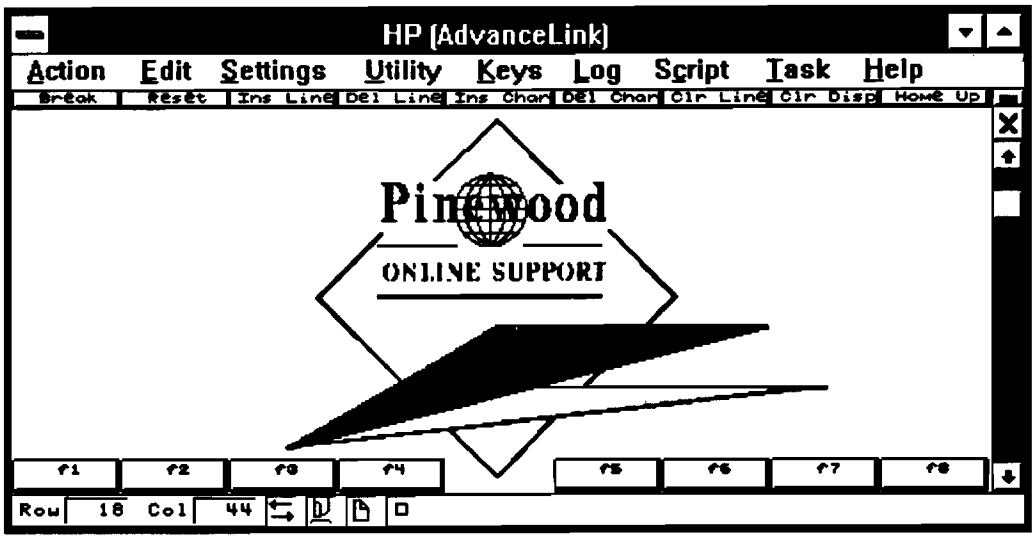


# AdvanceLink for Windows and *NewWave*

# Support Guide



[redacted]
PWD Online Support

Version 1.0

This printing
Thursday, May 28, 1992



HEWLETT PACKARD

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# Contents



🖫 = Supporting file available on disk

# Appendix



 = Supporting file available on disk

# 1 Introduction

AdvanceLink is a family of terminal emulation and file transfer products which allows HP Vectra and IBM compatible PCs to connect to HP3000, HP9000 or HP1000 host computers.

This document is the result of discussions with the developers and technical support personnel at TymLabs (the producers of AdvLink WIN/NW). It's aim is to give HP field support personnel a better understanding of how to sucessfully troubleshoot problems with AdvLink WIN/NW. It is intended to be a primer for the product and a reference of technical tips and support techniques.

At various places throughout this document, icons are used to draw the readers attention to specific points of interest or other reference items. These icons are explained below.

 Reference to another document for further information on a topic.

 Reference to supporting file on the AdvLink Win/NW Support Disk.

 A point of special importance.

 A supporting file on the AdvLink Win/NW Support Disk.

 A document on the AdvLink Win/NW Support Disk.

 A directory on the AdvLink Win/NW Support Disk.

 A program on the AdvLink Win/NW Support Disk.

# 2 User Interface

The main window of AdvLink Win/NW has several indicators positioned around the window. These are described in the figures below. Some indicators are only visible in VT100 mode. These are described in figure 2, all other indicators in the figure have the same meaning as in figure 1.

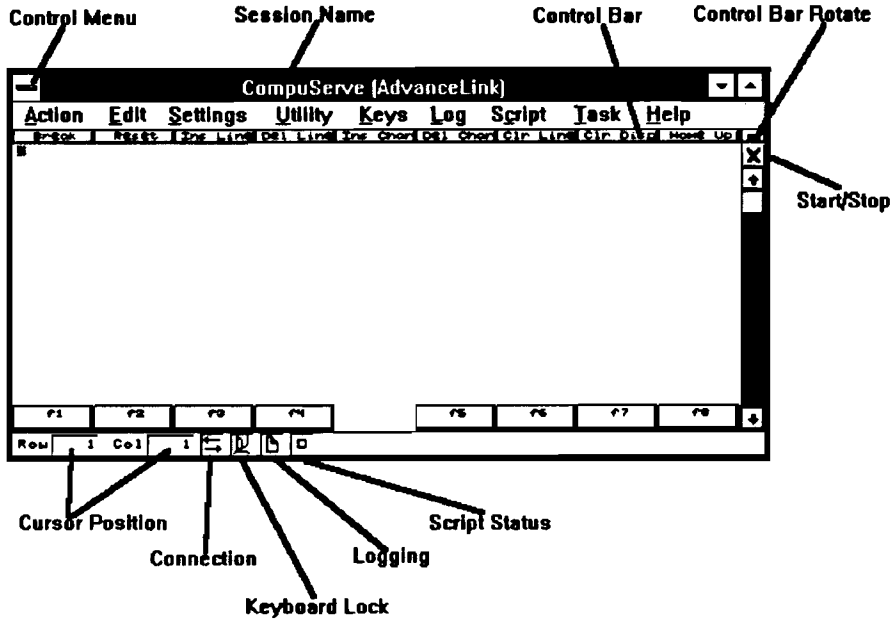


*Figure 1: Explanation of the indicators in the AdvLink main window in HP mode.*

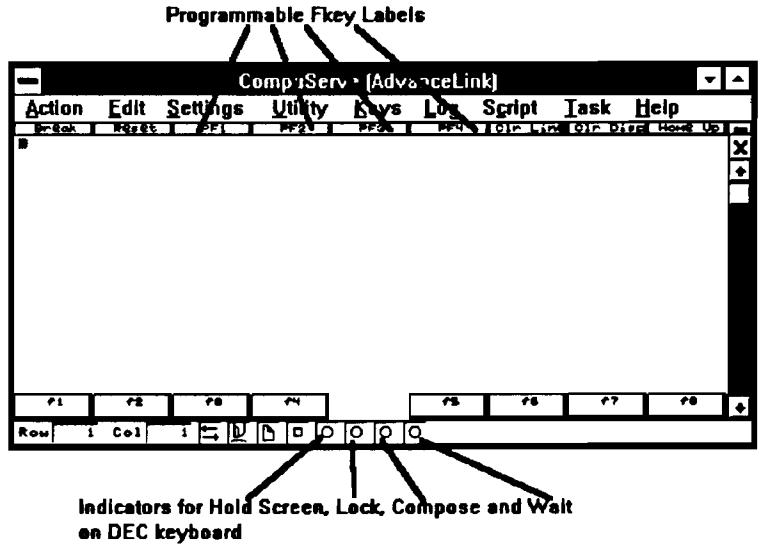


*Figure 2: Explanation of the indicators in the AdvLink main window in VT mode.*

## Drag and Drop

With version A.03.12, drag and drop was introduced into both the Windows and the NewWave product. Drag and drop give the user the ability to drag files from the Windows file manager and have them transfered to the host simply by dropping them on the AdvLink window or the minimised AdvLink icon.

The NewWave version of AdvLink has supported drag and drop functionality since version A.03.02. This was limited to objects on the NewWave desktop. Now both NewWave objects and files from the Wondpws file manager can be handled by the NewWave version of the product.

If the user wishes, dragging and dropping a file on to AdvLink can cause a TermTalk script to be executed. This is done by checking the "Object drop & paste " box in the `SCRIP SETTINGS` dialog box (see below).

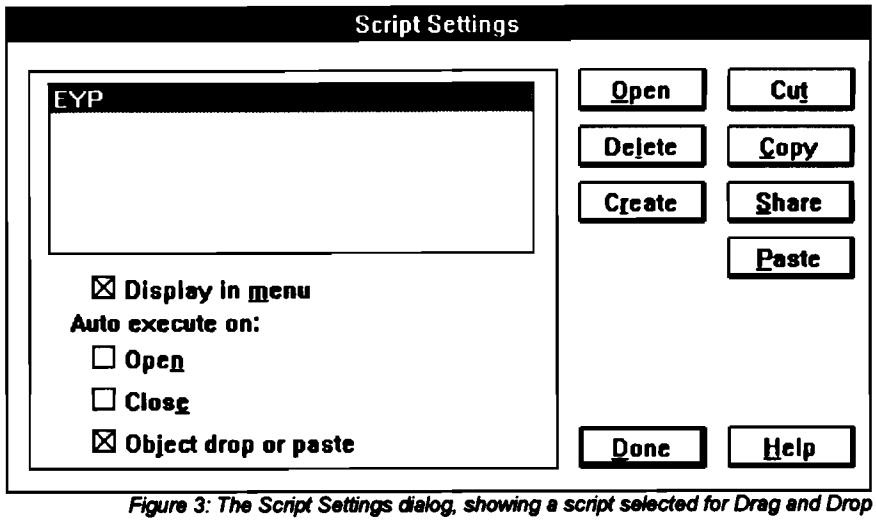


*Figure 3: The Script Settings dialog, showing a script selected for Drag and Drop*

If the user needs to be able to drop multiple file selections or whole directories onto AdvLink for transfer to the host, then a handling script **MUST** be written to manage the transfer.

## Data Logging

AdvLink Users have the ability to log data while they are using a session on the host. The LOG menu (see below) shows the various logging options available to the user.

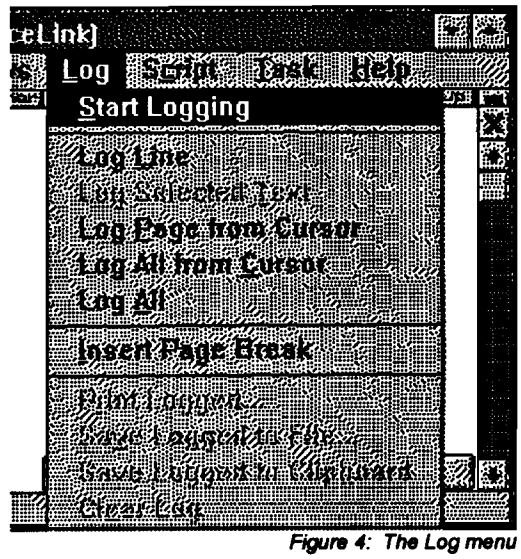


*Figure 4: The Log menu*

The options which are currently highlighted are the only ones available to the user. The options which are "Greyed out" become available when other specific operations have been performed.

This is what the same menu looks like after some data has been logged.

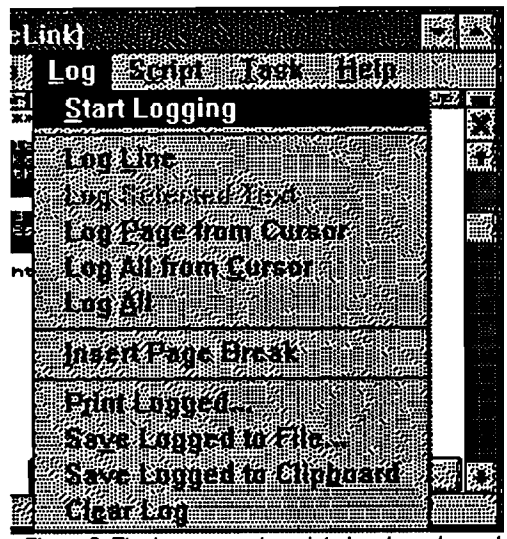


*Figure 5: The log menu when data has been logged.*

Notice that the user now has several more options available for selection. After data has been logged, it can be manipulated. Typically logged data can be printed to a local or network printer. The only menu item not demonstarted here is the "Log Selected Text" option. This becomes available when the user has selected some text on screen by dragging a bounding box around it.

This functionality used to be used by the HPDeskManager script "LPRINT". This script assumes that all logged data is sent directly to a printer. With AdvLink Win/NW, this is not the case. Printing logged data is now a two step process. First it has to be logged, then it has to be printed. If customres wish to continue to use the LPRINT script (which is unsupperted) in HPDesk, they will need to modify it to conform to the new logging functionality of AdvLink Win/NW.

## Performance

Users sometimes compare the performance of AdvLink Win/NW with that of AdvLink DOS. This is not a fair comparision as the two products run under VERY different environments. The very nature of MS-Windows means that processes that run under it must share the resources available on the PC. Some programs are less well behaved than others. It is possible for a programer to write software that will run at the exclusion of other processes. This is not very desirable in the Windows environment because it impacts on the multi-processing capabilities of the environment. Badly behaved programs benefit in improved performance for themselves at the expense of others.

AdvLink Win/NW is a well behaved Window program. It yeilds frequently to allow other Windows processes to access the processor. This has a trade off in that it can seem slower than other Windows based terminal emulators.

As a result of many Online Support calls into PWD, the division has put together this support notice on the subject of AdvLink Win/NW performance.

PINEWOOD SUPPORT STATEMENT: Performance of AdvanceLink/Windows

---

Thank you for bringing the above issue, (ie. performance of AdvanceLink/Windows)
to our attention. We are currently considering our performance situation.

Consequently, we have identified the points below, as the main key factors affecting the performance of AdvanceLink/Windows:

* The Graphical User Interface (GUI) used by AdvanceLink/Windows slows the product because all the characters on the screen, are handled as graphics. AdvanceLink/Windows does not have full control over the PC. Also, in particular, AdvanceLink/Dos does not have to support special fonts.

* AdvanceLink/Windows runs under the multi-tasking environment of MS-Windows, and hence, has to 'compete' for system resources.

* AdvanceLink/Windows implements MS-Windows 'Good Citizen' techniques, ie. it yields to allow other Windows applications to share the processor, while AdvanceLink is running.

NOTE: Some other Windows based terminal emulators, do not do this. This would significantly increase their performance speed on certain actions, such as screen painting.

There are of course, other factors that performance is dependant upon, such as:

* The type of processor used in your PC, (ie. 286, 386, 486).

* The current load on the PC, (ie. other processes running).

* The resolution of the display. (Screen Refresh/paint specific).

NOTE: Speed enhancement cards are available.

The Product Team are aware of our performance issues, and will continue to investigate ways, to provide improvements to the AdvanceLink/Windows product.

Thank you for the interest which you have shown in this product.

PWD SUPPORT.
6th May 1992.

# 3 Trouble Shooting Datacomms

## Supported Connection Methods

The following table details the various supported connection methods and the MS-Windows modes that supports them:

| Host Requiring HP Terminal Emulation | PC Connectivity | Protocol | AdvanceLink Connection to Select | Windows 3.0 Modes Support |
|---|---|---|---|---|
| Any Host: (HP 3000/9000 HP 1000 DEC VAX, UNIX) | Serial Port | RS 232C | COM1, COM2 | R, S, E |
| | Int 14 Driver | - | INT 14 1-2 | R, S, E |
| | Eicon Redirector | X.25 | COM1, COM2 | R, S, E |
| HP 3000 | HP OfficeShare III | VT | AdvanceNet | R, E * |
| | HP Network Services 2.0 | VT | AdvanceNet | R, E |
| | HP Network Services 2.1 | VT | AdvanceNet | R, S', E |
| HP 3000 With Wallongong ARPA Services | HP ARPA Services 2.0 | Telnet | BAPI | R, E |
| | HP ARPA Services 2.1 | Telnet | BAPI | R, E |
| | 3Com LAN Manager | Telnet | BAPI | R, E |

(PTO)

| Host Requiring HP Terminal Emulation | PC Connectivity | Protocol | AdvanceLink Connection to Select | Windows 3.0 Modes Support |
|---|---|---|---|---|
| HP 9000 | HP OfficeShare III | CVT Telnet | HP Telnet | R * |
| | HP ARPA Services 2.0 | Telnet | BAPI | R, E |
| | HP ARPA Services 2.1 | Telnet | BAPI | R, E |
| | 3Com LAN Manager | Telnet | BAPI | R, E |
| | NetManage's NEWT | Telnet | NEWT Telnet | E, S |
| | Frontier's SuperTCP | Telnet | SuperTCP Telnet | E, S |
| Other UNIX or TCIP Systems HP 1000, Sun, DEC, VAX, Apollo etc | HP ARPA Services 2.0 | Telnet | BAPI | R, E |
| | HP ARPA Services 2.1 | Telnet | BAPI | R, E |
| | 3Com LAN Manager | Telnet | BAPI | R, E |
| | NetManage's NEWT | Telnet | NEWT Telnet | E, S |
| | Frontier's SuperTCP | Telnet | SuperTCP Telnet | E, S |

R = Real Mode
S = Standard Mode
S' = Standard Mode requires MS-Windows 3.00A
E = Enhanced Mode
VT = Virtual Terminal
CVT= Character Virtual Terminal
* = Single LAN Session

## Uploading HPLINK

This task is now performed by a srcipt in version A.03.02 and later. The upload is done using fcopy. The datacomms **MUST** be configured as stated on page 87-88 of the reference manual. It is important that the port be configured as termtype 10. This can be done either in the system config or by adding `;TERM=10` to the logon string.

The AdvLink datacomms **MUST** be set to `BAUD=2400, PARITY=none, DATA BITS=8` and no `XON/XOFF` flow control.

## LAN Connections


Connections to a host can fail for various reasons, some of the most usual are listed below:-

Insufficient network resources. The settings to check here are: the number of `VT` drivers loaded (one needed for each connection), the number of `TCP/IP` connects configured (AdvLink needs two for each connection, other apps may use these also). When investigating LAN connections problems it is advisable to get the following files form the user: `AUTOEXEC.BAT, CONFIG.SYS, WIN.INI, SYSTEM.INI, PROTOCOL.INI, NET_STRT.BAT`

Memory pressure. This is one of the most common reasons for being unable to connect. Windows does not manage memory well in all but Enhanced mode. Even in Enhanced mode when running version of DOS earlier than 5.0 there may only be a small amount of base memory left after loading the network. If memory is low you have to get the user to back out as many drivers and TSRs as possible and restart the system.

There are undefined problems when running the `QEMM` memory manager. Customers who are running the `QEMM` driver are not supported unntil they replace it with the `EMM386` driver shipped by MicroSoft on the Windows 3.0(1) distribution discs. When running DOS 5.0 the follwoing lines should be in the PC's `CONFIG.SYS` file:

```
DOS=HIGH,UMB
DEVICE=EMM386 RAM
```

These commands will allow DOS 5.0 to load most of the LAN software into high memory and should leave about 500KB free for applications after all of `LanMan, NS` and `ARPA` have been loaded.

The location of the network drivers can be checked by using the following command:

```
UNLOAD /S
```

This will list all of the loaded network drivers showing how much memeory each is using and where in memory they are loaded. The display will vary from one PC to another, but should look something like this:

The following network programs are loaded. They are listed in reverse load order, i.e. the first one in the list would be the first one to unload.

| Network Program Name | Memory Consumption Below 640k | UMB (640k-1M) |
|---|---|---|
| Virtual Terminal | 21072 | 0 |
| TICL | 6272 | 0 |
| Probe | 2368 | 0 |
| Domain Name Services | 2000 | 0 |
| BAPI | 16736 | 0 |
| Telnet | 256 | 2272 |
| Sockets | 8640 | 0 |
| EMSBFR | 256 | 1168 |
| Tiny RFC NetBIOS | 256 | 2416 |
| TCP/IP | 256 | 54064 |
| Total Memory Consumption | 58112 bytes | 59920 bytes |

11 pages of expanded memory are in use by network programs.

430432 bytes of memory are available below 640k for use by application programs.

You should notice that there are two figures given for Total Memory Consumption. The one which will directly effect the performance of the PC is the total below 640k. This is important because Windows applications need to be able to allocate a data block below the 640k memory line. If memory in this area is limited by the use of networking, it may mean that the Windows app cannot get access to enough memory below 640k. In this case, the application may display unprodictable behaviour. This is because the exact behaviour exhibited will depend upon what the application was attempting to do at the time. Applications can hit this problem when they restored after ebing minimised. In AdvLink's case this can result in screen elements not being redisplayed, or being displayed in the worng place (typically FKey labels at the top, rather than the bottom of the screen).

Connections can sometimes fail because the client cannot resolve a node name. This should be taken care of by one of : NET/IPC, ARP, or NS. The customer will need to have either a NS name server or a domain name server on their local network, or have the host entered in their local HOSTS file on the PC.

When using the MAC product, connections to a HP3000 can only be made if NS on the 3000 is configured to use the 802.3 protocol. This should be run in parallel with the Ethernet protocol.

Some connections across internet from a MAC may not be possible if the connection is routed through a bridge or router that requires a subnet mask. AdvLink MAC can support subnetting, but does not support subnet masks. Subnetting in this case is achieved by using intellegent bridges or routers which only route packets destined for machines on the other side of the gateway. In this case the gateway machine MUST be configured int he SESSION.HOSTS file on the MAC.

Resolving LAN connectivity issues can be very compilcated. Frequently it is necessary to get network specialists involved. There are some test that you can make before taking that step which allow you to determine if the problem is with the network or the emulator. With HP ARPA 2.1 ships several utilites that can be used to test the network. PING can be used to repeatedly send packets to a known host on the network. If PING fails then the problem is network related and not connected with AdvLink. If PING succeeds, then try the HP ARPA 2.1 TELNET program. This will allow you to connect to a 9000 as a VT100 terminal. Another test you can try is using AdvLink DOS. If this can connect and AdvLink WIN cannot, then the problem is within AdvLink WIN.

# 4 VPLUS Problems

There are two main known problems with AdvLink and VPLUS. The first is connected with the Windows product. When a host application uses the Modified Data Tagging (MDT) feature of the newer 700 series terminals, AdvLink WIN does NOT handle this situation correctly. The usual workaround is to set the terminal ID to 2392A. This will inform the host application that the terminal does not support MDT. The host application should then not try to use it. If the application trys to use MDT regardless of the terminal ID, then there is no way we can solve the problem.

The second VPLUS issues is with the MAC product. Some terminal status requests are not handled correctly. These problems can normally be overcome be creating a VENVCNTL.PUB.SYS file. This file is used by VPLUS to describe the terminal environment. A description of this can be found in the appendix.

These problems are fixed in version A.03.11

# 5 Capture Files

If a customer is having reproducable problems with datacomms then it is recommended that you request a capture file of the problem from the customer. Capture files can be created easily by the users and do not require an HP SE to go on site. To create a capture file, hold down the <SHIFT><CTRL><SPACE> keys simulaneously. This will inform the user that the capture mechanism has been started. From that point, all datacomm will be logged to a file called CAPTURE.TXT. Despite its file extention, this file must be treated as a **BINARY** file when being transfered. This is because it contains control code data which will be stripped if the file is transfered as ASCII. The capture mechanism **MUST** be started before the user logs on. This is to ensure that all the terminal config data is recorded. Some users have logon UDCs that configure Fkeys, etc and it is important that this data be recorded. After the problem has been reproduced in the session, the capture mechanism is turned of by pressing the same keys used to turn it on. At this point the CAPTURE.TXT file will be created.

After receiving the capture file from the user you can analyse it using the XCAPTURE program. XCAPTURE can replay the capture file to your terminal so that you can witness to error. It can also be printed out in a formatted way to a standard system line printer. This allows you to fully examine the characters being sent up and down the line. This is especially usful when identifying escape sequences which may be causing trouble. The details for running XCAPTURE in its various modes can be found in the appendix.

If you cannot solve the problem using the data available to you in the capture file, it will be necessary to collect tracing from a protocol analyser. When doing ths, collect examples of both successful and unsuccessful runs. This can be done by using a real terminal or another emulator for the successful example.

Data captured by a protocol analyser can be examined on a PC by using the 4951 tools. These let you take a look at the data and the timing. Timing is improtant when trying to discover if the protocol between the PC and the host has broken down.

A copy of the XCAPTURE program is available on the support disk.

# 6 TermTalk Scripts

TermTalk is the script language for AdvLink WIN. It is a completely new product and not intended to be directly compatable with the command language in AdvLink DOS. There are converters shipped with the product which allow trandlation of AdvLink DOS and REFLECTION command file to TermTalk scripts. These are both run as external applications and are documented in the reference manual.

TermTalk scripts can be created using any text editor. They are ASCII files that have a ".TTS" extention. If the user does not want to create a complete script from scratch, AdvLink WIN has a script recording function that will record user actions and save them as TermTalk commands. This feature is usful for finding out how to do something with a script, but can cause problems if the user relies on it completely. The script recorder cannot make guesses about what the host prompt is or about what sring to wait for before continuing. These things are vital if a script is to be robust. A good example is a logon script. If just recording is used, all the keystrokes are recorded faithfully, but when replayed, the script will fail because the responses are sent at the wrong time.

When a script is first run, AdvLink WIN compiles it. This adds an overhead to the first execution, but speeds up the susequent ones. Compiling is transparent and the user should never need to perform this function manually. It is possible to compile scripts manually either from the script editor or by issuing the TermTalk COMPILE command (both are documented in the reference manual and the TermTalk guide).

Once a script is created it can be used in many different ways. Scripts can automatically run when AdvLink is opened or closed, when a host control command is sent from the 3000, when a DDE request is made or when another object is dragged onto the NewWave version. Scripts can also be bound to function keys. This is done via the SETTINGS... - Function Keys... dialog. Binding scripts to function keys can be very useful for providing workarounds. Example, the user is using a laptop which has an embedded numeric pad ad cannot get the ENTER key to work. A script can be bound to one of the 12 Fkeys which performs the KEY ENTER command. This will simulate the enter key and solve the problem.

When writing TermTalkscripts it is essential to follow good coding practice. The AdvLink product defaults to having WaitHostPrompt set to ON. This will cause problems in TermTalk, so the first line of every script should turn this off. Subsequent flow control should be done be using the EXPECT command. This is **MUCH** more reliable than using timing, as timing can vary due to CPU capacity. When chosing prompts for the EXPECT command always go for ones that you know will be reliable. Many scripts fail because this rule is ignored and they hang waiting for a string that they never receive.

If you have to debug a script it is usful it use the script window to enter commands one at a time. This will allow you to see what the script is doing and identify where the problem may be occuring. At this time there isi not single step feature in TermTalk, but this is planned for a future release.

String handling in TermTalk is very powerful. Data can be captured from the host into variables and then analysed or broken down using "chunking". Example, a `LISTF` command is stored in a variable called `LISTFOUT`. The data can be scanned line by line or word by word. When scanning acros a line of text in a variable, it is quicker if that line is isolated in a temp variable. This is because TermTalk will scan all the previous lines even if a line number is specified.

If an error occurs in a script, it can be trapped using the `WHEN ERROR` construct. This allows the user to write scripts which are very robust and can continue despite errors on the host.

Unfortunately, not all the escape sequences used are documented in the TermTalk manual. A good example of this is the `GET CONNECTION` command. This command actually returns a numeric value to indicate the type of connection currently being used. They are:-

| | |
|---|---|
| 4 | modem |
| 5 | serial |
| 3 | advancenet |
| 7 | telnet |
| 6 | bapi |
| 8 | int14 |
| 10 | newt |

# Overview of Scripting

The following sections describe the various aspects of using scripts within AdvLink Win/NW. It is possible to interface these scripts with other PC applications via DDE and NewWave Agents. These topics will not be discussed outside of their interaction with AdvLink. To go further is outside the scope of this document.

## Use of Scripts

An overview of scripting is given in the TermTalk reference manual, chapter 1.

Scripts can be recorded and then edited using the script edit window. To observe the recording of a script choose `Record a Script` form the `script window's Script` menu. You may pause and insert text at any time. Othewise choose `Record Script` from the AdvLink `Script` menu.

Scripts can be edited using the standard Windows editing features in the Script window. Commands can be pastd into a script by using the `Paste Command` option on the edit menu.

The Script Window (Below) isused to edit scripts.

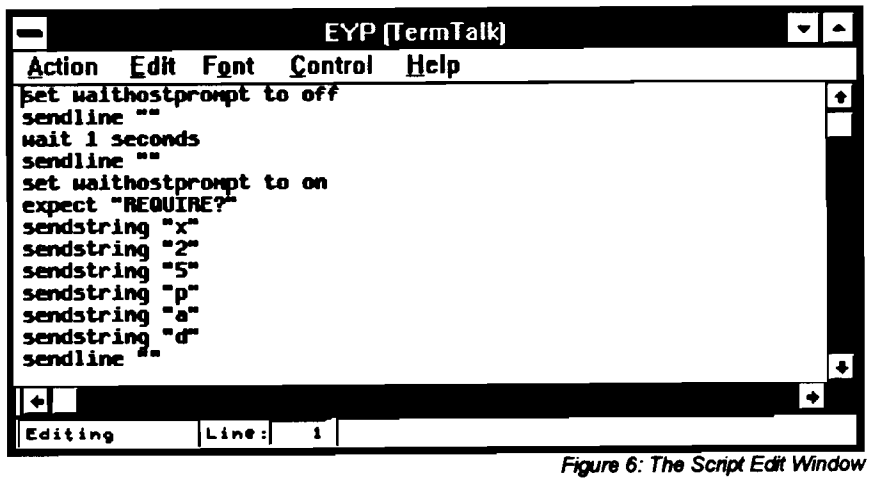


*Figure 6: The Script Edit Window*

Scripts can be started in one of the following ways:

- Session start up
- `Do Script` command
- Scripts on the `Script` menu
- Attached to a function key
- Session shut down
- From Other Scripts (upto 15 levels of nesting)
- From `DDE` conversations with other applications
- Dropped onto `AdvLink` from `File Manager` or the `NWDeskTop`

## Variables

The use of variables is described in the TermTalk reference manual, page 22-25.

Variable names in `TermTalk` can have the following attributes:

- UP to 255 character names
- Unique only in the first 31 characters
- First character a letter or an underscore
- Upper/lowwer case and digits
- # used to distinguish from the `TermTalk` resvered words (recommended)

Different scripts can exchange data by using `permanent` (global) variables. A variable **MUST** to `permanent` in both scripts for the data to be exchanged. Not doing this means that the variable is `local` to one of the scripts and therefore in a different domain.

## Comments

Comments should be used to improve readability of `TerTalk` scripts. All characters after a ";" character are ignored. Comments may be placed at the beginnning of a line or after an executable command.

## Strings

String handling is described in the TermTalk reference manual, on page 27.

Strings are characters which are interpreted as text. They may be expressed as a quoted literal or as a variable. When passing a string to a function, a variable can be used as the parameter. Strings are concatenated by using the "+" character between two literals or variables or combinations of the two. Concatenation can be used to add control characters to strings.

**EG**

CMDLINE# = "LISTF" + CR + LF

This would assign the LISTF command to the variable CMDLINE# and concatenate a carridge retun/Line feed so that the command would actioned if sent the host as a string.

## String Handling: Chunking

Chunking is described in the TermTalk reference manual, page 31-32.

Chunking is the name given to the manipluation of strings within a TermTalk script. Strings can be broken down into different units for processing. These units are:

- **CHARACTER**
  Any `ASCII` character.
- **WORD**
  A group including punctuation delimited by a space or an `EOL` character.
- **ITEM**
  A group including punctuation and spaces delimited by commas.
- **LINE**
  A group including punctuation and spaces delimited by an `EOL` character.

Keywords can be used to extract text from variables.

**EG**

```
CHAR 1 of WORD 2 of LINE 5
```

Operations on strings can be performed by a number of functions as described in the TermTalk reference manual, page 32-33.

## Flow Control

The various forms of flow control available are described in the TermTalk reference manual, page 37-40.

Flow control in TermTalk is fairley standard stuff. However, there are some peculiarities that should be highlighted.

Multiple `IF - ELSE` statements are made using the `ELSEIF` statement.

User defined procedures are created using the `PROC` command and are called using the `DO` command. They **MUST** be defined at the beginning of a script, after any `Permenant` variables.

## Error Handling

Error handling is described in the TermTalk reference manual, page 44-45.

By default, all run-time errors are fatal, causing the script to terminate. This behaviour can be changed by using the `IGNORE ERRORS` command. Ignoring errors means that the script has to handle the error condition itself. There are 3 functions available to help you do this:

- **ERROR()** - The number of the error detected.
- **ERRORLINE()** - The line number in the script where the error occured.
- **ERRORSTRING()** - The error message string.

## Interacting with the user

Communicating with the user is described in the TermTalk reference manual, page 48-50.

Scripts can request user interaction or present information to the user by using the following commands:

- **BEEP** - Sounds the PC's speaker.
- **DISPLAY** - This will display a literal or variable contents at the current cursor position.
- **INPUT** - This puts up a dialog box for the user to type input into. The dialog box can echo the input so that it can be read, or it will display a "*" character for each character typed by the user. This later behaviour is useful for sensitive information like passwords, etc.

## Configuration

The configuration of the terminal and session settings can be changed within a script by using the following commands. This technique is useful if it is necessary to set the session to a specific configuration at some time during the use of AdvLink. EG startup, file download, etc.

- **SET** - Used to set config variables (EG `BAUD`).
- **SETUP** - Interactive setting of config using dialog boxes.
- **REVERT** - Remove all config changes made since starting the session.
- **SAVE** - Saves config changes made. Saves everything except the screen memory. Beware of having Block mode enabled when saving.
- **OPEN SESSION** - Loads config from a previously `save`'d file.
- **GET** - Retrieves information about current config settings.

## Host Interaction

The commands that are used to control host interaction are:

- **CONNECT** - Used to establish a connection to the host via a LAN. If an modem is to be used, then the `DIAL` command should be used.
- **DISCONNNECT** - Used to break a connection over a LAN.
- **BREAK** - Used to stop execution of a host process or get attention of a data switch, etc.
- **DIAL** - Used to connect to a host via a modem.
- **SENDLINE** - Send a string to the host with a CRLF.
- **EXPECT** - Receive data into a variable or test for a specific response from the host.
- **SENDSTRING** - Send data to the host without a CRLF.
- **KEY** - Actions pressing the specified key. Maybe accompanied by a parameter specifiying the number of key presses to action (upto 255).
- **WAIT** - Pauses for the specified time.
- **LOG** - Logging may be done in preference to using the clipboard or variables.
- **RESET** - Choice of `SOFT` or `HARD` resets. Useful for clearing DC1 requests.

## File Transfer

File transfer is described in the TermTalk reference manual, page 56.

Files can be sent and received to and from a host (3000, 9000 and other) as `TEXT`, `BINARY` or `NewWave Objects`. These have various options which are discussed in the TermTalk reference manual. When transfering files using the `XMODEM` protocol, the file specific information is handled automatically by AdvLink.

## Working with files

File handling is described in the TermTalk reference manual, page 57-58.

TermTalk scrips may directly manipulate files held in the PC filing system. The user should be aware that if TermTalk commands are issued individually from the `DO COMMAND` option, then each command is treated like a separate script. DOS files are only held open while a script is running, therefore, any operations that require mulitple file accesses should be grouped togther in one script.

## Working with HP NewWave

Working with HP NewWave is described in the TermTalk reference manual, page 64-67.

AdvLink has a version that is totally integrated with HP NewWave. This allows the user to manipulate NewWave objects and invoke NewWave Agent tasks. This allows the user to take advantage of the benefits os HP NewWave from within the AdvLink product.

## Script Conversion

For those users how have an investment in AdvLink DOS scripts a tool is provided to convert those scripts to work with AdvLink Win/NW. Conversion is about 95% successful, with only a few commands having to be converted by the user, where there is no direct equivelent.

The converter is invoked by running the file `ADV2TTS.EXE` from the product disk. As this converter is not needed by all users, it is not installed along with the rest of the product. The user is prompted for both the input and output file names. It is always advisable for the output to be varified by hand before being run as there may sometimes be unexpected results.

A converter for Reflection to AdvLink Win/NW is also provided on the product disks. It is called `REF2TTS.EXE` and operates in a similar way.

These utilities are unsupported.

A comparision between Reflection commands and TemTalk and Advlink DOS commands and TermTalk is made in the TermTalk reference manual, page 236-243

Copies of the two conversion programs are available on the support disks.

# 7 Dynamic Data Exchange (DDE)

Dynamic Data Exchange (DDE) is described in the TermTalk reference manual, page 199-227.

DDE is a method of transfering data between Windows applications. It has a standard calling protocol but **a non standardized syntax**. AdvLink WIN/NW can use DDE commands in scripts to communicate with other Windows applications and exchange data with them. Data exchange takes place via "Conversations" (or "channels"). Each conversation has a specific "Topic". Only certain commands are valid in each topic.

A full list of the DDE commands supported by AdvLink is described in the TermTalk manual from page 203.

DDE conversations use the client/server model with each application taking one of the roles.

Not all other DDE aware applications support the whole set of DDE commands available from AdvLink.

**EG**

MicroSoft's Excel does not support the `EXPECT` command.

Before a DDE conversation can be started, the client application has to identify a unique instance of the server application. In AdvLink this can be done by setting the `DDEAPPLICATION` variable to a unique name which is known to the client application. Example, `SET DDEAPPLICATION TO "ADVLTEST"`, where `ADVLTEST` is known to the client.

Once the conversation has been established, the two applications can exchange data. This can be one in many ways. The two most useful ones in AdvLink are `POKE` and `RECEIVE`. These are used to send data to and get data from the server application respectively. Another type of data exchange is the `EXECUTE` command. This can be used to run TermTalk scripts or commands on AdvLink from another application.

**EG**

Excel could run a script which would logon to a HP3000 and get the disc space report. This data could then be imported into Excel and graphed up for a system manager to view.

DDE is a very complex area. Debugging scripts and macros that use DDE can be very difficult. There are two applications which act as client and server for DDE debugging. These are on the disk that accompany these notes. They allow you to initiate DDE conversations with AdvLink to isolate where a problem resides.

There is a demonstartion of DDE on the DEMO scripts disk using Excel. This shows how DDE can be used from Excel to drive applications on the 3000 and then use the data generated back in Excel.

## AdvLink as a client

When Advlink is acting as a client in a DDE conversation, the following commands are available from TermTalk to drive the server application:

- **DDE QUERY** - Get info about the server application
- **DDE INITIATE** - Start a conversation
- **DDE TERMINATE** - Stop a conversation
- **DDE REQUEST** - Request a data item from the server
- **DDE ADVISE** - Set up repetitive info
- **WHEN DDE DATA** - How to respond to advised data
- **DDE UNADVISE** - Stop repetitive info
- **DDE EXECUTE** - Send a command to the server
- **DDE POKE** - Set the value of a server item.

The above commands are overviewed in the TermTalk reference manual, page 218-220. Each command has its own detailed description in chapter 5 (page 199).

The `DDETIMEOUT` variable controls the timeout behaviour of DDE commands. This is not the same as other AdvLink "timeout"" variables and **MUST** be set independantly.

When acting as a client the TermTalk script should always check the status of the `error()` function after a DDE command. The following values are relevant:

- **0** - Accepted
- **400** - Rejected: The request is invalid or the server does not wish to respond.
- **401** - Busy: The request is valid but can not be handled at this time, try again later.
- **402** - Error: There is no such conversation either because of a script programming error or because the other application in the conversation has terminated it.
- **403** - No reply to a `DDE INITIATE` command.
- **404** - Timeout: The command timed out before receiving an acknowledgement. In most cases this does not mean that the command wil not take effect, only that the response from the target of the message did not arrive in time.
- **405** - (When Advlink is acting as a server.) Failed to set up script handler with a "`WHEN DDE ...`" command.
- **406** - (when AdvLink is acting as a server) The response given in the DDE respond command is illegal.

## AdvLink as a server

The AdvLink DDE server functionality is overviewed in the TermTalk reference manual, page 220-222. Each command has its own detailed description in chapter 5 (page 199).

When using AdvLink as a server, the client application must open a conversation with one of the following topics:

- **SYSTEM** - Items predefined by MicroSoft
- **MEMORY** - Access to display memory
- **TEMPLATE** - Access to formatted screen data
- **SCRIPT** - Data retrieval by script
- **VARIABLES** - Access to **permenant** variables

The most complicated one of the AdvLink server topics is the Template topic. Any conversation that uses this topic **MUST** have access to a template file on the PC. The template file describes a series of screen elements and events that the script can then use. Templates are used for providing a clean programmatic interface to the contents of AdvLink's display memory. If a script needs to scrutinise the contents of a screen location, the absolute coordinates can be used. If the screen layout changes at any time in the future, then the whole script will need to be chaged to take the new coordinates. If a template had been used, then only the template file would have to be changed. The template file maps an identifier name onto screen coordinates.

The template file is a text file that uses a structured language to desribe both the screen layout and the recognised events that the script can act upon. This file is specified when the conversation is initiated and then all the definitions contained within it become available to the calling script.

The use of template files is described in the TermTalk reference manual, page 208-216.

The memory topic can be used to access display memory where the template topic would be over kill. It is particularly useful when manipulating VPlus screens. Each filed on a VPlus screen becomes individually addressable by number. The script can read data from and write data to the VPlus form.

When running as a DDE server, the following commands are available for use by scripts:

- **DDE RESPOND** - Indicate status of DDE action
- **WHEN DDE EXECUTE** - Script executed when `DDE EXECUTE` received
- **WHEN DDE INITIATE** - Script executed when DDE conversation initiated
- **WHEN DDE POKE** - Script executed when item `poked`
- **WHEN DDE REQUEST** - Script executed on `DDE REQUEST`
- **WHEN DDE TERMINATE** - Script executed when DDE conversation terminated
- **CLEAR DDE HANDLERS** - Cancel all handler scripts

The commands above that begin **WHEN ...** set up special scripts called "Handlers". A handler script is used to process events. These events are those listed above (Execute, Initiate, Poke, etc). They remain in operation until they are cleared by the `CLEAR DDE HANDLERS` command. Handlers are used in conjunction with the `DDE ADVISE` command to process the receipt of data. Handlers can be set up to only respond to requests, etc for data on specific items.

**EG**

This allows the programmer to set up many hander scripts for the `REQUEST` command and have them processed differently dependant upon the item in question.

# 8 Installation


The installation of AdvLink Win/NW deffers from the A.03.02 version to A.03.12. The later version can be instaled into Windows or NewWave without leaving the Windows environment. Previous versions required the user to install them from DOS.

### Windows Installation

The windows product can be installed onto the PC's hard disk by running the `SETUP.EXE` off the product disk from within the Windows File Manager. This will prompt the user for a PATH name and use that as the target for the installation. The installation copies files onto the hard disk and decompresses them. The product requires 2.8MB of free disk space before installation can begin. This figure does not change if the user is attempting an upgrade of an old version.

The installation is driven by a "steering" file which contains details of where the various product files are to be placed on the hard disk. There are two versions of this file, one for 5.25" media and one for 3.5" media

Both of the Windows installation steering files are available on the support disks.

### NewWave Installation

Installation of the NewWave version of the product is very similar to the Windows version. The installation is done by the `NWSETUP.EXE` program from the Windows File Manager. The disk space requirement is the same (2.8MB). Two different steering files ae used for 5.25" and 3.5" media.

Both of the NewWave installation steering files are available on the support disks.

# VENVCNTL File

*Appendix A*

```
*************************************************************************
VPlus Environment Control File  - VENVCNTL.PUB.SYS - 6/1/90

*************************************************************************

The purpose of the VPlus Environment Control File (VENVCNTL) is to allow
VPlus applications to run with VPlus options that apply to the user
environment.  These options may be selected via the VENVCNTL file.  This
file may be built by the user with the MPE BUILD command:

     :BUILD VENVCNTL.PUB.SYS;DEV=DISC;REC=-80,1,F,ASCII

or created in the editor of your choice.

If the option(s) used are only to apply to a specific application, then
the file should be created in a local group and account.  A file
equation must be used to reference the local file.  For example:

     :FILE VENVCNTL.PUB.SYS = VENVCNTL.mygroup.myacct

The options are 'turned on' by setting a particular byte position to 1.
For example, if you want to use options available in bytes 1 and 5:

     :EDITOR
     /T VENVCNTL.PUB.SYS
     /A
     10001
     //
     /K

VENVCNTL Options
----------------

Byte 1 - VOpenTerm terminal identification optimization:
         VOpenTerm will assume that the user environment consists of
         ONLY newer terminals which return the terminal ID upon status
         request.  All block mode 262X, 150A, 239X, and 700/9X terminals
         are included in this category.  All 264X and non block mode
         262X terminals must not be used if this feature is activated.
         The identification process is abbreviated by eliminating some
         queries which are not necessary for newer terminals.  The end
         result is a performance gain in VOpenTerm.  Available since
         B.04.20.
         RELATED SR: 5000-125591.

Byte 2 - Aids/Modes/User keys:
         This option will enable the Aids/Modes/User keys during VPlus
         blockmode.  Available since B.04.20.
```

Byte 3 - Reserved. Set to "0" only.

Byte 4 - Disable Modified Data Tag:
Setting this byte to 1 will disable Modified Data Tag feature of terminals. Use this feature only when MDT must be avoided, as it will result in reduced performance and increased datacom. Available since B.04.24.
RELATED SR: 5000-175562

Byte 5 - Strip carriage return from extended status reads:
This byte is used with Patch AV64 on VPlus versions B.04.23 - B.05.00. External symptoms that this may address are - TERMINAL STATUS REQUEST FAILED and TERMINAL NOT SUPPORTED BY VPLUS. Refer to SR numbers 5000-277400, 5000-229906 and 4700-571836.

Byte 6 - Extend status reads on MPE/V systems on VPlus versions B.05.02 and after. This byte should only be used in an environment with a buffered network that is experiencing delays that cause TERMINAL STATUS REQUEST FAILED.

Byte 7 - Disable extended status reads on MPE/XL systems. This feature is currently not used.

Byte 8 - Do not force 80 column configuration of 700/9X terminals. This may be used when terminal display memory is lost after VCloseTerm or VTurnOff is called. The terminal MUST NOT use 132 column configuration when this feature is used. Available with Patch BV08* for versions B.04.24 - B.05.02 on MPE/V and with Patch AXV8* for version B.05.02 on MPE/XL. This byte can be used without a patch on B.05.03 and after. SR# 4700-591370.

Byte 9 - Do not reset label configuration after VTURNON. This may be used when additional VTURNON performance is desired, if the application does not manipulate the label configuration. Available with B.05.12 (MPE XL 2.0) and after.
SR#5000-414805.

Byte 10 - Inhibit dual terminator mode. In version B.05.15 or patch VPLCXM3, dual terminators for block mode reads became supported on MPE XL with MPE XL 2.1 or DTSAD38 patch for 2.0. Support of dual terminators end users to use function keys or the carriage return key to terminate a block-mode read after the terminal has powerfailed or been hard reset. Byte 10 is a diagnostic byte in case any trouble comes up with dual terminators - it disables the functionality.
SR# 1650-096958.

Byte 11 - Bypass 7009x configuration save functionality on VTURNON calls. This avoids problems with saving function key definitions in VTURNOFF/VTURNON interactions and restoring the wrong keyset after VCLOSETERM. Available with VPLCXM3 or VPLUS B.05.19 (not released yet). SR# 5000-441519.

Byte 12 - Bypass 7009x configuration save functionality on VOPENTERM calls. (for completeness of SR# 5000-441519).

Bytes 13 thru 19 are reserved. Set to 0 only.

Byte 20 - VCloseTerm from a child process may disrupt system timing on MPE/XL with DTC terminal connections. The problem would occur when returning to the parent process and attempting VGetNextForm or VCloseTerm. The terminal will hang with Terminal Status Request Failed or Terminal Close Failed as the symptom. Available with Patch AXV9* for B.05.02 or AV97 for B.05.03. This byte can be used without a patch on B.05.04 and after. SR# 5000-404830.

NOTE: In most cases where byte 20 needs to be set, byte 5 also needs to be set in order for the application to work.

Byte 21 - Forms caching may disrupt system timing on MPE/XL with DTC terminal connections. This byte is a "must" for forms caching applications on MPE XL 1.2 (version B.05.04). This is known to occur when logged on to a 'classic' system as follows:

Term. --> DTC --> S/950 --> S/70

The patch would be applied to the system that is running the application, either on MPE V or XL. Available with Patch AV97* for B.05.02. This byte can be used without a patch on B.05.04 and after. SR# 4700-675280, 4700-714386.

Note: This byte is unneccesary on 1.2' or 2.0 (B.05.05 and after) because the function is "defaulted" in VPLUS.

Bytes 22 thru 29 are reserved. Set to 0 only.

Byte 30 - Force driver consistency for nested VOPENTERM calls in application running on PAD terminal connected to MPE/V dslined to MPE/XL application. This is available on patch VPLCXM3 for MPE/XL 1.2 through 2.05. The problem goes away with NM Read functionality on MPE/XL 2.1. SR# 5000-549856.

RECOMMENDATIONS:

Byte 1 can be used on all systems without 264X terminals.

Byte 2 is up to the system manager. Gives users more access to terminal configuration.

Byte 4 should only be used when MDT terminals are failing (like some 150s) or when host data written to the block mode screen (messages) need to be picked up and transmitted to VPLUS as data.

Byte 5 should be used on all systems which have applications run on terminals connected to a DTC. (All XL systems, some V systems accessed over network).

Byte 8 can be used on systems with 700 terminals connected. It avoids the terminal reset in VTURNOFF and VTURNON which can disturb some applications.

Byte 20 can be used safely on all systems; it is a requirement for process-handled applications (more specifically, applications which execute VOPENTERM, VCLOSETERM multiple times) with terminals connected to the DTC.

Byte 21 needs to be used with forms cache applications on 1.2. It is the default (not needed) on 1.2' (B.05.05) or later. It may be needed for applications running on 1.1 (with a patch).

# Problem Identification Template *Appendix B*

**This PIT should be used to gather data when investigating an AdvLink Win/NW call. It asks for all the relevant data that the lab and Tymlabs are likely to need to provide a solution. Please feel free to distribute this PIT to any support personnel.**

✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂

PROBLEM IDENTIFICATION TEMPLATE
AdvLink Windows/NewWave

==========

The AdvLink Product
-==========-

Product Version # A.xx.xx

Is a capture file available (Y/N)? X
Created by typing <CTRL><SHIFT><SPACE> before
logon and after logoff
(If Y, please send with call)

Is a protocol analyser trace available (Y/N) X
(if Y, please send with call)

Is a script involved (Y/N)? X
(If Y, please send with call)

Is the AdvLink configuration file available (Y/N) X
(If Y, please send with call)

Can problem be reproduced by terminal.exe or AdvLink DOS (Y/N)? X

==========

Operating System
-==========-

DOS Version # Amount of free memory xxx KB

Please send copies of : CONFIG.SYS
AUTOEXEC.BAT

==========

```
                                Windows
                                -======-

Windows version #                       Operating mode (REAL/STD/ENH)

Free system resource xxxxx KB           Smartdrv (Y/N)?

Please send copies of : WIN.INI
                        SYSTEM.INI
================================================================================

                                NewWave
                                -======-

NewWave Version #

Is agent task involved (Y/N)    X
        (If Y, please send with call)

Is AdvLink installed as a data object (Y/N)?  X

Is AdvLink encapsulated from the Windows version (Y/N)  X

Has the problem been reproduced with the Windows version (Y/N)  X

================================================================================

                            The Host System
                            -==============-

Host type (1000, 3000, 9000, Vectra (SCO UNIX)) XXXXXXXXXX

Host Model # (8xx, 9xx, Classic):  XXX

If host is a Classic, what kind of port is used (ADCC/ATP): XXXX

Operating system version: XXXXX

Is a specific host application connected with this problem (Y/N)?  X

If Y, Which application     XXXXXXXXXXXXXXX
  and which version         X.XX.XX

Is dial on access possible (Y/N)?  X

If Y, Modem telephone number (inc country codes): XXXXXXXXXXXXXXXXXXX
   Logon string (inc keywords, eg HELLO): XXXXXXXXXXXXXXXXXXXXXXXXX
   Passwords (please specify prompt): XXXXXXXX
                                      XXXXXXXX
                                      XXXXXXXX
   Any site specific information :    XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    (eg. operations tel #, BAUD, etc) XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

   Contact Name:  XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
```

```
==========================================================================

                          Connection Method
                          -================-

              LAN                                    SERIAL
              ===                                    ======

LAN Product (OS/ARPA/NS/LANM/Other)     Comm Port #

LAN prod Version #                      HP dual serial card (Y/N) X

IF ARPA/NS/LANMAN send                  BAUD rate: XXXXX
       PROTOCOL.INI
       NET_STRT.BAT                     Parity: XXXXX

                                        Handshaking:
                                      Input  XON/XOFF (Y/N) X
                                        Output XON/XOFF (Y/N) X
Connection protocol:                           ENK/ACK (Y/N)  X
       TELNET (Y/N) X
       VT (Y/N)     X                   If XL, is typeahead enabled
       BAPI (Y/N)   X                    on the 3000 port (Y/N)     X
       Other: XXXXXXX


                                                 X.25
                                                 ====

                                     IF Y, is DC1 pacing
                                          disabled (Y/N) ?     X

                                     PAD type: XXXXXXXXXXXXXX

                                     TERM type for the 3000 port: XXX

==========================================================================

                        File Transfer Errors
                        -==================-

File Type (ASCII, binary, PCBackup, 3000Backup, NW SOF) xxxxxxx

Type of transfer (Place an "X" next to the relevant xfer types):

                             SEND
                             ====

            - Convert to EDITOR format, Word Wrap
            - Convert to EDITOR format, Retain Lines
            - Binary Transfer
            - Backup PC File
            - Restore HP3000 File
            - NewWave SOF Package
```

RECIEVE
=======

- Convert to Text format, Word Wrap
- Convert to Text format, Retain Lines
- Binary Transfer
- Backup HP3000 File
- Restore PC File
- NewWave SOF Package

Does the error occur with more than one file (Y/N)? X

Does the host program abort (Y/N)? X
(If Y, please give abort details)

xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

==========

Problem Description
-==========-

Please give a full description of the problem. Include all relevent configuration information (eg version # of host applications, network details, steps needed to reproduce, etc). The more information you can give here, the quicker we will be able to start solving your problem. Thank you.

# AnswerBack Articles

*Appendix C*

**The following articles have been published in PWD Answerback about AdvLink Win/NW. They are available electronically by sending an HPDesk message to Pwd HOTLINE/HP1600, with a title of INDEX.**

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PWD ANSWERBACK NEWSLETTER #16?
HP INTERNAL USE ONLY.

---

TITLE : AdvanceLink Windows/NewWave & MS-Windows 3.1 compatibility
AUTHOR: Howard Price
ENTITY: PWD Online Support

---

The division has become aware of several problems which users of AdvLink Windows/NewWave A.03.02 or later will encounter if they upgrade to MS-Windows 3.1.

NOTE: HP NewWave is not required to run AdvanceLink Windows/NewWave under MS-Windows 3.1 (or 3.0a).

Problem 1
---

Transferring files to the host via a serial connection will fail.

This problem exhibits two different behaviours:

1 The transfer takes a very long time.
2 The transfer fails with a failure message.

In both cases the file is created on the host with a length of 0 and no data is actually transfered.

Problem 2
---

Printing logged data will fail.

Data will be logged, but if the user tries to then print that data, nothing will be printed. Data can saved to a file or to the Windows clipboard.

A workaround is to save the data to the clipboard and then paste it into a Notepad or Write document.

Problem 3
---

Connections to HP9000 systems via the BAPI protocol will no longer be available to users on 80286 based PCs.

This is due to the removal of REAL mode from Windows 3.1 and that support for BAPI connections is only currently only available for MS-Windows REAL and ENHANCED modes.

Problem 4
---

When changing the color configuration settings, the sample selected colors can not be seen when running under MS-Windows 3.1.

Changes can still be made to the settings and these will be actioned upon leaving the color settings dialog box. All color settings will be saved in the .ACF file when the user exits AdvanceLink and saves his configuration.

Proposed solutions
---

PWD is working to obtain a patch which will fix the known problems with AdvLink Windows/NewWave under MS-Windows 3.1. When a fix is available, the Response Centers will be informed and the patch will be made available. The patch will be implemented on version A.03.1x of the AdvLink product. This will mean that customers will have to purchase an upgrade from an earlier version before support for MS-Windows 3.1 can be obtained. The new version contains many defect fixes and some new functionality in addition to the support for MS-Windows 3.1.

Recommendations
---

As currently BAPI connections in MS-Windows STANDARD mode are not supported, PWD recommends that users who require BAPI connections to HP9000 systems from MS-Windows STANDARD mode should not upgrade to MS-Windows 3.1. A patch version of AdvanceLink to provide support for BAPI connections from MS-Windows STANDARD mode will be available from PWD soon.

Users who are dependant upon file transfer via serial connections should also not upgrade to MS-Windows 3.1 until the patch version of AdvanceLink/WIN is available.

Users who require the ability to print data logged from the host should upgrade to MS-Windows 3.1 and be aware of the workaround mentioned above. This problem is also fixed in version A.03.11 of AdvanceLink which will be made available to the response centers.

PWD ANSWERBACK NEWSLETTER #16?
HP INTERNAL USE ONLY.

TITLE : AdvanceLink Windows/NewWave & NewWave 4.0
AUTHOR: Howard Price
ENTITY: PWD Online Sopport

The division has become aware of several problems which users of AdvLink Windows/NewWave A.03.02 or later will encounter if they upgrade to NewWave 4.0.

In addition to the problems described here, this version of AdvanaceLink NW has all the problems decribed in the AnswerBack article entitled "AdvanceLink Windows/NewWave & MS-Windows 3.1 compatibility" which can be found in this issue.

Problem 1
---

If a TermTalk script within AdvanceLink calls an NW Agent menu task, this will fail under NewWave 4.0.

The reason for the failure is that NewWave 4.0 introduces a new architecture for storing Agent menu tasks. AdvanceLink needs to be updated to use the new architecture.

Problem 2
---

If a NewWave Agent task is run while any AdvanceLink sessions are open, these sessions will not respond to the user while the Agent task is running or after it has finished.

The user will have to close AdvanceLink and re-open it after the Agent task has finished.

The reason for this defect is currently under investigation.

Proposed solutions
---

We are currently investigating the causes of these problems and will be producing a patch to AdvanceLink Windows/NewWave to fix the defects. At this time the schedule for this patch is not known. The fix will be made available to the response centers and will be rolled into the released version of the product at the earliest available opportunity.

Recommendations
---

PWD recommends that users who are dependant upon AdvanceLink's ability to call NewWave Agent menu tasks from TermTalk scripts should not upgrade to NewWave 4.0 until the AdvanceLink patch version is available.

Those users who do not require this functionality but who do run Agent tasks, should upgrade, but not run Agent tasks while AdvanceLink is in use.

PWD ANSWERBACK NEWSLETTER #16?
HP INTERNAL USE ONLY.

TITLE : AdvLink DOS & MS-Windows 3.1
AUTHOR: Howard Price
ENTITY: PWD Online Support

The division has become aware of several problems which users of AdvLink DOS B.02.00 or B.02.20 will encounter if they upgrade to MS-Windows 3.1.

The problems are only found if the user is running MS-Windows in ENHANCED mode.

Problem 1
---

Windows puts a warning box up saying this application has violated system integrity.

Problem 2
---

Windows puts a warning box up saying this application has tried to execute an illegal instruction.

Problem 3
---

The system simply hangs and needs to be reset - Windows often catches the CTRL-ALT-DEL reset and either manages to close the Advancelink/DOS application, or will stop the machine requiring the PC to be powered down.

All three of these problems can be experienced by starting AdvanceLink DOS from either The File Manager (via the .BAT and .PIF files) or from command line under the EXECUTE option form the FILE menu or the program icon in the Program Manager.

Proposed Solution
---

The division is currently investigating the cause of these problems and is planning to provide a patch for the product. The availability of this patch will be announced in AnswerBack in the coming weeks.

Recommendation
---

If users need to run AdvanceLink DOS under MS-Windows in ENHANCED mode we do not recommend that they upgrade to MS-Windows 3.1 until the patch to AdvLink DOS is available.

If users do not need to use ENHANCED mode recommend that they work around the problem by using STANDARD mode and installing the patch when it becomes available.

If users can upgrade to AdvanceLink/WIN and do not need to use the parts of its functionality affected by Windows 3.1, we recommend that they upgrade to AdvanceLink/WIN and Windows 3.1 and follow up with the patch to AdvanceLink/WIN when it becomes available.

# SRs Fixed in A.03.11

*Appendix D*

The following details all the SRs fixed in the A.03.11 version of AdvLink Win/NW.

| SR No. | Sev. | Description |
|---|---|---|
| 1600112110 | C | Incorrect handling of 7-bit data in Block Mode. (10000) |
| 1600112128 | C | Incorrect Swedish Chars in 7-bit mode (1039) |
| 1600113092 | C | Problems with closedown scripts when closing NWave/Windows. (10018) |
| 1600113100 | C | In Block Mode, data entry can exceed 'Number of Screens'. (10019) |
| 1600116988 | C | UAE after issuing Esc d to read data entered in UIV field (10135) |
| 1650164830 | C | Command line flashes then disappears, using an SPL routine. (10039) |
| 5000654921 | C | Customer is unable to access hp1000 running forms/1000. ( 10043) |
| 1600111583 | S | Page down problems using the mpexl debugger ( 872) |
| 1600111815 | S | Problems when the 'Control Bar' is not shown ( 1031) |
| 1600112003 | S | Can't initiate new DDE conversation after 1st convers'n closed (10007) |
| 1600112011 | S | 'Host sequence' DDE System topic item doesn't work correctly (10008) |
| 1600112193 | S | Non-conformance to Windows standard with ALT key in Menu bar. (10009) |
| 1600112243 | S | OMF error 0073 when AdvLk is saved as a tool & F.Keys hidden (10015) |
| 1600112367 | S | UAE in Block Mode screens when asking for DDE Memory Topic (10016) |
| 1600113522 | S | Cannot select and paste a screen region to DDE within a script. (10020 |
| 1600113555 | S | UAE setting application name after receiving a DDE Poke. (10028) |
| 1600113589 | S | Executing DDE scripts repeatedly can result in rogue errors (10031) |
| 1600114868 | S | DDE Advise/Receive data handled incorrectly in Client Mode (10037) |
| 1600115139 | S | "Unrecoverable app error" in ANSI mode using VI on 9000. (10069) |
| 1600115147 | S | ESC F is not emulated correctly for a 2392 on full memory (10070) |
| 1600116103 | S | Abort with UAE when exiting after doing Template DDE (10097) |
| 1600116723 | S | AL/WIN does not transmit option field in EQUOS and OMS appl'n (10125) |
| 1600116996 | S | On 9000, Esc d always returns Esc & d @ (@ = end enhancement) (10137) |
| 1650164848 | S | Unable to print to a slave printer using escape codes. (10044) |
| 1650168187 | S | HPSLATE Esc seqs. not properly processed - page# not echoed (10083) |
| 1650169904 | S | Swedish chars represented incorrectly in Keys menu using BB (10099) |
| 1653001271 | S | Cut/Paste of ISO7 chars not converted to Roman8 before Clipb'd.(10077) |
| 1653002683 | S | DATA LOSS-switch'g from Stan'd & Alt char sets in VT100/HPANSI (10089) |
| 1653003244 | S | In VPLUS, PC hang if no char. entered in last field (r23, c80) (10100) |
| 1653003376 | S | With Term ID=70094, contiguous field prblems in VPLUS (10101) |
| 1653004580 | S | Using VPLUS, cannot enter data into required field (r23,c80) (10109) |
| 5003015198 | S | Set_Variable & Variable() don't pass vars from TT to NWA tasks (10087) |
| 1600107961 | M | Limit on file name length for file transfer. |
| 1600111476 | M | Closing AdvanceLink and NewWave too quickly causes PC hang. ( 1016) |
| 1600111484 | M | Memory problems running debug version of Windows (360) |
| 1600111625 | M | Display problems after using Revert with Color Pairs selected (932) |
| 1600111666 | M | Agent Task not recognizing 'Line_Modify_On' when recorded (952) |
| 1600111690 | M | Line draw problem in 'opt' when configured for 1 screen of memory.(991 |
| 1600111732 | M | We do not send cr+lf with the screen data over DDE ( 941) |
| 1600112052 | M | Improvements required in handling of Low Memory situations (10002) |
| 1600112136 | M | Extended chars copied to another Application are incorrect (1040) |
| 1600112185 | M | In the LOG pull-down menu the 's' accelerator is used twice. (10006) |
| 1600112375 | M | Screen item in DDE Memory topic only returns line 1 of screen (10017) |
| 1600112748 | M | Saving a script as 'Execute Only' sometimes does not work. (10010) |
| 1600113449 | M | DDE Template 'File' item cannot accept 'full path' filename. (10022) |
| 1600113456 | M | Cannot retrieve current DDE Timeout setting using scripts/DDE (10023) |

| | | |
|---|---|---|
| 1600113548 | M | Cannot return last DDE message by using WM_DDE_REQUEST. (10027) |
| 1600113563 | M | Unable to set DDE template name twice in server mode script. (10029) |
| 1600113571 | M | Can't POKE DDE app'n name to server mode script from DDE client (10030 |
| 1600114835 | M | DDE Template topic does not support Advise with 'WAIT for ACK' (10034) |
| 1600114843 | M | Can't hold >1 conversation with DDE Template and Poke for each.(10035) |
| 1600114850 | M | DDE Template can't take WM_DDE_UNADVISE with null item name (10036) |
| 1600114876 | M | Problems compile/run script via DDE Execute with >1 conversation(10038 |
| 1600114975 | M | CAPS Lock setting not saved by Save Configuration (10046) |
| 1600115279 | M | Scrolling problems in UNIX VI editor with VT100 emulation (10084) |
| 1600117002 | M | CTRL-O works incorrectly with EDIT/1000 - extra chars appear (10136) |
| 5000649244 | M | Refers to 2 previously closed SRs 5000 606517 & 5000 492397 (10040) |
| 5000655134 | M | Unrecoverable App Error logging to ThinkJet as default printer.(10047) |
| 1600111765 | L | Changing font size from command lang doesn't change block cursor (1027) |
| 1600111823 | L | Local echo doesn't check to see if block mode is on ( 372) |
| 1600111898 | L | No warning msg when closing down and connected via BAPI ( 1025) |
| 1600112151 | L | In single page the escape sequence for insert line does not work.(335) |
| 5003020693 | M | Multiple VT sessions-must close ALL before open new one (10110) |
| 5003032151 | M | Multiple VT sessions - ALL must be closed in LIFO order(10110) |

# SRs Fixed in A.03.12H

*Appendix E*

The following list detaills the SRs fixed in the A.03.12H version of AdvLink Win/NW

| SR No. | Sev. | Description |
|---|---|---|
| 1600117259 | S | Refresh softkey problem when using Oracle personnel system (10157) |
| 1653003996 | S | Local printing loses control chars. (file on 3K built with CCTL) |
| 5003039768 | S | REQUEST: compatability with Win 3.1 such that file transfer works |
| 5003040071 | S | REQUEST: compatability with Win 3.1 such that 'Print Logged...' works |

These are in addition to those fixed in version A.03.11

# Contacting Tymlabs

*Appendix H*

Members of the Hewlett-Packard support oganisations can contact Tymlabs directly in connection with support calls related to HP internal users of AdvLink Win/NW. In addition, Memebers of PWD Online Support can connect Tymlabs regarding supports calls raised by both HP internal users and HP's customers.

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