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SimpTerm is a Chinese communication program for MS - Windows 3.1. It allows you to read Chinese text in BIG5, HZ or GB encoded format sending from a remote computer, even if you don't have a Chinese system installed on your PC computer. It also provides VT- 100 terminal emulation and file transfer function.

To learn how to use Windows Help, press F1.

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SimpTerm Overview

SimpTerm is a shareware communication program for MS-Windows 3.1. It is capable of displaying Chinese text without the need of underlying operational system support.

It can use commonly available **BIG5** or **GB** encoded bitmap font displaying **BIG5**, **HZ** or **GB** Chinese text sending from a remote host computer.

In addition, **SimpTerm** provides following features:

Terminal Emulation:

VT-100/102, VT-52, and ANSI Color BBS.

File Transfer protocols:

Kermit

with 2048 byte long packet, file attribute extension, run length encoding and user configurable control character prefixing.

X/YMODEM

with CRC error checking, 1024 byte long packet and G option.

Screen Buffer:

800 line screen scroll back buffer (under 80 X 24 mode). Configurable screen size of up to 132 columns, 92 rows.

Modem Dialer:

with 10 programmable speed dial buttons, and memory for 10 most frequently used numbers as well as modem initialization strings.

Miscellaneous:

48 programmable function keys User configurable Microsoft 3D and Borland BWCC style dialog box.

See also

System Requirement

System Requirement

SimpTerm requires an IBM PC compatible computer with a 286 or higher CPU, running Microsoft Windows 3.1 and a VGA or higher resolution graphics card. A mouse and a fast video card with SVGA capability are strongly recommended.

To display Chinese text by **SimpTerm**, you need one or more Chinese bitmap font files.

To use either the Microsoft 3D style dialog or Borland Custom Control style dialog, you need

CTL3DV2.DLL or CTL3DV2.DLL and/or BWCC.DLL.

These files are available from many ftp sites on the Internet, and many dial up BBS systems.

SimpTerm will work without these files as a regular communication program.

See Also Setup SimpTerm

Acknowledgments

Since the first beta release of **SimpTerm** on Jan. 20, 1994, many kind users around the world identified many missing features and bugs with various hardware/software.

I am indebted to all your suggestions and I would like to especially thank Yifeng Fu, my colleague in the Illinois Institute of Technology, for suggesting me to add Chinese text displaying capability to SimpTerm, and Jian Shi, Jun Aubrey Zhang, Norley Liu, Tianwei Xie, for their numerous ideas, productive discussions and extensive testing.

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Packing List

This version of **SimpTerm** comes with following files:

spterm.exe	SimpTerm executable file
spterm.hlp	Windows 3.1 help file for SimpTerm
spterm.ini	Configuration file for SimpTerm
kfmgr.dll	Chinese font management dynamic link library
kfmgr.ini	Configuration file for kfmgr.dll
vt100.scn	VT-100 terminal emulation screen driver
vt100.kbd	VT-100 terminal emulation keyboard driver
vt52.scn	VT-52 terminal emulation screen driver
vt52.kbd	VT-52 terminal emulation keyboard driver
ansi.scn	ANSI terminal emulation screen driver
ansi.kbd	ANSI terminal emulation keyboard driver
readme.txt	ASCII format introduction file

Chinese Fonts

SimpTerm can use 16X16 **GB** encoded bitmap font to display **HZ** and **GB** encoded Chinese text, and 14X16 or 16X16 **BIG5** encoded bitmap font to display **BIG5** encoded Chinese text.

Font information is contained in **kfmgr.ini** in the form:

[Fonts] gbfont=fontfile big5font=fontfile

Where fontfile is font file name.

For example:

[fonts] gbfont=myfont.fon big5font=c:\font\cfont.fon

Font files can be stored in another drive/directory provided that the full path name is given.

You can change Chinese font at run time. From **File** menu, choose **Run Editor** to start an editor. Open KFMGR.INI and change the font name. After you save the change you made, from <u>View</u> menu, clear the **Use Bitmap Font** option, and then check this option again. This will cause **SimpTerm** reload Chinese font using new information in the configuration file.

Using Different Dialog Styles

SimpTerm can display dialogs in 4 different styles.

Regular	Normal Windows dialog style.
<u>Microsoft 3D</u>	Microsoft 3D effect dialog style.
BWCC 3	Borland Custom Control dialog style with steel-gray background.
<u>BWCC 4</u>	Borland Custom Control dialog style with light gray background.

To choose different dialog styles, from <u>Options</u> menu, select **Program Settings**. The **Program Setup** dialog will appear. You can select a dialog style from the **Dialog Style** group box.

If you can not select a particular style, the required file for that style is missing or is not installed properly.

For Microsoft 3D dialog style

Required File:

Microsoft's **CTL3DV2.DLL** or **CTL3D.DLL** dynamic link library. Location:

Windows system directory (default C:\WINDOWS\SYSTEM).

For BWCC 3 or BWCC 4 dialog style

Required File:

Borland International's **BWCC.DLL** dynamic link library. Location:

One of following directories

Windows directory (default C:\WINDOWS).

Windows system directory (default C:\WINDOWS\SYSTEM).

A directory listed in current PATH statement.

Note:

These two files are not distributed with **SimpTerm**. They are freely

available from many ftp sites and BBS systems.

Displaying Chinese Characters

Chinese characters can be displayed by either **SimpTerm** or a Chinese Windows System.

To display Chinese characters by **SimpTerm**,

Install <u>Chinese bitmap font</u> files if you haven't done so. Select the **Use Bitmap Font** option in **SimpTerm**'s <u>View</u> menu.

To display Chinese characters by a Chinese Window System,

Clear the **Use Bitmap Font** option in **SimpTerm**'s <u>View</u> menu.

You should also <u>choose an ASCII screen font</u> with proper size to get best result. <u>Click here for a Demo</u>.

Even if you are running a Chinese Window system, you can still use **SimpTerm** to display Chinese characters for faster display speed.

The advantages of using **SimpTerm** to display Chinese characters:

Fast speed, this is very important when using a fast modem. You don't have to install a Chinese system on your computer.

The advantages of using a Chinese system:

You may have more choices of fancy Chinese font. In some cases, you can use less memory for Chinese viewing.

More Information

SimpTerm stores Chinese font in memory at run time and doesn't do font scaling. These will reduce the overhead of displaying Chinese character to the minimum. The side effect of doing so is that it requires more memory. The memory requirement for Chinese font is around 400 KB for BIG5 mode, 300 KB for HZ/GB mode and 700 KB if two instances of **SimpTerm** are running at the same time, one in BIG5 mode, the other in HZ/GB mode. But under Windows 3.1 386 Enhanced mode, one can use virtual memory to reduce this side effect.

If the **Use Bitmap Option** is cleared, memory used for Chinese font data as well as the Chinese font engine will be released. In this case, **SimpTerm**'s

memory requirement is just like that of a typical medium sized Windows application.

Some of the popular Chinese Window Systems are

Microsoft Windows 3.1 Chinese edition (BIG5 or GB version) Chinese Star TwinBridg

Note:

Depends on which version of these systems you are using, you may only use them to display Chinese characters in one of the BIG5 mode or HZ/GB mode. **SimpTerm** does not provide run time BIG5 <-> GB translation.

File Menu Commands

From this menu, you can choose different command to **Open** or **Close** a session log file, to **Run** an editor or to **Exit** the **SimpTerm**.

The default text editor is Windows NOTEPAD. If you like to use another editor, you can change it by choosing **<u>Options</u>** menu, **Program Settings**. The <u>Program Setup</u> dialog will appear. You can then enter the editor program's name in the **Editor** window in this dialog.

When you open a log file, anything sending from the remote host computer will be saved in a file on your PC.

When you open a log file, you can either create a new file name or choose an existing file. In the later case, incoming information will append to the old file.

The incoming data is saved to log file as is. You may have difficulty in viewing log files using a regular text editor, since the log file may contain VT - 100 command strings. You can however use an ANSI editor to read, edit log files.

In general, if you only log output from a UNIX cat or VAX/VMS type command, there will be not VT-100 command strings. But still, you should use a editor that is capable of understanding UNIX style new line characters.

The log file feature is used mostly for debugging **SimpTerm** while testing this program.

Edit Menu Commands

In this menu, you can choose following commands

Сору	Send text in the Windows clipboard to remote host computer.
Paste	Copy selected text in the terminal window to Windows clipboard.
Send	Send selected text in the terminal window to remote host computer. The text will not be copied to the Windows clipboard.
Refresh Screen	Redraw the terminal window.

Under the **Clear** option, you can choose Clear **Current Screen** or Clear **Screen Buffer** to clear text in the current terminal window or in the entire screen scrollback buffer.

Toggle Selected and **Toggle Screen** will toggle on screen text between ASCII and GB encoded Chinese text. They are useful if the incoming Chinese HZ text is not properly formatted

Options Menu Commands

From this menu, you can choose different command to start following dialogs to change various **SimpTerm** settings:

<u>Port</u>	Change communication port settings.
<u>Terminal</u>	Set terminal window options, emulation mode, and screen colors.
Function Keys	Program function keys.
<u>Fonts</u>	Change screen font.
Program Settings	Change dialog style or text editor.

View Menu Commands

From this menu, you can choose different command to set **SimpTerm** terminal window's working mode.

ASCII mode resets all Chinese displaying mode.

BIG5, **GB** and **HZ** mode can be selected to display Chinese text in different encoding format.

In **HZ** mode

Show HZ Escape Code toggles the HZ escape code display mode. if checked, '~{', and '~}' escape code are shown as is.

HZ Magic Switch toggles the automatic insertion of HZ escape code. if checked, '~{', and '~}' will be added as needed.

Use Bitmap Font option determines how to display Chinese character, by **SimpTerm** if checked AND <u>Chinese bitmap fonts</u> are installed. by a Windows Chinese system otherwise.

Show Vertical Scroll Bar will turn on/off the terminal window's vertical scroll bar. Under 640X480 mode, if vertical scroll bar is turned on, you may have difficulty in displaying a full 80 character line.

Note:

SimpTerm's Chinese modes are almost compatible with a regular terminal. In general, there is no need to switch between a Chinese mode and the **ASCII** mode just to start or stop Chinese viewing. Some of the differences are listed here

In Chinese modes, regular ASCII codes from 160 to 255 are treated as Chinese characters.

In **HZ** mode, a ~ will not be displayed until next character is coming.

When you switch between different terminal modes, the change will only take in effect when new text is coming from remote host computer. Text in screen buffer won't be changed.

To use **BIG5** and **GB** mode, you need an **8 bit** connection, **8**, **n**, **1** Port setting and set up **SimpTerm** to show **8 bit characters**. The later two

options can be set from the **Options** Menu **<u>Port</u> and <u>Terminal</u> dialog.**

SimpTerm's Chinese font engine is very fast, and font placement is internally coded to match the ASCII font. If you choose to use alternate Chinese program/system to view Chinese character, the display speed may be very slow.

Phone Menu Commands

From this menu, you can choose different command to <u>Dial</u> a number or **hang up** an established modem connection. Currently, **SimpTerm** only supports modems using Hayes compatible modem control command.

Utilities Menu Commands

From this menu, you can choose different command to clear the communication port, send a break signal to remote computer or reset the **SimpTerm** terminal windows.

These commands are used to restore normal operation of the program.

Communication Port commands

Clear Comm. Port	Clear the communication port that is blocked by phone line noise.
Send Break	Send a break signal to remote host computer.
Send Long Break	Send a longer break signal to remote host.
	You can usually use this command to escape back to a terminal server to kill a bad telnet connection

Terminal Reset commands

Soft Reset: Remove VT-100 terminal scroll region.

Hard Reset: Clear Screen, clear screen buffer, remove VT-100 scroll region, set terminal to 80 character per line Auto Line Wrap On, and position cursor to the upper left corner.

They are useful if the remote host computer send incorrect command to setup **SimpTerm**'s terminal window, or a WWW, Gopher connection is suddenly broken, and **SimpTerm**'s terminal window is in a strange state.

Transfer Menu Commands

From this menu, you can choose different command to start file transfer with different protocol, change file transfer directory, change file transfer settings and get information about the last file transfer statistics.

Send or Receive File	Start file transfer.
Finish Kermit Server	Stop the remote Kermit server.
Change Dir.	Change current working directory.
<u>Transfer Setup</u>	Change file transfer settings.
Transfer Info.	View statistics for the most recent file transfer operation.

Help Menu Commands

From this menu, you can choose different command to get help information on using **SimpTerm**.

Choose a Screen Font

The **Screen Font** dialog can be used to choose screen font for normal ASCII text displaying. A Sample text window will show you the selected font in current screen colors. Actual font height and width values are given above the Sample text window.

Only fixed pitch fonts are supported. In Windows 3.1, fixed pitched fonts are **Fixed system**, **Courier**, **Courier New** TrueType and **Terminal**.

Only regular and bold font styles are supported. If you choose other font styles that **SimpTerm** is not able to display, a **Not Supported** message will be shown in the **Sample** window.

If you have only one font, **Courier New** TrueType, in the selection box, chances are you select to use TrueType font only in your Windows. This setting can be changed from the Windows Control Panel, Font dialog, TrueType Option.

In Chinese mode, the ASCII font selection will affect the Chinese character placement. **Click here for a Demo**.

As a guide line, the screen font chosen should have at least 8 pixel in width and 12 to 20 pixel in height.

For example, under 640X480 VGA mode, use **Courier New** TrueType at 10 point font size and under 800X600 SVGA mode use 11 point font size.

More Information

In **SimpTerm**, each Chinese character is represented with two ASCII characters, and needs at least 16 pixel both in width and height. If a regular ASCII character is 8 pixel in width, there will be no inter character space for Chinese character. If a regular ASCII character is 9 pixel in width, a Chinese character will have $2 \times 9 - 16 = 2$ pixel of inter character space. In this case, Chinese text will look much better. For inter line space, **SimpTerm** enforces a minimum of 18 pixel line height in Chinese mode. If the ASCII font is too small, there will not be a balance between ASCII text and Chinese text.

You can download a 9X16 fixed pitch font for better displaying result from ftp site *ftp.cica.indiana.edu* under *pub/pc/win3/fonts*. The file name is woafon14.zip. A nice addition to the **Terminal** font family.

Input Chinese Character

This version of **SimpTerm** does not provide Chinese input function. You need to use other programs to send Chinese character to **SimpTerm**.

Some of these programs include

MS-Windows Chinese edition Chinese Star TwinBridge Way3100

While editing in **HZ mode**, you should remember to type escape sequence to begin a block of HZ text, if you don't use the automatic HZ escape insertion feature of **SimpTerm**. You can store those escape code in <u>function keys</u>. For example, store \sim { in F11 and \sim } in F12.

When you turn on the **HZ Magic Switch** option from the <u>View</u> menu, **SimpTerm** will add HZ escape code automatically. In this case there is NO need to type \sim , { , and \sim } to start or stop a block of HZ text.

When typing Chinese characters, you would better turn on the **Show HZ Escape code** option from the <u>View</u> menu. **SimpTerm** and many editors running on the host computer need to know the actual cursor position to operate correctly.

On the remote host computer, use a Chinese compatible editor, such as CELVIS, CEMACS, etc.

Error correction during HZ mode editing is trouble some. Currently, only backspace key works reasonably well. Send a refresh screen command frequently to remote computer. Usually, the command to do so is

CTRL + L (in lower case).

Configure the Communication Port

The **Port** dialog can be used to setup communication port parameters.

Usually the setting will be **8**, **n**, **1**, that is **8 data bits**, **none parity**, **1 stop bit**.

Parity Check can be left unchecked.

Flow Control's setting depends on many factors, your host computer, your modem, or even your modem's cable if it is an external one. The default setting is **none**.

Note:

The **Xon/Xoff** flow control is not compatible with X/YMODEM file transfer protocols.

To display **BIG5** or **GB** text, you need the **8**, **n**, **1** port setting.

Set Terminal Options

The **Terminal** dialog set most of the options for the terminal display and keyboard.

In most cases, there is not need to change the default settings.

Options	Short description	Default setting
Screen Size	Characters per line Lines per screen	80 columns 24 rows
Cursor	Cursor shape.	Underline
Backspace Key	Backspace key mode If you see a ^H when you want to delete a character, toggle this setting	Destructive Means pressing backspace sends ASCII code 127 CTRL+backspace sends ASCII code 9 (Backspace)
Arrow Keys	Extended keyboard arrow key mode in terminal emulation	Numeric
		May be changed by host computer
Keypad	Keypad mode	Numeric
	in terminal emulation	May be changed by host computer
Misc.	Set new line translations Line wrap mode Warning Beep Mode	Line Wrap checked Warning Bell checked These settings may be changed by host computer.
Emulation	Terminal	VT-100, 7 bit character (0

	emulation mode and ASCII character range When 8 bit char is checked, ASCII code 128 to 256 will be displayed in the terminal window	127), No auto answer May be changed by host computer from VT 100 to VT 52
Screen Color	When ANSI color is checked, screen color default to normal white text on black background and host computer will change terminal colors by sending special code	User defined May be changed by host computer Under VT-100 mode, the host computer may reverse the text and background color.

Otherwise, screen color is user defined.

To change line width, choose desired value from the **Columns** drop down list.

To change the terminal window line numbers, choose desired value from the **Rows** drop down list. Default setting is 80 columns, 24 rows.

SimpTerm supports 72 to 132 character per line and 20 to 96 lines per screen.

Note:

You may need to resize the terminal window so that all text could be displayed in the terminal window.

You also need to tell your host computer that you have a bigger screen.

On UNIX, the command to do so is usually

stty rows 32 cols 80

for a 80 character, 32 line screen.

Screen color of the terminal window can be set by click the **Set Color** button in the **Terminal** dialog. The Screen Color dialog will appear. From there, you choose **Text Color** and **Screen Color** from 16 color boxes and a small window will show you the effect.

If you check the **Reverse** button above the **Set Color** button, the actual color for text and background will be exchanged.

Screen color can also be controlled by the remote computer if the **ANSI Color** option is selected. Many BBS systems can send control code to display fancy color text.

The **8 Bit Char**. option determines whether **SimpTerm** will display ASCII characters in the range 128 to 256 decimal. This option must be checked to view **GB** or **BIG5** encoded Chinese characters as well as special IBM graphic characters used on many BBS systems.

In some cases, you need to left this setting unchecked. For example, the remote host computer requires a 8, n, 1 port setting, but the computer's tty driver can't handle 8 bit character correctly, and there is a lot of garbage character on the terminal window.

In VT - 100 mode, a remote host computer may send a command to ask for an answer back string. The **Auto Answer** option determines whether **SimpTerm** should honor this command. This command is rarely used. You can edit this string in the **Answer String** edit window. Even if the Auto Answer is not turned on, you can still send this string to remote host by type CTRL + PAUSE.

Function Keys

SimpTerm uses F1 to F12 as function keys. Along with Normal, Shift, Control and Control + Shift combination, there are total of 48 function keys available for programming.

Function keys can be programmed from **View** menu, choose **Function Keys** dialog.

In this dialog, there are 12 edit entries for F1 to F12. By choosing one of the Normal, Shift, Control or Control Shift at the upper right corner of the dialog, the 48 function keys can be programmed individually.

After you edit any entry, you should click the **Save** button to save new changes.

For each entry, up to 80 characters can be stored. For long strings, you can use arrow keys to move back and forth so the edit point is coming into view in the edit window.

Control characters are prefixed with a $^{.}$ So carriage return CR is m , line feed is j , and CTRL-F is f .

On a real VT - 100 or VT - 52 terminal, there are four function keys - PF1 to PF4. For most users, these keys are rarely used. If you do need to use them, you have to clear F1 to F4 and left them empty. **SimpTerm** will then using F1 to F4 to send control code for VT - 100/52's PF1 to PF4 key codes.

File Transfer

To transfer files between your PC and remote host, you start the remote computer's file transfer program first. Then from the **SimpTerm**'s **Transfer** Menu, choose **Send File** or **Receive File**.

If you choose **Send File**, the **Send File** dialog appears. You choose files to be sent and protocol to be used. For XMODEM protocol, only one file can be transferred each time. For others, you can select a group of files by holding down the Control key or Shift key while highlighting files.

If you choose **Receive File**, the **Receive File** dialog appears. You select the protocol to be used and the directory you want the incoming files to be stored. If you choose **Kermit Get** or **XMODEM** as transfer protocol, you also need to provide remote file name in the **Remote File Name** window. If you don't, another dialog will prompt you to enter remote file name.

In either case, you can click the **Transfer Setup** button to change <u>File</u> <u>Transfer Settings</u>.

Examples:

1 Receive files using Kermit.

kermit// Type this to start remote Kermit.send *.txt// Ask Kermit send all files with .txt extensionKermit ready to send file ... // remote Kermit is saying it's readyAt this point, you can do one of the followings

From **Transfer** menu, choose **Receive File...**, or type ALT+R. The **Receive File** dialog will appear. In the **Receive File** dialog, choose **Kermit Receive** from the **Protocol** list box, then choose **OK**.

Type ALT+K

Kermit receive will start.

2 Send a file using Kermit.

kermit	// Type this to start remote Kermit
receive	// Tell Kermit enter receive mode

Kermit ready to receive ... // remote Kermit is ready

From **Transfer** menu, choose **Send File...**, or type ALT+S. The **Send File** dialog will appear. In the **Send File** dialog, choose **Kermit Send** from the **Protocol** list box, then select a file from the file list box at the left hand side. When everything is ready, click **OK**.

Kermit send will start.

Cancel File Transfer

While a file transfer is undergoing, you can cancel the transaction from the <u>**File Transfer Dialog</u>** by clicking **Abort**. A dialog will pop up so you can choose how to cancel the transfer.</u>

For Kermit transfer, choose

Cancel File	Cancel the file being transferred and skip to next file, if any.
Cancel Batch	Cancel the entire file transfer session.

If the above two commands don't work, choose

Cancel Nicely Send an error signal to the remote computer.

Cancel Abruptly. This will shut down local transfer function.

For **X/YMODEM** transfer, only **Cancel Nicely** and **Cancel Abruptly** two options are available.

Note:

When receive file using **YMODEM-G** protocol, it may be very difficult to cancel the transfer session. Some programs on the remote host computer simply ignore a user's cancel request in **YMODEM-G** transfer mode.

Kermit Prefix Table

During a Kermit file transfer session, the Kermit protocol will add special characters to distinguish binary data and control characters. This is known as control prefixing. By default, binary data in the range 0 to 31, 127, 128 to 159 and 255 decimal will be prefixed. While this is needed for some network connection, it also adds significant overhead, resulting a slow transfer rate.

In **SimpTerm**, the control character prefixing can be controlled through a prefix table. By prefixing only those control characters that must be prefixed, the through put of Kermit transfer can be increased ranging from 10 % to 30 %.

The control prefixing table can be edited by click the **Kermit Prefix Table** button in the **File Transfer Setup** dialog. This will bring up the **Control Prefix Table** dialog. In this dialog, each control character is represented by a check box, in one of two groups - those in the range of 0 to 127 and those in the range of 128 to 255. Clearing a check box will disable the control prefixing for the corresponding control character. The **Clear All** and **Set All** button will clear or check all check box respectively. The **Sync** button will make the check boxes in two different groups have same state.

Note:

The remote Kermit program must be able to handle selective control prefixing.

The control prefix table in **SimpTerm** only controls outgoing data.

SimpTerm can honor selective control prefixing in Kermit receive mode. In fact if the connection is 8 bit clean, there is no need to prefix any control character. But for reliable transfer, prefixing for 0 and 1 is recommended. If you use Xon/Xoff flow control, prefixing of 17 and 19 is required.

For best result, you must try different combination depend on the remote host computer, the remote Kermit program, and the connection type (telnet, rlogin, *etc*.)

In general, check these control characters to start your test: 0, 1, 3, 10, 13, 17, 19, 127 and their counterpart in the range 128 to 255 decimal.

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File Transfer Settings

File transfer parameters can be changed in the **File Transfer Setup** dialog. Most of the parameters are for Kermit protocol.

You can choose different error checking method, packet size and compression option for a Kermit file transfer session. You can also edit the Kermit <u>Control Prefix</u> table by clicking the **Kermit Prefix Table** button.

The Kermit protocol in **SimpTerm** is a partial implementation of the Columbia University's Kermit file transfer protocol. The packet size is limited to 2048 byte maximum. The transfer is done only in binary mode. Sliding window as well as locking shift is not implemented.

The following two options are shared by all file transfer protocols.

Rename Duplicate File option will determine how to handle an incoming file with a name that is the same as a local file's name. If checked, **SimpTerm** will give a new name to incoming file.

Discard Partial File option will determine how to handle an incomplete file during file transfer. If checked, **SimpTerm** will delete the incomplete file when a receiving transaction is failed.

Bugs and Limitations

This version of **SimpTerm** has following bugs and limitations:

VT-100 emulation

Double width and double height character not supported.

DEC graphics character not fully supported. If the screen font is OEM character set (for example Terminal), **SimpTerm** will do some translation.

Blink and Dim character attribute are not supported.

Bold character attribute is only supported when a TrueType regular style font is chosen as ASCII screen font.

Printer control command not supported.

ANSI emulation

Host controlled keyboard remapping not supported.

Copy and Paste

Only usable for current screen. You must scroll desired text into view before choose copy, paste, or send. Paste doesn't work in HZ mode as desired.

Terminal Window

Doesn't resize automatically when font, viewing mode is changed.

HZ Decoder/Encoder

Not as stringent as that specified in HZ 2.0 standard.

The $\sim \sim$ escape sequence is not honored, string will be displayed as is, so that the in HZ mode the terminal is still compatible with a regular ASCII terminal.

The \sim character will not be added before a new line character. A \sim character before a new line character will be displayed. This is also for the compatibility with a regular terminal.

As a result, you can use UNIX VI editor to view HZ file.

The decoder will tolerate many illegal HZ encoding formats so that it will display as much useful information as possible. This does not mean to encourage these formats.

Chinese Font Engine

Only recognizes a limit number of bitmap fonts. Won't use fonts in more than one file. The RAM requirement is relatively high. **SimpTerm** currently stores all Chinese font in RAM. The priority is given to fast display speed. For a computer with 4MB of RAM, this isn't a big trouble. If you do have limit resource, say less than 2MB of RAM, try to <u>use a Chinese system</u> <u>or program to display Chinese text</u>.

Modem Dialer

Only Hayes compatible modems are supported. Hopefully they count for more than 90 % of modems. If you have a modem that is not in this category, you must dial it manually or store some commands in function keys.

Internal Modem Handling

A small percentage of internal modems using VLSI chip to simulate a PC UART will hang the computer if not configured properly. This is a compatibility problem between the modem and the Windows communication driver.

When a terminal program exits, or closes a communication port, the Windows communication driver checks the modem for certain response. If in data connection mode, some modems will ignore this request, resulting the communication driver locks up the computer.

If your modem has this behavior, remember to use **SimpTerm**'s dialer to place a call and use the **Hang--up** command to disconnect before quit **SimpTerm**.

Communication Port Handling

Still using pooling instead of Windows notification function. This will avoid a bug in the Windows communication driver, but may consume more power on a notebook computer.

File Transfer Dialog

This dialog shows information during a file transfer session. These include remote file name, local file name, local directory, current protocol, packet numbers transferred, bytes transferred for the current file, approximate throughput, retry and/or error number for the transfer session. The total file size, and percentage transferred will also be shown if the information is available.

You can click the **Hide** button to hide this dialog and minimize the **SimpTerm** window.

You can click the **Abort** button to <u>Cancel File Transfer</u>.

You can also move this dialog to other location and review the terminal window during a transfer session.

Trouble Shooting

This section lists some problems you may encounter while using **SimpTerm**. Possible solutions are given.

Terminal

1 Terminal won't echo characters typed to the keyboard

Make sure **SimpTerm** is connected to a communication port (the window caption is SimpTerm on COMX, where X is 1 to 4).

Make sure you have a modem on that communication port.

Make sure the Scroll Lock on the keyboard is not pressed, toggle it if needed.

Check the communication settings for proper speed, parity, data bit size.

If all these are OK,

Send a long break signal by type Shift + Break, or choose <u>Utilities</u> menu, **Send Long Break**.

Change the port from the <u>Port</u> dialog to Comm. Port None, Speed 2400, 8 Bit, Parity None, 1 Stop Bit, Flow Control None. Select OK. After **SimpTerm** changes its Title to SimpTerm - No Connection, change the Port setting to the port that your modem is connected. This will reset the communication port.

2 Text can only be displayed in some portion of the terminal screen.

Make a **Soft Reset** from <u>Utilities</u> menu.

3 Some text lines always scroll out of terminal window.

The terminal window's size is not properly set. Using the mouse to resize your terminal window until it can't go any larger. If this doesn't work, change the screen font with a smaller one.

From the <u>Terminal Setup</u> dialog, choose 80 columns, 24 rows if you are using a different setting.

Modem

1 Computer locks up when SimpTerm starts, or exits

Your internal modem is not fully compatible with Windows communication driver and the modem is connected to a remote host.

Turn of the computer's power, start everything again. Use SimpTerm's dialer to place a call. If you have to dial manually, send AT&D2 command to your modem before dial a number. See also <u>Bugs and Limitations</u>.

2 Modem Hang up problems

When using the **<u>Phone</u>** menu **Hang Up** command, the connection is closed, but any further command sent to modem resulting an ERROR until the modem or computer is turned off and turned on again.

Your modem has a slow response time, so the modem is not actually hang up. Type an ATH command to the modem. This will usually get the modem out of trouble.

After the modem is back to normal, type ATS7=20<return> to your modem.

3 When quitting SimpTerm or changing Communication Port to another one, the modem connection is lost.

This is the default behavior. To overcome this, you must provide a command line switch -d to **SimpTerm**. From Program Manager's window, high light the **SimpTerm** Icon (Click it ONCE). Choose **File** menu, **Properties**. In the **Program Item Properties** dialog, add -d to the end of command line. Be sure to leave a space between -d and spterm.exe.

File Transfer

1 Low throughput during file transfer

The host computer is very busy; The phone line is noisy while using an error correction modem; You are using Kermit with short packet size, try to set the packet size to 1000 or more.

2 Transfer always fails at certain point.

You are using X/YMODEM protocol, but you are using Xon/Xoff flow control for the communication port. Disable the Xon/Xoff flow control.

3 Transfer never starts

X/YMODEM protocol needs an 8 bit connection. Make sure you set the communication port parameters to 8, n, 1.

The remote Kermit doesn't recognize selective control prefixing, or the

network you connect to need certain control prefixing. From the Transfer menu, choose Transfer Setup. In the up coming File Transfer Setup dialog, click Kermit Prefix Table button. The Control Prefix Table dialog will appear. Check all the check box by clicking the Set All button. This will disable the selective control prefixing.

The remote Kermit is using another communication setting than yours. Make sure the two computers have same communication settings - data bits, parity, stop bits.

4 Transfer fails frequently

The remote computer can't handle long packet size. Using short packet size. For Kermit, try to set packet size to a smaller value. For XMODEM/YMODEM, using the short packet protocol for sending.

The remote Kermit program or the network you connect to can't handle selective control prefixing. Disable the selective control prefixing. See last question.

You are using a high speed modem but your computer doesn't have a 16550 UART, or the 16550 UART is not used correctly by the Windows communication driver.

A 16550 UART can provide much better transfer performance under MS-Windows than a regular 8250 or 16450 UART. Use the program MSD.EXE comes with Windows to check if your computer has such a device. Exit Windows and from the Windows directory type MSD. Type C to see the COM Ports information and look for UART Chip Used. You may want to read the **sysini.wri** file in the Windows directory for related settings for communication port under [386Enh] Section Settings(Using Windows Write, Page 7).

Program Speed Buttons

The dialer comes with **SimpTerm** has ten **speed dial buttons**, into which you can store frequently used phone numbers.

To program speed dial buttons, from <u>Phone</u> menu choose **Dial** to bring up the <u>SimpDial</u> dialog.

Click the **Program** button at the upper right corner of the **<u>SimpDial</u>** dialog.

The Program Speed Buttons dialog appears. You can enter a phone number and optionally a name for each of the ten speed button entries. The first 9 to 10 characters of a name will be displayed on the corresponding speed button's face in the **SimpDial** dialog.

After a speed button is programmed, you can click it in the **SimpDial** dialog to dial the number it stores.

If you click a speed button that is empty, a small dialog will prompt you to enter a number and a name.

Dial to a Remote Computer

SimpTerm has a modem dialer - **SimpDial**. From the **Phone** menu, choose **Dial...** to bring up this dialer, or simply type ALT + D (in lower case will do).

This dialer will remember 10 of your most frequently used phone numbers, 10 of your most frequently used modem initialization strings and has 10 Speed Buttons to store your favorite numbers.

The number you want to dial may be entered using keyboard, using mouse to click the numerical key pad in the **SimpDial** dialog, or choose a number from the pull down list of the **phone number** window if it is in the last 10 mostly used number's list.

For frequently used numbers, you may <u>store them into Speed Buttons</u>, then click the speed button to dial the number.

If you want to dial some special code to disable features such as call waiting, enter those special codes to the **Dialing Prefix** window and check **Use Prefix** option.

The modem speed can be set from within the **SimpDial** dialog. If you need to set other communication port parameters, you should use the <u>Options</u> menu, <u>Port</u> dialog.

The dialer can also automatically adjust modem speed upon the connection, if the **AutoBaud** option is checked. This feature is only useful for modems with maximum speed of 2400 bps. or less. With newer high speed modems, there are simply too many parameters need to be exchanged upon a connection, the use of **AutoBaud** is not recommended.

Before dialing a number, the modem can be initialized use the initialization string you entered in the **Init. String** edit window, or chosen from the last 10 mostly used initialization string list. The **init. modem** check box should be checked to enable this feature.

Using the Mouse

SimpTerm has following special mouse operation features:

Double click Left Mouse Button

On a text string:	Send that string to remote host computer.
On empty screen space:	Send a space character to remote host
	computer.

Click Right Mouse Button

Send high lighted text to remote computer OR

a Carriage Return if there is no high lighted text.

Keyboard Short Cut Keys

SimpTerm has following keyboard short cut keys:

ALT + S	Brings up the Send File Dialog.
ALT + R	Brings up the Receive File Dialog.
ALT + D	Brings up the Dialer Dialog.
ALT + G	Starts YMODEM-G Receive.
ALT + K	Starts Kermit Receive.
ALT + X	Starts XMODEM CRC Receive.
ALT + Y	Starts YMODEM Receive.
ALT + / or .	During file transfer, toggle focus between terminal window and the file transfer dialog window.

Contact the Author

For suggestions, bug report or for registration information to use **SimpTerm** for commercial purpose, contact the author at

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Keyboard Index

See one of the following topics for more information.

<u>Short Cut Keys</u> <u>Special Keys</u> <u>Screen Movement Keys</u> <u>Using Function Keys</u>

Screen Movement Keys

SimpTerm has a quite large screen buffer to hold text scroll out of screen. In addition to use the Windows vertical scroll bar, you can scroll back or forward the screen buffer with these keyboard short cut keys:

Page Up	Scroll back one page
Page Down	Scroll forward one page
CTRL + Home	Scroll to the top of the buffer
CTRL + End	Scroll to the bottom of the buffer
CTRL + Up Arrow	Scroll up one line
CTRL + Down Arrow	Scroll down one line

Note:

If the remote computer erases the current screen, those texts won't be stored in the screen buffer.

When you move around in the screen buffer, new text sending from the remote computer will be written to the portion of screen buffer that is in the terminal window instead of the bottom of the screen buffer

Special Keys

Scroll Lock	Start or Stop receiving text from the remote computer.	
Break	Send a break to remote computer.	
Shift + Break	Send a long break signal to remote computer	
CTRL + Break	Send VT - 100 Answer Back string to remote computer	
CTRL + Enter	Send a Line Feed character to remote computer.	

The SimpWatch Watch Dog

This dialog will keep the modem connection for you. It sends a CR every 1 min. So the remote host won't disconnect the line.

To start it, type ALT + W.

Setup SimpTerm

Put all files listed in the <u>Packing List</u> into one directory, say C:\SPTERM.

Add an icon for **SimpTerm** in your Windows Program Manager. After that, you can double click the icon to start **SimpTerm**. It will run as a regular terminal program.

In order to view Chinese text, you should install Chinese font files for **SimpTerm** or run a Chinese Windows system.

To use different dialog styles, you may need two files, CTL3D.DLL and BWCC.DLL.

See the following topics for more information.

Installing Chinese font files for **SimpTerm** Displaying Chinese characters Using different dialog styles

Command Line Switches

SimpTerm has following command line switches:

- -d Dialer won't enforce the &D2 command string.
- -f Port can be closed faster.
- -w The **SimpWatch** will work forever without the 4 min. limit.

See **Program Manager**'s help for how to add command line switches.

Terminal Emulation

SimpTerm has 3 terminal emulation modes.

VT - 100 mode emulates a DEC VT - 100 terminal with some VT - 102's features, including inserting characters and deleting characters. The PF1 to PF4 keys are emulated with F1 to F4. But to use them, you should not program them as function keys. See <u>Program Function Keys</u> section for more details.

VT - 52 is provided mainly for the completeness of VT - 100 emulation, which requires the ability to enter VT - 52 mode.

ANSI Color BBS emulation mode can be used to communicate with a BBS system capable of sending commands to change terminal screen color. To enable ANSI color, from **Options** menu choose <u>Terminal</u> setup and in the **Terminal Setup** dialog, check **ANSI color**, **8 bit character** and **ANSI emulation**.

Not a Topic

<u>Watch Dog</u> <u>Cool Switches</u>

Choose and Run an Editor

From **SimpTerm**'s **File** Menu, you can choose **Run Editor** to start an editor program.

The editor will be the Windows Notepad if you haven't selected another editor.

To select an editor other than Notepad, from the <u>Options</u> menu, choose **Program Settings**. The Program Setup dialog will appear.

In the **Program Setup** dialog, type in an editor program's name in the **Editor** window.

If the program is not in a directory that is listed in the DOS' PATH, you must provide full path name.

For example, you have an editor named myedit.exe in C:\MYTOOLS, then you will type

c:\mytools\myedit.exe

to the **Program Setup** dialog's **Editor** window.

You can choose whatever program you like, even if that is not an editor. **SimpTerm** will simply run that program if possible.

SimpTerm Menu Index

Choose one of topics list below for detailed information:

File Menu CommandsEdit Menu CommandsOptions Menu CommandsView Menu CommandsPhone Menu CommandsUtilities Menu CommandsTransfer Menu CommandsHelp Menu Commands

Program Setup Dialog

You can use this dialog to

<u>Change Dialog Styles</u> used by **SimpTerm** or <u>Select an Editor</u> for the <u>**File**</u> menu **Run Editor** command.

SimpTerm Author

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CTL3D Dialog Style



BWCC 3 Dialog Style



BWCC 4 Dialog Style



Screen Font Demo

The image only represents spacing for different font size.

640 X 480 / 800 X 600 mode

ASCII Screen Font Height 16, Width 9 Line Height 18 字体演示AaBbCcYyZz 效果良好 效果良好!

ASCII Screen Font Height 16, Width 8 Line Height 18 字体演示AaBbCoYyZz 这就太挤了!

ASCII Screen Font Height 16, Width 7 Line Height 18 字体演示WaBbCcYyZz 简直不可容忍的挤! ASCII Screen Font Height 16, Nidth 9 Line Height 18 字体演示AaBbCcYyZz 效果良好 效果良好!

1024 X 768 mode

ASCII Screen Font Height 16, Width 8 Line Height 18 字体演示AaBhCeïyZz 这就太挤了!

ASCII Screen Pont Reight 16, Midth 7 Line Reight 18 字体演示NaMbCcYyZz 简直不可容忍的拐!

SimpTerm Quick Reference

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Keyboard Shortcuts:

Alt + D	Dial a number.	Alt + X	XMODEM CRC receive.
Alt + G	YMODEM-G receive.	Alt + Y	YMODEM receive.
Alt + K	Kermit receive.	Alt + / or.	Toggle input focus between
Alt + R	Receive file.		terminal window and transfer
Alt + S	Send file.		window during file transfer.

Screen Buffer Movement:

Page Up/Down Ctrl + Up/Down Ctrl + Home/End	Scroll back/forward one scr Scroll up/down one line. Scroll to the top/bottom of	een. screen buffer.	
Special Keys:			
Break Shift + Break Ctrl + Break	Send a break signal. Send a long break signal. VT - 100 Answer Back.	Scroll Lock Ctrl + Enter	Start or Stop receiving text. Send a Line Feed.
Special Mouse fea	tures:		

ł

Double click left Send the string under the cursor or a space if there is nothing under the cursor. Click right button Send high lighted text or a carriage return if nothing is high lighted

Sample Chinese Font Configuration file - kfmgr.ini

[fonts] gbfont=c:\fonts\kanji\gbfont.fon big5font=c:\fonts\kanji\big5font.fon

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