



# PowerTerm<sup>®</sup> Series Terminal Emulator

## User's Guide

Windows edition

**Version 6.6.2**

**Ericom North America**  
Ericom Software Inc.  
231 Herbert Ave., Bldg. #4  
Closter, NJ 07624 USA  
Tel: +1 201 767 2210  
Fax: +1 201 767 2205  
Toll Free: 1 888 769 7876  
Email: [info@ericom.com](mailto:info@ericom.com)

**Ericom Europe**  
Ericom Software (UK) Ltd.  
11a Victoria Square  
Droitwich, Worcestershire  
WR9 8DE United Kingdom  
Tel: +44 (0)1905 777 970  
Fax: + 44 (0)1905 777 972  
Email: [ukinfo@ericom.com](mailto:ukinfo@ericom.com)

**Ericom International**  
Ericom Software Ltd.  
8 Hamarpeh Street  
Har Hotzvim  
Jerusalem 91450 Israel  
Tel: +972 (0)2 571 4774  
Fax: +972 (0)2 571 4737  
Email: [info@ericom.com](mailto:info@ericom.com)

---

# Important Notice

This guide is subject to the following conditions and restrictions:

- This User's Guide provides documentation for the PowerTerm Series of products. Your specific PowerTerm product might include only a portion of the features documented in this Guide.
- The proprietary information belonging to Ericom® Software Ltd. is supplied solely for the purpose of assisting explicitly and properly authorized users of PowerTerm®.
- No part of its contents may be used for any other purpose, disclosed to any person or firm, or reproduced by any means, electronic and mechanical, without the express prior written permission of Ericom® Software Ltd.
- The text and graphics are for the purpose of illustration and reference only. The specifications on which they are based are subject to change without notice.
- The software describe in this document is furnished under a license agreement. The software may be used or copied only in accordance with the terms of that agreement.
- Information in this document is subject to change without notice. Corporate and individual names and data used in examples herein are fictitious unless otherwise noted.

Copyright© 2003 Ericom® Software Ltd.

Ericom® and PowerTerm® are registered trademarks of Ericom® Software Ltd., which may be registered in certain jurisdictions

Other company and brand, product and service names are trademarks or registered trademarks of their respective holders.

---

# Table of Contents

<b>ABOUT THIS GUIDE</b>	<b>11</b>
<b>INTRODUCTION TO POWERTERM</b>	<b>12</b>
<b>What is PowerTerm?</b>	<b>13</b>
<b>PowerTerm Features</b>	<b>14</b>
<b>System Requirements</b>	<b>15</b>
<b>PowerTerm Setup</b>	<b>16</b>
Working with a Single Terminal Connection	16
Working with Multiple Terminal Connections	16
<b>A Quick Guide Through PowerTerm</b>	<b>17</b>
Step 1: Start PowerTerm	17
Step 2: Select a Terminal Emulation	17
➤ To select terminal settings	17
➤ To open a previously defined Terminal setup file	17
Step 3: Connect to a Host	18
➤ To connect to a host	18
Step 4: Work with a Host	18
Step 5: Exit PowerTerm	18
➤ To exit PowerTerm	19
<b>THE POWERTERM WORK AREA</b>	<b>20</b>
<b>The PowerTerm Window</b>	<b>21</b>
<b>Menu Bar</b>	<b>23</b>
Working with Menus and Commands	24
➤ To select a menu item using the mouse	24
➤ To select a menu item using direction keys	24
➤ To select a menu or menu item by typing a letter	24
<b>Toolbar</b>	<b>25</b>
➤ To display a description of what each button does	26
<b>Hot Keys</b>	<b>27</b>

<b>Manipulating Desktop Components</b>	<b>28</b>
➤To show/hide the Menu bar	28
➤To show/hide the Soft buttons	28
➤To show/hide the Status bar	28
➤To show/hide the Toolbar	28
➤To show/hide the Power Pad	28
➤To show/hide the History Scroll bar	28
➤To change the display color of the PowerTerm window	28
➤To disable/enable underline	29
➤To disable/enable blink	29
➤To disable/enable host colors	29
<b>Selecting Text</b>	<b>30</b>
➤To select a word	30
➤To select a block	30
➤To select full lines	30
➤To select a string	30
➤To select the entire screen	30
➤To select a menu entry	31
➤To activate light pen support	31
<b>USING POWERTERM</b>	<b>32</b>
<b>Step 1: Starting PowerTerm</b>	<b>33</b>
➤To start PowerTerm	33
Starting PowerTerm Using a Setup File	33
➤To start PowerTerm with a customized setup file	33
➤To use a setup file during a PowerTerm session	33
Starting PowerTerm Using a Script	34
Starting PowerTerm with Auto Connect	34
➤To access the Auto Connect option	34
<b>Step 2: Setting Up your Working Environment</b>	<b>35</b>
Mapping the PC Keyboard	35
➤To view the default keyboard mapping	35
➤To map a PC key to a host key	35
➤To assign a script command to a PC key	36
➤To map combinations of keys that include Alt, Ctrl and Shift	36
➤To cancel a keyboard key definition	36
➤To replace a PC key with another PC key	36
➤To copy a PC key to another PC key	36
➤To restore the default keyboard mapping of all mapped keys	36
Saving and Opening Keyboard Mapping Settings	36
➤To save keyboard mapping settings	36
➤To open a predefined keyboard mapping settings	37
Programming the Power Pad	37
➤To program the Power Pad	37
➤To adjust the number of buttons in the Power Pad	37
Saving and Opening Power Pad Settings	37
➤To save your Power Pad settings	37

➤To open predefined Power Pad settings	38
Programming Soft Buttons	38
➤To program Soft buttons	38
Selecting Fonts	38
➤To select PowerTerm fonts	38
➤To select system fonts	38
<b>Step 3: Defining Settings for a Terminal Emulation (Terminal Settings)</b>	<b>39</b>
Emulation Property Page	39
➤To define settings for terminal emulation	39
General Property Page	40
➤To define emulation parameters	40
Display Property Page	42
➤To define display parameters	42
Keyboard Property Page	43
➤To define keyboard parameters	43
Printer Property Page	45
➤To define printer parameters	45
Advanced Printing	46
Non 5250 printing	46
➤To set values for non-host print transform in non-graphic mode	46
TN5250 Printing Session	47
➤To set values for non-host print transform in non-graphic mode	47
➤To enable host print transform	47
Tabs Property Page	48
➤To define tab parameters	48
Colors Property Page	49
➤To define color parameters	49
Preferences Property Page	50
➤To define PowerTerm preferences	50
<b>Step 4: Defining Modem and Communication Settings</b>	<b>51</b>
Modem Settings	51
➤To define modem settings	51
➤To add modem settings	51
➤To modify modem settings	51
➤To delete modem settings	51
➤To clear Modem Information fields	51
Communication Settings	52
➤To define communication settings	52
Session Types	53
➤To enter a Device Name	54
➤To specify a Dial Number	54
➤To add a Quick Dial Number	54
➤To specify a Script file	55
➤To specify a setup file	55
➤To select a predefined session	55
➤To save a session	55
➤To modify a session	55
➤To delete a session	55

<b>Step 5: Saving the Terminal Setup File</b>	<b>56</b>
➤To create a shortcut for session settings	56
➤To save terminal settings to the current setup file	56
➤To save a terminal setup file under a different name	56
➤To save PowerTerm settings as an icon	56
➤To open a setup file	57
<b>Step 6: Connecting to a Host</b>	<b>58</b>
➤To establish a connection	58
➤To modify a connection to a host	58
<b>Step 7: Working with the Host</b>	<b>59</b>
Transferring Files	59
➤To define host and PC data types for file transfer	59
➤To receive a non-ASCII file from the host	59
➤To receive an ASCII file from the host	59
➤To send a non-ASCII file from the PC to the host	60
➤To send an ASCII file from the PC to the host	60
Transferring Files for 3270 Emulations	60
➤To receive files from the host computer	60
➤To send files to the host computer	60
Printing Data	62
➤To select a printer and set printing parameters	62
➤To execute a form feed on the printer	62
➤To execute a line feed on the printer	62
➤To print accumulated data displayed in the work area	62
➤To print a session using device naming	62
➤To print the Terminal Screen	63
Starting a New PowerTerm Session	63
➤To open a new instance of the PowerTerm window	63
➤To toggle between open sessions	63
➤To switch to a specific session	63
<b>Step 8: Ending a PowerTerm Session</b>	<b>64</b>
➤To define parameters for closing a PowerTerm session automatically	64
➤To automatically reconnect a PowerTerm session after exiting the current session	64
➤To manually close a session	64
➤To fast exit the current session	64
Optional Closing	64
➤To re-establish communication	65
<b>Step 9: Exiting PowerTerm</b>	<b>66</b>
➤To exit PowerTerm	66
<b>SCRIPTS</b>	<b>67</b>
<b>Script Overview</b>	<b>68</b>
PSL Types	68
<b>Using PowerTerm Scripts</b>	<b>69</b>
➤To create a script file	69

➤To edit a script file	69
➤To record a script	69
➤To run a script from startup by creating a Windows shortcut	70
➤To run a script file	70
➤To run a script file during a PowerTerm session using Soft buttons	70
➤To run a script file during a PowerTerm session using the Power Pad	70
➤To run a script file upon connecting to a host	70
➤To run individual script commands	71
➤To activate a recorded script	71
➤To save a recorded script	71

## **MENU REFERENCE** **72**

### **File Menu** **73**

New Terminal Setup	73
Open Terminal Setup	73
Save Terminal Setup	73
Save Terminal Setup As	73
Save as Icon	73
Open Keyboard File	73
Save Keyboard File	73
Open Power Pad File	74
Save Power Pad File	74
Print Screen	74
Print Setup	74
Start/Stop Auto Print	74
Close Print Queue	74
Form Feed	74
Line Feed	74
New Terminal Window	74
Exit All Sessions	75
Exit	75

### **Edit Menu** **76**

Select Screen	76
Clear Screen	76
Reverse Screen	76
Clear History	76
Copy	76
Paste	76
Copy to File	76
Automatic Copy	77

### **Terminal Menu** **78**

Setup	78
PowerTerm Fonts	78
System Fonts	78
Reset	78
Online	78
Hold Screen	78

---

English/ German/ French/ Italian/ Spanish/ Greek	78
<b>Communication Menu</b>	<b>79</b>
Connect	79
Modify Connection	79
Disconnect	79
Modem Setup	79
Reset Communication	79
File Transfer Setup	79
Receive File	79
Send File	79
Run FTP	80
Utilities	80
Dial	80
Break	80
Set DTR	80
Clear DTR	80
Set RTS	80
Clear RTS	80
AUX: Modify connection	80
<b>Session Menu</b>	<b>81</b>
<b>Options Menu</b>	<b>82</b>
Keyboard Map	82
Power Pad Setup	82
Start/Stop Trace	82
Input Trace	82
Hide Menu	82
Hide Buttons	82
Hide Status bar	82
Hide Tool Bar	82
Show Power Pad	83
<b>Script Menu</b>	<b>84</b>
Run Script	84
Edit Script	84
Script Command	84
Start/Stop Script Recording	84
Pause Script Recording	84
Activate Recorded Script	84
Save Recorded Script	84
<b>Help Menu</b>	<b>85</b>
Contents	85
Getting Started	85
About PowerTerm	85
<b>INTRODUCTION TO THE POWERTERM FTP CLIENT</b>	<b>86</b>
<b>What is the PowerTerm FTP Client?</b>	<b>87</b>

---

<b>Features and Benefits</b>	<b>88</b>
<b>PowerTerm FTP Client Concepts</b>	<b>89</b>
<b>The PowerTerm FTP Client Window</b>	<b>90</b>
Menu Bar	91
Toolbar	91
<b>A quick Guide through PowerTerm FTP Client</b>	<b>93</b>
Step 1: Start PowerTerm FTP Client	93
Step 2: Connect to an FTP Site	93
Step 3: Transfer Files	94
Step 4: Exit PowerTerm FTP Client	94
<b>WORKING WITH THE POWERTERM FTP CLIENT</b>	<b>95</b>
<b>Starting PowerTerm FTP Client</b>	<b>96</b>
➤To start PowerTerm FTP Client	96
<b>Defining Configuration Settings</b>	<b>97</b>
Defining PowerTerm FTP Client Preferences	97
➤To define PowerTerm FTP Client preferences	97
Selecting a file Transfer Mode	98
➤To select the data transfer mode	99
File Transfer Setup Option	99
➤To select file transfer options	99
<b>Working with Configuration Files</b>	<b>101</b>
➤To create a new configuration file	101
➤To open an existing configuration file	101
➤To save a configuration file	101
➤To save a file under a different name	101
<b>Defining Connection Parameters</b>	<b>102</b>
➤To define connection parameters	102
➤To specify Firewall parameters	103
<b>Working with Connection Profiles</b>	<b>104</b>
➤To create a connection profile	104
➤To modify a profile	104
➤To delete a profile	104
➤To reset (clear) a connection profile	104
<b>Connecting to an FTP Site</b>	<b>105</b>
➤To connect to an FTP site	105
<b>Using the FTP-Log Window</b>	<b>106</b>
➤To automatically display connection information for all sessions	106
➤To display connection information for a specific session	106
➤To stop/start displaying connection information	106
➤To save the connection information to a log file	106

---

➤To clear the Log-FTP window	106
➤To close the Log-FTP window	106
<b>Working with Local and Remote Directories and Files</b>	<b>108</b>
➤To select a directory	108
➤To create a directory	108
➤To remove a directory	108
➤To view a file	108
➤To delete a file	108
➤To rename a file	109
➤To refresh the directory display	109
<b>Transferring Files</b>	<b>110</b>
➤To download a file from an FTP site	110
➤To upload a file to an FTP site	110
<b>Automatic File Transfer</b>	<b>111</b>
➤To create a shortcut	111
File Transfer Conventions	112
➤To transfer all files with the same extension	112
➤To transfer all files of one type and save them with a different extension	112
➤To append all files of one type to a specific file	113
➤To transfer a file to another unknown file	113
<b>Disconnecting and Exiting PowerTerm FTP Client</b>	<b>114</b>
➤To disconnect from an FTP site	114
➤To exit the PowerTerm FTP Client	114
<b>Troubleshooting the PowerTerm FTP Client</b>	<b>115</b>

# About this Guide

PowerTerm is a fully functional terminal emulator for Microsoft Windows, Linux, Mac OS X, and Solaris.

This Guide assumes that you are familiar with basic windowing system conventions (file transferring, copy/paste functions, etc.) and the operation of the terminal you intend to emulate.

The PowerTerm User's Guide is comprised of the following chapters:

**Chapter 1, Introduction to PowerTerm**, presents PowerTerm and describes its main features. It also provides a quick guide to working with PowerTerm.

**Chapter 2, The PowerTerm Window**, provides an overview of the PowerTerm window and its components.

**Chapter 3, Using PowerTerm**, provides step-by-step instructions for using PowerTerm.

**Chapter 4, Scripts**, describes the use of the Power Script Language (PSL). For a more detailed description of each PSL command, see the PowerTerm online help and the "PowerTerm Power Script Language, Programmer's Reference", available in pdf format.

**Chapter 5, Menu Reference**, describes each of the PowerTerm menu options.

**Chapter 6, Introduction to the PowerTerm FTP Client**, presents PowerTerm FTP Client and describes its main features. It also provides a quick step-by-step guide for working with PowerTerm FTP Client as well as an overview of the PowerTerm FTP Client window and its components.

**Chapter 7, Working with the PowerTerm FTP Client**, describes how to define connection parameters as well as the procedure to connect to an FTP site. It also describes how to display connection information.

---

# Chapter 1

## Introduction to PowerTerm

This chapter presents PowerTerm and its main features. A quick guide to the PowerTerm is also provided. It describes the basic steps for users who are familiar with accessing remote terminals.

This chapter includes the following topics:

- **What is PowerTerm?**
- **PowerTerm Features**
- **System Requirements**
- **PowerTerm Setup**
- **A Quick Guide Through PowerTerm**

## What is PowerTerm?

PowerTerm is a fully functional emulation for Microsoft Windows, Linux, Mac, and Solaris operating systems. It emulates various terminal types, including UNIX, OpenVMS and IBM. PowerTerm enables you to connect to a single host or multiple hosts via both network and remote connections.

PowerTerm provides two main features to enable the PC to act and feel like a real host terminal:

- **Terminal display emulation**  
PowerTerm emulates the exact display of the chosen terminal. It presents host applications exactly 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 terminal.
- **Terminal keyboard emulation**  
PowerTerm 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 also provides various options to customize and optimize the working environment such as:

- **Power Pad** (Windows edition only)  
A programmable floating keypad.
- **Soft buttons**  
Programmable buttons located at the bottom of the PowerTerm window.
- **Power Script Language (PSL)**  
A special 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, or can be utilized anytime during a PowerTerm session. PSL is intended for users with scripting or programming skills. PSL commands can also be assigned to the Power Pad and the Soft buttons to enable additional functions with a click of the mouse.

PowerTerm enables you to use the standard Microsoft DDE mechanism to communicate with other Windows applications as a DDE client or DDE server application.

## PowerTerm Features

- Compact, light and high performance program.
- 32-bit support for Windows 95/98/2000/NT/XP, Linux, Mac OS X, and Solaris.
- File transfer for Xmodem, Ymodem, Zmodem, Kermit, Ascii, Binary and INDSFILE.
- Support for TCP/IP WinSock, DECnet (CTERM) and LAT.
- Support for RS-232 (both direct and via modem), PPP/SLIP, SNA and APPC connections.
- Support for Ethernet and Token ring networks.
- Script recording for automation of tasks with PowerTerm Power 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. It also supports EHLLAPI.
- Support for most Western and Eastern European languages.
- Modem dialing.
- Multi-session capabilities.
- User programmable Soft buttons.
- Control of color selection and screen attributes.
- Support for printing including Auto Print mode and Slave Printing. Advanced Printing capabilities: including TN5250 host print transform, specifying the orientation of the printed output for non-graphic printing, setting values for CPI/LPI/FONT parameters, printer rows and columns.
- Support for Kermit **get** command.
- Floating Power Pad with programmable buttons.
- DDE communication for client or server.

# System Requirements

To run PowerTerm you need:

- MS Windows version 95 or higher.
- 386 data processor or higher.
- Connection to a host computer.
- 9.1 MB free space on your hard disk.

## PowerTerm Setup

To enable PC-host interaction, you need to define two sets of parameters:

- Terminal parameters
- Communication parameters

These are both 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.

PowerTerm provides the option to work with a single host connection or multiple connections. You can create different setup files for working with each connection to enable each user a customized working environment.

### 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 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 connection. 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. For more information about setup files, see Chapter 3: “Using PowerTerm”.

---

# A Quick Guide Through PowerTerm

The following workflow provides a quick guide for using PowerTerm:

Each of the steps is explained on the pages that follow. For a more detailed description of these steps, see PowerTerm workflow in Chapter 3: “Using PowerTerm”.

## Step 1: Start PowerTerm

- Start PowerTerm by clicking the PowerTerm icon in the Ericom PowerTerm group. The PowerTerm window opens.

When PowerTerm is used for the first time, the **PowerTerm** window is automatically displayed together with the **Connect** dialog box. After the connection parameters have been defined, the **Connect** dialog box will be displayed according to your selected option. For more information on defining connection preferences, see Step 3: “Defining Settings for Terminal Emulation, Preferences Property page”.

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

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

## Step 2: Select a Terminal Emulation

You can either select a terminal for the current session or open a previously defined terminal setup file.

### ➤ To select terminal settings:

- 1** Select the **Terminal | Setup**. The **Terminal Setup** dialog box 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** window display.
- 4** Define terminal settings by clicking the relevant **Property** page tab and define setup parameters.
- 5** Click **OK**.
- 6** Save the settings by clicking **File | Save Terminal Setup**.  
or,
  - 1.** Select **File | Save Terminal Setup As**.
  - 2.** Specify a setup file name and click **OK**.  
The file is saved.

### ➤ To open a previously defined Terminal setup file:

- 
- 1** Select **File | Open Terminal Setup**. The **Open File** dialog box appears.
  - 2** Select a setup file and click **Open**.
- or,
- 1** Select **Communication | Connect**. The **Connect** dialog box appears.
  - 2** Click **Setups**. The **Setup** dialog box appears.
  - 3** Type a setup file name or click the browse button. The **Select File** dialog box appears. Select a setup file.

## Step 3: Connect to a Host

After you have selected a terminal emulation, you can connect to a host. Before connecting to a host, you need to define communication parameters for the current session, or select a previously saved session from the session list. To define communication parameters for a current session, select a session type and the session parameters. PowerTerm also provides an option to run a script file before you connect to a host, or select a Terminal setup file to define terminal settings.

### ➤ To connect to a host:

- 1** Select **Communication | Connect**. The **Connect** dialog box appears.
  - 2** Define communication parameters.
- or
- 1** Select a session with previously defined connection parameters from the Sessions List.
  - 2** Click **Connect**. A connection is established to a host computer.

## Step 4: Work with a Host

PowerTerm provides the following options for working with a host:

### Transferring files

PowerTerm enables you to transfer files to and from a host.

- For **non-IBM terminal emulations** PowerTerm transfers files in **Kermit**, **Xmodem**, **Ymodem**, **Zmodem**, **ASCII**, or **Binary** mode.
- For **IBM terminal emulations** PowerTerm enables you to select **CMS**, **TSO**, or **CICS** as a Mainframe working environment.

### Printing files

PowerTerm enables you to define print parameters, and print the terminal screen or data transferred from the host application.

## Step 5: Exit PowerTerm

PowerTerm provides different options when exiting PowerTerm. You can end a session automatically or be prompted with a confirmation message prior to closing a session. If you have changed terminal settings, PowerTerm 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 used the default).

➤ **To exit PowerTerm:**

- Select **File | Exit**. The PowerTerm window closes.

---

# Chapter 2

## The PowerTerm Work Area

This chapter provides an overview of the PowerTerm window and its components. The PowerTerm window contains menu and toolbar options that provide access to most PowerTerm functions. Right-clicking the relevant PowerTerm object can access even more PowerTerm functions.

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

This chapter also includes a section describing how to select text in PowerTerm.

This chapter describes the following topics:

- **The PowerTerm Window**
- **Menu Bar**
- **Toolbar**
- **Hot Keys**
- **Manipulating Desktop Components**
- **Selecting Text**

---

# The PowerTerm Window

The PowerTerm window consists of the following components:

<b>Control Menu Box</b>	Provides standard Windows commands and enables you to redisplay the <b>Menu</b> bar.
<b>Title Bar</b>	Displays the application name. During a communication session, the <b>ID</b> type and/or the host name is displayed next to the application name. For example, <b>(A) PowerTerm</b> .
<b>Menu Bar</b>	Contains dropdown menus, which enable the user to perform most PowerTerm operations.
<b>Toolbar</b>	Contains buttons, which can be used as shortcuts to access frequently used menu commands.
<b>Work Area</b>	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 work area is displayed in black.
<b>History Scroll Bar</b>	Enables you to scroll up and down through the PowerTerm window to view previously displayed data. Displayed by default. For non-IBM emulations only.
<b>Emulator Type</b>	Displays the current terminal emulation type selected from the <b>Emulation</b> tab in the <b>Terminal Setup</b> dialog box.
<b>Cursor Position Counter</b>	Displays the current line and column position of the text cursor in the work area.
<b>Caps</b>	Indicates whether the keyboard is in Caps lock mode.
<b>Hold</b>	Indicates whether the screen is in hold or frozen mode.
<b>Status Indicator – On Line, Off Line, Printer, Auto Prt</b>	<ul style="list-style-type: none"><li>• The status indicator reads <b>On Line</b> when communication is established.</li><li>• The indicator reads <b>Printer</b> when data is transmitted with a printing request to the slave printer. The color of the indicator is the same as when PowerTerm is in <b>On Line</b> mode. For example, the printer will appear in red if the system was <b>On Line</b> when the printing request arrived.</li><li>• The date is sent to the screen and printer, and the indicator reads <b>Auto Prt</b>, when the terminal is in <b>Automatic</b></li></ul>

**Printing mode.**

<b>Soft Buttons Area</b>	Contains a series of buttons that you can program to execute specific script commands.
<b>Macro/Message Display Area</b>	Displays system messages, or a script sequence as you type it in the work area.
<b>Minimize button</b>	Closes the window, but not PowerTerm. <ul style="list-style-type: none"><li>• Click the <b>PowerTerm</b> button appearing in the <b>Taskbar</b> to reopen the PowerTerm window.</li></ul>
<b>Maximize button</b>	Enlarges the window so that it fills the entire screen. The button is then replaced with the <b>Restore</b> button. This button is used to restore the window to its previous size.
<b>Window Border and Corners</b>	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 Menu bar** displays the main PowerTerm functions in dropdown menus. The following is a brief description of each PowerTerm menu and the functions that it can perform.

<b>File Menu</b>	Provides options to create, save and restore a terminal setup file as well as to set printing parameters, print the screen and open a new instance of the PowerTerm window. The <b>File</b> menu also enables you to save your keyboard and <b>Power Pad</b> settings, and open them at a later date.
<b>Edit Menu</b>	Provides options to select, clear and reverse text in the PowerTerm window as well as delete the contents of the history buffer. The <b>Edit</b> menu also provides standard windowing operating system commands (copy and paste), in addition to commands that enable you to copy data to a file or to the Clipboard.
<b>Terminal Menu</b>	Provides options to define and reset connection (terminal and communication) parameters, set the system to be online or offline, and freeze or unfreeze the screen. You can also select the fonts to be displayed in the PowerTerm window.
<b>Communication Menu</b>	Provides options to define and modify the communication (session) parameters, and to disconnect a PowerTerm session. The <b>Communication</b> menu also provides options for file transfer as well as to select a modem, add customized modem definitions and edit the initialization string.
<b>Sessions menu</b>	Provides easy access to multiple sessions of PowerTerm. An alternative to navigating with the Toolbar buttons.
<b>Options Menu</b>	Provides options to display and edit the keyboard mapping, and define the <b>Power Pad</b> display. The <b>Options</b> menu also enables you to capture session data in a log file for debugging purposes and provides options to hide or show PowerTerm window components.
<b>Script Menu</b>	Provides options to record, edit and run a script as well as open and save scripts.
<b>Help Menu</b>	Provides options for accessing the PowerTerm online helps and product information.

---

## Working with Menus and Commands

You can select menus and commands by:

- Using a mouse
- Using direction keys
- Typing a letter

➤ **To select a menu item using the mouse:**

- 1** Click the desired menu on the menu bar. The menu drops down.
- 2** Click the desired menu item.

**N**OTE After clicking the name of a menu or the menu bar, you can drag the mouse to the right, left or up and down to move to other options.

➤ **To select a menu item using direction keys:**

- 1** Press the <Alt> key to access the menu bar. The far left menu is highlighted.
- 2** Use the direction (arrow) keys to move the highlighting bar to select a menu.
- 3** Press the down arrow to open the menu.
- 4** Use the up and down arrows to highlight the command that you want and press <Enter>.

➤ **To select a menu or menu item by typing a letter:**

Menus, menu items and commands have an underline character.

- 1** Hold down the <Alt> key and type the underlined letter of the desired menu. For example, hold down the <Alt> key and type the letter <F> to open the **File** menu.
- 2** Type the desired menu item's underlined character.

# Toolbar

The PowerTerm Toolbar contains buttons, which provide shortcuts to frequently used menu options.

**N**OTE For IBM emulation types, the Toolbar consists of fewer options.

The following is a brief description of each PowerTerm Toolbar button and its function:

## Hold Screen/Release Hold



Freezes and unfreezes the PowerTerm window. The **STOP** button appears red when the PowerTerm window freezes and green when it unfreezes. Equivalent to **Terminal | Hold Screen**.

## Connect/Disconnect



Enables you to define session communication parameters and connect to the host computer. Disconnects an open session. Equivalent to **Communication | Connect (Disconnect)**.

## Copy To Clipboard



Copies selected data displayed in the PowerTerm 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 or the entire contents of the work area. Equivalent to **File | Print Screen**.

## Start/Stop Auto Print



Starts/Stops printing incoming data as it is displayed on the screen. Equivalent to **File | Start Auto Print (Stop Printing)**.

## Dial



Enables you to dial a specific telephone number for COM type communication. Equivalent to **Communication | Utilities | Dial**.

## Start/Stop Script Recording



Starts/Stops recording manual operations that you perform, in script form. Equivalent to **Script | Start (Stop) Script Recording**.

## Change to 80 Columns



Specifies an 80-column display for the PowerTerm work area. Equivalent to **Terminal | Setup | Display | Dimensions 80 Columns**.

**Change to 132 Columns**

Specifies a 132-column display for the PowerTerm work area.  
Equivalent to **Terminal | Setup | Display | Dimensions 132 Columns**.

**Terminal Setup**

Displays the **Terminal Setup** dialog box in which you can define terminal setup parameters.  
Equivalent to **Terminal | Setup**.

**Keyboard Mapping**

Opens the **Keyboard Mapping** dialog box in which you can map PC keys to host keys.  
Equivalent to **Options | Keyboard Map**.

**Show/Hide Power Pad**

Displays/Closes the **Power Pad** dialog box.  
Equivalent to **Options | Show (Hide) Power Pad**.

**Help Contents**

Displays the PowerTerm online help.  
Equivalent to **Help | Contents**.

**New Terminal Window**

Opens a new instance of the PowerTerm window. This option enables you to conduct several sessions concurrently.  
Equivalent to **File | New Terminal Window**.

**Session**

Displays an icon for each additional session of PowerTerm.

➤ **To display a description of what each button does:**

- Place your mouse cursor over a tool to display the tool tip.

---

## Hot Keys

Hot Keys are keyboard keys that you can press 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 Hot Keys:

<b>Alt F4</b>	Exit
<b>Alt F6</b>	Open new terminal window
<b>Alt F9</b>	Activate script
<b>Ctrl + Alt F9</b>	Start/Stop recording script
<b>Alt F10</b>	Select screen
<b>Alt F11</b>	Clear screen
<b>Alt F12</b>	Reverse screen
<b>Scroll Lock</b>	Hold screen
<b>Pause</b>	Change the cursor shape
<b>Ctrl Up Arrow</b>	Scroll up one line
<b>Ctrl Down Arrow</b>	Scroll down one line
<b>Ctrl Home</b>	Scroll to beginning of the history buffer
<b>Ctrl End</b>	Scroll to end of the history buffer
<b>Ctrl Page Up</b>	Scroll up one page
<b>Ctrl Page Down</b>	Scroll down one page
<b>Shift + Ctrl + X</b>	Switch focus to session <b>X</b> X is the session letter (A...Z) displayed in the PowerTerm window <b>Title</b> bar.
<b>Ctrl + Spacebar</b>	Switch to the next active session

# Manipulating Desktop Components

PowerTerm enables you to customize the PowerTerm 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.

## ➤ To show/hide the Menu bar:

- Select **Options | Hide Menu**. This removes the menu bar altogether.
- Click the **Control Menu** box, and then select **Restore Menu**, to restore the **Menu** bar.

## ➤ To show/hide the Soft buttons:

- Select **Options | Hide Buttons**. The menu option becomes **Show Buttons**.
- Select again to redisplay the **Soft buttons** bar.

## ➤ To show/hide the Status bar:

- Select **Options | Hide Status Bar**. The menu option becomes **Show Status Bar**.
- Select again to redisplay the **Status** bar.

## ➤ To show/hide the Toolbar:

- Select **Options | Hide Tool Bar**. The menu option becomes **Show Tool Bar**.
- Select again to redisplay the **Toolbar**.

## ➤ 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:

**N**OTE This option is only available for non-IBM emulations.

- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
  - 2** Click the **Display** tab. The **Display Property** page is displayed.
  - 3** Select **History Scroll Bar** in the **General** section.
  - 4** Click **OK**. The PowerTerm window is redisplayed with the history scroll bar displayed.
- Clear **History Scroll Bar** to remove the history scroll bar from the PowerTerm window.

## ➤ To change the display color of the PowerTerm 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.

For non-IBM emulations, the **Select Attribute** of the entire screen is generally **Normal**.

- 
- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
  - 2** Click the **Colors** tab. The **Colors Property** page is displayed.
  - 3** Click the attribute for which you want to define foreground and background colors.
    - In the **Text** area, click the color that you want to apply to the text (foreground) of the display.
    - In the **Background** area, click the color that will apply to the background for the text.
  - 4** Click **OK**. The PowerTerm window displays the selected colors.

➤ **To disable/enable underline:**

You can choose whether to display data with or without the underline, for data received from the host with the underline attribute.

- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
- 2** Click the **Colors** tab. The **Colors Property** page is displayed.
- 3** Select/Clear **Enable Underline** as desired.

➤ **To disable/enable blink:**

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

- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
- 2** Click the **Colors** tab. The **Colors Property** page is displayed.
- 3** Select/Clear **Enable Blinking** as desired.

➤ **To disable/enable host colors:**

You can choose whether to work with the host colors or with your own (PC) color scheme.

- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
- 2** Click the **Colors** tab. The **Colors Property** page is displayed.
- 3** Select/Clear **Disable Host Colors** as desired.

---

# Selecting Text

You can select text in the work area using the mouse. The following are descriptions of specific text selection techniques that you may find useful in different emulations.

➤ **To select a word:**

- Click a word to select it.
- Press <Ctrl> and click a word to select it and any punctuation marks or other symbols, up to the first space that follows them.

**N**OTE If the **Automatic Copy** option in the **Edit** menu is activated (default), selecting text also copies the selection to the Clipboard.

➤ **To select a block:**

A block is any section of the work area.

**For VT emulations:**

- 1 Point to one corner of the block.
- 2 Press <Ctrl> and drag the mouse to the opposite corner of the block.

**For 3270 and 5250 emulations:**

- 1 Point to one corner of the block.
- 2 Drag the mouse to the opposite corner of the block.

➤ **To select full lines:**

- 1 Point anywhere in a line.
- 2 Press <Shift> and drag the mouse, down or up, to the last line you want to include in the selection.

➤ **To select a string:**

**For VT emulations:**

- 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.

**For 5250 and 3270 emulations:**

- 1 Point to the first character that you want to include in the selection.
- 2 Hold down the <Ctrl> key and drag the mouse to the last character that you want to include in the selection.
- 3 Release the mouse button.

➤ **To select the entire screen:**

- Select **Edit | Select Screen**. The whole work area is selected.

➤ **To select a menu entry:**

For VT emulations only.

- Double-click a word and press <Enter>. The word is sent to the host followed by an <Enter> signal. For example, if the emulation screen displays an application menu residing on the host, click a menu entry to activate the program that the menu entry represents.

➤ **To activate light pen support:**

**N**OTE For 3270 emulations only.

- Double-clicking on the screen is equivalent to touching it with a light pen.

---

# Chapter

# 3

## Using PowerTerm

This chapter provides step-by-step instructions for using PowerTerm and provides a detailed explanation of each step.

**N**OTE *If you are familiar with accessing remote terminals, you may want to follow the procedure outlined in A Quick Guide through PowerTerm.*

This chapter consists of the following topics:

- Step 1: Starting PowerTerm**
- Step 2: Setting up your Working Environment**
- Step 3: Defining Settings for Terminal Emulation**
- Step 4: Defining Modem and Communication Settings**
- Step 5: Saving the Terminal Setup File**
- Step 6: Connecting to a Host**
- Step 7: Working with the Host**
- Step 8: Ending a PowerTerm Session**
- Step 9: Exiting PowerTerm**

---

## Step 1: Starting PowerTerm

When PowerTerm is used for the first time, the PowerTerm window is automatically displayed together with the **Connect** dialog box. After the connection parameters have been defined, the **Connect** dialog box will be displayed according to your selected option. For more information on defining connection preferences, see Step 3: “Defining Settings for Terminal Emulation, Preferences Property page”.

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

### ➤ To start PowerTerm:

- 1 Click the **Start** button in the **Task** bar.
- 2 Select **Programs | Ericom Software | PowerTerm | PowerTerm**. The **PowerTerm** window opens.

## Starting PowerTerm Using a Setup File

PowerTerm 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, it automatically uses this file to initiate terminal setup and connection parameters.
- A **customized setup** file is used with multiple host connections and you want to start PowerTerm 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. For more information about how to create and save a setup file, see Steps 3 - 5 in this chapter.

**N**OTE You can also select and open a terminal setup file during a PowerTerm session. For more information, see Step 6: “Connecting to a Host”.

### ➤ To start PowerTerm with a customized setup file:

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

### ➤ To use a setup file during a PowerTerm session:

A terminal setup file can also be opened during a PowerTerm 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 box appears in which you can select a setup file. For more information, see Step 5: “Saving the Terminal Setup File”.

- Select **Communication | Connect**. The **Connect** dialog box appears in which you can specify the name of the setup file to be run before communication is established. For more information, see Step 4: “Defining Modem and Communication Settings”.

## Starting PowerTerm Using a Script

You can also launch PowerTerm and run a script immediately upon launching. Scripts are created with Power Script Language (PSL) and enable you to automate tasks. For example, you can use a script to automatically connect to a specific host.

## Starting PowerTerm 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 box appears.
- 2** Click the **Preferences** tab. The **Preferences Property** page is displayed.
- 3** Select **Auto Connect**.
- 4** Click **OK**.

For more information about this option, see Preferences Property page in Step 3: “Defining Settings for Terminal Emulation”.

---

## Step 2: Setting Up your Working Environment

This section provides a description of the basic operations that may be performed to set up and optimize the PowerTerm working environment for your usage. You can customize the PowerTerm window to show or hide window components and change the display of the window. These options are all described in the Manipulating desktop components section of Chapter 2 “The PowerTerm Window”.

PowerTerm enables you to emulate a host keyboard by assigning (mapping) PC keys to host keys. It furthermore provides two features, the Power Pad and Soft buttons, which enable you to automate commands as well as to save your keyboard and/or Power Pad settings in separate files and open them at a later date.

**N**OTE *Changes made to either feature will not affect the others.*

To set up the PowerTerm work environment:

- **Mapping the PC Keyboard**
- **Saving and Opening Keyboard Mapping Settings**
- **Programming the Power Pad**
- **Saving and Opening your Power Pad Settings**
- **Programming Soft buttons**
- **Selecting Fonts**

### Mapping the PC Keyboard

PowerTerm 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`.

➤ **To view the default keyboard mapping:**

- 1** Select **Options | Keyboard Map**. The **Keyboard Mapping** dialog box appears.
- 2** Slide the mouse pointer over the different keys. The bottom line of the dialog box 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 to a host key:**

- 1** Select **Options | Keyboard Map**. The **Keyboard Mapping** dialog box appears.
- 2** Drag a key from the upper terminal keyboard to a PC key on the lower keyboard.

- 
- Click the <Shift> or <Control> 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 Select **Options | Keyboard Map**. The **Keyboard Mapping** dialog box appears.
    - 2 Right-click a key on the PC keyboard that you want to assign a command and select **Enter Script Commands**. The **PC Button** dialog box appears.
    - 3 Enter the script command description 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) on your PC keyboard. Then map keys by following the procedure described previously.
    - Click the required <Alt>, <Ctrl> or <Shift> key (or any combination), to view the mapped key.
  - **To cancel a keyboard key definition:**
    - Drag the PC key definition that you want to cancel, in the **Keyboard Mapping** dialog box, to the wastebasket icon. This restores the default function of the PC key.
  - **To replace a PC key with another PC key:**

PowerTerm 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, in the **Keyboard Mapping** dialog box, onto the PC key that it will replace. The functionality of the PC key has been replaced.
    - Drag the replacing key back to its original position, to restore the values.
  - **To copy a PC key to another PC key:**

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

    - Hold the <Ctrl> key, in the **Keyboard Mapping** dialog box, while you drag the PC key whose function you want to copy to the required PC key. Both keys now have the same functionality.
  - **To restore the default keyboard mapping of all mapped keys:**
    - Click the **Default** button, in the **Keyboard Mapping** dialog box.

## Saving and Opening Keyboard Mapping Settings

PowerTerm enables you to save keyboard-mapping settings in separate files and open them at a later date.

- **To save keyboard mapping settings:**
  - 1 Select **File | Save Keyboard File**. The **Save Keyboard File** dialog box appears.

- 2 Select the directory in which you want to save the file.
- 3 Enter a file name. The file extension **.kbd** is automatically added to the file name.
- 4 Click **Save**. The keyboard-mapping file is saved.

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

- 1 Select **File | Open Keyboard File**. The **Open Keyboard File** dialog box appears.
- 2 Select the directory in which the keyboard file is saved.
- 3 Select the required file from the files list and click **Open**. Parameters defined in the selected keyboard file are now applied to the current session.

## Programming the Power Pad

The Power Pad is a floating keypad for which its buttons can be programmed to execute customized PSL scripts. The buttons are by default named **F1**, **F2**, **F3**, and so on, with a few default function names, such as **Clear**, **Enter** and **Insert**. The number of displayed buttons and their names can be changed. You send the programmed command to the host by clicking the desired Power Pad button. For more information on how to create scripts, see Chapter 4: “Scripts”.

➤ **To program the Power Pad:**

- 1 Select **Options | Show Power Pad**. The **Power Pad** appears.
- 2 Right-click the Power Pad button that you want to program. The **Power Pad Button** dialog box appears.
- 3 Type the **Button Description** (that is, the name that will appear on the Power Pad button).
- 4 Type the **Script Commands** to be run by this Power Pad button. For example, “send <f13>”. You can type several scripts separated by semicolons.
- 5 Click **OK**. The Power Pad button is now displayed with its new name and will execute the defined script.

➤ **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, whereas the defaults are 9 rows and 4 columns.

- 1 Select **Options | Power Pad Setup**. The **Power Pad Setup** dialog box appears.
- 2 Select the number of rows and/or columns that you desire from the dropdown boxes.
- 3 Click **OK**. The Power Pad opens with the number of rows and columns specified.

## Saving and Opening Power Pad Settings

PowerTerm enables you to save your Power Pad settings in separate files and open them at a later date.

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

- 1 Select **File | Save Power Pad File**. The **Save Power Pad File** dialog box appears.
- 2 Select the directory in which you want to save the file.
- 3 Enter a file name. The file extension **.pad** is automatically added to the file name.
- 4 Click **Save**. The settings are saved.

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

- 1** Select **File | Open Power Pad File**. The **Open Power Pad File** dialog box appears.
- 2** Select the directory in which the Power Pad file is saved.
- 3** Select the required file from the files list and click **Open**. Parameters defined in the selected Power Pad file are now applied to the current session.

## Programming Soft Buttons

Along the bottom of the PowerTerm window are twelve programmable Soft buttons by default named from **F1** to **F12**. These can be renamed and programmed to execute customized scripts. You send the programmed command to the host by clicking the desired Soft button.

The Soft button parameters are saved automatically in the terminal setup file.

➤ **To program Soft buttons:**

- 1** Right-click the Soft button that you want to program. The **Function Button** dialog box appears.
- 2** Type the **Function Description** (that is, the name that will appear on the button).
- 3** Type the **Script Commands** to be run by this button. For example, “exec notepad”. You can type several scripts separated by semicolons.
- 4** Click **OK**. The Soft button is now displayed with its new name and will execute the defined script.

## Selecting Fonts

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

- **System fonts** are standard general-purpose fonts, which different attributes can be set.
- **PowerTerm 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 select PowerTerm fonts:**

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

➤ **To select system fonts:**

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

---

## Step 3: Defining Settings for a Terminal Emulation (Terminal Settings)

PowerTerm 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 session.

Each setting option is displayed in the format of a property page in the **Terminal Setup** dialog box.

**N**OTE You first have to select an emulation type and then define the other settings.

The terminal settings provided by PowerTerm are:

- **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 window.
- **Keyboard**, defines keyboard setup parameters.
- **Printer**, defines printer parameters.
- **Tabs**, defines tab stops in the work area.
- **Colors**, defines color settings for the PowerTerm window.
- **Preferences**, defines parameters that determine PowerTerm behavior and automate processes.

**I**MPORTANT The parameters that you define will only remain active for the current session, unless you save them in a setup file. For more information, see Step 5: "Saving the Terminal Setup File".

### Emulation Property Page

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

➤ **To define settings for terminal emulation:**

- 1** Select **Terminal | Setup**. The **Terminal Setup** dialog box 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.

## General Property Page

The **General** property page enables you to define parameters for the selected emulation type.

### ➤ To define emulation parameters:

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

**N**OTE *The selected host application will usually determine the default option.*

The parameters displayed in the **General property** page are:

<b>Terminal ID</b>	Determines the ID returned by the emulation program to the host. Verify that you select an ID that the host application recognizes.
<b>NRC Set</b>	Determines the communication and keyboard character set for 7-bit data only. You can either select <b>None</b> or one of the languages available.
<b>UPS Set</b>	Determines the communication and keyboard character set for 8-bit data only. Select one of the available character sets.
<b>8 bit Controls</b>	Enabled when UPS Set is specified as Code Page 437 and up. <ul style="list-style-type: none"> <li>• <b>Disable</b> determines if 0x80 to 0xAF are displayed characters.</li> <li>• <b>Enable</b> determines if 0x80 to 0xAD are control characters.</li> <li>• <b>0x9B</b> all characters are displayed characters except 0x9B, which is a control character.</li> </ul>
<b>Online</b>	Equivalent to <b>Terminal   On Line (Off Line)</b> .
<b>New Line</b>	Determines whether the <Enter> key generates only a carriage return or a carriage return/line feed combination.
<b>Use 8 Bit Data Characters</b>	<ul style="list-style-type: none"> <li>• <b>Select</b> this parameter if the communicated data is in 8-bit character format.</li> <li>• <b>Clear</b> it for 7-bit characters. When cleared, the 8<sup>th</sup> bit is truncated.</li> <li>• If you receive 7-bit data, you can convert it to 8-bit data for printing on the slave printer.</li> </ul>
<b>User Defined Keys (UDK)</b>	<ul style="list-style-type: none"> <li>• <b>Locked</b> Determines whether applications on the host system can override your user-defined keys when you have defined a function key that conflicts from being overridden.</li> <li>• <b>Unlocked</b> allows them to be overridden.</li> <li>• UDKs let you use a single key for multiple keystrokes. To</li> </ul>

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.

<b>Cursor Keys</b>	Determines whether the four arrow keys generate ANSI-standard control sequences for moving the cursor, or generate customized application program functions.
<b>Keypad</b>	Determines the effects of the numeric keypad on your keyboard. <ul style="list-style-type: none"> <li>• <b>Numeric</b> Keypad keys insert numbers. For example, pressing &lt;7&gt; on the numeric keypad is the same as typing &lt;7&gt; on the keyboard.</li> <li>• <b>Application</b> Keypad keys generate control sequences that can be used by some applications.</li> </ul>
<b>Cursor coupling</b>	Select this parameter to cause the cursor to remain visible during page scrolling.
<b>Status Line</b>	<ul style="list-style-type: none"> <li>• <b>None</b> Displays an emulation screen without the status line.</li> <li>• <b>Indicator</b> Displays the status line.</li> <li>• <b>Host Writeable</b> Displays the status line sent by the host.</li> </ul>
Unique parameters for the 3270 and 5250 emulation types:	
<b>General</b>	<ul style="list-style-type: none"> <li>• <b>ID</b> Determines the ID returned by the emulation program to the host. Make sure you select an ID that the host application recognizes.</li> <li>• <b>Unscaled Screen</b> Select this parameter if you want to disable the scaleable feature for PowerTerm fonts.</li> <li>• <b>Show Response Time</b> Select this parameter if you want to display the number of seconds that elapsed between the time data was sent to the host and the host response time.</li> </ul>
<b>Cursor Ruler</b>	Displays full-screen, vertical or horizontal lines as a cursor ruler.
<b>Cursor</b>	Controls the cursor display.
<b>Appearance</b>	<ul style="list-style-type: none"> <li>• <b>Power GUI</b> Displays data in a window with 3D look and feel.</li> <li>• <b>Show Frame</b> Places a frame around the text area of the emulation.</li> </ul>
<b>HLLAPI Names</b>	Specify HLLAPI names here.
<b>Code Page</b>	Specifies the keyboard mode. This sends the correct keystrokes for a specific country or language's keyboard layout to the host.

**Alternate Size**

- **Enable** Select to override the terminal alternate size with a specific size.
- **Rows/Columns** Type the required number.

## Display Property Page

The **Display property** page enables you to define parameters that determine the appearance (display) of the PowerTerm window.

**N**OTE For non-IBM emulations only.

➤ **To define display parameters:**

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

The parameters displayed in the **Display property** page are:

**General**

- **Reverse Display Colors** Reverses the text and background colors in the work area.
- **Unscaled Screen** Select this parameter if you want to disable the scalable feature for PowerTerm fonts.
- **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 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. Only with scaled screen.

**Cursor Ruler**

Displays full-screen, vertical or horizontal lines as a cursor ruler.

**Cursor**

Controls the cursor display. Experiment with each parameter to view the options available.

**Ctrl Characters**

- **Interpret** Displays normal text as affected by control characters.
- **Display** Actually displays the control characters.

**Power GUI**

Displays data in a window with 3D look and feel.

**Show Frame**

Places a frame around the text area of the emulation.

<b>Dimensions</b>	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 <b>Other</b> box instead of choosing one of the standard options (80 and 132).
<b>Scrolling</b>	Determines the pace at which data is displayed in the work area as it arrives. If you select <b>Jump</b> , you should determine the <b>Jump Scroll Speed</b> that is measured in number of line units. The higher the value, the faster the scrolling. <ul style="list-style-type: none"> <li>• <b>Unlimited</b> Displays data without delaying communication.</li> <li>• <b>Page</b> Scrolls data by full screens.</li> <li>• <b>Smooth</b> is equivalent to a Jump Scroll Speed of 1.</li> </ul>
<b>Enable Soft Fonts</b>	Enables you to work with VT soft fonts. The fonts will be loaded from the host application.

## Keyboard Property Page

The **Keyboard property** page enables you to define keyboard parameters for your PC.

### ➤ To define keyboard parameters:

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

The parameters displayed in the **Keyboard property** page are:

<b>Backspace Key Sends</b>	Determines whether the < <b>Backspace</b> > key sends <b>Delete</b> or an actual <b>Backspace</b> .
<b>Auto Repeat</b>	Repeatedly displays the character whose key is being continuously pressed down.
<b>Key Click</b>	Issues a click sound when you press a key on the keyboard.
<b>Local Echo</b>	Determines whether keyboard input is displayed (echoed) on your screen. <ul style="list-style-type: none"> <li>• <b>Select</b> to display the keyboard input even if the host system does not echo your input.</li> <li>• <b>Clear</b> to send the keyboard input to the host system without being displayed on the screen (unless the host system echoes the characters).</li> </ul>
<b>Use Emulator Alt Keys</b>	Select to make an < <b>Alt</b> > key perform the terminal operation even if Windows OS have an operation on the same key.
<b>Margin bell</b>	Determines whether the terminal sounds a bell tone when the

---

cursor reaches the right margin.

<b>Warning Bell</b>	Determines whether the terminal sounds a bell tone when receiving the “bell” (ASCII 7) character. For operating errors, mail messages etc.
<b>Use VT Keyboard Mode</b>	Transforms your keyboard to 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.
<b>Use Shift Lock</b>	Select to simulate <b>Shift Lock</b> mode. For example, if you type “a”, the keyboard issues “A”.
<b>Answerback Message</b>	Specifies an answerback message and its display. <ul style="list-style-type: none"><li>• <b>Clear</b> Deletes the message.</li><li>• <b>Conceal</b> Hides the message without being deleted. Click <b>Clear</b> to cancel the conceal command.</li></ul>
<b>Auto Answerback</b>	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.
Unique parameters for the 3270 and 5250 emulation types:	
<b>Backspace</b>	Select to delete characters by pressing the <b>Backspace</b> key.
<b>Auto Repeat</b>	Repeatedly displays the character for which its key is being continuously pressed down.
<b>Key Click</b>	Issues a click sound when you press a key on the keyboard.
<b>Typeahead</b>	Types data ahead before the host responds.
<b>Use Emulator ALT Keys</b>	Select to make an <Alt> key perform the terminal operation even if Windows OS have an operation on the same key
<b>Use Shift Lock</b>	Select to simulate <b>Shift Lock</b> mode. For example, if you type “a”, the keyboard issues “A”.
<b>Numpad Decimal Sends Comma</b>	Determines whether the <b>Numeric Pad</b> sends a comma instead of a decimal.
<b>Lock Numeric Field</b>	Determines whether the keyboard is locked when you try to enter non-numeric data to numeric only fields.
<b>Non SNA System Wait</b>	Determines whether the <b>System Wait</b> in the IBM 3270 emulation will act as a <b>System Wait</b> in a non-SNA terminal.

## Printer Property Page

The **Printer property** page enables you to define printer parameters for your PC.

### ➤ To define printer parameters:

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

The parameters displayed in the **Printer property** page are:

<b>Print Device</b>	<p>Allows you to select a printing output channel.</p> <ul style="list-style-type: none"> <li>• <b>None</b> No destination was assigned. The <b>Device File Name</b> is disabled. Printer data is received by the terminal, but discarded (not printed).</li> <li>• <b>Print Manager</b> Sends printing to the standard Windows Print Manager, in text mode.</li> <li>• <b>Device</b> Sends printing to the device you designate in the <b>Device Name</b> text box. This can be a device such as PRN, ILPT1, COM1, etc. In the <b>Device Name</b> text box, you can also specify communication parameters. For example: COM 1:9600,8.</li> <li>• <b>File</b> Sends printing to the file you type in the <b>File Name</b> text box.</li> </ul>
<b>Device File Name</b>	<ul style="list-style-type: none"> <li>• <b>File Creation</b> Enables you to choose whether to add new data to an already existing file or to create a new one.</li> <li>• <b>Append</b> Adds data to an existing file.</li> <li>• <b>Overwrite</b> Creates a new file.</li> </ul>
<b>Use Form Feed</b>	<p>Adds a form feed (page eject) after each printing job, if you are printing to a file.</p>
<b>Print Line Graphics As Text</b>	<p>Converts line graphics to text. This speeds up printing on a slow dot-matrix printer.</p>
<b>CR-&gt;CRLF</b>	<p>Adds a line feed after each single carriage return (one that has no line feed following it) when in slave printing mode.</p>
<b>Print Screen Data Conversion</b>	<p>Converts data to <b>IBM</b> or <b>Digital</b> character sets.</p> <ul style="list-style-type: none"> <li>• <b>None</b> Does not convert data.</li> <li>• <b>Graphics</b> Prints in Graphics mode. Will always send a print screen via the Print Manager regardless of the print device.</li> </ul>
<b>Slave Printer Data Conversion</b>	<p>Converts data to <b>IBM</b> or <b>Digital</b> character sets for slave printing.</p> <ul style="list-style-type: none"> <li>• <b>None</b> Does not convert data.</li> <li>• <b>Graphics</b> Prints to a postscript printer.</li> </ul>

<b>Slave Printer Job Delimiter</b>	Specifies the job delimiter character that will divide the data into print jobs, thus disabling the escape sequences arriving from the host application.
<b>Delay for Print Closing (Seconds)</b>	The command to close the printer queue is delayed by the number of seconds that you determine. This command only takes effect if no <b>open</b> command is issued in the meantime. Important for printing to cut sheet printers (for example, inkjets/lasers) and network printers.

## Advanced Printing

The **Advanced Printer Setup** dialog box enables you to define printer parameters.

### Non 5250 printing

There are two different modes with different fields enabled:

- **Text mode** is designated in the **Printer property** page by setting the two data conversion combo boxes (**Print Screen** and **Slave Printer**) to **None**.
- **Graphics mode** is graphic printing.

#### ➤ **To set values for non-host print transform in non-graphic mode:**

- 1** Select the **Printer property** page.
- 2** Click the **Advanced Printing** button. The **Advanced Printer Setup** dialog box appears.
- 3** Select your printer model, or a compatible one, from the **Printer/Type Model** drop down list.
- 4** Use the initial printer values that appear in the **Font**, **CPI**, **LPI**, **Printer Columns** and **Printer Rows** combo boxes or override them by clearing the **Ignore** check box and selecting the desired value from the adjacent combo box.
- 5** Click **OK**.

The parameters displayed in **Text** mode are:

<b>Printer Type/Model</b>	Specifies the destination printer.
<b>Ignore</b>	Disables the adjacent combo box. When selected, default values are applied.
<b>Font</b>	<b>Printer default</b> font and size will be applied to the output when <b>Ignore</b> is selected. Otherwise, <b>User input</b> will be applied. Select the desired font from the <b>Font</b> dropdown list.
<b>LPI</b>	Lines Per Inch
<b>CPI</b>	Characters Per Inch

<b>Printer Columns</b>	Determines the number of printer columns in the output. Select <b>Ignore</b> to apply the number of columns on your emulation screen to the output. For graphic printing.
<b>Printer Rows</b>	Determines the number of printer rows in the output. Select <b>Ignore</b> to apply the default values of the specific emulation to the output. For graphic printing.
<b>Orientation</b>	For <b>Non Graphic</b> printing. Specifies the orientation of the printed output. The default depends on your printer's settings.

Graphics mode parameters:

- **Printer Columns** and **Printer Rows** are the only relevant fields.
- Select the desired **Orientation** in the **Print Setup** dialog box.

## TN5250 Printing Session

### ➤ To set values for non-host print transform in non-graphic mode:

- 1 Select the **Printer** property page.
- 2 Click the **Advance Printing** button. The **Advanced Printer Setup** dialog box is displayed.
- 3 Select your printer model, or a compatible one, from the **Printer/Type Model** drop down list.
- 4 Use the host values for the **Font, CPI, LPI, Printer Columns** and **Printer Rows** or override them by clearing the **Use Host Value** check box and selecting the desired value from the adjacent combo box.
- 5 Click **OK**.

### ➤ To enable host print transform:

**N**OTE For IBM printer only.

- 1 Select **Enable Host Print Transform**.
- 2 Select the manufacturer printer type and model from the **Printer Type/Model** dropdown list.
- 3 Select the paper size from the **Drawer 1** dropdown list.
- 4 Select the paper size from the **Drawer 2** dropdown list.
- 5 Select the paper size from the **Envelope Hopper** dropdown list.
- 6 Specify whether the printer has Code Page 899 installed in the **Supports ASCII Code-Page 899** check box.

Additional steps for **Other Printers**:

- Specify the **Customizing Object**.
- Specify the **Customizing Object's Library**.

The parameters displayed are:

<b>Enable Host Printer Transform</b>	Enables the host to send the printer specific format commands to the emulation. When disabled, the host sends general format commands in which the emulation in turn, translates to printer specific commands.
<b>Printer Type/Model</b>	Specifies the destination printer.
<b>Drawer 1</b>	Specifies the size for the paper in <b>Paper Source 1</b> .
<b>Drawer 2</b>	Specifies the size for the paper in <b>Paper Source 2</b> .
<b>Envelope Hopper</b>	Specifies the size of the envelope.
<b>Supports ASCII Code-Page 899</b>	Specifies whether the printer has Code Page 899 installed.
<b>Customizing Object</b>	Specifies the object name that you have previously defined on the AS/400. Enabled only for Other Printer model.
<b>Library</b>	Specifies the customizing object's library on the AS/400. Enabled only for Other Printer model.

## Tabs Property Page

**N**OTE For VT emulations only.

The **Tabs property** page enables you to determine tabs in the work area. Tabbed data received from the host will be laid out in the work area according to ruler settings defined with this option.

### ➤ To define tab parameters:

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

The parameters displayed in the Tab property page are:

<b>Tab Stops</b>	Click anywhere within the <b>Tab Stops</b> area to set tab stops manually. <ul style="list-style-type: none"> <li>• <b>Set Every</b> Sets a tab stop in increments of a number typed in the adjacent text field.</li> <li>• <b>Clear All</b> Clears all tab stops.</li> </ul>
------------------	---

## Colors Property Page

The **Colors property** page enables you to define the color of data displayed in the work area.

### ➤ To define color parameters:

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

The parameters displayed in the **Colors property** page are:

<b>Preview Box</b>	Shows the result of your selections.
<b>Enable Underline</b>	Enables underlined characters. Clear to disable displaying data with the underline, for data transmitted from the host with the <b>Underline</b> attribute.
<b>Enable Blink</b>	Enables blinking. Clear to disable blinking data, for data transmitted from the host with the <b>Blink</b> attribute.
<b>Disable Host Colors</b>	Select to ignore specific color assignment by the host. Uses colors you select for the attributes only.
<b>Show BMP</b>	Specifies a <b>Bitmap Screen</b> as the background for the emulation window. The desired bitmap should be named <b>pt_bg.bmp</b> and should be copied to the <b>PowerTerm</b> folder.
<b>Select Attribute</b>	Select the attribute for which you want to define foreground and background colors. Attributes change according to the emulation type you selected in the <b>Emulation</b> property page. Generally, the attribute of the entire screen is <b>Normal</b> . The color for the <b>Normal</b> attribute determines the color of the entire work area.
<b>Text</b>	Select the color that will apply to the text (foreground) of the display.
<b>Background</b>	Select the color that will apply to the background of the text.

## Preferences Property Page

The **Preferences** property page enables you to determine PowerTerm behavior and automate processes. They remain active until you change them. For example, if you select to connect automatically at PowerTerm startup, you will always be connected when you open PowerTerm, until you change this setting in the **Preferences** property page.

### ➤ To define PowerTerm preferences:

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

The parameters displayed in the **Preferences** property page are:

- |                                    |  |
|------------------------------------|--|
| <b>On Terminal Setup File Open</b> | <ul style="list-style-type: none"> <li>• <b>Auto Connect</b> Connection is established immediately with the parameters saved in the default setup file.</li> <li>• <b>Show Connect Dialog box</b> Connection is not established immediately. The <b>Connect</b> dialog box opens, enabling you to select the connection parameters that you require.</li> <li>• <b>Do not Connect</b> The PowerTerm window opens. You decide what to do.</li> </ul>  |
| <b>Window Title</b>                | Enables you to give the currently active window a name of your choice.   |
| <b>History Buffer</b>              | Specifies the size of the buffer in which data is stored, by selecting an option from the dropdown list.   |
| <b>On PowerTerm Exit</b>           | <ul style="list-style-type: none"> <li>• <b>Save Terminal Setup</b> The new terminal parameters (if you changed them) are saved to the current terminal setup file.</li> <li>• <b>Confirm Save</b> Terminal parameters are not saved automatically. PowerTerm displays a dialog box where you can decide whether or not to save.</li> <li>• <b>Save Window Size &amp; Position</b> Saves the size and position of the emulation window. Next time you open PowerTerm, the window appears with the same size and position as last time.</li> <li>• <b>Confirm Disconnect Session</b> If you close PowerTerm during a session, you will be requested to confirm disconnect.</li> <li>• <b>Inactivity Timeout</b> Specifies the time limit for keyboard inactivity, after which time PowerTerm shuts down.</li> </ul> |
| <b>On Session Exit</b>             | <ul style="list-style-type: none"> <li>• <b>Auto Reconnect</b> Re-establishes communication if the line was dropped.</li> <li>• <b>Auto Exit PowerTerm</b> Closes PowerTerm altogether on disconnect.</li> </ul>   |

---

# Step 4: Defining Modem and Communication Settings

## Modem Settings

Modem settings enable you to add customized modem definitions, edit initialization strings for existing modems as well as modify and delete modem definitions.

➤ **To define modem settings:**

- 1** Select **Communication | Modem Setup**. The **Modem Setup** dialog box appears.
- 2** Select the required modem settings.
- 3** Click **OK**. Your modem settings are defined.

➤ **To add modem settings:**

- 1** Select **Communication | Modem Setup**. The **Modem Setup** dialog box appears.
- 2** Type the modem name in the **Modem Name** field.
- 3** Type the initialization string in the **Init String** field.
- 4** Click **Add**. The new modem settings appear in the **Modem List**.

➤ **To modify modem settings:**

- 1** Select **Communication | Modem Setup**. The **Modem Setup** dialog box appears.
- 2** Select the modem you want to modify from the **Modem List**. The parameters of the selected modem appear in the **Modem Information** fields.
- 3** Enter the new parameters in the **Modem Name** and **Init String** fields.
- 4** Click **Modify**. The selected modem's settings are updated.

➤ **To delete modem settings:**

- 1** Select **Communication | Modem Setup**. The **Modem Setup** dialog box appears.
- 2** Select the modem you want to delete from the **Modem List**. The parameters of the selected modem appear in the **Modem Information** fields.
- 3** Click **Delete**. A confirmation message is displayed.
- 4** Click **OK** to delete the selected modem.

➤ **To clear Modem Information fields:**

- 1** Select **Communication | Modem Setup**. The **Modem Setup** dialog box appears.
- 2** Select a modem from the **Modem List**. The parameters of the selected modem appear in the **Modem Information** fields.
- 3** Click **Clear**. The **Modem Information** fields are cleared, and you can redefine the information.

**Modem Name** Specifies the name of the modem.

**Init String** Specifies the initialization string, which defines the way the

---

	modem communicates with another modem.
<b>Modem List</b>	List of available modems.
<b>Add</b>	Adds modem settings to the <b>Modem List</b> .
<b>Modify</b>	Updates data entered in the <b>Modem Information</b> fields for a selected modem.
<b>Delete</b>	Deletes selected modem settings.
<b>Clear</b>	Clears the <b>Modem Information</b> fields for the selected modem.

## Communication Settings

Communication settings enable you to define the session type, session parameters and select the script file and setup file. Communication and terminal settings are both saved in a setup file. This file can be used on PowerTerm startup or opened during a PowerTerm session. For more information, see Step 1: “Starting PowerTerm” and Step 5: “Saving the Terminal Setup File”. All sessions in the **Sessions List** are saved in the **ptcomm.ini** file.

### ➤ To define communication settings:

- 1** Select **Communication | Connect**. The **Connect** dialog box appears.
- 2** Select a **Terminal Type** from the dropdown list.
- 3** Click a **Session Type**. Available types differ according to the selected Terminal type. For each Session type, PowerTerm displays a set of parameters.
- 4** Enter required parameters or select a predefined Setup file. A predefined Script file can also be selected.
- 5** Click **Connect**. Host connection is established. For more information, see Step 6: “Connecting to a Host”.

<b>Terminal Type</b>	Changes the current emulation.
<b>Terminal ID</b>	Changes the ID returned by the emulation program to the host.
<b>Device Name</b>	For 5250 Display. Each new session can automatically be given a new name, followed by the session number (when using multiple sessions). For example, if the device name is Test, then the first session would be Test 1, and the next Test 2, and so on.
<b>Dial Number</b>	For COM Session type. Specifies the number to be dialed by the modem before communication is established.
<b>Script File</b>	Specifies the name of a script to be run before communication is established.

---

<b>Setup File</b>	Specifies the name of a setting to be opened before communication is established.
<b>Connect</b>	Connects to the host according to the displayed session parameters.
<b>Save As</b>	Saves the current session settings.
<b>Modify</b>	Updates a selected session setting, with the data entered in the upper section of the dialog box.
<b>Delete</b>	Deletes a session setting.

## Session Types

<b>TELNET</b>	Uses the Telnet protocol over TCP/IP for network communication. <ul style="list-style-type: none"><li>• You must specify the host computer name or the IP address in the Parameter's <b>Host Name</b> field.</li><li>• You can also specify the Telnet <b>Port Number</b> (default is 23).</li><li>• The <b>winsock.dll</b> file must be on the search path.</li></ul>
<b>COM</b>	Uses serial communication with the PC's COM ports. <ul style="list-style-type: none"><li>• You must specify the <b>Baud Rate</b>, <b>Port Number</b>, <b>Parity</b>, <b>Stop Bits</b> and <b>Flow Control</b> fields.</li><li>• Optionally, you can specify a <b>Dial Number</b> (telephone).</li></ul>
<b>BAPI</b>	For TCP/IP connections with parameters similar to those of TELNET. <ul style="list-style-type: none"><li>• Verify that the BAPI support software is installed on your PC before you use this option.</li></ul>
<b>CTERM</b>	<ul style="list-style-type: none"><li>• Uses the DIGITAL CTERM protocol for network communication with a remote or local VAX/Open VMS host via DIGITAL PATHWORKS 32. You must specify the host computer name in the parameter's <b>Node Name</b> field.</li></ul>
<b>LAT</b>	Uses DIGITAL LAT protocol for network communication with a VAX/OpenVMS host via DIGITAL PATHWORKS 32. <ul style="list-style-type: none"><li>• You must specify <b>Service Name</b> and a <b>Password</b> (if required).</li></ul>
<b>TN3270</b>	TELNET for 3270. <ul style="list-style-type: none"><li>• Select <b>Use TN3270E Protocol</b> if you want to work with TELNET SNA extensions.</li><li>• You can also specify the <b>LU name</b> of the host (LU name or LU pool).</li></ul>

---

<b>MS SNA Server</b>	For connection via Microsoft SNA Server. <ul style="list-style-type: none"> <li>Specify the <b>LU Name</b> (or LU pool).</li> </ul>
<b>NWSAA (IPX)</b>	For connection via IPX to Novel Netware for SAA. The <b>Service Name</b> is the same as Novel's Profile. <ul style="list-style-type: none"> <li>You must select an <b>LU Category</b>.</li> <li>You can specify an asterisk, as the <b>Server Name</b> and <b>PowerTerm</b> will connect to the appropriate Netware for SAA server.</li> </ul>
<b>NWSAA (TCP/IP)</b>	Same as previous for TCP/IP connection. <ul style="list-style-type: none"> <li>You must specify the server's IP address or host name in the <b>Server Name</b> field.</li> </ul>
<b>TN5250</b>	TELNET for 5250.
<b>APPC</b>	<ul style="list-style-type: none"> <li>Specify the appropriate AS/400 names in <b>Host Name</b> and <b>Device Name</b>.</li> <li>Select <b>Auto SignOn</b> if you want to skip the sign on stage.</li> </ul>
<b>RLOGIN</b>	Uses the RLOGIN protocol over TCP/IP for network communication. <ul style="list-style-type: none"> <li>You must specify the host computer name or the IP address in the <b>Host Name</b> field.</li> <li>You can also specify the port number in the <b>Host Name</b> field.</li> </ul>
<b>SUPERLAT</b>	This is a version of the LAT protocol for network communication with a VAX/OpenVMS host, which requires Meridian's SUPERLAT. <ul style="list-style-type: none"> <li>You must specify <b>Service Name</b> and <b>Password</b> (if required).</li> </ul>

➤ **To enter a Device Name:**

- Type "<desired device name>+" in the **Device Name** field.

➤ **To specify a Dial Number:**

- Type the desired number in the text box.

or,

- Click the **browse** button. The **Quick Dial Setup** dialog box appears with the modem list of available dial numbers.
- Select the desired name from the **Dial List**.
- Click **OK**.

➤ **To add a Quick Dial Number:**

- Type the **Name** you want to appear in the **Dial List**.

- 
- 2 Enter the **Dial Number**.
  - 3 Click **OK**.

➤ **To specify a Script file:**

- Type the desired file name in the text box.

or,

- 1 Click the browse button. The **Browse Login Script** dialog box appears.
- 2 Select a file and click **Open**.

➤ **To specify a setup file:**

- Type the desired file name in the text box.

or,

- 1 Click the browse button. The **Browse Terminal Setup** dialog box appears.
- 2 Select a file and click **Open**.

➤ **To select a predefined session:**

- Select a session by clicking its name in the **Sessions List**. Its parameters appear in the dialog box.

➤ **To save a session:**

- 1 Define session parameters.
- 2 Click the **Save As** button. The **Save Session** dialog box appears. PowerTerm offers a default session name. You can overwrite this name and specify your own session name.
- 3 Click **OK**. The session is displayed in the **Sessions List**.

➤ **To modify a session:**

- 1 Select the session you want to modify from the **Sessions List**.
- 2 Enter the new parameters in the upper section of the **Connect** dialog box.
- 3 Click **Modify**. The new parameters are updated.

➤ **To delete a session:**

- 1 Select the session to delete from the **Sessions List**.
- 2 Click **Delete**. A confirmation message is displayed.
- 3 Click **OK** to delete the session setting.

---

## Step 5: Saving the Terminal Setup File

Defined terminal and communication settings can be saved in a setup file. The default Terminal Setup file extension is **.pts**. This file can be used to start PowerTerm, to connect to a host using the predefined terminal and communication parameters, or opened manually during a PowerTerm session. Changes in settings can be saved to the currently loaded setup file, or under a different file name if you do not want to overwrite the parameters in the current setup file. Creating an icon for your current PowerTerm settings, which can be accessed from the Windows Start menu or by double-clicking on your desktop icon, is also possible as well as saving the settings when you exit PowerTerm. For more details about saving a setup file when exiting PowerTerm, see Step 9: “Exiting PowerTerm”.

➤ **To create a shortcut for session settings:**

- 1** Locate the PowerTerm shortcut (either on your desktop or in the **Start Menu** folder).
- 2** Right-click **Properties**. The **PowerTerm Properties** dialog box appears.
- 3** In the **Target** area, position your cursor after the quotation mark (“”).
- 4** Type a space and then the name of the required setup file. In the event that the setup file is in a directory other than that of PowerTerm, type the entire path of the setup file.

**N**OTE *PowerTerm recognizes Windows file naming conventions, including spaces in a file name. If you have a setup file with a space in the name, for example Setup 1.pts, PowerTerm ignores the space and looks directly for the .pts extension.*

- 5** Click **OK**. Next time the PowerTerm window will be displayed using the parameters defined in the specified setup file.

➤ **To save terminal settings to the current setup file:**

- Select **File | Save Terminal Setup**. The current terminal settings are saved.

**N**OTE *This option overwrites parameters previously defined in the setup file.*

➤ **To save a terminal setup file under a different name:**

- 1** Select **File | Save Terminal Setup As**. The **Save File As** dialog box appears.
- 2** Select the directory in the **Save in** dropdown box in which you want to save the file.
- 3** Type the desired file name in the **File name** text box.
- 4** Click **Save**. The file is saved.

➤ **To save PowerTerm settings as an icon:**

- 1** Select **File | Save As Icon**. The **Save As Icon** dialog box appears.
- 2** Type the **Icon Information** that you want to use for your icon.
- 3** Click **OK**.

**N**OTE *The name of the setup file should be changed to avoid changing the default settings.*

➤ **To open a setup file:**

- 1** Select **File | Open Terminal Setup**. The **Open File** dialog box appears.
- 2** Select the directory in the **Look in** dropdown list in which the setup file is located.
- 3** Select the required setup file from the files list.
- 4** Click **Open**. Parameters defined in the selected setup file are now available.

---

## Step 6: Connecting to a Host

Once you have defined terminal and communication parameters you can connect to a host. It is not relevant if you started PowerTerm automatically with a terminal setup file or with a script file. The communication mode appears beside the application name on the PowerTerm window title bar. When communication ends, the mode name disappears from view.

PowerTerm enables you to connect to a host using a customized PSL script, when working with more than one host. 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 details on how to start PowerTerm using a customized setup file, see Step 1: “Starting PowerTerm/Starting PowerTerm Using a Script”.

PowerTerm 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 establish a connection:**

- 1** Select **Communication | Connect**. The **Connect** dialog box appears.
- 2** Click **Connect**. Connection with the host computer is established using the current communication (session) parameters.

➤ **To modify a connection to a host:**

- 1** Select **Communication | Modify Connection**. The **Modify Connection** dialog box appears with its title bar indicating the session type.
- 2** Change the session parameters (but **not** the **Session Type**), and the **Script File** as required. For more information, see Step 4: “Defining Modem and Communication settings”.

## Step 7: Working with the Host

Once you have connected to a host, PowerTerm enables you to perform the following functions:

- **Transfer files to and from the host**
- **Print data from your host application**
- **Start a new PowerTerm session**

### Transferring Files

PowerTerm enables you to transfer files between the PC and the host. PowerTerm operates with both ASCII and non-ASCII files. Before transferring files, you need to define the PC and host data types. These are defined in the **File Transfer Setup** dialog box.

**N**OTE *File transfer for 5250 emulations is not supported.*

#### ➤ **To define host and PC data types for file transfer:**

- 1** Select **Communication | File Transfer Setup**. The **File Transfer Setup** dialog box appears.
- 2** Select **Convert Data**.
- 3** Select data types for the host and PC data from each one's respective dropdown list.
- 4** Click **OK**.

#### ➤ **To receive a non-ASCII file from the host:**

- 1** Connect to a host.
- 2** Type in the work area, the command that the host uses to send a file and press **<Enter>**.
- 3** Select **Communication | Receive File**. The **Receive File** dialog box appears.
- 4** Click any tab, except the ASCII tab.
- 5** Click the browse button to specify a directory, if required.
- 6** Type a file name in the **File Name** field.  
or,  
Leave "." (or empty) if you want to receive the data into a file that carries the same name as the name used by the host.
- 7** For **Kermit** functioning in **Server** mode, select the **Use Get** check box and specify both file names in the **File Name** and **Host File Name** text boxes.
- 8** Click **OK**. The PC starts to receive the file, which will be saved on the PC disk under the specified name and directory.

#### ➤ **To receive an ASCII file from the host:**

- 1** Connect to a host.
- 2** Type in the work area, the command that displays the file (for example: for UNIX, `cat<filename>`; for VAX, `type<filename>`). Do **not** press **<Enter>**.
- 3** Select **Communication | Receive File**. The **Receive File** dialog box appears.
- 4** Click the **ASCII** tab.
- 5** Type in the **File Name** field, the PC file name that will store the received data.

- 
- 6 Click **OK**.
  - 7 Press **Enter** to activate the command.
- At the end of the capture process, select **Communication | Stop Receiving ASCII File**.

➤ **To send a non-ASCII file from the PC to the host:**

- 1 Connect to a host.
- 2 Type in the work area, the host's file reception command and press **<Enter>**.
- 3 Select **Communication | Send File**. The **Send File** dialog box appears.
- 4 Click any tab, except the ASCII tab.
- 5 Click the browse button to specify a directory, if required.
- 6 Type a file name in the **File Name** field.
- 7 Click **OK**.

➤ **To send an ASCII file from the PC to the host:**

- 1 Activate the command that will accept the data on the host (for example: for UNIX, `cat<filename>` or enter an editor and move to the data entry state within the editor).
- 2 Select **Communication | Send File**. The **Send File** dialog box appears.
- 3 Click the **ASCII** tab.
- 4 Type in the **File Name** field, the PC file name.
- 5 Click **OK**.

## Transferring Files for 3270 Emulations

PowerTerm provides **IND\$FILE** transfer for 3270 emulation.

**N**OTE All of the command's parameters can also be modified in the `ptdef.pts` file under the `[3270 IND$FILE]` heading.

➤ **To receive files from the host computer:**

- 1 Select **Communication | Receive File**. The **IND\$FILE: Receive File** dialog box appears.
- 2 Select the appropriate tab (**CMS**, **TSO** or **CICS**), which reflects your mainframe-working environment.
- 3 Specify the **PC File Name** and **Host File Name**.
- 4 Modify the other parameters as required.
- 5 Click **OK**. A **File Transfer Status** dialog box with file transfer details appears.

➤ **To send files to the host computer:**

- 1 Select **Communication | Send File**. The **IND\$FILE: Send File** dialog box appears.
- 2 Select the appropriate tab (**CMS**, **TSO** or **CICS**), which reflects your mainframe working environment.
- 3 Specify the **PC File Name** and **Host File Name**.
- 4 Modify the other parameters as required.
- 5 Click **OK**. A **File Transfer Status** dialog box with file transfer details appears.

---

The parameters displayed are:

<b>PC File Name</b>	The name of the file that resides on the PC.
<b>Host File Name</b>	The name of the file that resides on the mainframe.
<b>File Conversion</b>	<ul style="list-style-type: none"><li>• <b>ASCII</b> Specifies converting the file to ASCII format.</li><li>• <b>CR/LF</b> Specifies deleting a carriage return and a linefeed character from the end of each line of the file you are sending, or adding them to the end of each line of the file you are receiving from the host. CR/LF processing is typically appropriate for ASCII files.</li><li>• <b>Local Conversion</b> Specifies converting the file according to the format specifications that appear in the above <b>Host</b> and <b>PC</b> fields.</li></ul>
<b>File Creation</b>	<ul style="list-style-type: none"><li>• <b>Append</b> Specifies appending the transferred file onto an existing file with the same name.</li><li>• <b>Overwrite</b> Specifies that the transferred file overwrites an existing file with the same name.</li></ul>
<b>Record Format</b>	<ul style="list-style-type: none"><li>• <b>Default</b> Specifies the default format for the file residing on the mainframe.</li><li>• <b>Fixed</b> Specifies the fixed format for the file residing on the mainframe.</li><li>• <b>Variable</b> Specifies the variable format for the file residing on the mainframe.</li><li>• <b>Undefined</b> Specifies an undefined format for the file residing on the mainframe.</li></ul>
<b>Allocation Units</b>	The unit in which to measure the primary and secondary <b>Space</b> allocation of disk space. <ul style="list-style-type: none"><li>• <b>Tracks</b> Specifies Tracks as the allocation unit.</li><li>• <b>Cylinders</b> Specifies Cylinders as the allocation unit.</li><li>• <b>AvBlocks</b> Specifies the size (in blocks) for an average block. Relevant only where you are using blocks as your allocation unit.</li></ul>
<b>LRECL (Logical Record Length)</b>	Specifies the record size (in bytes) for the file being created on the host. For ASCII files, set this value to accommodate the longest line in your file. <ul style="list-style-type: none"><li>• Range: 0 - 32768.</li><li>• Default: Lines of up to 80 characters.</li></ul>
<b>Block Size</b>	Specifies the block size (in bytes) for the file being created on the host. For files with fixed-length records, this value must be a multiple of the <b>LRECL</b> .
<b>Space</b>	Specifies the size (in allocation units) of the primary (left box) and secondary (right box) allocation for the host file being

created. In the event that the primary allocation is insufficient, then a secondary allocation is used.

#### **Additional Options**

Specifies any parameters specific to the IND\$FILE program on your host system. The contents of this text box are attached to the end of the transfer command.

#### **Host program**

Specifies the name of the host program to be utilized by PowerTerm to initiate a file transfer.

- Default (only valid option): IND\$FILE

## **Printing Data**

PowerTerm enables you to define print parameters and print the terminal screen or data transferred from the host application.

### ➤ **To select a printer and set printing parameters:**

- Select **File | Print Setup**. The **Print Setup** dialog box appears with a set of printing parameters. The displayed parameters change according to the printer you select. For details, consult your printer documentation.
- The **Default printer** parameter enables you to send the output to the default printer selected under Windows.
- The **Specific printer** parameter allows you to select one of the currently installed printers.

### ➤ **To execute a form feed on the printer:**

- Select **File | Form Feed**.

### ➤ **To execute a line feed on the printer:**

- Select **File | Line Feed**.

### ➤ **To print accumulated data displayed in the work area:**

- 1** 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**.
- 2** 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 information.

### ➤ **To print a session using device naming:**

- 1** Open a session.
- 2** Select **Terminal | Setup**. The **Terminal Setup** dialog box appears.
- 3** Select 5250 Printer from the **Emulation** tab.
- 4** Select the **Printer** tab and select **File** from the **Print Device** dropdown list.
- 5** Type Lpt1 in the **File Name** field and click **OK**.
- 6** Select **Communication | Connect**. The **Connect** dialog box appears.

- 7 Type the name of the AS/400 host in the **Host Name** field.
- 8 Type the name of the device for the printer session in the **Device Name** field.
- 9 Click **Connect**. The **Printer Session** dialog box appears. Leave it open. The AS/400 automatically creates a queue with the specified device name.
- 10 Open another session, this one a 5250-display session, and send your print jobs to the queue created by the AS/400.

➤ **To print the Terminal Screen:**

- 1 Mark desired text or the entire contents of the work area.
- 2 Select **File | Print Screen**.

## Starting a New PowerTerm Session

PowerTerm enables you to run two or more sessions concurrently by opening a new instance of the PowerTerm window. Each session is identified by a letter (starting at 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 window:**

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

➤ **To toggle between open sessions:**

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

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

- 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>**.
  - or
  - Click the desired session's icon.
  - or
  - Select **Sessions | desired session**.

## Step 8: Ending a PowerTerm Session

You need to end the session(s) before exiting the PowerTerm application. PowerTerm provides four options to end a session:

- **Automatic Closing** PowerTerm enables you to close PowerTerm 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.
- **Optional 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 then reacts according to the parameters selected in the **Preferences** tab in the **Terminal Setup** dialog box. For more details on how to exit PowerTerm, see Step 9: “Exiting PowerTerm”.

### ➤ To define parameters for closing a PowerTerm session automatically:

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

### ➤ To automatically reconnect a PowerTerm session after exiting the current session:

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

### ➤ To manually close a session:

- Select **Communication | Disconnect**.

### ➤ To fast exit the current session:

- Press **<Alt>+<F4>**.

## Optional Closing

**N**OTE For non-IBM emulations only.

PowerTerm displays the following message at session termination when **Auto Exit PowerTerm** in the **Terminal Setup** dialog box is cleared:

“Session closed (<exit code>). Hit Enter to restart session.”

<exit code> 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.

➤ **To re-establish communication:**

- Press **Enter** to re-establish communication based on the current terminal and communication parameters.

## Step 9: Exiting PowerTerm

➤ **To exit PowerTerm:**

- 1** Select **File | Exit**. If you have changed the terminal settings, PowerTerm 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 default setup file.

# Chapter 4

## Scripts

The **Power Script Language (PSL)** is PowerTerm's own programming language. It enables you to create scripts for automating tasks. PSL is intended for users with programming or scripting skills.

For a full description of the different PSL commands, see the “**PowerTerm Power Script Language, Programmer's Reference**”, available in pdf format. Each PSL command is also described in PowerTerm's online help, which can be accessed by selecting **Contents** from the **Help** menu.

This chapter describes the following topics:

- **Script Overview**
- **Using PowerTerm Scripts**

---

# Script Overview

PowerTerm enables you to use scripts to automate tasks. For example, you can create a script to login to PowerTerm, execute a file, display a message, etc. Scripts can be run upon startup or during a PowerTerm session. They can be written in any standard text editor, like Notepad and are saved with a .PSL extension.

## PSL Types

The PSL commands can be grouped into different categories:

<b>Simulation transmission to host commands</b>	Enables you to communicate with the host. For examples, the <b>&lt;send&gt;</b> command sends data to the host.
<b>Standard programming commands</b>	Enables you to use standard programming commands. For example, the <b>&lt;exec&gt;</b> command opens a program.
<b>File handling commands</b>	Enables you to work with files. For example, the <b>&lt;read&gt;</b> command reads from a file.
<b>PowerTerm-specific commands</b>	Enables you to activate specific PowerTerm features. For example, the <b>&lt;map&gt;</b> command enables you to map a PC key to a host key.
<b>Desktop interface commands</b>	Enables you to manipulate components in the PowerTerm window. For example, the <b>&lt;menu hide&gt;</b> command hides the PowerTerm menu.
<b>DDE commands</b>	Enables you to use standard Microsoft Windows DDE mechanisms to communicate with other Windows applications.

---

# Using PowerTerm Scripts

PowerTerm provides you with the following script options:

- **Create a Script** creates a script to run upon startup or at any time during a PowerTerm session.
- **Edit a Script** edits an existing script file.
- **Record a Script** creates a script by recording all the actions that you perform in the PowerTerm window. Actions can include selecting a menu option, typing an entry on the screen, making selections in a dialog box and so on.
- **Run Scripts** runs specific scripts or individual commands, upon startup or during a PowerTerm 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 scripts to be used at a later date.

## ➤ To create a script file:

- 1** Select **Script | Edit Script**. The **Edit Script** dialog box appears.
- 2** Specify the PowerTerm folder in the **Look in** field in which to store the new script.
- 3** Type a name for the new script file in the **File name** field. You can type any name and extension that comply with DOS file-naming conventions. It is recommended that you use a **.psl** extension, because PowerTerm automatically recognizes it indicating a script file.
- 4** Click **Open**. A message box displays, asking whether to create a new file.
- 5** Click **Yes**. Notepad opens.
- 6** Type the script command(s) that you require.
- 7** Select **File | Save**.
- 8** Exit from Notepad.

## ➤ To edit a script file:

- 1** Select **Script | Edit Script**. The **Edit Script** dialog box appears.
- 2** Double-click the required script file in the files list. Notepad opens and displays the selected script.
- 3** Edit the script as required.
- 4** Select **File | Save**.
- 5** Exit from Notepad.

## ➤ To record a script:

- 1** Select **Script | Start Script Recording**. 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 box, 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 script recording.

- 5 Select **Script | Stop Script Recording** when you have performed all the operations to be stored in the script.

➤ **To run a script from startup by creating a Windows shortcut:**

This option creates a Windows shortcut to PowerTerm 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 **ptw23.exe** on your computer.
- 2 Right-click and select **Create Shortcut** option. The **Shortcut to ptw32.exe** appears in the current folder.
- 3 Right-click the created shortcut and select **Properties** option. The **Shortcut to ptw32.exe Properties** dialog box appears.
- 4 In the **Target** field, position your cursor after the **.exe** file name.
- 5 Add a space and then type the name of the required script file.  
You can also add parameters to the script file. These determine the communication parameters. For example, it can be the name of the host to which you want to connect, or the port number.
  1. Position your cursor after the PSL script name in the **Target** field
  2. Add a space and type the required parameters. Parameters should be separated by a space.  
Example:  
`\PTW32\PTW32.EXE COMM.PSL 1 9600 xonxoff`  
PowerTerm recognizes Windows file naming conventions, including spaces in a file name. If you have a setup file with a space in the name, PowerTerm ignores the space and looks directly for the .psl extension.
- 6 Click **OK**. When you start PowerTerm, 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:**

- 1 Select **Script | Run Script**. The **Run Script** dialog box appears with a list of all the files in the PowerTerm directory that carry the .psl extension.
- 2 Double-click the script file that you want to run. The selected script file is executed.

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

- Click the Soft button that has the desired script assigned. The script is sent to the host. For more information, see “Programming Soft Buttons”.

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

- Click the Power Pad button that has the desired script assigned. The script is sent to the host. For more information, see “Programming the Power Pad”.

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

- 1 Select **Communication | Connect**. The **Connect** dialog box appears.

- 2 Type the desired script file in the **Script File** field or browse for it. For more information, see Step 6: “Connecting to a Host”.

➤ **To run individual script commands:**

- 1 Select **Script | Script Command**. The **Script Command** dialog box appears.
- 2 Type the name of the script command you want to run.
- 3 Click **OK**. The specified script command is executed.

➤ **To activate a recorded script:**

- Select **Script | Activate Recorded Script**. The script currently recorded in memory is activated.

➤ **To save a recorded script:**

- 1 Select **Script | Save Recorded Script**. The **Record Script** dialog box appears.
- 2 Select the directory in which you want to save the file.
- 3 Enter a file name. The .psl file extension is automatically added.
- 4 Click **Save**. The file is saved with the specific file name.

---

# Chapter 5

## Menu Reference

This chapter describes each of the PowerTerm Menu bar options. Use it for reference only. For a detailed explanation of each step involved, see Chapter 3: “Using PowerTerm” and Chapter 4: “Scripts”.

The PowerTerm Menus are:

- **File Menu**
- **Edit Menu**
- **Terminal Menu**
- **Communication Menu**
- **Sessions Menu**
- **Options Menu**
- **Script Menu**
- **Help Menu**

## File Menu

The **File** menu provides options to create, save and restore a terminal setup file as well as create an icon for your current PowerTerm settings, 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 window.

### New Terminal Setup

Restores the default parameters including the terminal display colors. If you have changed terminal parameters since the last save, PowerTerm displays a warning message asking whether or not to save the latest changes. The message points to the terminal settings file currently loaded.

### Open Terminal Setup

Opens the **Open File** dialog box, which enables you to select and open an existing setup file.

### Save Terminal Setup

Saves both terminal setup and communication parameters to the current setup file.

### Save Terminal Setup As

Opens the **Save File As** dialog box which enables you to save the current setup file under a different name.

### Save as Icon

Opens the **Save As Icon** dialog box to create an icon for the current PowerTerm 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 box, which enables you to open keyboard-mapping settings that have previously been saved.

### Save Keyboard File

Opens the **Save Keyboard File** dialog box, which enables you to save 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 box, which enables you to open Power Pad settings that have previously been saved.

## Save Power Pad File

Opens the **Save Power Pad File** dialog box, 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

Opens the **Print Setup** dialog box, 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.

For more details about installing a new printer, consult your operating system documentation.

## Start/Stop Auto Print

Prints all the data displayed in the work area. This option changes to **Stop Printing** once the **Start Auto Print** function is activated.

## Close Print Queue

Closes the Windows print queue manually.

## Form Feed

Executes a form feed on the printer.

## Line Feed

Executes a line feed on the printer.

## New Terminal Window

Opens a new instance of the PowerTerm window. This enables you to run several sessions concurrently and simulate more than one terminal type. You can access a session by switching windows. After opening a new terminal window, you should define terminal and communication parameters before connecting to a host.

## **Exit All Sessions**

Exits all sessions at once.

## **Exit**

Enables you to exit PowerTerm. If you have changed the terminal settings, PowerTerm displays a warning message asking you if you want to update the terminal settings file.

## Edit Menu

The **Edit** menu provides options to select, clear, and reverse text in the PowerTerm window and delete the contents of the history buffer. The **Edit** menu also provides standard windowing editing commands (copy and 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 screen and passes the data to the history buffer. An example of an application that issues clear screen commands is VMS Mail.

### Reverse Screen

Changes the paragraph alignment. You can type from left to right or right to left, depending on the language you are using.

### 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.

### Copy

Copies marked text to the Clipboard when the **Automatic Copy** option in the **Edit** menu is not active.

### Paste

Pastes the clipboard into the work area. Right-click sends data stored on the Clipboard, to the host. This operation is equivalent to actually typing the contents of the Clipboard on the host screen.

### 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 information to the Clipboard with no need to select the **Copy** option.

## 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. The **Terminal** menu also enables you to select the system fonts you want to be displayed in the PowerTerm window, or use the default PowerTerm fonts.

### Setup

Opens the **Terminal Setup** dialog box in which you can define settings for terminal emulations. This dialog box contains different property pages that enable you to define all aspects of your terminal setup. For more information, see Chapter 3, Step 3: “Defining Settings for a Terminal Emulation (Terminal Settings)”.

### PowerTerm Fonts

Displays the default fonts defined in the PowerTerm window. The default PowerTerm 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 system fonts you want to be displayed in the PowerTerm window. System fonts remain the same size, no matter what the size of the window. When you select your own system fonts, you can only select fixed size fonts. System fonts enable you to select a different language.

### Reset

Resets the VT terminal defaults. This command does not apply to PowerTerm’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.

### English/ German/ French/ Italian/ Spanish/ Greek

Selects each language for the desired PowerTerm interface.

# 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

Displays the **Connect** dialog box, which enables you to define session parameters and connect to a host.

## Modify Connection

Displays the **Connect** dialog box, which enables you to modify connection parameters for COM type communication.

## Disconnect

Disconnects the communication session.

## Modem Setup

Opens the **Modem Setup** dialog box, 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.

## File Transfer Setup

Displays the **File Transfer Setup** dialog box, which enables you to define host and PC data types for file transfer.

## 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, Zmodem, Ymodem, Xmodem, Ascii or Binary.

## **Run FTP**

Launches the **PowerTerm FTP Client** capable of transferring files from one computer to another.

## **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 DTR**

Sets DTR (Data Terminal Ready) signals.

### **Clear DTR**

Clears DTR (Data Terminal Ready) signals.

### **Set RTS**

Sets RTS (Ready To Send) signals.

### **Clear RTS**

Clears RTS (Ready To Send) signals.

### **AUX: Modify connection**

Two-ways slave printing to a serial printer.

## Session Menu

A list of current PowerTerm sessions. You can toggle between the sessions by clicking the one you desire.

## Options Menu

The **Options** menu enables you to display and edit the keyboard mapping and define the Power Pad display. The **Options** menu also enables you to store a session in a log file and provides options to show or hide PowerTerm window components.

### Keyboard Map

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

### Power Pad Setup

Displays the **Power Pad Setup** dialog box, which enables you to adjust the number of buttons in the Power Pad. For more information, see Chapter 3: “Using PowerTerm/Programming the Power Pad”.

### Start/Stop Trace

Stores the session in a log file. Raw data is stored in the **Capture.log** file, while formatted data with readable escape sequences is stored in the **Trace.log** file. This menu option changes to **Stop Trace** once the **Start Trace** option has been activated.

### Input Trace

Enables you to view the contents of the **Capture.log** file on the PowerTerm desktop work area.

### Hide Menu

Hides the **Menu** bar. To restore it, select **Restore Menu** from the **Control Menu** box.

### Hide Buttons

Hides the **Soft buttons**. This option changes to **Show Buttons** when the Soft buttons are hidden.

### Hide Status bar

Hides the **Status** bar. This option changes to **Show Status Bar** when the Status bar is hidden.

### Hide Tool Bar

Hides the **Toolbar**. This option changes to **Show Tool Bar** when the Toolbar is hidden.

## Show Power Pad

Displays the floating **Power Pad**. This option changes to **Hide Power Pad** when the Power Pad is floating.

## Script Menu

The Script menu provides options to record, edit, and run a script.

### Run Script

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

### Edit Script

Displays the **Edit Script** dialog box, which enables you to create a new script or edit an existing one.

### Script Command

Displays the **Script Command** dialog box, which enables you to run individual script commands.

### Start/Stop Script Recording

Writes a script automatically. After requesting **Start Script Recording**, the manual operations you perform in the emulation screen are recorded to a script file, until you choose the **Stop Script Recording** option.

### Pause Script Recording

Pauses 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 PowerTerm is active.

### Save Recorded Script

Enables you to save a script from memory to a specific file to be used at a later date.

## **Help Menu**

The Help menu provides options for accessing the PowerTerm online help, Getting Started online help and product information.

### **Contents**

Accesses the table of contents for the PowerTerm online help.

### **Getting Started**

Accesses the table of contents for the PowerTerm online help.

### **About PowerTerm**

Displays product and contact information.

---

# Chapter 6

## Introduction to the PowerTerm FTP Client

This chapter presents PowerTerm FTP Client and its main features. A quick guide to the PowerTerm FTP Client is also provided. It describes the basic steps for users who are familiar with accessing remote terminals.

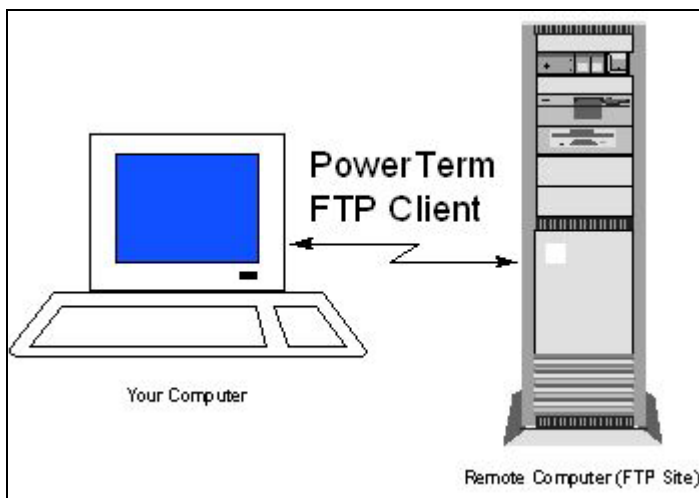
This chapter includes the following topics:

- **What is PowerTerm FTP Client?**
- **Features and Benefits**
- **PowerTerm FTP Client Concepts**
- **The PowerTerm FTP Client Window**
- **A Quick Guide through PowerTerm FTP Client**

## What is the PowerTerm FTP Client?

The PowerTerm 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. It does not matter where the two computers are located, how they are connected, or whether they use the same operating system.

PowerTerm FTP Client provides direct access to any FTP server site. The server side only requires a login identity and password before it responds to requests.



## Features and Benefits

- Provides access to a wide variety of operating systems, including UNIX, Windows 95/98/ME/2000/NT/XP, VAX/VMS, IBM AS400, IBM Mainframe operating systems (such as MVS, VSE, etc.) and more.
- Saves connection parameters in a configuration file.
- Uses prompt messages to confirm actions.
- 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.
- Views files in the format that they were created.
- Automates connection and transfer operations.
- Provides support for a variety of firewall options.
- Secures the connection for the file transfer using the SSH2 protocol.

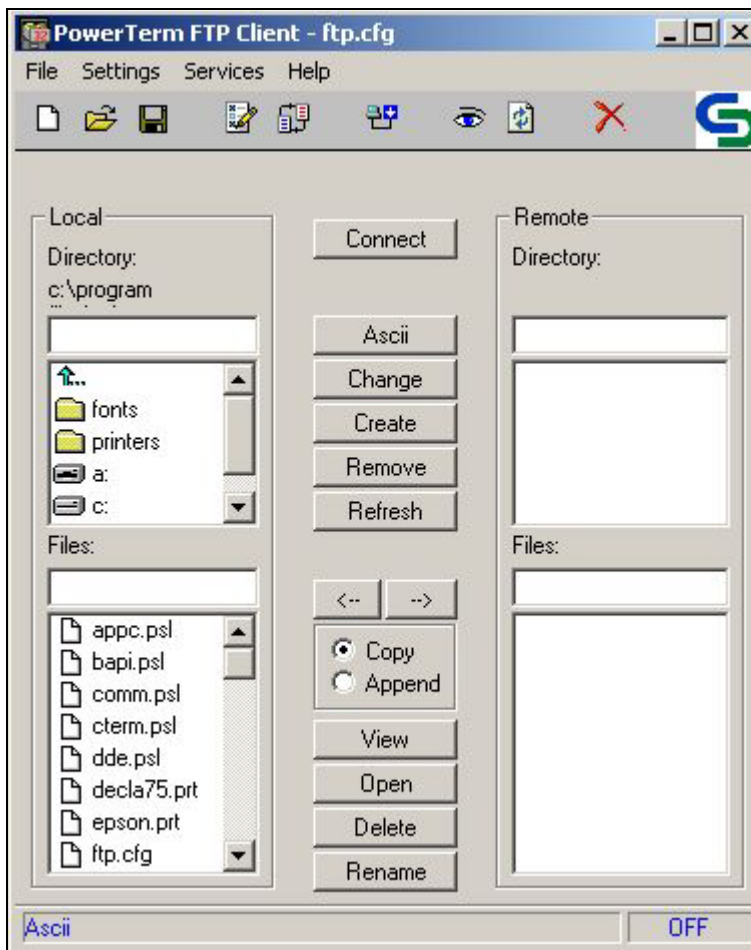
---

# PowerTerm FTP Client Concepts

The following describes some important concepts, which are used in this guide:

<b>FTP Site</b>	The remote site to which you are connecting. In this guide this term is also known as a host or remote computer.
<b>Configuration Settings</b>	Configuration settings contain your PowerTerm 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.
<b>Connection Profile</b>	PowerTerm FTP Client enables you to create a connection profile for an FTP site with which you frequently establish communication. This profile contains login, system, directory and firewall information. The connections profile, along with configuration information, is saved in a configuration file.
<b>Connection List</b>	Connection profiles are displayed in a <b>Connection List</b> at the bottom of the <b>Connect</b> dialog box. You can select a profile from the list to connect directly to an FTP site.
<b>Configuration File</b>	The configuration file contains your connection profiles and configuration settings. Configuration files are saved with a <b>.cfg</b> extension. Default configuration file is <b>ftp.cfg</b> , which is loaded at startup.
<b>Current Session</b>	The current session refers to the current connection between your PC and remote computer.

# The PowerTerm FTP Client Window



The PowerTerm FTP Client Window consists of the following components:

- |                         |  |
|-------------------------|--|
| <b>Control Menu Box</b> | Provides standard Windows commands.  |
| <b>Title Bar</b>        | Displays the application name (PowerTerm FTP Client) and the Configuration File currently in use.  |
| <b>Menu Bar</b>         | Contains drop-down menus, which enables you to access PowerTerm FTP Client functions.  |
| <b>Toolbar</b>          | Contains tools, which can be used as shortcuts to access frequently used menu commands.  |
| <b>Display Area</b>     | 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 <b>Display Area</b> 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 the PowerTerm FTP Client application. The icon is active while PowerTerm FTP Client is running.

## Menu Bar

### File Menu

Provides options to create, open, and save a configuration file. You can also use this menu to exit the PowerTerm FTP Client application.

### 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. The **Services Menu** also enables you to refresh the file list in both the local and remote directory.

### Help Menu

Provides 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



Enables you to select preferences for file transfer. Equivalent to **Settings | Options**.

### File Transfer Setup



Enables you to select options for data conversion. Equivalent to **Settings | File Transfer Setup**.

### Connect



Enables you to enter connection parameters for file transfer. Equivalent to **Services | Connect**.

### Log Window



Displays connection details. Equivalent to **Services | Log**.

**Refresh**

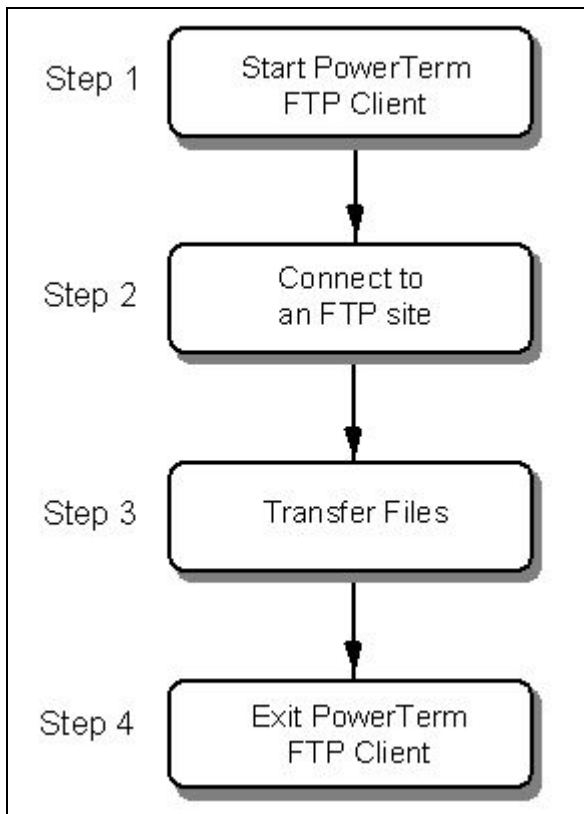
Refreshes the display of directories and file names shown in the PowerTerm FTP Client window. Equivalent to **Services | Refresh**.

**Exit**

Exits the PowerTerm FTP Client application. Equivalent to **File | Exit**.

# A quick Guide through PowerTerm FTP Client

The following workflow is a quick guide for using PowerTerm FTP Client. This quick guide is intended for users who are familiar with FTP applications. For a more detailed description on how to work with PowerTerm FTP Client, see Chapter 7: “Working with the PowerTerm FTP Client”.



## Step 1: Start PowerTerm FTP Client

- 1 Select **Communication | Run FTP**. The **PowerTerm FTP Client** window opens.
- 2 Click **Connect**. The **Connect** dialog box appears.

## Step 2: Connect to an FTP Site

The **Connect** dialog box enables you to define connection parameters and connect to an FTP site. PowerTerm FTP Client provides options to define connection parameters for a current session as well as to select a previously defined connection profile from the **Connection List**.

- To **define** connection parameters for the current session, enter the required parameters in the **Connect** dialog box.
- 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 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 PowerTerm FTP Client

- 1 Click **Disconnect** in the PowerTerm FTP Client window. A confirmation message is displayed.
- 2 Click **OK**.
- 3 Select **File | Exit** or use standard windowing procedures to close the PowerTerm FTP Client.

---

# Chapter

# 7

## Working with the PowerTerm FTP Client

This chapter describes how to define connection parameters for a current session. These parameters can be saved in a Connection Profile for future use. The **Connection List** displays the different profiles that you have created. This chapter also describes the procedure for connecting to an FTP site and how to display on-screen connection information.

This chapter includes the following topics:

- **Starting PowerTerm FTP Client**
- **Defining Configuration Settings**
- **Working with Configuration Files**
- **Defining Connection Parameters**
- **Working with Connection Profiles**
- **Connecting to an FTP Site**
- **Using the FTP-Log Window**
- **Working with Local and Remote Directories and Files**
- **Transferring Files**
- **Automatic File Transfer**
- **Disconnecting and Exiting PowerTerm FTP Client**
- **Troubleshooting**

## Starting PowerTerm FTP Client

The PowerTerm FTP Client is opened using either the default (**ftp.cfg**) or a customized configuration file. You can also create a shortcut that at startup accesses the PowerTerm FTP Client with a specified configuration file.

**N**OTE Before you create a shortcut to a configuration file, you need to first create and save it in PowerTerm FTP Client, as described in "Working with Configuration Files/Creating a New Configuration File".

➤ **To start PowerTerm FTP Client:**

- Select **Communication | Run FTP** in the PowerTerm window. The PowerTerm FTP Client window opens with the predefined configuration settings.

## Defining Configuration Settings

To set up your PowerTerm FTP Client working environment, you need to define PowerTerm FTP Client preferences and select the required file transfer mode. PowerTerm 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 PowerTerm FTP Client sessions. For more information, see “Working with Configuration Files”.

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

## Defining PowerTerm FTP Client Preferences

PowerTerm FTP Client provides various options to customize your working environment. You can specify which actions will prompt you with a confirm message (for example, removing a directory), and specify the information displayed when you connect to an FTP site.

### ➤ To define PowerTerm FTP Client preferences:

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

The parameters displayed are:

#### 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.
- **Open 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 the remote files 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 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 FTP Client dialog box. To view the size of files, you may need to enlarge your PowerTerm FTP Client window. You can use standard windowing Shift and Ctrl keys to select multiple files. The combined size of selected files is displayed in the PowerTerm FTP Client window area.
- **Save Settings on Exit** Automatically saves the current configuration settings when you exit PowerTerm FTP Client, without prompting you to save these settings. If you do not select this option, PowerTerm FTP Client will always prompt you to save the current configuration file when you exit the application.
- **Password for Anonymous Login** Provides PowerTerm FTP Client with a specified password for anonymous login. Type in your e-mail address in the **Password** field.

## Selecting a file Transfer Mode

PowerTerm 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 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, files 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) file	Ascii

---

Spreadsheet file	Usually Binary
Database file	Usually Binary
Word Processor file	Usually Binary
Program source code	Ascii
Electronic mail message	Ascii
UNIX shell archives (shar)	Ascii
Compressed files (zip, tar, lzh, arc, Binary arj)	Binary
Unencoded files	Ascii
Executable files	Binary
Executable script files (bat, etc.)	Ascii
PostScript files	Usually Ascii
Hypertext (html) Documents	Ascii
Picture files (tiff, jpeg, mpeg)	Binary
Rich Text Format files (rtf)	Ascii

**N**OTE 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 in the PowerTerm FTP Client window. The required mode is selected.

## File Transfer Setup Option

PowerTerm FTP Client enables you to setup the Data Conversion mode and Data Type for both your computer and the remote computer (host).

➤ **To select file transfer options:**

- 1** Select **Settings | File Transfer Setup**. The **Data Conversion** dialog box appears.
- 2** Select the required file transfer setup parameters.

**3** Click **OK**.

The parameters are:

**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.

---

# 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 in PowerTerm FTP Client, or by starting PowerTerm FTP Client with a customized configuration file. To do this, you should add the name of the configuration file to the PowerTerm FTP Client shortcut. For more information see Chapter 7, “Setting up PowerTerm FTP Client/Starting PowerTerm FTP Client”.

➤ **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 box 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 box appears if the current configuration file is noname.cfg.

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

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

# Defining Connection Parameters

PowerTerm FTP Client enables you to 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 box are kept and displayed when you re-open it (except the password).

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

## ➤ To define connection parameters:

- 1 Select **Services | Connect** or click the connect button. The **Connect** dialog box appears.
- 2 Specify connection parameters.

The following parameters are displayed:

### Login

- **Host Name** The remote computer that you want to access. Type the host computer's domain name or its IP address.
- **User Name** The account that you want to use to access the remote computer. Select **anonymous** if you do not have an account on the FTP server. Enter your user name if you have a personal account on the remote computer.
- **Password** Enter your complete e-mail address for anonymous ftp. Enter the password that you have been assigned for personal ftp. PowerTerm FTP Client displays the characters that you type as asterisks.
- **Account** This parameter 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.

### SSH-2 SFTP

Specifies implementing the **SSH2** security protocol during the file transfer.

---

<b>PASV Mode</b>	Specifies that the program will work in <b>PASV</b> mode.
<b>Use Firewall</b>	Clear this option to enable the <b>Firewall</b> button.

➤ **To specify Firewall parameters:**

- 1** Open the **Connect** dialog box.
- 2** Select **Use Firewall**. The **Firewall** button is enabled.
- 3** Click **Firewall**. The **Firewall** dialog box appears.
- 4** Enter required parameters and select a firewall type.
- 5** Click **OK**.

The following parameters are displayed:

<b>Host Name</b>	The computer that you want to act as a security guard prior to granting access to a remote computer.
<b>User Name</b>	The account of the computer that you want to perform the security check.
<b>Password</b>	Enter the password that you were assigned for the computer that performs the security check.
<b>Port</b>	A number that identifies an Internet application, which performs the security check. Default port is 21.
<b>Type</b>	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.

---

# 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 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 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 connection profile:**

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

➤ **To modify a profile:**

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

➤ **To reset (clear) a connection profile:**

- 1** Open the **Connect** dialog box. The last parameters specified are displayed.  
Or  
Select the desired Connection 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 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 box.

➤ **To connect to an FTP site:**

- 1** Display the **Connect** dialog box.
  - 2** Specify connection parameters or select a Connection Profile from the **Connection List**.
  - 3** Click **Connect**.
- Or,
- Double-click a Connection Profile in the **Connection List**.

## Using the FTP-Log Window

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

- **To automatically display connection information for all sessions:**
  - 1** Select **Settings | Options**. The **FTP-Preferences** dialog box appears.
  - 2** Select **Open Log Window** and click **OK**. The **Log-FTP** 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 FTP Client window. The **Connect** dialog box appears.
  - 3** Enter connection parameters.
  - 4** Click **Connect**. The Log-FTP window displays each step performed by PowerTerm FTP Client in the connection process.
  
- **To stop/start displaying connection information:**
  - 1** Click the **Stop** button to stop displaying connection information. The button toggles to **Start**.
  - 2** Click **Start** to continue displaying connection information. The button toggles to **Stop**.
  
- **To save the connection information to a log file:**
  - 1** Click the **Save** button. The **Save As** dialog box 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-FTP window:**
  - Click **Clear**. All connection information displayed is cleared.
  
- **To close the Log-FTP window:**
  - Click **Close** to exit.

The following options are available in the Log-FTP window:

<b>Stop</b>	Stops displaying connection information. This button toggles to <b>Start</b> .
<b>Save</b>	Saves the connection information in a log file.
<b>Clear</b>	Clears the Log-FTP window.

**Close**

Closes the Log-FTP window.

---

# Working with Local and Remote Directories and Files

The PowerTerm FTP Client enables you to manipulate the directories and files in both your own computer and 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. The ability to refresh the display of your local and remote directory and file structures is also featured.

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

➤ **To select a directory:**

- 1 Select the required directory using standard windowing selection conventions.
  - 2 Click **Change**.  
Or
  - 1 Type the name of the required directory in the **Directory** field.
  - 2 Press **Enter**.  
Or
- Double-click the required directory.
- The selected directory and its files are displayed.

➤ **To create a directory:**

- 1 Double-click the required drive (local or remote as desired).
- 2 Type the name of the new directory in the **Directory** field.
- 3 Click **Create**. The new directory is created and displayed in the local or remote directory list as specified.

➤ **To remove a directory:**

- 1 Select the required drive (local or remote as desired).
- 2 Select the directory that you want to remove.
- 3 Click **Remove**. The directory is removed from the local or remote directory list as specified.

➤ **To view a file:**

- 1 Select the file that you want to view.
  - 2 Click **View**.  
Or
- Double-click the required file.

The file is displayed in the format in which it was created. For example, a file with a .doc extension is opened in Word and a file with a .txt extension is opened in Notepad.

➤ **To delete a file:**

- 1 Select the file that you want to delete.

**2** Click **Delete**. The selected file is deleted from the list.

➤ **To rename a file:**

- 1** Select the file that you want to rename.
- 2** Click **Rename**. The **Rename** dialog box appears.
- 3** Type the new file name and extension.
- 4** Click **OK**. The file is displayed in the file list with the new name.

**N**OTE You can use standard windowing conventions like *Shift* and *Control*, to select multiple files.

➤ **To refresh the directory display:**

- Select **Services | Refresh**. The information displayed in the PowerTerm FTP Client window is refreshed. All changes that you have made to directories or files will be displayed.

---

# Transferring Files

The PowerTerm FTP Client enables you to 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 buttons are inactive during the transfer of files, however, you can still perform informative operations, for example viewing directory and file information and accessing online help. You can minimize the PowerTerm FTP Client window while file transfer is in progress.

**N**OTE You can use standard windowing conventions like *Shift* and *Control*, to select multiple files.

## ➤ To download a file from an FTP site:

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

### Copying a file:

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

### Appending a file:

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

## ➤ To upload a file to an FTP site:

### Copy a file:

- 1** Select the target remote **directory**.
- 2** Select the file to upload from your computer.
- 3** Select **Copy**.
- 4** Click the **right** arrow button. The **FTP Transfer** dialog box graphically displays the progress of uploading the selected file.

### Appending a file:

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

# Automatic File Transfer

The PowerTerm FTP Client enables you to automate connection and transfer options by creating a PowerTerm FTP Client 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 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.

**I**MPORTANT *The PowerTerm FTP Client uses a set sequence of parameters to transfer files. This sequence cannot be modified.*

**N**OTE *The following procedures describe one way to create a shortcut. Consult your windows documentation for a description of other methods.*

## ➤ To create a shortcut:

- 1 Locate the file **ftpc32.exe** on your computer. It resides in the PowerTerm 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 box appears.
- 4 Enter, in the **Target** field, the required parameters after the target file path.
- 5 Click **OK**. The next time that you open PowerTerm FTP Client, it will open with the parameters defined.

Example of Connection Parameters (P):

P1	P2	P3
ericom.com	anonymous	eran@ericom.com

Example of File Transfer Parameters (P):

P1	P2	P3	P4	P5	P6	P7
ericom.com	anonymous	eran@ericom.com	get	Ascii	/usr/pub/ericom/abc.txt	C:\ftp\mydir\cde.doc

The parameters are:

---

<b>Parameter 1</b>	Host site name
<b>Parameter 2</b>	User name
<b>Parameter 3</b>	Password
<b>Parameter 4</b>	File transfer direction. <ul style="list-style-type: none"> <li>• <b>Get</b> for downloading.</li> <li>• <b>Put</b> for uploading.</li> </ul>
<b>Parameter 5</b>	File transfer mode. <ul style="list-style-type: none"> <li>• <b>Binary</b></li> <li>• <b>Ascii</b>.</li> </ul>
<b>Parameter 6</b>	Path and name of the local or remote file that you want to transfer, according to the file transfer direction specified in Parameter 4.
<b>Parameter 7</b>	Path and name of the local or remote file that receives the transferred file, according to the file transfer direction specified in Parameter 4.

**I**MPORTANT *The PowerTerm 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.*

## File Transfer Conventions

PowerTerm FTP Client enables you to use wildcards, and combinations of them, in Parameter 6 and 7 to transfer groups of file.

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 PowerTerm FTP Client

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

Changes to the preferences are either saved automatically when you exit the PowerTerm FTP 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 FTP Client:**
  - Select **File | Exit**.

# Troubleshooting the PowerTerm FTP Client

If you have any difficulties with PowerTerm 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 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.