Contents for HA/Win Help

HyperACCESS for Windows (or HA/Win) is a high performance, easy to use communications program utilizing the full capabilities of Windows graphical user interface (<u>GUI</u>).

To learn how to use Help, press F1.

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Automation Techniques

HyperACCESS provides four key tools for automating your communications sessions. They are:

Keyboard Macros

Automatic Program Generation

Assigning Programs to Keys or Buttons

Creating Buttons

In addition to these capabilities, HyperACCESS introduces a major advance in communications software with the ability to drag and drop files. See <u>Drag and Drop</u>. Another major automation tool is HyperACCESS's use of the C programming language instead of a proprietary script language. Not only can you program your own procedures using C, you can use HyperACCESS's Application Program Interface (HAPI) with Visual BASIC and other programming languages.

The *HyperACCESS API Guide* contains a complete description of the programming interface. If it wasn't provided as part of your purchase, you can obtain it from Hilgraeve at nominal cost.

Buttons

Phonebook Buttons
Session Buttons

Glossary

Absolute path Accelerator key <u>Access</u> **Application Icon** <u>ASCII</u> <u>Asynchronous</u> Asynchronous adapter Autodial Backscroll Buffer Baud <u>Binary</u> <u>Bit</u> **Boot** <u>bps</u> **Button Panel Byte** Carrier Detect signal <u>Cascade</u> <u>CD</u> Character. Character length **Check Box** <u>Checksum</u> <u>Choose</u> Christensen protocol Clear to Send signal Click <u>COM</u> Command button Communications port Compiling Compression Configuration Connect time

<u>Context menus</u> <u>Control characters</u>

CTS
Cursor
Data bits
Data Carrier Detect signal
Data Terminal Ready signal
Data word
DCD
DCE
<u>Default drive</u>
<u>Dialog box</u>
DOS
<u>Double click</u>
<u>Download</u>
<u>Drag</u>
<u>Drop down list box</u>
DSR
<u>DTE</u>
<u>DTR</u>
<u>Echo</u>
<u>Electronic mail</u>
<u>Emulate</u>
Escape Sequences
Flow control
<u>Formatting</u>
<u>Full duplex</u>
GND
Ground signal
<u>GUI</u>
<u>Half duplex</u>
<u>Hardware handshaking</u>
Hexidecimal HEX
<u>Host system</u>
HyperACCESS Application Programming Interface (HAPI)
<u>HyperProtocol</u>
lcon

Control Menu

<u>CRC</u>

<u>Menu</u> Menu bar Minimize button Modeless Dialog Box <u>Modem</u> Mouse pointer Null modem cable Off line On line Option button OS 2 <u>Parity</u> <u>Pathname</u> Peripheral device Phonebook entry Phonebook window <u>Point</u> <u>Port</u> Push button R D Radio button Reboot Receive Data signal Relative path Remote system Request To Send signal Restore button Ring Indicator signal

Insertion point

Keyboard macro

Log on or logon

Maximize button

<u>Launch Pad</u> <u>List box</u>

<u>ISDN</u>

<u>Macro</u>

<u>Memory</u>

<u>RNG</u>

Rocker Buttons

RS 232 cable

<u>RTS</u>

Scroll bar

<u>Select</u>

Serial port

Session Window

Shortcut key

Sign-on or Sign on

Software handshaking

Start bits

Stop bits

Synchronous

<u>Syntax</u>

<u>System</u>

System List

System menu

<u>TD</u>

<u>Terminal</u>

Terminal area

Terminal emulation

Text box

Text editor

Text file

<u>Tile</u>

Title bar

<u>Transmit Data signal</u>

<u>TTY</u>

<u>Upload</u>

Wildcard characters

Window title

<u>Workspace</u>

Xmodem protocol

XOFF XON

Keyboard

You don't really need a mouse take advantage of HyperACCESS's features and speed, but we highly recommended one. To access the menu bar, press and release <Alt> followed by the underlined letter of the menu you want to select. After pressing <Alt> to access the menu bar, you can also use the arrow keys to navigate between menus and within menus. To make a selection, press <Enter>. For more information on operating HyperACCESS without a mouse, see your Microsoft Windows User's Guide.

Keyboard Definition

The following topics provide information about the definition of your keyboard within a active session.

Keyboard Macros

Terminal Emulators

ASCII Characters

The first 32 ASCII character codes are called control characters and are not displayed in a Windows application, such as HyperACCESS for Windows. To obtain them, press and hold <Ctrl> and type the character indicated in ASCII Characters Appendix of your HyperACCESS User's Manual. For example, <Ctrl>-A sends 01 (hex). The next 96 are the standard ASCII character codes for letters, numbers, punctuation, and symbols, which you type using the regular keys on your keyboard. The last 128, called extended ASCII characters, are graphics characters and other special characters. To obtain an extended ASCII character, press and hold <Alt>, type the decimal value of the ASCII character on the numeric keypad, then release <Alt>.

Mouse

You don't really need a mouse take advantage of HyperACCESS's features and speed, but we highly recommended one.

Here is some basic terminology.

Choose Use a mouse (or keyboard commands) to pick an item that starts an action

in Windows.

Click Press and release a mouse button (normally the left one) quickly.

Double-click Click the mouse button twice in rapid succession.

Drag Press and hold the mouse button while moving the mouse.

Menu A list of items, which are usually commands. For example, the Control

Menu has items that include Restore, Maximize, Minimize, and Close.

Point Move the mouse until the mouse pointer is at a chosen item.

Select Mark an item by clicking on it with a mouse or by highlighting it with

keyboard commands.

To select text, position the I-Beam <u>mouse pointer</u> and drag over the characters you wish to select. You can also select text using accelerator

keys.

Terminal Screen Mouse Actions

You can use the mouse to highlight text in the <u>terminal area</u> or <u>Backscroll Buffer</u>, and to display <u>context menus</u>. If the <u>terminal emulator</u> you're currently using supports cursor movement commands, positioning the cursor on your screen with the mouse causes HyperACCESS to issue appropriate cursor movement codes to the <u>remote system</u>.

Phonebook Commands

<u>File</u>

<u>View</u>

Options

Automation

<u>Window</u>

Procedures

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Calling a Remote System

Calling Systems in the Phonebook

Calling Systems not in the Phonebook

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Using Browse

Using Context Menus

Using DDE Links Without Programming

Session Commands

<u>File</u>

<u>Edit</u>

<u>View</u>

Properties

<u>Transfer</u>

Automation

<u>Window</u>

File Menu Commands

You'll find the Phonebook **F**ile menu useful for adding and deleting <u>Phonebook entries</u>, beginning a communications session, and exiting HyperACCESS.

Most of the menu items behave in one of two ways when selected:

- With no Phonebook entry selected, a <u>dialog box</u> appears that lets you pick a desired session file. This dialog box is a common windows file selection dialog and permits you to pick a session file from any drive or directory.
- With a Phonebook entry or <u>icon</u> selected, the selected menu item performs the desired function.

Use the scroll bar to see more commands.

New

Displays the **Description** dialog box to permit you to name the session and select an icon. It then opens a <u>session window</u> using the name you specified and displays the **Communications** dialog box with default values from the New Session Defaults Phonebook entry. You can modify any parameters in this dialog box before continuing.

<u>O</u>pen

Opens a session using a Phonebook entry. **O**pen doesn't initiate <u>modem</u> commands or claim a <u>port</u>. It lets you use a current Phonebook entry as a basis for a new entry; view information in the <u>Backscroll Buffer</u>; or compose messages in <u>Launch Pad</u> before connecting with the remote system.

Once open, you can make modifications to Phonebook parameters, and connect to a remote system. If you want, you can use $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s from the session Menu Bar to modify or create a new Phonebook entry.

Copy

Duplicates a Phonebook entry by opening a session (see $\underline{\mathbf{O}}$ pen above) so you can modify and save the communications parameters.

Delete

Deletes a Phonebook entry.

<u>P</u>roperties

Displays a <u>cascade menu</u> with selections to modify various communications parameters for a session. This cascade menu is the same as the <u>P</u>roperties drop-down menu on a session window Menu Bar.

Connect

Connect opens a session window, claims a port, initiates modem commands, and establishes a connection with a <u>remote system</u>.

Connect Special

Connect Special provides three options:

- Record a new <u>logon</u> program.
- Open a port without dialing a phone number.
- Connect without running the logon program.

You specify the desired action through a dialog box that appears when you select Connect Special.

Find...

Finds Phonebook and other files using search criteria entered in a dialog box.

Exit

E<u>x</u>its (quits) HyperACCESS.

View

Use the Phonebook <u>V</u>iew menu to customize the way HyperACCESS displays Phonebook information.

Only one menu item in the first group may be checked at a time.

Use the scroll bar to see more commands.

Icon

Displays a check mark when selected. If <u>I</u>con is checked, Phonebook displays an <u>icon</u> for each <u>Phonebook entry</u>. This is the default view.

Name

Displays a check mark when selected. If **N**ame is checked, Phonebook displays only names of Phonebook entries in a multi-column <u>list box</u> format.

File name

Displays a check mark when selected. If $\underline{\mathbf{F}}$ ile name is checked, Phonebook displays the drive letter, \underline{path} , and complete file name for each system.

Details

Displays a check mark when selected. If **D**etails is checked, Phonebook displays the details defined in the **Communications** dialog box for each entry.

You can split the Phonebook vertically to display file names (and paths) in the left pane and entry details in the right pane.

You can use the \underline{V} iew/ \underline{L} ayout menu item to determine which \underline{D} etails to display. In addition, you can arrange the order of the display using \underline{V} iew/ \underline{L} ayout or by dragging with your mouse. Each Phonebook entry appears as a single line.

Statistics

Displays a check mark when selected. If <u>S</u>tatistics is checked, Phonebook displays statistics by system name. Among the statistics are: last date and time called, and date the Phonebook entry was created and changed.

You can split Phonebook vertically to display file names (and paths) in the left pane and entry statistics in the right pane.

You can use the \underline{V} iew/ \underline{L} ayout menu item to determine which \underline{S} tatistics to display. In addition, you can arrange the order of the display using \underline{V} iew/ \underline{L} ayout or by dragging with your mouse. Each Phonebook entry appears as a single line.

Layout

Layout displays a cascade menu containing menu items: $\underline{\mathbf{D}}$ etails and $\underline{\mathbf{S}}$ tatistics. These menu items display a dialog box of check boxes of Phonebook parameters or statistics. Pressing the **Change Order...** button in this dialog box displays a dialog box to reorder the $\underline{\mathbf{D}}$ etails or $\underline{\mathbf{S}}$ tatistics.

Show Pages

Displays a check mark when selected. If Show Pages is checked, Phonebook has the appearance of an open book with a 3-dimensional look. A page header for the book uses the name you specified during installation, and shows the current view and sort order.

When not selected, Phonebook has the default Window Background color (see Windows Control Panel documentation) without ornamentation.

Show Background

Displays a check mark when selected. If Show Background is checked, the HyperACCESS application window has a gray background with a 3-dimensional HA/Win repeating pattern.

When not selected, the application window has the default Application Workspace color (see Windows Control Panel documentation).

Button panel

Displays a <u>cascade menu</u> when selected. The cascade menu lets you position the Button panel in the Phonebook window. It also provides a selection to close (remove) the Button panel.

Button size...

Displays a dialog box that lets you change the size of the buttons in the Phonebook window by dragging an edge or corner of the current button shape.

Sort by

Sort by displays a cascade menu that lets you define the order for Phonebook entries.

ΑII

Displays a check mark when selected. If $\underline{\mathbf{A}}$ II is checked, all Phonebook entries on drives and directories listed in the **Phonebook Location** dialog box are displayed. This selection is mutually exclusive with $\underline{\mathbf{So}}$ me.

Some...

Displays a check mark when selected. If Soleton is selected, a dialog box is displayed that lets you specify which systems you want displayed. This selection is mutually exclusive with \mathbf{A} II.

Options

You can use the Phonebook **O**ptions menu items to modify overall operation HyperACCESS. Each menu item lets you customize various HyperACCESS features. These menu items let you define utility programs used by HyperACCESS, Phonebook location, and how HyperACCESS behaves on startup.

Use the <u>scroll bar</u> to see more commands.

External utilities...

External utilities displays a <u>dialog box</u> that lets you change programs used by HyperACCESS. By default, HyperACCESS uses Windows Clipboard and Notebook.

Phonebook Location...

Phonebook Location displays a dialog box that lets you specify drives and/or directories that HyperACCESS should scan for listing systems in Phonebook.

Startup...

Startup displays a dialog box that lets you define the starting directory for HyperACCESS, a program to be run for the startup, and how you want HyperACCESS to display document windows after startup.

Sound

Displays a check mark when selected. When unselected all sound (beep) warnings and notifications are turned off.

Automation

You can use the Phonebook <u>A</u>utomation menu to run, abort, or edit programs that automate your communication. In addition, you can assign programs to various key combinations and buttons.

Use the <u>scroll bar</u> to see more commands. Also see the topic <u>Automation Techniques</u>.

Run...

Run displays a dialog box that lets you select a program to run. While a program is running, you'll see a check mark on this menu item.

Abort

Abort terminates a running program.

<u>E</u>dit Program...

Edit Program displays a <u>dialog box</u> that lets you specify which file you want to edit. Once you've selected a file, Windows Notepad (or whatever editor you've specified in **O**ptions/**E**xternal utilities) opens.

Keys & buttons...

Keys & buttons displays a dialog box that lets you assign a program to a key and/or button.

Window

The Phonebook <u>W</u>indow menu items allow you to control display of HyperACCESS windows. This menu also lets you select the window to make active.

The first group of menu items change how windows are arranged, shows Clipboard, and closes all HyperACCESS document windows. The second group of menu items shows a numbered list of all available windows.

Use the <u>scroll bar</u> to see more commands.

Cascade

Cascade arranges all document windows, one on top of the other, so that each <u>title bar</u> remains visible. Only the top-most, or active window is fully visible.

Tile

Tile arranges all open windows and modifies their size so that windows don't overlap and all windows are at least partially visible.

Show Clipboard

Loads Clipboard. You can resize or move Clipboard anywhere on your screen, and continue working in HyperACCESS.

Close All

Closes All HyperACCESS session windows without quitting HyperACCESS.

1 Phonebook

1 Phonebook begins the list of available windows. The active window is preceded by a check mark.

Adding a Phonebook Entry

There are several techniques available for creating a new <u>Phonebook entry</u> (also see, <u>Copying a Phonebook Entry</u>). One of the easiest is to:

- 1. Select the <u>File/New command</u> (or click on **New** in the button panel) to open an untitled <u>session window</u>. This displays the <u>Description dialog box</u>.
- 2. Enter a system name, and select an <u>icon</u>. When you press **OK**, HyperACCESS displays the **Communications** dialog box.
- 3. If you're planning on calling this system in the future, it's a good idea to enter the **Phone number**. Otherwise, every time you use this entry you'll be prompted for the phone number (see <u>Calling Systems with No Phone Number Entry</u>).
- 4. Verify that all other communications details including <u>Baud rate</u>, <u>Parity</u>, <u>Data bits</u>, and <u>Stop bits</u> are correct for the system you intend to call. Make any required changes.
- 5. You may need to change the **Terminal** because different systems support different terminal emulations. If necessary, you can also change the <u>Port type</u>, Port name, and Modem (or device).
 - **Note:** Default information displayed in this dialog box is taken from the New Session Defaults Phonebook entry.
- 6. Click **OK**. The session window opens with the session name you've specified in the title bar. You can make additional changes to the session, save the session, or initiate communication with the remote system.
 - To save the session, select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave, $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s, $\underline{\mathbf{F}}$ ile/Close, or $\underline{\mathbf{F}}$ ile/E $\underline{\mathbf{x}}$ it. Any of these display the **Save As** dialog box.
- 7. Enter a new **Filename** or use the **<u>Browse</u>** command button to see the names of existing files. (We recommend that you always use.**HAS** as the suffix for system file names.)
- 8. Click **OK**. HyperACCESS saves the current session parameters in the file specified; and creates the Phonebook entry with the icon and system name specified.

Calling a Remote System

There are many ways you can call a remote system using HyperACCESS. The easiest is to set up a Phonebook entry for systems you want to call (see <u>Adding a Phonebook Entry</u>, for procedures to create Phonebook entries). If you haven't used communications software before, you may also find it helpful to refer to *Placing Your First Call* in the *HyperACCESS User's Manual*.

Calling Systems in the Phonebook

Calling Systems not in the Phonebook

Calling Systems with No Phone Number

Calling Multiple Systems

Connecting from a Session Window

Finding and Calling a System in Phonebook

Calling Systems in the Phonebook

To call an existing **Phonebook entry** use one of the following techniques:

Double-click

With the **Phonebook window** displayed and active:

- 1. Move the mouse pointer to the Phonebook entry you want to call.
- 2. Double-click on the desired entry.

HyperACCESS opens a <u>session window</u>, sends <u>modem</u> initialization commands, and dials the number listed in your Phonebook entry.

Connect

With the Phonebook window displayed and active:

- 1. Move the mouse pointer to the Phonebook entry you want to call.
- 2. Select it by clicking on it one time.
- 3. Select the File/Connect command.

HyperACCESS opens a session window, sends modem initialization commands, and dials the number listed in your Phonebook entry.

Connect Special

With the Phonebook window displayed and active:

- 1. Move the mouse pointer to the Phonebook entry you want to call.
- 2. Select it by clicking on it one time.
- 3. Select the <u>File/Connect</u> Special command. HyperACCESS displays the **Connect Special** dialog box with three choices:
 - Learn new logon program when connection is made
 - Open port but do not dial phone number
- **D**o not run logon program
 - 4. Make your selection from the dialog box, and click **OK**.

HyperACCESS opens a session window, and performs the operation requested.

Open

With the Phonebook window displayed and active:

- 1. Move the mouse pointer to the Phonebook entry you want to call.
- 2. Select it by clicking on it one time.
- 3. Select **F**ile/**O**pen to open a session window, and make it active.
- 4. You can now change any communications parameters, or compose a message in <u>Launch Pad</u>, before initiating connection.
- 5. Follow instructions in Connecting from a Session Window.

Using the Button Panel

There are three standard buttons in the Phonebook button panel that provide similar techniques. They are:

- **Dial** -- Performs the same function as **F**ile/**C**onnect (see *Connect*, above).
- Open -- Opens a session window. To make a connection to a remote system, follow

instructions in *Connecting from a Session Window*, below.

■ Record -- Performs the same function as <u>File/Connect</u> Special with selection of <u>Learn new logon program when connection is made</u> in the dialog box (see *Connect Special*, above).

Calling Systems Not in the Phonebook

Systems may not appear in the Phonebook for the following reasons:

- After adding a remote system to the Phonebook, you exited without saving the session.
- The system file name doesn't end with an.**HAS** suffix.
- The system file isn't in the Phonebook path. For example, it may reside on a floppy disk.
 - Arr View/Some has been used to narrow the scope of displayed systems.

Calling Systems with No Phone Number

Whenever you attempt to connect to a <u>remote system</u> that doesn't have a phone number defined in the **Communications** <u>dialog box</u>, HyperACCESS displays the **Telephone Number** dialog box.

This dialog box displays the last number dialed (if any) using this <u>Phonebook entry</u>. You can dial the same number by pressing <Enter> or <u>clicking</u> on **Dial**. You can also select another number from the <u>drop-down</u> history list, or type a new number in the <u>text box</u>.

If you select the **Save as session telephone number** check box, the number you dial is saved as the session default, and this dialog box won't appear the next time you attempt to connect to this system.

Calling Multiple Systems

HyperACCESS allows you to concurrently communicate with any number of <u>remote systems</u>. You're only limited by the number of <u>communications ports</u> and available system memory. You can also select and dial multiple systems, one after another.

Selecting Multiple Sessions at the Same Time

You can select multiple sessions at the same time from the Phonebook, and let HyperACCESS either:

Connect with the first one that answers, or

Connect with each in turn.

To do this:

1. Use the extended selection feature to select more than one entry (i.e., multiple systems) in the Phonebook.

There are two basic techniques for performing extended selection:

- To select Phonebook entries in sequence (from top-to-bottom, left-to-right), <u>click</u> on the first <u>icon</u> in the group. Then, move the <u>mouse pointer</u> to the last item in the group, press and hold a <Shift> key, and click.
- To select Phonebook entries individually, press and hold the <Ctrl> key while you click on each entry.
 - 2. Use <u>File/Open</u> (or the **Open** button) or <u>File/Connect</u> (or the **Dial** button) to open and/or connect to each selected system. Depending on the command selected, one of two dialog boxes displays:
 - a. If you select **O**pen, a **Warning** dialog asks if you really want to open all selected systems.
 - b. If you select **C**onnect, the **Multiple Calls** dialog box lets you specify whether you want to:
 - Connect with **f**irst system that answers
 - Connect with <u>a</u>ll systems in turn

Use the rocker buttons or text box to enter the number of retries. Then click on **OK** to begin connection process.

Calling Another System with One or More Sessions Active

HyperACCESS provides several techniques for initiating additional sessions.

- From the <u>session window</u>, select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{O}}$ pen or $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{N}}$ ew. Then follow the instructions in <u>Connecting from a Session Window</u>.
- Press <Ctrl>+<F6> until the <u>Phonebook window</u> is active. Then follow any of the procedures in <u>Finding and Calling a System in Phonebook</u>.

Connecting from a Session Window

Once you've opened a <u>session window</u> you can connect to the <u>remote system</u> using any of the following techniques:

- Select <u>File/Connect</u>. This initializes the <u>modem</u> and dials the number listed in your <u>Phonebook entry</u>.
- Select <u>File/Connect</u> Special or click on the record button in the <u>Button Panel</u> to have HyperACCESS learn a new <u>logon</u> sequence.
 - \blacksquare Click on **Dial** in the button panel. This performs the same function as \underline{F} ile/ \underline{C} onnect.

Finding and Calling a System in the Phonebook

This procedure can be helpful if you can't remember the full name of a system you want to call, and don't want to look through your entire Phonebook.

- 1. Select <u>File/Find</u> to display the **Find Systems** <u>dialog box</u>.
- 2. Select one or more of the <u>check boxes</u> depending on what information you can remember.
- 3. Enter strings of characters you know for each selected check box search criterion.
 - **Note:** This search is not case sensitive.
- 4. Use the **Search** text box to specify where you want to search. Phonebook is the default. You can search one or more disk drives in place of or in addition to Phonebook using extended selection techniques.
- 5. Press **Search**. If no systems are found, you can repeat steps 2 through 4 and press **Search** again. If at least one system is found that matches your search criteria, the first system in the **n systems found** text box (*n* is the number of systems actually found) is highlighted and **Connect** is the default button. You can:
 - Press <Enter> or **Connect** to connect to the <u>remote system</u>, or select **Open** to open a session.
- Select a different system, then press <Enter> or **Connect** to connect to the remote system, or select **Open** to open a session.
- Use the extended selection to select several systems, then press <Enter> or **Connect** to connect to the remote systems, or select **Open** to open the sessions.
- Change your search criteria in the check box(es) and/or the **Search** list box, and search again.

Capturing Text to a File

HyperACCESS gives you two ways to capture text displayed in the <u>terminal</u> /<u>Backscroll Buffer</u>. (To capture data directly to the printer, see <u>Printing Incoming Information as it Arrives</u>, or <u>Printing Incoming Information after it's Received</u>.)

You can copy from the terminal /Backscroll Buffer to a file.

You can use the $\underline{\mathbf{F}}$ ile/Capture to $\underline{\mathbf{F}}$ ile command in the <u>session window</u> to capture data as it arrives.

Capturing Backscroll Buffer Data

You can copy information from the terminal/Backscroll Buffer to a file to save your current interaction. Follow these steps:

- 1. Use the vertical <u>scroll bar</u>, if necessary, until the beginning or end of the section you want to capture is visible in the session window.
- 2. Select the character(s), word(s), and/or line(s) of text desired. You can <u>double-click</u> to highlight a single word, and extend in either direction; or position the mouse pointer anywhere in the text and perform normal Windows text selection.
- 3. Select **E**dit/Co**p**y to/**F**ile. This displays a <u>dialog box</u> that lets you enter a file path and name. You may also choose to use the <u>context menu</u> by pressing the right mouse button. See Using Context Menus.
- 4. Enter a file name (with path, if necessary), or use the **Browse** button.
- 5. Select Append or Overwrite.
- 6. Click on **C**opy.

Capturing Text as it Arrives

Before you can begin capturing incoming text, you must open a <u>session window</u> using any of the alternatives described in. <u>Calling a Remote System</u>.

To capture your interaction with the <u>remote system</u>, follow these steps:

- 1 Select File/Capture to File to display the **Capture** dialog box.
- 2 If you've defined a default capture file for the <u>Phonebook entry</u>, that file name appears in the **File** text box. If you don't have a default capture file defined for the entry, either type a path and file name or press the <u>Browse</u> <u>command button</u> to help you specify a capture file.
- 3 Select one of the options in the group **If File Already Exists**. The options are:
 - **Append** -- If the file exists, adds new session interaction to the end of the current file. If the file doesn't exist, creates it. (The default)
- **Overwrite** -- If the file exists, deletes the old file and creates a new capture file. If the file doesn't exist, creates it.
- Rename by date --HyperACCESS creates file names using the extension specified plus the first letter of the file name with date/sequence appended. The date/sequence format is MMDD999 where MM is the month (values 01 to 12), and DD is the day (values 01 to 31), and 999 is a sequence number from 000 to 999 for the files created on that date.
- Rename sequentially -- appends a sequence number from 0 to 999 to the end of the file name. If the name is already 8 characters long, the sequence number replaces characters at the end of the name.
 - 4 Select one of the options in the group **Capture arriving:**. The options are:
 - **Characters** -- Captures all incoming data except escape sequences.

- **Lines** -- Captures each line when the carriage return at its end is received. It also captures the line you're on when you stop or suspend capturing. (the default)
- **Screens** -- Captures the entire screen whenever the remote system clears the screen or you stop or suspend capturing.
 - **Raw data** -- Captures all incoming data, including escape seguences.
 - 5 Select the **Make these the default settings** check box if you want all changes you've made in this dialog box to become the default settings for future sessions.
 - 6 Click one of the command buttons:
 - **Start** -- Returns to the session window and begins capturing data according to specified options.
 - Snapshot -- Copies the current contents of the terminal area to the capture file.
 - 7 See Printing if you want to print text while you're capturing it to a disk file.

Stopping, Pausing, and Resuming Text Capture

Once a capture has been initiated, selecting $\underline{\mathbf{F}}$ ile/Ca $\underline{\mathbf{p}}$ ture displays a <u>cascade menu</u> with the following choices:

- **Stop** -- Stops file capture and closes the current capture file.
- **Pause** -- Suspends file capture, but doesn't close the current capture file. If capture is already paused, this menu item is grayed out (unavailable).
- **Resume** -- Restarts file capture using the current capture file. If capture is already active, this menu item is grayed out (unavailable).
 - **Snapshot** -- Copies the entire terminal screen to the capture file.

Changing a Phonebook Entry

You can change a **Phonebook entry** from either the **Phonebook** or a session window.

Changing a Phonebook entry from the Phonebook.

This procedure assumes that the Phonebook window is active, and no session for the system has been opened. It also assumes that the parameter you want to modify is one of the standard communications parameters, such as <u>baud rate</u> or <u>parity</u>.

- 1. Select the desired Phonebook entry.
- 2. Select File/Properties/Communications to display the Communications dialog box.
- 3. Modify parameters as required.
- 4. Press **OK** to activate your modifications.

Note: Parameters modified in Phonebook are automatically saved.

Changing a Phonebook entry from the session window.

This procedure assumes that a session window has been opened. It also assumes that the parameter you want to modify is one of the standard communications parameters.

- 1. Fither:
 - a. Select Properties/Communications

or

- b. Click on the **Settings** button in the Button Panel
- 2. Modify parameters as required.
- 3. Press **OK** to activate your modifications.

Note: Changes you've made aren't automatically saved for the session's Phonebook entry. To save the new setting values, either explicitly select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s; or, when you close the session window, HyperACCESS will ask you whether or not it should save the new settings.

Changing Protocol Settings

You can change file transfer protocol settings from either the <u>Phonebook</u> or an open <u>session</u> window. Regardless of where you make changes to these settings, each Phonebook entry has its own uniquely saved values. This means you can access multiple remote systems using the same protocol (for example, Zmodem), and you can define each Phonebook entry with its own combination of settings.

This section outlines alternative steps for accessing protocol **Settings** dialog boxes. For details on actual settings and permitted values for each protocol, follow the steps for changing settings, and click on the <u>H</u>elp button in the **Settings** dialog box. Use one of the following procedures:

Changing Parameters from Phonebook

Changing Parameters from a Session Window

Changing Settings from Phonebook

When you change protocol settings from Phonebook, you're specifying default values. You can modify these values on either a temporary or permanent basis from an open session window (see below). To access a protocol's **Settings** dialog box from Phonebook:

- 1. With a Phonebook entry selected, select File/Properties/Transfer Protocols
- 2. Select the desired file transfer protocol from the **Default receiving protocol:** and **Default sending protocol:** drop-down lists.
- 3. Click on the desired **Settings...** command button.

 Note: If both sending and receiving protocols are the same, either **Settings...** button affects both directions.
- 4. Make desired selections from the protocol-**Settings** dialog box, and click on **OK**.

When you exit the **Transfer Protocols** dialog box by clicking **OK**, HyperACCESS automatically saves all changes you've made for the current Phonebook entry.

Changing Settings from a Session Window

You can specify either default transfer protocol settings for a session, or modify settings from within the **Receive** or **Send** dialog boxes. To access a protocol's **Parameters** dialog box from a session window:

Changing Session Default Protocol Settings

- 1. Select Properties/Transfer Protocols
- 2. Select the desired file transfer protocol from the **Default receiving protocol:** and **Default sending protocol:** drop-down lists.
- 3. Click on the desired **Settings...** command button.
 - **Note:** If both sending and receiving protocols are the same, either **Settings...** button affects both directions.
- 4. Make desired selections from the protocol-unique dialog box, and click on **OK**.

Changes you've made aren't automatically saved for the session's Phonebook entry. To save the new setting values, either explicitly select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s; or, when you close the session window, HyperACCESS will ask you whether or not it should save the new settings.

Changing Send or Receive Protocol Settings on-the-fly

- 1. Select Transfer/Receive or Transfer/Send.
- 2. Select the desired file transfer protocol from the **Protocol**: drop-down list.
- 3. Click on **Settings...** in the dialog box.
 - **Note:** If both sending and receiving protocols are the same, either **Settings...** button affects both directions.
- 4. Make desired selections from the protocol-unique dialog box, and click on **OK**.

Changes you've made aren't automatically saved for the session's Phonebook entry. To save the new setting values, either explicitly select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s; or, when you close the session window, HyperACCESS will ask you whether or not it should save the new settings.

Changing Terminal Emulator Settings

You can change terminal emulator settings from either the <u>Phonebook</u> or an open <u>session</u> window. Regardless of where you make changes to these settings, each Phonebook entry has its own uniquely saved values. This means you can access multiple remote systems with the same basic emulator (for example, VT100), and you can define each Phonebook entry with its own combination of setting values.

This section outlines alternative steps for accessing **Terminal Settings** dialog boxes. For details on actual settings and permitted values for each terminal emulator, follow the steps for changing settings, and click on the <u>H</u>elp button in the **Parameters** dialog box. Use one of the following procedures:

Changing Settings from Phonebook

Changing Settings from a Session Window

Changing Settings from Phonebook

To access the **Terminal Settings** dialog box for any terminal emulator:

- 1. Either:
 - a. With a Phonebook entry selected, select $\underline{{\bf F}}$ ile/ $\underline{{\bf P}}$ roperties/ $\underline{{\bf C}}$ ommunications or
 - b. Click on the **Settings** button in the Button Panel
- 2. Select the desired terminal emulator from the **Terminal**: drop-down list.
- 3. Click on the **Terminal Setup...** command button.
- 4. Make desired selections from the emulator-unique dialog box, and click on **OK**.

When you exit the **Communications** dialog box by clicking **OK**, HyperACCESS automatically saves all changes you've made for the current Phonebook entry.

Changing Settings from a Session Window

To access **Terminal Settings** dialog box for any terminal emulator:

- 1. Either:
 - a. Select **P**roperties/**C**ommunications

or

- b. Click on the **Settings** button in the Button Panel
- 2. Select the desired terminal emulator from the **Terminal**: drop-down list.
- 3. Click on the **Terminal Setup...** command button.
- 4. Make desired selections from the emulator-unique dialog box, and click on **OK**.

Changes you've made aren't automatically saved for the session's Phonebook entry. To save the new setting values, either explicitly select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s; or, when you close the session window, HyperACCESS will ask you whether or not it should save the new settings.

Copying a Phonebook Entry

Copying a Phonebook entry provides an alternative technique for creating a new entry. (See also, <u>Adding a Phonebook Entry</u>.) One of the easiest is to:

- 1. Select an existing entry that has similar characteristics, or select the New Session Defaults entry.
- 2. Select the <u>File/Copy</u> command. This opens the <u>Description dialog box</u>. Enter a system name, and select an icon. When you press **OK**, HyperACCESS opens a <u>session window</u> with the name you specified in the <u>title bar</u>.
- 3. If some communications parameters are different for this Phonebook entry:
 - a. Select Properties/Communications to open the Communications dialog box.
 - b. Enter or modify information in the **Communications** dialog box, such as Phone number, and verify that all other information (<u>baud rate</u>, <u>parity</u>, etc.) is correct.
 - c. Press **OK**.
- 4. Select File/Save as to display the Save As dialog box.

Note: Closing the session window or exiting HyperACCESS automatically displays the **Save As** dialog box.

5. Enter a file name in the $\underline{\mathbf{F}}$ ilename $\underline{\mathbf{text}}$ box or press the $\underline{\mathbf{B}}$ rowse command button to see the names of existing files.

Note: Entries must have the **.HAS** extension to be displayed in Phonebook.

6. Press **OK** to save the new Phonebook entry.

Creating Keyboard Macros

HyperACCESS has a simple, straight-forward technique for keyboard mapping and creating keyboard macros. Techniques described in this section are in addition to the powerful, built-in automatic generation of C language programs and complete language coupling through the HyperACCESS Application Programming Interface (HAPI).

To create a keyboard macro (or map keys on your keyboard), follow these steps:

- From an open session window, select <u>Automation/Keys & Buttons</u>. This displays the Keys & Buttons dialog box.
- 2. Click on the **Add Macro...** command button. This displays the **Add Macro** dialog box.
- 3. To specify the keys and/or keyboard combinations that the macro will issue, by click in the <u>Macro text box and press the desired keys</u>. You may enter any key combination.
- 4. To specify the key (or shifted key) required to invoke the macro, click in the Assigned **K**ey text box and enter the key (or key combination) you want to use. If the key currently defines a standard Windows accelerator, HyperACCESS displays a warning dialog, and lets you change the sequence.

If you don't want to define a button to the keyboard macro, make sure you select $\underline{\mathbf{N}}$ o button.

Assigning a Button to a Keyboard Macro

You can assign either a text or bitmap button to any keyboard macro. Select whichever button type you want. For a text button, simply enter the text string you want displayed on the button. For example, you could create a button with "Send" or "Send File" on it. To assign a bitmap button, select one of the pre-defined buttons, or select click **Import Button...**

The button appears with the standard HyperACCESS buttons in the session window Button Panel. Each session has its own set of buttons in the Button Panel.

Once you've created a new text or bitmapped button, you may want to change the button size. Changing the size of any button in a session window changes the size of all buttons in that window.

You can enter a line of help information in the text box, Help text. This line displays whenever you move the mouse pointer over a button and press the right mouse button.

Adding a Button

To add a new button, select click **Import Button...** in the **Add Macro** dialog box. For more information adding a button, see <u>Adding a Button</u>.

Creating a Macro Two Examples

The following sections illustrate how you create keyboard macros. The first example creates creates a keyboard macro to issue a hypothetical command to a remote system to send a file using Zmodem. The second example illustrates how you remap the keyboard using HyperACCESS's macro capability.

Macro to Issue a Host Command

This macro would be used to issue a commonly used host command to download a standard parts database. To create the macro, perform the following steps:

- 1. Select the Phonebook entry for the remote system.
- 2. Open the session window using $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{O}}$ pen or clicking on the \mathbf{Open} button.
- 3. Select Automation/Keys & Buttons.
- 4. Click on the **Add Macro...** command button.
- 5. In the <u>M</u>acro text box, type the host command. For example, you might type: **zsend c:\database\parts.***
- 6. In the <u>A</u>ssigned key text box, press the key you want to use to issue this command. For example, you might press <F5>.
- 7. Click on **OK** (assuming you don't want to assign a button to this function).
- 8. In the Keys & Buttons dialog box, click on OK.

You're now ready to use the <F5> key to issue this host command. Don't forget to save the changes to the Phonebook entry. You can do this either explicitly using $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s, or implicitly when you close the session. At that time, HyperACCESS will warn you that the session was modified and ask if you want to change it.

Keyboard Remapping Example

HyperACCESS maps the VT320 emulator's PF keys to <F1>-<F10>. (There's also an option to map PF1 - PF4 to the four keys above the keypad, to match the physical location of these keys on an actual DEC terminals.) Since the VT320 terminal emulator and Windows both use these and other special PC keys (<F1> for Help, <F6> for switching among windows, <Page Up> and <Page Down> for scrolling, etc.) there are some potential conflicts. Fortunately, HyperACCESS provides several ways to deal with such conflicts.

Each emulator that uses such keys has an option that let's users specify whether the emulator or Windows will get these keys. If you're using the terminal emulator to access systems where special terminal emulator keys aren't required, you can simply devote these keys to Windows (the default). If you choose to use these keys for terminal emulation, you can still use them to control Windows, by simply press <Scroll Lock> (remember that selecting text also creates an implicit Scroll Lock). During Scroll Lock, keys required for terminal emulation revert to Windows.

But suppose you need to use PF1-PF10 for terminal emulation, but also want to be able to use <F1>-<F10>, etc., for Windows control without having to pressing <Scroll Lock> first. This can be accomplished by remapping PF1-PF10 to other keys, such as <Ctrl>+<Shift>+1 through <Ctrl>+<Shift>+0 along the top row of the keyboard.

As an illustration of the technique required to perform this task, follow these steps to reassign the PF1 key to <Ctrl>+<Shift>+1.

1. Select the Phonebook entry for the remote system.

- 2. Open the session window using **F**ile/**O**pen or by clicking on the **Open** button.
- 3. Select Automation/Keys & Buttons.
- 4. Click on the **Add Macro...** command button.
- 5. In the <u>Macro text box</u>, press <F1>
- 6. In the Assigned key text box, press <Ctrl>+<Shift>+1.
- 7. Click on **OK**.
- 8. In the **Keys & Buttons** dialog box, click on **OK**.

You're now ready to use the <Ctrl>+<Shift>+1 key combination to issue the same code as <F1> to the host. Continue using the same procedure to reassign the other function keys. Don't forget to save the changes to the Phonebook entry. You can do this either explicitly using $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s, or implicitly when you close the session. At that time, HyperACCESS will warn you that the session was modified and ask if you want to change it.

Deleting a Phonebook Entry

To delete a <u>Phonebook entry</u>, follow these steps:

- 1. From the Phonebook window, select the entry you want to delete.
- 2. Select $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{D}}$ elete, or press the <Delete> key.
- 3. Click on \mathbf{OK} in the warning <u>dialog box</u>, if you're certain you want to delete the Phonebook entry.

Drag and Drop

The term *drag* and *drop* refers to the technique of selecting one or more objects, usually with your mouse, and moving the object(s) somewhere else. Drag and drop is a technique generally available for various types of objects in most modern <u>GUI</u> s including Windows 3.1 and OS/2 Presentation Manager.

In HyperACCESS, the term drag and drop refers to your ability to select files from File Manager and drop them on:

- HyperACCESS, when minimized -- HyperACCESS executes the program defined in the Properties/File Usage For dropped files run text box for the current session. If no session is open, HyperACCESS opens the first session in the Phonebook. The program defined in this dialog box must specify actions to be performed with the dropped file(s), such as sending them to the remote system.
- A session window -- With HyperACCESS loaded and a session displayed, dropping file(s) on that window executes the program defined in Properties/File Usage For dropped files run text box. This program defines the action to be performed with the dropped file(s), such as sending them to the remote system.
- The Send dialog box -- Dropping file(s) into the Additional files to send list box of the dialog box adds the absolute path(s) and file name(s) to the list. You send the file(s) by clicking the Send button.

Editing Text

You'll use the Windows Notepad (or any other <u>text editor</u>) to edit a text file, such as a file you've captured to disk or a C language program file. You can use the Notepad editor at any time. You may also choose to use <u>Launch Pad</u>, particularly if you intend to prepare a message that you'll send as text. The sections below provide information on using Notepad and Launch Pad.

Press >> to view next section sequentially, or make a selection from the list below:

Editing a Text File

Editing Launch Pad Text

Modifying Launch Pad Text

Copying Text to Launch Pad

Copying Text from Launch Pad

Sending Launch Pad Text to the Host

Editing a Text File

You can edit a text file, using Windows multitasking capabilities, while HyperACCESS remains connected to the remote system. For example, you can use Windows Notepad (or any text editor) by following these steps:

- 1. Press <Alt>+<Tab> until Windows Program Manager becomes active.
- 2. Open the Accessories window, if necessary, by <u>double-clicking</u> on the Accessories group <u>icon</u>.
- 3. Double-click on the Notepad icon. You'll see an empty, untitled Notepad window.
- 4. Select the **F**ile/**O**pen command to retrieve the file you want to edit.
- 5. Edit the file as required.
- 6. To save changes, use the <u>File/Save</u> or <u>File/Save</u> <u>As</u> command. See the *Microsoft Windows User's Guide* for additional information on using the Notepad.

Editing Launch Pad Text

<u>Launch Pad</u> provides a convenient scratch pad area for creating text you would normally type directly to the <u>remote system</u>. The advantage of using Launch Pad is that you can freely move about and edit text using standard Windows techniques. You don't have to concern yourself with the idiosyncrasies of editing on the remote system.

You can switch between the <u>terminal</u> /<u>Backscroll Buffer</u> pane and the Launch Pad pane of the <u>session window</u> by using the mouse or shortcut keys <F6> or <Shift>+<F6>.

Using editing techniques described here, along with saving Launch Pad text described in <u>Copying Text from Launch Pad</u>, it's possible to use Launch Pad just as you would use Notepad. This gives you a complete text editing capability without ever leaving the session window. <u>Context menus</u> make this especially convenient.

Modifying Launch Pad Text

Manually editing text in <u>Launch Pad</u> is identical to techniques used in Windows Notepad and other standard Windows applications. For example, you can:

- 1. Move the <u>mouse pointer</u> (I-beam) to the beginning of text you want to edit, and click to set the <u>insertion point</u>.
- 2. Perform any of the following operations:
 - a. If you want to insert text at the insertion point, type the text that you want to insert.
 - b. If you want to delete a character after the insertion point, press the <Delete> key.
 - c. If you want to delete a character before the insertion point, press the <Backspace> key.

To delete or replace a block of text, you can:

- 1. Move the mouse pointer (I-beam) to the beginning of the text. Press the left mouse button, and <u>drag</u> the selection cursor to select (highlight) the text you want to delete.
- 2. You can then perform one of the following operations:
 - a. To delete the text, use the $\underline{\mathbf{E}}$ dit/ $\underline{\mathbf{C}}$ ut command, the Cut shortcut key <Ctrl>+ \mathbf{X} , or Cut from the <u>context menu</u>.
 - b. To replace the highlighted text, use the <u>E</u>dit/Paste to Launch Pad, the Paste shortcut key <Ctrl>+**V**, or Paste to Launch Pad from the context menu.

Copying Text to Launch Pad

There are several techniques available to copy text from the <u>terminal</u> /<u>Backscroll Buffer</u> to <u>Launch Pad</u>. One technique is:

- 1. Select the text you want to copy by moving the <u>mouse pointer</u> (I-beam) to the beginning of the text.
- 2. <u>Double-click</u> on a word and/or <u>drag</u> the I-beam until you've selected desired text. (You can select text from anywhere within the terminal/Backscroll Buffer.)
- 3. Move the mouse pointer (I-beam) to the place in Launch Pad where you want to copy the selected text, and click.
- 4. Use the **E**dit/Co**p**y to/**L**aunch Pad command to copy the selected text.

Alternatively, you can:

- 1. Select the text to be copied by moving the mouse pointer (I-beam) to the beginning of the text.
- 2. Double-click on a word and/or drag the I-beam until you've selected desired text. (You can select text from anywhere within the terminal/Backscroll Buffer.)
- 3. Select the $\underline{\mathbf{E}}$ dit/ $C\underline{\mathbf{o}}$ py command (or <Ctrl $>+\mathbf{C}$ copy shortcut key) to copy the selected text to Windows Clipboard.
- 4. Move the mouse pointer (I-beam) to the place in Launch Pad where you want to copy the selected text and click.
- 5. Paste from Windows Clipboard to Launch Pad using one of the following techniques:
 - a. Select **E**dit/Paste to launch pad
 - b. Use <Ctrl>+V shortcut key
 - c. Use the context menu (mouse button 2), and select: Paste to Launch Pad.

You can also copy text from a file to Launch Pad. To do this, follow these steps:

- 1. Move the mouse pointer (I-beam) to the place in Launch Pad where you want to insert the file.
- 2. Use one of the following techniques to Paste from a file:
 - a. Select **E**dit/P**a**ste from file..., or
 - b. Use the context menu (mouse button 2), and select: Paste from File...

Copying Text from Launch Pad

You can easily save information you enter in Launch Pad following these steps:

- 1. Select the text to be copied by moving the <u>mouse pointer</u> (I-beam) to the beginning of the text.
- 2. <u>Double-click</u> on the word and/or <u>drag</u> the I-beam until you've selected the desired text.

Note: You can select all text in Launch Pad by pressing <Ctrl>+<Home> followed by <Ctrl>+<Shift>+<End>.

- 3. Copy to the file using one of the following techniques:
 - a. Select **E**dit/Co**p**y to/**F**ile...
 - b. Use the context menu (mouse button 2), and select: Copy to File...
- 4. Use the <u>dialog box</u> to indicate what you want to do if the file exists.
- 5. Enter the file name, use the drop-down file list, or press the **Browse** command button to select an existing file.
- 6. Press the **Copy** command button.

Sending Launch Pad Text to the Host

Once you've completed entering and editing text in <u>Launch Pad</u>, you'll want to send it to the <u>remote system</u>. To do this, <u>click</u> the **Send** <u>command button</u> that appears on the right side of the <u>terminal area's</u> horizontal <u>scroll bar</u>. This causes HyperACCESS to send the contents of Launch Pad as if a very fast typist were keying the data. Settings specified in the <u>ASCII</u> <u>Setup</u> <u>dialog box</u> control how text is sent.

Effects of Scroll Lock

Scroll Lock is a condition that applies to the <u>terminal</u> /<u>Backscroll Buffer</u> pane of the <u>session window</u>. There are three conditions that cause the pane to be locked. They are:

- Pressing <Scroll Lock>
- Selecting View/Scroll lock
- Selecting the Scroll Lock button, if one exists

All three methods display the **S**croll lock menu item check mark, cause the Scroll Lock indicator to light on the keyboard, and display the Scoll Lock indicator in the status bar (the letters **SL** appear in the second field of the status bar). Selecting text in the terminal/Backscroll Buffer pane also causes an *implicit* scroll lock, which ceases as soon as the text is no longer selected.

A session window with scroll lock on, immediately stops scrolling text in the terminal area, and won't send characters to the <u>remote system</u>.

Printing

HyperACCESS provides four ways to print text. You can:

- Printing Incoming Information as it Arrives
- <u>Printing Information after It's Received</u> from the terminal/Backscroll Buffer (or from Launch Pad before it's sent).
- Some terminal emulators permit the host to issue print commands. HyperACCESS supports both continuous and selected printing for applicable terminal emulators (for example VTxxx).
- Print information from a capture file (See <u>Capturing Text</u> for more information) using another application.

You can use <u>File/Print</u> or <u>File/Capture</u> to <u>Printer</u> commands in the session window to initiate printing at any time, even before the session is connected to the remote system. However, before actually printing, you should make sure that your printer is set up properly.

See related topics:

Changing Printer Setup

Stopping, Pausing, and Resuming Printing

Changing Printer Setup

The **Setup...** button in the **Print** dialog box displays the standard Windows printer setup dialog box. From this dialog you can select from among the printers defined on your system, and set key printer parameters. To access the printer setup dialog box:

- 1. Select <u>File/New or File/Open command</u> (or use the corresponding buttons from the button panel) to open a session window if one is not already opened.
- 2. From a session window, select **F**ile/**P**rint.
- 3. From the **Print** dialog box, press the **Setup...** command button to display the Windows **Print Setup** dialog box.
- 4. Select the desired printer from the list. Press **Setup** to change printer parameters.
- 5. Press **OK** to save your printer settings. This changes the Windows printer settings, and is equivalent to using the Windows Control Panel, Printers icon.

Printing Incoming Information as it Arrives

HyperACCESS lets you print your interaction with the host as while you're on line. To initiate this type of printing, follow these steps:

- 1. Verify that your Printer Setup is defined correctly. See Changing Printer Setup.
- 2. Verify that your printer is turned on and has plenty of paper.
- 3. To start printing, select **F**ile/Capture to **P**rinter (or press the Print button) to display the **Capture to Printer** dialog box.
- 4. The dialog box shows the active printer.
- 5. Select the appropriate option in the **Capture Mode** group box to specify what information you want to capture. The option buttons provide the following choices:
 - Characters -- Captures all incoming data except escape sequences.
- **Lines** -- (the default) Captures each line when the carriage return at its end is received, plus the line you're on when you stop or suspend capturing.
- **Screens** -- Captures the entire screen whenever the remote system clears the screen or you stop or suspend capturing.
 - 6. Select the appropriate option in the **Print Method** group box to specify when HyperACCESS releases captured data to the printer. The option buttons provide two choices:
 - By page -- Select this option to print each page as it's received. HyperACCESS uses information from Windows to determine page length.
- By session -- When you select this option, HyperACCESS releases data to the printer after capture is stopped or the session is closed.
 - 7. Press the **Start** command button to print data that corresponds to the option selected. This data is also displayed in the session window.

Printing Incoming Information after it's Received

To print a section of the terminal area, Backscroll Buffer, or Launch Pad follow these steps:

- 1. Verify that your printer is turned on and has plenty of paper, and that your Printer Setup is defined correctly. See <u>Changing Printer Setup</u> for more information.
- 2. Select the text to be printed in the terminal area, Backscroll Buffer, or Launch Pad. (If you want to print the entire terminal/Backscroll Buffer, you don't need to make a selection.)
- 3. Select <u>E</u>dit/Co<u>p</u>y to/<u>P</u>rinter, <u>F</u>ile/P<u>r</u>int, or use the context menu. When the dialog box appears, select either <u>A</u>ll or S<u>e</u>lection from the **Print Range** group box, and press **OK**,. The range selected will be printed.

Stopping, Pausing, and Resuming Printing

Once you've initiated printing operations for a session, selecting $\underline{\mathbf{F}}$ ile/Capture to $\underline{\mathbf{P}}$ rinter displays a cascade menu with the following choices:

- **Stop** -- Stops capturing data for the printer and closes the printer connection (for print spoolers, such as Windows Print Manager, this enables the spooler to release the information to the printer).
- Pause -- Suspends capturing data for the printer, but doesn't close the printer connection. If the printer is already paused, this menu item is grayed out (inactive).
- **Resume** -- Restarts capturing data for the printer using the current printer connection. If the printer is already active, this menu item is grayed out (inactive).
 - **Snapshot** -- Copies the entire terminal screen to the printer.

See also Printing Incoming Information as it Arrives.

Quitting HyperACCESS

To exit HyperACCESS, select $\underline{\mathbf{F}}$ ile/E $\underline{\mathbf{x}}$ it or use the shortcut key <Alt>+<F4>. If you are connected to a remote system in a session, you'll see a warning message that closing the window will also disconnect the session.

Receiving Files (Downloading)

HyperACCESS uses a modeless **Receive** dialog box to facilitate your interaction with remote systems. In addition, HyperACCESS supports many different file transfer protocols. This section describes, generically, how you receive files regardless of the file transfer protocol selected. For a brief description of the protocols and their default settings, see the *HyperACCESS User's Manual* or click on the **Help** command button (or press <F1> in a particular protocol's **Parameters** dialog box.

- 1. Select **T**ransfer/**R**eceive... to display the **Receive** <u>dialog box</u>.
- 2. If you've already received a file in the current session, the **Filename or directory to receive into** text box shows the last path used in the session. You can:
 - a. Edit the path in the text box.
 - b. Select one of the previously received files from the drop-down history list.
 - c. Use the **Browse** button to select an existing directory.
- 3. If necessary, use the **Protocol** drop-down list box to select a different file transfer protocol. The sending system must be using the same file transfer protocol specified.
- 4. If you need to change settings for the selected file transfer protocol, press **Protocol Settings...** to see a dialog box for the selected protocol.
- 5. If the file transfer protocol sends file name information, you can select the **Use** received filenames check box and/or the **Use received directories** check boxes; otherwise, the check boxes are dimmed.
- 6. You can also select the **Filter received files for known viruses** check box so that HyperGuard will check each received file for viruses.
- 7. Select one of the options in the **If File Already Exists** group box.
 - Overwrite -- If the file exists, deletes the old file and creates a new file. If the file doesn't exist, creates it.
- **Append** -- If the file exists, adds newly received data to the end of the current file. If the file doesn't exist, creates it.
- **Refuse** -- If the file exists, refuses the remote system's attempt to transmit a file with the same name.
- **Refuse unless newer** -- If the file exists, checks the create/modify date for the file. If the protocol supports the ability to send a create/modify date, verify that the file being sent by the remote system is newer than the one on your system. If it is, accepts it. Otherwise, rejects it.
- Rename using date --HyperACCESS creates file names using the extension specified plus the first letter of the file name with date/sequence appended. The date/sequence format is MMDD999 where MM is the month (values 01 to 12), and DD is the day (values 01 to 31), and 999 is a sequence number from 000 to 999 for the files created on that date.
 - Rename sequentially -- appends a sequence number from 0 to 999 to the end of the file name. If the name is already 8 characters long, the sequence number replaces characters at the end of the name.
 - 8. Type commands to the remote system to send the file(s). (Commands vary from system to system, so we can't provide detailed instructions in this manual.) When the remote system is ready, press the **Receive** command button. This causes HyperACCESS to enter receive mode, and displays the **Receive Progress** dialog box.

Sending Files (Uploading)

HyperACCESS provides straightforward methods for sending files to a <u>remote system</u> using whatever protocol that system has available. The simplest technique requires that you send one file at a time. However, most file transfer protocols supported by HyperACCESS can send groups of files. You can also create batches during an interactive session and save them for future use. This lets you avoid re-entering groups of files you send often.

The following sections describe, generically, how you send files regardless of the file transfer protocol selected. For a brief description of the protocols, and their default settings, see the *HyperACCESS User's Manual*.

Press >> to view next section sequentially, or make a selection from the list below:

Simple File Transfer

Advanced File Transfer Techniques

Simple File Transfer

This simple file transfer method lets you send one file or a group of files that you select using wild cards. Follow these steps:

- 1. Issue commands to the remote system to receive files from you. (Commands vary from system to system, so we can't provide detailed instructions here.)
- 2. Select **T**ransfer/**S**end... to display the **Send** dialog box.
- 3. Enter a file name with its <u>absolute path</u> in the <u>Filename text box</u>, or use the <u>Browse</u> command button to select a file. File names entered in the <u>text box</u> can include wild cards. In this case, HyperACCESS sends each file in the specified path that satisfies the wild card selection.

Note: If you select the **Include matching files from subdirectories** check box, HyperACCESS also searches subdirectories of the specified path for matching files.

- 4. If necessary, use the **Protocol** <u>drop-down list box</u> to select a different file transfer protocol. The sending system must be using the same file transfer protocol specified.
- 5. Click the **Send** button. This causes HyperACCESS to enter send mode, and displays the **Send Progress** dialog box.

Advanced File Transfer Techniques

In addition to the simple file transfer technique described above, HyperACCESS provides many procedures that you may wish to employ as you become more expert in using the program. The following steps outline some of these techniques:

- 1. Select **T**ransfer/**S**end... to display the **Send** dialog box.
- 2. If you've already sent a file in the current session, the **Directory:** shows the directory most recently used to select file(s) for sending. Otherwise it shows the default directory specified in **P**roperties/**F**ile Usage.

To send files, you can either enter the file name in the $\underline{\mathbf{F}}$ ilename text box as we described in $\underline{\text{Simple File Transfer}}$, or you can enter file names in the **Additional files to send** list box. To add files to this list, you can:

- a. Enter the path and file name (with wild cards, if desired) in the \mathbf{F} ilename $\underline{\mathbf{text}}$ box.
- b. Select one of the previously sent files from the **F**ilename <u>drop-down</u> history list.
- c. Use the Filename Browse command button to select an existing file.
- d. Press the **Restore Batch...** button to display a file browse dialog. Selecting a previously saved batch file restores the files to the **Additional files to send** list box.
- e. Use <u>drag and drop</u> to select files from File Manager, and place them in the **Additional files to send** list box.
- 3. If you enter a file name in the <u>F</u>ilename text box, and you want HyperACCESS to search subdirectories of the current path when adding files to the list, select the **Include matching files from subdirectories** check box.
- 4. If you intend to make additional selections, click the **Add** -->> button. (This isn't necessary if you've used the **Restore Batch...** button, or if you're ready to press **Send** based on a simple file selection.)
- 5. If necessary, you can remove files from the list by selecting them and clicking the **Remove** button. You can use standard windows extended selection to remove multiple files.
- 6. If necessary, use the **Protocol** drop-down list box to select a different file transfer protocol. The receiving system must be using the same protocol.
- 7. If you need to change settings for the selected file transfer protocol, press **Settings...** to see a dialog box for the selected protocol.
- 8. If the protocol supports file path information, you can select the **Include paths** when sending file names check box.
- 9. If you want to save the list of files for future transfers, click the **Save as batch...** button. This button displays a file <u>browse</u> dialog to specify the batch file name.
- 10. Type commands to the remote system to send the file(s). (Commands vary from system to system, so we can't provide detailed instructions here.) When the remote system is ready, press the **Send** command button. This causes HyperACCESS to enter send mode, and displays the **Send Progress** dialog box.

Starting Sessions from Program Manager

HyperACCESS lets you start communications sessions by simply clicking a Program Manager icon. To use this option, you create a Phonebook entry (see <u>Adding a Phonebook Entry</u>), or use one of the pre-defined Phonebook entries. Then follow these steps:

- 1. From Windows Program Manager, select the program group in which you want the new icon to appear.
- 2. Select File/New.
- 3. From the **New Program Object** dialog box, select the Program <u>I</u>tem radio button and click on **OK**.
- 4. In the **Program Item Properties** dialog box, enter the following:
 - a. In the <u>Description</u> text box, enter the system name used to describe the Phonebook Entry. (Any description will work, but using the system name will avoid confusion.)
 - b. In the **C**ommand Line text box, enter the path and execution file name for HyperACCESS followed by the name of the Phonebook entry's filename. For example:

c:\hawin\hawin.exe mci_mail.has

Note: The Phonebook entry file should be in the Phonebook's search path.

- c. In the **W**orking Directory text box, enter the path for the HyperACCESS directory.
- d. Click on the **Change Icon...** command button. This displays the **Change Icon** dialog box that has all the predefined HyperACCESS icons available for selection.
- e. Select the icon of your choice, and click on **OK**.
- 6. Click on **OK** in the **Program Item Properties** dialog box.

The icon appears in the selected program group. To execute that communications session without stopping to select a Phonebook entry, simply double-click your new icon.

Using Browse

Many dialog boxes in HyperACCESS have one or more **Browse...** command buttons. These buttons display Standard browse dialog boxes. Browse dialogs always have a <u>title</u> consistent with the context of their use. These dialog boxes have the following components:

File Name list

The **File Name** <u>text box</u> lets you enter a <u>path</u> or file name or <u>wild card</u> selection. For example, if you enter *.HAS in the text box, all files with an HAS suffix would appear in the files list.

List Files of Type

This <u>drop-down list</u> provides standard wild card selections for the file name text box. It provides an alternative technique for specifying types of files to list.

Directories list box

The directories list box graphically shows the path to the HyperACCESS (or current) directory. You can change the current directory by <u>double-clicking</u> on any entry in the list box, or you can select an entry and <u>click</u> on **OK**.

Drives drop-down list box

You can change the current drive letter with the drives drop-down list box. It contains all hard and floppy disk drives defined on your system.

Where the context requires, a browse dialog may only permit selection of the drive and directory path. In this case, the **File name** list and **List files of type** text boxes aren't present.

Using Context Menus

Context menus (sometimes called pop-up menus) appear near the mouse pointer when you click the mouse's button 2 (normally the right button). The term context menu refers to the fact that displayed menu items depend on location of the mouse pointer, type of window currently active, and application.

In HyperACCESS, context menus provide an additional technique for performing commonly used functions. You can access all items in HyperACCESS context menus through menu bar selections or the button bar (if it's displayed). The advantage of context menus is that they are right there -- at the object you're working with. The context menu is just one mouse-click away, and it contains only those options pertinent to your present operation/object.

The following sections describe the context menus available in HyperACCESS. Press \geq to view the next section sequentially, or make a selection from the list below:

<u>Using Terminal/Backscroll Buffer Context Menus</u>

Using Launch Pad Context Menus

Using Terminal/Backscroll Buffer Context Menus

There are two different context menus displayed when you <u>click</u> (or press) mouse button 2 in the <u>terminal</u> /<u>Backscroll Buffer</u> pane of a <u>session window</u>. The menu depends on whether:

- The mouse pointer is over selected text.
- The mouse pointer is anywhere else in the terminal/Backscroll Buffer pane of the session window.

Over Selected Text

When the mouse pointer is over selected text, the context menu has the following items:

Copy to Clipboard

Copies selected text to the Clipboard.

Copy to Host

Copies selected text to the host.

Copy to Host with <ENTER>

Copies selected text to the host and sends a carriage return and, optionally, line feed character. (Depending on <u>Properties/Communications/ASCII</u> Setup...)

Copy to Launch Pad

Copies selected text to Launch Pad.

Copy to Printer

Copies selected text to the printer.

Copy to File...

Copies selected text to a file you specify using a file <u>browse</u> dialog.

Find...

Displays the **Find** <u>dialog box</u>. The <u>Find What: text box</u> contains the selected text. Find limits its search to the <u>terminal</u> /<u>Backscroll Buffer</u> pane of the <u>session window</u>.

Anywhere Else

When the mouse pointer is anywhere in the terminal/Backscroll Buffer pane other than over selected text, the context menu has the following items:

Receive File...

Displays the **<u>Receive</u>** dialog box.

Send File...

Displays the **<u>Send</u>** dialog box.

Capture to File

The Capture to File menu item appears two ways -- with ellipsis and with a right-pointing arrow head. When selected with an ellipsis showing, the <u>Capture to File dialog box</u> displays. Otherwise, the <u>Capture to File cascade menu</u> displays.

Capture to Printer

The Capture to Printer menu item appears two ways -- with ellipsis and with a right-

pointing arrow head. When selected with an ellipsis showing, the <u>Capture to Printer</u> <u>dialog box</u> displays. Otherwise, the <u>Capture to Printer cascade menu</u> displays.

With a printer active for the current session, this menu item appears as Capture to Printer (without ellipsis, but with a right pointing arrow head). Selecting Capture to Printer displays the Capture to Printer cascade menu.

Paste to Host

Transmits text in the Windows Clipboard to the host system.

Paste from File...

Displays a standard file <u>browse</u> dialog box. Once you select a file, its contents are transmitted to the host system. This is the same as selecting $\underline{\mathbf{T}}$ ransfer/ $\underline{\mathbf{S}}$ end using Text Send protocol.

Select Terminal Screen

<u>Selects</u> (highlights) the contents of the <u>terminal area</u>. You can copy selected text to the Windows Clipboard, Launch Pad, or a file.

Select All

Selects (highlights) the contents of the <u>terminal area</u> and <u>Backscroll Buffer</u>. You can copy selected text to the Windows Clipboard, Launch Pad, the host, or a file.

Find...

Displays the $\underline{\textbf{Find}}$ dialog box. Find limits its search to the $\underline{\text{terminal}}$ / $\underline{\text{Backscroll Buffer}}$ pane of the $\underline{\text{session window}}$.

Using Launch Pad Context Menus

There are two different context menu displayed when you <u>click</u> (or press) mouse button 2 in the <u>Launch Pad</u> pane of a <u>session window</u>. The menu depends on whether:

- The mouse pointer is over selected text.
- The mouse pointer is anywhere else in the Launch Pad pane of the session window.

Over Selected Text

When the mouse pointer is over selected text, the context menu has the following items:

Undo

Available after a cut or paste operation. Reverses the last operation.

Cut

Copies selected text to the Windows Clipboard and deletes the text from Launch Pad.

Cut to host

Transmits selected text to the <u>remote system</u> and deletes the text from Launch Pad. With all text in Launch Pad selected, this is the same as clicking Launch Pad's **Send** button.

Copy

Copies selected text to the Clipboard.

Copy to

Displays a cascade menu that permits you to copy selected text to the host, printer, or file.

Paste to Launch Pad

Replaces selected text with text contained in Windows Clipboard.

Paste from file...

Displays a standard file <u>Browse</u> dialog. Once you select a file, its contents are copied to Launch Pad replacing the selected text.

Find...

Displays the <u>Find dialog box</u>. The <u>Find What: text box</u> contains the selected text. Find limits its search to the Launch Pad pane of the session window.

Close Launch Pad

Closes the Launch Pad pane of the session window without transmitting or removing its contents.

Anywhere Else

When the mouse pointer is anywhere in the Launch Pad pane other than over selected text, the context menu has the following items:

Undo

Available after a cut or paste operation. Reverses the last operation.

Clear

Deletes the contents of Launch Pad, and leaves the Launch Pad pane of the session window open.

Paste to Launch Pad

Inserts text contained in Windows Clipboard at the current insertion point.

Paste from File...

Displays a standard file <u>browse</u> dialog. Once you select a file, its contents are copied to Launch Pad at the current insertion point.

Find...

Displays the <u>Find dialog box</u>. Find limits its search to the Launch Pad pane of the session window.

Close Launch Pad

Closes the Launch Pad pane of the session window without transmitting or removing its contents.

Using DDE Links Without Programming

You can create DDE links between client applications and HyperACCESS without writing a program. This is accomplished using **Copy Link** and **Copy Link to Pattern**. For example, if you want to retrieve specific stock quotations from Dow Jones, and you have a stock listing group pre-defined, you can create a copy link in Excel that will automatically access HyperACCESS, connect to Dow Jones, search downloaded data for a particular stock of interest, and store information you want in your Excel spread sheet.

A general outline for accomplishing this task is as follows:

- 1. Run HyperACCESS and connect to Dow Jones while recording your logon sequence. See Recording a Logon Sequence.
- 2. Create your download list in Dow Jones.
- 3. Download the list of stocks, so you can see exactly what the data looks like.
- 4. Disconnect from Dow Jones.
- 5. Stop recording, and select the **Install as current logon task** check box.
- 6. Select **F**ile/**S**ave to save the changes to the Dow Jones session.
- 7. Select text from the <u>terminal area</u> or <u>Backscroll Buffer</u> that uniquely identifies the data you want HyperACCESS to look for in a pattern match.
- 8. Select **E**dit/Cop**y** or press <Ctrl>+**C** to copy the string for the pattern match to the Clipboard.
- 9. Select **E**dit/Copy Lin**k**. This displays the **Copy Link** dialog box.
- 10. Scroll through the list until **PatternSearch** is visible. Select **PatternSearch** and click **OK**.
- 11. In the <u>Copy Link to Pattern</u> dialog box, press <Ctrl>+**V** to paste your pattern string into the **Pattern to search for** text box.
- 12. Select the appropriate **Text to return**, and click **OK**.
- 13. Switch to Excel and load your spread sheet. In the cell that you want the data to appear, select **E**dit/Paste **L**ink.
- 14. Excel will initiate the Dow Jones session using the DDE link. Whenever you execute the spread sheet and update the cell with the link, Windows will start HyperACCESS, if necessary, request the Dow Jones session, and HyperACCESS will search for the pattern you specified, so the data you requested can be transferred to Excel.

Note: Some client applications have a link timeout value that you may have to change to allow sufficient time for HyperACCESS to connect to the remote system and obtain requested data.

File

File gives you some of the same capabilities as the Phonebook \underline{F} ile menu. For example you can begin a communications session and exit HyperACCESS. In addition, you can disconnect a session, or capture interaction with the remote system to a file or printer.

Use the scroll bar to see more commands.

New

Displays the **Description** dialog box to permit you to name the session and select an <u>icon</u>. It then opens a <u>session window</u> using the name you specified and displays the **Communications** dialog box with default values from the New Session Defaults <u>Phonebook entry</u>. You can modify any parameters in this dialog box before continuing.

<u>O</u>pen...

Opens another session window using a dialog box requesting the file name of the Phonebook entry. **O**pen doesn't initiate <u>modem</u> commands or claim a port.

Once open, you can make modifications to Phonebook parameters, and connect to a remote system. If you want, you can use $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{S}}$ ave or $\underline{\mathbf{F}}$ ile/Save $\underline{\mathbf{A}}$ s to modify or create a new Phonebook entry.

Close

Closes the current session window. If the session is connected to a <u>remote system</u>, HyperACCESS displays a warning dialog. If the session has been modified, HyperACCESS displays another warning dialog.

Save

Saves changes that have been made using the **P**roperties menu.

Save as...

Saves session communications parameters as a new file. HyperACCESS prompts you with a dialog box for the <u>path</u> and file name.

Connect...

Connect claims a <u>port</u>, initiates modem commands, and establishes a connection with a remote system.

Connect Special...

Connect Special provides three options:

- Record a new <u>logon</u> program.
- Open a port without dialing a phone number.
- Connect without running the logon program.

You specify the desired action through a dialog box that appears when you select Connect **s**pecial.

Disconnect

Disconnect sends commands to the modem to hang up the phone line, and disconnects the session from the claimed port.

Print...

Print displays a standard Windows dialog box that lets you print text selected in the terminal/Backscroll Buffer or Launch Pad. If no text is selected, HyperACCESS prints the entire window pane currently active. Use this menu item to access the standard Windows

Print Setup dialog box.

Capture to Printer...

Capture to <u>P</u>rinter lets you specify how interactive information is captured for printing, and whether it's released to the printer **By page** or **By session**. Releasing to the printer **By session** is important if you're printing to a network printer.

Capture to File...

Capture to $\underline{\mathbf{F}}$ ile displays a dialog box that lets you specify a path, file name, and other parameters for saving your interaction with the remote system. If capture has already started, this entry displays a cascade menu with entries to $\underline{\mathbf{S}}$ top, $\underline{\mathbf{P}}$ ause, $\underline{\mathbf{R}}$ esume, and take a $\mathbf{S}\underline{\mathbf{n}}$ apshot.

Exit

Exits (quits) HyperACCESS.

Edit

You'll find the session **E**dit menu items useful for text manipulation in the session window.

Use the scroll bar to see more commands.

Undo

Undoes various editing operations, such as cut, copy, and paste. Operations that send information to a remote system can't be undone.

Note: Undo is dimmed or grayed out when it can't reverse the previous editing operation. If you prefer, you can use the Undo accelerator key sequence: <Ctrl>+Z.

Cut

Cuts and deletes selected text from <u>Launch Pad</u>, and copies it to the Windows Clipboard. If you prefer, you can use the Cut accelerator key sequence: <Ctrl>+**X**.

Note: This item is grayed out (dimmed) unless text has been selected.

Cut to Host

Cut to $\underline{\mathbf{H}}$ ost sends selected text from Launch Pad to the <u>remote system</u>. It also deletes the selected text.

Note: This item is grayed out (dimmed) unless text has been selected.

Copy

Copies selected text from Launch Pad, terminal area, or Backscroll Buffer to the Windows Clipboard. If you prefer, you can use the Copy accelerator key sequence: <Ctrl>+ \mathbf{C} .

Note: This item is grayed out (dimmed) unless text has been selected.

Copy to

Copies selected text to the host, launch pad, printer, or file depending on the item selected from a cascade menu.

Note: This item is grayed out (dimmed) unless text has been selected.

Copy Link...

Displays the <u>Copy Link</u> dialog box that lets you specify a DDE link. After completing Copy Link, you use Paste Link in your client DDE application. HyperACCESS acts as a DDE server. It can provide any of ten general purpose variables that you can use in conjunction with HAPI; several dedicated variables, such as **PortType**, **BaudRate**, **ConnectTime**, etc.; and a pattern search variable. If you select **PatternSearch**, HyperACCESS displays the <u>Copy Link to Pattern</u> dialog box that lets you select a pattern match string for incoming data and the information that HyperACCESS should store in the **PatternSearch** variable.

Paste to Host

Pastes text from the Windows Clipboard to the host (remote) system. If you prefer, you can use the Paste accelerator key sequence: <Ctrl>+ \mathbf{V} .

Note: This item appears on the menu only when the current <u>insertion point</u> cursor is in the terminal/backscroll pane. It is mutually exclusive with Paste to Launch Pad.

Paste to Launch Pad

Pastes text from the Windows Clipboard to Launch Pad. If you prefer, you can use the

Paste accelerator key sequence: <Ctrl>+V.

Note: This item appears on the menu only when the current insertion point cursor is in Launch Pad. It is mutually exclusive with Paste to Host.

Paste from File...

Displays the **Paste from File** dialog box that lets you select a file and specify whether to past to the host or Launch Pad.

Clear

Clears (deletes) selected text from Launch Pad, and doesn't copy it to the Windows Clipboard.

Find...

Finds text specified in a dialog box.

View

Use session $\underline{\mathbf{V}}$ iew to customize the way HyperACCESS displays a <u>session window</u>. Use the scroll bar to see more commands.

Scroll Lock

Displays a check mark when selected. By default **S**croll lock is off. With **S**croll lock on, HyperACCESS prevents new data from displaying in the terminal/Backscroll Buffer.

Horizontal Split

Displays a check mark when selected. The terminal display/Backscroll Buffer is a single horizontally scrollable pane when **H**orizontal Split isn't checked (the default).

Selecting **H**orizontal Split displays a horizontal line in the session window. You then use either the mouse or cursor arrow keys to position the split. Click the mouse button or press <Enter> to set the split position.

Alternatively, you can use your mouse to drag the splitter bar from above the vertical scroll bar to the desired split. Either method displays two independently scrollable horizontal panes for the terminal/Backscroll Buffer. Scroll bars appear in the active pane.

Note: Each session window may be split both horizontally and vertically.

Vertical Split

Displays a check mark when selected. The <u>terminal</u> /Backscroll Buffer is a single vertically scrollable pane when $\underline{\mathbf{V}}$ ertical Split isn't checked (the default).

Selecting <u>V</u>ertical Split displays a vertical line in the session window. You then use either the mouse or cursor arrow keys to position the split. Click the mouse button or press <Enter> to set the split position.

Alternatively, you can use your mouse to drag the splitter bar from the left of the horizontal scroll bar to the desired split. Either method displays two independently scrollable vertical panes for the terminal/Backscroll Buffer. Scroll bars appear in the active pane.

Note: Each session window may be split both veritcally and horizontally.

Bezel

Displays a check mark when selected, and the terminal area has a 3-dimensional appearing bezel around it. When unselected, the bezel isn't displayed. A line separates the terminal area from the Backscroll Buffer, and the two areas continue to have different background colors -- white for the terminal area and gray for the Backscroll Buffer.

Launch Pad

Displays a check mark when selected. By default, <u>Launch Pad</u> isn't displayed. Selecting this item displays the Launch Pad pane.

Status Bar

Displays a check mark when selected. If $S\underline{t}$ at us bar is checked (the default), HyperACCESS displays important session information at the bottom of the current session window.

Button Panel

Displays a <u>cascade menu</u> with options for positioning or hiding the Button Panel. The current position selection displays a check mark.

Button Size...

Displays a <u>dialog box</u> that lets you change the size of the buttons in the <u>session window</u> by dragging an edge or corner of the current button shape.

Each session has its own Button Panel. Changing the Button Panel location, button size, button order, or adding buttons, only affects the current session.

Fonts...

Fonts displays a dialog box that lets you change text font and size for the session.

Properties

The session <u>Properties</u> Menu has the same items as the <u>File</u> /<u>Properties cascade menu</u> in the Phonebook. In this case, the properties apply to the active session. You may explicitly save the changes to this or another <u>Phonebook entry</u> (using <u>File</u>/<u>Save or File</u>/Save <u>As...</u>), or HyperACCESS will ask whether or not to save changes when you close the session.

Use the scroll bar to see more commands.

Description...

Description displays a <u>dialog box</u> that lets you change the system name and icon for a selected Phonebook entry. You type or edit the system name in the <u>text box</u>, and pick an <u>icon</u> from a scrollable display or from an icon file.

Communications...

Communications displays a dialog box that you can use to change or add a phone number, baud rate, parity, and number of stop and data bits. You can also select type of modem, port, and terminal emulation; and modify default characteristics for pre-defined selections.

Transfer Protocols

Transfer Protocols displays a dialog box with a <u>drop-down list</u> box of available file transfer protocols. The <u>S</u>ettings... button displays a dialog box that enables you to change parameters of the selected transfer protocol.

File Usage...

File Usage displays a dialog box with text boxes to enter file names with <u>absolute</u> or <u>relative paths</u>. Among the names you specify are: <u>logon</u> program file, session log file, default capture file, and default transfer directory.

Preferences...

Preferences displays a dialog box with text boxes and rocker buttons to adjust settings for the Backscroll Buffer. It also permits you to define how you want to use your mouse buttons.

Runtime Values...

Runtime Values displays a dialog box that lets you enter variable data that your automation programs can use. You can enter your User Name, User ID, Password, and up to 10 different text strings.

Transfer

You can use session **T**ransfer menu to send (upload) and receive (download) files, as well as review the log for the session.

Use the scroll bar to see more commands.

Receive...

Receive displays a <u>modeless dialog box</u> that lets you set the file transfer protocol and other parameters for receiving files from a remote system.

Modeless dialog boxes let you continue to interact with the remote system with the <u>dialog box</u> displayed. This lets you prepare to receive before you execute the <u>remote system</u> commands to send the file(s) to you. Once you've typed the remote system commands, simply <u>click</u> the **Receive** button.

Send...

Send displays a <u>modeless dialog box</u> that lets you set the file transfer protocol and other parameters for sending files to a remote system.

Like $\underline{\mathbf{R}}$ eceive's dialog box, you can continue to interact with the remote system with the dialog box displayed. This lets you prepare to send files before you execute the remote system commands to have it receive them. Once you've typed the remote system commands, simply click the **Send** button.

Other major features of the dialog box:

- It supports <u>drag and drop</u> selection of files from File Manager for adding files to the send list.
- It lets you create or use a batch file.

Transfer log...

Transfer log displays a text file that contains a listing of file transfers. You specify the name of the file in **File Usage** dialog box, and the text editor in the **External Programs** dialog box.

Note: By default, all sessions use a file called **SESSION.LOG**. You can specify individual log files in the **File Usage** dialog box.

Automation

You can use <u>Automation</u> to run, record, and edit programs that will operate HyperACCESS. It has the same items as its <u>Phonebook</u> counterpart, plus it has three items that relate to recording. The new menu items are:

Use the scroll bar to see more commands. Also see the topic Automation Techniques.

Record

Starts recording your keystrokes and generates C language statements to perform required operations. **(Recording)** appears in the session <u>title bar</u>, and a **Recording in Progress** window opens that displays C language statements as they're generated.

The **Recording in Progress** window remains open until you stop recording. You can resize or reposition this window.

Recording Options...

Displays a <u>dialog box</u> that lets you determine whether the generated program will abort only by user intervention or if the remote system fails to respond.

Runtime Values...

Displays a dialog box that lets you specify a user name, user id, password, and up to 10 different text strings. You can hide the password so that it's not visible in the dialog box.

Window

You can use the session Window menu to control display of HyperACCESS's windows. This menu also lets you select the active window.

Use the scroll bar to see more commands.

<u>W</u>ipe

Wipe clears (erases) the terminal area in the current session window.

Reset terminal

Reset terminal clears the session window, and resets the terminal to its default settings, such as tab stops, cursor type, font, etc.

Cascade

Cascade arranges all document windows, one on top of the other, so that each <u>title bar</u> remains visible. Only the top-most, or active window is fully visible.

Tile

Tile arranges all open windows and modifies their size so that windows don't overlap and all windows are at least partially visible.

Show Clipboard

Loads Clipboard. You can resize or move Clipboard anywhere on your screen, and continue working in HyperACCESS.

Close All

Closes <u>A</u>ll HyperACCESS session windows without quitting HyperACCESS.

1 Phonebook

1 Phonebook begins the list of available windows. The active window is preceded by a check mark.

Absolute path

A complete listing of the disk drive and directories used to store or retrieve a file. It often includes the filename. Sometimes referred to as a fully qualified path or filename.

Accelerator key

See Shortcut key.

Access

To establish a connection and log on to a remote system.

Application Icon

A picture that is a graphical representation of an application. Same as <u>Icon</u>.

ASCII

An abbreviation for American Standard Code for Information Interchange. This standard code consists of 7 *data bits*(or binary values) per character. Letters, numbers, and special characters (\$, #, %, etc.) are represented by different ASCII codes. The ASCII character set represents 96 printable characters and 32 non-printable control characters.

Asynchronous

A method of communicating characters between computers. With asynchronous communication, characters can be sent without special coordination or control characters. See <u>Synchronous</u> communication.

Asynchronous adapter

See Communications port.

Autodial

A <u>modem</u> feature that allows users to dial telephone numbers without using a telephone. Commands for dialing can be manually entered from the computer keyboard or automatically issued by a communications program.

Backscroll Buffer

A special area of your computer's memory that contains a read-only image of the data scrolled off the terminal screen. HyperACCESS displays the Backscroll Buffer above the terminal area in the session window.

Baud

Although technically speaking, baud is the number of discrete signal changes that occur per second on a data line, the term baud is now used interchangeably with the term bits per second (<u>bps</u>). Hence, 1200 baud is the same as 1200 bps and equates to a transmission rate of about 120 characters per second (a character typically consists of 8 <u>data bits</u>, 1 <u>start bit</u>, and 1 <u>stop bit</u>).

Binary

A numbering system that is used by computers for storage of data. Binary numbers are stored as a series of 0's and 1's. Each 0 or 1 is referred to as a <u>bit</u>.

Bit

The smallest unit of information used by computer systems. A bit is either on or off, representing values 1 or 0, respectively. A series of 8 bits is called a $\underline{\text{byte}}$. $\underline{\text{ASCII}}$ characters are represented as one byte.

Boot

The process of starting a computer and loading its operating system from a storage device into the computer's memory. Most computers boot automatically when you turn them on.

bps

An abbreviation for bits per second, a measure of data transmission speed. See <u>baud</u>.

Button Panel

The Button Panel contains the currently active buttons for a window. Buttons may have either text labels or bit-mapped graphics (or both) to identify them. Each button executes an assigned program when it's clicked. Pressing your right mouse button on a button in the Panel displays one line button help.

Phonebook and each session window have independent Button Panels. Within each window, you can optionally display buttons along the top, left side, right side, or bottom. You can also float the Button Panel or close (hide) it.

Byte

Eight $\underline{\text{bits}}$ that are treated as one unit of information. Within your computer, numbers and characters are represented as bytes.

Carrier Detect signal

See <u>CD</u>

Cascade

An arrangement of all open windows, one on top of the other, so that $\underline{\text{title bars}}$ remain visible. Contrast with $\underline{\text{Tile}}$.

CD

An abbreviation for Carrier Detect. CD is an $\underline{\text{RS-232}}$ signal from a $\underline{\text{modem}}$ to a computer indicating that the modem has made a connection with a remote system. CD is also known as $\underline{\text{DCD}}$.

Character

Any alphabetic, numeric, or special character symbol. See also ASCII.

Character length

Also called <u>data bits</u> or <u>bits</u> per character, this is the number of bits required to represent a character. Standard <u>ASCII</u>characters have a character length of 7 bits.

Check box

In a \underline{GUI} , a square box next to a description of an option that you can turn on and off. A check box contains an X if the option is selected (turned on).

Checksum

A method of error checking that is sometimes used in <u>Xmodem</u> and other file transfer protocols. A checksum is a calculated by both the sending and receiving systems. The sending system transmits its calculated number. If the checksum received differs from the receiving system's calculated number, it requests retransmission of the block.

Choose

To use a mouse or keyboard commands to pick an item that starts an action in Windows.

Christensen protocol

A communications protocol (also known as <u>Xmodem</u>) developed by Ward Christensen and used to transfer text or binary files. Data is transferred in blocks, along with an error-checking code (or <u>checksum</u>), to insure error free transmission of data.

Clear to Send signal

See <u>CTS</u>.

Click

To press and release a mouse button (normally the left one) quickly. See also $\underline{\text{double-click}}$.

COM1, COM2, COM3, COM4

<u>Port</u> names used to represent physical devices on your computer. COM1 and COM2 usually have their own connector on your computer to which your <u>modem</u> or other peripheral devices are connected. Internal modems often have the ability to be configured as COM3 or COM4 in addition to COM1 or COM2.

Command button

In a $\underline{\text{GUI}}$ a button in a dialog box that performs a command, such as OK or Cancel. Same as $\underline{\text{push button}}.$

Communications port

Also known as a <u>port</u>, <u>serial port</u>, or adapter. A port is the physical connection through which data are transferred into and out of a computer.

Compiling

The process of converting a human-readable version of a program into a machine-readable version that a computer can execute.

Compression

The process of reducing the total size of data by converting it to a more compact format. HyperACCESS uses data compression whenever possible to transfer files in the least amount of time.

Configuration

The term used to describe your computer hardware or settings of options that change how your hardware or software behaves.

Connect time

The length of time that has elapsed between when you <u>sign on</u> to a remote system and when you sign off. The connect time displays at the bottom of a session window in the status bar.

Context menus

Context menus (sometimes called pop-up menus) appear near the <u>mouse pointer</u> when you <u>click</u> the mouse's button 2 (normally the right button). The term context menu refers to the fact that the menu items displayed depend on the location of the mouse pointer, the type of window currently active, and the application.

Control characters

Codes that are part of the <u>ASCII</u> character set. These codes aren't usually printable or displayable on your screen. Control characters include carriage return, line feed, and others.

Control menu

In a <u>GUI</u>, the <u>control menu</u> contains commands that you can use to restore, resize, move, maximize, minimize, and close a window. You can <u>click</u> on the control menu box, normally located in the upper left hand corner of a window, to see the control menu. Sometimes called <u>system menu</u>.

CRC

An abbreviation for cyclic redundancy check. CRC is the preferred method of error checking used in <u>Xmodem</u> and other file transfer protocols. A CRC is calculated by both the sending and receiving systems. The sending system transmits its calculated number. If the CRC received differs from the receiving system's calculated number, it requests retransmission of the block.

CTS

An abbreviation for clear to send, which is an $\underline{\text{RS-232}}$ signal from a modem to a computer that indicates the remote system is ready to receive data.

Cursor

The indicator on your display that shows where characters you type will appear on the screen. In a <u>GUI</u>, the cursor may be displayed in various ways such as an <u>insertion point</u>, <u>mouse pointer</u>, or underline character.

Data bits

The number of <u>bits</u>, usually 7 or 8, in a <u>data word</u> that contain data. See also <u>start bits</u>, <u>parity</u>, and <u>stop bits</u>.

Data Carrier Detect signal

See <u>CD</u>or <u>DCD</u>.

Data Terminal Ready signal

See <u>DTR</u>.

Data word

The combination of <u>start bits</u>, <u>data bits</u>, <u>parity bits</u>, and <u>stop bits</u> is called the data word. One data word is used to represent each character of transmitted data.

DCD

See <u>CD</u>.

DCE

An abbreviation for data communications equipment, which identifies the specific type of $\underline{\text{RS-232}}$ port that is commonly found on peripheral equipment such as modems. Contrast with $\underline{\text{DTE}}$.

Default drive

	The disk drive that is assumed	l unless you	explicitly specify	v the letter of	a different driv
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Dialog box

In a <u>GUI</u>, a special window displayed by an application. A dialog box may display options you need to choose among (usually with **OK** and **Cancel** <u>command</u> <u>buttons</u>); or it may display a warning (sometimes with **Yes** and **No** command buttons); or it may explain why a command can't be completed as requested (usually with an **OK** command button).

DOS

An abbreviation for disk operating system. It is frequently used as a generic description for MS-DOS, PC-DOS, and other equivalent disk operating systems.

Double-click

To $\underline{\text{click}}$ a mouse button twice in rapid succession.

Download

The process of receiving a file from another computer. (<u>Upload</u> means to send a file to another computer.) Since some people find the terms download and upload confusing, HyperACCESS and this manual use the terms send and receive.

Drag

To press and hold a mouse button (usually the left one) while moving the mouse.

Drop-down list box

In a <u>GUI</u>, a text box with the current choice displayed in the box. You can change the choice by clicking (see <u>click</u>) on the underlined arrow in the square box at the right (displaying the drop-down list) and choosing a different option, or by typing in the text box.

DSR

An abbreviation for data set ready. DSR is an $\underline{\text{RS-232}}$ signal from a $\underline{\text{modem}}$ to a computer indicating that the data set (modem) is ready to communicate.

DTE

An abbreviation for data terminal equipment, that identifies the specific type of $\underline{\text{RS-232}}$ port that is commonly found on personal computers and terminals. Contrast with $\underline{\text{DCE}}$.

DTR

An abbreviation for data terminal ready. DTR is an $\underline{\text{RS-232}}$ signal from a computer to a $\underline{\text{modem}}$ indicating that the data terminal (computer) is ready to receive data. It is used to force the modem to disconnect (hang up) from a remote system.

Echo

The process whereby a computer sends back a duplicate of each received character to the computer that sent the character. In communications with most remote, dial-up systems, characters you type on your keyboard will be echoed back to you by the remote system.

Electronic mail

Messages sent from one computer to another through telephone lines. Sometimes called E-mail for short.

Emulate

To enable a computer to simulate the behavior of a terminal.

Escape Sequences

Escape sequences let remote programs control your terminal or printer. They also allow your terminal to inform the remote system about terminal status, such as cursor position. Escape sequences begin with the ASCII ESC (1Bh) character. Depending on the terminal being emulated, they may include any number of additional characters after the ESC character. Escape sequences generally don't print or display on your screen.

Flow control

A means by which a computer or device that is receiving data can command the computer or device that is sending data to suspend and resume sending. Typical means of flow control are $\underline{\mathsf{XON/XOFF}}$ and $\underline{\mathsf{hardware\ handshaking}}$.

Formatting

The process performed by DOS or OS/2 FORMAT program, which prepares (initializes) a disk to accept files. Also the process of arranging data or text, as in an editor.

Full duplex

A mode of communications whereby characters you type are sent directly to the remote computer without first being displayed on your screen. The characters display on your screen only after the remote system has sent an <u>echo</u> of the characters back to you.

GND

An abbreviation for ground. GND is an $\underline{\text{RS-232}}$ signal that serves as a signal ground between a computer and a $\underline{\text{modem}}$.

Ground signal

See <u>GND</u>.

GUI

Abbreviation for graphical user interface, such as Windows or OS/2 Presentation Manager.

Half duplex

A mode of communications whereby characters you type are displayed on your screen as they are being sent. The remote computer does not echo characters you type when you are using half duplex.

Hardware handshaking

A process by which a computer uses lines in the <u>RS-232 cable</u>, in addition to those that carry serial data, to indicate to another computer when it is ready to accept data.

Hexidecimal (HEX)

A number system using base 16. (Decimal numbers use base 10 and <u>binary</u> numbers use base 2.) Each digit in a number system must represent values from zero to the base minus 1. For example, binary digits are 0 and 1. Decimal digits are 0,1,2,...,9. Hexidecimal digits are: 0,1,2,...,9,A,B,C,D,E,F.

The hexidecimal number system is convenient for modern computers because it takes four <u>bits</u> to represent a hexidecimal digit. Therefore, two hex digits represent a <u>byte</u>.

Host Mode

Host mode lets your PC answer incoming telephone calls. You can restrict callers by name and password, and you can restrict what they can access on your PC.

Host system

A computer system that accepts calls and responds to commands that the caller types on a terminal or on a computer that is acting as a terminal. Same as <u>Remote system</u>.

Host session

In HyperACCESS, you use <u>Host Mode</u> to answer incoming calls. Host mode requires an open <u>session window</u>, called the host session. You can have multiple concurrent host sessions, if you have multiple <u>communications ports</u> available on your PC.

HyperACCESS Application Programming Interface

HyperACCESS Application Programming Interface (or HAPI) provides function calls for any compiler that supports external references. This provides full language coupling between HyperACCESS and any programming language.

The same HAPI function calls are fully supported by HyperACCESS's built-in C language interpreter.

HyperProtocol

An error-free, streaming file transfer protocol developed by Hilgraeve. HyperProtocol is very fast over noisy or noise-free connections despite propagation delays common with long-distance calls, high-speed modems, X.25 and packet-switching networks.

lcon

A picture that is a graphical representation of various Windows elements. See also <u>Application Icon</u>.

Insertion point

In a $\underline{\text{GUI}}$, the flashing vertical bar usually displayed in a $\underline{\text{text box}}$ to indicate the place where you can type or edit information.

ISDN

An abbreviation for Integrated Services Digital Network, a digital transmission technology that enables voice and high-speed data communications to be multiplexed on a single telephone line.

Keyboard Macro

See <u>Macro</u>.

Launch Pad

A special area at the bottom of a session window that can be used to create and manipulate text.

List box

In a <u>GUI</u>, a rectangular box that displays a column of available choices. If there are additional choices available that are not displayed, the list box will have a <u>scroll bar</u>.

Log on (or logon)

Log on is a verb, meaning to type a user identification and password as necessary to gain access to a computer system. Logon is a noun, describing the activity of logging on or the information you type when logging on.

Macro

An automatic sequence that issues multiple keystrokes or characters when you enter a single keystroke or key combination.

Maximize button

In a <u>GUI</u>, this is a pointing-up triangle usually in the upper right-hand corner of a window. It's used to enlarge the window to fill the entire screen. To use it, move the <u>mouse pointer</u> to the maximize button and <u>click</u>. See also <u>minimize button</u> and <u>restore button</u>.

Memory

A computer has many kinds of memory. The term by itself usually refers to a storage area inside the computer where programs execute and data can be copied, held, and retrieved.

Menu

In a <u>GUI</u>, a list of items, which are usually commands.

Menu bar

In a <u>GUI</u>, the menu bar displays the name of each menu for the application, such as $\underline{\textbf{F}}$ ile and $\underline{\textbf{V}}$ iew.

Minimize button

In a <u>GUI</u>, the minimize button is a pointing down triangle usually in the upper right-hand corner of a window, and it's used to shrink the window to an *icon*. To use it, move the <u>mouse pointer</u> to the minimize button and <u>click</u>. See also <u>maximize button</u> and <u>restore button</u>.

Modem

A device that allows communications between two computers through telephone lines. This term is derived from MOdulator/DEModulator. A modulator converts digital signals from the computer into audio signals that can be transmitted over telephone lines. A demodulator converts audio signals back to digital signals. HyperACCESS and this manual occasionally use the term modem to refer to communications devices in general.

Modeless Dialog Box

A Modeless dialog box displays on top of the parent Windows application. However, you can move a modeless dialog box anywhere on the screen even outside the border of the application window. Although it remains on top and active, a modeless dialog box doesn't prevent you from using another window of the current application.

Mouse pointer

In a <u>GUI</u>, this is usually an arrow (but may have other shapes like an I-beam) that is controlled by a mouse and is displayed if you have installed a mouse in Windows.

Null modem cable

An $\underline{\text{RS-232 cable}}$ that allows the $\underline{\text{DTE}}$ ports of two computers to be directly connected to each other.

Off-line

A term for a computer system's not being connected to another system for the purpose of communications. Contrast with <u>on-line</u>.

On-line

A term for being connected with a remote computer for purposes of communications. Contrast with <u>off-line</u>.

Option button

In a \underline{GUI} , a circular button that selects an option from a list of mutually exclusive items. The selected option contains a black dot. You \underline{click} on an option button to select a different option. Same as $\underline{Radio\ button}$.

OS/2

A multitasking operating system developed jointly by Microsoft and IBM for 80286 and later computers. It is an alternative to the DOS, PC-DOS, or MSDOS operating system and Windows.

Parity

A <u>bit</u> having a value of 0 or 1 that is added to a character as the character is sent. The receiving system can use the parity bit as a means of detecting errors in the character. The parity bit added makes the sum of bits in a data word either an odd number (for odd parity) or an even number (for even parity).

Pathname

A listing of directories used to store or retrieve a file. See also <u>absolute path</u> and <u>relative path</u> and for details, your OS/2 or DOS manual.

Peripheral device

A device that is connected to a computer for supplying input and/or accepting output from the computer.

Phonebook entry

A Phonebook entry defines connection parameters for a remote system. For example, each Phonebook entry specifies <u>communications port</u>, <u>modem</u>, <u>parity</u>, etc. It can also define a phonenumber. Phonebook entries have a system name, a filename, and an <u>icon</u>.

Using the $\underline{\mathbf{V}}$ iew menu, you can choose to display some or all Phonebook entries in Phonebook. You can also choose to display icons, system names, filenames, or other information about Phonebook entries.

Phonebook window

The Phonebook window displays <u>Phonebook entries</u> in directories listed in the **Phonebook Location** <u>dialog box</u>. The default Phonebook shows <u>icons</u> for all Phonebook entries.

Using the $\underline{\mathbf{V}}$ iew menu, you can choose to display some or all Phonebook entries in Phonebook. You can also choose to display icons, system names, filenames, or other information about Phonebook entries.

Point

To move a mouse until the <u>mouse pointer</u> is located on an item. See also <u>choose</u>.

Port

See Communications port.

Push button

Same as command button.

Radio button

Same as Option button.

RD

An abbreviation for Receive Data. RD is an $\underline{\text{RS-232}}$ signal that carries data from a $\underline{\text{modem}}$ to a computer.

Reboot

To reboot is to restart a computer or to reload its operating system from a storage device, such as a disk, into a computer's memory. With microcomputers, you reboot by pressing <Ctrl>+<Alt>+<Delete>, by pushing a reset button on the computer, or by turning the power off and back on.

Receive Data signal

See <u>RD</u>.

Relative path

A listing of directories used to store or retrieve a file. A relative path assumes the current drive and directory are the starting point for the path. It often includes the filename.

Remote system

A computer or computer service (other than the one on which you're running HyperACCESS) with which you can establish a connection and exchange data. Same as <u>Host system</u>.

Request To Send signal

See <u>RTS</u>.

Restore button

In a <u>GUI</u>, this contains both a pointing-up triangle like the <u>maximize button</u> and a pointing-down triangle like the <u>minimize button</u>, usually in the upper right-hand corner of a window. The restore button replaces the maximize button after the window has been enlarged and will restore a window to its previous size. To use it, move the <u>mouse pointer</u> to the restore button and <u>click</u>.

Ring Indicator signal

See <u>RNG</u>.

RNG

An abbreviation for ring indicator. RNG, is an $\underline{\text{RS-232}}$ signal from a modem to a computer indicating that the telephone is ringing. Sometimes called ring detect.

Rocker Buttons

HyperACCESS provides these buttons as an alternative to typing a number in a <u>text box</u>. There are usually two rocker buttons whenever they appear. The larger, left-most provides course increments, while the smaller provides fine increments. In this case, 10 second and one second increments respectively.

RS-232 cable

A standard type of cable adopted by the Electronic Industries Association (EIA) to ensure uniformity of interfacing signals between two computers and/or peripherals. RS-232 cables typically plug onto male or female 9-pin or 25-pin D sockets on your computer, modem, or other peripheral devices.

RTS

An abbreviation for request to send. RTS is an $\underline{\text{RS-232}}$ signal from a computer to a $\underline{\text{modem}}$ that indicates the computer has data to send to a remote system.

Scroll bar

In a <u>GUI</u>, a vertical scroll bar appears on the right-hand side of a window and the horizontal scroll bar appears at the bottom of a window. Each scroll bar contains a scroll box, which may be moved by dragging (see <u>drag</u>) it to see different areas of a window. You can also <u>click</u> on the bar or the arrow buttons on either end.

Select

To select is to mark an item by clicking (see $\underline{\text{click}}$) on it or by highlighting it using keyboard commands. See also $\underline{\text{choose}}$.

Serial port

See Communications port

Session window

A session window is opened whenever you create a new <u>Phonebook entry</u>, or open or connect to a <u>remote system</u>. Multiple session windows can be opened concurrently. You can actively communicate through any number of session windows at the same time provided you have <u>communications ports</u> and <u>modems</u> available.

Shortcut key

A key combination or sequence that can be used in place of selecting a menu item. For example, you can use the shortcut key <Ctrl>+X instead of selection the $\underline{\textbf{E}}$ dit/ $\underline{\textbf{C}}$ ut menu item.

Sign-on (or Sign on)

HyperACCESS uses the terms <u>log on and logon</u>, in place of sign on and sign-on.

Software handshaking

A method by which a system that is receiving data can send <u>control characters</u> to the computer that is sending, to indicate when it is ready to receive data.

Start bits

<u>Bits</u> that are added to the beginning of a data character (see <u>data bits</u>) during <u>asynchronous</u> communications.

Stop bits

 $\underline{\text{Bits}}$ that are added to the end of a data character (see $\underline{\text{data bits}})$ during $\underline{\text{asynchronous}}$ communications.

Synchronous

A method of communicating characters between <u>modems</u>. With synchronous communication, the two modems coordinate transmission using special sequences of control characters. See <u>Asynchronous</u>communication.

Syntax

The rules governing the use of a programming language.

System

In HyperACCESS, a computer with which you can communicate via $\underline{\text{modem}}$, cable, or other communications device.

System List

The directory of remote systems that appears as the Phonebook in HyperACCESS.

System menu

Same as control menu.

TD

An abbreviation for transmit data, TD, is an $\underline{\text{RS-232}}$ signal that carries data from a computer to a $\underline{\text{modem}}$.

Terminal

A device consisting of keyboard and screen that can be connected to a host computer to allow you to operate the host computer. Typically, the function of communications software is to make your computer act like, or emulate, a terminal.

Terminal area

The terminal area is the portion of the <u>session window</u> where interaction with the remote system takes place. By default, the terminal area is surrounded by a bezel. This bezel can be removed using the $\underline{\mathbf{V}}$ iew menu.

Terminal emulation

A feature that allows a computer to mimic the behavior of different	t types (of terminals.
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Text box

A rectangular box in a <u>GUI</u> into which you type information, such as a phone number.

Text editor

A program that allows you to create and edit files that contain printable or displayable text. For example, Windows Notepad is a text editor.

Text file

A file containing <u>ASCII</u> characters. These characters are normally printable. For certain applications, <u>control characters</u> are embedded in the text to inform the program that is processing the text to take some action.

Tile

A series of open windows so that no windows overlap and all are at least partially visible. Contrast with <u>Cascade</u>.

Title bar

In a <u>GUI</u>, the title bar appears at the top of the window to identify that window with a <u>window title</u>, such as **HyperACCESS for Windows** or **Phonebook**. The title bar of an active window is displayed with a different color or intensity than inactive windows.

Transmit Data signal

See <u>TD</u>.

TTY

TTY stands for Teletype. A Teletype terminal is the simplest type and is compatible with more remote systems than any other. Its distinguishing feature is that data come onto its screen one line at a time, similar to the way the data would print on a printer.

Upload

To upload is to send a file to another computer (contrast with <u>Download</u>). Since some users find the terms upload and download confusing, this manual uses the terms send and receive.

Wildcard characters

Wildcard characters, also known as global filename characters, are the symbols * and ?, which represent unknown or unspecified characters in filenames. See your DOS or OS/2 manual for details.

Window title

In a $\underline{\text{GUI}}$, this appears in the $\underline{\text{title bar}}$ at the top of the window to identify the name of the window, such as $\mathbf{HyperACCESS}$ for $\mathbf{Windows}$ or $\mathbf{Phonebook}$.

Workspace

In a $\underline{\text{GUI}},$ the workspace is the window area you'll use to work with and display information.

Xmodem protocol

Xmodem is the most commonly used name for an error-free file transfer protocol developed by Ward Christensen. In this protocol, data are transferred as blocks along with error-checking (or checksum) codes. ASCII control characters are used to synchronize the transfer.

XOFF/XON

A method of $\underline{\text{flow control}}$ or $\underline{\text{software handshaking}}$ used primarily during transfer of text or textlike data.

Add Character Translation Dialog Box

This dialog box lets you add characters for filtering or stripping in a translation table file. It has the following options and parameters:

Character

This drop-down list box lets you select or enter an ASCII character code according to the selection of Decimal or Hex in the **Character Filtering** dialog box. This is the original incoming or outgoing character that will be translated or removed from the data.

Convert to

This option button indicates that you want to translate **Character**. The associated drop-down list box lets you select or enter an ASCII character code according to the selection of Decimal or Hex in the **Character Filtering** dialog box. This character is the result of the incoming or outgoing translation.

Strip

This option button indicates that you want to remove **Character** from the incoming or outgoing data.

Apply To

By default, this group shows the option selected in the **Character Filtering** dialog box. You can change the Incoming or Outgoing direction for the character you're currently defining.

Add Macro Dialog Box

The **Add Macro** dialog box has the following features:

Macro text

This text box lets you specify a macro by thping the keys you want included in the macro. Simply press the key (or combination of keys) that you want included in the macro. To include <Tab>, <Enter>, <Esc>, <Backspace>, or <Delete>; first press <Insert> followed by the desired key.

Assigned key

This field lets you assign a key combination to a program. Simply press the key (or combination of keys) that you want to use to invoke the program. To assign <Tab>, <Enter>, <Esc>, <Backspace>, or <Delete>; first press <Insert> followed by the desired key.

Assigned button

This group area contains three <u>option buttons</u> that let you specify whether the program has $\underline{\mathbf{N}}$ o button, a $\underline{\mathbf{T}}$ ext button, or a $\underline{\mathbf{B}}$ itmap button.

Selecting $\underline{\mathbf{T}}$ ext button displays the insertion pointer in the associated text box. Any text you enter will appear on the button.

Selecting **B**itmap button lets you pick one of the pre-defined buttons in the scrollable area, or you can click on **Import Bitmap...**.

Help text

This text box lets you define help text for a button. Pressing your right mouse button on the button in the Button Panel displays this one-line help message.

Import bitmap...

Import bitmap... is dimmed or grayed out until you first select the $\underline{\mathbf{B}}$ itmap button option. Clicking this button displays the $\underline{\mathrm{Import Bitmap}}$ dialog box. This dialog box lets you specify a bitmap from Clipboard or from a file. In either case, clicking the $\underline{\mathbf{V}}$ iew... command button displays the button without committing you to use it.

<u>D</u>elete bitmap

This command button is dimmed or grayed out (unavailable) unless you first select a button that you added. You can't delete any of the pre-defined bitmaps.

Add Program Dialog Box

The **Add Program** dialog box has the following features:

Program

This <u>text box</u>, with its associated <u>**Browse...**</u> command button, lets you specify a program file name and <u>path</u>. The program file can be C language, or an **exe** file using <u>HAPI</u>.

Assigned key

This field lets you assign a key combination to a program. Simply press the key (or combination of keys) that you want to use to invoke the program. To assign <Tab>, <Enter>, <Esc>, <Backspace>, or <Delete>; first press <Insert> followed by the desired key.

Assigned button

This group area contains three <u>option buttons</u> that let you specify whether the program has \mathbf{N} button, a \mathbf{T} ext button, or a \mathbf{B} itmap button.

Selecting **T**ext button displays the insertion pointer in the associated text box. Any text you enter will appear on the button.

Selecting **B**itmap button lets you pick one of the pre-defined buttons in the scrollable area, or you can click on **Import Bitmap...**.

Help text

This text box lets you define help text for a button. Pressing your right mouse button on the button in the Button Panel displays this one-line help message.

Import bitmap...

Import bitmap... is dimmed or grayed out until you first select the $\underline{\mathbf{B}}$ itmap button option. Clicking this button displays the $\underline{\text{Import Bitmap}}$ dialog box. This dialog box lets you specify a bitmap from Clipboard or from a file. In either case, clicking the $\underline{\mathbf{V}}$ iew... command button displays the button without committing you to use it.

Delete bitmap

This command button is dimmed or grayed out (unavailable) unless you first select a button that you added. You can't delete one of the pre-defined buttons.

ASCII Setup Dialog Box

Options specified in the **ASCII Setup** dialog only apply to normal terminal interaction with the <u>remote system</u>. File transfer protocols aren't affected by these options.

The options for sending are:

Send line ends with line feeds

Default is CR only. Check this box to have HyperACCESS send a CR and LF at the end of each line.

Expand blank lines to include a space

The default permits null lines (two CRs without any intervening characters). Check this box to force HyperACCESS to always include at least one space character between two CRs.

Echo typed characters locally

The default is no echo. When set, this option displays transmitted characters in the terminal area. Select this option when you're communicating with remote systems that expect you to be operating in half duplex (sometimes called echoplex).

After sending each line, wait for character

The default is no waiting. However, if selected, the default character causes HyperACCESS to wait for an echoed 0Dh (CR) character before sending the next line. Most remote systems operate in full duplex mode, so all characters sent are echoed back. Waiting for CR can help synchronize transmission to slower remote systems.

Convert outgoing tabs to

The default is no conversion. However, if checked, the default is eight spaces. You can change the number of spaces using the <u>rocker buttons</u> or associated <u>text box</u>.

Line delay

The default is zero milliseconds. If you experience loss of characters at the beginning of lines when performing ASCII transmission to remote systems, changing this setting may improve transmission integrity. Use the rocker buttons or associated text box to change the number of milliseconds.

Character delay

The default is zero milliseconds. If you experience loss of characters when performing ASCII transmissions to remote systems, changing this setting may improve transmission integrity. Use the rocker buttons or associated text box to change the number of milliseconds.

The options for receiving are:

Append line feeds to incoming line ends

This <u>check box</u> forces a CR and LF at the end of each line. The default is to leave the lines as received. Lines sent to you by most remote systems will already end with CR and LF.

Force incoming data to 7-bit ASCII

Converts 8 bit data characters to standard ASCII by replacing the 8th bit with a zero.

By setting this check box, you can suppress spurious extended ASCII characters caused by line noise or incorrect parity and/or bits per character settings. With systems that send extended ASCII characters, leave this check box unselected. The default is

unselected.

Note: HyperACCESS ignores this setting when you use the ANSI emulator because it must support graphic characters that use the eighth bit.

Echo incoming data to sender

The default is no echo. When set, this option transmits every received character back to the remote system.

You may want to select this check box when you're communicating terminal-to-terminal.

Wrap lines that exceed terminal's width

The default is off, which discards characters beyond the terminal's maximum line length. When on, long lines appear on multiple terminal lines.

Show hex value of non-printing characters

The default is off. When on, <u>control characters</u>, <u>escape sequences</u> and screen control codes no longer control your screen, they display as hexadecimal values in square brackets.

By comparing these values to the table in *ASCII Characters* Appendix of the *HyperACCESS User's Manual* you may be able to spot troublesome characters or sequences.

Tab spacing for incoming

The default replaces each tab character with eight contiguous spaces. Use the rocker buttons or associated text box to change the number of contiguous spaces used to convert a tab character. Set this value to zero to turn conversion off.

Filtering...

This command button displays the <u>Character Filtering</u> dialog box. It allows you to automatically strip or convert either incoming and/or outgoing data.

Baud Rate Dialog Box

This dialog box displays a <u>drop-down list</u> providing common transmission rates between 300 and 115200 <u>baud</u>. The baud rate parameter determines the maximum transfer speed in bits per second (bps) between your PC and the modem.

With many <u>modems</u>, you can set a higher baud rate than the modem actually uses to exchange data with remote systems; see your modem manual.

Button Size Dialog Box

This dialog lets you use your mouse to $\underline{\text{drag}}$ one of the button sides or corner to change the size of all buttons in the current $\underline{\text{Button Panel}}$.

Capture to File Dialog Box

The **Capture** dialog box lets you specify a file for capturing your interaction with the remote system. It also provides various ways for you to use the file.

The information displayed and the parameters and options of the dialog are:

Directory

The absolute path of the current directory.

File

This drop-down list, with its associated **<u>Browse...</u>** command button lets you specify a <u>path</u> and name for the capture file.

If you've previously specified a default capture file in the <u>File Usage</u> dialog box, or you've previously used a capture file for this session, HyperACCESS displays the current capture file name in the drop-down history list box.

The drop-down list displays the last six files used for capture. You can edit the path or name in the list box, select a file from the drop-down list, or use the **Browse...** command button to select a capture file.

If file Already Exists

This section has the following four option buttons:

Append

If the file exists, adds new session interaction to the end of the current file. If the file doesn't exist, creates it.

Overwrite

If the file exists, deletes the old file and create a new capture file. If the file doesn't exist, creates it.

Rename by date

HyperACCESS creates file names using the extension specified plus the first letter of the file name with date/sequence appended. The date/sequence format is MMDD999 where MM is the month (values 01 to 12), and DD is the day (values 01 to 31), and 999 is a sequence number from 000 to 999 for the files created on that date.

Rename sequentially

appends a sequence number from 0 to 999 to the end of the file name. If the name is already 8 characters long, the sequence number replaces characters at the end of the name.

Capture Mode

This section has the following four option buttons:

Characters

Captures all incoming data except control or escape sequences.

Lines

(the default) Captures each line when the carriage return at its end is received. It also captures the line you're on when you stop or suspend capturing.

Screens

Captures whatever passes into the <u>Backscroll Buffer</u>, plus the <u>terminal area</u> when you

stop or suspend capturing.

Raw data

Captures all incoming data, including control or escape sequences.

Make these the default settings

This <u>check box</u> appears at the bottom of the dialog box. Selecting it makes the file specified the default capture file with the options you've selected the default settings.

Start

This <u>command button</u> returns to the <u>session window</u> and begins capturing data according to selected options.

Snapshot

This command button copies the current contents of the session window to the capture file. The Capture to $\underline{\mathbf{F}}$ ile menu item continues to display an ellipsis (selecting it displays this dialog box), so you can specify additional screen captures.

Capture to File Cascade Menu

After you've started capturing incoming data the Capture to $\underline{\mathbf{F}}$ ile menu item displays a cascaded menu with the following items:

<u>S</u>top

Stops file capture and closes the current capture file.

Pause

Suspends file capture, but doesn't close the current capture file. If capture is already paused, this menu item is grayed out (unavailable).

Resume

Restarts file capture using the current capture file. If capture is already active, this menu item is grayed out (unavailable).

Snapshot

Copies the entire terminal screen to the end of the current capture file.

Capture to Printer Dialog Box

The Capture to <u>Printer dialog</u> box shown in Figure - lets you specify how interactive information is captured for printing, and whether it's released to the printer **By page** or **By session**.

The information displayed in this dialog, and its parameters and options are:

Printer

Displays the current printer. This printer is selected using the Windows Control Panel, some other Windows application, or using the **Setup...** command button in the **Print** dialog box from **F**ile/P**r**int.

Characters

Prints all incoming data except escape sequences.

Lines

Prints each line when the carriage return at its end is received (the default). It also prints the line you're on when you stop or suspend printing, unless that line is blank.

Screens

Prints the entire screen whenever the remote system clears the screen or you stop or suspend printing.

By Page

This is the print method most users prefer. It submits each page to the printer (or Print Spooler) as a separate print job.

By Session

This print method hangs on to all pages until you close the session, then passes them to the printer as a single print job. This method prevents pages from being interspersed with print jobs submitted by other applications or users who share the same printer.

Pressing the **Start** command button initiates printing on the selected printer using the options specified.

Capture to Printer Cascade Menu

After you've started printing incoming data, Capture to $\underline{\mathbf{P}}$ rinter displays a cascade menu with the following items:

<u>S</u>top

Stops printing and closes the printer. The print data is released to the Windows print spooler.

Pause

Suspends printing, but doesn't close the printer. If printing is already paused, this menu item is grayed out (unavailable).

<u>R</u>esume

Restarts printing using the current printer. If the printer is already active, this menu item is grayed out (unavailable).

Snapshot

Copies the entire terminal screen to the printer.

Change Order of Details Dialog Box

This dialog box lets you define the sequence that entry details appear in Phonebook when you select $\underline{\bf V}$ iew/ $\underline{\bf D}$ etails.

To move a system:

- 1. Select an item by <u>click</u> ing on it.
- 2. Move the <u>mouse pointer</u> where you want the selected item to appear.
- 3. Click the mouse button.
- 4. Continue until you've changed the order of all items desired.
- 5. Click on **OK**.

Change Order of Statistics Dialog Box

This dialog box lets you define the sequence that statistics appear in Phonebook when you select $\underline{\mathbf{V}}$ iew/ $\underline{\mathbf{S}}$ tatistics.

To move a system:

- 1. Select an item by <u>click</u> ing on it.
- 2. Move the <u>mouse pointer</u> where you want the selected item to appear.
- 3. Click the mouse button.
- 4. Continue until you've changed the order of all items desired.
- 5. Click on **OK**.

Change Order of Systems Dialog Box

This dialog box lets you define the sequence that entries appear in Phonebook.

To move a system:

- 1. Select an item by <u>click</u> ing on it.
- 2. Move the <u>mouse pointer</u> where you want the selected item to appear.
- 3. Click the mouse button.
- 4. Continue until you've changed the order of all items desired.
- 5. Click on **OK**.

Character Filtering Dialog Box

This dialog box has the following options and parameters:

Translation file

This <u>drop-down list</u> displays translation table files in the HyperACCESS directory with a.**TRN** suffix. For a list of files supplied, see *ASCII Translation Table Files* in the *HyperACCESS User's Manual Appendix*.

Show

The two <u>option buttons</u> determine which portion of the translation table displays. These buttons also specify the default for the **Add** or **Modify Character Translation** dialog boxes.

Incoming

Used to display filtering and character stripping for data you're receiving.

Outgoing

Used to define and/or display filtering and character stripping for data you're sending.

Character list

Lists characters to filter or strip. You enter or modify characters in the translation tables by clicking on the **Add...** or **Modify...** command buttons.

Add...

Clicking on this command button displays the **Add Character Translation** dialog box, which lets you define characters that will be filtered or removed from the incoming or outgoing data stream (see below).

Modify...

Clicking on this command button displays the **Modify Character Translation** dialog box, which lets you modify characters that will be filtered or removed from the incoming or outgoing data stream (see below).

Undo

Clicking on this command button undoes the last modification to the character list.

List

The two option buttons determine how the character list displays the character values, and how you're defining character values.

The choices are:

Decimal values

Characters are listed using their decimal ASCII values.

Hex values

Characters are listed using their hexadecimal ASCII values.

Communications Dialog Box

Many of the items in the **Communications** dialog box have values based on the New Session Defaults Phonebook entry.

For purposes of this discussion, the parameters in this dialog can be grouped into the following general categories:

Dialing instructions

Transmission characteristics

Hardware characteristics/emulation

Dialing Instructions

You specify dialing instructions using three <u>text boxes</u> (two with corresponding <u>check boxes</u>). If you always call the same phone number to access a <u>remote system</u>, it's best to enter the **Phone number**. However, there may be advantages to leaving this field blank.

Selecting a Phonebook entry that doesn't have a phone number displays the <u>Telephone</u> <u>Number dialog box</u> to obtain the number (see also <u>Calling a System with no Phone Number</u>).

To use a dialing prefix, you must select the **Use stored dialing prefix** check box. Enter or <u>select</u> an item from the corresponding <u>drop-down list box</u> to specify the prefix. For example, you could enter a ***70** (to disable call waiting), an access code for an outside line (e.g., **9,**), or an 800 number for your long distance carrier. Entries specified in this drop-down list box are dialed before the **Phone number**. If the check box is selected and there is no entry in the drop-down list box, the check box has no effect.

To use a dialing suffix, you must select the **Use stored dialing suffix** check box. Enter or select an item from the corresponding drop-down list box to specify the suffix. For example, you could enter a credit card number or an accounting code. Entries specified in this drop-down list box are dialed after the **Phone number**. If the check box is selected and there is no entry in the drop-down list box, the check box has no effect.

Transmission Characteristics

Specifying transmission characteristics requires knowledge of your <u>modem</u> 's capabilities and the remote system's modem capabilities and settings. You'll usually be told to enter specific values for each of these parameters by the remote system's administrator.

Baud rate

A drop-down list providing common transmission rates between 300 and 115200 <u>baud</u>. The baud rate parameter determines the maximum transmission speed in bits per second (bps).

With many modems, you can set a higher baud rate than the modem actually uses to exchange data with remote systems.

Data bits

<u>Option buttons</u> that specify the number of bits per character. Most systems use seven or eight.

Parity

A drop-down list box to specify the type of character <u>parity</u>. The options are:

- None
- Odd

- Even
- Mark
- Space

Note: When using Odd, Even, Mark, or Space parity, you will customarily need to set Data bits to 7.

Stop bits

Option buttons that specify the number of <u>stop bits</u> per character. Most systems use one stop bit.

Priority

A drop-down list box to specify priority of this session relative to all other concurrent sessions and applications.

This field is usually set to **Normal**. Other possibilities are **Low** and **High**.

Hardware Characteristics/Emulation

The remaining drop-down list boxes and command buttons specify the characteristics of your hardware and the terminal you're emulating. Terminal emulation selections require knowledge of the remote system's capabilities.

Port type

A drop-down list box with the <u>port types</u> supported by HyperACCESS.

If you're using an internal or external modem, external <u>ISDN</u> terminal adapter, or <u>serial</u> <u>port</u> installed directly on your PC, select **Standard Com Port**.

Other port types for use with network interfaces such as **Standard Int 14H** may also appear here. For information on these port types, see the READ.ME file supplied with HyperACCESS.

Port name

A drop-down list box with the PC hardware communication port names. For **Standard Com Port**, the choices are:

- COM1
- COM2
- COM3
- COM4

The **Port Setup...** command button displays the **Port Setup** dialog box with additional settings for specific port types and names selected.

Modem or device

A drop-down list box with all <u>modems</u> supported by HyperACCESS.

The **Modem Setup...** command button displays the <u>Modem Setup dialog box</u> with additional modem settings. HyperACCESS specifies reasonable defaults for each of these settings. Settings in this dialog affect only this session, and are independent of settings used when calling other systems.

Terminal

A drop-down list box with terminal emulations supported by HyperACCESS.

The **Terminal Setup...** command button displays the <u>Terminal Settings</u> dialog box with additional emulation parameters. These parameters vary depending on terminal type.

ASCII Setup...

This command button displays the <u>ASCII Setup dialog box</u>. Options specified in the **ASCII Setup** dialog only apply to normal terminal interaction with the remote system. File transfer protocols aren't affected by these options.

Connect Special Dialog Box

Connect Special has three option buttons:

If you select **Record new logon program when connection is made**, HyperACCESS will begin learning your keystrokes as soon as you're connected to the <u>remote system</u>. When you have completed all the commands you want HyperACCESS to learn, select **Stop!** from the menu bar of the **Recording in Progress** window.

If you select **Open port but do not dial phone number** and click **OK**, HyperACCESS claims the <u>port</u> and opens a <u>session window</u>. However, no dialing commands are sent to the modem, and the logon program (if one exists) isn't run. You can enter modem commands manually, change communications parameters, or perform diagnostics. This option button appears dimmed if your modem or communications device doesn't have commands for dialing.

If you select $\underline{\mathbf{Do}}$ **not run logon program**, HyperACCESS connects the port and dials the phone number (if one exists) or displays the dialog box to obtain the number. Once connection with the remote system is established, you must manually $\underline{\log on}$ to the system.

Connection Dialog Box

The **Connection** dialog box lets you select the port type, port name, and modem that best describes the setup of your PC. Click the downward-pointing arrow or press Alt+Down Arrow to view the list of selections available for each of the following:

Port type

A drop-down list box with the <u>port types</u> supported by HyperACCESS.

If you're using an internal or external modem, external <u>ISDN</u> terminal adapter, or <u>serial</u> <u>port</u> installed directly on your PC, select **Standard Com Port**.

Other port types for use with network interfaces such as **Standard Int 14H** may also appear here. For information on these port types, see the READ.ME file supplied with HyperACCESS.

Port name

A drop-down list box with the PC hardware communication port names. For **Standard Com Port**, the choices are:

- COM1
- COM2
- COM3
- COM4

Modem or device

A drop-down list box with all <u>modems</u> supported by HyperACCESS. If your modem isn't listed by name, you can still get excellent results by selecting one of the following:

- Hayes-Compatible 1200
- Hayes-Compatible 2400
- Hayes-Compatible high speed
- User Modem 1-5

For more information, see Appendix B of the HyperACCESS User's Guide.

Copy Link Dialog Box

This dialog box lets you select a variable for a DDE link. Either enter a variable in the text box, or make a selection from the list. If you select **PatternSearch**, HyperACCESS displays the **Copy Link to Pattern** dialog box.

Copy Link to Pattern

This dialog box lets you specify a string of characters in the **Pattern to search for** text box. HyperACCESS looks for this string during a communications session. When the string is detected, the data selected in the **Text to return** list box is stored in the **PatternSearch** variable.

Copy to File

The <u>text box</u>, options, and buttons of this dialog box are:

Copy to file

This <u>drop-down list</u> box displays up to six files previously used for copy operations.

Browse... command button

Use this <u>command button</u> as an alternative to the drop-down list to specify a file for the copy operation. See <u>Using Browse</u> dialog boxes for a complete description.

If File Already Exists

This group box lets you specify whether you want to **Append** or **Overwrite** the file if it already exists. Select the desired <u>option button</u>.

Copy command button

Use this button to initiate the copy operation and close the dialog box.

Description Dialog Box

This dialog box provides you the ability to change the **System Name** that appears below the Phonebook <u>icon</u>. You can also use the <u>scroll bar</u> to view available **Icon**s, or add your own bit-mapped icons. The icon selected has a border around it. To change a selection, simply click on the icon desired.

If you press the **Import Icon...** command button, you'll see the <u>Import Icon</u> dialog box.

The **Sesson Notes** text box lets you type information about the <u>Phonebook entry</u>.

Dialing Method Dialog Box

This dialog box has two option buttons that let you set either **Tone** or **Pulse** dialing.

Dialing Prefix Dialog Box

Entries specified in this drop-down list box are dialed before the phone number. For example, you could enter a *70 (to disable call waiting), an access code for an outside line (e.g., 9,), or an 800 number for your long distance carrier.

External Utilities Dialog Box

This dialog permits you to change the programs used by HyperACCESS. By default, HyperACCESS uses Windows Clipboard and Notebook. To specify a different program for either the text or Clipboard viewer, enter the <u>path</u> and file name in the <u>text box</u> or use the corresponding **Browse**... <u>command button</u> to select the desired program.

File Usage Dialog Box

The **Files Usage** dialog has a series of <u>text boxes</u> for entry of file names with their <u>paths</u>. Each text box has an associated <u>**Browse...**</u> <u>command button</u> to assist you in selecting the file you want.

The files that are specified in this dialog are:

Upon connection, run program

This text box defines the path to a program that's automatically run when you connect with a <u>remote system</u>. These files should have a.**c** suffix for uncompiled C code, or.**exe** for compiled code written in any language (Visual Basic, Rexx, Microsoft C, etc.).

For dropped files, run

This text box defines the path to a program that executes when you <u>drag and drop</u> files from File Manager onto this session.

Before connection, run

This text box defines the path to a program that's automatically run before you connect with a remote system. One use is for support of host operation within HyperACCESS. You can also use this feature to substitute a user-defined modem handling routine for the built-in mechanisms. These files should have a **.c** suffix for uncompiled C code, or **.exe** for compiled code written in any language (Visual Basic, Rexx, Microsoft C, etc.).

Session backscroll file

Defines the session Backscroll Buffer file. This ASCII text file is used to save Backscroll data between sessions.

Session log file

Defines a default session log file. It is an <u>ASCII</u> text file that contains the time and date of key events that take place in the session. You can view this file from within the session by selecting **T**ransfer/**T**ransfer log.

Note: The viewer can be Windows Notebook (or any other editor) that you define using $\underline{\mathbf{O}ptions}$ / $\underline{\mathbf{E}}$ xternal Utilities.

Default capture file

Defines a default capture file. The capture file can be changed during a session. Changing the default capture file here has the same effect as changing it in session $\underline{\mathbf{F}}$ ile.

Default Receiving directory

Defines a default directory for files received from the remote system. The receiving directory can be changed during a session. You can use either a path <u>relative</u> to the HyperACCESS directory, or you can use an <u>absolute path</u>.

Default Sending directory

Defines a default directory for files transmitted to the remote system. The sending directory can be changed during a session. You can use either a path relative to the HyperACCESS directory, or you can use an absolute path.

Find Dialog Box

This dialog lets you find a text string in either the <u>terminal area</u>, <u>Backscroll Buffer</u> or Launch Pad.

The search begins at the current <u>insertion point</u> in the active window pane, and proceeds in the direction specified in the dialog box. You can reposition the insertion point while the **Find** dialog box remains active simply by <u>click</u> ing at the desired location.

The **Find** dialog text box and options are:

Find what

Enter the string you want to find in this <u>text box</u>.

Match whole word only

Mark this <u>check box</u> if your search string is a whole word. When selected, HyperACCESS will only find occurrences of the string that are delimited on both sides by spaces, punctuation, tabs, or new line characters. The default for this option is unselected.

Match case

Mark this check box if you only want to find exact matches with the same upper/lower case characters. The default for this option is unselected.

Direction

This option button group provides choices for searching $\underline{\mathbf{U}}$ p or $\underline{\mathbf{D}}$ own from the current insertion point or text selection. The default is Up.

Find next

This <u>command button</u> initiates or continues a search. You can continue to search for the next occurrence until you find what you're looking for, or see a Cannot find message.

Find Systems Dialog Box

You can use the **Find Systems** dialog to locate a system. You can search the Phonebook or elsewhere on your computer, such as another hard drive or floppy disk.

You can use any one or all four of the <u>check boxes</u> to select search domains for the system(s) you want to locate. Enter search strings in the corresponding <u>text boxes</u>. Selecting multiple search domains with selection criteria will find all systems and/or files containing the respective search strings.

The first item in the **Search** <u>list box</u> is **Phonebook**, which is selected by default. This entry causes HyperACCESS to search all drives/directories in the Phonebook search path (defined using <u>Options</u> /<u>P</u>honebook location). The **Search** list box also contains a list of all disk drives in the system. Standard Windows extended selection is supported in the list box.

The **Search** command button initiates the search, and lists the <u>absolute path</u> of files that satisfy the search criteria in the **Systems found** list box. Selecting an entry in the list makes the **Open**, **Connect**, and **Update Phonebook** command buttons available.

<u>O</u>pen

Opens the session.

Connect

Opens the session, connects the <u>port</u>, and dials the phone number.

Update

Adds the session entry to the Phonebook.

Font Dialog Box

This dialog box provides control over the font style and size used within the current session window.

The list boxes in the dialog perform the following functions:

Font

The <u>text box</u> displays the current selection, and the selection is highlighted in the corresponding list box. Enter a new font name in the text box, or make a selection from the list box. HyperACCESS's default font and Window's Terminal font provide all standard ANSI graphics characters. Using a font without graphics characters may produce unusual results.

Note: Only fixed-pitch fonts are listed, since proportionally-spaced fonts usually aren't appropriate for communications.

Font Style

The text box displays the current selection, and the selection is highlighted in the corresponding list box. Enter a new style in the text box, or make a selection from the list box.

Size

The text box displays the current selection, and the selection is highlighted in the corresponding list box. Enter a new value in the text box, or make a selection from the list box.

Auto Snap

This group box determines whether or not HyperACCESS automatically sizes the session window to fit the terminal area.

There are three option buttons that determine operation of auto snap:

Off Disables automatic snapping (the default). With auto snap off, you can manually adjust the session window to whatever width and height you want. Use View/Snap to manually resize the window to snuggly fit the terminal area after you change the font and/or window size.

On Turns auto snapping on. With auto snap, HyperACCESS

resizes the session window to eliminate all space between the right-hand border of the terminal area and the session window border. It also sets the window to the same height as the terminal area, so that none of the

Backscroll Buffer is normally visible.

Horizontal only Turns auto snapping on. This option reduces the session

window width to exactly fit the minimum width of the terminal area for the selected font, style, and size. It doesn't affect the vertical size of the session window, so you can manually set the amount of the Backscroll

Buffer you want displayed.

The behavior of auto snap depends on whether or not you select the <u>Automatically</u> adjust font size to session window size check box. With this option selected, HyperACCESS snaps the session window to fit the nearest (smaller) available size for the selected font and style that permits display of the terminal's full width.

When this option is not selected, the session window always snaps back to snuggly fit

the terminal area for the selected font, style, and size.

Sample

Displays a sample of the currently selected font, style, and size. If the font includes line draw characters some of them will appear in the box. Ohterwise, you'll see foreign characters, such as: \not E, \not C, , and \not E.

Automatically adjust font size to session window size

With this check box selected (the default), HyperACCESS automatically picks the best point size for the font and style selected and the terminal area size.

Global Changes Dialog Box

The **Global Changes** dialog box lets you select which setup parameters you want to change. You can select any combination of the following:

Connection (port and modem)

This selection displays the Connection dialog box.

Baud Rate

This selection displays the <u>Baud Rate</u> dialog box.

Pulse or tone dialing

This selection displays the <u>Dialing Method</u> dialog box.

Dialing Prefix

This selection displays the <u>Dialing Prefix</u> dialog box.

Transfer directories

This selection displays the <u>Transfer directories</u> dialog box.

HyperACCESS/5 to HA/Win Conversion Dialog Box

The **HyperACCESS/5 to HA/Win Conversion Dialog Box** dialog box lets you select the export file which you want to convert into HyperACCESS/Win <u>Phonebook</u> entries.

You can use the **Exported Filename** <u>text box</u> to specify a <u>path</u> and file name, or you can press the <u>**Browse...**</u> <u>command button</u> that displays the standard file browse dialog box from which you can select a drive, directory, and file.

HyperACCESS/Win Conversion Program Dialog Box

To complete the conversion, CONVERT.EXE needs to obtain settings from your HyperACCESS/Win DEFAULT.HAS file. <u>Modem</u> and <u>port types</u>settings from this file are applied to new <u>Phonebook</u> entries to ensure compatibility with your hardware configuration.

The **HyperACCESS/Win Conversion Program Dialog Box** dialog box lets you select the DEFAULT.HAS to be used in the conversion.

The DEAFULT.HAS file typically is located in the same directory as the rest of your HyperACCESS/Win session files (which all have the .HAS extension).

The new session files are placed in the same directory as the DEFAULT.HAS file. You may copy them to the desired directory.

Import Bitmap Dialog Box

You can use one of the <u>option buttons</u> to select a **User-defined bitmap from Clipboard** or a **User-defined bitmap from.BMP file**.

You can use the **Filename** <u>text box</u> to specify a <u>path</u> and file name, or you can press the <u>Browse...</u> <u>command button</u> that displays the standard file browse dialog box (in this case the title is **Import Bitmap**) from which you can select a drive, directory, and file.

If you press the **View...** command button, you can see the bitmap in the selected file (or clipboard). After viewing the bitmap, you press **OK** to return to the previous dialog box. Then click on **OK** to add the selected icon, or **Cancel** to return without adding the bitmap.

Import Icon Dialog Box

You can import an **Icon from.BMP or.ICO file**. Use the **Filename** <u>text box</u> to specify a <u>path</u> and file name, or you can press the <u>Browse...</u> <u>command button</u> that displays the standard file browse dialog box from which you can select a drive, directory, and file.

If you press the **View Icon...** command button, you can see the icon in the selected file (or clipboard). After viewing the icon, you press **OK** to return to the **Add Icon** dialog box. Then click on **OK** to add the selected icon, or **Cancel** to return without adding an icon.

Insert Response Box

The first text box in this dialog lets you enter the title for the displayed dialog box. The second, larger text box lets you enter instructions to the user.

Selecting \mathbf{OK} , generates a C language statements that displays the dialog box with the title and instructions you've specified and a text box. Another statement sends typed text to the remote system.

Keys & Buttons Dialog Box

This dialog box differs depending on whether it was accessed from the Phonebook <u>A</u>utomation or session <u>A</u>utomation menu. You can only create and assign <u>keyboard macros</u> from an open session window. This Help text describes the session <u>A</u>utomation/<u>K</u>eys & Buttons dialog box. References to macros are irrelevant from Phonebook <u>A</u>utomation/<u>K</u>eys & Buttons, but all other information is consistent between the two dialogs.

You can assign keyboard macros, automatically generated or manually created C language programs, or any. **exe** program that uses <u>HAPI</u>. The large list shows program file names and/or macros for currently defined buttons and keystrokes. You can assign a program to a key combination and/or a button. Assigned key combinations appear to the right of the program name. To view an assigned button, select the program, and the button appears in the Size of **b**uttons area.

List (session dialog box only)

This group box lets you choose whether you want to display macros, programs or both. Select the <u>check boxes</u> desired.

Sort by

You can change the sort order of the macros and/or program file names appearing in the list by selecting either **K**eys or **F**ile names in the **Sort by** group. If there are more key combinations and/or buttons assigned than can fit within the list area, a vertical <u>scroll bar</u> appears next to the file name list.

Add Macro... (session dialog box only)

To add an new macro click the **Add Macro...** <u>command button</u>. This button displays the **Add Macro** dialog box.

Add Program...

To add an new program click the **Add Program...** command button. This button displays the **Add Program** dialog box.

Modify...

Modifies the assignment of a program or macro to a key and/or button. Select the program or macro you want to modify, and click on **Modify...**. Either the **Add Macro** or **Add Program** dialog box displays, depending on what you select. You can modify the assigned key and/or button from within the displayed dialog box.

Delete

Deletes an assignment of a macro or program to a key and/or button. Select the program or macro you want to delete, and click on **Delete**.

Edit

This command button lets you edit a program. Select the program you want to edit, and click on $\mathbf{E}\mathbf{dit}$. HyperACCESS displays the program in an independent Notepad window (or other application specified in \mathbf{P} roperties / \mathbf{F} ile Usage).

Modem Definition Dialog Box

This dialog box lets you customize the modem initialization strings, or create custom initialization strings for modems that HyperACCESS doesn't list by name. When displayed with for a supported modem, it displays the initialization string determined by Hilgraeve engineers. If you change the setting, and want to return to the default, press the **Restore** command button.

Modem Setup Dialog Box

The **Modem Setup...** dialog box has additional <u>modem</u> settings. HyperACCESS specifies reasonable defaults for each of these settings. Settings in this dialog affect only this session, and are independent of settings used when calling other systems.

The parameters are:

Extra modem setup commands for this session

This <u>text box</u> allows you to specify special commands required to configure your modem for communications with this particular remote system.

Dialing

<u>Check boxes</u> to indicate whether the modem should use pulse or tone dialing. The selection is a function of the telephone company or in-house PBX capabilities.

Wait for carrier

<u>Rocker buttons</u> and text box that specify how long the modem should wait for a carrier signal from the answering modem.

Number of retries

HyperACCESS will automatically retry if the called number is busy or doesn't answer. Use the rocker buttons or text box to specify the number of retries.

Retry after

Rocker buttons and text box that specify the time delay between retries.

Accept callback from remote system

This check box indicates that the system you're calling will disconnect and call back as part of its logon security or to reverse telephone charges. This selection places the modem in answer mode upon completion of the current call.

Speaker

Use this check box to enable or disable the modem speaker.

Modem definition...

This <u>command button</u> displays the <u>Modem Definition</u> dialog box. It allows you to customize the modem initialization strings, or create custom initialization strings for a modem that isn't in the list supplied with HyperACCESS. When displayed with for a supported modem, it displays the initialization string determined by Hilgraeve engineers. If you change the setting, and want to return to the default, press the **Restore** <u>command button</u>. See section, <u>Custom Modem Specification</u> in the <u>HyperACCESS User's Manual Appendix</u>.

Modify Character Translation Dialog Box

This dialog box lets you modify characters for filtering or stripping in a translation table file. It has the following options and parameters:

Character

This drop-down list box lets you select or enter an ASCII character code according to the selection of Decimal or Hex in the **Character Filtering** dialog box. This is the original incoming or outgoing character that will be translated or removed from the data.

Convert to

This option button indicates that you want to translate **Character**. The associated drop-down list box lets you select or enter an ASCII character code according to the selection of Decimal or Hex in the **Character Filtering** dialog box. This character is the result of the incoming or outgoing translation.

Strip

This option button indicates that you want to remove **Character** from the incoming or outgoing data.

Apply To

By default, this group shows the option selected in the **Character Filtering** dialog box. You can change the Incoming or Outgoing direction for the character you're currently defining.

Multiple Calls

This dialog box appears when you select multiple Phonebook entries and attempt to connect using $\underline{\mathbf{F}}$ ile/ \mathbf{C} onnect or the \mathbf{Dial} button. It lets you specify whether you want to:

- Connect with <u>first</u> system that answers Connect with <u>all</u> systems in turn
- Use the rocker buttons or text box to enter the number of retries. Then click on ${\bf OK}$ to begin connection process.

Open File Dialog Box

The **Open File** dialog box is similar to other standard <u>Browse dialog boxes</u> used throughout HyperACCESS. A standard browse dialog box always has a title consistent with the context of its use.

Password Dialog Box

Enter the **Password** you want HyperACCESS to send a program issues the command to send the User ID runtime value. Select the **Store as permanent value** check box if you want this value stored for future use by this Phonebook entry.

Paste From File Dialog Box

The **Paste from File** dialog box lets you copy text from a file to the <u>remote system</u> or Launch Pad.

Paste from file

Type the <u>path</u> and file name in the <u>text box</u> or use the <u>drop-down</u> history list that displays up to six files previously used for paste operations.

Browse... command button

Use this button as an alternative to the drop-down list to specify a file for the copy operation. See also <u>Using Browse dialog boxes</u>.

Paste to

This group box allows you to specify whether you want to paste to the **Host** or **Launch Pad**.

Paste command button

Use this button to initiate the copy operation and close the dialog box.

Phonebook Details Dialog Box

The **Phonebook Details** dialog box contains a <u>check box</u> for each item that can be displayed. You can select items you want displayed by checking appropriate boxes. Items with unchecked boxes aren't displayed.

You can change the order of the Phonebook Details by clicking on the **Change Order** command button. This displays the **Change Order of Details** dialog box

Phonebook Location Dialog Box

The **Phonebook Location** dialog box lets you specify search <u>paths</u> for Phonebook entries. The default <u>Phonebook</u> location is the directory you used to install HyperACCESS; however, you can use any valid drive and directory.

The **Add...** command button displays a directory <u>browse</u> dialog box. Paths specified in the browse dialog box appear in the **Scanned directories and drives** list.

The **Remove** command button is grayed out (unavailable) until you select an entry in the scanned directories list.

Phonebook Statistics Dialog Box

The **Phonebook Statistics** dialog box contains a <u>check box</u> for each item that can be displayed. You can select items you want displayed by checking appropriate boxes. Items with unchecked boxes aren't displayed.

You can change the order of the Phonebook Statistics by clicking on the **Change Order** command button. This displays the **Change Order of Statistics** dialog box

Port Setup Dialog Box

The **Port Setup** dialog box has additional settings for specific <u>port types</u> and names selected.

The parameters are:

Software handshaking

Use the <u>check boxes</u> to turn on <u>software handshaking</u> for receiving and/or sending. The defaults are off. Use the drop-down list boxes to specify the <u>Xon and Xoff</u> characters. The defaults are the standard ASCII Xon/Xoff characters.

Hardware handshaking

Use the check boxes to turn on <u>hardware handshaking</u> for receiving and/or sending. The defaults are none. When using a <u>modem</u> that supports <u>baud</u> rates above 2400 <u>bps</u>, <u>RTS</u> and <u>CTS</u> are the typical selections.

Break signal duration

A <u>drop-down list box</u> provides choices for the time in milliseconds. You can enter any value. This number determines the length of break signal that HyperACCESS generates when you press the break key for the terminal you're emulating.

Preferences Dialog Box

The **Preferences** dialog box determines how HyperACCESS handles the terminal <u>cursor</u>, size of the session <u>Backscroll Buffer</u>, whether or not information remains in the Backscroll Buffer between sessions, and how HyperACCESS reacts to mouse button <u>clicks</u>.

The options and parameters are:

Track terminal cursor

This <u>check box</u> determines behavior of the terminal window when the current view doesn't include the terminal cursor position. When checked, the view shifts automatically to follow the cursor whenever received characters cause the cursor to linger in a portion of the terminal screen that is not currently visible. When not checked, the <u>terminal area</u> / Backscroll Buffer view doesn't automatically track the cursor position.

Jump scroll increment

These <u>rocker buttons</u> determine the number of lines used when <u>jump scrolling</u> is required. Jump scrolling occurs when Windows is unable to scoll text lines fast enough to keep up with the <u>baud</u> rate. To keep up, the terminal screen automatically uses jump scrolling whenever multiple lines of text arrive during the time it takes to display the previously received line(s). During a jump scroll, the screen image jumps up the number of lines specified by this parameter, displaying all new lines at once.

Backscroll kept during session

These rocker buttons determine the size of the Backscroll Buffer. The default is 250 lines. Any number between 0 and 5000 is valid. Manually entered numbers larger than 5000 are automatically set to 5000.

Backscroll kept between sessions

These rocker buttons determine the size of the Backscroll Buffer saved between use of this <u>Phonebook entry</u>. The default is 250 lines. Any number between 0 and the size of **Backscroll kept during session** is valid. Larger numbers are automatically set to the size of **Backscroll kept during session**.

Button 1 double-click

This list of three <u>option buttons</u> determines the action taken when the mouse selection button (normally the left button) is <u>double-clicked</u>. The options are:

Selects word

Any other selected text is deselected and the word currently under the <u>mouse pointer</u> is selected and highlighted. This action can occur in the terminal viewing area, Backscroll Buffer, or <u>Launch Pad</u>.

This is the default action, and is consistent with normal Windows interface standards. Extended selection can proceed from the selected word by <u>dragging</u> the mouse pointer (without releasing on the second click), or using extended selection keys (<Shift>+<left>, <Shift>+<right>, <Ctrl>+<Shift>+<left>, or <Ctrl>+<Shift>+<right>).

Copies word or selected text to host

Automatically transmits the word under the mouse pointer; or if the mouse pointer is pointing to selected text, transmits the selected text to the remote system. If the mouse pointer is over white space, nothing is transmitted.

Copies word or selected text to host with <ENTER>

Behaves just like the previous option, plus a carriage return character is transmitted after any text. If the mouse pointer is over white space, a single carriage return character is transmitted.

Button 2 click

This list of four option buttons determines the action taken when the second mouse button (normally the right button of a two or three-button mouse) is clicked. The options are:

Displays context menu

Displays <u>context menus</u> within a session terminal area, Backscroll Buffer, or Launch Pad. See <u>Using Context Menus</u> for complete information on how to use context menus.

Positions host cursor

Repositions the remote system's cursor position, provided the terminal being emulated has the capability to transmit cursor control characters. For those terminals, HyperACCESS typically transmits multiple cursor control characters equivalent to the number of times arrow keys would have been pressed to arrive at the new position.

Because only certain remote systems respond properly to this feature, HyperACCESS makes no attempt to verify appropriate response. However, an error message will display when cursor repositioning is used with terminal emulators that don't support cursor control characters.

Copies single letter to host

Automatically transmits the single character under the mouse pointer. Clicking on white space sends an <ENTER> character to the remote system.

Does nothing

Disables HyperACCESS response to mouse button 2.

Print Dialog Box

This dialog lets you print selected text in the terminal/Backscroll Buffer or Launch Pad. If no text is selected, HyperACCESS prints the entire window pane currently active. Use this menu item to access the standard Windows **Print Setup** dialog box.

The information displayed in this dialog, and its parameters and options are:

Printer

Displays the current printer. This printer is selected using the Windows Control Panel, some other Windows application, or the **Setup...** command button in this dialog box.

Print Range

This group box has three option buttons:

All

prints the entire contents of the currently active area. If there is no selected text in the currently active window pane, this is the only option available.

Selection

prints selected text in the currently active window pane. This option is only available if you've selected text.

Pages

in HyperACCESS, this option is always grayed out (unavailable).

Print Quality

This selection and its drop-down list are a function of the current printer.

Copies

The number of copies to print.

Print to File

This check box lets you print to a file with control codes specified for the current printer.

Collate Copies

This check box determines whether multiple copies are stacked or collated.

<u>S</u>etup...

This command button displays the standard Windows Print Setup dialog box.

Print Setup Dialog Box

This is the standard Windows **Print Setup** dialog. You use this dialog box to specify the current printer or the default printer, paper size and orientation, and printer options. For more information, see the *Microsoft Windows User's Guide*.

Receive Dialog Box

Receive is a <u>modeless dialog box</u> that you can position anywhere on your screen. The dialog box allows you to set the file transfer protocol and other parameters for receiving files from a <u>remote system</u>. You can continue to interact with the remote system (or any other session) with this dialog box displayed. This enables you to prepare to receive your files, issue commands to the remote system, then <u>click</u> the **Receive** <u>command button</u>.

Some option <u>check boxes</u> may be unavailable (grayed out or dimmed) for the selected file transfer protocol. The options and parameters specified in this dialog are:

File name or directory to receive into

This <u>text box</u> with its associated <u>drop-down list</u> and **Browse...** command button enable you to specify either a file name or a <u>path</u> for receiving file(s).

If you've already received a file in the current session, the file path and name appear in the text box. The drop-down history list shows the paths and file names of the most recently received files. The **Browse...** command button displays the standard file browser dialog box from which you can select a drive, directory, and file.

Protocol

This drop-down list displays the default transfer protocol for this session. You can select another protocol from the drop-down list (you can't type into the box associated with the drop-down list). For more information on transfer protocols, see Appendix *File Transfer Protocols* in the *HyperACCESS User's Manual*.

In addition, the dialog has a **Settings...** command button that displays a custom dialog box for each protocol.

Use received filenames

This check box is available if the selected protocol is capable of sending file name information. Otherwise it is dimmed or grayed out (unavailable). Selecting this option instructs HyperACCESS to use file names sent as part of the file transfer.

Note: If **Use received filenames** is unchecked and the current protocol is unable to transfer filenames, you must enter a filename in the Receive Filename dialog box.

Use received time and date

This check box is available if the selected protocol is capable of sending a file's time and date attributes. If selected, HyperACCESS uses the time and date received when saving the file. If not selected, HyperACCESS uses the current time and date for the file.

Use received directories

This check box is available if the selected protocol is capable of sending directory path information. Otherwise it is dimmed or grayed out (unavailable). Selecting this option instructs HyperACCESS to use the path sent as part of the file transfer.

Filter received files for known viruses

This check box indicates that you want HyperGuard to check received data for viruses. See Appendix Safe Communications in the HyperACCESS User's Manual for more information on HyperGuard virus filtering.

If File Already Exists

This group box provides six option buttons that determine how HyperACCESS handles received files that have the same path and name as files which already exist. The options are:

Overwrite

Deletes existing files and replaces them with incoming data.

Append

Adds incoming data to existing files.

Refuse

The file transfer will be refused if the file already exists.

Refuse unless newer

The date and time of the incoming file will be checked to see if it's newer, and if it is, it will overwrite the existing file; otherwise, the file transfer will be refused.

Rename using date

The file name will be modified to incorporate a date with the format MMDD999; where MM is the month (values 01 to 12), DD is the day (values 01 to 31), and 999 is a sequence number for files received on this date (values 000 to 999). The first character and extension of the file name remain unchanged.

Rename sequentially

A sequential number, starting with zero, is appended to the file name. If the name is already 8 characters long, numbers replace characters at the end of the filename.

Save partial file if transmission interrupted

This check box indicates that HyperACCESS is to save partially completed file transfers. (This permits you to use Zmodem's crash recovery procedure.) If left unchecked, HyperACCESS deletes partially transferred files.

Receive

This command button initiates the receive sequence for the selected protocol, and displays the **Receive Progress** dialog box. Be sure to issue commands to the remote system instructing it to begin sending before you click **Receive**.

Receive Filename

This dialog box appears when you're trying to receive a file without checking **Use received filename** in the **Receive** dialog box or when the protocol you're using is unable to transfer filenames. You must enter a filename in the <u>text box</u>. To change the directory, enter either a <u>relative</u> or <u>absolute path</u> with the filename.

Recording Options Dialog Box

The **Recording Options** dialog box has two option buttons:

Only if user aborts manually.

Selecting this option button creates a generated program that only aborts when the user manually intervenes. This is the default.

If the remote system fails to respond within

Selecting this option button creates program statements that generate a timeout after the specified number of seconds, and aborts the generated program if the remote system hasn't responded. You specify the number of seconds for the timeout using the rocker button or associated text box.

Replace Text Dialog Box

No Help information available.

Restore Batch File Dialog Box

This standard <u>browse</u> dialog box lets you select a drive, directory, and file.

The file selected should have been saved using the **Save as Batch...** command button in the <u>Transfer Send dialog box</u>. The <u>absolute paths</u> of the files that were in the **Additional files to be sent** list box in the **Transfer Send** dialog at the time of the save are added to the list box replacing any paths already present.

Runtime Values Dialog Box

The **Runtime Values** dialog box lets you enter values for **User Name**, **User ID**, **Password**, plus ten other, general-purpose values. To maintain password security, pressing the **Hide** <u>command button</u> obscures the password. To redisplay it, you must first type the correct password.

You can then have HyperACCESS use these values during program execution. For information on inserting HyperACCESS statements that use these runtime values, see <u>Learning in Progress Window.</u>

Save as Batch File Dialog Box

This standard <u>browse</u> dialog box from which you can select a drive, directory, and file. Files in the **Additional files to be sent** list box are saved in the selected file.

Save As Dialog Box

The **Save As** dialog box for an existing <u>Phonebook entry</u> shows the <u>absolute path</u> of the entry in the **Filename** <u>text box</u>. Untitled sessions display the absolute path of the Phonebook directory with a proposed filename, derived from the system name.

You can enter any filename (with or without an extension). However, if you enter any extension other than. **HAS** you'll see a warning message: Systems saved to files with extensions other than HAS do not appear in the Phonebook. Are you sure you want to save to *filename.ext*?

Select a Directory Dialog Box

This is one of the standard browse dialog boxes used throughout HyperACCESS. It has the following components:

Directories list box

The directories list box graphically shows the <u>path</u> to the HyperACCESS (or current) directory. You can change the current directory by <u>double-clicking</u> on any entry in the path graphic, or you can select an entry and click on **OK**.

Drives drop-down list box

You can change the current drive letter with the drives <u>drop-down list box</u>. It contains all hard and floppy disk drives defined on your system.

Select Program Dialog Box

This is one of the standard browse dialog boxes used throughout HyperACCESS. It has the following components:

File name list

The **File Name** <u>text box</u> allows you to enter a <u>path</u> or file name or <u>wild card</u> selection.

List files of Type

This <u>drop-down list</u> provides standard wild card selections for the file name text box. It provides an alternative technique for specifying types of files to list.

Directories list box

The directories list box graphically shows the path to the HyperACCESS (or current) directory. You can change the current directory by <u>double-clicking</u> on any entry in the path graphic, or you can select an entry and click on **OK**.

Drives drop-down list box

You can change the current drive letter with the drives drop-down list box. It contains all hard and floppy disk drives defined on your system.

Startup Dialog Box

The **Startup** dialog box with its associated <u>browse</u> <u>command button</u>, lets you specify a directory for HyperACCESS startup. By default, this is the directory you specified when you installed HyperACCESS. If your specify a different directory HyperACCESS will copy the HAWIN.PRF file to that directory unless it is already there.

The second <u>text box</u>, with its associated browse button, enables you to specify a program to run when HyperACCESS begins execution. The file specified should have a.**c** suffix for uncompiled C code, or.**exe** for compiled code written in any language (Visual Basic, Rexx, Microsoft C, etc.).

The third section of the dialog box lets you specify the appearance of HyperACCESS upon startup. The three <u>option buttons</u> are:

Phonebook only

Displays only the Phonebook document window upon startup.

Restore windows last present

Displays all windows that were open at the time you last exited HyperACCESS.

Stop Recording

This dialog box lets you enter a file name by typing in the text box, making a selection from the history drop-down list, or making a selection using the **Browse...** command button. After you've entered a file name, you can press the **Assign...** button to assign the program to a key or button. See <u>Assigning Programs to Keys or Buttons</u>.

Telephone Number Dialog Box

This dialog box displays the last number dialed (if any) using this <u>Phonebook entry</u>. You can dial the same number by pressing <Enter> or <u>clicking</u> on **Dial**. You can also select another number from the <u>drop-down</u> history list, or type a new number in the <u>text box</u>.

If you select the **Save as session telephone number** check box, the number you dial is saved as the session default, and this dialog box won't appear the next time you attempt to connect to this system.

Transfer Directories

Receiving directory

Defines a default directory for files received from the remote system. The receiving directory can be changed during a session. You can use either a path <u>relative</u> to the HyperACCESS directory, or you can use an <u>absolute path</u>.

Sending directory

Defines a default directory for files transmited to the remote system. The sending directory can be changed during a session. You can use either a path relative to the HyperACCESS directory, or you can use an absolute path.

Transfer Protocols Dialog Box

The **Transfer Protocols** dialog box has two <u>drop-down lists</u> of protocols supported by HyperACCESS. (The associated display box of each protocol list doesn't permit manual entry. You must make a selection from the drop-down list.) In addition, the dialog has a **Settings...** <u>command button</u> that displays a custom dialog box for each protocol.

If you specify the same protocol for both sending and receiving, either **Setting...** button will define settings for both directions.

Transfer Send Dialog Box

This dialog box is <u>modeless</u>, and you can position it anywhere on your screen. It lets you set the file transfer protocol and other parameters for sending files to a <u>remote system</u>. You can continue to interact with the remote system (or any other session) with this dialog box displayed. This lets you prepare to send your files, issue commands to the remote system, then click the **Send** <u>command button</u>.

The options and parameters specified, and information displayed in this dialog are:

Directory

This area of the dialog box displays the current <u>absolute path</u> to which file selection applies. The path changes when a file is selected in the file browser, or a file is added to the **Additional files to be sent** list box (see definitions that follow).

<u>F</u>ilename

This <u>text box</u> with its associated <u>drop-down list</u> and <u>**Browse...**</u> command button enable you to specify a file name you want to send. (You can enter absolute or <u>relative paths</u> with or without wild card file name selection.)

If you've already sent and/or selected files or paths in the current session, those names appear in the drop-down history list, and the most recently selected file or path appears in the text box. The **Browse...** command button displays the standard file browser dialog box from which you can select a drive, directory, and file.

Add >>

This command button causes the absolute path of the file in the **Filename** text box to move to the **Additional files to be sent** list box. If **Filename** uses <u>wild card</u> selection, all files that satisfy the wild card selection criteria appear in the <u>list box</u>.

Include matching files from subdirectories

This <u>check box</u> applies to both the **Add** and the **Send** buttons. When selected, it causes HyperACCESS to search subdirectories of the path specified in the **Filename** text box. Files matching the file name or wild card selection are added to the list box (see above) or sent (depending on the button pressed).

Include path when sending files

This check box, when selected, causes HyperACCESS to send the absolute path along with the file name. This option is only available when it's supported by the selected protocol.

Protocol

This drop-down list displays the default transfer protocol for this session. You can select another protocol from the drop-down list (you can't type into the display box associated with the drop-down list). For more information on transfer protocols, see Appendix *File Transfer Protocols* in the *HyperACCESS User's Guide*.

In addition, the dialog has a **Settings...** command button that displays a custom dialog box for each protocol.

Remove

This command button is unavailable (dimmed or grayed) unless you select one or more files in the **Additional files to be sent** list box (see below). Selected files are removed from the list when this button is clicked (they aren't deleted from the disk).

Additional files to be sent

This list box displays the absolute path of files added to the transfer list. The list box has vertical and horizontal <u>scroll bars</u> when necessary. Standard Windows extended selection applies in the list when selecting files to be used with the **Remove** command button.

Save as Batch...

This command button displays the standard browser dialog box from which you can select a drive, directory, and file. The files in the **Additional files to be sent** list box are saved in the selected file.

Restore Batch...

This command button displays the standard browser dialog box from which you can select a drive, directory, and file.

The file selected should have been saved using the **Save as Batch...** command button. The absolute paths of the files that were in the **Additional files to be sent** list box at the time of the save are added to the list box replacing any paths already present.

Send

This command button initiates the transmission sequence for the selected protocol, and displays the **Send Progress** dialog box.

User ID Dialog Box

Enter the **User ID** you want HyperACCESS to send a program issues the command to send the User ID runtime value. Select the **Store as permanent value** check box if you want this value stored for future use by this Phonebook entry.

User Name Dialog Box

Enter the **User Name** you want HyperACCESS to send a program issues the command to send the user name runtime value. Select the **Store as permanent value** check box if you want this value stored for future use by this Phonebook entry.

View Button Dialog Box

This dialog box shows the bit map contained in the selected file.

View Icon Dialog Box

This dialog box shows the icon contained in the selected file.

View Some Dialog Box

The **View Some** dialog box includes <u>check boxes</u> followed by a <u>text box</u> or a <u>drop-down</u> list box.

To specify which entries you want Phonebook to display, <u>click</u> on one or more check boxes, and make an appropriate entry in the corresponding text box or drop-down list box. If you've checked an item but have no corresponding entry in a text or list box, there is no effect on the Phonebook display.

This dialog box has two additional <u>command buttons</u>, **Apply** and **Reset**. These buttons provide the following functions:

<u>Apply</u>

Use the current selections in the dialog box as specifications for the Phonebook display. Don't close the dialog.

This permits you to modify the selection criteria and click on **Apply** again or **Ok.** In either case, the additional selection criteria add Phonebook entries to those already displayed. **OK** dismisses the dialog box.

Reset

Removes the last selections from the Phonebook display. When all selection criteria are removed, the display is the same as $\underline{\mathbf{View}}$ / $\underline{\mathbf{A}}$ |I.

Terminal Emulators

HyperACCESS <u>emulates</u> a wide variety of computer terminals so that you can call and communicate with different systems. Each emulator lets you see text and respond to screen <u>control codes</u> in a way that closely resembles that type of terminal. If the terminal has keys that your computer lacks, the emulator defines other keys you can use in their place. Most people find the keys defined by HyperACCESS's emulators to be quite satisfactory. But you can easily define new keys to replace or supplement the original keys by creating macros and assigning them to keys as described in <u>Creating Keyboard Macros</u>.

Terminal Emulators and Their Settings

The following sections provide information about each terminal emulator and its optional settings (or parameters). Since HyperACCESS supports different settings for each emulator, they each have a unique **Terminal Settings** <u>dialog box</u>. In addition, each session can have its own terminal emulator specified with unique settings. Even if sessions share the same emulator, they still have their own settings and macros.

There are several ways to access an emulator's **Terminal Settings** dialog box. For detailed instruction see <u>Changing Terminal Emulator Settings</u>.

To access information about each terminal emulator, either click on the specific listing below, or use the \geq > key to page thru all listings.

- ADM 3A (Lear Siegler)
- ANSI (American National Standard Institute)
- CompuServe (CompuServe Information System)
- IBM 3101 (IBM 3101 series terminals)
- IBM 3278 (IBM 3278 series terminals)
- RENX3278 (Renex protocol)
- TTY (Teletype)
- TV 925 and TV 950 (Televideo terminals)
- Viewpoint (ADDS Viewpoint)
- VT52, VT100, VT102, VT220, and VT320 (DEC terminals)
 - Wang (for terminals with ADC or EADC protocol converters)

ADM 3A

The ADM 3A emulator supports the Lear Siegler ADM 3A terminal. <**Alt>-**I performs the same function as the ADM 3A terminal's *Here Is* key, which sends the answerback message entered on the ASCII Sending menu. You can use the keys listed below:

<u>Instead of this key</u>	Use this key
Here Is	<alt>-I</alt>
Clear	<alt>-C</alt>
Rubout	<delete></delete>
Linefeed	<ctrl>-<enter></enter></ctrl>
Break	<ctrl>-<break></break></ctrl>

To see the emulator settings, press ≥> or click on <u>ADM 3A Terminal Settings</u>.

ADM 3A Terminal Settings

Function, arrow, and control keys act as

This group box provides two radio buttons that let you specify whether these keys should perform as **Terminal keys or as Windows accelerator keys**.

Reverse < DEL> and < BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Remote screen clearing

When selected, this check box enables the remote system to clear your screen.

Uppercase only

When selected, this check box forces all incoming text to uppercase letters.

Overtype mode

This check box switches between insert (unselected) and overtype modes (selected).

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

ANSI

The ANSI emulator supports American National Standards Institute (ANSI) displays. These displays are usually implemented with the ANSI.SYS device driver on PC compatible computers. Note that HyperACCESS completely supports the ANSI display standard, and you do not need to add ANSI.SYS to your CONFIG.SYS file.

This emulator is most often used with computerized bulletin boards and other remote systems that send graphics characters or ANSI color codes.

To see the emulator settings, press \geq or click on <u>ANSI Emulator Terminal Settings</u>.

ANSI Terminal Settings

Function, arrow, and control keys act as

This group box provides three radio buttons that specify whether these keys send <u>IBM</u> <u>PC scan codes</u> (two- or three-byte hex codes for BBS Doorway mode), <u>Terminal keys</u> (ANSI escape sequences), or perform as <u>Windows accelerator keys.</u>

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

CompuServe

This emulator simplifies file transfers with CompuServe B+ protocol and is used solely with CompuServe Information Service. With this emulator, you can initiate file transfers just by commanding CompuServe to send or receive files (you don't need to select $\underline{\mathbf{T}}$ ransfer/ $\underline{\mathbf{S}}$ end or $\underline{\mathbf{T}}$ ransfer/ $\underline{\mathbf{R}}$ eceive). When using this emulator, you should configure CompuServe to treat your computer as an ANSI terminal (to begin the configuration process, enter GO TERMINAL at the CompuServe prompt).

To see the emulator settings, press >> or click on CompuServe Terminal Settings

CompuServe Terminal Settings

Use destructive backspace

When selected, this check box indicates that the backspace key will move the cursor left one character position and erase the character that was there. When unselected, the backspace character moves the cursor left one character without deleting characters. You can then overtype a portion of the current command line and press return without retyping correct keys to the right of the cursor position.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

IBM 3101

The IBM 3101 emulator supports both character mode and block mode of IBM 3101 series terminals. You can use the following keys:

terrimais. Tod carr ase ti	ie ronowing keys.
Instead of this key	Use this key
PF1 through PF8	<f1> through <f8></f8></f1>
Alt-alphanumeric key	<ctrl>-alphanumeric key</ctrl>
Break	<ctrl>-<break></break></ctrl>
Cancel	<ctrl>-<f10></f10></ctrl>
Clear	<ctrl>-<page up=""></page></ctrl>
Del	<ctrl>-<backspace></backspace></ctrl>
Del Char	<delete></delete>
Del Line	<ctrl>-<left arrow=""></left></ctrl>
Erase EOS	<ctrl>-<page down=""></page></ctrl>
Erase EOL/EOF	<ctrl>-<end></end></ctrl>
Erase Input	<ctrl>-<home></home></ctrl>
Ins Char	<ins></ins>
Ins Line	<ctrl>-<right arrow=""></right></ctrl>
Newline	<enter></enter>
Print	<shift>-<f1></f1></shift>
Print Line	<shift>-<f2></f2></shift>
Print Msg	<shift>-<f3></f3></shift>
Reset	<alt>-<f10></f10></alt>
Send	<ctrl>-<f1></f1></ctrl>
Send Line	<ctrl>-<f2></f2></ctrl>
Send Msg	<ctrl>-<f3></f3></ctrl>
Tab and ShiftTab	<tab> and <shift>-<tab></tab></shift></tab>

Details that you would set with dip switches on an IBM 3101 terminal are set on menus in HyperACCESS.

To see the emulator settings, press >> or click on IBM 3101 Terminal Settings

IBM 3101 Terminal Settings

Function, arrow, and control keys act as

This group box provides two radio buttons that let you specify whether these keys should perform as **Terminal keys or as Windows accelerator keys**.

Turnaround character

This group box provides four radio buttons that let you choose the character used to designate ends of data blocks exchanged with the remote system.

Transmission mode

This group box has two radio buttons that select whether data is transmitted as individual characters or blocks. Select Character to send each character as soon as it is typed. Select Block to have characters that you type sent only when you press the Send key (CTRL-F1).

Null suppression

Select this check box to avoid sending null characters when exchanging blocks with the host.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Uppercase only

When selected, this check box forces all incoming text to uppercase letters.

<u>S</u>crolling

Select this check box to enable scrolling of the terminal screen.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

IBM 3278

Use this asynchronous terminal emulator for communicating with IBM minicomputers or mainframes that:

are equipped with an IBM 7171, IBM 3708, or similar protocol converter, or are running the Yale ASCII protocol conversion program, or

have equivalent, built-in protocol conversion capabilities, as with the IBM 9370 or AS/400 computers.

You can use the following keys:

Use this key
<f1> through <f10></f10></f1>
<ctrl>-<f1> through <ctrl>-<f10></f10></ctrl></f1></ctrl>
<shift>-<f1> through <shift>-<f10></f10></shift></f1></shift>
<alt>-<f1> through <alt>-<f6></f6></alt></f1></alt>
<alt>-<f7>, <alt>-<f8>, <alt>-<f9></f9></alt></f8></alt></f7></alt>
<ctrl>-<break></break></ctrl>
<ctrl>-R</ctrl>
<alt>-C</alt>
<tab></tab>
<shift>- <tab></tab></shift>
<delete></delete>
<alt>-E</alt>
<ctrl>-<right arrow=""></right></ctrl>
<ctrl>-<left arrow=""></left></ctrl>
<alt>-I</alt>
<insert></insert>
<ctrl>-G</ctrl>
<ctrl>-<enter> or <ctrl>-J</ctrl></enter></ctrl>
<alt>-D</alt>
<ctrl>-X</ctrl>
<alt>-U</alt>

If the mainframe operator has redefined the protocol converter's VT100 conversion table, keys may not work as shown. You may need to define new keys as described in <u>Creating Keyboard Macros.</u>

To see the emulator settings, press ≥> or click on IBM 3278 Terminal Settings

IBM 3278 Terminal Settings

Use destructive backspace

When selected, this check box indicates that the backspace key will move the cursor left one character position and erase the character that was there. When unselected, the backspace character moves the cursor left one character without deleting characters. You can then overtype a portion of the current command line and press return without retyping correct keys to the right of the cursor position.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

RENX3278

Use the RENX3278 emulator for communicating with IBM minicomputers or mainframes equipped with Renex protocol converters. This emulator supports screen control codes of a VT100. Identify yourself to the IBM computer as a VT100 terminal and use the following keys:

Instead of this key	<u>Use this key</u>
PF1 through PF10	<f1> through <f10></f10></f1>
PF11 through PF20	<ctrl>-<f1> through <ctrl>-<f10></f10></ctrl></f1></ctrl>
PF21 through PF30	<shift>-<f1> through <shift>-<f10></f10></shift></f1></shift>
PF31 through PF36	<alt>-<f1> through <alt>-<f6></f6></alt></f1></alt>
PA1 through PA3	<alt>-<f7>, <alt>-<f8>, <alt>-<f9></f9></alt></f8></alt></f7></alt>
Attn	<alt>-<f10></f10></alt>
Backtab	<shift>- <tab></tab></shift>
Break	<ctrl>-<break></break></ctrl>
Clear	<ctrl>-C</ctrl>
Configuration mode	<alt>-5</alt>
Сору	<alt>-8</alt>
Cursor select	<alt>-3</alt>
Device cancel	<alt>-4</alt>
Drop DTR (disconnect)	<alt>-7</alt>
Dup	<alt>-9</alt>
Erase EOF	<alt>-2</alt>
Erase input	<alt>-1</alt>
FM (field mark)	<ctrl>-F</ctrl>
Force select/menu	<alt></alt>
Ident	<alt>-6</alt>
Insert mode	<insert></insert>
New line	<ctrl>-<enter> or <ctrl>-J</ctrl></enter></ctrl>
Reset	<ctrl>-R or <ctrl>-X</ctrl></ctrl>
Screen refresh	<alt>-=</alt>
Status display	<ctrl>-A</ctrl>
System request	<alt>-0</alt>
Tab	<tab></tab>

If the mainframe operator has redefined the protocol converter's VT100 conversion table, keys may not work as shown. You may need to define new keys as described in <u>Creating Keyboard Macros.</u>

To see the emulator settings, press >> or click on RENX3278 Terminal Settings

RENX3278 Terminal Settings

Use destructive backspace

When selected, this check box indicates that the backspace key will move the cursor left one character position and erase the character that was there. When unselected, the backspace character moves the cursor left one character without deleting characters. You can then overtype a portion of the current command line and press return without retyping correct keys to the right of the cursor position.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

TTY

Use the TTY (Teletype) emulator with any system that calls for a TTY terminal, a Teletype, a glass terminal, or no terminal. This class of terminal, due to its simplicity and wide availability, has become a de facto standard in communications, and you can access more systems with this emulator than any other. Even systems designed for use with more sophisticated terminals often provide rudimentary support for TTY terminals as well. TTY terminals use only regular, alphanumeric keys.

To see the emulator settings, press >> or click on TTY Terminal Settings

TTY Terminal Settings

Use destructive backspace

When selected, this check box indicates that the backspace key will move the cursor left one character position and erase the character that was there. When unselected, the backspace character moves the cursor left one character without deleting characters. You can then overtype a portion of the current command line and press return without retyping correct keys to the right of the cursor position.

Reverse and and <BACKSPACE> Keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

TV925 and TV950

Use TV925 and TV950 to emulate the respective Televideo terminals. Both provide full emulation of conversational (or character) mode, block mode, local edit mode, protected fields, and selective clear. These are the keys to use:

Instead of this key	Use this key	
F1 through F10	<f1> through <f10></f10></f1>	
F11 and SHIFT-F11	<ctrl>-<f1> and <alt>-<f1></f1></alt></f1></ctrl>	
Back tab	<shift>- <tab></tab></shift>	
Break	<ctrl>-<break></break></ctrl>	
Clear space and Shft-Clear space	ce <ctrl>-<f2> and <alt>-<f2></f2></alt></f2></ctrl>	
Char insert and Shft-Char insert	: <ctrl>-<f3> and <alt>-<f3></f3></alt></f3></ctrl>	
Char delete and Shft-Char delet	e <ctrl>-<f4> and <alt>-<f4></f4></alt></f4></ctrl>	
Funct <character></character>	<ctrl>-A <character> and then <enter></enter></character></ctrl>	
Line insert and Shft-Line insert	<ctrl>-<f5> and <alt>-<f5></f5></alt></f5></ctrl>	
Line delete and Shft-Line Delete	e < Ctrl>- < F6> and < Alt>- < F6>	
Line erase and Shft-Line erase	<ctrl>-<f7> and <alt>-<f7></f7></alt></f7></ctrl>	
Linefeed	<ctrl>-<enter> or <ctrl>-J</ctrl></enter></ctrl>	
Page erase and Shft-Page erase	<ctrl>-<f8> and <alt>-<f8></f8></alt></f8></ctrl>	
Send and Shft-Send	<ctrl>-<f9> and <alt>-<f9></f9></alt></f9></ctrl>	
Print and Shft-Print	<ctrl>-<f10> and <alt>-<f10></f10></alt></f10></ctrl>	
Shft-up arrow	<page up=""></page>	
Shft-down arrow	<page down=""></page>	
Tab	<tab></tab>	

To see the emulator settings, press \geq or click on <u>TV925 and TV950 Terminal Settings</u>

TV925 and TV950 Terminal Settings

Function, arrow, and control keys act as

This group box provides two radio buttons that let you specify whether these keys should perform as **Terminal keys or as Windows accelerator keys**.

Overtype mode

This check box switches between insert (unselected) and overtype modes (selected).

Edit Mode

This group box has three radio buttons that let you select how typed characters are handled. Select **N**ormal to send each character as soon as it is typed. Select **N**ormal to send each character as soon as it is typed. Select **N**ormal to send to have characters that you type sent only when you press the Send key (CTRL-F9). Select **L**ocal to display characters locally and not send them (for testing purposes only).

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has three radio buttons that select between block, underline, and no cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

Viewpoint

The emulator supports ADDS Viewpoint terminals. The following keys are supported:

Instead of this key	Use this key
F1 through F3	<f1> through <f3></f3></f1>
Shft-F1 through Shft-F3	<shift>-<f1> through <shift>-<f3></f3></shift></f1></shift>
Return	<enter></enter>
Shft-up, down, right, or left arrows,	<up arrow="">, <down arrow="">, or <right arrow=""> or <left arrow=""></left></right></down></up>
Shft-Home	<home></home>
Tab	<tab></tab>

To see the emulator settings, press \geq or click on <u>Viewpoint Terminal Settings</u>

Viewpoint Terminal Settings

Function, arrow, and control keys act as

This group box provides two radio buttons that let you specify whether these keys should perform as **Terminal keys or as Windows accelerator keys**.

Reverse < DEL> and < BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Scrolling

Select this check box to enable scrolling of the terminal screen.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

VT52, VT100, VT102, VT220 or VT320

These DEC emulators support virtually all features of DEC VT52, VT100, VT102, VT220, and VT320 terminals. Each emulator fully supports cursor-control (both ANSI and VT52), cursor-memory, cursor-reporting, tab stops, scrolling regions, half and full-duplex operation, origin mode, and host controlled printer operations.

The VT220 and VT320 emulators support multinational, British, French, French Canadian, German, and ASCII character sets. Double-high characters display as two lines of identical characters.

The following keys are supported:

Prev screen

Instead of this key Use this key PF1 (Gold key) through PF4 <F1> through <F4> F1 Hold Screen <Scroll Lock> F2 Print Screen <Shift>-<Print Screen> or <Print Screen> F5 Break <Ctrl>-<Break> F6 through F10 <F6> through <F10> F11-F20 <Ctrl>-<F1> through <Ctrl>-<F10> SHIFT-F6 through SHIFT-F10 <Shift>-<F6> through <Shift>-<F10> SHIFT-F11 through SHIFT-F20 <Alt>-<F1> through <Alt>-<F10> CTRL-<F2> or CTRL-Space <Ctrl>-@ CTRL-<F3> <Esc> or <Ctrl>-[CTRL-<F4> or CTRL-/ <Ctrl>-\ CTRL-<F5> <Ctrl>-1 CTRL-<F6> or CTRL-~ <Ctrl>-^ CTRL-<F7> or CTRL-? <Ctrl>- -CTRL-<F8> <Delete> Backspace <Backspace> **Break** <Ctrl>-<Break> <Delete> or <Ctrl>-<Backspace> Delete (labeled <X on VT220/320 Do (or F16) <Ctrl>-<F6> Find <Home> Help (or F15) <Ctrl>-<F5> Insert here <Insert> Keypad Enter + (near keypad) Keypad, * (near keypad) Linefeed <Ctrl>-<Enter> or <Ctrl>-J Next screen <Page Down>

<Page Up>

Remove <Delete>

Select <Page Down>

Details that you would define with setup screens on true DEC terminals are set on menus in HyperACCESS.

To see the emulator settings, press \geq or click on $\underline{VT52}$, $\underline{VT100}$, $\underline{VT102}$, $\underline{VT220}$ or $\underline{VT320}$ $\underline{\underline{Terminal Settings}}$.

VT52, VT100, VT102, VT220 or VT320 Terminal Settings

The following list includes a complete listing of settings for DEC VTxxx terminals. Some terminal types, such as VT52 and VT100, only have a subset of these settings.

Function, arrow, and control keys act as

This group box provides two radio buttons that let you specify whether these keys should perform as **Terminal keys or as Windows accelerator keys**.

PF1-PF4 also mapped to top row of keypad

When selected, this check box maps PF1 - PF4 keys to NUMLOCK, /, *, and - on the keypad in addition to <F1> - <F4>.

Keypad application mode

(Alternate keypad mode on VT52) When selected, this check box specifies that the keypad sends application codes that control programs running on the host.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

<u>C</u>ursor keypad mode

(not on VT52) When selected, the cursor keys (arrow keys) send Normal codes, which move the cursor. When unselected, the cursor keys send application codes, which control remote applications.

132 column mode

(not on VT52) When selected, sets the screen width to 132 characters. When set to 132, you can use <Ctrl>-<Right arrow> and <Ctrl>-<Left arrow> to view portions to the right or left of currently visible portion of the screen.

8 bit control codes

(VT220 and VT320 only) When selected, your PC sends 8-bit control sequences. When unselected, your PC sends the earlier 7-bit sequences.

User-defined keys allowed

(VT220 and VT320 only) When selected, allows user-defined outputs to be sent to your terminal by the host for <Shift>-<F6> thru <Shift>-<F20>.

Restore default tab settings

Clicking this command button replaces tab settings the host has sent with tab settings from the **ASCII Setup** dialog box.

Character set

This drop-down list lets you specify the national character set used.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

Wang

The Wang VS2110 emulator is used for communicating with a Wang minicomputer that is equipped with an ADC or EADC protocol converter. This emulator gives you direct equivalents to all the keys found on a Wang VS2110 terminal. In other respects the Wang host computer treats your PC as though it were a VT100 terminal:

Instead of this key	Use this key
PF1 through PF10	<f1> through <f10></f10></f1>
PF11 through PF20	<ctrl>-<f1> through <ctrl>-<f10></f10></ctrl></f1></ctrl>
PF21 through PF30	<shift>-<f1> through <shift>-<f10></f10></shift></f1></shift>
PF31 and PF32	<Alt $>$ - $<$ F1 $>$ and $<$ Alt $>$ - $<$ F2 $>$
Back tab	<shift>-<tab></tab></shift>
Break	<ctrl>-<break></break></ctrl>
Delete	<delete></delete>
Erase	<alt>-<f3></f3></alt>
Execute	<end></end>
Glossary	<alt>-<f7></f7></alt>
Help	<alt>-<f4></f4></alt>
Insert	<insert></insert>
Newline	<ctrl>-<enter> or <ctrl>-J</ctrl></enter></ctrl>
Next screen	<page down=""></page>
Previous screen	<page up=""></page>
Refresh screen	<ctrl>-W with EADC, <ctrl>-L with ADC</ctrl></ctrl>
Reset	<alt>-<f5></f5></alt>
ShftCancel	<alt>-<f6></f6></alt>
Tab	<tab></tab>

To see the emulator settings, press >> or click on Wang Terminal Settings

Wang Terminal Settings

Use destructive backspace

When selected, this check box indicates that the backspace key will move the cursor left one character position and erase the character that was there. When unselected, the backspace character moves the cursor left one character without deleting characters. You can then overtype a portion of the current command line and press return without retyping correct keys to the right of the cursor position.

Reverse and <BACKSPACE> keys

When selected, the Backspace and Delete keys functions are reversed.

Cursor

This group box has two radio buttons that select between block and underline cursor characters. It also has a check box to let you select a blinking (selected) or non-blinking (unselected) cursor.

File Transfer Protocols

HyperACCESS offers a wide variety of protocols. Having many protocols gives you the ability to transfer files with most systems. If a system has more than one file transfer protocol in common with HyperACCESS, you have a choice.

The sections below describe each protocol and give guidelines on when to use them. For information about how to set protocol parameters, see <u>Changing Settings</u>.

To access information about each file transfer protocol, either click on the specific listing below, or use the \geq > key to page thru all listings.

- ASCII (text) protocol
- 1K-Xmodem
- CompuServe B+
- HyperProtocol (our own state-of-the-art protocol)
- Kermit
- Xmodem
- Ymodem
- Ymodem G
- Zmodem

ASCII (Text) Transfer

For each system you call, you can specify characters to remove or translate. HyperACCESS performs this function as data is received or sent using Paste from File (to host), Cut to Host, Copy to Host, or Capture to File. Files transferred with file transfer protocols are unaffected. To specify characters for translation or stripping from either outgoing and/or incoming data, see Character Filtering.

ASCII (Text) Translation Table Files

HyperACCESS provides several translation table files. They are :

<u>Filename</u>	<u>Function</u>
CONTROL.TRN	Strips certain control characters
UPRCASE.TRN	Changes characters to uppercase
LWRCASE.TRN	Changes characters to lowercase
GERMANY.TRN	Translates German language characters
DEN-NOR.TRN	Translates Danish and Norwegian language characters
FIN-SWE.TRN	Translates Finish and Swedish language characters

1K Xmodem

1K Xmodem is a 1024-byte packet, error-correcting protocol similar to Ymodem, except that it can transfer only one file at a time. Unlike Ymodem, 1K Xmodem doesn't transfer filenames. Some remote systems that support 1K Xmodem refer to it as Ymodem.

To see the protocol parameters, press \geq or click on <u>1K Xmodem Parameters</u>.

1K Xmodem Settings

Error-checking

This group box provides three radio buttons to specify the error-checking method. The default is <u>Auto</u>, which adapts automatically to the error-checking method of the remote system. <u>CRC</u> and Check<u>sum</u> are the two alternative error-checking methods available with this protocol. Certain systems will require that you set this parameter to Check<u>sum</u>.

Compression

This group box lets you set whether files are compressed during transfers, to reduce their size and send them in less time. This can usually be set to **Compress when possible**, because compression turns itself off when necessary.

Seconds to wait to receive each packet

Use the rocker buttons or text box to set the number of seconds your PC waits for each packet to begin. This is normally set to 10. With slower systems such as CompuServe, you may need to set this as high as 30.

Seconds to wait to receive each byte

Use the rocker buttons or text box to set the number of seconds your PC waits for each byte in the packet. This is normally set to 5. With slower systems such as CompuServe, you may need to set this as high as 10.

Attempts to send each packet

Use the rocker buttons or text box to sets how many times your PC retransmits (or requests retransmission of) each packet. Normally this is 4.

CompuServe B+

This protocol is for use with CompuServe B+ protocol on the CompuServe Information Service. The CompuServe B+ protocol supports both single- and multiple-file transfers, and is an error-correcting protocol. All you need to do is command CompuServe to send or receive the desired files. HyperACCESS automatically transfers the files. To use this protocol, you must be using the CompuServe emulator.

To see the protocol parameters, press \geq or click on <u>CompuServe B+ Parameters</u>.

CompuServe B+ Settings

Protocol type

Select either $\underline{\mathbf{C}}$ ompuServe B+ (the default) or $\underline{\mathbf{O}}$ ld B by clicking on the appropriate radio button.

Packet size

Use the rocker button or text box to enter the packet size used for transmission. The rocker button increases (or decreases) packet size in 128 byte increments. If you enter any other number in the text box, HyperACCESS rounds it to the next lower number divisible by 128. The default packet size is 512. The minimum is 128 and maximum is 1024.

Quoting level

Standard quoting

Minimal quoting

Extended quoting

Maximum quoting

HyperProtocol

Use HyperProtocol whenever the remote system also has this protocol. (HyperProtocol is available in all versions of HyperACCESS, and on many bulletin board systems.) HyperProtocol is the fastest, most reliable protocol over any type of connection. Unlike most protocols, its speed is unaffected by propagation delays common in long-distance calls or packet-switching networks. HyperProtocol can send single files or file groups.

To see the protocol parameters, press ≥> or click on <u>HyperProtocol Parameters</u>.

HyperProtocol Settings

Error-checking

This group box provides two radio buttons to specify the error-checking method. The default is $\underline{\mathbf{C}}$ RC. $\underline{\mathbf{C}}$ RC and Check $\underline{\mathbf{s}}$ um are the two alternative error-checking methods available with this protocol. Use Check $\underline{\mathbf{s}}$ um for maximum speed, $\underline{\mathbf{C}}$ RC for maximum reliability.

On The Fly Compression

This group box lets you turn data compression on or off by selecting one of the radio buttons. On the fly compression is most effective when you're transferring files that aren't already compressed. If your PC is sufficiently powerful, it can also provide enhanced thruput for modems lacking data compression (non-V.42bis).

HyperProtocol Block Size

Use the rocker button or text box to enter the packet size used for transmission. The rocker button increases (or decreases) packet size in 1 byte increments. The default packet size is 2048 bytes. The maximum is 32767. Smaller values improve the speed of error recovery. Larger values improve throughput slightly but slow error recovery.

Resynchronization Timeout

This rocker switch lets you set the amount of time (in seconds) that HyperProtocol waits for a response from the remote system during startup of a transfer or during resynchronization after a line error. The default value is 5 seconds. Use a larger value in situations where large buffers or wireless links create a long propagation delay. If HyperProtocol takes a long time to recover after an error, or does not recover at all, try a larger value. You may need a value of 45 seconds or larger for wireless links.

Kermit

Kermit is a widely supported error-correcting protocol that is capable of sending file groups. While it is versatile and handles noisy connections well, it tends to be slower than other protocols.

To see the protocol parameters, press \geq or click on <u>Kermit Parameters</u>.

Kermit Settings

Compress when possible

When selected (the default), HyperACCESS compresses files during transfers, to reduce their size and send them in less time. This can usually be selected, because compression turns itself off when necessary.

Maximum number of bytes per packet

Use the rocker buttons or text box to set the packet size you prefer. The actual size is the smaller of your preference and that of the remote system. Normally this should be set to 96. Smaller settings are desirable only with noisy lines or with networks that demand smaller packets.

Seconds remote system must wait for each packet

Use the rocker buttons or text box to set the length of time a remote system is told to wait for your PC to begin each packet. Normally this is set to 5. Use a larger setting if your PC is very slow.

Error-checking size

Use the rocker button or text box to set the error- checking you prefer. The normal setting is 1 (1-byte checksum). Setting to 2 (2-byte checksum) or 3 (3-byte CRC) is slower, but more resistant to line errors.

Attempts to send each packet

Use the rocker button or text box to set the number of times your PC retransmits packets damaged by line errors.

Packet start character

Use the rocker button or text box to define the character that marks each packet's beginning. The most common setting is 1 (01h). With remote systems that require different characters, enter the decimal ASCII value from Appendix.

Packet end character

Use the rocker button or text box to define the character that marks each packet's end. The most common setting is 13 (0Dh). With remote systems that require different characters, enter the decimal ASCII value from Appendix.

Number of pad characters

Use the rocker button or text box to set the number pad characters your PC sends before each packet. The most common entry is 0, which uses none. With remote systems that need pad characters, a common setting is 10, which sends ten characters.

Pad character

Use the rocker button or text box to set the pad character your PC sends before each packet. The most common entry is 0, which is the null character. With remote systems that require different characters, enter the decimal ASCII value from Appendix.

Xmodem

Xmodem is a relatively simple, 128 byte packet, error-correcting protocol, which transfers only one file at a time without a filename. Xmodem is generally faster than Ymodem if the line is noisy, but slower if it is clean, as it transmits 128 byte packets rather than 1024 bytes as with Ymodem.

To see the protocol parameters, press >> or click on Xmodem Parameters.

Xmodem Settings

Error-checking

This group box provides three radio buttons to specify the error-checking method. The default is <u>Auto</u>, which adapts automatically to the error-checking method of the remote system. <u>CRC</u> and Check<u>sum</u> are the two alternative error-checking methods available with this protocol. Certain systems will require that you set this parameter to Check<u>sum</u>.

Compression

This group box lets you set whether files are compressed during transfers, to reduce their size and send them in less time. This can usually be set to **Compress when possible**, because compression turns itself off when necessary.

Seconds to wait to receive each packet

Use the rocker buttons or text box to set the number of seconds your PC waits for each packet to begin. This is normally set to 10. With slower systems such as CompuServe, you may need to set this as high as 30.

Seconds to wait to receive each byte

Use the rocker buttons or text box to set the number of seconds your PC waits for each byte in the packet. This is normally set to 5. With slower systems such as CompuServe, you may need to set this as high as 10.

Attempts to send each packet

Use the rocker buttons or text box to sets how many times your PC retransmits (or requests retransmission of) each packet. Normally this is 4.

Ymodem

Ymodem (also known as Ymodem Batch) is a 1024-byte packet, error-correcting protocol capable of transferring single files or groups. Ymodem is generally faster than Xmodem over noise-free lines, but slower over noisy lines, as it must re-transmit 1024 byte packets rather than 128 bytes as with Xmodem. (Ymodem is similar to 1K-Xmodem, except that 1K-Xmodem only transfers one file at a time without a filename.)

To see the protocol parameters, press >> or click on Ymodem Parameters.

Ymodem Settings

Compression

This group box lets you set whether files are compressed during transfers, to reduce their size and send them in less time. This can usually be set to **Compress when possible**, because compression turns itself off when necessary.

Seconds to wait to receive each packet

Use the rocker buttons or text box to set the number of seconds your PC waits for each packet to begin. This is normally set to 10. With slower systems such as CompuServe, you may need to set this as high as 30.

Seconds to wait to receive each byte

Use the rocker buttons or text box to set the number of seconds your PC waits for each byte in the packet. This is normally set to 5. With slower systems such as CompuServe, you may need to set this as high as 10.

Attempts to send each packet

Use the rocker buttons or text box to sets how many times your PC retransmits (or requests retransmission of) each packet. Normally this is 4.

Ymodem G

Ymodem G is a variant of Ymodem that does away with packet-by-packet acknowledgements, and simply aborts the transfer if an error is detected. Ymodem G should be used only with error-correcting modems or inherently error-free connections. Ymodem G is clearly faster than Ymodem, Xmodem, and Kermit, but there is a common misconception that Ymodem G is the best protocol to use with error correcting modems. In reality, HyperProtocol and Zmodem are much better because they can correct errors the modems cannot sense (such as those introduced by the computers or serial ports) with no penalty in performance.

To see the protocol parameters, press ≥> or click on <u>Ymodem G Parameters</u>.

Ymodem G Settings

Compression

This group box lets you set whether files are compressed during transfers, to reduce their size and send them in less time. This can usually be set to **Compress when possible**, because compression turns itself off when necessary.

Seconds to wait to receive each packet

Use the rocker buttons or text box to set the number of seconds your PC waits for each packet to begin. This is normally set to 10. With slower systems such as CompuServe, you may need to set this as high as 30.

Seconds to wait to receive each byte

Use the rocker buttons or text box to set the number of seconds your PC waits for each byte in the packet. This is normally set to 5. With slower systems such as CompuServe, you may need to set this as high as 10.

Attempts to send each packet

Use the rocker buttons or text box to sets how many times your PC retransmits (or requests retransmission of) each packet. Normally this is 4.

Zmodem

Zmodem is an error-correcting, streaming protocol that has become popular on bulletin boards. Next to HyperProtocol, it is the fastest, most desirable protocol. Like HyperProtocol, it maintains its speed despite propagation delays, though its efficiency is slightly less (98% versus 99%) and it lacks compression. Zmodem can send single files or file groups.

To see the protocol parameters, press $\geq >$ or click on Zmodem Parameters.

Zmodem Settings

The **Zmodem Settings** dialog box has three group boxes **Receiving**, **Sending**, and **Transmission**. Parameters in each group are defined in the following sections.

Receiving Parameters

Respond to Zmodem autostart

Select this check box to have HyperACCESS automatically begin receiving as soon as you command the remote system to send. If this check box is left unselected, you must click the **Receive** command button in the **Receive** dialog box to begin receiving.

If file already exists

This group consists of two option buttons. Select either:

- Follow sender's Append/Overwrite option -- to use the option specified by the sending system. This can be dangerous to your files.
- **Follow options in Transfer Receive dialog** -- to use your options specified in the **Receive** dialog box. You have somewhat more control.

Crash recovery

This group consists of three option buttons. Select either:

- **Negotiate** -- The default. This lets recovery occur when file recovery is enabled at the remote system.
- **Never** -- Prevents recovery from occurring, even if the remote system has file recovery enabled.
- **Always** -- File recovery will occur if the remote system has recovery set to enable or negotiate.

Sending Parameters

Append/Overwrite option

This drop-down list has eight options:

- None -- Use this with systems that don't support Zmodem Management options.
- **Newer or longer** -- Overwrites if file sent has newer time/date or larger size.
- **CRC differs** -- Overwrites if file sent has different contents.
- **Append to file** -- Adds file sent to end of existing file.
- **Overwrite always** -- Overwrites any file having same name as file sent.
- **Overwrite if newer** -- Overwrites if file sent has a more recent time/date.
- **Different length or date** -- Overwrites if file sent has different size or time/date.
- **Never overwrite** -- Rejects file sent if its name matches any existing file.

Crash recovery

This group consists of three option buttons. Select either:

- **Negotiate** -- The default. This lets recovery occur when file recovery is enabled at the remote system.
- **One-time** -- Allows recovery during the next file transfer only, after which the setting reverts to Negotiate. This prevents inadvertant file recovery, which can damage files.
- **Always** -- File recovery will occur if the remote system has recovery set to enable or negotiate.

Transmission Parameters

Method

This group lets you specify error detection and recovery procedures when you're sending files. The Zmodem protocol lets the sending system choose whether or not to wait for positive acknowledgement from the receiving system before sending additional blocks. If the sending system chooses to wait for acknowledgement, it can also choose how often it waits. Alternatively, the sending system can *stream* data until transmission is complete or it receives a negative acknowledgement from the receiving system. Upon receipt of a negative acknowledgement, the sender retransmits the failed block and all subsequent blocks.

- **Streaming** -- This option button indicates that HyperACCESS Zmodem should send in streaming mode (the default).
- Windowed -- This option button, with its associated drop-down list box, indicates that you want Zmodem to periodically stop and wait from acknowledgement. The drop-down list provides options of 2 and 4 K bytes.

Packet

Use the rocker buttons to set the number of bytes in each packet. Larger packets mean faster transfers but slower recovery from errors. Available packet sizes are: 32, 64, 128, 256, and 1024 (the default). Packet size reduces automatically if necessary.

CRC

Lets you set the size of error-checking codes used. 16 bits is usually adequate. Setting to 32 bits further enhances reliability at the expense of speed.

Wait

These rocker buttons set how long Zmodem waits between attempts to re-send packets. Through networks, where the receiver may lag far behind the sender, you may need to increase this setting. The default setting is 15 seconds with a range of 1 to 99 seconds.

End-of-line conversion

Select this check box if you're transferring text files with a system that requires a line feed character after each carriage return, which is typical of UNIX systems. The default is unselected.

Control sequences use escape codes

Select this check box if you want Zmodem to replace all control codes with an equivalent series of non-control codes. This may be necessary with networks or remote systems that have problems transmitting control codes.

Phonebook Buttons

You can optionally display Phonebook buttons along the top, left side, right side, or bottom of the Phonebook window. You can also float the Button Panel or close (hide) it. For details on positioning Button Panel, see section Phonebook View/ Button Panel.

You can create your own buttons or reposition buttons using <u>drag and drop</u>. The default buttons provided with HyperACCESS (in their default order) are:



New

The **New** button performs the same function as Phonebook's <u>File</u> /<u>N</u>ew.



Open

The **Open** button performs the same function as Phonebook's **File** /**O**pen.



Dial

The **Dial** button performs the same function as Phonebook's **F**ile /**C**onnect.



Record

The **Record** button performs the same function as Phonebook's <u>File</u> /Connec<u>t</u> Special/**Learn new logon program when connection is made**.



Notes

The **Notes** button performs the same function as Phonebook's $\underline{\mathbf{File}}$ / $\underline{\mathbf{P}}$ roperties/ $\underline{\mathbf{D}}$ escription or a session's $\underline{\mathbf{Properties}}$ / $\underline{\mathbf{D}}$ escription.



Settings

The **Settings** button performs the same function as Phonebook's **File** /**P**roperties/**C**ommunications or a session's **P**roperties /**C**ommunications.



View

The **View** button cycles between Phonebook displays. The sequence is:

- Icon
- Statistics
- Details



Setup

The **Setup** button is equivalent to running the setup program for definition of global

default values for all selected Phonebook entries, or for all Phonebook entries if none or all are selected. Among the settings that you can modify with **Setup** are:

- Port type
 Port name
- Modem

Session Buttons



Dial

The **Dial** button performs the same function as the session's **File** /**C**onnect.



Hang Up

The **Hang Up** button performs the same function as the session's **File** /**D**isconnect.



Capture

The **Capture** button performs the same function as the session's <u>File</u> /Capture.



Settings

The **Settings** button performs the same function as Phonebook's <u>File</u> /<u>P</u>roperties/<u>C</u>ommunications or a session's <u>P</u>roperties/<u>C</u>ommunications.



Download

The **Download** button performs the same function as the session's $\underline{\text{Transfer}}$ / $\underline{\text{R}}$ eceive.



Upload

The **Upload** button performs the same function as the session's **T**ransfer /**S**end.



Record

The function of the **Record** button depends on the status of the current session. For a disconnected session, it performs the same function as Phonebook's <u>File</u> /Connect Special/**Learn new logon program when connection is made**. For a connected session, it performs the same function as <u>Automation</u> /Record.



Scroll Lock

The **Scroll Lock** button performs the same function as the session's **View** /**S**croll lock.

Automatic Program Generation

As with any application, you'll find that you perform certain communications tasks repeatedly. For example, logon procedures for a remote system remain essentially unchanged from session to session. You may also find that you're often repeating the same remote system commands. HyperACCESS provides several complimentary tools for automating these repetitive tasks. You can create automatic sequences that do such things as:

- Produce many keystrokes when you press a single key, and either send these characters to the remote system or perform local HyperACCESS operations.
- Wait for prompts from a remote system and send a response.
- Wait for a certain time of day or wait a given length of time before executing a series of commands.
- Customize HyperACCESS for data processing procedures required by large corporations. Users within these companies can be given standard programs that facilitate their interaction with the company's host systems.
- Automatically execute a program when you drop files on HyperACCESS or on a session window.

Creating automatic sequences is easy. You can create <u>keyboard macros</u>; have HyperACCESS record your keystrokes, normal response delays, and remote system responses in an automatically generated program as you interact with the remote system; or you can create custom programs using any programming language that can call external functions.

Once created, you'll have the option to assign a macro or program to:

- A special key combination (for example <Ctrl>+<Shift>+<F4>)
- A pre-defined or custom button
- Automatically execute when connecting to a remote system.
- Automatically execute a program when you load HyperACCESS.

You create keyboard macros simply and easily using the session <u>Automation/Keys & Buttons</u> menu item. Alternatively, HyperACCESS can create C language programs as it learns your actions and system responses. A built-in C language interpreter executes these programs whenever they're run.

For those of you who don't want to think about or learn a programming language don't worry, HyperACCESS takes care of everything for you. However, if you already know C, you can easily modify and extend these automatically generated programs; and if you've never used C and want to learn it, you can watch statements appear in a window as HyperACCESS learns your interaction with a remote system. You can then use the HyperACCESS API Guide or any other C language tutorial to increase your understanding of this powerful computer language.

Keyboard Macros

The ability to define <u>keyboard macros</u> within HyperACCESS provides a powerful technique to remap your keyboard. In addition to simple keyboard remapping, macros let you assign multiple keystrokes to a single key or key combination, and/or a button. This provides a simple, straightforward, non-programming method to automate commonly used words, phrases, and key combinations. For additional information on creating keyboard macros, see <u>Creating Keyboard Macros</u>.

Automatically Generated versus Custom-Written Programs

Since you can assign either automatically generated or custom-written programs to keys and buttons, you may be asking what the difference is. The most important distinction is that HyperACCESS executes its automatically generated programs with its built-in C language interpreter, while you can write programs in any language for execution by HyperACCESS. All you need is a compiler for the language that is compatible with Windows and lets you access external functions. Of course, you can also write C language programs that use HyperACCESS's built-in interpreter.

There are some situations where an automatically generated program won't have the capability required -- for example, HyperACCESS lets you define a program for execution whenever you drag and drop files onto HyperACCESS or one of its session windows. In this case, you need a general purpose program to handle the decisions required (was one file dropped, were many files dropped, were wild cards used?). A generated program can't handle all the circumstances of drag and drop.

Generating Programs

Both Phonebook and session menu bars have an $\underline{\mathbf{A}}$ utomation menu. For simplicity, we'll assume you'll access $\underline{\mathbf{A}}$ utomation from a session window. The following sections review the learning processes:

Recording a Logon Sequence

Recording other Programs

Recording in Progress window

Assigning Programs to Keys or Buttons

Adding a Button

Running Programs

Aborting a Macro or Program

Editing Programs

Recording a Logon Sequence

There are four sequences of operations that let you learn your logon interaction. They are:

- 1. Using the session Automation menu:
 - a. Open the desired Phonebook entry.
 - b. Select <u>Automation</u> /<u>R</u>ecord.
 - c. Select $\underline{\mathbf{File}}$ / $\underline{\mathbf{C}}$ onnect or press the $\underline{\mathbf{dial}}$ button .
- 2. Initiate from Phonebook using menu selection:
 - a. Select the desired Phonebook entry.
 - b. Select <u>File</u> /Connec<u>t</u> Special. In the **Connect Special** dialog box, select **Learn new logon program when connection is made** and click **OK**.
- 3. Initiate from Phonebook using a button:
 - a. Select a Phonebook entry.
 - b. Click the Record button. HyperACCESS will open, connect, and begin recording.
- 4. Initiate from a session window using a button:
 - a. Open a session.
 - b. Click the Record button. HyperACCESS will open, connect, and begin recording.

Regardless of which technique you choose to record a new logon sequence, HyperACCESS dials the remote system and learns its messages and your responses. When you've completed the logon sequence, follow these steps:

- 1. Select <u>S</u>top from menu bar in the <u>Recording in Progress window</u>. HyperACCESS displays the **Stop Recording** dialog box with the **Install as current logon task** check box selected.
- 2. Enter a file name by typing in the <u>text box</u>, making a selection from the history <u>drop-down list</u>, or making a selection using <u>Browse</u>.

Recording other Programs

Recording any program is no different than techniques #1 or #4 described for $\underline{\text{Recording}}$ a logon sequence . You simply select session $\underline{\text{Automation}}$ / $\underline{\text{R}}$ ecord or click the session's record button to begin. Once started, your actions and the remote system responses generate C language statements in the $\underline{\text{Recording in Progress}}$ window.

Recording in Progress Window

The following topics describe additional capabilities available through the menu bar of the **Learning in Progress** window.

Stop!

<u>Edit</u>

<u>Action</u>

Stop!

Selecting this menu bar action stops recording and displays the **Stop Recording** <u>dialog</u> <u>box</u>. Enter a file name by typing in the <u>text box</u>, making a selection from the history <u>drop-down list</u>, or making a selection using <u>Browse</u>. After you've entered a file name, you can press the **Assign...** button to assign the program to a key or button. See <u>Assigning Programs to Keys or Buttons</u>.

Edit

Selecting $\underline{\mathbf{E}}$ dit displays menu items that provide editing capabilities comparable to standard Windows accelerator editing keys.

Action

The Action menu has four entries. They perform the following functions:

Insert User Name

Inserts C language statements that obtain the User Name entered in **Runtime Values** dialog box and sends the text string to the remote system. See <u>Automation</u> /Runtime **Values**.

Insert User Id

Inserts C language statements that obtain the User ID entered in **Runtime Values** dialog box and sends the text string to the remote system. See <u>Automation</u> /Runtime **Values**.

Insert Password

Inserts C language statements that obtain the Password entered in **Runtime Values** dialog box and sends the text string to the remote system. See $\underline{\textbf{A}}$ utomation /Runtime $\underline{\textbf{V}}$ alues.

Insert Text Query

Selecting this menu item displays the **Insert Response Box** <u>dialog box</u>. The first <u>text box</u> in this dialog lets you enter the title for the displayed dialog box. The second, larger text box lets you enter instructions to the user.

Selecting **OK**, generates a C language statements that display the dialog box with the title and instructions you've specified and a text box. Another statement sends typed text to the remote system.

Pause!

Select this menu item pauses recording of your keystrokes and remote system responses. When selected, this menu changes to Resume!.

Resume!

Select this menu item resumes recording of your keystrokes and remote system responses. When selected, this menu changes to Pause!.

Shrink!

Selecting this menu item reduces the **Recording in Progress** window to its minimum size without making it an <u>icon</u>. To view the contents of the window, either <u>maximize</u> the window or <u>drag</u> a border or corner to grow the window to a size you prefer.

Assigning Programs to Keys or Buttons

In addition to running a program whenever a session connects to the $\underline{\text{remote system}}$, HyperACCESS lets you assign a learned sequence to a keyboard combination and/or a custom button. This lets you execute that sequence at any time. Whether you assign program to a key combination or button is a matter of personal preference. As you'll see, it's equally easy to do either.

When you select $\underline{\mathbf{S}}$ top! from the menu bar of the $\underline{\mathbf{Recording\ in\ Progress}}$ window, HyperACCESS displays the $\underline{\mathbf{Stop}\ Recording\ dialog\ box}$. The $\underline{\mathbf{F}}$ ile name $\underline{\mathbf{text}\ box}$ displays the last file used to save a program for this session, and the $\underline{\mathbf{drop-down}}$ history list has the previous six files that were used. If you want to assign a new name, either type the path and file name in the text box, or use the $\underline{\mathbf{Browse}}$ button to find an existing file.

Once you've entered a file name, press the **Assign...** button. This displays the **Add Program** dialog box. From this dialog, you can assign the program to a keyboard combination, a button, or both.

The first text box, **P**rogram, is the file name entered or selected in the **Stop Recording** dialog box. You can change the name by typing in the text box or pressing the **Browse** button.

Assigning a Key Combination

To assign a keyboard combination to a program, simply click in the Assigned $\underline{\mathbf{k}}$ ey text box and press the desired keys. For example:

```
<F2> displays <F2> <Shift>+<F2> displays <shift-F2> <Ctrl>+<Shift>+<F2> displays <ctrl-shift-F2>
```

You may enter any key combination. If the combination currently defines a standard Windows accelerator, HyperACCESS displays a warning dialog, and lets you change the sequence.

If you don't want to define a button to have the same action, make sure you select $\underline{\mathbf{No}}$ button.

Assigning a Button

You can assign either a text or bitmap button to any program. Select whichever button type you want. For a text button, simply enter the text string you want displayed on the button. For example, you could create a button with Send or Send File on it. To assign a bit map button, select one of the pre-defined buttons, or click **Import button...**

Assuming a session window is active, the button appears with the standard HyperACCESS buttons in the session window Button Panel. Each session has its own Button Panel.

Once you've created a new text or bitmapped button, you may want to change the button size, see <u>Changing Button</u>. Changing the size of any button in either a session window or Phonebook changes the size of all buttons in that window.

You can enter a line of help information in the text box, **Help text**. This line displays whenever you move the mouse pointer over a button and press the right mouse button.

Adding a Button

To add a new button, <u>click</u> **Import button...** in the **Add Program** <u>dialog box</u>. (See <u>Assigning Programs to Keys or Buttons</u>.) If you've created a bitmap and copied it to Window's Clipboard, select the first <u>radio button</u>. You may then $\underline{\mathbf{V}}$ iew the image, or simple select **OK**. If the bitmap image exists in a BMP file, select the **User-defined button with label from .BMP file**, and enter the file path and name. If you're uncertain of the file name or path, you can use the <u>Browse</u> button (for a complete description of browse dialogs, see page -). Once you've specified the file, you can view it, or select **OK** or **Cancel**.

Running Programs

There are four ways you can execute a program. Depending on how it was defined, you can:

Have it automatically execute

The program will automatically execute upon initiation of HyperACCESS or a session, or when you drop files on HyperACCESS for transmission. To define a program for automatic execution, define it to execute using **O**ptions /S**t**artup or **P**roperties /**F**iles usage.

Press a key combination

Programs assigned to specific keys or key combinations execute when you type the correct keys.

Press a button

Programs assigned to a text or bitmapped button execute when you position the mouse pointer over the button and <u>click</u>. You can define buttons for display on either <u>Phonebook</u> or <u>session window</u> Button panels.

Explicitly run

You can explicitly run any program from either Phonebook or a session window by selecting <u>Automation</u> /<u>Run...</u> This displays the **Select Program** dialog box, which is simply a file browser. Enter the path and file name, or use <u>browse</u> to find the file you want to run and either select it and click **OK**, or double-click on it.

Command line execution

Using Program Manager's <u>File/Properties</u> selection, you can enter a program's file name on the <u>Command line</u> in the **Program Item Properties** dialog box.

Aborting a Macro or Program

You can create programs that automatically abort if the remote system fails to respond. You can also manually abort a running program by selecting $\underline{\mathbf{A}}$ utomation $|\underline{\mathbf{A}}$ bort.

Editing Programs

You can use any text editor to create or modify a program. From within HyperACCESS you can launch Window's Notepad or any other editor by selecting <u>Automation</u> /<u>E</u>dit. This displays a standard file <u>browser</u>. As soon as you select the file you want to edit, HyperACCESS launches the editor. You can specify your preferred editor using <u>Options</u> /<u>E</u>xternal Utilities.

Changing Program Assignment or Button Size

After assigning a program to a key combination and/or button, you can go back and change the assignment at any time using $\underline{\mathbf{A}}$ utomation / $\underline{\mathbf{K}}$ eys & buttons. Making this selection displays the **Keys & Buttons** dialog box .

The list displays the file names of currently defined programs and macros. The left-most column of the list shows defined key combinations, if any. Any program without a key combination is assigned to a button. You can assign the same program to both a key combination and a button.

You can use this dialog box to add new programs; modify the key or button selection for a program; modify the size of the buttons in either the Phonebook or session window Button Panel; or delete an assigned program. The following sections describe these options:

Adding Programs

Modifying a Program Assignment

Adding Programs

If you create a program using a text editor or compiler, you can assign it to a HyperACCESS key combination and/or button using this dialog box. Click the **Add Program** command button and follow the instructions in section <u>Assigning Programs to Keys or Buttons</u>.

Modifying a Program Assignment

To modify the key or button assigned to a program, follow these steps:

- 1. Select the file name in the list. Note that the button displayed in the **Size of Buttons** area of the <u>dialog box</u> is the current button for the program, if one was assigned.
- 2. Click the **Modify** command button. This displays the **Add Program** dialog box showing the name of the file, and the current key combinations and/or the button selected.
- 3. Make desired changes in the **Add Program** dialog box (see <u>Assigning Programs to Keys or Buttons</u>).

Changing Button Size

To change the size of all buttons in either Phonebook or session windows, follow these steps:

- 1. Depending on which Button Panel you want to change, make either Phonebook or a session window active.
- 2. Select <u>Automation</u> /<u>K</u>eys & buttons. This displays the **Keys & Buttons** dialog box.
- 3. With any program selected that displays a button in the **Size of Buttons** area of the dialog box, use your mouse as follows:
 - a. <u>Point</u> to a side or corner of the button. Make sure the <u>mouse pointer</u> changes to double-headed resizing arrow.
 - b. Drag the mouse pointer to shape the button as desired
 - c. Click on OK.

Editing a Program

To edit a program assigned to a key or button, follow these steps:

- 1. Select <u>Automation</u> /<u>K</u>eys & Buttons. This displays the **Keys & Buttons** dialog box.
- 2. With the program selected, click on **Edit**. This opens Notepad (or other application specified in **P**roperties/**F**ile Usage) with the program displayed.
- 3. Make edits as required, and **S**ave or Save **A**s before closing Notepad.

Deleting a Program

To delete a program assignment in HyperACCESS, follow these steps:

- 1. Select Automation /Keys & buttons. This displays the Keys & Buttons dialog box.
- 2. With the program selected, click on **Delete**. This deletes the assignment of the key combination and/or removes the button from the current Button panel. It doesn't delete the file or remove the button from other Button panels.

HyperACCESS Host Mode

This section describes how to initiate <u>host (or answer) mode</u> operations using HyperACCESS. You'll see how to:

- Initiate host operations.
- Specify a greeting to display when your system answers a call.
- Specify valid users and passwords, and restrict access to predefined users if desired.
- Define user authorization level what individual users can do when they log on to your PC.
- Specify a master password so that others can't access the password list and authorization table.

In HyperACCESS, host mode is like any other session. The sections listed below describe some of the implications of this implementation, but to thoroughly understand host mode, you may want to review *Host Mode* in the *HyperACCESS API User's Guide*.

To access information about host mode, either click on the specific listing below, or use the \geq > key to page thru all listings.

Add Dialog Box

Assigning Passwords and Access Privileges

Host Mode Options

<u>Host Monitor Dialog Box</u>

How Callers Command Your PC

How Callers Connect and Log On

How Callers Should Configure

Introduction to Host Mode

Manage Passwords Dialog Box

Master Password Dialog Box

Modify Dialog Box

Preparing to Answer Calls

To Avoid Confusion

Welcome File Text

Introduction to Host Mode

With HyperACCESS, you can let other users access your PC. <u>Host mode</u> isn't just a bulletin board, it lets you authorize who can log on, and what they can do. After your PC answers a call, and the caller enters their name and password, they can type commands that make your PC do various operations. You can define, in advance, which of the following operations each caller can perform:

- Examine you disk directories (you can restrict callers to a given drive and directory).
- Command your PC to send a file or batch of files.
- Command your PC to receive a file or batch of files.
- Perform file or disk management operations on your PC using COPY, DELETE, RENAME, CHDIR, MKDIR, or RMDIR.

After you initiate host mode, you can minimize the **Host Monitor** dialog box, the <u>host session</u>, or the entire HyperACCESS application. You can also use HyperACCESS to initiate outgoing sessions, using the same <u>communications port</u>, while host mode is active. In this case, HyperACCESS borrows the communications port from host mode during the duration of the call and returns it after you've completed your outgoing session. Finally, HyperACCESS lets you start multiple host mode sessions (if you have multiple modems connected to your PC), and they can either share or have their own list of valid callers and their access authorization.

Once you've started host mode operation, you can leave your PC. HyperACCESS will accept call after call with no assistance from you. For example, you can start host mode when you leave the office, so you can access it later from your home PC, or from a laptop PC when you're on the road.

Preparing to Answer Calls

If you've already installed the host mode files, you'll see the **HyperACCESS Host** Phonebook entry and/or icon. If you didn't request HyperACCESS Setup to install host mode files, you must run setup again from the installation disks, and request installation of **Host Mode Files**. Installing HyperACCESS and Placing Your First Call in your HyperACCESS User's Manual.

With host mode installed, <u>double-click</u> the **HyperACCESS Host** Phonebook entry. This opens a HyperACCESS Host session and begins executing the host mode program that displays the **Host Monitor** dialog box.

Host Monitor Dialog Box

This dialog box appears whenever you execute $\underline{\mathsf{host}}$ mode . It has the following information and command buttons:

Answering

The information displayed at the top of the dialog box includes communications settings for <u>baud rate</u>, <u>data bits</u>, <u>parity</u>, and <u>stop bits</u>. It also identifies the type and name of <u>communications port</u> and the type of <u>modem</u> in use for this port. You can modify these options using Phonebook $\underline{\mathbf{F}}$ ile/ $\underline{\mathbf{P}}$ roperties/ $\underline{\mathbf{C}}$ ommunications prior to opening a <u>host</u> session.

Call History

This <u>drop-down list box</u> displays a scrollable list of calls that have been made to this host mode session. Each time you start host mode, HyperACCESS clears this list.

Current Status

This group box displays the current status of the host mode session.

Quit/Hangup

<u>Click</u> on this <u>command button</u> when you want to exit host mode. It terminates the host mode program, removes the **Host Monitor** dialog box, and closes the **HyperACCESS Host** session. If a caller is <u>online</u>, host mode asks for confirmation before disconnecting the caller and terminating.

Options...

This command button displays the **Options** dialog box.

Passwords...

This command button displays the **Manage Passwords** dialog box.

Host Mode Options

The **Options** dialog box lets you specify how host mode operates on your system.

The options and parameters specified in this dialog are:

Monitor Display Options

This group box has two <u>option buttons</u> and a <u>check box</u>. The option buttons let you choose between:

- **Display Monitor only** Only the <u>Host Monitor</u> dialog box displays. HyperACCESS is minimized to an icon on your Windows desktop. (You can use Windows task switching to restore HyperACCESS to its previous window size.)
- **Display HA/Win and Monitor** Keeps both HyperACCESS and **Host Monitor** visible on your screen. You can continue to use any HyperACCESS functions while host mode operates.

If you select **Display HA/Win and Monitor**, the **Hide Monitor if HA/Win is minimized** check box is available. Otherwise it is grayed out (unavailable). When selected, this check box indicates that the **Host Monitor** dialog box will be hidden if you minimize HyperACCESS. Otherwise, when unselected, the **Host Monitor** dialog remains full-size even when you minimize HyperACCESS.

Host Settings

This group box has two check boxes and three <u>text boxes</u> for entry of options. They are:

- Close session when Monitor quits When selected (the default), this check box indicates that the HyperACCESS Host session for the Host Monitor should be closed when you click on Quit/Hangup.
- **Accept only one call** Select this check box when you want host mode to terminate after the first completed call-in session.
- **Answer after** Enter the number of rings you want to wait until host mode answers the phone call. Leave the default at 1, unless you're sharing the phone line with voice calls or other machines, such as a FAX.
- **Inactivity timeout** Use this text box to set the number of seconds you want host mode to wait for caller activity before it automatically terminates the caller. If you want host mode to operate indefinitely, set this number to zero.
 - **Welcome file** Use this text box, or its associated **Browse...** command button, to enter the path and filename of the file that contains your greeting to callers of your system. See <u>Welcome File Text</u> for more information.

Welcome File Text

HyperACCESS host mode includes a file called **welcome.txt**. You can edit this file using Notepad or any text editor. Alternatively, you can specify a different file in the host mode **Options** dialog box. To ensure compatibility with potential callers, it's a good idea to limit text lines to less than 80 characters. If you're uncertain as to the type of terminal or emulator the caller may be using, it's also good practice to limit your welcoming text to standard <u>ASCII</u> characters. Extended ASCII, or graphics characters, can create problems for some terminals.

Assigning Passwords and Access Privileges

When you click on the **Password...** command button in the **Host Monitor** dialog box, HyperACCESS host mode displays the **Manage Passwords** dialog box.

Manage Passwords dialog box

The **Manage Passwords** dialog box has the following information, parameters, and buttons:

Password file

This <u>text box</u> displays the current <u>path</u> and filename of the password file. You can enter a new path and/or filename or use the **Browse...** command button to select a file.

Admit only callers with predefined passwords

When you select this <u>check box</u>, HyperACCESS host mode won't let callers log on to your system unless their name and password appear in the password file.

If this check box isn't selected, callers can identify themselves and their passwords during their first call. Such callers receive privileges defined as **{New password defaults}**.

Last name, First name

This <u>list box</u> displays currently defined users. You can **Add** to this list; or **Modify** or **Delete** users from this list by selecting the user in the list box and clicking the appropriate <u>command button</u>.

Add...

Clicking this command button displays the <u>Add</u> dialog box, and lets you add new callers and specify their access privileges.

Modify...

Clicking this command button displays the **Modify** dialog box, and lets you modify existing callers and their access privileges. See *Modify*, below.

Delete

Clicking this command button deletes the selected caller from the list.

Lock List...

Clicking this command button displays the **Master password** dialog box.

Add

The **Add** dialog box lets you enter new callers and their privileges.

The information you enter in this dialog is:

First name

The caller's first name. <u>Control characters</u> and blanks aren't permitted, and upper and lowercase characters are equivalent.

Last name

The caller's last name. Control characters and blanks aren't permitted, and upper and lowercase characters are equivalent.

Password

The caller's password. Control characters and blanks aren't permitted, and upper and lowercase characters are equivalent.

Callback number

This <u>check box</u> with its associated <u>text box</u> lets you enter a telephone number that HyperACCESS will call after this user successfully logs on. Upon successful logon, host mode hangs up, waits a moment, and then calls this telephone number one time. You can use this capability to provide an additional level of security, or to reverse telephone charges. Once reconnected, the caller can use the privileges you've assigned.

Privileges

This group box lets you specify access privileges for this caller.

Note: You can change default values for these settings by selecting **{New password defaults}** and clicking on **Modify...**.

Select the check boxes corresponding to the privileges you want to grant.

- **Read** This check box lets callers enter commands to send files from your computer to their computer. It's the caller's responsibility to issue the correct command depending on protocol.
- Write This check box lets callers enter commands to send files from their computer to your computer. It's the caller's responsibility to issue the correct command depending on protocol.
- **Overwrite** Select this check box to let the caller overwrite an existing file. (The caller must also have **Write** access.) Leave it unselected to keep your existing files intact. Host mode notifies the caller when conflicts arise. When this occurs, it's the caller's responsibility to either save the file under a new name or cancel the transfer.
- **File management** Select this check box to let the caller use COPY, DELETE, RENAME, MKDIR, and RMDIR. To prevent tampering with your files and directories, leave this check box unselected.
 - Access limited to Select this check box to limit the caller's access to a particular drive or directory. Enter the drive and directory path in the associated text box, or use the **Browse...** command button.

This becomes the caller's default location, and commands issued only affect this drive and directory.

Note: The caller also has access to all subdirectories of the specified drive and directory.

Modify Password

You access this dialog by selecting a caller in the <u>Manage Passwords</u> dialog box and clicking the <u>Modify...</u> command button. The **Modify** dialog box has the same options and parameters described for <u>Add</u> with two additional command buttons.

The new command buttons in this dialog are:

Next

This command button lets you display the next caller in the list without returning to the **Manage Passwords** dialog box.

Previous

This command button lets you display the previous caller in the list without returning to the **Manage Passwords** dialog box.

Note: If you click on **Next** or **Previous** after you've made changes to the current caller entry, host mode pops up a dialog box requesting that you confirm those changes.

Master Password Dialog Box

This dialog box lets you keep others from displaying or modifying the caller list and access privileges. After you've specified a **Master password**, you'll be required to enter it whenever you click the **Passwords...** command button in the **Host Monitor** dialog box.

Note: If you forget this password, you will have to delete the password file, and re-enter the entire caller list.

How Callers Should Configure

Callers should configure their communications software as follows:

- 8 data bits
- 1 stop bit
- No parity
- Full duplex
- Respond to XOFF/XON when sending
- Do not send line feeds at line ends
- Do not append line feeds to received lines
- Do not <u>echo</u> received characters

A caller may use any <u>modem</u>, and any <u>baud</u> rate that both modems can support. When the caller connects with your PC, host mode automatically determines the proper baud rate and switches to that baud rate if necessary.

How Callers Connect and Log On

In addition to telling callers how to configure their computers, you must tell them how to log on to your PC. Callers should follow these steps:

- 1. Configure their computer as described above.
- 2. Dial your modem's telephone number.
- 3. When the caller connects, and the modems have matched baud rates, host mode displays **Enter first name:** on the caller's screen. This usually happens automatically, but some callers may need to press e (about once per second) until it appears.
- 4. The caller should type their first name. If you're admitting only predefined callers, the caller must type their name as you've entered it in the caller list. Otherwise, they should enter their name as they want to type it in the future.
- 5. Host mode then displays **Enter last name:** on both your screen and the caller's screen.
- 6. The caller should type their last name. If you're admitting only predefined callers, the caller must type their name as you've entered it in the caller list. Otherwise, they should enter their name as they want to type it in the future.
- 7. Host mode then displays **Enter password:** on both your screen and the caller's screen.
- 8. The caller should type their password. If you're admitting only predefined callers, the caller must type the password as you've entered it in the caller list. Otherwise, they should enter their own password as they want to type it in the future. For security reasons, the password never displays on either computer while the caller is entering it.

There are two alternatives to steps 4-8 above. They are:

- 1 At the **Enter first name:** prompt, the caller types:
 - a. firstname lastname
 - b. Host mode then prompts for the caller's password.
- 2 At the **Enter first name:** prompt, the caller types:
 - a. firstname lastname password

If **Incorrect password** or **Invalid user** displays, even when a caller enters a valid name and password, line noise may be the cause. It's common for line noise to affect data in one direction, but not the other. Noisy connections can be random; calling again may help. If the problem persists, contact the phone company.

If your PC displays **Enter first name:** just once, then seems to ignore the caller's attempts to enter a name, the modems may have established an unworkable connection. Modems from different manufacturers sometimes seem to connect, but then are able to pass data in only one direction. Have the caller try again, or use a different baud rate.

How Callers Command Your PC

Although privileges you give each caller may vary, all callers use the same general procedure to command your PC. Host mode displays the following prompt on both your screen and the caller's screen:

Type HELP for a list of commands [HA/Win host] C:\pathname

To see a list of available commands the caller types **HELP** followed by <Enter>. To see a detailed explanation of a particular command, the caller types **HELP** followed by that command and then <Enter>.

When a caller types **HELP**, the list of commands displayed depends on the caller's privileges.

To Avoid Confusion

When you're at the answering PC, don't type commands at the **[HA/Win host]** prompt, as this may confuse the caller. When at the calling PC, remember that commands you enter at the **[HA/Win host]** prompt control the answering PC only, not the calling PC.

Compatibility with previous version of HyperACCESS Systems vs. Sessions

HyperACCESS for Windows has a different structure from HyperACCESS/5 for <u>DOS</u> and <u>OS/2</u>. While none of HyperACCESS/5's files are directly compatible, you can convert its System List entries into HA/Win <u>Phonebook</u> entries. To do this, export the desired systems from HyperACCESS/5 as described in its manual. Then run the conversion utility by doubleclicking on the <u>Conversion Program icon</u> in the HyperACCESS/Win group.

HyperPilot vs. HAPI

HA/Win has a full-featured <u>API</u> (Application Programming Interface), rather than a proprietary script language similar to HyperACCESS/5's HyperPilot language. You can automate your communications or create your own custom front end with Visual Basic, C++, C, or any language that can drive .DLLs -- or you may use HA/Win's built-in C interpreter.

Conversion Program

Use this program to convert systems from HyperACCESS/5 System List into HyperACCESS/Win <u>Phonebook</u> entries. To do this, you must first use the HyperACCESS/5 export facility to create an export file containing the desired systems. Refer to the HyperACCESS/5 manual for details on its export facility.

The new session files will be placed in the same directory as the DEFAULT.HAS file.

To complete the conversion, CONVERT.EXE will need to obtain settings from your HyperACCESS/Win DEFAULT.HAS file. <u>Modem</u> and <u>port types</u> settings from this file are applied to new <u>Phonebook</u> entries to ensure compatibility with your hardware configuration.

The DEAFULT.HAS file typically is located in the same directory as the rest of your HyperACCESS/Win session files (which all have the .HAS extension).