

WinTel32

Version 1.0

User's Guide

Copyright 1994 by Satyavrat Mehrotra, SMSOFT. All rights reserved. Microsoft Windows is a trademark of Microsoft Corporation. Graphic Interchange Format(c) is the Copyright property of CompuServe Inc. GIF(sm) is a service mark of CompuServe Inc.

GIF-LZW is licensed under U.S. Patent No. 4,558,302 and foreign counterparts.

GIF/JPEG viewer included with WinTel32 is based in part on the work of the Independent JPEG Group.

All other brand and product names are trademarks or registered trademarks of their respective companies.

I am required to state that the price of WinTel32 is not raised significantly because KERMIT is included.

DISCLAIMER - AGREEMENT

Users of WinTel32 must accept this disclaimer of warranty:

WinTel32 is supplied "AS IS". The author disclaims all warranties, expressed or implied, including, without limitation the warranties of merchantability and of fitness for any particular purpose. The author assumes no liability for damages, direct or consequential, which may result from the use of WinTel32.

WinTel32 is a "shareware program" and is provided at no charge to the user for evaluation. Feel free to share it with your friends, but please do not give it away altered or as part of another system. If you find this program useful then you must register. The registered users would be provided with a disk and a printed manual. The disk also contains an installation program. Please read wintelrg.wri for more info on registration. The registration will license one copy for use on any one computer at any one time. You must treat this software just like a book. An example is that this software may be used by any number of people and may be freely moved from one computer location to another, so long as there is no possibility of it being used at one location while it's being used at another. Just as a book cannot be read by two different persons at the same time.

If you have any suggestion or have any bug to report, please send me an email to:

If you have any suggestion or have any bug to report, please send me an email at:

internet:

74243.3047@compuserve.com

CompuServe ID : 74243,3047

System Requirements

* You must have Microsoft Windows 95, NT or higher. A 386 or 486 based PC with a mouse and a hard drive.

* Your computer must have at least 4MB of memory.

* A modem is required to dialin to a remote system. If you need to connect to computer in the same room then a null modem cable is required.

This user's guide is organized as follows:

Section 1 outlines WinTel's features.

Section 2 explains you how to install this program.

Section 3 explains you how to connect and disconnect to a remote system.

Section 4 deals with modifying keyboard, color, modem, communication, terminal and font settings.

Section 5 explains you how to send and receive file from a remote system.

Section 6 explains you how to view a GIF/JPEG file in realtime and offline mode. Also how you can uuencode and uuencode an internet file is explained.

Section 7 explains you how to write a script language to automate your logins.

Section 8 deals with copying and transmitting text from the clipboard. Printing and session capturing is also explained.

Introduction

WinTel is a full featured communication software that connects you to other computers. Following features are included:

- * Phonebook which stores your remote service names, phone numbers and communication settings.
- * Telnet client to remote host using TCP/IP (SLIP/PPP) connection.
- * File transfer using ASCII, xmodem, xmodem 1k, ymodem batch, zmodem and kermit protocols.
- * A realtime and an offline GIF/JPEG viewer.
- * DEC VT100, VT52, VT100 (ANSI Color), TTY and a raw mode terminal emulation.
- * Redialing and batch dialing capability.
- * Programmable script language which automates your logins to remote system.
- * Chat mode, which lets you talk to the user at the remote end.
- * Resizeable fonts, scroll back buffer, printing and session capture.
- * uuencode and uudecode internet files.
- * Run multiple instances of this application.

Section Two

Installation

To install WinTel, select the Run command from the File menu of the program manager. In the command line box, type in A:\install.exe or B:\install.exe as the case may be. Press Enter key. An installation dialog box would appear. You would be asked for the directory name where you want WinTel files to be copied or just select the default directory. Click on OK. The installation program would inform you once it is complete.

Section Three

Connecting

You can start WinTel in one of the following ways:

- a) Double clicking on its icon .
- b) Selecting Run command from the File menu of program manager.
- c) Selecting Run command from the File menu of the file manager.

Open phonebook by selecting phonebook command from either the File menu or toolbar. Your login session is started by either double clicking an existing entry or by selecting an existing entry in the name listbox and then clicking on the dial button. A dial window would open up showing you the phone number dialed. You can cancel the dial operation by clicking on the Cancel button. The system will inform you once the connection has been established. If you want to dial in batch mode then enable the dial batch check box in the phonebook dialog box. Double click on entries which you wish to be added to the batchlist. Once you have added all your desired entries to the batchlist, click on the dial button. The system will batch dial until a connection is established.

In order to add a new entry to the phonebook, click on the New button in the phonebook. A Communication setting window would open up. You must already know your required settings for the remote computer with which you want to communicate. Most services publish their communication settings as: 2400,8,N,1. This indicates a 2400 baud modem speed, 8 data bits, no parity and 1 stop bit. If you do not know the port where modem is connected then click on the default setting button. This program will figure out the port and make following settings for you:

Baudrate

2400

Databits

8

Parity

None

Stopbit

1

Flow Control

Both hardware (RTS/CTS) and XON/XOFF

Phonetype

Tone

Port

Port where your modem is connected.

Terminal

VT100 (Ansi Color) with auto wrap

File transfer Protocol

ZMODEM

Modem

Hayes compatible

Retry dial count

5

Connect timeout

60

You make entries to the online service name and its phone number. You may however change the default baud rate of 2400 to whatever connect speed you desire.

Phonebook button description

Here is a brief description of all the buttons in the phonebook:

Cancel

Removes the phonebook from the display.

Dial

Dials a selected entry or batch dials.

New

Adds a new entry to the phonebook.

Delete

Deletes a selected entry from the phonebook.

Copy

By clicking on this button you would invoke copy service dialog box. you can copy all the settings of an existing entry to a new entry. Following controls are provided:

Service name

Here you type in your new service name.

Phone number

Here you type the phone number of new service.

Phone prefix

Phone prefix is a number which modem must dial before it dials the actual number. For example many PBX systems require you to dial "9" to obtain a outside line. In this case you would be entering "9," in the phone prefix field.

Autologin

Executes the Script for the selected entry.

Options

This would open up dial options dialog box. Here you can specify following fields:

Retry dial count

If you attempt to connect and connection fails (busy line or no reply etc.) then the program would retry to connect. The default number of retries is set to 5 but you can change this field by typing in new number in retry dial count edit box.

Timeout

9

This field tells the system how much time the program should wait for the connection before it times out. The default is set to 60 seconds. But you may modify this field by typing in the new value in the timeout edit box.

Batch Dial

By enabling this option, you can dial numbers stored in the batch list. You make entries to batch dial list by first enabling the batch dial. A check mark would appear when enabled. You double click on service name listbox entries. The double clicked entry would be added to the batch list.

Remove

You can delete a batch dial entry by first selecting it and then clicking on the remove button.

Hardwire/Answerback mode

If you want to connect your computer to another computer in the same room or you want the other computer to dial in to your computer, then you must first establish a communication channel. You do this by making an entry in the phonebook. Follow same steps as you do when you add a new entry to the phonebook but leave the phone number field in the communication settings dialog box as empty and set the phone type field in the communication setting dialog box as none. Click on the dial button. Your communication channel would open up.

Chat Mode

With this option you can chat with the user logged onto a remote computer. When you make this selection, your window will split into two halves. The upper window will display the text you type in and the bottom window would show you the response from the remote user. Before you can commence chatting, you must first establish a connection. This can be done either your dialing in to his/her system or wait for a call from the other end. If the other end wants to dial in to your system, you must first open your communication port. Use the phonebook, make an entry in the communication setting dialog box with no phone number and phone type field set to none, then click on the dial button. This would open up the communication channel. From the option menu enable the "Answer " command and then wait for the call. However, If this option is disabled, then any incoming call would result in a "RING" text on your screen. You type in "ATA" and the connection would be established. Enable the chat mode if you have not already done so. Now you are ready to chat. Disconnect the connection by choosing "Hangup" command from the session menu or from the hangup button in the toolbar.

Disconnecting

If you want to disconnect from a session, you must first hangup. This is done by selecting "Hangup" command from the session menu or clicking on the hangup button in the toolbar. You may then either exit from the program or dialin to another service. You exit the program by selecting Exit command from the File menu or clicking on the exit button in the toolbar.

Telnet Client

You can connect to internet using Telnet. This allows your computer to talk to the remote host using TCP/IP protocol. Before you can telnet to your host computer, you would require a TCP/IP stack and if you are using your modem to dialin to your remote computer, you would need a internet dialer talking SLIP/PPP protocol. Windows 95 already has a built in TCP/IP stack and an internet dialer. Once you have established a connection to internet using Windows 95 dialup networking, you are ready to telnet to the remote host.

Double click on the Telnet icon in WinTel program group. A Telnet phonebook would open up. You can create entries to the phonebook by clicking on the new button. A communication dialog box would appear. You type in the phonebook entry name in the name field and in the address field you type in the internet address of the remote host.

If for example, you wish to telnet to CompuServe, then the name field, you would enter Compuserve and in the address field, compuserve.com. The terminal setting and the the protocol buttons work exactly the same way as in the modem connection described earlier.

Once an entry has been made, you can click on the connect button in the phonebook dialog box. This program would then attempt to connect.

When you have established your connection, you can do file transfer using xmodem, ymodem, zmodem and kermit. If you are transferring files, make sure you check the binary checkbox in the communication setting dialog box.

The advantages of using telnet over serial line connection is that you can have several sessions open at the same time. That is different windows can communicate with different hosts at the same time.

Section Four

Settings

Note: All settings excepting that of scroll buffer length and batch dial flag apply locally to a given online service.

Communication Setting

Communication settings dialog box can be invoked from the phonebook's edit button. This command allows you to define your communication parameters. Here is a list of options available to you:

Cancel

Removes the box from display

Name

Enter your service name. Any text following space or first eight characters is treated as a comment to the name.

Phone number

The phone number of remote computer.

Phone prefix

This field is required for an internal phone system to connect to an outside line or to wait for a dialtone. This usually is 9.

Baud Rate

Select the speed of your modem. The most common setting is 2400 baud. You must set it to your modem's baud rate. NOTE: If you have a modem with baud rate 14.4K and you experience problem connecting at 14.4K, then you may select the baud rate of 19200.

Data Bits

Specify the number of data bits in each data packet exchanged between yours and the remote computer. This field usually is either 8 or 7.

Parity

Select the type of parity. Select no parity for 8 data bits and an even/odd parity for 7 data bits.

Port

Here you specify your communication port where you have your modem connected. This usually is either 1 or 2.

Flow Control

This selection specifies which action is to be taken when the incoming data buffer gets full. The default is set for both hardware (RTS/CTS) and XON/XOFF flow control.

Phone type

For touch tone phone select phone type as tone. For pulse dialing select pulse and for direct connection and manual dialing select none.

Modem Setting

This option can either be selected from communication settings dialog box or from the settings menu. You select your modem by clicking on your modem type in the list box and then selecting OK. If you do not find your modem in the listbox then select a custom modem option. If you wish to modify modem strings then click on the select button. This would open up modem string setting dialog box. These strings in the dialog box enable WinTel to initialize, reset, dial and hangup the modem. Following is the description of modem strings:

Dial

This command places the modem in originate mode and dials a number and attempt to make a connection. The dial string is built from the command in the prefix string, P(Pulse) or T(tone) and the phone number. The default prefix string is ATD and the suffix string is a carriage return (^M). You may never have to modify this.

Hangup

The command in here forces the modem to hangup. The default string is ATH.

InitString

This is an initialization string which is sent to the modem. The default Hayes compatible string is ATSO=0Q0V1E1. Different modem vendors may specify their own initialization string. Consult your modem's user guide. You may change it only in case you are experiencing problem with the initialization.

Reset

The string in here soft resets the modem. Reset restores the default factory setting or a stored profile setting. The default is ATZ

Escape

This is a sequence to switch modem from data mode to command mode. The default is <guard time>+++<guard time>. When you are connected to remote, you can type in +++ in succession and the modem would switch from data mode to command mode. You can reestablish the connection by typing ATO.

Valid dial characters

The characters in here are the valid characters in a dial string. However, you may add any dial modifiers not found in here but listed in your modem's documentation.

Result code button

When you click on this button, a result code dialog box would be displayed. These result codes enable WinTel to redial in case of an error. Following result codes are available:

Busy

This string is sent by your modem to your computer when the number you dial is busy. The default is BUSY

Dialtone

This string is sent by your modem when there is no dialtone. The default is NO DIALTONE.

Carrier

This string is sent by modem to your computer when there is no carrier. The default is NO CARRIER.

Answer

This string is sent by modem to your computer when there is no answer. The default is NO ANSWER.

Error

This string is sent by your modem to your computer if the command sent to the modem is invalid. The default is ERROR.

OK

This string is sent by your modem to your computer when the modem acknowledges a command. The default is OK.

Timeout

This string is sent by your modem to your computer when modem timeouts while making an connection. The default is TIMEOUT.

Connect

This string is sent by modem to your computer when connection has been established. The default is CONNECT.

Terminal Emulation

WinTel can emulate most of the popular terminal types. Perhaps the most popular terminal emulation used in the industry is VT100(ANSI). You select terminal preference either from the communication settings dialog box or from the settings menu. In VT100 and VT52 mode, your function keys F1 to F4 behave like those of DEC's PF1 to PF4. Keep the Num Lock key down to emulate the DEC VT100 keypad. Codes sent by numeric keypad 9 to . are same as those sent by DEC's VT100 terminal. Your PC's insert key sends the same code as sent by keypad's enter key on a VT100 terminal. To emulate BBSs graphic characters, choose the terminal fonts from the fonts menu option.

WinTel also has a raw terminal emulation mode. This allows you to view all the characters sent by the remote computer. These include control keys. This feature is extremely useful in examining the raw codes sent by the remote computer.

Following options in the terminal preferences may also be selected:

Local Echo

This option is useful when the remote computer does not echo your typed in characters. This is the case when the remote computer operates in an half duplex mode. Do not make this selection as most computers operate in full duplex mode.

CR->CR/LF

Specifying this option enables carriage return and a line feed to be sent to the remote computer when you press an enter key . As most computers send you a linefeed, do not select this option.

Buffer Lines

Here you specify the number of lines this program should save. The default is 200 lines. You may save upto 400 lines in the buffer for later viewing.

Terminal Width

Here you specify width of the terminal. The default is 80 columns.

Auto Wrap

Here you specify whether or not text wraps to next line when it reaches right margin. The default setting is auto wrap as most of the BBSes assume.

Backspace -> Delete

Here you specify whether backspace character should be treated as a destructive delete character or simply a backspace character i.e. cursor moves to the left without deleting the character. For ANSI terminal, by default, the backspace key is treated as a destructive delete key.

OK

Clicking on OK will save your settings.

Cancel

Cancel will cancel all the changes you have made to the terminal prefs dialog box.

Keyboard

This command can be invoked either from Settings menu or from communication settings dialog box. You can examine keycode sent to the remote computer by clicking on the desired key. When you click on say an arrow key, a dialog box displays the arrow and keypad sequence in application mode (this mode is set by the host) sent to remote when you press any of these keys. The codes sent depend on the type of terminal emulation you have chosen. With the num lock key down, the codes sent by keys 9 thru “.” are same as those of DEC’s VT100 and VT 52 terminals. If you have chosen VT100 as your terminal emulation then page up/down key take you 1 page forward/backward while using DEC’s EDT and home/end key take you to the top/bottom of a file.

Here you can also define F5 to F12 for your purposes. Click on any function key F5 thru F12, a function key definition dialog box would be displayed. You make an assignment to the function key by typing in the string in the edit box. Remember to type “Enter” key as ^M. Similarly all control keys are prefixed by a caret ^. For example if you want to define key F5 as control-Z then you would enter ^Z in the edit box. If you want the definition to contain an escape character (ASCII 27) then you would enter ^[.

Colors

This command can be invoked either from the settings menu or from the communication settings dialog box.

You can select color settings for the text and the window background by selecting color command from the settings menu for terminals other than VT100 (ANSI Color) terminal. For ANSI Color terminal, by default, light gray text is shown on the black background. Select the element and then choose the desired color from 16 predefined VGA colors. If these colors do not suit your needs then create your own colors with the help of three RGB scroll bars. By changing the red, green and the blue component of a color, any desired color can be achieved. Once you have made your choice, save them by clicking the OK button. You may revert back to your original window colors by clicking on the default button.

Summary of Color controls:

Color Element Listbox

Here you specify the element whose color you want to modify.

Default

When you click on this button, the window text and the background color would revert back to default colors of the window.

Color Boxes

You click here to choose one of the 16 colors for your background and text.

Red, Green and Blue scrollbars

These three scrollbar controls would enable you to customize your color. You change the red, green and blue component of a color to obtain a desired color. The color thus obtained is displayed in a rectangle. The RGB values are shown to the left of the scrollbars.

Fonts

You can select font command from the settings menu or from communication settings dialog box. A list of all fixed size fonts are shown in the listbox. A font is selected by clicking on the desired entry in the listbox.

Font size is not shown as this program adjusts the size of the font based on your window size.

Default Directory

This command can be invoked either from the settings menu or from the communication settings dialog box. Here you specify the default directory for the file transfer and your session logs. If the session log option is enabled then the log file would be stored in the directory you specify in the session log edit box. Your downloaded files from the remote system will go to the directory specified in the default download directory edit box.

Protocol

You select the file transfer protocol by first invoking the protocol dialog box from the settings menu or from the communication setting dialog box. Select the desired protocol from the listbox. The default and the recommended protocol for file transfer is ZMODEM. You may specify maximum number of errors allowed before the transfer aborts. The default value is 5. You can also specify if the system should make a backup file in case the file you are receiving has same name as the existing file. This however does not apply if in the ZMODEM protocol, you have selected crash recovery option.

ZMODEM Options

If you have chosen ZMODEM protocol, you may like to edit options available to it. Click on the options button. A zmodem options dialog box would be displayed. There are three check buttons in this dialog box. They are:

Send skip if file exists

If you are downloading a file and this file already exists in your directory and it is of the same size then the system would inform the remote to skip sending this file if this option is enabled. A check mark would appear when this option is enabled.

Crash recover

If you are downloading a file and this file already exists in your directory and the size of the file is smaller, then the system would inform the remote of sending the file starting from the current size of the file.

Segmented streaming

This option enables segmented streaming i.e. there are intermediate acknowledgments. This would slow down the file transfer. This option however is useful if you are storing your data say onto a floppy.

Escape control

This option enables all control characters to be escaped. This is useful if the network you are connected to does not pass control characters. For example, if you are telnetting to another unix machine and the mode of connection is ASCII, then by enabling this option, you would be able to do file transfer directly to your machine.

ASCII Options

If you opted for ASCII file transfer protocol. Click on the options button. An ASCII transfer options dialog box would be displayed. There are three items in this dialog box:

Strip linefeed when sending

In a MS-DOS text file, a line is terminated by a carriage return (ASCII 13) and a line feed (ASCII 10). You enable this option if the remote system requires you to strip away the line feed.

Character to initiate transfer

Remote system may require you to send a character to initiate ASCII file transfer. This usually is a carriage return. Enter that character in the edit box here.

Character to end file transfer

This is the character which remote computer sends to indicate the end of file transfer. You type in this character in the edit box.

Inter-line delay

Here you specify delay in milliseconds after each transfer of a line in text. The default is no delay.

Inter-character delay

Here you specify delay in milliseconds after each transfer of a character. The default is no delay.

KERMIT Options

This dialog box appears when you click on the options button in the protocol dialog box and you have selected KERMIT protocol in the listbox. For the block check option, WinTel supports block check type 1 and 2.

Following options are available:

Maximum buffer size

Here you specify maximum possible packet size for KERMIT. The maximum size allowed is 9024 bytes. However, your remote computer must be capable of sending and receiving packet of this size. The bigger the packet size, faster would be the file transfer. It is recommended that you use 1024 bytes as the packet size.

Eight bit prefixing

Enable this option if your communication channel is 7 bit wide.

Section Five

File Transfer and Protocols

Once you have established a connection to the remote system. You can exchange text and binary files. In order to transfer files, you must first select a protocol which both your system and the remote system recognize. A text file is a file created by a text editor known as an ASCII file. A binary file is a file of any kind. This could be a bitmap image or an executable file. It is recommended that you use binary file transfer protocol for all your file transfers. This is due to the fact that ASCII file transfer protocol does not do any error checking. For binary transfers, you may opt for one of the protocols described below:

XMODEM/Checksum

This protocol transfers data in 128 byte packets. It does error checking of the data with checksum. It is reliable but is slow because of the small packet size. Also it does not have a batch transfer capability.

XMODEM/CRC

This protocol transfers data in 128 byte packets. It does error checking of the data with 16 bit CRC. It is reliable but is slow because of the small packet size. Also it does not have a batch transfer capability.

XMODEM (1K)

This protocol transfers data in 128 and 1024 byte packets. It is an extension of XMODEM/CRC. This protocol is also known incorrectly as YMODEM. This is not a batch protocol therefore only one file can be transferred per transfer.

YMODEM(BATCH)

Like XMODEM(1K), this protocol transfers data in 128 and 1024 bytes data blocks but in its first block it sends the filename, filesize and the file creation date. This protocol is fast, reliable and has a batch transfer capability.

YMODEM(BATCH -g)

Like XMODEM(1K), this protocol transfers data in 128 and 1024 bytes data blocks but in its first block it sends the filename, filesize and the file creation date. This protocol does not have intermediate acks and naks. Therefore it is more suited for the hardwired connection. This protocol is extremely fast but not recommended because a single error would cause the retransmission of the entire file. This protocol has a batch transfer capability.

ZMODEM

This is perhaps the most popular protocol today. It is fast because it can do full streaming, very reliable and allows batch file transfers. Also it allows the transfer of partial files (known as crash recovery) in case transfer was aborted.

KERMIT

This protocol is available for almost any operating system. This protocol would work over any communication channel as long as it is capable of receiving and sending printable ASCII characters. The

maximum size of a packet in the original kermit is limited to 94 bytes. But with the extended packet option, the packet size has been extended to 9024 bytes. This speeds up the file transfer. WinTel supports extended packet size option.

Receiving Files

If you want to receive files using ASCII, XMODEM or YMODEM Batch protocol. You choose receive command from the File transfer menu. This must be done after the remote system has informed you that it is ready to send you files. Once you have selected the receive command, you will be asked for a filename of the downloaded file in case of ASCII and XMODEM (All flavors) protocol.

If you have opted for YMODEM batch protocol, no such dialog box appears as the filename is contained in first block of the data packet.

For ZMODEM, you do not choose receive file command from the menu. This program will automatically detect the transfer once the downloading starts.

Once the file transfer starts, you will see a window with the statistics such as file name, total number of bytes to receive, number of bytes received etc. You may abort the transfer anytime by clicking on the Cancel button.

Sending Files

First you inform the remote system that you wish to upload files. As for the receiving files, you select the protocol which matches with the remote system. If you need to send multiple files choose YMODEM Batch or ZMODEM protocol. If you have chosen any of these batch protocols a batchlist dialog box would be displayed with following controls:

Done

You click on this button when you are done with creating a batchlist and ready to execute previous command.

Delete

You click on this button to delete an entry from the batchlist.

Add

Add button is clicked when you want to add a file entry to the batchlist.

Once you have prepared a list of files to uploaded. Click on the DONE/OK button. Another window would appear which shows you the file transfer statistics. If you wish to abort the transfer then simply click on the Cancel button. Once your transfer is complete, you will see a message to this effect in the transfer window. Click on the OK button to remove the transfer window from the screen.

Section Six

Viewing GIF/JPEG File

If you want to view a GIF/JPEG file while downloading it, enable the view GIF/JPEG realtime option from the utilities menu. Any file of type GIF/JPEG would be displayed on a separate window while being downloaded.

You can also view stored GIF/JPEG files by selecting view GIF/JPEG offline command from the utilities menu or from the toolbar. This would activate GIF/JPEG viewer. By choosing "Open" from the file menu in GIF/JPEG viewer and selecting file of type GIF/JPG, the file can be viewed. You can resize the picture by selecting stretch/shrink command in the File menu. You exit the GIF/JPEG viewer by choosing "Exit" command from the file menu.

UUENCODE

uuencode utility allows you to encode a binary file to an ASCII file so that it can be transmitted on Usenet or send as an email on an internet. When you select this option either from the utilities menu or from the toolbar, You will be asked for the file name to encode. Select the file and your file be encoded with the extension "uue". If your input file is of large size then the output file is split over into multiple files with sequence numbers appended to the file name. The first line of encoded file contains "begin 600 filename" and the last line has an "end".

UUDECODE

uudecode utility allows you to decode uuencoded file. Generally on an internet, a uuencoded file is transmitted in a batch because of its large size i.e. file a.uue may be transmitted as a1.uue and a2.uue. You select this option either from the utilities menu or from the toolbar. You would then be asked for the file names which need to be uudecoded. Once you have selected your files, press on the done button and your file will be decoded. Make sure that each of the files contain a "begin" at the start of the decoded text and an "end" at the end of the decoded text.

Unix to DOS Text File Conversion

This command is executed when you select Unix-to-DOS convert command in the utilities menu. With this utility you can convert a text file downloaded from an Unix machine to the MS-DOS format. This utility essentially changes the Unix newline character NL (ASCII 10) to CR (ASCII 13) and LF (ASCII 10). The DOS file is created with a .DOS extension. This operation can be performed in batch mode.

DOS to Unix Text File Conversion

This command is executed when you select DOS-to-Unix convert command in the utilities menu. With this

utility you can convert a text file in the MS-DOS format to Unix format. This utility essentially changes the CR (ASCII 13) and LF (ASCII 10) characters to single Unix newline character i.e. NL (ASCII 10). The Unix file is created with an .UNIX extension. This operation can be performed in batch mode.

Section Seven

Scripts

Editing

Use Edit command in the script menu to call the notepad editor to edit a script file. Here is an example of a script file to connect to delphi service via a local sprintnet number:

All comments in the script file begin with !.

```
!
! connect to delphi
!
! define timeout for waitstring command. The default is 3 seconds. You may place this
! timeout anywhere before waitstring command.
timeout 5
! Transmit string in quotation to remote
send "@D"
! Wait for string "terminal" from the remote computer
waitstring "terminal:"
! once it finds string "terminal" it sends a carriage return
send "^M"
! transmit "c delphi"
send "c delphi"
! wait for string "username:" from remote"
waitstring "username:"
! Send the username "jjohn"
send "jjohn"
! waits for string "password:" from remote
waitstring "password:"
! sends password "abcdef"
send "abcdef"
! exit from script
exit
```

Executing Script

Once you have created a script file and you have made an entry of the service in the phonebook, you can execute it either from the command execute in the Script menu or by clicking on the Autolog button in the phonebook.

Section Eight

Edit Commands

Copy and Paste

If you want to send the text from the clipboard, first copy the text to the clipboard. This can be done either from some other application or from your own screen. You select the text to be copied to the clipboard by pressing on the left mouse button and dragging over the text you want copied. Once the text is selected, choose copy command from the edit menu. Your text will be copied to the clipboard. Next choose the transmit command from the edit menu. Your text will be transmitted.

Clearing Scroll Buffer

When you receive text from the remote computer, this text is placed in a buffer which can be viewed by using vertical scroll bar. If you want to clear this buffer, use the clear buffer command from the Edit menu.

Printing

You can print your session log file by selecting print logfile command from the Files menu. You will be asked for the file name to printed. Select the desired file and your file would be printed. You can also print the saved scroll back buffer by selecting print buffer command from the File menu.

Session Capture

By enabling this option from the session menu, You can redirect all your incoming data from the remote system onto to a file for later viewing and printing. Your session log file name would be the name of the online service you are connected to with log extension. You can stop capturing the session by reselecting the capture session command from the Options menu.

Miscellaneous Commands

Check Modem Port

This command checks for the port where your modem is connected.

Break

By selecting this command from the Misc. menu, you would suspend character transmission and place the communication device in the break state for 150 ms.

Communication Status

This dialog box is invoked by selecting comm status from the Misc. menu and it displays the communication status. It is an important diagnostic tool if your remote computer is not responding.

Following fields are provided:

Transmission is waiting as a result of clear to send signal

If you are using hardware flow control, then this condition indicates that the transmission of your data is waiting for clear to send signal.

Transmission is waiting as a result of xoff character being received

This condition would result if you are using xon/xoff flow control and the remote computer sends you a xoff character. It can also result if you abort your binary file transfer or as result of garbled character received. Clear this box and the transmission would resume.

Number of characters in receive queue

When remote sends you data, this data is placed in a receive queue before being processed by this program.

Number of characters in transmit queue

When you send data to the remote, this data is first placed in the transmit queue and then transmitted. If your modem or remote is not responding then you would see transmit queue number to increase.

Reset term

When you click on this button, the system will reset the terminal i.e. the scroll region is set to default and the xoff flag is cleared.

Switch to MS-DOS

When you select switch to MS-DOS command from the misc. menu, you would switch to MS-DOS. You switch back to this program by typing EXIT at the MS-DOS prompt

Section Nine

Troubleshooting

Here are some of the most frequently asked question:

Setting problems

Problem

When entering service name in the communication setting dialog box, the system gives an error message saying "no service name or invalid service name specified"

Solution

Following characters are not allowed in the name i.e. /, \, [,], , |, <, +, =, ., *, ?. These are the same characters not allowed in a DOS file naming convention.

Problem

When entering phone number and you want non-numeral characters and the system tells you that it is an invalid phone number.

Solution

Edit your modem's string dialog box. There is a field called valid dial characters. You may add any characters you want to be included in the phone number field.

Connecting Problems

Problem

Can not open comm port

Solution

Your comm port may be in use by some other application. Also check the comm port setting in the communication setting dialog box. You can find out the ports available in your computer by running a program called MSD. See if the assigned port is available in your computer.

Problem

Can not connect at 14.4K baud.

Solution

This problem is observed with some brand of modems. Try selecting the baud rate of 19200. You would still get the carrier of 14.4K but the baud rate between your computer and the modem is set for 19200.

Problem

Can not open communication port for manual dialing or in answerback mode.

Solution

In the phonebook, make an entry with no phone number field specified and set the phone type field to none.

Problem

No response from modem

Solution

Check your port. In the Misc. menu, select check modem port command. This would tell you which port your modem is connected to. Then make this port selection in the communication setting dialog box. If you are still experiencing the problem then check your Init string. Consult your modem's documentation for the right Init string. Type in the Init string in the InitString edit box of modem's setting dialog box. If even this fails then check the baud rate. If it is 14.4K then try selecting 19200 as your baud rate in the communication setting dialog box.

Problem

After connecting, the program loses the carrier immediately.

Solution

Make sure you set either the hardware (RTS/CTS) or both (hardware & xon/xoff) as your flow control.

Problem

After connecting, garbage characters appear.

Solution

Perhaps, you are connected to 7 databit communication channel. Select 7 databits and even or odd parity in the communication parameter dialog box.

File Transfer Problems

Problem

While receiving, if you cancel zmodem file transfer, garbage characters appear and the system stops responding.

Solution

Try typing 5 consecutive CTRL-X (control X) characters.

Problem

To many errors while receiving files in zmodem.

Solution

Make sure you are using either the hardware or both (hardware and xon/xoff) flow control. The flow control can be set in the terminal preference dialog box.

GIF/JPEG and uudecode problem

Problem

GIF/JPEG picture colors do not seem to be right

Solution

Your display card or your display driver may not support 256 colors.

Problem

While uudecoding, system warns of an illegal line number.

Solution

Some uudecoded file lines have an extra character at the end of line. In that case ignore this message. This message is also caused when instead of “begin” text at the start of uudecoded text you have some other text such as section. In that case ignore this message