MS-Windows

AdvanceLink NewWave Supplement





HP Part No. D2104-90006 Printed in USA March 1991

First Edition E0391

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Preface

AdvanceLink for NewWave provides HP and DEC VT100 terminal emulation in the HP NewWave environment. Most of its features operate identically to those of AdvanceLink for Windows and are covered in the *AdvanceLink Reference* (MS-Windows).

AdvanceLink's script language, TermTalk, is also used with AdvanceLink for NewWave, as documented in the *TermTalk* manual. For an overview of NewWave-specific commands, see "Working with HP NewWave" in Chapter 3 of *TermTalk*.

The current manual is a supplement to the AdvanceLink for Windows documentation. It describes installation under NewWave and the use of NewWave features, organized as follows:

- Chapter 1, NewWave Features, provides an overview of AdvanceLink's special NewWave features.
- Chapter 2, Getting Started, provides installation instructions and a discussion of AdvanceLink objects and TermTalk objects.
- Chapter 3, Drag and Drop, explains what happens when you drag or paste objects into an AdvanceLink object.
- Chapter 4, The Menus, explains the differences between the menus of AdvanceLink for NewWave and those of AdvanceLink for Windows.
- Chapter 5, Task Language, lists the commands that compose AdvanceLink's task language.

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NewWave Features

AdvanceLink for NewWave is an HP 2392, HP 700/94 and VT100 terminal emulator for the HP NewWave environment. Once you have connected your PC to an HP 3000, HP 9000, HP 1000, DEC VAX, or other system by direct cable, modem, or network, AdvanceLink allows you to access the data, applications, and storage capacity of the host as if you were using an HP terminal. AdvanceLink for NewWave also includes TermTalk, a scripting language that automates terminal-based functions.

AdvanceLink for NewWave adds two kinds of objects to your NewWave Office: AdvanceLink objects and TermTalk objects. An AdvanceLink object, when open, provides a terminal emulation window in which you can connect to and communicate with a host computer. A TermTalk object is a script containing commands which control AdvanceLink, instructing it to perform a series of terminal emulation functions.

In general, AdvanceLink for NewWave operates just as AdvanceLink for Windows does, according to the documentation in the *AdvanceLink for Windows Reference*. Special NewWave extensions to the capabilities of AdvanceLink for Windows are documented in this supplement. These extensions are:

Dragging and dropping or pasting any NewWave object other than a TermTalk object into an open AdvanceLink window initiates transfer of the object to a host computer. (Unlike a tool object like the Waste Basket, the AdvanceLink object must be open for drag and drop to

Chapter 1: Overview

- work.) To do something other than initiate file transfer (for example, to customize the file transfer procedure, or even to disable file transfer) upon object drop or paste, you can specify a TermTalk script object which is executed instead of file transfer.
- Dragging and dropping a TermTalk object into an open AdvanceLink window executes the commands contained in that object. Pasting a TermTalk object into the window initiates transfer of the object to the host computer.
- NewWave-style help is provided for all screen elements and a help button is included in each dialog box.
- To support the development of computer based training (CBT) applications, AdvanceLink for NewWave allows command monitoring. This allows you to build an Agent task which runs an interactive CBT lesson, as described in "Computer-Based Training Developer Guide" included in the Hewlett-Packard NewWave Environment Developer Kit.

Automating Computer Functions

While AdvanceLink for NewWave provides automation of terminal-based functions through the use of the TermTalk script language, it also includes a set of task language commands which are used by the NewWave Agent to automate tasks which involve the use of AdvanceLink. The differences between the NewWave Agent task language and the TermTalk script language are outlined in the table below.

NewWave Agent	TermTalk
Creates tasks which	Limited in operation to
can integrate any	the single
number of different	AdvanceLink object
tools and objects,	running the script
including	-
AdvanceLink	
Takes over	Can run in background
workstation while	while user or agent
running; user cannot	performs some other
do anything else	activity
while task in progress	
Limited control of	Thorough control of
handshaking and	host communications
timing for host	including flexible
communications	manipulation of timing
	and handshaking
Can set but not	Can set and retrieve
retrieve all basic	basic configuration
configuration settings	settings, as well as
_	low-level data comm
	parameters

To illustrate the differing functions of Agent tasks and TermTalk scripts, assume you want to automate the process of backing up several NewWave objects to the host computer. First, let us examine how you would perform this procedure interactively.

1. You open an AdvanceLink object.

- 2. You log on to the host.
- You drag and drop each NewWave object to be transferred to the host into the AdvanceLink window, one at a time. After you drop each object, a Send File dialog box is displayed in which you can confirm or modify transfer options.
- 4. You log off.
- You close the AdvanceLink object.

While this whole procedure could be recorded and later performed by the NewWave Agent with no TermTalk script objects involved, better control of the timing involved in logging on and logging off is provided by TermTalk. TermTalk script objects which log on and log off the host can be executed automatically upon opening and closing of the AdvanceLink object. Once you have set up an AdvanceLink object which logs on when opened and logs off when closed, this object can be used by any other task or interactive user who needs to communicate with the host.

Each AdvanceLink object can have one TermTalk script object which is executed automatically upon opening, and one which is executed automatically upon closing. To create such a script object, you might select the **Record A Script** command from AdvanceLink's Script menu, perform the desired actions, then select **Stop Recording** from the same menu. You then use the **Script** command on AdvanceLink's Settings menu to designate this script as the one to be executed upon the opening or closing of the object.

If you did create the opening and closing scripts described above, the backup procedure would be automated as follows.

The NewWave Agent opens an AdvanceLink object.

- The AdvanceLink object automatically executes a script which logs on to the host.
- 3. The NewWave Agent drags and drops each NewWave object to be transferred to the host into the AdvanceLink window, one at a time. After dropping each object, the Agent sets transfer options using the SEND_OBJECT command (one of the commands AdvanceLink adds to the Agent task language). This corresponds to the Send File dialog normally completed by the user.
- The NewWave Agent closes the AdvanceLink object, which logs off automatically.

Another possibility for Step 3 would be to set up a TermTalk script which replaces the simple initiation of file transfer upon object drop with a more complex script which not only initiates transfer but specifies all options, and perhaps goes on to move the documents which have been backed up into different groups on the host computer. Each AdvanceLink object can have one TermTalk script object which is executed automatically upon object drop and paste, replacing the default action of initiating file transfer. Such a relationship is established using the Script command on AdvanceLink's Settings menu.

The sophisticated functions of Agent tasks and TermTalk scripts are illustrated by a further example. Suppose you wanted to produce a graph of the fluctuations of a particular stock price every morning. This procedure could be automated with the following steps.

- The NewWave Agent opens a speadsheet object and an AdvanceLink object.
- The AdvanceLink object automatically executes a script which sets communications parameters, dials a modem, and logs on to the online service which provides stock prices.

- 3. The Agent uses the SET_VARIABLE command (one of the commands AdvanceLink adds to the Agent task language) to set up a permanent variable with the name of the stock in question. The Agent then executes a TermTalk script object with the DO_SCRIPT_OBJECT command (another AdvanceLink addition to the task language.) During the execution of the script object, the Agent is suspended.
- 4. The script object retrieves the name of the stock price to be looked up from the permanent variable, then finds its current price using the online service. The timing, handshaking, and management of display memory required by this process are smoothly handled by TermTalk commands. The price is placed in a second permanent variable.
- 5. When the script completes, the Agent resumes task execution. The Agent retrieves the stock price from the second permanent variable using the VARIABLE function (added by AdvanceLink to the Agent task language.) It then pastes the value into the spreadsheet object.
 - If multiple stocks are to be monitored, steps 3 through 5 could be repeated.
- The Agent closes the AdvanceLink object. A script which logs off the online service and hangs up the modem is executed automatically.
- 7. The Agent produces and prints a graph using the spreadsheet object, then closes that object.

To update the graph on a daily basis, the Agent's Calendar could be used to schedule the task to run every weekday at 6 AM.



Getting Started

Installation Instructions

To install AdvanceLink for NewWave, insert the disk labelled "AdvanceLink Volume 1" into drive A and run the INSTALL procedure. This procedure is run under MS-DOS before loading Windows or NewWave.

C: A: Enter

A: INSTALL C: (or other drive where the NewWave

directory, \HPNWDATA, is located)

To install from a drive other than drive A, use the DOS ASSIGN command. For example, if you are on drive C and wish to install AdvanceLink from drive B, enter the following commands:

C: ASSIGN A=B

C: A: Enter

A: INSTALL C: (or other drive where the NewWave

directory, \HPNWDATA, is located)

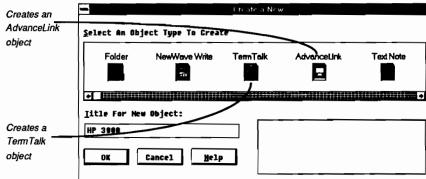
The installation procedure loads NewWave and instructs it to copy the necessary files from the AdvanceLink Master disk. Halfway through the procedure, you will be prompted to insert "Volume 2." Insert the disk labelled accordingly.

Once this phase of installation is complete, you can create an AdvanceLink object by selecting Create a New... from the Objects menu of the NewWave Office, then selecting the AdvanceLink icon from the list of NewWave objects.

Chapter 2: Getting Started

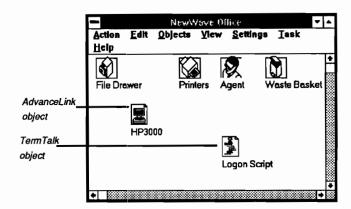
AdvanceLink Objects and TermTalk Objects

Once installed in the NewWave Office, AdvanceLink can create two types of objects: AdvanceLink objects and TermTalk objects.

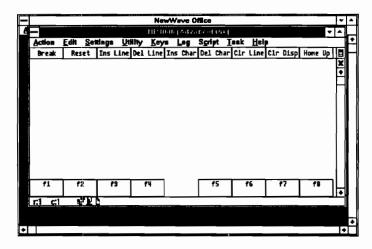


An AdvanceLink object is created by selecting **Create a New** from the Objects menu of the NewWave Office, then choosing the AdvanceLink icon from the list of NewWave objects. When opened, an AdvanceLink object provides a terminal emulation window in which you can communicate with a host computer.

A TermTalk object is created by selecting **Create a New** from the Objects menu of the NewWave Office, then choosing the TermTalk Script icon from the list of NewWave objects. A TermTalk object can also be created using the **Create** button in AdvanceLink's Script Settings dialog box (select **Script** from the Settings menu of the AdvanceLink window). A TermTalk object is a script which automates AdvanceLink functions.

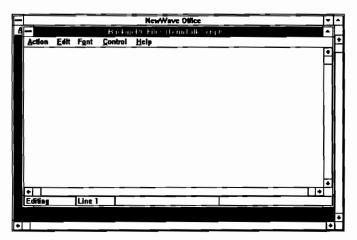


When you open an AdvanceLink object by double-clicking it or by selecting **Open** from the Objects menu of the NewWave Office, you get an AdvanceLink window in which you can communicate with a host computer.



When you open a TermTalk object by double-clicking it, by selecting Open from the Objects menu of the NewWaveOffice, or by using the Open button in the Script Settings dialog box (select Script from the Settings menu of the AdvanceLink window), you get a text editing window in which you can create and edit a script which controls

AdvanceLink using commands from the TermTalk script language.



Multiple connection and script windows can be open at once, and are independent of each other. To link a particular TermTalk object to a particular AdvanceLink object for the purpose of automatic script recording, use the Set Script Window command on the AdvanceLink Script menu. This connection lasts only as long as the windows are open; it is not saved with the objects.

Unlike most NewWave objects (but like the NewWave Office itself), an AdvanceLink object can be iconized. This means that the window is closed and the object appears on the Windows desktop outside the NewWave Office window. Meanwhile, any processing that is in progress continues uninterrupted. This is especially useful during the execution of lengthy file transfers. To iconize a connection window, click the downward-pointing arrow in the upper right corner.



Unlike Windows applications, an iconized AdvanceLink object does not display the Control menu when you click it. Double-click the icon to re-open the window.

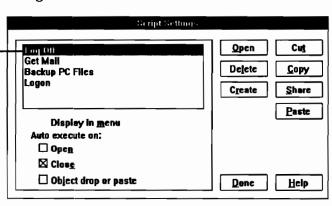
Compound Objects

In the same way that a NewWave Write object can contain or share graphics objects, spreadsheet objects, and so on, an AdvanceLink object can contain or share one or more TermTalk objects. These linked objects can:

- Be listed on the Script menu of the AdvanceLink object.
- Be associated with a particular function key.
- Be automatically executed upon opening or closing of the AdvanceLink object.
- Replace file transfer as the default action when a non-TermTalk object is dragged and dropped or pasted into the AdvanceLink object.

TermTalk objects which are used in this way, as well as any nested TermTalk objects called by these objects and any scripts to be executed with host control escape sequences, must be listed in the Script Settings dialog box (select Script from the Settings menu of the AdvanceLink window.) This dialog box is illustrated below.

Linked TermTalk objects are listed here, and can be displayed on the menu or executed automatically on open, close, drop or paste.



If an AdvanceLink object is exported to DOS or transferred to a host computer (possibly for the purpose of distributing it to other NewWave users), all linked objects are moved with it.

For more information on the Script Settings dialog box, see Chapter 4.

Installing the File Transfer Link Program

To perform file transfers with HP 3000 and 9000 host systems, you must install HPLink, the file transfer link program, on the host s with which you plan to transfer files. To do so, first run AdvanceLink and set the configuration values described in "Installing the Host Program" in Chapter 4 of the AdvanceLink Reference (MS-Windows). Then follow these steps:

- Locate Volume 2 of your AdvanceLink installation disks and insert it into your disk drive.
- Select Import from Disk File from the Objects menu of the NewWave Office. Then select the file install.ser from the disk you have just inserted. Once imported, this file appears as a TermTalk object called "Install HPLINK on host" in your NewWave Office.
- Drag "Install HPLINK on host" into the AdvanceLink window in which you have set configuration values and logged on. This initiates execution of the installation script object.

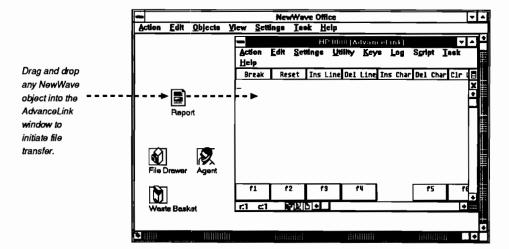
The first thing the installation script does is ask whether you are installing on an HP 3000 or an HP 9000. Once you click the desired button, an informational dialog box is displayed. When you click **Install** in this box, AdvanceLink looks for a copy of HPLink in the directory from which AdvanceLink was run. If it is not there, AdvanceLink prompts you to insert the HPLink master disk in drive A.

For more information, refer to Chapter 4 of the *AdvanceLink* Reference (MS-Windows).

Drag and Drop

Transferring Objects to the Host

You can drag and drop any NewWave object into an open AdvanceLink window, and you can paste any object which is on the NewWave clipboard into the AdvanceLink window using the **Paste** command from the Edit menu of the AdvanceLink window. The window must be open for drag and drop or paste to work.



Dropping or pasting any object that is not a TermTalk object initiates file transfer as currently configured in the File Transfer Settings box (select File Transfer from the Settings menu of the AdvanceLink window). Immediately after you drop or paste the object, the Send File dialog box shown on the next page is displayed. See the chapter titled "File Transfer" in the AdvanceLink Reference (MS-Windows) for an explanation of the options in this dialog box.

Convert to EDITOR format, word wrap Convert to EDITOR, jetain lines Blinary transfer Backup PC File Restore HP3000 file	PC File to be Sent to HP3000: Report HP3000 File Characteristics Name RFPORT Rec Size	Text File HP3000 File NewWave Other
© Convert to EDITOP, retain lines © Binary transfer © Backup PC File © Restore HP3000 file		
○ Binary transfer ○ Backup PC File ○ Bestore HP3000 file	_	
O Bestore HP3000 file	1	
		Send Cancel

Note

There is a **Send File** command on the AdvanceLink's Action menu but it is only used to send DOS files. To send NewWave objects you must use drag and drop or the **Paste** command on the AdvanceLink's Edit menu. If you choose the **Send File** command from AdvanceLink's Action menu, only DOS file names are accepted and NewWave transfer options are not available.

By default, NewWave objects are transferred in the NewWave Serialized Object Format (SOF). This creates a copy of the object, including all linked objects and underlying files, in a format that can be restored using the NewWave SOF conversion option in AdvanceLink's Receive File dialog box. The SOF format is also recognized by some HP 3000 applications, including HP DeskManager. In an HP 3000 LISTF directory listing, these files have the file type "SOF."

It is also possible to transfer the NewWave object with the "Binary transfer" or "Backup PC file" conversion options. These options send all the information described above



without the SOF file marker which identifies the file as a NewWave object.

To receive both DOS and NewWave files, use the Receive File command on the Action menu of the AdvanceLink window. When you receive a NewWave file, the default conversion is "NewWave SOF package," which restores the object into the NewWave Office. You can also select "Binary transfer," which receives the object as a DOS file. You might then put this DOS file on a flexible disk to pass onto other NewWave users, who could import it into their NewWave Offices.

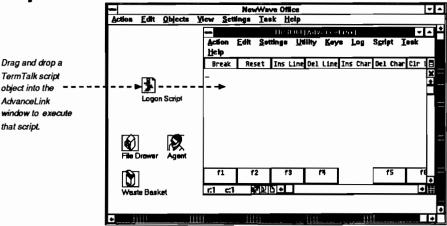
Changing the Default

To do something other than initiate file transfer (or to customize the file transfer procedure, or even to disable file transfer) when an object is dropped or pasted into the AdvanceLink window, specify the TermTalk object to be executed in the Script Settings dialog box (select Script from the Settings menu of the AdvanceLink window.)

	Script Settings	
If you choose this option, the selected script will be executed when an object is pasted or dropped into the AdvanceLink window.	Log Off Get Mail Backup PC Files Logon Beno Ubject Display in menu Auto execute on: Open Close Object drop or poste	Open Cut Dejete Copy Create Share Paste

Executing and Transferring TermTalk Objects

You can execute any TermTalk object by dragging and dropping it into the AdvanceLink window. The window must be open for this procedure to work.



Since dropping a TermTalk object into the AdvanceLink window executes the script instead of transferring it to the host, you must use the Paste command on the Edit menu of the AdvanceLink window to transfer a TermTalk object. Select the TermTalk object you wish to transfer, choose Share, Copy, or Cut from the NewWave Office Objects menu to place it on the Clipboard, then select Paste from the Edit menu of the AdvanceLink window. AdvanceLink's Send File dialog is then displayed.

AdvanceLink Menus

Note

This section covers *only* the menu commands which are different from those of AdvanceLink for Windows. Commands which operate identically are discussed in the *AdvanceLinkReference* (*MS-Windows*). TermTalk menus are covered in the *TermTalk* manual.

The AdvanceLink for NewWave menu bar contains nine menus.

Action Edit Settings Utility Keys Log Script Task Help

The Action menu is similar to the File menu of AdvanceLink for Windows; differences are discussed in this chapter.

The Edit menu is identical to that of AdvanceLink for Windows. The **Paste** command, however, pastes objects as well as text, as discussed in the preceding chapter.

On the Settings menu, there are differences in the **Terminal**, **Script**, and **Function Keys** dialogs. These are discussed in this chapter.

The Utility, Keys, and Log menus are the same. When you select **Print Logged**, the data goes into the NewWave printer queue.

Differences in the Script menu are discussed in this chapter.



The Task and Help menus are standard NewWave menus, documented in your NewWave reference manuals. For help with any screen element or menu item, select the Screen/Menu Help command. The mouse pointer changes to an arrow with a question mark on top of it. You place this pointer on the element in question and click.

Action Menu

Action
Save
Saye As
Rever <u>t</u>
Connect
<u>D</u> isconnect
Se <u>n</u> d File
Rec <u>e</u> ive File
Attributes
Printer Setup
<u>C</u> lose
About AdvanceLink

The Action menu contains commands which manage the AdvanceLink object, control connection and printer status, and initiate file transfer. It does not contain an **Open** command because all objects must be opened from the NewWave Office by double-clicking or selecting **Open** from NewWave's Objects menu.

Save

Updates the saved version of the AdvanceLink object with the current status of the following commands:

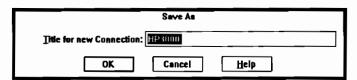
- All settings made using commands from the Settings menu.
- Tab and margin settings.
- Status of the control bar.
- Status and contents of function key labels.

To load AdvanceLink with these configuration settings, open the AdvanceLink object.

It is convenient to save an AdvanceLink object with each configuration setup you frequently use. For example, you could store the settings you use when you dial your modem in an AdvanceLink object called Modem, and just open that object to load that configuration.

Save As

Save the current status of the configuration items listed above to a new AdvanceLink object, which you name in the dialog box shown below:



The new object is placed in the NewWave Office. It is not opened automatically. The configuration settings in the currently-open AdvanceLink object are not changed by this command.

The default name for the new object is the same as the current session. Though in most cases you will want to modify this name, it is possible under NewWave to have multiple objects with the same name.

Revert

Returns all configuration settings to the values saved by the last use of the Save command, or to the settings in effect when the AdvanceLink object was opened if Save has not been used.

Send File

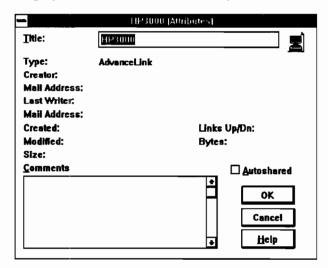
Sends DOS files to remote computers. Use drag and drop or the **Paste** command from the Edit menu to transfer NewWave objects.

Receive File

Receives DOS files and NewWave objects from remote computers. The only difference in the operation of this command and the identically-named command in AdvanceLink for Windows is that, under NewWave, if the file received is a Serialized Object Format (SOF) package, it can be imported back into the NewWave Office instead of remaining as a DOS SOF file.

Attributes

Displays the standard NewWave object attributes dialog box:



The title configured here and the title in the Terminal Settings dialog box (select Terminal from the Settings menu of the AdvanceLink window) are the same — both are the name of the object. Any change you make in that dialog box is carried over to this one, and the changes you make here are reflected there as well.

Close

Closes the AdvanceLink object.

About AdvanceLink

Shows which version of AdvanceLink you are using.

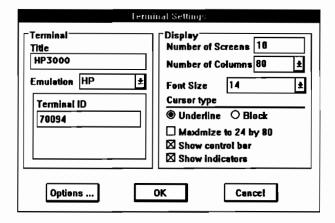
Settings Menu



Commands on the Settings menu operate just as the corresponding commands in AdvanceLink for Windows do, with the following exceptions.

Terminal

The Terminal Settings dialog looks like this:

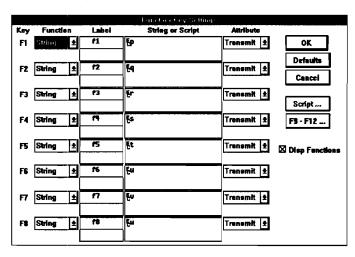


Title

The title shown here is the name of the AdvanceLink object. This field is changed when you enter changes in the Attributes dialog box, or when you change the name of the AdvanceLink object when it is closed in the NewWave Office window by clicking the name and modifying it as desired.

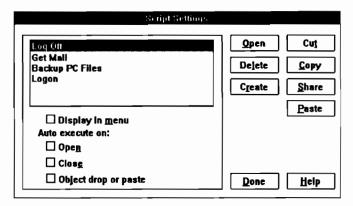
Function Keys

Only TermTalk objects listed in the Script Settings dialog box can be associated with a function key. When you click the Script button in the following dialog box, only those TermTalk objects are displayed.



Script

The Script Settings dialog box looks like this:



TermTalk object list

This list serves as a directory of linked TermTalk objects. Any TermTalk object which is to be automatically executed, displayed on the Script menu, associated with a function key or executed by host control, as well as any nested script executed by such a script, must be listed in this box. This is so that the AdvanceLink object can locate each of these TermTalk objects as they are needed.

To add an existing TermTalk object to this box, drag and drop its icon into the dialog box window. This is an exception to AdvanceLink's usual operation—dragging and dropping a TermTalk object normally executes it. However, normal drag and drop operation is disabled when the Script Settings dialog box is open.

When a TermTalk object is dragged into the Script Settings dialog, it is contained exclusively within the AdvanceLink object and no longer appears in the NewWave Office.

An existing TermTalk object can also be moved into this box from the Clipboard by clicking the Paste button in the dialog box. If the object was cut or copied to the Clipboard, it is contained exclusively within the AdvanceLink object. If it was shared, references to the object exist both in its former

location(s) and within the AdvanceLink object. It is the same object, so modifications made in any location are reflected in the rest.

A new script can be created and added to the list by clicking the Create button. You are prompted for a name for the TermTalk object and it appears at the bottom of the list.

To open any TermTalk object in the list for writing and editing, select its name and click Open, or double-click its name in the list box. The standard script window is displayed.

To remove a script from the list, highlight its name and click Delete.

To remove a script from the list and place a copy on the Clipboard, highlight its name and click Cut.

To place a copy of a script on the list on the Clipboard, leaving a copy in the list, click Copy. The two copies have the same name but are independent of each other.

To place a reference to a TermTalk object on the list on the Clipboard, click Share. When you paste the shared object, references to it exist in both places. It is the same object, so any changes you make to it in one location are seen in the other.



Dispiay in menu

To place a TermTalk object on the Script menu, highlight its name and check this option. Up to ten scripts can be listed on the Script menu. They are listed in the order they appear in the Script Settings dialog. (To change the order, cut and paste the scripts in the list box.)

The scripts appear on the Script menu with keyboard shortcuts $\boxed{A_{II}}$ + 0 through $\boxed{A_{II}}$ + 9 assigned automatically.

S <u>c</u> ript	
Pause Script	
Stop Script	
Do <u>C</u> ommand	
Record a Script	
Pause Recording	
Set Script Window.	
Backup PC Files	AR+1
Logoff	AR+2
Get Mail	AR+3
Logon	AR+4

Auto execute on open

To automatically execute a TermTalk object when the AdvanceLink object is opened, highlight its name and check this option. Only one TermTalk object can be automatically executed on open, so a script you select for this purpose replaces any other script that may have been previously selected.

Auto execute on ciose

To automatically execute a TermTalk object when the AdvanceLink object is closed, highlight its name and check this option. Only one TermTalk object can be automatically executed on close, so a script you select for this purpose replaces any other script that may have been previously selected.

Auto execute on object drop or paste

The TermTalk object for which this option is selected is automatically executed when an object that is not a TermTalk script is dragged and dropped into the AdvanceLink window. If no script is designated for this purpose, file transfer is initiated as described in Chapter 2. Only one TermTalk object can be automatically executed on object drop or paste, so a script you select for this purpose replaces any other script that may have been previously selected.

The *TermTalk* manual lists several commands which can be used in a script which is executed upon drop or paste to test and manipulate the dropped or pasted object. See "Working with HP NewWave" in Chapter 3 and the alphabetical command reference in Chapter 4 of *TermTalk*.

Script Menu

Script Stop S

Stop Script
Pause Script

Do Command...

Becord a Script...
Pause Recording

Set Script Window...

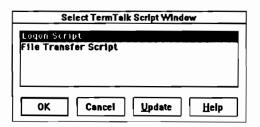
To execute a TermTalk object, drag its icon into the AdvanceLink window. There is no menu command which performs this function. Once the script has begun execution, you can use Pause Script to temporarily suspend execution, or Stop Script to terminate execution.

As in AdvanceLink for Windows, **Record a Script** does not open a script window, but records the TermTalk commands necessary to replicate your actions to a file. This file can be either saved or discarded when you select **Stop Recording**. Once saved, it appears as a TermTalk object in the NewWave Office.

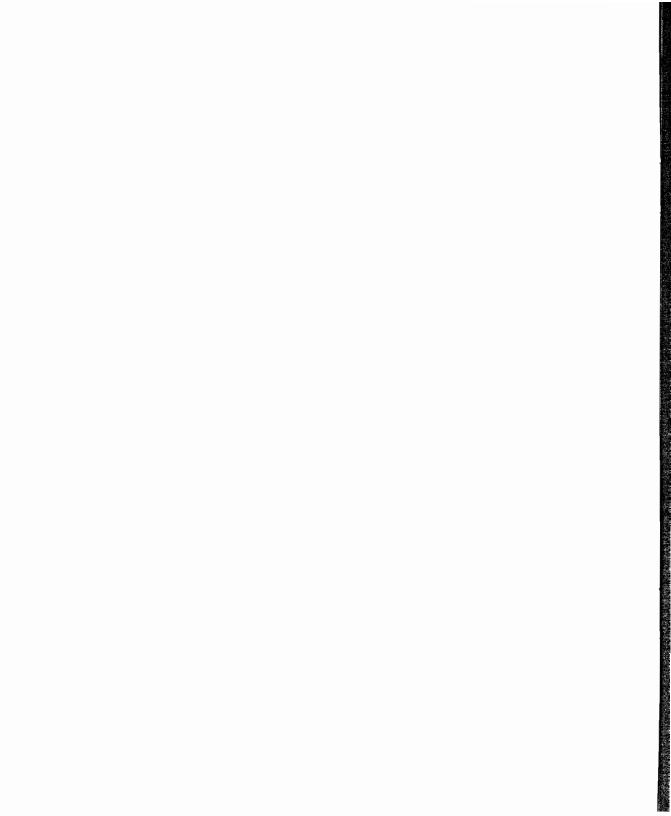
To record a script into a particular TermTalk object, open the TermTalk object in the NewWave Office, then use the Set Script Window command from this menu to establish a link between the AdvanceLink object and the target TermTalk object. To record to this object, select Record a Script from the Control menu of the TermTalk window rather than from the Script menu of the AdvanceLink window.

Set Script Window

Allows you to select a TermTalk script window into which TermTalk commands which reproduce the actions you perform in the AdvanceLink window are recorded.



If the TermTalk object you want to record to is not listed in the box, it may not be open. Open the object in the NewWave Office, then click **Update** to add its name to the list. The link between the TermTalk window and the AdvanceLink window only lasts for as long as the two windows are open, or until you choose the Set Script Window command again and link the AdvanceLink window to a different TermTalk window.



Task Language Commands

These commands are used to record tasks for the NewWave Agent which involve the use of AdvanceLink. Each command performs the function of a specific menu command, keyboard key, or mouse action, and they are grouped accordingly.

- Control Menu
- Action Menu
- Edit Menu
- Settings Menu
- Utility Menu
- Keys Menu
- Log Menu
- Script Menu
- Keyboard and Mouse
- Control Bar
- Host Interaction
- Miscellaneous

The commands are indexed alphabetically in the Index of this manual.

The functionality of each command can be determined by looking up the corresponding user interface element in the *AdvanceLink Reference (MS-Windows)* or, where the command operates differently under NewWave, in Chapter 4 of this manual. Most command parameters correspond to dialog box options documented in those places.

Note

Where commands have a list of options, these must be specified in the order shown, though any not required may be omitted.

The syntax of commands that display a dialog box includes an optional question mark after the command name. This means that a dialog box will be displayed with any default options you indicate (though none are required), so the user has the chance to confirm or change these options.

Control Menu

RESTORE

ADJUST_WINDOW

{ AT origin_point I TO width_integer [BY] height_integer I AT origin_point TO width_integer [BY] height_integer}

MINIMIZE

MAXIMIZE

Action Menu

SAVE

SAVE_AS[?] title_name

REVERT

CONNECT

DISCONNECT

SEND_FILE [?] file_name_string [TO host_file_name_string]

[EDITOR_WORD_WRAP | EDITOR_RETAIN_LINES | BINARY |

BACKUP | RESTORE | NEWWAVE_SERIAL_FILE]

[RECORD_SIZE record_size_integer [BYTES | WORDS]]

[OVERWRITE]

The SEND_OBJECT command is only valid immediately after an object has been dragged and dropped into the AdvanceLink window. This is recorded by NewWave Office's task language commands. If the object is to be pasted (rather than dragged and dropped) into AdvanceLink, use the PASTE_OBJECT command, listed below under the Edit menu.

SEND_OBJECT [?] [TO host_file_name_string]

[BINARY | BACKUP | NEWWAVE_SERIAL_FILE]

[RECORD_SIZE record_size_integer_[BYTES | WORDS]]

[OVERWRITE]

RECEIVE_FILE [?] host_file_name_string [TO file_name_string]

[TEXT_WORD_WRAP | TEXT_RETAIN_LINES | BINARY | BACKUP |

RESTORE | NEWWAVE_SERIAL_FILE] [OVERWRITE]

PRINTER_SETUP

CONNECTION_ATTRIBUTES [?] [AUTOSHARED {ON | OFF}]

[TITLE title_string] [COMMENTS comments_string]

CLOSE [SAVE | DISCARD]

ABOUT?

Edit Menu

CUT

COPY

PASTE

PASTE_OBJECT [?]

[TO host_file_name_string]

[BINARY | BACKUP | NEWWAVE SERIAL FILE]

[RECORD_SIZE record_size_integer [BYTES | WORDS]]

[OVERWRITE]

CLEAR

COPY_FIELDS

COPY_WINDOW_IMAGE

PASTE_FILE [?] file_name_string

SELECT ALL

CLEAR_DISPLAY

CLEAR_LINE

DELETE_LINE

INSERT_LINE

DELETE_CHARACTER

INSERT_CHARACTER {ON | OFF}

CLEAR_ALL_TABS

CLEAR_ALL_MARGINS

Settings Menu

```
TERMINAL SETTINGS [?]
      [TITLE title_string]
      [EMULATION {HP | ANSI | VT100}]
      [TERMINAL_ID id_string]
      [ANSWERBACK answerback string]
      [SCREENS screen_count_integer ]
      [COLUMNS {80 | 132 | 160}]
      [FONT {6 | 7 | 8 | | 9 | 10 | 12 | 14 | 16}]
      [BLOCK CURSOR | UNDERLINE CURSOR]
      [FULL_SCREEN | TERMINAL_SCREEN]
      [CONTROL_BAR {ON I OFF}]
      [INDICATORS {ON | OFF}]
      [TRANSMIT_FUNCTIONS {ON I OFF}]
      [INHIBIT_LINE_WRAP {ON | OFF}]
      [INHIBIT_HANDSHAKE {ON | OFF}]
      [INHIBIT_DC2 {ON | OFF}]
      [PAGE_MODE {ON | OFF}]
      [LINE MODIFY (ON I OFF)]
      [BLOCK_MODE {ON I OFF}]
      [REMOTE_MODE {ON | OFF}]
      [LOCAL_ECHO {ON | OFF}]
      [SMOOTH SCROLLING (ON LOFF)]
      [MEMORY_LOCK {ON I OFF}]
      [DISPLAY_FUNCTIONS {ON | OFF}]
      [AUTO_LINE_FEED {ON | OFF}]
      [FORMAT_MODE {ON | OFF}]
      [TYPEAHEAD {ON I OFF}]
      [CAPS_LOCK {ON | OFF}]
      [AUTO_HORIZONTAL_SCROLL {ON | OFF}]
      [AUTO_KEYBOARD_LOCK {ON | OFF}]
      [DISABLE_BELL {ON I OFF}]
      [HOST_CONTROL {ON I OFF}]
      [DDE {ON I OFF}]
```

```
CONNECTION_SETTINGS [?]
      ICONNECTION (SERIAL I MODEM | INT14 | EICON X25 | BAPI |
             HP TELNET | ADVANCENET }]
      [PORT {COM1 | COM2 | COM3 | COM4 |
             PORT1 | PORT2 | PORT3 | PORT4}]
      [BAUD {300 | 600 | 1200 | 2400 | 4800 | 9600 | 19200}]
      [PARITY {NONE8 | EVEN7 | ODD7 | ZEROS7 | ONES7}]
      [ENQ ACK {ON | OFF}]
      [XON_XOFF_INPUT {ON | OFF}]
      [XON_XOFF_OUTPUT {ON | OFF}]
      [PHONE_NUMBER phone_number_string]
      [HAYES_COMPATIBLE | OTHER_MODEM]
      [TONE | PULSE]
      [REDIAL {ON | OFF}]
      [HARDWARE HANGUP {ON | OFF}]
      [HOST NODE NAME host name string]
COLOR SETTINGS (?)
      [COLOR PAIRS (ON LOFF)]
      [FOREGROUNDO (red_integer, green_integer, blue_integer )]
       [BACKGROUNDO (red_integer, green_integer, blue_integer)]
       [FOREGROUND1 (red_integer, green_integer, blue_integer)]
       [BACKGROUND1 (red_integer, green_integer, blue_integer)]
      [FOREGROUND2 (red_integer, green_integer, blue_integer )]
      [BACKGROUND2 (red_integer, green_integer, blue_integer.)]
      [FOREGROUND3 (red_integer, green_integer, blue_integer)]
      [BACKGROUND3 (red_integer, green_integer, blue_integer)]
      [FOREGROUND4 (red_integer, green_integer, blue_integer)]
      [BACKGROUND4 (red_integer, green_integer, blue_integer)]
      [FOREGROUND5 (red_integer, green_integer, blue_integer)]
      [BACKGROUND5 (red_integer, green_integer, blue_integer)]
      [FOREGROUND6 (red_integer, green_integer, blue_integer)]
      [BACKGROUND6 (red_integer, green_integer, blue_integer )]
      [FOREGROUND7 (red_integer, green_integer, blue_integer)]
       [BACKGROUND7 (red_integer, green_integer, blue_integer.)]
```

FILE_TRANSFER_SETTINGS [?]

[HP3000 | HP9000 | XMODEM]

[STARTUP_SEQUENCE startup_run_string]

[DEFAULT_FILENAME filename_string]

[NON_TEXT_AS_BINARY | NON_TEXT_AS_PC_BACKUP]

[SUBSTITUTE_8BIT {ON | OFF}]

[SUBSTITUTE_CONTROLS {ON | OFF}]

[HOST_DC1 {ON | OFF}]

```
FUNCTION_KEY_SETTINGS [?]
      [F1 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message_string]}]
      [F2 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message string]}]
      [F3 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL TOP label string] [LABEL BOTTOM label_string]
             [STRING message string]}]
      [F4 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message_string]}]
      [F5 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message_string]}]
      [F6 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message_string]}]
      IF7 { ILOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message string ] } ]
      [F8 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL TOP label string] [LABEL BOTTOM label string]
             [STRING message string]}]
      [F9 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message string]}]
      [F10 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message_string]}]
      [F11 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message string ] } ]
      [F12 { [LOCAL | REMOTE | NORMAL | SCRIPT]
             [LABEL_TOP label_string] [LABEL_BOTTOM label_string]
             [STRING message string]}]
```

```
KEYBOARD_SETTINGS [?]
      [TAB_KEY {TAB | SPACES space_count_integer | RETURN}]
      [RETURN KEY {RETURN | ENTER}]
      [BACKSPACE { DESTRUCTIVE | NON_DESTRUCTIVE | DEL } ]
      [SHIFT_BACKSPACE { DESTRUCTIVE | NON_DESTRUCTIVE | DEL } ]
      [ENTER_KEY {RETURN | ENTER}]
      [NUM_PLUS_KEY {PLUS | RETURN | ENTER}]
      [EXTENDED_CHARACTERS {ON | OFF}]
      [CHARACTER_SET {NORMAL | LINE | MATH | ITALIC | BOLD |
             USASCII I UK I ANSILINE}]
LOG_SETTINGS [?]
      [LOG_TOPILOG_BOTTOM]
      [NORMAL | COMPRESSED | EXPANDED]
SCRIPT SETTINGS [?]
      [DONE | SELECT script_name _string
                 [EXECUTE ON_OPEN {ON | OFF}]
                 [EXECUTE_ON_CLOSE {ON I OFF}]
                 [EXECUTE ON OBJECT_INSERT {ON | OFF}]
                 [SHOW_IN_MENU {ON I OFF}]
                 [OPEN | DELETE | COPY | CUT | SHARE]
                 [CREATE script_name_string ] ]
```

Utility Menu

Break

SOFT_RESET

HARD_RESET

LINE_MODIFY {ON | OFF}

BLOCK_MODE {ON I OFF}

REMOTE {ON I OFF}

FORMAT_MODE {ON | OFF}

DISPLAY_FUNCTIONS {ON | OFF}

AUTO_LINE_FEED {ON I OFF}

KEYBOARD_LOCK {ON | OFF}

MEMORY_LOCK {ON I OFF}

TYPEAHEAD {ON | OFF}

SHOW EDIT_BUTTONS | MARGIN_TABS | CONTROL_BUTTONS

Keys Menu

The user function key labels shown in this menu are listed in the "Keyboard and Mouse" section later in this manual.

SHOW_FUNCTION_KEYS {ON | OFF}

LOCK_FUNCTION_KEYS {ON | OFF}

Log Menu

LOGGING {ON I OFF}

LOG_LINE

LOG_PAGE_FROM_CURSOR

LOG_ALL_FROM_CURSOR

LOG_ALL

LOG_SELECTION

INSERT_PAGE_BREAK

PRINT_LOG

SAVE_LOG [?] file_name_string [OVERWRITE | APPEND]

SAVE_LOG_TO_CLIPBOARD

CLEAR_LOG

Script Menu

Certain menu commands cannot logically be recorded. Therefore they have been omitted from the task language. These include Record a Script, Pause Recording, Stop Recording, and Set Script Window.

```
DO_SCRIPT_OBJECT object_name_string
```

DO_COMMAND[?] [command_string]

Keyboard and Mouse

```
CURSOR
    { UP | DOWN | LEFT | RIGHT | ROLL_UP | ROLL_DOWN | ROLL_LEFT |
             ROLL RIGHTI HOME UP I HOME DOWN I NEXT PAGE I
             PREV_PAGE | ROLL_PAGE_LEFT | ROLL_PAGE_RIGHT |
             LINE_HOME | LINE_ENDs [count_integer ] }
      I {row_integer_column_integer [RELATIVE]}
SCROLL_TO_LINE line_integer
SCROLL_TO_COLUMN column_integer
SELECT {UP | DOWN | LEFT | RIGHT [count_integer ]}
      I {left_column_integer_top_row_integer_right_column_integer
      bottom_row_integer [COPY] }
STOP (ON LOFF)
F1 ... F12
SHIFT_F1 ... SHIFT_F8
PF1 ... PF4
TAB
BACKTAB
```

By default, the Enter key is the one on the numeric keypad, not the Return/Enter key on the main keyboard. This can be reconfigured with the **Keyboard/Character Set** command on the Settings menu.

ENTER

RETURN

BACKSPACE

SHIFT_BACKSPACE

Control Bar

The edit buttons are duplicated by commands on the Edit and Action menus, and are shown under those menus. Control character buttons generate SEND_STRING commands. Tab and margin settings generate the following commands:

SET_TAB tab_position_integer [ON | OFF]

SET_LEFT_MARGIN margin_position_integer

SET_RIGHT_MARGIN margin_position_integer

Host Interaction

SEND_LINE transmission_string [EXPECT expect_string [WAIT seconds_integer]]

SEND_STRING transmission_string [EXPECT expect_string [WAIT seconds_integer]]

If EXPECT is used to intercept a host response to transmission from the terminal, it is best to add the string to the SEND_LINE or SEND_STRING syntax as shown above. If a separate EXPECT command is used, as shown below, some data may arrive

from the host before the command is executed and may not be available for comparison with the expected string.

EXPECT expect_string [WAIT seconds_integer]

The following command specifies the host prompt for which the SEND_LINE command waits before sending the transmission string. The default host prompt, DC1, is appropriate only for communications with the HP 3000.

HOST_PROMPT host_prompt_string

Miscellaneous

The following commands are used to set and retrieve the values of permanent variables in TermTalk scripts. Note that string values must be surrounded by double quotes.

SET_VARIABLE global_name_string [TO string_expression]

VARIABLE (global_name_string)

The VARIABLE() function returns the string or long integer contents of the permanent TermTalk script variable specified. If the variable does not yet exist, a numeric value of zero is returned.

To import or export session files to or from MS-DOS files, in order to share configuration data with AdvanceLink for Windows users:

CONVERT {FROM file_name_string | TO file_name_string [OVERWRITE]}

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