

WinQVT/Net Release Notes

Version 1.31

- 1.** The 'Standard Window' and 'Tall Window' options have been added to the 'Setup' menu. This feature allows you to switch between a normal 24-line window, and a 'tall' window that is sized to contain as many lines as the screen will allow without overflow.
- 2.** Ftp will no longer 'hang' if an attempt is made to connect to a host which is nonexistent or unavailable. If a connection cannot be made in a reasonable period of time, the attempt will be abandoned.
- 3.** The 'lpwd' command has been added to ftp.
- 4.** The ftp window will now redraw when restored or exposed.
- 5.** The scrolling function has been fixed so that a partially occluded window will scroll properly.
- 6.** When the 'ANSI' character set is selected, the fixed-width system font will be used instead of the proportional system font (bug fix).

Version 1.4

- 7.** Support has been added for 'rcp'. This allows you to remotely copy files from and to the PC using the host-based 'rcp' command.
- 8.** Anonymous FTP users can now use the command 'cd ..' to move up one directory level, until the directory specified by the 'anonftp_dir' directive is reached. This makes it possible for anonymous users to easily move up and down a directory tree. Anonymous users are still prevented from logging to directories which are not part of the tree specified by 'anonftp_dir'.
- 9.** The keyboard handler has been modified for better compatibility with non-US keyboards.
- 10.** A bug has been fixed which resulted in sessions being left alive if WinQVT/Net was shut down as part of a general shutdown of Windows.
- 11.** The architecture of WinQVT/Net's user interface has been overhauled. WinQVT/Net now begins by bringing up a 'Console' window. This window serves two purposes: first, it is the point from which all new Telnet and FTP sessions are launched; second, it provides a display area for error messages. Another benefit of the console-based architecture is the ability to start WinQVT/Net simply for the purpose of running the background FTP server (i.e., no Telnet or FTP).

WinQVT/Net now starts up by displaying the console window in the upper-right-hand corner of the screen. Sessions are initiated from the 'Services' menu.

To start a Telnet session, click on 'Services', and select the 'Telnet' menuitem. The list

of available configurations will be displayed, and you can either select a configuration from the list, or type in a host name (or IP address) directly into the edit field which is at the top of the dialog box (previous versions of WinQVT/Net did not allow for user-supplied host names or IP addresses).

Note: to connect to a host which is not listed in QVT_TCP.RC, you must have a nameserver defined in QVT_TCP.RC.

To start an FTP session, select 'FTP' from the 'Services' menu (WinQVT/Net still supports only one FTP session). Note that a benefit of the new architecture is the ability to start an FTP session without having to start a Telnet session first.

The 'Servers' menuitem is used to start and stop the two background servers. Note that the FTP server cannot be disabled if a session is currently open.

The console architecture has an impact on the closing as well as the opening of sessions. First of all, the console window remains on-screen even after all sessions have been closed. Secondly, the 'Close All Sessions' facility is now mapped to the console's 'Close' menuitem.

12. WinQVT/Net sessions will now shut down properly when terminated from the Windows 'Task List'.

13. The 'ftp_server=on|off' and 'rcp_server=on|off' directives may now be included in the global section of the QVT_TCP.RC file to enable or disable the ftp and rcp servers. The default value is 'off' for both servers.

14. The 'CDUP' command is now supported by the background FTP server.

15. Function key strings may now include arbitrary byte values, specified by the standard C notation of a '\' character followed by exactly 3 octal digits. To include the backslash character itself in a function key string, use two consecutive backslashes.

16. A bug has been fixed in the 'mget' command. This bug caused spurious filenames and phrases to be appended to the list of filenames.

17. Three new configuration directives have been added. The first two are for use in the 'user configuration' section of QVT_TCP.RC, the third may be used in the 'Global' section.

win_pos	Specify a screen location that WinQVT/Net will use when creating a new session. Syntax is 'win_pos=<x>,<y>', where <x> and <y> are the horizontal and vertical pixel offsets, respectively.
	There must be no comma between the numbers which represent <x> and <y>.
win_height	Specifies that a 'normal' or 'tall' window will be created.
autostart	Allows the user to instruct WinQVT/Net to bring up one or more Telnet sessions immediately at program startup. The syntax is 'autostart=<config name 1>,<config name 2>', etc. Up to five configuration names can be specified in the list. There should be

no blanks on either side of the commas which separate the names.

Version 1.5

18. A bug has been removed which caused Windows to crash if an attempt was made to cycle into WinQVT/Net using the <Alt-Tab> key combination.

19. A small on-line news-reading facility has been added. This feature, accessible through the 'News' menuitem on the console window's 'Services' menu, allows users who have access to an NNTP server to read Usenet news articles directly on their PC.

Before the news reader can be used, you must create a file called NEWS.RC in the same directory with WNQVTNET.EXE and QVT_TCP.RC. This file should be an ASCII text file containing a list of the newsgroups that you want to read, one per line, up to a maximum of 20. Do not append colons or any other punctuation to the newsgroup names!

You must also:

* create a 'name=' entry for the NNTP server in the user section of your QVT_TCP.RC file;

* use that name as the value of the 'nntp_host=' directive, which resides in the 'global' section of QVT_TCP.RC. If the name contains periods, enclose it in double quotes.

When 'News' is started, the new window will show the list of newsgroups (from NEWS.RC), along with the number of unread articles in each newsgroup. To select a newsgroup, simply click the mouse on the newsgroup, then click on the 'Read' button; the header portion of the first unread article will be brought up for viewing. To see the article itself, click on the 'Read' button.

You can now use the top-row button controls to move forward or backward through the newsgroup. The 'Save' button can be used to write the current article to disk; WinQVT/Net will automatically generate a 'reasonable' filename, based on the newsgroup and article number.

The 'Newsgroups' menu provides the ability to add newsgroups to the subscription list, remove newsgroups from the list, and 'purge' a newsgroup of unread articles (useful if you have fallen behind in a newsgroup and don't intend to read the backlog of articles).

20. It is now possible to quickly access the console window from within any Telnet window by holding down the <Shift> key and clicking the left mouse button once. The same can be done from the keyboard by pressing the key combination <Alt-C>. This will work even if the console window is minimized at the time.

21. Each Telnet window now has a 50-line scrollback buffer.

22. You can now specify window colors using arbitrary RGB values, instead of color names. This way, both the hue and the intensity can be specified. The syntax is: '<color>=nnn,nnn,nnn', where <color> is one of the three color config directives, and 'nnn,nnn,nnn' is an RGB value. Each segment of the RGB value should be an integer ranging from 0 to 255. Do not embed spaces!

Note that the actual colors you see will depend on the capabilities of your video hardware and software.

For backward compatibility, the old color names are still supported at this time.

23. The 800x600 Super-VGA font has been improved, and a new 1024x768 font is now available to registered users.

24. If the FTP server is asked to receive a file by an 'anonymous' user, and a fully-qualified pathname is supplied, the server will use only the filename portion of the pathname. This will prevent 'anonymous' users from clobbering files in directories which are outside their authorized area.

Also, UNIX filenames which do not fit within the limitations of the MS-DOS filename convention will be arbitrarily modified so that they do.

25. The FTP window is now 24 lines in height, instead of 16.

26. The news reader now uses the 'System' font instead of the 'ANSI' font; on most systems, the 'System' font is larger and more readable.

27. FTP will no longer 'hang' when the initial login is attempted.

28. The overall stability and robustness of the program has been improved.

29. The 'Minimize All' console menuitem has been modified so that it alternates with 'Restore All', depending on the state of the window. Together, these menuitems form a quick way to remove the WinQVT/Net environment from the screen, and then quickly restore it later.

30. The mapping of the DEC keypad ',' and '-' keys has been reversed. The DEC ',' is now mapped directly to the '+' key on the IBM numeric keypad; the DEC '-' is now mapped to <Ctrl +> on the IBM keypad.

31. The FTP server will now strip the VMS version number from incoming filenames before attempting to open the file.

32. During transparent printing, all 8-bit characters will now be passed through to the printer without modification. Previously, characters in the range 0x84 through 0x9F were being translated to their 7-bit equivalents before being sent to the printer, which resulted in some conflicts with certain common printer-control escape sequences.

Version 1.6

33. The news reader has been enhanced considerably. Both the presentation format, and the user interface, have been improved.

To begin with, the list of newsgroups is now displayed in a small listbox located at the top of the 'News' window. To select a newsgroup for reading, you first position the mouse cursor over the desired newsgroup, then click the left mouse button once. In response, the newsgroup name will be displayed in inverse video. Also, the 'Read', 'Purge', and 'Unsubscribe' menuitems will be enabled.

Note: the 'Read' and 'Purge' menuitems will be enabled only if the selected newsgroup contains unread articles.

To read articles from the selected newsgroup, invoke the 'Read' menuitem. This will cause the list of newsgroups to be replaced by a list of unread articles from the selected newsgroup. If there are fewer than ten unread articles, the entire list will be loaded; otherwise, only the first five articles will be displayed.

To select an article for reading, follow the same procedure used to select a newsgroup: position the mouse cursor to the desired article, then click the left mouse button. To read the selected article, click on the 'Read' button which is positioned just below the listbox which contains the list of articles.

When an article is selected for reading, the entire text of the article will be loaded into the main part of the 'News' window (i.e., the region which lies below the row of pushbuttons). If the article exceeds one screenfull, a scroll bar will be provided to allow for scrolling the article text.

The rest of the pushbuttons perform as follows:

- | | |
|----------------------------|--|
| Next | Select and read the next article in the list |
| Junk | Delete the currently selected article, then select the next article |
| Save | Save the currently selected article to a disk file. |
| necessarily
the article | NOTE: the <u>currently selected</u> article will be the one saved, not the <u>currently displayed</u> article! By 'currently selected', we mean whose subject line is currently displayed in reverse video. |
| Followup | Post a 'followup' to the currently displayed article. |
| More | Load the next five unread articles into the listbox. |

A modified form of the 'Next' function is available by holding down the <Ctrl> key while clicking on the 'Next' button. This will cause the next article with a matching subject line to be selected and displayed. This mode will remain in effect until a different article is selected explicitly and displayed, or until no more matching articles can be found. The change of mode is visually represented by the presence of the '^' character at the beginning of the word 'Next' on the pushbutton.

The menuitems which run across the main menu bar are for performing operations at the newsgroup level, as opposed to the article level. Available functions are:

- | | |
|--------------------|---|
| Read | Read articles from the selected newsgroup |
| Purge | Mark all articles in the selected newsgroup as 'read' |
| Subscribe | Add a new newsgroup to the list |
| Unsubscribe | Remove the selected newsgroup from the list |

Post Post a new article to a newsgroup

The final menuitem - 'Session' - is used to terminate and initiate NNTP sessions. If you wish to close out the current news session, but without closing the 'News' window, you can use the 'Session - Close' menuitem to do so. A new NNTP session can be opened later by using the 'Session - Open' option.

34. Two new configuration directives have been added. They are 'console_forecolor' and 'console_backcolor', and they are used to specify the console window's foreground and background colors, respectively. Possible values are the same as those for Telnet windows: either one of the 'standard eight' IBM PC color names (black, blue, green, cyan, red, magenta, brown, white), or an RGB color spec of the form 'nnn,nnn,nnn', where each 'nnn' is a decimal number between 0 and 255, inclusive.

35. Some bugs in the background FTP server have been removed.

36. Some bugs have been removed from the posting and followup functions of the news reader.

37. The news-reader 'Save' function now works correctly; it will always save the highlighted article, even if a different article is actually being displayed for reading.

Also, it is now possible to supply your own filename to a saved news article.

38. A bug in has been fixed in the Telnet module, which caused a UAE if the window was maximized while the 'small' DEC font was selected.

Also, Telnet will now support logical line lengths up to 160; the previous limit was 132. This feature will come into play mostly on 1024x768 (or larger) displays, where more than 132 characters will fit across the screen when the window is maximized with the 'small' font selected.

39. The 'charset=' setup directive has been enhanced. You may now specify 'charset=dec-small' if you want sessions using that configuration to be initiated with the 'small' DEC font, instead of the 'standard' DEC font.

40. The news-reader window will now display up to 36 lines of text, depending on the size of the screen.

41. A local 'print screen' function is now available, by pressing the key combination <Ctrl-F2>.

Version 1.7

42. Telnet windows are now freely-resizable, and have both vertical and horizontal scrollbars. The maximum size of a window is 48 lines 160 columns.

43. If you include WinQVT/Net as one of the applications which are started by Windows at boot time (i.e., the 'LOAD=' directive in WIN.INI), the icon will now display properly.

44. The Telnet configuration selection dialog is now a multiple-selection listbox, which allows for the initiation of multiple sessions on a single pass through the dialog. As a

side-effect of this enhancement, the first listed configuration will no longer be 'selected' when the dialog box is first displayed.

45. The FTP host selection dialog has been modified. It is now similar in structure to the Telnet configuration selection, except that only a single host can be selected. The presence of the edit field at the top of the dialog box provides a way to begin an FTP session on a host which is not among those listed.

In addition, the method of opening an FTP window with no selected host has been changed. Instead of selecting the pseudo-host '<No Host>', simply begin the session with no hostname in the edit field.

46. The news-reader window is now resizable, within the present limits of 36 lines by 80 columns. The initial size of the window will be 24x80.

47. Telnet: keyboard control over horizontal scrolling has been improved. The <Alt-Left> and <Alt-Right> key combinations will now scroll by one character; <Ctrl-Alt-Left> and <Ctrl-Alt-Right> will scroll by ten characters. Previously, scrolling by only a single character was not supported.

48. A bug has been fixed which caused keyboard behavior in telnet windows to become somewhat erratic if a telnet session was accessed while an FTP transfer was taking place (in the FTP window). In particular, keys such as <Return> and <Backspace> would exhibit non-standard behavior.

49. A new config directive has been added, for use in the 'global' section of QVT_TCP.RC. This directive - 'nntp_font=', allows you to select either the 'system' or 'ansi' font for use with the news reader. These fonts are system-dependent, and one may be distinctly preferable to the other on some installations. If left unspecified, the default is 'system'.

50. A mechanism has been provided for restarting WinQVT/Net cleanly following a UAE. Should a UAE occur which shuts down WinQVT/Net, but leaves Windows running, you can now restart WinQVT/Net without having to reboot the PC. You will be asked to respond to a dialog which asks if you want to release the old packet driver handles; answer 'Yes' to continue normally.

51. There have been a couple minor improvements/fixes to the news reader. First, the list box is now guaranteed to be tall enough to display five lines. Second, when returning to the newsgroup list after reading some articles, the newsgroup list will be positioned in the list box exactly where it was prior to reading any articles. Third, a bug has been removed which made it impossible to unsubscribe a newsgroup that had no unread articles.

52. The 'terminal type' and 'window size' Telnet options are now supported.

53. The FTP window is now scrollable.

54. Some problems in the functioning of the FTP window's 'Close' menuitem have been fixed. Specifically, it is no longer possible to perform a 'Close' if an FTP command is in progress at the time.

Version 1.8

55. Two new config directives have been added, for use in the 'Global' section of QVT_TCP.RC. The new directives are 'ftp_forecolor' and 'ftp_backcolor', and they provide a means of setting the foreground and background colors, respectively, of the FTP window.

Any of the 'standard eight' IBM colors may be used, as well as RGB values of the form 'nnn,nnn,nnn', where each 'nnn' is an integer ranging from 0 through 255.

56. FTP: the 'lls' command now accepts a filespec argument, in order to restrict the directory display. the format of the argument should be the same as that used with the DOS 'dir' command.

57. Support for the DEC LK250 keyboard has been improved:

- * It is no longer necessary to manually activate 'Extended Scan Code' mode;
- * When the <PF3> key is pressed, the spurious '*' will no longer be generated;
- * The mapping of the <Down-Arrow>, <Right-Arrow>, <Keypad-Minus>, and <Keypad-Plus> keys has been fixed.

58. An auto-login capability has been added to Telnet. Logins are performed using a miniature 'script language', containing these two statements:

wait <secs> ["string"] Wait up to <secs> seconds for "string" to be received from the host.

The second argument, "string", is optional.

type "string" Transmit "string" to the host.

To add auto-login to a configuration, you should first create a 'script file' containing the appropriate 'wait' and 'type' statements. For example,

```
wait 5 "login:"
type "myname^M"
wait 5 "password:"
type "secret^M"
```

Note in this example the use of the '^M' to signify a carriage return; any control character can be notated this way. Also, be aware that, in the 'wait' statement, the string comparison is case-insensitive.

Then, add a 'script=' directive to the section in QVT_TCP.RC which defines the configuration:

```
name=myhost
...
script=c:\wnqvtnet\myhost.lgn
...
```

59. Two new config directives have been added to the 'Global' section of QVT_TCP.RC. These new directives - 'nntp_forecolor' and 'nntp_backcolor', are used to control foreground and background colors used by the news reader. Unlike Telnet and FTP windows, only the 'basic eight' colors are available for use with these directives.

- 60.** The telnet 'terminal type' option now works correctly.
- 61.** You can now start the FTP session at load time by including the reserved name 'ftp' in your 'auto_start' list.
- 62.** The size limit on programmable function keys has been doubled to 40 characters.
- 63.** A new button - 'Unmark' - has been added to the News Reader. This button, which is activated only when a article is being displayed, is used to mark that article as 'unread'. The article will not be deleted from the list of articles, and will remain available for reading in a future session.

Version 2.0

64. WinQVT/Net now offers support for mail, in the form of a POP3 client module. This new module is compatible with the POP3 protocol, as outlined in RFC1225. It also includes support for the XTND XMIT command, so that mail may be sent as well as received. Not all POP3 servers support this command, but the 'popper' server from UCB does (version 1.8x or higher).

Note: WinQVT/Net requires a POP3 server that supports the 'TOP' command. This command is not part of the mandatory POP3 command set, and may not be available on all POP3 servers.

No QVT_TCP.RC entries are required in order to use the POP3 module. However, three new optional config directives are available to set up the POP3 client:

```
pop_host=    the name or IP address of the default POP3 host machine
pop_forecolor=  the color to use for drawing text (default is BLACK; RGB
values OK)
pop_backcolor=  the background color of the POP3 window (default is
WHITE)
```

If you supply a 'pop_host' in your QVT_TCP.RC, a login sequence will be initiated as soon as you start POP3 from the console menu. If no 'pop_host' is defined, you must manually open a POP3 session on a host. To do so, use the 'open' command, whose syntax is identical to the FTP 'open' command.

The initial implementation of the POP3 client module uses an FTP-like command-line interface. To see the available commands, type 'help' from the 'pop3>' command line.

A note on the 'mail' command (used to send mail) which is not documented on the help display: after you are finished typing in the message, you should type a <Ctrl-D> as the first and only character on the line to terminate the input process and send the message.

- 65.** The timeout values used by the News Reader have been extended considerably, to allow for longer-than-average network delays. Retrieval speed has also been increased somewhat.
- 66.** Support has been added for reprogramming <Shift> and <Ctrl> key combinations, in addition to the 'base' key programming that has been available for some time.

WinQVT/Net will now use the '|' character as a substring separator within a key definition. The first substring will be transmitted when the key is pressed by itself; the second substring will be transmitted when the key is pressed together with the <Shift> key; the final substring will be transmitted when the key is pressed together with the <Ctrl> key.

If any of these substrings is empty, the key will revert to its default behavior, thereby preserving backward compatibility with previous versions of WinQVT/Net.

For example, take

```
abc|def|ghi
```

as a sample key definition. If the key to which this program is assigned is pressed by itself, the string 'abc' will be transmitted; if the key is pressed 'shifted', the string 'def' will be transmitted; if the key is pressed together with the <Ctrl> key, the string 'ghi' will be transmitted.

Note that <Shift> has priority over <Ctrl>; if both modifier keys are held down, only the string associated with the <Shift> key will be used.

As a byproduct of this enhancement, the local 'Print Screen' function has been remapped to the <Alt-F2> key combination; previously, <Ctrl-F2> was used.

67. The 'Services' menu, which is the main launch point for all WinQVT/Net application modules, has been duplicated as a hierarchical menu attached to the 'System' menu of the main Console window. This is to allow the starting of clients even when the Console window is minimized.

Also, 'Minimize All' and 'Restore All' are now both permanent members of the System Menu, regardless of the state of the console window itself. The console window will not be affected by either of these menuitems.

68. You may now append a '/H' to configuration names which you want to exclude from the list which is brought up to launch a new Telnet session. This would be appropriate for gateways and nameservers, machines which need to be included in QVT_TCP.RC, but which may not ever be used as interactive hosts. For example,

```
name=Sun-Gateway/H
host="sun.test.com"
host_ip=nnn.nnn.nnn.nnn
gateway=2
..
```

defines a configuration entry for a machine which will be used as a gateway only. The trailing '/H' at the end of the 'name=' directive will prevent this configuration from being offered as a selection for Telnet. Note that machines which are excluded in this way do not count against the limit of 30 configurations.

69. A new config directive has been added to the global section of QVT_TCP.RC. This directive, 'nl_mode=', is used to control the interaction between the <NumLock> key and the state of the numeric keypad. In the normal PC environment, pressing the <NumLock> key has only one effect, that being to toggle the keypad in and out of 'numlock' state. WinQVT/Net, however, uses the <NumLock> key to emulate the DEC

<PF1> key, since it happens to occupy that position on the keyboard. This means that a WinQVT/Net user will often press the <NumLock> key when there is no intent to manipulate the state of the keypad.

A complication is created by the behavior of the '5' key on the keypad. Unlike all of the other keys on the keypad, this key does not transmit a scan code to the system unless the keypad is in 'numlock' state. If WinQVT/Net did not force the keypad into 'numlock' state at all times, it would be quite possible for a user to press the '5' key and find that nothing had happened, the reason being that a previous press of the <NumLock> key had taken the keypad out of 'numlock' mode.

To get around these difficulties, WinQVT/Net forces the keypad into 'numlock' mode and keeps it there at all times. For most users, this isn't a problem, and it makes it easier to use the numeric keypad, since the '5' key will always work, no matter how many times the <NumLock> key may have been pressed.

Some users, however, don't like the software taking control of the keypad state. For these users, the 'nl_mode' directive has been added to QVT_TCP.RC.

If 'nl_mode=lock' (the default), the keypad will continually be forced into 'numlock' mode. If 'nl_mode=unlock', the status of the keypad will toggle every time the <NumLock> key is pressed (as it does with most software). The emulation of the <PF1> key is retained in both modes.

If it becomes necessary to shift the keypad into 'numlock' mode without transmitting any data to the host, you can do so by pressing the key combination <Shift-NumLock>. This will force the keypad into 'numlock' mode without causing a <PF1> sequence to be transmitted.

Because of the problem with the keypad '5' key, we recommend that 'nl_mode=unlock' not be used when the host software makes frequent demands on this key, as does the VAX text editor EDT.

Note: these comments apply to Telnet only. The <NumLock> key functions only as a toggle in the mail and FTP modules.

Version 2.10

70. Support for the Reverse ARP protocol has been added. To use RARP, use the following config directive in QVT_TCP.RC (global section):

```
my_ip=RARP
```

On the host side, you must ask your system manager to add your PC's ethernet address to the address table located on the host, and you must also make sure that your PC is listed in the 'hosts' table.

71. WinQVT/Net has a new, expanded key-redefinition facility that allows any key on the keyboard to be reprogrammed (with the exception of the <Shift>, <Ctrl>, <Alt>, and <CapsLock> keys). This new feature is accessed from the 'Keymaps' menu item, which has been added to the Console window. The 'Function Keys' menu item, which used to be found on Telnet windows, has been dropped.

The 'Keymaps' menu item has two options: 'Main Keyboard', and 'Keypads'. These

refer to the main alphanumeric keyboard (including the top-row function keys), and the set of three keypads which are located to the right of the main keyboard.

The key-redefinition process actually begins before WinQVT/Net is started. The first thing you should do is add a new config directive to the 'global' section of your QVT_TCP.RC file. This directive,

```
keymap=<filespec>
```

provides WinQVT/Net with the name of a file where the key definitions can be stored. You should do this even though the file doesn't actually exist; it will be created by WinQVT/Net at the end of the key-redefinition procedure. We recommend that a fully-qualified DOS pathname be used.

The actual key-redefinition process is performed interactively, by selecting one of the menu options mentioned above (i.e., 'Main Keyboard' or 'Keypads'). This will bring up a dialog box which contains a 'diagram' of the selected region of the keyboard keyboard, with each key represented by a pushbutton.

To redefine a key:

- * Click on the button that represents the key that you want to reprogram. This will bring up another small dialog box. This dialog contains a single input field, which you should use to enter the new key definition string (see release note 66 for a discussion of the format of these strings).

- * When the key definition string has been entered, click on 'Ok' to save the new definition. The small dialog box will disappear, leaving the larger dialog with the keyboard diagram.

You can now repeat these steps for each key that you want to redefine.

When you are finished, click on the 'Ok' button at the bottom of the main dialog box (i.e., the one with the keyboard diagram). If you have specified a file for storing the key definitions (using the 'keymap=' config directive), they will now be written to that file. The contents of this file will be read the next time you start WinQVT/Net. The new key definitions are also available for immediate use during the remainder of the current session.

If you have not provided a filename in QVT_TCP.RC, a small dialog box will appear. This dialog box contains a single input field that you can use to enter a filename. **Note:** even though your key redefinitions will be saved to the specified file, your QVT_TCP.RC file will not be modified to include a 'keymap=' directive. You still must manually edit QVT_TCP.RC and add this directive, so that the new key definitions will be loaded the next time you start WinQVT/Net.

72. A keyboard interface has been added to the News Reader. Of course, it has always been possible to use the keyboard to select the top-row menu options. However, until now there have been no keyboard equivalents for the pushbuttons which control most of the functions.

The new keyboard interface is very simple: any time that a pushbutton is 'enabled', you may actuate it by pressing the key on the keyboard which corresponds to the first letter of the button's label:

Read	R
Next	N
Junk	J
Unmark	U
Save	S
Followup	F
More	M

73. A bug in the News Reader has been fixed. This bug often caused long articles to be truncated. Note that there is still a limit of 500 lines for an article. Articles longer than 500 lines should be saved to disk.

74. A new service, 'lpr', has been added for the purpose of printing over the network. In order to use this service, you must include two new config directives in the global section of QVT_TCP.RC. These are:

```
my_name=<name of your PC node>
lpr_username=<your login name on the lpr host>
```

Two optional config directives are also used by lpr:

```
lpr_hostname=<name of default lpr host>
lpr_qname=<name of default print queue>
```

For 'lpr_hostname', you should provide a value which can be found elsewhere in QVT_TCP.RC as an argument to the 'host=' directive.

Note: Before you can use the lpr client, you must ask your system administrator to add your node name (i.e., the 'my_name=' directive) to the list of hosts which are given access to the lpr daemon (on the various host systems). This list is usually found in the '/etc/hosts.lpd' file. Your PC must also be listed in the '/etc/hosts' file.

75. Two enhancements have been made to the POP client:

- * You can print a mail message by executing a 'save' command with a printer device name (e.g., 'LPT1') as the argument;

- * You can mail a file to another user by adding a second argument to the command line, as in 'mail testuser filename.txt'. This command will mail the file 'filename.txt' to the user 'testuser'. Note that this is the only command format which supports this option.

76. The following enhancements have been made to the News Reader:

- * Having selected a newsgroup, you can 'force-load' the entire list of articles in the newsgroup by pressing the <Ctrl> key and simultaneously clicking on the 'More' button (or by pressing <Ctrl-M>).

- * A third option - 'Refresh' - has been added to the 'Session' menu. This option will close the current news session and immediately open a new one. Any articles which have arrived at the server while the first session was in progress will be made available for reading.

- * When using the 'Followup' function, the new Notepad window will be brought to the foreground after it is created.

* When the last article in the listbox is selected for reading, the next series of articles in the newsgroup will automatically be brought into the listbox.

* You may now delete ('junk') all of the articles in the listbox by pressing the <Alt> key and clicking the 'Junk' button (or pressing <Alt-J>). If more articles are available in the newsgroup, they will automatically be loaded into the listbox.

* The 'Read' menu item has been enhanced. After a newsgroup has been selected for reading, the 'Read' menuitem will change to 'Reread', and selecting it will restart the selected newsgroup from the first unread article. Any articles which have been read and/or junked will be restored to the list. You will also be able to use this menu option to reread newsgroups which have been read in their entirety during the current session. This will not work, however, for newsgroups which have been purged.

* The 'Purge' menuitem has been extended to include both a 'full' and 'partial' purge. The 'full' purge works just as the 'purge' command has always worked in previous versions; all unread articles in the newsgroup are marked as 'read'. The 'partial' command will mark all but the last few articles as 'read'.

The purpose of the 'partial' purge is to make it easy to play 'catch up' when you have been away from the news for a while and have accumulated a large number of unread articles. In this situation, you will want to clear away the backlog of older articles that you won't have time to read, but you may want to retain access to the newer articles, so you can pick up the thread again with a manageable number of articles.

* When a list of articles is displayed in the listbox, each line will now include the name of the article's author, as well as the article number and subject line.

77. A new config directive - 'printer_init' - has been added to the global section of QVT_TCP.RC. This directive should have as its value a string that will be transmitted to the printer whenever the printer is opened for transparent printing under Telnet. The standard WinQVT/Net notation should be used for non-printing characters (i.e., a backslash followed by three octal digits which specify the ASCII value of the character).

78. A bug has been fixed in the News Reader. This bug would most often occur if the 'Session-Close' menuitem was invoked, followed by a subsequent 'Session-Open'. The result of this sequence was often a UAE.

79. The following commands have been added to ftp:

lrename	rename a local file in the current working DOS directory
lrm/ldele	delete a local file
lmkdir	create a local subdirectory
lrmdir	remove a local subdirectory

Also, the the command 'ldir' is now accepted as an alias for 'lls'.

80. The optional 'nntp_winpos' config directive has been added to the global section of QVT_TCP.RC. This directive allows you to specify the initial screen position of the News Reader window when a new session is opened. Syntax is 'nntp_winpos=x,y', where 'x' and 'y' are pixel offsets.

Also, the optional 'nntp_win_height' directive has been added to allow you to set the initial size of the News Reader window. The maximum value is 36.

81. A menu bar has been added to FTP. This provides an idiomatic way to carry out the most common FTP tasks, such as sending, receiving, and deleting files. In most cases, where a command operates on a directory, a file, or a list of files, a listbox will be presented which allows the use of the mouse to make selections. Some of these lists, such as 'send file' and 'delete file', allow multiple selections.

The following commands are available via the menu interface:

```
status
open
close
cd
ls
dir
put/mput
get/mget
rm
mkdir
rmdir
lls
lcd
ldele
lmkdir
lrmdir
```

Also, the 'Configuration' submenu allows you to change the state of most of the FTP operating parameters, such as 'file type'.

82. The ability to specify a port other than '23' has been added to the Telnet startup dialog. Note that, if you use this option to communicate with servers other than Telnet, you should probably enable 'Local Echo'. Also, you will probably have to hit <Ctrl-J> (linefeed) to terminate command lines, rather than <Return>.

Version 2.20

83. This is a maintenance release. It consists of the following bug fixes to the previous release:

- * Telnet: switching from standard to small font while in a maximized window will no longer cause a UAE.
- * Console: the 'Minimize All', 'Restore All', and 'Clear Console' menuitems have been bound to keystrokes.
- * FTP: the 'Configuration' menu will now show checkmarks next to the correct menu items.
- * News Reader: the 'Reread' menu option will now re-enable the 'More' button.
- * News Reader: a problem with 'Save' and 'Followup' getting the wrong article has been fixed.

Version 2.21

84. The PKTINT.COM packet-driver interface module has been updated. The new PKTINT is not compatible with earlier versions of WinQVT/Net, nor will version 2.21 of WinQVT/Net work with the previous version of PKTINT.COM.

If you have an older version of WinQVT/Net installed on your system, you must replace the old PKTINT.COM with the new version before attempting to run WinQVT/Net 2.2!

The new PKTINT.COM provides a larger output buffer, as well as a considerably larger real-mode stack.

Version 2.30

85. A bug in the Telnet terminal-type negotiation has been fixed. WinQVT/Net will now respond to the initial terminal-type query with the value given in the QVT_TCP.RC entry for that configuration. For example, if you have set 'terminal=VT100' in QVT_TCP.RC, WinQVT/Net will send 'VT100' as its first response to a terminal-type query from the host. Previously, the first response was always 'VT220', followed by 'VT100' and 'VT52', regardless of which mode was set in QVT_TCP.RC.

86. Bug fix: versions 2.1x and 2.2x both had problems initiating Telnet sessions on hosts whose IP addresses were not listed in QVT_TCP.RC. This problem is fixed in version 2.30

87. News Reader: the 'Purge' menuitem has been enhanced. Rather than simply providing two purge options ('Full' or 'Partial'), a dialog box is now employed which allows you to enter the number of articles that you want left in the newsgroup after purging. This number should be entered into the edit field which is located to the right of the 'Partial' radio button. Note that you must first select 'Partial' in order to enable input into the edit field.

88. Bug fix: characters typed into the FTP or POP3 windows would be 'doubled' if an inactive 'lpr' window was open at the same time. This bug has been removed.

89. FTP Server: anonymous logins will now be refused if no 'anon_ftplib' has been specified in QVT_TCP.RC. Only authorized users will be allowed to log in to the server.

90. Bug fix: in the News Reader, an 'Unsubscribe' followed by a 'Close' would cause a UAE, and an empty NEWS.RC file would be written. This bug has been removed.

91. It has been discovered that many - perhaps most - UAE's can be eliminated by making sure that your CONFIG.SYS file contains statements such as the following:

```
files=30
buffers=30
shell=c:\dos\command.com /p /e:1024
```

Some details will vary from case to case, but these key elements should always be present:

- * 'files' set to at least 30
- * 'buffers' set to at least 30
- * the COMMAND.COM environment set to at least 512 bytes, and preferably more.

92. The News Reader will now report at connect time whether the NNTP server will permit posting or not.

93. The number of configurations that can be stored in QVT_TCP.RC has been increased from 30 to 50.

94. A new option - 'Script File' - has been added to the Telnet 'File' menu. This provides the ability to select and execute a script file at any time during a Telnet session.

95. News Reader: the 'Save' option has been added to the 'Session' menu. This allows you to save the current state of your session (i.e., write an updated NEWS.RC) without closing the session.

Version 2.40

96. The 'Terminal' font has been made available for use with Telnet and News Reader sessions. To select the Terminal font, use the value 'TERMINAL' as the argument to the 'charset' and/or 'nntp_font' directives.

The Telnet 'Terminal' setup dialog has been expanded to allow for interactive selection of the Terminal font.

97. A bug in the sample QVT_TCP.RC file has been fixed. The keyword 'nl_mode' was inadvertently listed as 'nl_lock' instead. This bug resulted in a fatal configuration file error at startup time.

98. Bug fix: in the 'lpr' client, if a network or protocol error occurred during an attempt to print a file, the lpr window would not reset properly. As a result, it was impossible to close the window, or do anything else, for that matter.

99. News Reader: more care has been taken to ensure that a mouse click or keystroke during a data transfer will not result in a loss of data, or a corruption of the environment.

100. An emulation bug in Telnet has been fixed. This bug would result in a corrupted screen redraw in the rightmost columns, if the Telnet window had been manually extended beyond 80 columns.

101. A 'Delete After' checkbox has been added to the lpr client. If this option is selected, the file will be deleted after printing. Deletion will only occur if the file is printed successfully.

102. Telnet: support for the 'underlined' attribute has been extended to all of the non-DEC fonts.

103. The Windows 'Helv' font is now available for use with the News Reader. To select this font, include the line 'nntp_font=helv' in the global section of QVT_TCP.RC.

104. News Reader: you can now use the new config directive 'nntp_list' to specify the height of the listbox which is used to present lists of newsgroups and articles. Any value between 2 and 10 can be used; the default is 5.

The 'nntp_list=' directive should be placed in the global section of QVT_TCP.RC.

Version 2.5x

105. Mail: the 'pop_font' config directive has been added, allowing you to choose one of two fonts to use in the mail window. Possible values are 'system' (the default) and 'ansi'.

106. The POP3 mail server now provides background detection of new mail received. This feature is activated when, having previously logged on to POP3, you exit with one of the 'C' commands (which close the session but leave the window open). After the session is closed, the POP3 client will log on the server once every minute and check for new mail. If new mail does in fact come in, a dialog box will pop up into the foreground and provide notification.

The background new mail detection can be enabled and disabled using the 'pop_background' config directive. Values are 'on' to enable, or 'off' to disable.

107. FTP: the 'ftp_font' directive has been added to the global section of QVT_TCP.RC. It works the same as 'pop_font', described above in note #105.

108. The POP3 logon sequence has been modified. When the 'open' command is given, a dialog box will now appear which is used for entering the hostname, username, and password. Values entered into this dialog box will be preserved across POP3 logons, so that subsequent logons will require only that the 'Ok' button be clicked to initiate the logon.

In addition, the 'Open' command is now available as a standard Windows-style menuitem.

Lastly, the 'pop_user' config directive has been added. It can be used to specify the username that will typically be used for logging on to the POP3 server (as specified by the 'pop_host' directive). When used together with 'pop_host', 'pop_user' simplifies the logon process, as only the password needs to be supplied at runtime.

109. The News Reader has been made more robust.

Version 2.6x

110. The 'nntp_savedir' config directive has been added to the global section of QVT_TCP.RC. This directive allows you to specify a default directory as the location where news articles will be saved.

111. WinQVT/Net now uses the optional QVTNET_DIR environment variable as a pointer to the directory where the QVT_TCP.RC, NEWS.RC, and PNEWS.HDR files are located. Also, the runtime file WNQVTNET.HDL will be created in that directory, rather than the default directory.

This feature has been added to help with situations where a number of users are

sharing a single copy of WinQVT/Net which is kept on a file server. Ordinarily, WinQVT/Net will read the QVT_TCP.RC and NEWS.RC files which are located in the same directory as the program executable, and will create the WNQVTNET.HDL file in that directory. The QVTNET_DIR variable allows different users to keep their own private .RC files, and prevents multiple users from clobbering each other's WNQVTNET.HDL files.

The QVTNET_DIR variable supersedes the old TCPCONFIG variable as a specifier for an alternate QVT_TCP.RC file. If you have been using TCPCONFIG to specify a config file other than QVT_TCP.RC (or the specify a different location for QVT_TCP.RC), you must now use QVTNET_DIR instead. Note that QVTNET_DIR is a directory spec only; it supplies only the name of the directory where the config file is located, rather than the entire pathname of the config file. The config file must always be named QVT_TCP.RC.

Note: for reasons of backward compatibility, it is still necessary to place a dummy copy of NEWS.RC in the same directory with the WinQVT/Net executable. If you are using QVTNET_DIR to point to the 'real' NEWS.RC, the dummy copy will be ignored after program startup. This requirement will be removed in a future release.

112. Mail: when reading a mail message that exceeds one screenful in length, a pause is inserted after each screen, accompanied by the '--More--' prompt. With version 2.6, the responses to the '--More--' prompt have been modified:

- * To display the next screenful, press the space bar (no carriage return);
- * To scroll up one line only, press <Return>
- * To stop reading the message, press the letter 'q' (no carriage return).

These responses are consistent with those used by the Unix 'more' and 'less' utilities.

113. WinQVT/Net version 2.6 has been tested with, and found to be fully compatible with, Windows 3.1.

114. Telnet: the 'Setup-Font' submenu has been expanded. In addition to switching between the 'large' and 'small' DEC fonts, you can now select one of the other three supported fonts as well.

Version 2.7

115. The mail module has been redesigned. The new version uses a layout and interface very similar to that of the News module. There is a menu bar to handle 'meta' commands, such as 'open session' and 'close session', and an array of four buttons to take care of commands which operate at the level of the individual mail message. The mail message headers themselves are displayed in a listbox which resides between the menu bar and the button bar.

The four subcommands provided are:

Read	Read the currently selected message. This button will be disabled if
	there is no message selected, and also when the selected message is

the one currently displayed in the text area.

Save
only when

Save the current message to a text file. This button is enabled a message has already been displayed on the screen.

Reply

Compose and send a reply to the current message.

Delete
displayed

Delete the selected message. This can be the currently-displayed message or any other message in the list.

Note the difference between the 'Close' and 'Exit' menu options: the 'Close' option will terminate the current mail session, but will not destroy the window; 'Exit' does both. All necessary login information is preserved after a 'Close', so that initiating another mail session on the same host can be accomplished simply by selecting 'Open', and clicking on the 'Ok' button; the host, username, and password are all retained from the previous session.

116. The 'editor=' config directive has been added to the global section of QVT_TCP.RC. You can use this directive to specify which text editor you want to use for editing mail messages and news articles. The default value is 'notepad', the default editor provided with Windows.

Note: please specify a Windows-hosted editor! Do not use a DOS editor.

117. A bug has been fixed in the 'lpr' module. This bug surfaced most often when trying to print a Postscript file on (say) an Apple LaserWriter. Typically, the print job would apparently finish successfully, but no output would appear on the printer.

Note: there is still an lpr bug outstanding, this being the bug which causes lpr daemons running on DEC Ultrix systems to refuse print jobs submitted by WinQVT/Net. Specifically, such jobs fail with an 'invalid control file' error.

118. A bug has been fixed in the FTP client. This bug caused serious misbehavior if an attempt to connect to a host failed. Specifically, neither the keyboard nor the menubar would respond to input, and often the only way to regain control of the machine was to reboot.

119. A bug in the Telnet terminal-type negotiation has been fixed. This bug caused negotiation with a VMS host to fail.

120. The 'pop_savedir' config directive has been added to the global section of QVT_TCP.RC. Like 'nntp_savedir', this directive allows you to specify a default 'save' directory for mail messages.

121. News Reader: articles are no longer deleted from the listbox as soon as they are read. Instead, they are marked with an asterisk (*) just to the left of the subject line. This way, articles that have been read once can be re-read without having to reload the entire newsgroup.

Once leaving the newsgroup, however, 'read' articles will be purged from the list.

Version 2.8

122. The TCP/IP transport code is now incorporated into a separate DLL, WNNETDLL.DLL. Make sure that this file is kept in the same directory as the WinQVT/Net executable.

123. A button bar has been added to the console menu, for more efficient selection of client services.

124. FTP: an enhanced login dialog has been added. The new dialog allows for the selection of a host, as well as username/password entry, in a single step.

125. A new global config directive - 'domain_reuse' - has been added. This directive, which can be assigned a value of 'yes' or 'no', specifies whether WinQVT/Net should use a domain lookup to retrieve the IP address for a host only the first time it is needed, or every time a connection to that host is attempted. This allows for situations where the mapping of host names to actual machines is changing over time. By always performing a domain lookup, WinQVT/Net will always be using the most current address for a host.

126. FTP: the keyboard interface has been redesigned. Instead of a classic 'tty' style interface, a 'command window' is now presented at the bottom of the FTP client window. All command lines (and command arguments) will be entered into this command area. Output will be displayed in scrolling fashion in the main window area, as before, with each batch of output preceded by the command which invoked it.

127. It is now possible to use FTP to transfer the contents of the Clipboard, and for lpr to print the contents of the clipboard. To do this, simply use the word 'clipboard' as the name of the file to be transferred (or printed). For FTP transfers, a second command-line argument, giving the remote filename, is also required (it is optional for ordinary file transfers).

For example:

```
ftp> send clipboard clipbrd.txt
```

This command will send the current contents of the clipboard to the remote file 'clipbrd.txt'.

A checkbox is also available to utilize this feature. If this method is used under FTP, the remote filename will be set to 'clipbrd.txt' by WinQVT/Net.

Note: only text data can be processed by WinQVT/Net. An attempt to transfer or print anything other than text data will be rejected.

128. Mail: the timer interval for the background 'new mail' check has been extended from one minute to five minutes. This should enhance reliability.

129. Mail: a bug has been fixed which may have caused the system to 'hang' when attempting to send long mail messages (> 4K bytes).

130. It is now possible to include 'news' and/or 'mail' in your 'auto_start' list. When included in 'auto_start', these modules will be started automatically (as icons) at program startup time. Note that, at present, the number of 'auto_start' items remains limited to 5.

131. Key redefinitions: the maximum length of a key redefinition string has been

extended from 40 characters to 80 characters.

132. Two new files - WNQVTNET.SYM and WNNETDLL.SYM - are now included with the WinQVT/Net distribution. These files should be copied to the \WINDOWS directory, where they can be used by the Microsoft 'Dr. Watson' utility to identify, by name, the function that was executing if and when a crash (GP fault) occurs. The Dr. Watson output can then be e-mailed to QPC, where we can use it to help find and fix the problem.

133. Mail: the 'Reply' command will now copy the contents of the current message into the editor, so that the original message text is available to provide context for the reply. Each line of text is preceded by a '>' to distinguish it from new text entered as part of the reply.

134. FTP bug fix: when the 'Local - Delete File' menu option is selected, the ensuing dialog box will no longer erroneously read 'FTP - Send Files' as the window title.

135. FTP: the 'take' command has been added. This command allows you to prepare script files, containing FTP commands, and execute the scripts using the command 'take <scriptfilename>'. A couple of notes:

* If any of the commands in the script fails to execute, the entire script will be aborted at that point.

* If any of the commands require additional input, the script will pause so that input may be entered at the keyboard.

136. All console messages will now be saved in a file. The log file will be named 'console.log', and will be placed either in the default 'current' directory, or in the directory named by the QVTNET_DIR environment variable.

The console logfile supersedes the FTP logfile, in that all FTP (and RCP) server messages will be captured to the console log, as well as all other console messages. Support for the 'ftp_logfile=' configuration directive has therefore been dropped.

137. FTP: the 'logto' command has been added. This command allows you to save all FTP console output to a log file, exactly as it appears on the screen. The 'logto' command has two forms:

ftp> **logto <filename>** opens <filename> for logging

ftp> **logto off** terminates logging

138. Beginning with release 2.82, the 'retrans' configuration directive should be specified in seconds instead of 'ticks' (1 tick = 1/18 sec.). Users upgrading from an earlier release should take note of this and modify their QVT_TCP.RC file accordingly!

139. The window initializations have been fixed so that telnet, mail, and ftp windows will never appear partially off-screen (as long as they are small enough to fit on the screen to begin with).

140. The console window is now scrollable, with a 50-line scrollbar buffer. In addition, the size of the console window has been expanded from 12x80 to 16x100.

141. Downloads from the FTP server should now be somewhat faster.

142. FTP: the 'Kbytes per second' report at the completion of each file transfer is now more accurate (the fractional part is not truncated).

8/28/92