WinLink Update Notes

WinLink Release 1.2
4/28/95

I would like to thank all of you who have so generously participated in the betterment of WinLink. This product wouldn't be what it has become without your help. I know it is sometimes frustrating when there are bugs and no new release is immediately available.
This release sums up all current activities. A while ago I promised a new release for "Dayton '95". With some luck and after much midnight-oil I'm happy to report that I have made it. Believe me: I'm just as relieved as you are.
I will now take a break for the summer. Do not expect much new stuff except if a major bug shows up.

vy 73s
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N8PGR

Summary of changes in release 1.2

With this release I have dropped the support for 286 CPUs. WinLink v1.2 will only run on 386 or later vintage CPUs.

1.   8-Bit implementation

1.1   Characters and Control Codes

The first phase of adaptation to the 8-bit world is complete. With this release you will be able to correctly receive and send the full ASCII set (hex 20 to hex 255) including all special characters. This is true for all modes except AMTOR. When a file is forwarded over the AMTOR port containing "upper characters" you will notice those being replaced by a question mark (?). The same is true when any control character is encountered in this or any other mode.
These special characters and the occasional occurrence of control codes used to cause havoc on many intelligent TNCs. You will be pleased to know that those days are gone for good.
Do not try to forward binary files! This feature is not implemented.

1.2   Character Sets

A related issue is the handling of European characters in a Windows display. You will notice that any given DOS character may not necessarily display the same character under Windows. There are many factors that determine the correct display. To this date I haven't found an automated way to do it all for you. As an interim solution you will find some additional features in the

Message Manager and Editor EDIT pull-down menu. The two (2) character set choices (ANSI and OEM) allow you to switch between different code-pages. The default code page is the ANSI page, the one you were always used to work with. If you find black square characters in the middle of your text try the OEM character set and you may be able to see what's behind those characters.
A word of caution: When you create text using the WinLink Message Manager or Editor and you are using a European keyboard (or the equivalent ALT characters) you will find the correct character to be displayed on the windows screen. However, this is the windows character and if you send this file to a DOS-based BBS, that user may not see the same character on his screen. As I write this I am still torn on how to solve this issue in it's final form. I have decided to release the code as it stands so that you have a chance to work with it. Please feel free to give me feedback or any better ideas of handling this.

2.   EDITOR

      o The EDITOR had a problem locating the automatic return BBS when the originating BBS was a Packet station. This has now been corrected.

      o The EDITOR now allows you to choose font and character sets. This feature was introduced so that European users can see the upper characters in the ASCII set with the correct character. This is a kludge fix while I'm still trying to find a better way to display DOS characters with the matching Windows font. Unfortunately DOS and Windows are not compatible on this front. Feel free to experiment with different fonts and point sizes. This is really helpful when you want to view a file that has 80 character lines. In the past you noticed that WinLink broke the line just short of character 80. This was (and still is) because the default Windows system font does not allow us to display 80 characters on one line. However, if you reduce the point size using another font you can then see many more characters on each line, depending on the font and point size.

3.   MSGMGR

      o A bug was fixed in the Message Manager where the MCB editor used to point to the wrong MCB under certain conditions.

      o The Font and Character set choice are available as with the EDITOR.

4.   PACTOR

      Removed the > identifier for stations that don't have the "I" feature set in their SID. I left it in for keyboarders so that the sending station identifies itself between messages when they request a RM or RN where multiple messages are read in sequence.

Added protection so that control codes (ASCII 0 to 31) are no
longer sent. They are being replaced with a question mark instead.
At the same time I allowed the transmission and reception of the
upper ASCII character set (ASCII 127 TO 255). Proper display of
these characters may require the user to change the character set
while viewing the message (see EDITOR changes)

7Plus files are now safely handled by Pactor, both in and out
bound.

5.   New Commands

The NTS command is now implemented in all modes (not just AMTOR).
It lists all PENDING NTS traffic only. You may still use the
original LT command to list all NTS traffic at that station.

The old APLINK commands: LF and LI are implemented again. The LF
command sends that stations' forwarding file (FORWARD.APS) and the
LI command sends that stations' intercept file (INTRCPT.APS). Both
of these commands are reserved to MBO users only. This may be a
good time to clean up those files at your station and place
comment lines where appropriate so that others down the line can
interpret what they see.

6.   PACKET

This module has received the most attention in this release. I
believe that we now have a nice and clean version.
o I am happy to report that I finally found and fixed the
little booger that killed a Packet link during forwarding of
long files when the link wasn't point-to-point (going through
several nodes).
o I also fixed the message truncation problem when messages
coming in had no CR/LF terminators in them. It will now force
a truncation after 180 characters.
o I had to change the way the WLM_AUTOFWD command works. This
only effects programmers that used this call through the WLDLL.
Please read the WLDLL.WRI document for the parameter change.
o Packet now supports an optional initialization file. You may
place any Packet commands in this file. Comment lines need to
begin with a semicolon (;) in column one (1). The file must be
named the same as the packet port with an extension of INS
(e.g. VHF.INS) and reside in the APDATA directory. A sample
file is included on the installation diskette. A typical
installation would look like this:

```
ECHO OFF
FLOW OFF
NEWMODE ON
NOMODE OFF
BBSMSGS ON
XFLOW OFF
XON $00
XOFF $00
START $00
STOP $00
```

```
                              MONITOR OFF
                              MYCALL (enter your callsign here)
                              AWLEN 8
                              8BIT ON
```

o Added protection so that control codes (ASCII 0 to 31) are no
longer sent. They are being replaced with a question mark
instead. At the same time I allowed the transmission and
reception of the *upper ASCII* character set (ASCII 127 TO 255).
Proper display of these characters may require the user to
change the character set while viewing the message (see EDITOR
changes). For this to correctly work you must make sure to set
the following two parameters in your Packet initialization
file:
```
                      8BIT  ON
                      AWLEN 8
```
Please note that the Packet module uses the default Packet
Command: **pass character** (16hex {CTL-V}) to accomplish the
transmission of upper ASCII characters. If, for some reason,
your TNC does not support this feature let me know so that I
can put optional restriction in the code.

o 7Plus files are now safely handled by Packet, both in and out
bound.

7.   AMTOR
7.1   General
The PREFERENCES setup in AMTOR has been cleaned up, removing those
items from the list that were never in use (the program never
looked at them).
Two new items were added:
- List Bulletins
- Include/Exclude Bulletins originating from the Packet port
(Packet Bulletins). This feature lets SYSOPS selectively *hide* the
Packet bulletins from the LB list command. This does not mean that
those bulletins cannot be read. It just means that by default only
HF and SYSOP bulletins will be listed. If a SYSOP wants to make
certain Packet bulletins visible on AMTOR he needs to change that
bulletin's *source* to SYSOP (in the MCB).

Two related changes were made to the scan-stop logic:
- The Preference option **Log FEC signals** now also serves to control
whether or not to stop the TY1PS scanner upon detection of a FEC
signal. When this option is not checked the scanner will no longer
stop when a FEC signal is seen by the controller.
- The PK232 controller also has a built-in scan-stop feature for
FEC signals. That feature is also set/reset depending on the
Preference selection. This applies to those of you who use the PK-
232 scan-stop signal to stop a hardware scanner.

7.2   PCI-3000 specific
o The controller setup screen has been cleaned up, a *default*
button was added and an additional checkbox to select ***early
selcall detect*** was also added. The latter allows stations using a
hardware scanner to stop it after the first triplet of the selcall

is detected, such allowing for faster scan rates.

8.   New interface DLL to WinLink

As of this release there is an **additional** DLL available, allowing
programmers to link into the WinLink environment and take
advantage of its functions. This DLL was written specifically for
Visual Basic programmers, but it may be used by any other language
that supports linkage into a Windows API. Anyone who may have
linked directly into WLDLL before may change their code to link
into this library instead. The following is provided:

            o ability to link by Function Name **or** by Ordinal
      Value
            o ability to pass VB-type Strings
            o new function to receive the WLDLL's current
      version

For more details on this library consult the enclosed document
INTERFAC.WRI.

Included with this update is a stand-alone program VB_WLNK.EXE. It
is written in VB to exercise all the WinLink interface calls. Feel
free to run this program to exercise your *WinLink technical
interface* knowledge. You may run this program concurrently with
WinLink. To fully understand each and every function you will need
to have the document INTERFAC.WRI handy. It explains the fields
dwAccess in USERCALLS, **dwMSW** in MCB and **Message** in INTERTASK. The
source code for this program is available on CompuServe Hamnet
Forum, Library 9 and on Internet. You may use it as a template for
your own development. In particular I recommend that you use the
VB_WLNK.BAS file which has already all the Call Definitions and
special User Defined Structures coded.

9.   New IMPORT / EXPORT feature

A new feature has been added to the Message Manager which allows
you to **export** messages to a special file format instead of sending
the messages over the air. This file can then be mailed by
electronic means such as Internet, CompuServe etc. to the
forwarding BBS. That recipient can then **import** this same file just
as if it were transmitted over the air. This feature can be used
when conditions are really bad over a prolonged period and you
want to get rid of your traffic.
The export files can also get compressed before mailing. Just make
sure to retain the file's original name after expanding the file.

This is an initial version of this new feature for you to
experiment.

9.1   Naming conventions

Export files must be given a name and an extension. It is
suggested that the originator (the creator of the export file)
name the file with **his** callsign and a running file-extension. This

allows many BBSs to send export files to the same recipient
without the possibility of duplicating export file-names from
different sources. WinLink's export feature already defaults the
file name to your station name. All you need to do is add a unique
file extension.

9.2   Export Messages features

When you activate this function you are first prompted to select a
destination BBS. Enter here the call sign of the station you wish
to extract messages for. WinLink will compute a QTC for that
location and display it. Pressing ENTER on the BBS field or
clicking the QTC button serve the same purpose.
Once the QTC information is displayed you can change the callsign
to another BBS, cancel altogether or proceed with the actual
extraction process. The export files are written into the MESSAGES
directory unless you choose another drive and/or directory at the
time when you select the export file name. They are in plain ASCII
format and you can display them with any text editor. Make sure,
however, not to alter its contents. This format is required by the
receiving stations' **import** function.

Once you select **Start Export** the familiar Windows file-menu is
displayed. The name of the export file should be BBS.nnn, where
BBS is the callsign of your station and nnn is a running numeric
file extension. The directory defaults to WinLink's MESSAGE
directory, but you may change the drive and/or directory to any
other place you wish to export to.
When the extraction process is complete you are asked to tag the
messages just extracted. Consider this a safety valve in case you
accidentally pressed the **Start Export** button. Once you confirm to
tag the messages they will all be marked as forwarded with the
current time and date.

9.3   Import Messages features

This feature serves to process files generated by the sender of an
export file. You are asked to enter a BBS callsign from which to
accept messages. WinLink will present the File-menu from where you
may select existing export files in the MESSAGES directory. You
may choose another drive and/or directory from where to import
data. Once a file is selected its four (4) header lines are
displayed for you to verify that it is the correct file to import.
When you are ready to process this file press the **start import**
button. All messages contained in the export file are processed
and validated in the same manor as WinLink does for any other
message received. This includes the testing of the BID/MID. A
duplicate message will be skipped.
Also note that the header of the received message receives a
special marking of [Auto Import] to signify its source.
There is also a new message-source of type **Import** in the MCB
editor. This status gets set for all messages imported into
WinLink.
Note that import files are not automatically deleted. It is your
responsibility to remove processed files from the system.

10. EVTLOG

    The log program will now erase the prior year's log data file
    (EVTLOGxx) when a month switch takes place. In the past the log
    just kept on growing, adding new events to the same month's data
    of the year prior. However, this automatic delete function will
    only work if the EVTLOG program is always running. It must detect
    a date-change on its own. Therefore make sure to place the EVTLOG
    program in your startup program group.

    Many of you have requested that the log look again like the old
    APLINK log. The current design of WinLink unfortunately does not
    allow for this. There will be some design changes forthcoming at
    which time I will be able to change the log.

11. New Internet FTP sites

    I have now a working link to the WinLink FTP site. I will keep
    this site current at all times. When you connect to IP address
    148.114.0.217 (stennis.ssc.nasa.gov) you are asked to log in.
    Choose **anonymous** as the user name and your callsign as the
    password. Once connected you will see directory WINLINK. In this
    directory are several text files worth reading along with latest
    WinLink releases etc. You have *read only* privileges in this
    directory. This is for your (and mine) protection so that no one
    can inadvertently upload damaged code.
    Underneath WINLINK is another directory labeled USERAREA. This
    directory is for your use. You have read/write privileges in this
    area. Feel free to upload your files and/or comments to share with
    your fellow WinLink sysops.

    Another feature of this site is a dedicated Message BBS (area)
    where you can exchange your WinLink related stories. Send your
    mail to "winlink@ab6z.ampr.org". I will periodically check in
    there, too.

    By the way, if you wish to send me mail on internet you may send
    it to **HansK@interramp.com** or to **n8pgr@ab6z.ampr.org**.

    In addition to this site you may also find WinLink at the official
    ADRS FTP site at **ftp.iea.com/public/adrs/win**
    On WWW you find the same location under **http://www.iea.com/~adrs**

Distribution places for WinLink

This as well as future copies of WinLink may be downloaded from the
following sources:

ADRS LL BBS: USA 813-922-5904
                    Library 1

Compuserve: HamNet Forum
                    Library 9

```
Internet:         stennis.ssc.nasa.gov     IP 148.114.0.217
                  /pub/winlink
                  Log in as **anonymous**
```

There are also many secondary sources, but the above listed three (3)
are the only ones I keep current.