Pro Enterprise main window title.
HideMenu	Hides the PowerTerm Pro Enterprise menu.

HideWindow	Hides the PowerTerm Pro Enterprise window.
InputTrace	Executes capture file.
InputTraceEx	Executes capture file chosen from the dialog.
LockColumns	Locks the number of columns preventing the user from making any modifications until he performs UnlockColumns.
MapKeyToCommand	Configures a PC key to execute PSL commands.
MapKeyToDefault	Configures a PC key to its default.
MapKeyToNull	Configures a PC key to be inoperable.
MapKeyToScript	Configures a PC key to run a PSL script.
MapKeyToVbaMacro	Configures a PC key to execute VBA Macros.
MapKeyToVtKey	Configures a PC key to send a VT key.
MaximizeWindow	Maximizes the PowerTerm Pro Enterprise window.
Message	Displays a message.
MinimizeWindow	Minimizes the PowerTerm Pro Enterprise window.
MoveWindow	Changes the position and dimensions of the PowerTerm Pro Enterprise window.
OpenPowerpadFile	Opens a specified Power Pad file.
OpenKeyboardFile	Opens a specified Keyboard file.
OpenPrinterFile	Opens a specified printer file.
OpenSetupFile	Opens a specified setup file.
OpenURL	Opens a specified URL in PowerTerm Pro Enterprise internal browser.
PrintFile	Prints the specified file.
PrintScreen	Prints the data presently displayed on the emulation screen.
ReceiveAsciiFile	Receives file from the host using the ASCII protocol.
ReceiveAsciiStop	Receives ASCII stop.
ReceiveBinaryFile	Receives file from the host using the binary protocol.
ReceiveBinaryStop	Receives binary stop.
ReceiveFile	Receives file from the host using either the kermit, xmodem, ymodem, or zmodem protocol.
ReceiveIndFile	Receives file from the host for IBM emulation types.
ReceiveIndFileEx	Sets parameters for IBM emulation type file transfer and sends file.
RestoreMenu	Restores the PowerTerm Pro Enterprise menu.

RestoreWindow	Restores the PowerTerm Pro Enterprise window.
RingBell	Rings the bell.
Send	Sends interpreted data to the host.
SendAbortOutput	Sends escape sequences to the host to stop sending output.
SendAsciiFile	Sends file to the host using the ASCII protocol.
SendBinaryFile	Sends file to the host using binary protocol.
SendBreak	Abort looping command.
SetCursorPos	Moves the cursor to the specified screen coordinates.
SendFile	Sends file to the host using either the kermit, xmodem, ymodem, or zmodem protocol.
SetFunctionButton	Programs the designated Function button.
SendIndFile	Sends file to the host for IBM emulation types.
SendIndFileEx	Sets parameters for IBM emulation type file transfer and receives file.
SendRawText	Sends non-interpreted text to host.
SetColor	Sets emulation screen color.
SetCursorPos	Moves the cursor to the specified screen coordinates.
SetDtr	Set the Data Terminal Ready signal.
SetFunctionButton	Programs the designated Function button to run PSL script command.
SetFunctionButtonVBAMacro	Programs the designated Function button to run VBA macro.
SetIndFileParameters	Sets parameters for IBM emulation type file transfer.
SetPadButton	Programs the designated Power Pad button.
SetRts	Set the Ready To Send signal.
SetWindowFocus	Activates the PowerTerm Pro Enterprise window.
SetWindowPosition	Sets the PowerTerm Pro Enterprise window position.
SetWindowSize	Sets the PowerTerm Pro Enterprise window size.
SetWindowTitle	Sets the text of the PowerTerm Pro Enterprise window title bar.
ShowWindow	Displays the PowerTerm Pro Enterprise window.
StartAutoPrint	Starts accumulating incoming data (while it is displayed on the screen).
StatusMessage	Displays status message.
StopAutoPrint	Prints all the data accumulated in the printing buffer of

	the slave printer, or in the autoprint buffer.
SwitchToView	Switches to specific application view.
ToggleAutoPrint	Alternates between the start autoprint and stop autoprint states.
UnlockColumns	Unlocks columns allowing for the user to change the number of columns.
Wait	Wait for specific strings received from the host.
WaitForRecord	Only for 3270 emulations. The command instructs PowerTerm Pro Enterprise to wait for the next screen record from the mainframe.
WaitForSystem	Only for 5250 emulations. The command instructs PowerTerm to wait for the AS/400 to notify it when the AS/400 has finished processing a screen.
WaitForText	Wait for specific strings received from the host.
WaitForTextOnScreen	Wait for specific strings received from the host, which are displayed on the screen.

Session Class Properties

AppcPassword	Password.
AppcUsername	User Name.
BaudRate	Baud rate.
CommPortNumber	Comm port number.
CommType	Comm type.
DeviceName	Device name.
DialNumber	Dial Number.
EnabledSsl	Uses the Secure Sockets Layer protocol.
FlowControl	Flow Control.
HostName	Host name.
LUCategory	LU category.
LUName	LU name.
MessageLibrary	Message Library.
MessageQueue	An ordered list of messages awaiting transmission, from which they are taken up on a first-in, first-out (FIFO) basis.
NodeName	Node name.
Parity	Parity.

ServerName	Server name.
ServiceName	Device name.
SessionName	Session name.
StopBits	Stop Bits.
TelnetPort	Telnet port.
TerminalName	Terminal name.
UseAvailableLU	Use Available LU.
UseTN3270Eprotocol	Uses the TN3270E protocol.

Session Class Methods

Close	Closes Communication.
Modify	Modifies Communication.
Open	Opens Communication.
SetComParameters	Sets parameters for Comm communication.
SetTelnetParameters	Sets parameters for Telnet communication.
Wait	Begins a wait that is satisfied by the occurrence of the specified event. The

Procedure containing the command is paused until the wait expires or is satisfied.

Setup Class Properties

EmulationType	Emulation Type.
PadColumns	Pad Columns.
PadRows	Pad Rows.
Parent	Returns an object representing the PowerTerm Pro Enterprise setup.
RTFCopy	Sets RTFCopy (copies to clipboard in RTF format) setup flag.

Enumerations

AllocUnitsTracks	An enumeration of allocation units tracks for file transfer.
BaudRates	An enumeration of baud rates for COM connection.
CommProtocol	An enumeration of protocol types (Flow Control) for COM connection.

CommType	An enumeration of PowerTerm Pro Enterprise communication types.
EmbeddedAppl	An enumeration of applications that can be embedded.
EmulationType	An enumeration of PowerTerm Pro Enterprise Emulation Type.
FileTransferAsciiFlag	An enumeration of ASCII file transfer type flag.
FileTransferType	An enumeration of file transfer type.
IndFileRecordFormat	An enumeration of record format for IBM file transfer.
IndFileTransferType	An enumeration of file transfer type for IBM emulation types.
LuCategory	An enumeration of LU Categories for NWSAA connection.
Parity	An enumeration of parity values for COM connection.
StopBits	An enumeration of stop bits for COM connection.
EnumViewType	An enumeration of application views.

To run VBA scripts from the Command line

1. 1 Position your cursor on the command line, after the .exe file name.
2. 2 Add a space and then type the name of the required script (.pcf) file.

To add parameters to the VBA script file

1. Position your cursor on the command line, after the PSL script name.
2. Add a space and type the required parameters. Parameters should be separated by a space.

Syntax

ptpro.EXE pcf-filename vba-module-macro-name [parameter-1 …]

Example

"\PowerTerm Pro\ptpro.EXE" Telnet.pcf MyMacro param1 param2

PowerTerm Pro Enterprise VBA Sample Project

This project demonstrates how you can utilize VBA in conjunction with PowerTerm Pro/PowerTerm Pro Enterprise.

To view the PowerTerm Pro Enterprise VBA Sample Project:

1. Select Tools | Macro.
2. Select Advanced.
3. Run VBA Sample Project. The VBA Examples screen opens with the following examples:

Home	Allows the users to access the Internet, E-mail and Snail mail.
Scripting Examples	Demonstrates several scripts, which interact with PowerTerm Pro Enterprise.
Internet	Launches the user's Internet browser to a desired URL or Internet site.
Auto Login	Performs an effortless login to the host.
Power Terminal	Sends the PowerTerm Pro Enterprise emulation screen display to various destinations.
System Info	Demonstrates how VBA assists you in interacting with the API. It displays a list of all visible windows operating on the system and their relative positions. Double-clicking any one of the items on the list will open up that program.
FTP	Provides a user-friendly interface to connect to an FTP host.

VBA Examples

The PowerTerm Pro Enterprise provides you with different examples to study how VBA can be used for different purposes.

System Info

This screen demonstrates how VBA assists you in interacting with API (Application Programming Interface). The API is a set of routines that an application programmer uses to request and carry out lower-level services performed by a computer's operating system. These maintenance chores are performed by the computer's operating system, and an API provides the program with means of communicating with the system, telling it which system-level task to perform and when.

System Info displays a list of all visible windows operating on the system and their relative positions. Double-clicking any one of the items on the list will open up that program.

To display information about one of the visible windows operating on the system:

1. Click Show Windows. A list of all visible windows operating on the system is displayed.
2. Select the desired application from the All Visible Windows list. The position of the selected application is displayed in the Window Position fields.

Scripting Examples

The Scripting Examples demonstrates several scripts that interact with PowerTerm Pro Enterprise.

Scripting Examples Code

The scripting examples code was provided with comments in order to facilitate the end-user who chooses to adapt these scripts by making small modifications. You can open the scripting examples file and make these changes according to your own specific requirements and use them afterwards.

To modify the scripting examples file:

1. Select Tools | Macro.
2. Select Open VBA Project. The Open dialog box appears.
3. Locate the PowerTerm Enterprise directory.
4. Open the VBA folder.
5. Select ptvbasmpl.pcf
6. Click OK. The VBA Editor opens and displays the selected scripting examples file.
7. Make the desired modifications to the script and save it as described below.

To save a customized VBA Sample Project:

1. Click Tools | Macro.
2. Select Advanced.

3. Select Save VBA Project or Save VBA Project As.

11. APPLICATION PROGRAM INTERFACE (API)

PowerTerm Pro InterConnect supports various APIs, such as

- COM
- DDE (currently not supported for Windows Vista and higher)
- Hllapi, ehllap, and winhllapi. They all use the hllapi.dll file. This file can be renamed if necessary.

For more information about how to use the different APIs' commands please refer to "PowerTerm Pro Script Language Reference" for DDE and COM and to http://publib.boulder.ibm.com/infocenter/pcomhelp/v5r9/index.jsp?topic=/com.ibm.pcomm.doc/books/html/emulator_programming07.htm for hllapi.

12. POWERTERM PRO FTP CLIENT

The PowerTerm Pro FTP client is a client-server application, which uses the File Transfer Protocol (FTP). It provides an easy to use graphic user interface to define how to transfer files between your computer (client) and remote computers (servers), across a wide variety of platforms like Unix, Windows, and more. PowerTerm Pro FTP client provides direct access to any FTP server site. The server site only requires a login identity and password before it responds to requests.

Features and Benefits

PowerTerm Pro FTP client

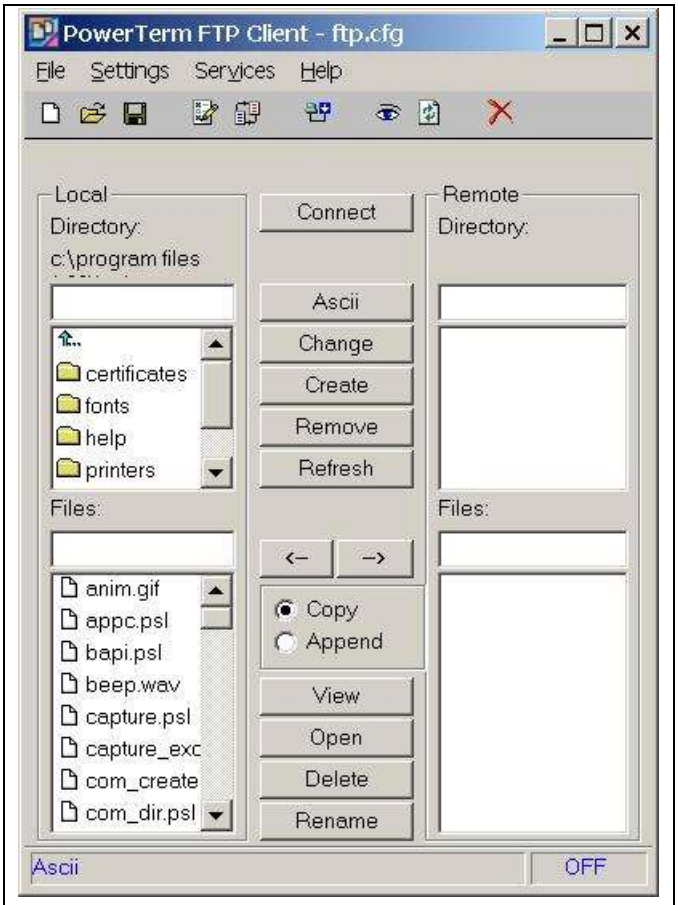
- Provides access to a wide variety of operating systems, including UNIX, Windows 98/ME/2000/NT/XP/2003/ Windows Vista/ Windows 7/ 2008/ 2008 R2/ 2012 / VAX/ VMS, IBM AS400, IBM Mainframe operating systems (such as MVS, VSE, etc.) and more.
- Saves connection parameters in a configuration file.
- Provides detailed on-screen connection information.
- Provides a choice of Binary or ASCII data transfer modes.
- Provides a variety of data conversion options.
- Creates, removes and changes directories, as well as deletes and renames files.
- Automates connection and transfer operations.
- Provides support for a variety of firewall options.

Concepts

The following concepts are used in this guide:

FTP Site	*The remote site to which you are connecting. In this guide this term is also known as a host or remote computer.*
Configuration Settings	*Contains your PowerTerm Pro FTP client preferences and selected data transfer mode. These parameters only remain active for a current transfer session, unless they are saved in a configuration file.*
Connection Profile	*Creates a connection profile for an FTP site with which you frequently establish communication. This profile contains login, system, and directory and firewall information. The connections profile, along with configuration information, is saved in a configuration*

	file.
Connection List	*Displays, in the Connection dialog, the saved connection profiles.*
Configuration File	*Contains your connection profiles and configuration settings. Configuration files are saved with a* ***.cfg*** *extension. Default configuration file is* ***ftp.cfg*** *which is loaded at startup.*
Current Session	*Refers to the current connection between your PC and the remote computer.*



The PowerTerm Pro FTP client window consists of the following components:

PowerTerm Pro FTP Client Window

Control Menu Box	*Provides standard Windows commands.*
Title Bar	*Displays the application name and the Configuration File currently in use.*
Menu Bar	*Contains drop-down menus, which enables you to access PowerTerm Pro FTP client functions.*
Toolbar	*Contains icons, which can be used as shortcuts to access frequently used menu commands.*
Display Area	*Displays information about a selected file, like file size, date and time for compilation etc. when you select more than one file, the combined size of files is shown. The Display Area also shows the current button, menu or toolbar option selected. When you connect to a remote PC, a message is displayed with the name of the host to which you are connecting.*
Application Status Icon	*Displays the activity status of PowerTerm Pro FTP client. The icon is active while the client is running.*

Menu Bar

File Menu	Provides options to create, open, and save a configuration file, as well as exit the client.
Settings Menu	Provides options to select preferences for file transfer and define the data translation mode.
Services Menu	Provides options to connect and display connection information in a log window. This menu also enables you to refresh the file list in both the local and remote directory.
Help Menu	Provides online help and product information.

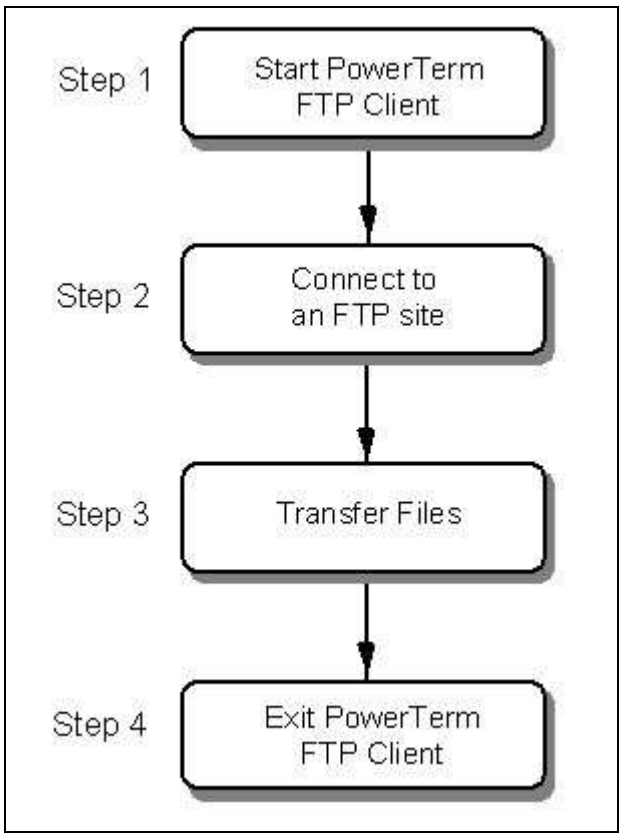
Toolbar

New		*Creates a new configuration file.* *Equivalent to* ***File | New***
Open		*Opens an existing configuration file.*

		*Equivalent to **File** | **Open***
Save		*Saves a configuration file.* *Equivalent to **File** | **Save***
Options		*Opens the **FTP - Preferences** dialog which enables you to select preferences for file transfer.* *Equivalent to **Settings** | **Options***
File Transfer Setup		*Opens the **Data Conversion** dialog which enables you to select options for data conversion.* *Equivalent to **Settings** | **File Transfer Setup***
Connect		*Opens the **Connect** dialog which enables you to enter connection parameters for file transfer.* *Equivalent **Services** | **Connect***
Log Windows		*Opens the Log – FTP window.* *Equivalent **Services** | **Log***
Refresh		*Refreshes the display of directories and file names shown in the PowerTerm Pro FTP client window.* *Equivalent to **Services** | **Refresh***
Exit		*Exits the PowerTerm Pro FTP client application.* *Equivalent to **File** | **Exit***

A Quick Guide through PowerTerm Pro FTP Client

The following workflow is a quick guide for using PowerTerm Pro FTP client. This quick guide is intended for users who are familiar with FTP applications. You can read a more detailed description on how to work with PowerTerm Pro FTP client in the following chapters.



Step 1: Launch PowerTerm Pro FTP client

4. Select in the PowerTerm Pro window, **Communication | Run FTP**. The PowerTerm Pro FTP Client window opens.
5. Click **Connect**. The **Connect** dialog appears.

Step 2: Connect to an FTP site

To define connection parameters for the current session, enter the required parameters in the **Connect** dialog.

To save your connection profile for future sessions, type a profile name in the **Description** field and click **Add**. The connection profile is displayed in the **Connection List**.

To select a connection profile, click on a profile in the **Connection List**.

To connect to the specified FTP site, click **Connect**.

Step 3: Transfer files

Select **Copy** or **Append** in the lower part of the PowerTerm Pro FTP client window.

Downloading files:

1. Select the files to transfer in the **Remote/Files** field.

2. Click the left arrow button.

Uploading files:

1. Select the files to transfer in the Local/Files field.
2. Click the right arrow button.

Step 4: Exit

1. Click **Disconnect**. A confirmation message is displayed.
2. Click **OK**.
3. Select **File | Exit**.

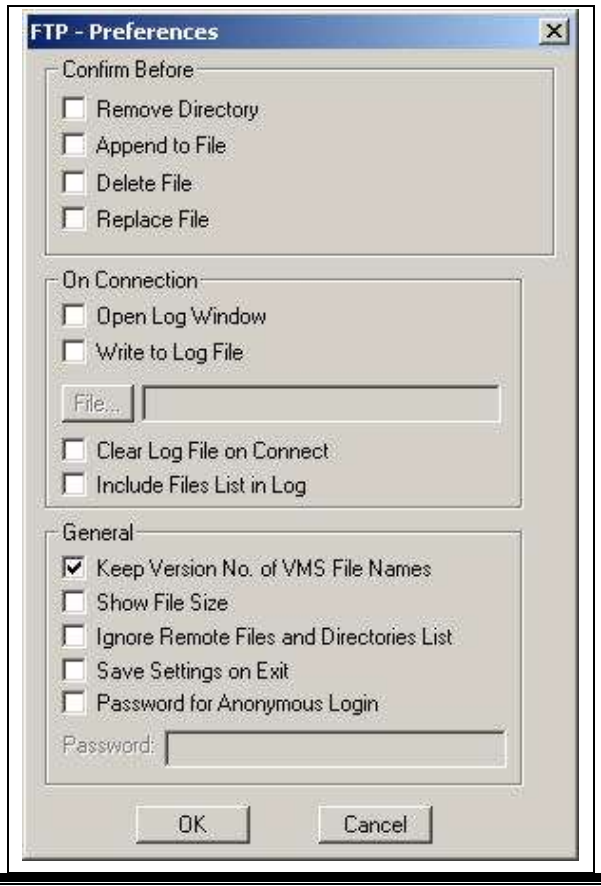
Configuration Settings

To set up your PowerTerm Pro FTP client working environment, you need to define PowerTerm Pro FTP client preferences and select the required file transfer mode. PowerTerm Pro FTP client also provides an option to select the data transfer conversion. You can save your own settings to a configuration file so that they can be used in later sessions.

The parameters that you define will only remain active for the current session, unless you save them.

Defining PowerTerm Pro FTP Client Preferences

PowerTerm Pro FTP client provides various options to customize your working environment. You can specify which actions will prompt you with a confirmation message (e.g. removing a file), and specify the information displayed when you connect to an FTP site.



Confirm Before	*Determines the actions which display a confirm message:* ***Remove Directory****, prompts you for confirmation before deleting directories from your computer or the remote FTP site.* ***Append to File****, prompts you for confirmation before appending (adding) a file to an existing file in your computer or the remote FTP site.* ***Delete File****, prompts you for confirmation before deleting a file from your computer or the remote FTP site.* ***Replace File****, prompts you for confirmation before overwriting a file in your computer or the remote FTP site.*
On Connection	*Determines the connection information displayed when you connect to an FTP site.* ***Open Log Window****, opens a temporary Log-FTP window, which displays the messages exchanged by your computer and the FTP site while connecting. This window enables you to monitor the status of the current FTP connection.*

	***Write to Log File**, saves connection details to a file, which you can then open and view at a later date.* ***Clear Log File on Connect**, clears the log file every time you connect to an FTP site. Only the current connection information is saved in the log file.* ***Include Files List in Log**, displays a list of remote file in the Log-FTP window. To access this option select Open Log Window. If you want to save this list to the log file, select Open Log File.*
General	*Determines general information displayed when you use the PowerTerm Pro FTP client.* ***Keep Version No. of VMS File Names**, retains the version number of the VMS file names.* ***Show File Size**, displays the size of files in the lower part of the PowerTerm Pro FTP client window. (To view the size of files, you may need to enlarge the window.) You can use standard windowing Shift and Ctrl keys to select multiple files and see the combined size of the selected files.* ***Ignore Remote Files and Directories List**, refrains from displaying the remote files and directories list.* ***Save Settings on Exit**, automatically saves the current configuration settings when you exit PowerTerm Pro FTP client, without prompting you to save theses settings. If you do not select this option, PowerTerm Pro FTP client will always prompt you to save the current configuration file when you exit the application.* ***Preserve Case of File Names**,* Copies the original case of the file names. ***Password for Anonymous Login**, provides PowerTerm Pro FTP client with a specified password for anonymous login. Type in your e-mail address in the **Password** field.*

➔ **To define PowerTerm Pro FTP client preferences:**

1. Select **Settings | Options**. The **FTP-Preferences** dialog appears.
2. Select the option that you require.
3. Click **OK**.

Selecting a File Transfer Mode

PowerTerm Pro FTP client distinguishes between transferring Binary data

and transferring a text (ASCII) file. It is important to select the right transfer mode to obtain the correct information, when accessing files on host computers. By default, PowerTerm Pro FTP client transfers files in Binary mode.

In **Binary** mode, data is copied bit by bit so that the original and the copy are identical. This mode is usually appropriate when transferring files between computers of the same type. Programs are usually transferred in Binary mode, for example, .doc, .bat, .exe, and .dll files.

In **Ascii** mode, data is treated as a set of characters (seven bit plus one bit for parity checking). The characters transferred have the same meaning on the target computer as they have on the source computer. This mode is appropriate for transferring textual data between two different systems, for example UNIX and Windows. Text files are usually transferred in ASCII mode, for example, a file with the .txt extension.

The following is a list of common file types and their recommended mode of transfer:

Type of File	***Mode***
Text (.txt)	*Ascii*
Spreadsheet	*Usually Binary*
Database	*Usually Binary*
Word Processor	*Ascii*
Program source code	*Ascii*
Electronic mail message	*Ascii*
UNIX shell archives (shar)	*Ascii*
Compressed files (zip, tar, lzh, arc, Binary arj)	*Binary*
Unencoded	*Ascii*
Executable	*Binary*
Executable script (bat, etc.)	*Ascii*
PostScript	*Usually Ascii*

Hypertext (html) documents	*Ascii*
Pictures (tiff, jpeg, mpeg)	*Binary*
Rich Text Format (rtf)	*Ascii*

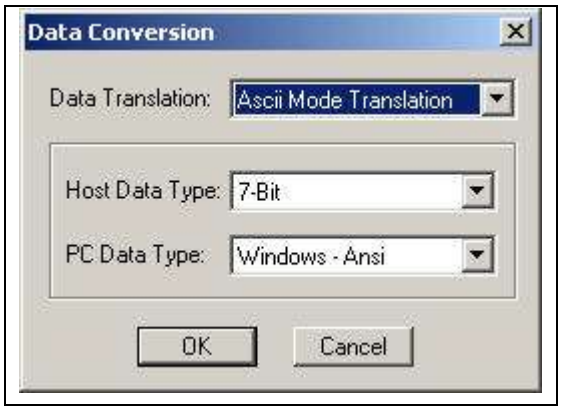
When transferring files between UNIX FTP servers and Windows computers, select Binary mode if you are not sure about the kind of file you are transferring.

➔ **To select the data transfer mode:**

Click the **Binary/Ascii** button.

File Transfer Setup Options

You can setup the Data Conversion mode and Data Type for both your computer and the remote computer (host).



Data Translation	*Defines the mode of transferring files: no translation, Ascii mode translation, and Ascii and binary translation.*
Host Data Type	*Defines the data type for the FTP site: 7-bit, 8-bit (DOS-Ascii), and 8-bit (Windows-Ansi).*
PC Data Type	*Defines the data type for your PC: DOS-Ascii and Windows-Ansi.*

➔ **To select file transfer options:**

1. Select **Settings | File Transfer Setup**. The **Data Conversion** dialog

appears.

2. Select the required file transfer setup parameters and click **OK**.

Working with Configuration Files

A Configuration file consists of the configuration settings you have defined and your connection profiles. You can save configuration settings to the default **ftp.cfg** configuration file, create a new configuration file, or save the configuration file under a different name. All configuration files are saved with a **.cfg** extension. You can use previously defined configuration settings by opening an existing configuration file, or by starting PowerTerm Pro FTP client with a customized configuration file. To do this, you should create a shortcut and add the name of the configuration file to it. For more information about creating a shortcut, see paragraph *Automatic File Transfer*

➔ **To create a new configuration file:**

Select **File | New**. A new configuration file called **noname.cfg** is created in which you can specify the parameters that you require.

➔ **To open an existing configuration file:**

1. Select **File | Open**. The **Open Configuration File** dialog appears.
2. Select the configuration file that you require.
3. Click Open. The configuration file opens with the settings that you previously defined.

➔ **To save a configuration file:**

1. Define configuration settings and connection profiles as required.
2. Select **File | Save**.
   The file is saved without any confirmation prompt, if you have already saved the current configuration in a .cfg file. The **Save File As** dialog appears if the current configuration files is noname.cfg.

➔ **To save a file under a different name:**

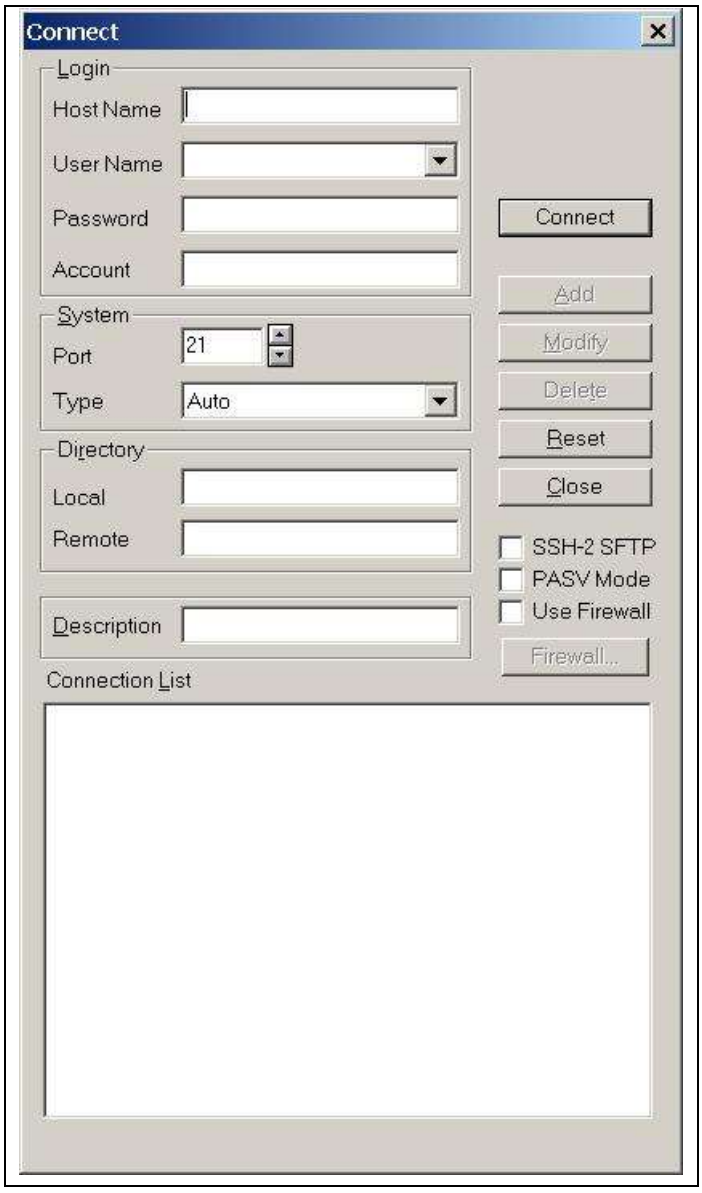
1. Select **File | Save As**. The **Save File As** dialog appears.
2. Specify a name in the **File Name** field.
3. Click **Save**. The file is saved with a .cfg extension.

Defining Connection Parameters

You can set parameters for connecting to an FTP site. These parameters

include login, system and directory information. The last parameters that you specified in the **Connect** dialog are stored and displayed when you re-open it (excluding the password).

The parameters that you define will only remain active for the current session, unless you save them.

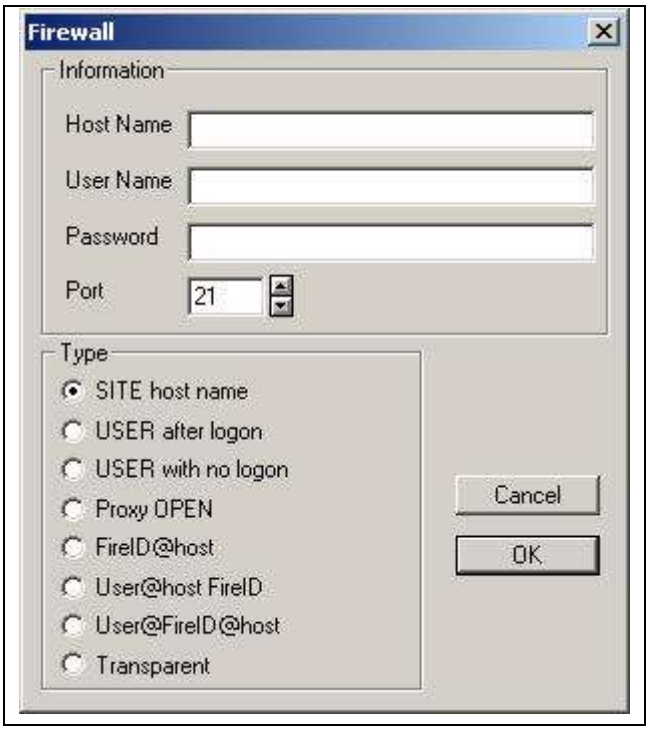


Connection Parameters

Login	***Host Name****, the remote computer that you want to access. Use the host computer's domain name or its IP address.*

	***User Name**, the account that you want to use to access the remote computer. Use anonymous if you do not have an account on the FTP server or enter your user name if you have a personal account on the remote computer.* ***Password**, enter the password that you have been assigned for personal FTP or enter your complete e-mail address for anonymous FTP. (The characters are displayed as asterisks.)* ***Account**, optional, may be required for personal FTP, in addition to your user name and password.*
System	***Port**, a number that identifies an Internet application. Default port is 21.* ***Type**, the operating system used by the remote computer. Default type is **Auto**.*
Directory	*Optional parameters:* ***Local**, the local directory to or from which you want to transfer files.* ***Remote**, the remote directory to or from which you want to transfer files.*
Description	*A name for the connection profile.*
Connection List	*Displays a list of the existing connection profiles.*
PASV Mode	*Specifies that the program will work in PASV mode.*
Use Firewall	*Select this option to enable the **Firewall** button.*

Firewall Parameters



Host Name	*The computer that you want to act as a "security guard" prior to granting access to a remote computer.*
User Name	*The account of the computer that you want to perform the security check.*
Password	*Enter the password that you were assigned for the computer that performs the security check.*
Port	*A number that identifies an Internet application, which performs the security check. Default port is 21.*
Type	*The Firewall type. If you do not know which type of firewall you have, choose the default (the most popular) or contact your firewall manufacturer to verify the type.*

➔ **To define connection parameters:**

1. Select **Services | Connect** or click  . The **Connect** dialog appears.

4. Specify connection parameters.
5. ➔ To specify Firewall parameters:
6. Open the Connect dialog and select Use Firewall to enable the Firewall button.
7. Click Firewall. The Firewall dialog appears.
8. Enter required parameters and select a firewall type.
9. Click OK.

Working with Connection Profiles

If you frequently connect to a specific remote computer, you can create a **Connection Profile** for this computer to use again for other PowerTerm Pro FTP client sessions. This profile contains the connection parameters for the specific FTP site, for example the host name, user name and password. The connection profile you create is displayed in the **Connection List**, which is saved in the current **Configuration File** along with the configuration settings. PowerTerm Pro FTP client enables you to modify, delete, and reset (clear) the parameters of a Connection Profile. You can also use **Reset** to introduce new parameters and create a new Connection Profile.

➔ **To create a profile:**

1. Enter parameters in the **Connect** dialog.
2. Type a profile name in the **Description** field.
3. Click **Add**. The profile is created and displayed in the **Connection List**.

➔ **To modify a profile:**

1. Select the desired profile from the **Connection List**.
2. Modify the parameters as required.
3. Click **Modify**. The profile is modified.

➔ **To delete a profile:**

1. Select the desired profile from the **Connection List**.
2. Click **Delete**. The profile is deleted.

➔ **To reset (clear) a profile:**

1. Select the desired profile from the **Connection List**.
2. Click **Reset**. Parameters are cleared.

Connecting to an FTP Site

Once you have defined your connection parameters or selected a connection profile, you are ready to connect to an FTP site. After the connection is established, the PowerTerm Pro FTP client window displays directories and files of the remote computer in the lower part of the window. A log window is also displayed if you have selected the **Open Log Window** option in the **FTP - Preferences** dialog.

➔ **To connect to an FTP site:**

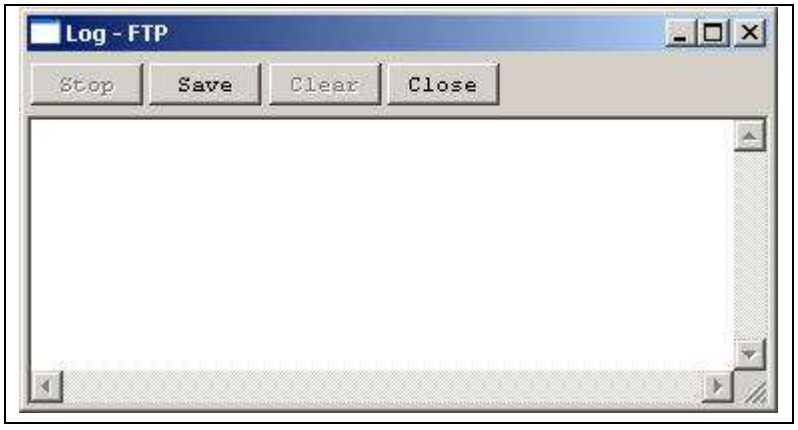
1. Display the **Connect** dialog.
2. Specify connection parameters or select a profile from the **Connection List**.
3. Click **Connect**.

Or,

Double-click a profile in the **Connection List**.

Using the FTP Log Window

You can open a temporary log window to display messages exchanged (connection information) by the PowerTerm Pro FTP client and the remote server. You can either automatically display the log window every time that you connect to an FTP site, or you can open it for a specific session.



Start/Stop	*Toggles between start/stop displaying connection information.*
Save	*Saves the connection information in a log file.*
Clear	*Clears the log window.*

Close	*Closes the log window.*

➔ **To automatically display connection information for all sessions:**

1. Select **Settings | Options**. The **FTP-Preferences** dialog appears.
2. Select **Open Log Window** and click **OK**. The log window will automatically open and display connection information each time you connect to an FTP site.

➔ **To display connection information for a specific session:**

1. Select **Services | Log**. The **Log-FTP** window opens with no information.
2. Click **Connect** in the PowerTerm Pro FTP client window and enter connection parameters.
3. Click **Connect**. The log window now displays each step in the connection process.

➔ **To stop/start displaying connection information:**

Click **Stop/Start** to toggle between stopping and resuming the display.

➔ **To save the connection information to a log file:**

1. Click **Save**. The **Save As** dialog appears.
2. Select the directory and specify the name of the file to which you want to save the connection information.
3. Click **Save**. The file is saved with the **.log** extension.

➔ **To clear the log window:**

Click **Clear**. All connection information displayed is cleared.

➔ **To close the log window:**

Click **Close**.

Working with Local and Remote Directories and Files

The PowerTerm Pro FTP client enables you to manipulate directories and files in both your own computer and in the remote computer. It also provides options to select, create, and remove directories and files, as well as rename and view the contents of a file in the format that it was

created.

☞ Some FTP sites may restrict access to certain functions, for example, removing a directory or deleting a file.

☞ You can use standard windowing convention like **Shift** and **Ctrl**, to select multiple files.

➔ **To select a directory:**

There are several ways to select a directory and display its files.

Select the required directory and click **Change**.

Double-click the required directory.

Type the directory name in the **Directory** field and press **Enter** on the keyboard.

➔ **To create a directory:**

1. Double-click the required drive.
10. Type the new directory name in the Directory field and click Create.

➔ **To remove a directory:**

Select the directory you want to remove and click **Remove**.

➔ **To view a file:**

The file will be displayed in the format in which it was created, i.e. a file with a .doc extension will be opened in Word, and a file with a .txt extension will be opened in Notepad.

Select the desired file and click **View**.

Double-click the desired file.

➔ **To delete a file:**

Select the file you want to delete and click **Delete**.

➔ **To rename a file:**

1. Select the desired file and click **Rename**. The **Rename** dialog appears.
2. Type the new file name and extension (if necessary), and click **OK**. The file is displayed in the file list with the new name.

➔ **To refresh the directory display:**

Select **Services | Refresh**. All changes that you have made to directories and/or files are displayed.

Transferring Files

You can download and upload files between your computer and an FTP site. Files can be copied to a directory or appended to an existing file. Most menu options and toolbar icons are inactive during the transfer of files. However you can still perform informative operations such as view directory and file information, and access online help. You can minimize the PowerTerm Pro FTP client window while file transfer is in progress.

You can use standard windowing conventions like **Shift** and **Ctrl** to select multiple files.

➔ **To download file(s) from an FTP site:**

The name(s) of the file(s), which is to receive the downloaded file, must be specified. If the receiving file does not exist, the PowerTerm Pro FTP client will create it for you. The downloaded file is copied into your directory under this file name. If the receiving file already exists, the new file will overwrite it.

Copying file(s) to your local computer:

1. Select the target local directory.
2. Select the file(s) to download from the FTP site.
3. Select **Copy**.
4. Click the **left** arrow. The FTP Transfer dialog graphically displays the progress of downloading the selected file(s).

Appending file(s) from your local computer:

1. Select the target local file(s).
2. Select the file(s) to download from the FTP site.
3. Select **Append**.
4. Click the **left** arrow. The FTP Transfer dialog graphically displays the progress of downloading the selected file(s).

➔ **To upload file(s) to an FTP site:**

Copying file(s) to an FTP site:

1. Select the target remote directory.
2. Select the file(s) to upload from your computer.

3. Select **Copy**.
4. Click the **right** arrow. The FTP Transfer dialog graphically displays the progress of uploading the selected file(s).

Appending file(s) to an FTP site:

1. Select the target remote file(s).
2. Select the file(s) to upload from your computer.
3. Select **Append**.
4. Click the **right** arrow. The FTP Transfer dialog graphically displays the progress of uploading the selected file(s).

Automatic File Transfer

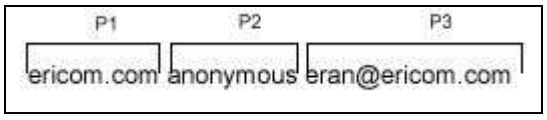
You can automate connection and transfer options by creating a shortcut which specifies the necessary parameters to perform these operations. Once you have created the shortcut, you activate it by double-clicking its icon. The following parameters can be specified:

Connection parameters for connecting to an FTP site. They include the host site, user name, and password.

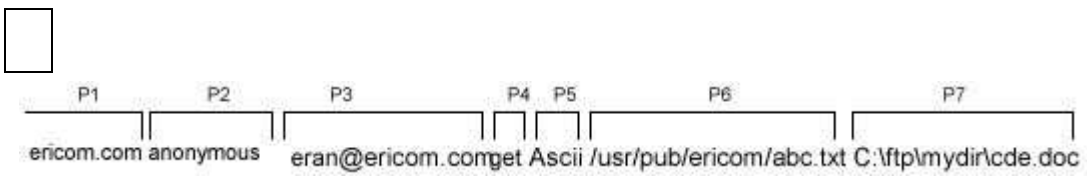
File transfer parameters for connecting to an FTP site and transferring files to or from your computer. The transfer parameters include the location of the PowerTerm Pro FTP client and the host site, file transfer direction, and file path of the local or remote file that you want to receive or send. You can also use file transfer conventions to transfer all file, or all files of a single type, to and from a directory.

IMPORTANT The PowerTerm Pro FTP client uses a set sequence of parameters to transfer files. This sequence **cannot** be modified.

Example of **Connection** parameters (P):



Example of **File Transfer** parameters (P):



Parameter 1	*Host site name*

Parameter 2	*User name*
Parameter 3	*Password*
Parameter 4	*File transfer direction:* ***Get** for downloading* ***Put** for uploading*
Parameter 5	*File transfer mode:* ***Binary*** ***Ascii***
Parameter 6	*Path and name of the local or remote file that you want to transfer, according to the file transfer direction specified in parameter 4.*
Parameter 7	*Path and name of the local or remote file that received the transferred file, according to the file transfer direction specified in parameter 4.*

IMPORTANT The PowerTerm Pro FTP client will display an error message telling you of any missing parameters. You must enter " " as the password parameter rather than leaving it empty.

➔ **To create a shortcut:**

The following procedure describes one way to create a shortcut. Consult your Windows documentation for descriptions of other methods.

1. Locate the file **ftpc32.exe** on your computer. It resides in the PowerTerm Pro installation folder.
2. Right-click and select **Create Shortcut**. The shortcut to ftpc32.exe appears in the current folder.
3. Right-click the shortcut and select **Properties**. The **Shortcut to ftpc32.exe Properties** dialog appears.
4. Enter after the **Target** file path, the required parameters.
5. Click **OK**. The next time that you open PowerTerm Pro FTP client, it will open with the defined parameters.

File Transfer Conventions

You can use wildcards and combinations of them, in parameters 6 and 7

to transfer groups of files. The symbols used for wildcards are:

*	*Any character combination*
?	*Any single character*

➔ **To transfer all files with the same extension:**

Type * and the file extension to upload or download all files of this type in a directory.

Example:

All files with the .cpp extension will be copied to /usr/pub/Ericom

```
C:\*.cpp /usr/pub/Ericom/
```

➔ **To transfer all files of one type and save them with a different extension:**

Type * and the extension that you want to give to the transferred files.

Example:

All files with the .cpp extension will be copied to the folder /usr/pub/Ericom receiving the same name, but with a .txt extension

```
C:\*.cpp /usr/pub/Ericom/*.txt
```

➔ **To append all files of one type to a specific file:**

Type the name of the file to which you want to append the transferred files.

Example:

All files with the .cpp extension will be appended to the file /usr/pub/Ericom/aaa.txt

```
C:\*.cpp /usr/pub/Ericom/aaa.txt
```

➔ **To transfer a file to another unknown file:**

Type ? for the unknown letter in the file name.

Example:

The file aaa.log will be copied to the file /usr/pub/Ericom/babcc.txt

```
C:\aaa.log /usr/pub/Ericom/b?b*.txt
```

Disconnecting and Exiting

Before you exit the PowerTerm Pro FTP client, you need to disconnect from the current FTP site.

Changes to the preferences are either saved automatically when you exit the client, if you selected **Save Settings on Exit**, or you are prompted to save them.

➔ **To disconnect from an FTP site:**

Click **Disconnect**.

➔ **To exit the PowerTerm Pro FTP client:**

Select **File | Exit**.

Troubleshooting the PowerTerm Pro FTP Client

If you have any difficulties with PowerTerm Pro FTP client, refer to the following checklist:

Connection cannot be established	Ensure that the remote system provides an FTP server, which is running. Ensure you have entered the system type correctly. Select **Auto** if you do not know the system type to which you are connecting.
PowerTerm Pro FTP client reports a login failure	*Ensure that the **User name** and **Password** were entered correctly.*
Files cannot be transferred or received	Ensure that the correct transfer type (Binary or Ascii) is selected. Transferring a file in the incorrect mode may corrupt that file. Select **Binary**, unless you transfer text files to or from a UNIX FTP server Ensure that you have the necessary permission for specific operations, like write access to a directory.

13. CREATING CAPTURE AND LOG FILES TO SEND TO ERICOM SUPPORT

Ericom Software's Technical Support team can assist whenever needed, providing that you send them the required information. This feature automates the process for the end-user.

➔ **To create the necessary captures and log files to send to support:**

1. Open PowerTerm Pro InterConnect.
2. Connect to your host
3. Perform the following:

Press key combination	Appears on the Status bar
ctrl+shift+s	"capture.log with send with keys"
ctrl+shift+k	"capture.log with send"
ctrl+shift+t	"tcpip.log"

Warning: One's password is liable to be recorded in this manner.

4. Connect to host and arrive at the trouble spot.
5. Continue with the following:

Press key combination	Appears on the Status bar
*ctrl+shift+s	"capture file end"
ctrl+shift+t	"tcpip.log end"
ctrl+shift+v	View the log file before it's sent.

*mandatory

6. Click Send. The CAB file is sent to Ericom Software's Technical Support.

14. LIST OF SUPPORTED CODE PAGES

VT and other character mode emulations

7 bit character sets:

None

British

Bulgarian

Dutch

Finnish

French

French Canadian

German

Greek

Italian

Norwegian Danish

Portuguese

Slovenian

Spanish

Swedish

Swiss

Turkish

8 bit character sets:

DEC Multinational

ISO Latin 1 (USA)

ISO Latin 2 (East European)

ISO Latin 4 (North European)

ISO Latin 5 (Turkish)

ISO Latin 6 (Nordic)

ISO Latin 7 (Baltic)

ISO Latin 9 (western with Euro sign instead of the international currency symbol)

DEC Cyrillic

ISO Cyrillic

DEC Greek

ISO Greek

HP Roman 8

DGI (Data General International)

Code Page 437 (PC USA)

Code Page 620 - Polish (Mazovia)

Code Page 737 Greek IBM PC de facto Standard (Greek 437)

Code Page 775 (Baltic)

Code Page 808 Russia (866 with Euro)

Code Page 848 (Cyrillic, Ukrainian with Euro)

Code Page 850 (Multilingual)

Code Page 851 (Greek)

Code Page 852 (Poland, Hungary, Romania, Slovakia, Czech, Croatia, Slovenia)

Code Page 855 (Bulgaria, Serbia-Montenegro, FYR Macedonia)

Code Page 857 (Turkish)

Code Page 858 (850 with the Euro character)

Code Page 860 (Portuguese)

Code Page 863 (Canadian French)

Code Page 865 (Nordic)

Code Page 866 (Cyrillic)

Code Page 872 Bulgaria, Serbia-Montenegro, FYR Macedonia (855 With Euro)

Windows 1250 (Windows Eastern/Central European)

Windows 1251 (Windows Cyrillic)

Windows 1252 (Windows Latin 1 (US, Western Europe)

Windows 1253 (Windows Greek)

Windows 1254 (Windows Turkish)

Windows 1257 (Windows Baltic)

IBM (EBCDIC) emulations

5250:

037 (USA/Canadian)

273 (German)

277 (Danish, Norwegian)

278 (Finnish, Swedish)

280 (Italian)

284 (Spanish, Latin American)

285 (UK English)

297 (French)

423 (Greek)

500 (Belgian (New), Swiss (French and German))

836 (People's Republic of China)

870 (Poland, Hungary, Romania, Slovakia, Czech, Croatia, Slovenia)

871 (Icelandic)

875 (Greek)

880 (Cyrillic)

924 USA, Canada (French), Netherlands, Portugal, France, Finland

1025 (Russia, Bulgaria, Serbia-Montenegro, FYR Macedonia)

1026 (Turkish)

1047 USA, Canada (French), Netherlands, Portugal (Latin-1/Open System)

1140 USA, Canada (French), Netherlands, Portugal, Brazil, Australia, New Zealand (same as 037 but with Euro sign instead of the international currency symbol)

1141 Germany, Austria (same as 273 but with Euro sign instead of the international currency symbol)

1142 Denmark, Norway (same as 277 but with Euro sign instead of the international currency symbol)

1143 Finland, Sweden (same as 278 but with Euro sign instead of the international currency symbol)

1144 Italy (same as 280 but with Euro sign instead of the international currency symbol)

1145 Latin America (Spanish), Spain (same as 284 but with Euro sign instead of the international currency symbol)

1146 United Kingdom (same as 285 but with Euro sign instead of the international currency symbol)

1147 France (same as 297 but with Euro sign instead of the international currency symbol)

1148 Belgium, Switzerland (French), Switzerland (German) (same as 500 but with Euro sign instead of the international currency symbol)

1149 Iceland (same as 871 but with Euro sign instead of the international currency symbol)

1153 Latin 2 Multilingual (870 with Euro)

1154 Cyrillic, Multilingual (880 with Euro)

1155 Turkey (1026 with Euro)

1158 Cyrillic, Ukraine with Euro

3270:

Cyrillic (same as 880)

Danish (same as 277)

English-UK (same as 285)

English-USA (same as 037)

Finnish (same as 278)

French (same as 297)

German (same as 273)

Greek (same as 423)

Icelandic (same as 871)

Italian (same as 280)

Spanish (same as 284)

Swiss (same as 500)

Turkish (same as 1026)

Latin-1/Open System (same as 1047)

274 (Belgian)

870 (Poland, Hungary, Romania, Slovakia, Czech, Croatia, Slovenia)

875 (Greek)

924 USA, Canada (French), Netherlands, Portugal, France, Finland

1025 (Russia, Bulgaria, Serbia-Montenegro, FYR Macedonia)

1140 USA, Canada (French), Netherlands, Portugal, Brazil, Australia, New Zealand
(same as 037 but with Euro sign instead of the international currency symbol)

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1145 Latin America (Spanish), Spain (same as 284 but with Euro sign instead of the international currency symbol)

1146 United Kingdom (same as 285 but with Euro sign instead of the international currency symbol)

1147 France (same as 297 but with Euro sign instead of the international currency symbol)

1148 Belgium, Switzerland (French), Switzerland (German) (same as 500 but with Euro sign instead of the international currency symbol)

1149 Iceland (same as 871 but with Euro sign instead of the international currency symbol)

1153 Latin 2 Multilingual (870 with Euro sign instead of the international currency symbol)

1154 Cyrillic, Multilingual (880 with Euro sign instead of the international currency symbol)

1155 Turkey (1026 with Euro sign instead of the international currency symbol)

1158 Cyrillic, Ukraine with Euro sign instead of the international currency symbol

1160 Thai 838 with FE = Euro (€)

15. MENU ITEMS FOR POWERTERM PRO

ActivateRecordedScript

AutomaticCopy

Break

ClearDTR

ClearHistory

ClearRTS

ClearScreen

Connect

Contents

Cut / Copy / Paste

CopyToFile

Dial

Disconnect

EditScript

Exit

FileTransferSetup

FormFeed

General

HideButtons

HideMenu

HidePowerPad

HideStatusBar

HideToolBar

HoldScreen

InputTrace

KeyboardMap

LineFeed

ModemSetup

NewTerminalSetup

NewTerminalWindow

OnLine

OpenKeyboardFile

OpenPowerPadFile

OpenTerminalSetup

PauseScriptRecording

PowerPadSetup

PrinterN (where N represents one of the supplementary printers from 2-6)

PrintScreen

PrintSetup

ReceiveAsciiFile

ReceiveFile

ReceiveINDFILE

ReceiveKermit

ReceiveZmodem

Reset

ResetCommunication

ReverseScreen

RunFTP

RunScript

SaveKeyboardFile

SavePowerPadFile

SaveRecordedScript

SaveTerminalSetup

SaveTerminalSetupAs

ScriptCommand

SelectHistory

SelectScreen

SendAsciiFile

SendFile

SendINDFILE

SendKermit

SendZmodem

SetDTR

SetRTS

ShowButtons

ShowMenu

ShowPowerPad

ShowStatusBar

ShowToolBar

StartAutoPrint

StartScriptRecording

StartTrace

StopScriptRecording

StopTrace

SystemFonts

TerminalSetup

ToggleAutoPrint

ToggleScriptRecording

ToggleTrace

About Ericom

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