To

The destination of the file(s) being transferred.

SESSION

☐ Command List

SESSION [path]session-name[ext]

Where: **Session-Name** is the name of the session file. By default, the session file is retrieved from the emulators session directory. However, an optional path and file extension can be supplied.
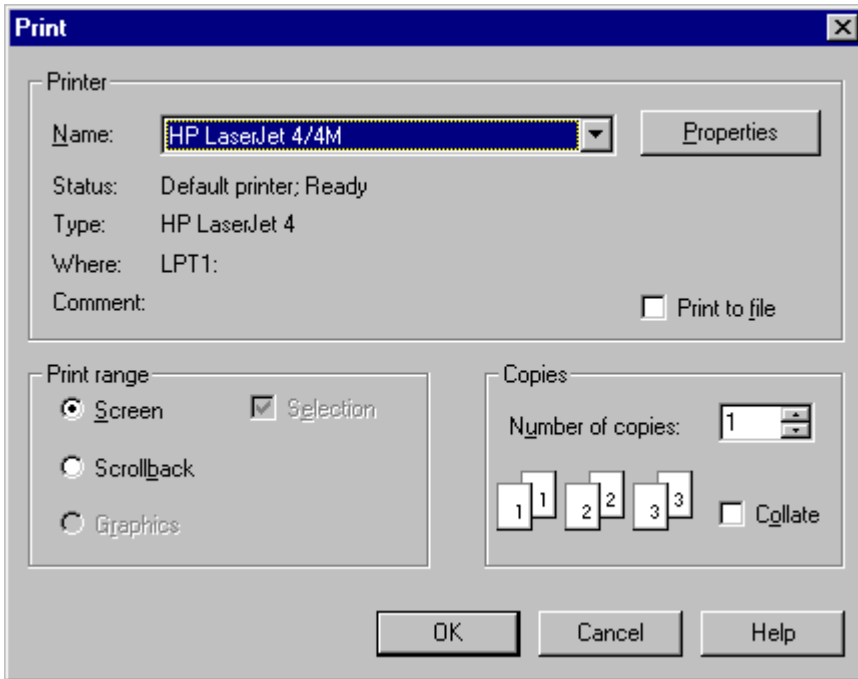
Starts an emulator session using the specified session file.

If the session file does not exist, an inlaid file specification error will be returned. Status =STS_K_CMD_INVFSPEC.

Print

☐ File Menu

Used to select the Printer, Print Range, Print to File, and Printer Properties. The Printer Properties accessed through this dialog box are determined by the printer driver. The more important printer options are configured in the *Page Setup* dialog box.

Note: *Changes made to options in this dialog box are not saved and will revert to their default value the next time it is displayed. Changes to the printer name will be remain in effect until the program exits.*

WIN

☐ Command List

WIN (Windows command string)

Executes the Windows command string in order to launch a Windows application from within the emulator.

Example: WIN NOTEPAD

Displays the Windows Notepad.

Symbols can be used to assign Windows command strings to a more convenient form.

Example: NOTEPAD:=="WIN NOTEPAD"NOTEPAD C:\VT320\MODEM.ECF

Creates an emulator command, NOTEPAD, that launches the Notepad editor. The editor then displays the MODEM.ECF file. When Notepad is exited, you return to the emulator.

Keyboards

The emulator supports two IBM PC keyboard configurations and the DEC LK250/450 Keyboard. Click the keyboard to display the default key assignments. See *Customizing the Keyboard and Mouse - Keyboard Mapper* for information on editing key assignments or creating an entirely new key map.

IBM - Enhanced Keyboard

- ☐ DEC VT Default Key Assignments
- ☐ WYSE 50 Default Key Assignments

IBM - AT Keyboard

- ☐ DEC VT Default Key Assignments
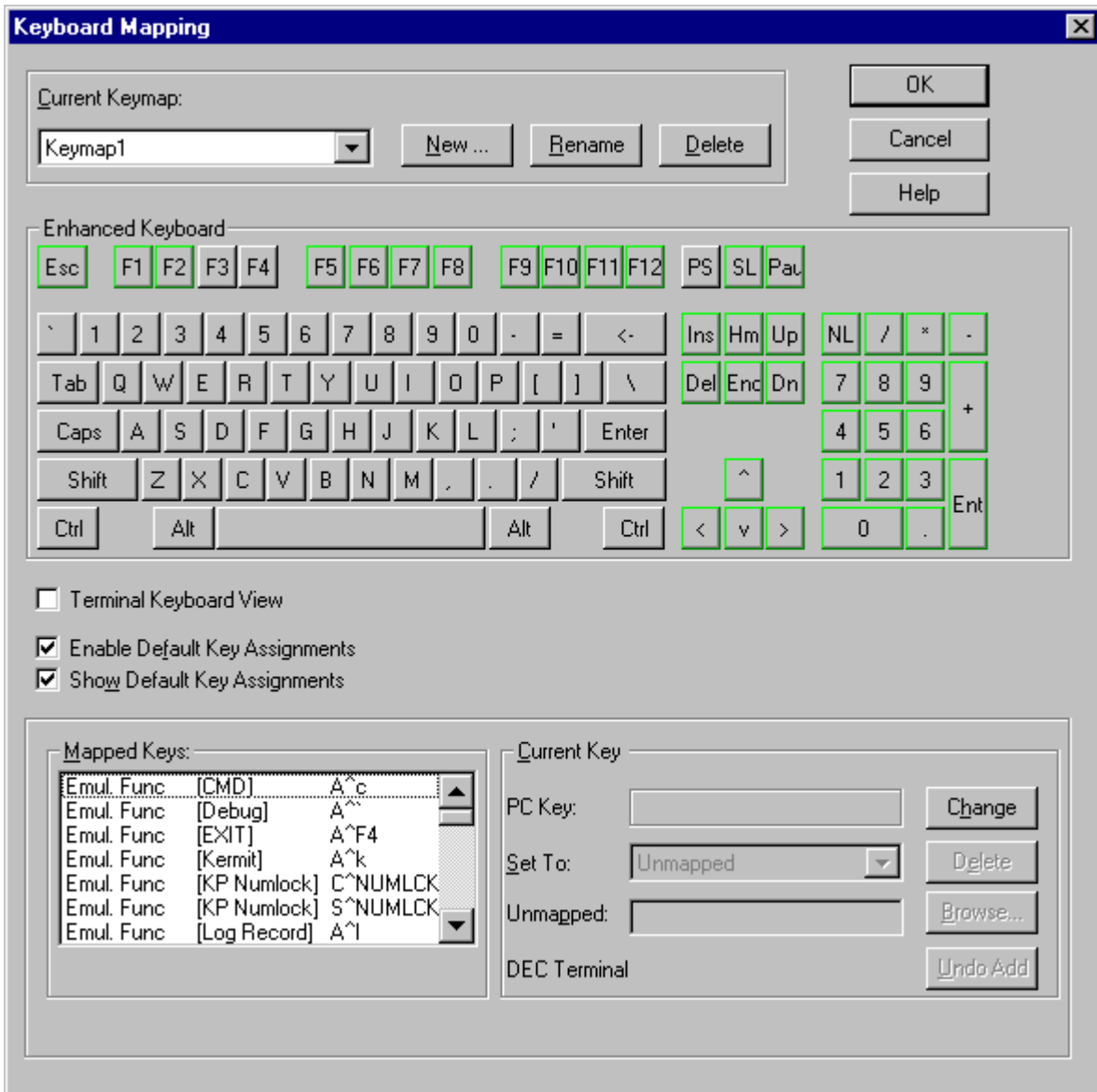
DEC LK 250/450 Keyboard

- ☐ DEC VT Default Key Assignments

Keyboard Mapper

☐ Setup Menu

Using the Key Mapping dialog box, the keyboard can be configured to perform many different functions. A PC key can be defined to send a terminal key, execute a command or command file, send a string, or perform an emulator function.

See also:

☐ Creating a New Keymap
☐ Mapping the Current Key (Standard View)
☐ Terminal Keyboard View
☐ Mapping Keys in Terminal Keyboard View

Mouse Mapper

☐ Setup Menu

Using the Mouse Mapper, mouse buttons can be configured to perform many functions such as sending a string, a command, a mouse position report, running a command file, and executing an emulator function.

Mouse mapping definitions are only executed when the mouse cursor is in the emulation window. If the mouse cursor is moved outside of the emulation window, the mouse buttons perform their normal Windows functions.
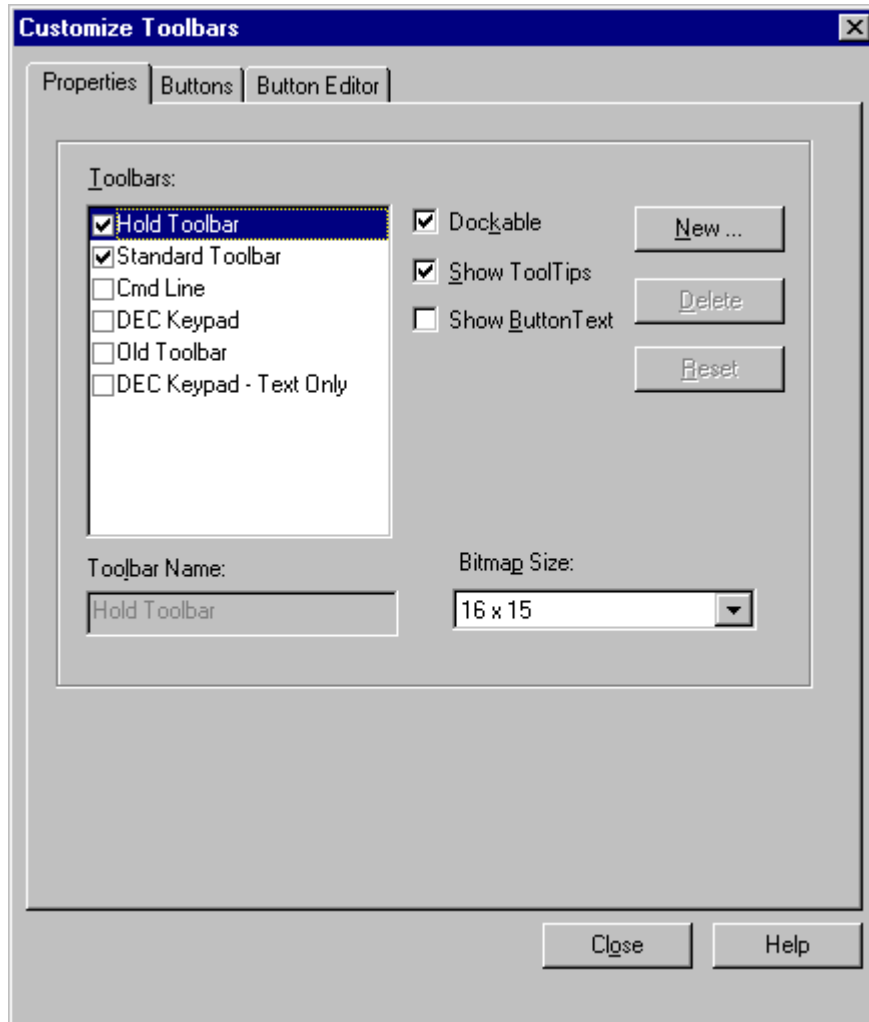
To enter the Mouse Mapping dialog box, click *Setup - Mouse Mapper*.
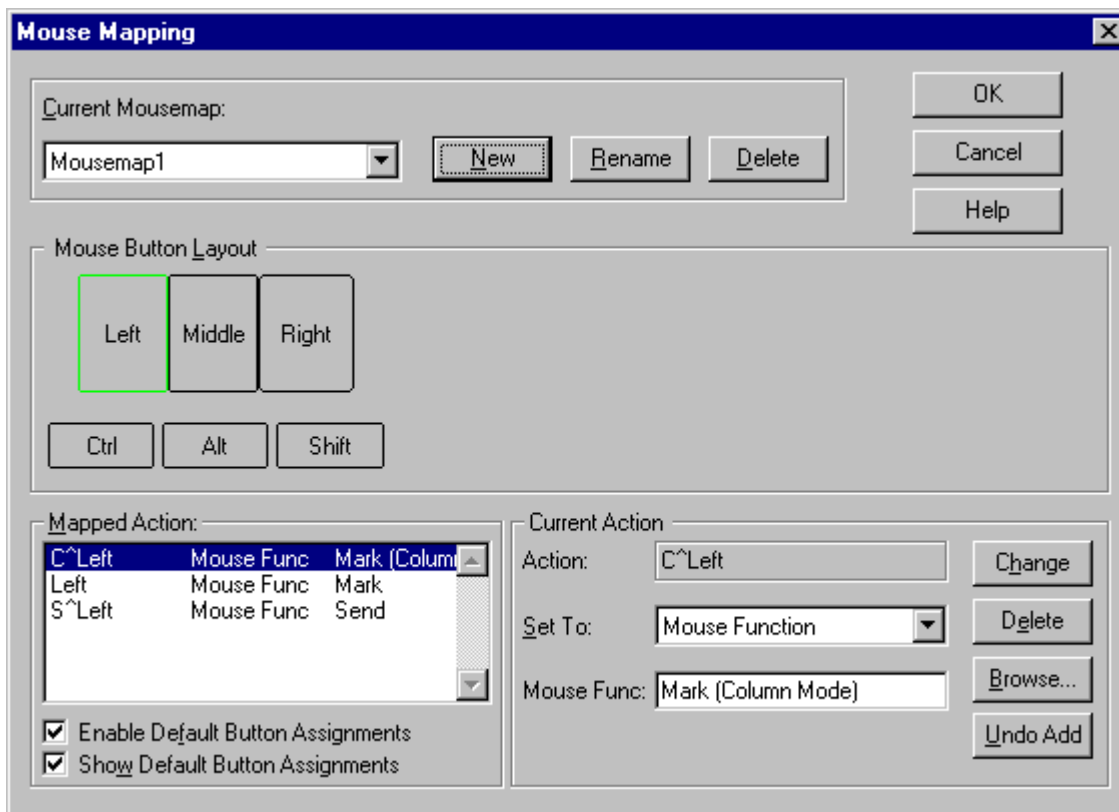
Customize Toolbars

☑ Setup Menu

Through this set of dialog boxes the behavior and appearance of the emulator toolbars can be modified to suit individual preference. Toolbar buttons can be created, edited and deleted. Entire new toolbars can also be created.

.

Command List

☐ Commands

COMMAND	FUNCTION
BREAK	Send a break
CLOSE	Close a file
CLS	Clear screen (short form)
CAPTURE	Capture host data to a text file.
CONTINUE	Resume execution of next command
DDE CONNECT	Connect a client and server application for the specified topic
DDE DISCONNECT	Disconnect the specified conversation
DDE DISCONNECTALL	Disconnect all conversations
DDE EXECUTE	Send commands to the server to be executed
DDE REQUEST	Request the value of a data item from the server
DDE POKE	Send a data item value to the server
DDE ADVISE	Create an Advise Data Link
DDE UNADVISE	Delete an Advise Data Link
DDE TOPICS	Compile a list of active server applications and topics
DELAY	Delay specified time
DELETE SYMBOL	Delete symbol(s)
DISPLAY	Output data to screen
DOS	Execute DOS command
DROPDTR	Drop Data Terminal Ready (DTR)
EMULATE	Enter Emulation mode
ENDINTERACTIVE	End interactive command mode
ERASE SCREEN	Clear Screen (long form)
EXECUTE	Executes a terminal key or emulator function.
EXIT	Exit emulate mode
FILE	Perform a file transfer
FLUSH	Flush receive buffer
GOSUB	Execute a subroutine within a command file
GOTO	Go to a command file label
HELP	Display emulator Help
IF	Test condition
INQUIRE	Prompt for input
INTERACTIVE	Enter interactive command mode
INVOKE	Invoke the named member of an automation object
KERMIT	Enter Kermit mode
KERMIT BYE	Logout the host and exit to Windows
KERMIT CONNECT	Return to Emulation mode
KERMIT DOS	Execute DOS command
KERMIT END	End Kermit server session
KERMIT EXIT	Exit to Windows
KERMIT FINISH	Tell server to exit
KERMIT GET	Receive files from server
KERMIT HELP	Lists Kermit commands
KERMIT LOGOUT	Tell server to logout
KERMIT RECEIVE	Non-server receive file
KERMIT SEND	Sends file to remote Kermit
LOG	Create a log file
ON ABORT	Set condition for ON ABORT
ON DEVICE_ERROR	Set condition for ON DEVICE_ERROR
ON DISCONNECT	Set condition for ON DISCONNECT
ON Error_Severity	Set condition for ON error levels
OPEN	Open a file
OPEN/OLE	Creates an automation object of the automation server
PICTURE	Create or display a graphics image
PRINT EJECT	Eject printer page
PRINT ON/OFF	Continuous print on/off
PRINT SCREEN	Print the text screen

PRINT/CONTROLLER	Pass data directly to the printer
QUIT	Exit emulate mode
READ	Read a string from the host or file
READ SCREEN	Reads information from the screen.
REPLAY	Replay an emulator Log file
RETURN	Return from a GOSUB command
SCAN	Display the key names
SEND	Send ASCII text file or message to host
SESSION	Start an emulator session
SET ABORT	Set Abort key checking
SET CDELAY	Set delay for sending characters
SET DDECLIENTTIMEOUT	Set the timeout value, in seconds, for the DDE client commands.
SET DDESERVERNAME	Set the name that the emulator responds to as a DDE server.
SET [NO]DDEAUTOINITIALIZE	Set the DDE auto initialize feature to on or off.
SET [NO]DDEAPPENDINSTANCE	Set the DDE append instance feature to on or off.
SET DEVICE_ERROR	Set device error checking
SET DISCONNECT	Set disconnect checking
SET EOF	Set the End of File character
SET HOST	Create a session to a remote node
SET KEYMAP	Switch Keymaps
SET LDELAY	Set delay for sending lines
SET MESSAGE	Set message control
SET ON	Set error checking
SET TERMINAL	Set terminal characteristics
SET TURNAROUND	Set a turnaround character
SET VERIFY	Set verify mode
SHOW SYMBOL	Display local and global symbol values
STOP	Terminate execution of all command files
WAIT	Wait for a host string
WP5 ON/OFF	Enable/Disable WordPerfect 5.x mode
WIN	Execute a Windows command string
WRITE	Write a string to the host or file

Command File Programming

Command files are text files that contain emulator commands. Command files are useful for automating tasks such as transferring files, logging on, and defining keyboard configurations. However, command files are not limited to the above functions.

This section covers the following advanced programming features:

- Symbol assignment and substitution
- Full range of lexical functions (Locate, Extract, etc.)
- Logical operations
- IF processing
- Special display lexical functions
- Command file nesting
- Comprehensive error control

See also:

- Display Lexicals
- Documenting Command Files
- Expression Evaluation
- Error Facility
- Foreign Commands
- Labels
- Lexicals
- Operators in Expressions
- Passing Parameters
- Special Characters
- Symbols
- Symbol and Lexical Substitution
- Symlexes

Command Files

☐ Command Execution

Command files are text files containing emulator commands. Command files are useful for automating tasks such as file transfers, logins, and defining keyboard configurations.

Command files can be executed from the following:

- Command line prompt
- Key definition
- Mouse button definition
- Host computer
- Command file

See also:

☐ Recording a Command File

Commands

☐ Kermit

Before issuing Kermit commands, the Kermit program should be running on the host computer.

The following table lists the available emulator Kermit commands. For a list of the commands available on your host Kermit, please see your host Kermit manual or help system.

Command	Function
BYE	Logout the host and exit to Windows
CONNECT	Return to Emulation mode
DOS	Execute DOS command
END	End Kermit server session
EXIT	Exit to Windows
FINISH	Tell server to exit
GET	Receive files from server
HELP	Lists Kermit commands
LOGOUT	Tell server to logout
RECEIVE	Non-server receive file
SEND	Sends file to remote Kermit

LEXICALS

☐ Command File Programming

Lexicals are functions that return information about character strings and other items. Lexical functions are not enclosed in quotation marks and often require an argument. Lexicals can be used in expressions in the same manner as character strings, integers, symbols and variants.

- ☐ F$ELEMENT
- ☐ F$EXTRACT
- ☐ F$GETINFO
- ☐ F$FAO
- ☐ F$INTEGER
- ☐ F$LENGTH
- ☐ F$LOCATE
- ☐ F$MESSAGE
- ☐ F$STRING
- ☐ F$TYPE

See Also

- ☐ Display Lexicals
- ☐ Lexical Commands for Variant Manipulation and Automation

Recording a Command File

☑ Record Command File

The Command File recorder employs two basic commands to write the keystorkes typed and the commands received from the host to a command file:

▶ WRITE HOST (what the user types or sends to the host)
▶ WAIT (the data received form the host)

Record

To record a login command file:

1. After starting the emulator, but before logging in, go to *File - Record Command File*, and specify a command file name. The host connection details and username and password keyboard input are stored in this file. Once logged in to the host, any other keyboard input is also stored until you stop the recording.

2. Once the recording is started, a toolbar pops up with optins to pause, run, start, stop playing, or stop recording. Alternatively, to stop recording, go to *File - Stop Recording Command File*.

Note: *The command file recorder does not record data or keystrokes performed with a dialog box. The only exception to this is when performing a connection/login.*

Next time the emulator is started, the command file can you load the emulator you can manually run the script. To automate the process further you can associate the login script to a specific session file, which will run the script after the session has connected.

Note: *When you create a login command file with the Command File recorder and specify that it be launched in in the Session Manager, the Session Properties tab must be set to None. This is because the SET HOST command is built into the script and specifying a tab other than None creates two attempts to connect to the host.*

Command List

☐ Commands

COMMAND	FUNCTION
BREAK	Send a break
CLOSE	Close a file
CLS	Clear screen (short form)
CAPTURE	Capture host data to a text file.
CONTINUE	Resume execution of next command
DDE CONNECT	Connect a client and server application for the specified topic
DDE DISCONNECT	Disconnect the specified conversation
DDE DISCONNECTALL	Disconnect all conversations
DDE EXECUTE	Send commands to the server to be executed
DDE REQUEST	Request the value of a data item from the server
DDE POKE	Send a data item value to the server
DDE ADVISE	Create an Advise Data Link
DDE UNADVISE	Delete an Advise Data Link
DDE TOPICS	Compile a list of active server applications and topics
DELAY	Delay specified time
DELETE SYMBOL	Delete symbol(s)
DISPLAY	Output data to screen
DOS	Execute DOS command
DROPDTR	Drop Data Terminal Ready (DTR)
EMULATE	Enter Emulation mode
ENDINTERACTIVE	End interactive command mode
ERASE SCREEN	Clear Screen (long form)
EXECUTE	Executes a terminal key or emulator function.
EXIT	Exit emulate mode
FILE	Perform a file transfer
FLUSH	Flush receive buffer
GOSUB	Execute a subroutine within a command file
GOTO	Go to a command file label
HELP	Display emulator Help
IF	Test condition
INQUIRE	Prompt for input
INTERACTIVE	Enter interactive command mode
INVOKE	Invoke the named member of an automation object
KERMIT	Enter Kermit mode
KERMIT BYE	Logout the host and exit to Windows
KERMIT CONNECT	Return to Emulation mode
KERMIT DOS	Execute DOS command
KERMIT END	End Kermit server session
KERMIT EXIT	Exit to Windows
KERMIT FINISH	Tell server to exit
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KERMIT HELP	Lists Kermit commands
KERMIT LOGOUT	Tell server to logout
KERMIT RECEIVE	Non-server receive file
KERMIT SEND	Sends file to remote Kermit
LOG	Create a log file
ON ABORT	Set condition for ON ABORT
ON DEVICE_ERROR	Set condition for ON DEVICE_ERROR
ON DISCONNECT	Set condition for ON DISCONNECT
ON Error_Severity	Set condition for ON error levels
OPEN	Open a file
OPEN/OLE	Creates an automation object of the automation server
PICTURE	Create or display a graphics image
PRINT EJECT	Eject printer page
PRINT ON/OFF	Continuous print on/off
PRINT SCREEN	Print the text screen

PRINT/CONTROLLER	Pass data directly to the printer
QUIT	Exit emulate mode
READ	Read a string from the host or file
READ SCREEN	Reads information from the screen.
REPLAY	Replay an emulator Log file
RETURN	Return from a GOSUB command
SCAN	Display the key names
SEND	Send ASCII text file or message to host
SESSION	Start an emulator session
SET ABORT	Set Abort key checking
SET CDELAY	Set delay for sending characters
SET DDECLIENTTIMEOUT	Set the timeout value, in seconds, for the DDE client commands.
SET DDESERVERNAME	Set the name that the emulator responds to as a DDE server.
SET [NO]DDEAUTOINITIALIZE	Set the DDE auto initialize feature to on or off.
SET [NO]DDEAPPENDINSTANCE	Set the DDE append instance feature to on or off.
SET DEVICE_ERROR	Set device error checking
SET DISCONNECT	Set disconnect checking
SET EOF	Set the End of File character
SET HOST	Create a session to a remote node
SET KEYMAP	Switch Keymaps
SET LDELAY	Set delay for sending lines
SET MESSAGE	Set message control
SET ON	Set error checking
SET TERMINAL	Set terminal characteristics
SET TURNAROUND	Set a turnaround character
SET VERIFY	Set verify mode
SHOW SYMBOL	Display local and global symbol values
STOP	Terminate execution of all command files
WAIT	Wait for a host string
WP5 ON/OFF	Enable/Disable WordPerfect 5.x mode
WIN	Execute a Windows command string
WRITE	Write a string to the host or file

DDE Command Builder

☐ Execute Menu

The DDE Command Builder dialog box is used to select and execute DDE commands. The DDE Command Builder makes it easier to perform DDE commands because you don't need to learn the format of each command.
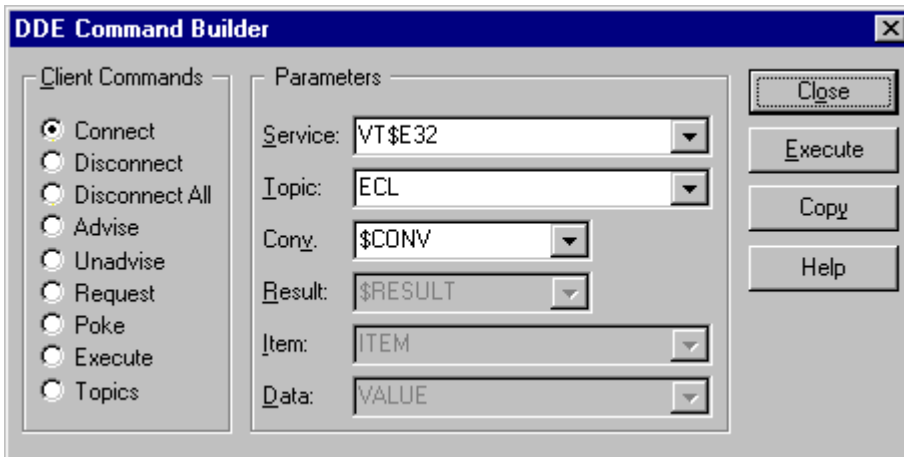
See also:

☐ Advise Data Links
☐ DDE Commands
☐ Using DDE
☐ Server Topics

File Transfer

The emulator includes an **ASCII** file transfer plus four popular protocols for error free file transfer:

- Kermit
- XMODEM
- YMODEM
- ZMODEM

For more information, click of the following:

- Overview
- Auto Command Mode Setup
- Receiving Files
- Sending Files
- Setting up the File Transfer Protocol

Logging and Replay

Logging

The LOG function writes all data that appears on the screen into a log file on the disk. The log file contains all screen data and control sequences received by the emulator.

To record a log file:

1. Click *File - Record Log File*.

2. Enter a filename. The log filename can include a complete DOS path specification. If a filename extension is not specified, the emulator assigns .LOG.

3. Check **Append** to add new log information to the end of an existing log file.

4. Check **Overwrite Protection** to be notified if the file already exists.

5. Click *Save*.

6. To stop recording the log file, click *File - Stop Recording Log File*.

Replay

The Replay function allows a previously recorded log file to be played back offline from the host computer system.

The log file can be replayed at six different rates. It can also be programmed to stop on every page, new screen, or user defined string. The replay can also be paused at anytime using HOLD.

To start the replay operation:

1. Click *File - Replay Log File*.

2. Enter the name of the log file. The log filename can include a complete DOS path name.

3. Click *Open*.

4. Terminate replay by clicking on *Execute - Abort*.

Options

Setup - General - Log Replay includes several options that control the operation of the Replay function.

REPLAY RATE
Selects the replay speed. Speeds are, ranging from the slowest to the fastest: 300, 1200, 2400, 4800, 9600, to the maximum baud rate.

CLEAR SCREEN
Pauses the replay prior to executing any control sequence that causes an erase from the first column of the top margin to the last column of the bottom margin.

EVERY PAGE
Pauses the replay each time a new page of text is scrolled. This option may not work correctly with log files that display text using direct cursor positioning.

TEXT
The replay pauses when the data in the log file matches the user-defined string. The user-defined string can be 25 characters in length and include any control character.
To disable, clear the user-defined string.

Pause Actions

When a replay pause occurs, the following message appears in the Status Line:

Pause on " ".   (Press Enter to continue, Q to Quit, or P to Print Screen)

Press carriage return to continue, Q to terminate the replay operation, or P to print the screen.

Programming

Some experimentation with the replay programming may be necessary to achieve the desired results. The following are guidelines for setting programming options:

Select the desired replay rate and use HOLD to stop the replay at the desired places.

Selecting the *Every Page* option *Setup - General - Log Replay* causes a replay pause after each page of text.

MENU DRIVEN APPLICATIONS

Pauses for menu driven applications require some consideration. The display techniques vary widely between programs. One or more options may be required simultaneously to program the desired pauses.

Selecting the **Clear Screen** option in *Setup - General - Log File Replay* works for many menu driven applications by causing an automatic pause before clearing each screen.

Many menu programs clear the screen one line at a time. These programs will not pause when the screen is cleared.

If the replay does not pause when the screen is cleared, examine the application screens for a string that appears near the bottom of every screen. Enter the string in the **Text** field in *Setup - General - Log Replay*.

Menus and Dialogs

☐ Contents

Menu items and dialog box descriptions are included in this section. Click any item below to navigate through the menu system.

☐ File

☐ Edit

☐ View

☐ Setup

☐ Execute

☐ Connect

☐ Help

OLE Support

OLE Automation

Using the Emulator Command Language (ECL), the emulator can act as a client to instantiate (create) "Automation Objects" or "Automation Servers". In the Microsoft world, these objects are referred to as COM objects, Automation objects, or ActiveX objects and come in the form of a .dll or .ocx file.

Click the following topics for information:

- ECL Automation Object Commands
- ECL Capabilities
- ECL Commands
- ECL Variant Type
- Lexical Functions for Variant Manipulation and Automation
- OLE Requirements
- Sample Files
- Using Automation Objects in ECL

Mode

Glossary

The operating state of the terminal.

Glossary

A **ANSI**
      ASCII
      Asynchronous

B **Baud**
      Binary
      Bit
      Byte

C **Character Attributes**
      Character Sets
      Cursor

D **Default**
      Default Directory
      Dialog Box
      DEC Multinational Character Set
      DEC Special Graphics Character Set
      DEC Supplemental Graphics Character Set
      Download

E **Echo**

F **Full-Duplex**

H **Half-Duplex**
      Hardcopy
      Host System

I **ISO Latin-1 Supplemental Set**
      Instance

K **K-Byte (KB)**
      Kermit

L **Local Echo**

M **Mode**
      Modem

N **National Replacement Character Sets (NRC)**

O **Online**

P **Packet**
      Parity Bit
      Port
      Protocol

R **Remote Host**
      Remote Server
      Root Directory

S **Scrollback**
      Server Mode
      Softkey
      Strapable Options

T **Transparent Mode**

U **Upload**

X **XMODEM**

Information to Provide

☑ Technical Support

> *Note:* For convenience, print this topic and then fill it out. Keep a copy handy nearby for any support calls.

To help us resolve your problem faster, please have this information ready and be at the computer that can duplicate the problem when you call:

Product: _____ Version: _____ Registration #: _____

PC Configuration:

Make and Model:
Microsoft Windows Version: _____
Disk Space: _____ Memory (RAM): _____
Largest Executable Program Space (with Windows running): _____
Video card manufacturer and model: _____

Network Configuration (if applicable):

How is your PC connected to the host computer: _____
What is the model of your Ethernet board: _____
Are you using NetWare: _____
What network driver are you using: _____ Version: _____

Serial Configuration:

Type of connection (direct or modem): _____
Line speed: _____ Number of data bits: _____

Host System Configuration:

Model: _____ Operating System: _____ Version: _____

Registering the Product

Please fill out and return your Registration Card immediately. Registering your software allows you to receive Technical Support and notification of upgrades.

Overview

☐ File Transfer

The emulator includes an ASCII file transfer plus four popular protocols for error free file transfer. Click one of the following protocols for more information.

    ☐ ASCII
    ☐ Kermit
    ☐ XMODEM
    ☐ YMODEM
    ☐ ZMODEM

ASCII transfer moves text files between computer systems using standard file utilities that already exist on the remote computer. ASCII transfers are not guaranteed to be error free and can only be used for sending and receiving text files that do not contain binary coded information.

Error free file transfer protocols insure the correct delivery of binary and ASCII information. One or more of these protocols are usually supported by host systems and bulletin boards. Use of an error free protocol is recommended over ASCII transfers due to the increased performance and reliability.

When transferring files with an error free file transfer protocol, the following scenario typically takes place:

1. Make the initial connection to, and ready the remote computer for transfer.

2. Tell the remote computer which file to transfer.

3. The file is broken into smaller pieces called packets. The file is sent packet by packet until complete.

4. The receiver inspects the arriving packet; acknowledging if it's okay, NAKing (rejecting) if it's damaged. If the packet is accepted, the next one is sent. If the packet is rejected, it is sent again. If the packet is retransmitted and rejected too many times, or if an acknowledgment is not received, the file transfer fails.

5. When the file transfer is complete, the sender tells the receiver that it has reached the "End of File".

6. Repeat steps 2 - 5 to send more files. When all the files are sent, the two programs disconnect.

To

The destination of the file(s) being transferred.

Picture Files

Enter the name of the directory used for storing or displaying picture files.

Colors

The color palette shows the possible colors for text foreground and background.

Print

☐ File Menu

Used to select the Printer, Print Range, Print to File, and Printer Properties. The Printer Properties accessed through this dialog box are determined by the printer driver. The more important printer options are configured in the *Page Setup* dialog box.
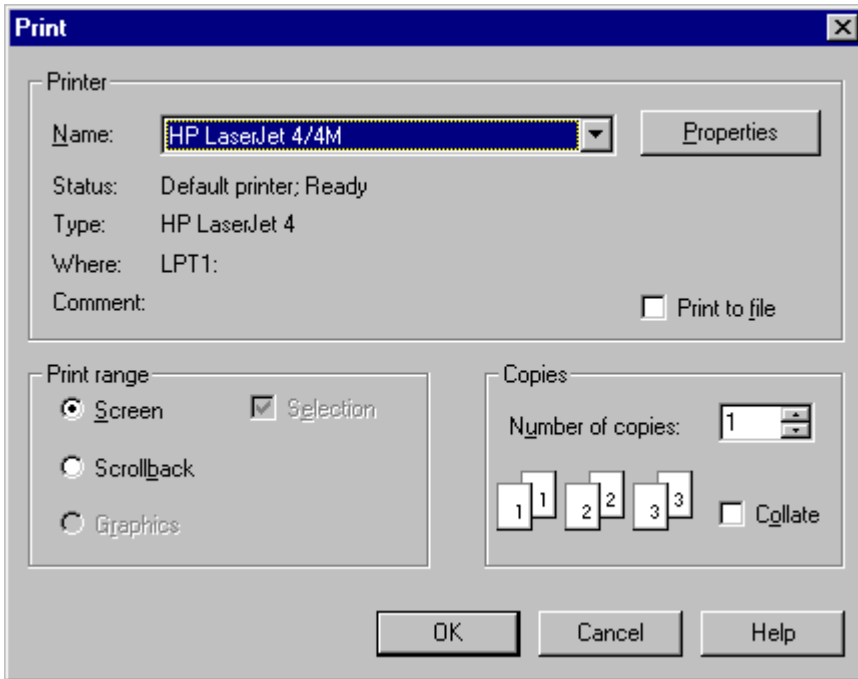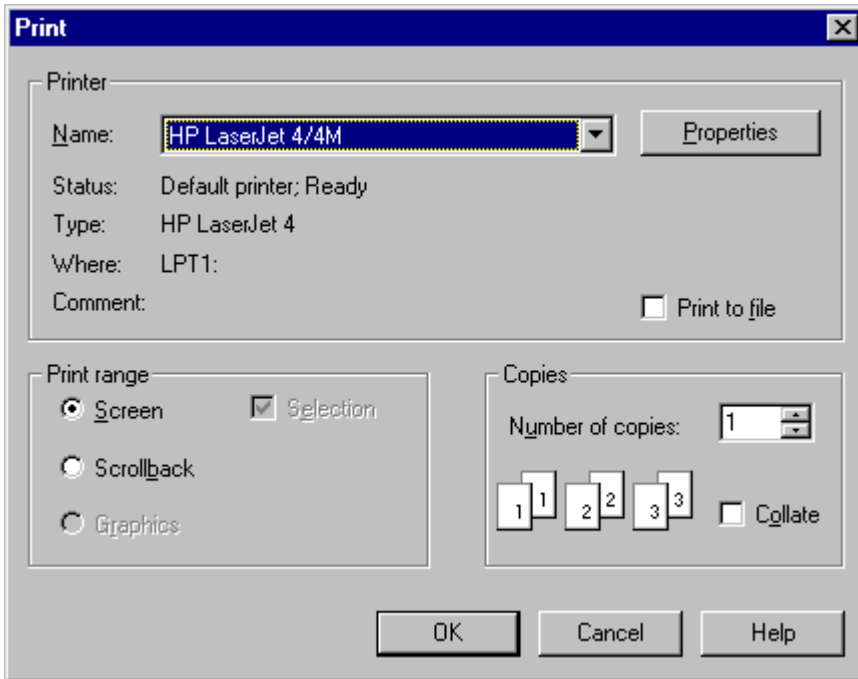

Note: *Changes made to options in this dialog box are not saved and will revert to their default value the next time it is displayed. Changes to the printer name will be remain in effect until the program exits.*

Print

☐ File Menu

Used to select the Printer, Print Range, Print to File, and Printer Properties. The Printer Properties accessed through this dialog box are determined by the printer driver. The more important printer options are configured in the *Page Setup* dialog box.

Note: *Changes made to options in this dialog box are not saved and will revert to their default value the next time it is displayed. Changes to the printer name will be remain in effect until the program exits.*

PICTURE

Command List

PICTURE /CREATE filename

(VT340 graphics mode only.) Saves the current graphics image to a file. By default, the emulator creates the file with the extension .SDF. A path name can be specified as part of the filename.

Options:

/OVERWRITE   Overwrites the specified filename if the file already exists.

/BITMAP   Creates a Windows-compatible device independent bitmap (DIB) file. Images created with /BITMAP cannot be replayed at a later time. This option is available for users who wish to import the graphics into other Windows applications.

Example 1: PICTURE /CREATE /BITMAP IMAGE.BMP

Creates a DIB image file named IMAGE.BMP.

Example 2: PICTURE /CREATE /OVERWRITE IMAGE

Creates a graphics picture file named IMAGE.SDF.

PICTURE /DISPLAY filename

Displays a graphics image previously created with the /CREATE command. The emulator will only replay files with the .SDF extension.

Example: PICTURE /DISPLAY IMAGE.SDF

Displays the picture file IMAGE.SDF.

Terminal Setup

☐ Setup Menu

Terminal Setup

Terminal Type:
VT320

Terminal ☑ Auto
VT320

Status
⦿ Online
○ Local
☐ Local Echo

Display | Keyboard | **VT320**

Click on Terminal Type to select a terminal

Click on a tab to open the folder

OK | Cancel | Apply | Help