

## Release Notes for WinQVT version 4.x

### Version 4.3x

118. WinQVT 4.30 has been converted to work under Windows 3.0. It will NOT WORK under Windows 2.x!

119. Transparent printing performance has been improved.

120. A bug has been fixed in the 'restore cursor' function which sometimes caused a DEC font to be enabled even though the ANSI or IBM character set was selected.

121. The 'printerport=' config directive has been added. Valid entries are 'LPTn' or 'COMn', where 'n' is the number of a parallel or serial port to which a printer is attached.

WinQVT printing does not go through the Windows 'Print Manager', so you will not be able to print through WinQVT if there is a print job already running.

122. The DEC 'Enter' key (numeric keypad) is now mapped to the <Enter> key on the keypad of the IBM Enhanced keyboard. The keypad '-' is now mapped to the keypad <Plus>, and keypad ',' is now mapped to <Ctrl-Plus>. See the READ.ME file for a complete key map.

123. WinQVT is now a medium-model application. As a result, it is now possible to load more than one instance of WinQVT.

124. The 'Transfer' menu is now a hierarchical menu. You first select "Upload" or "Download", then the transfer protocol. Note that there are two entries for the Kermit protocol; one for regular downloads, and one for server downloads.

125. A bug has been fixed in the processing of the IND, RI, NEL, and LF control characters. This bug would occasionally result in improper scrolling, erasing, or cursor positioning, especially when using host programs such as the VAX Language Sensitive Editor (LSE).

126. The user-defined 'bold' color now tracks with the standard foreground color. If both the inverse and bold attributes are enabled, the bold color will be applied to the background, not the foreground. This more closely mimics the behavior of the VT terminal itself (which is monochrome).

127. The 'select\_on\_load' config directive has been added to QVT.GLB. Values are 'yes' or 'no'; when 'yes', the 'WinQVT Config Files' dialog box will be brought up immediately at program startup, thereby eliminating the need to select the 'Open' menuitem. This will only occur if WinQVT is started without a pre-selected config file.

128. WinQVT is now more aggressive about grabbing CPU cycles when performing background file transfers. This should result in better throughput and reliability, especially when performing ZMODEM downloads.

129. If a file-transfer or dialing session is minimized, the dialog box can be re-displayed by clicking once on the WinQVT icon. To re-iconify, click on the 'Minimize' button in the dialog box. In previous versions, the dialog box was re-minimized by clicking again on the WinQVT program icon.

130. The DOWNLOAD\_DIR environment variable has been dropped. Instead, the default download directory is now specified by the 'download\_dir=' config directive. The 'download\_dir=' config directive should be placed in QVT.GLB.

131. For all file transfers, the 'Disconnect' checkbox now remains enabled during the transfer, thereby making it possible to select or de-select auto-disconnect after the transfer has started. Previously, it was necessary to select the 'Disconnect' option before starting the transfer, and you could not change your mind later.

132. The 'dial\_on\_load=' config directive has been created. This allows you to specify that dialing should begin immediately after a config file has been loaded, without waiting for you to click on the 'Ok' button. Possible values are 'yes' and 'no'.

133. The 'Kermit Get' file-transfer function has been fixed.

## Version 4.4x

134. For all download protocols except B-Plus, the destination directory and filename are now separated into two fields, 'Directory' and 'Filename'. For XMODEM and Kermit 'Get' operations, the filename should be entered into the 'Filename' field; in all other cases, the 'Filename' field will be filled in by the protocol during the download process.

NOTE: as always, when performing a Kermit 'Get', the 'Filename' entry may be a filespec which includes wildcards.

135. The QVT.GLB global config file has been re-implemented as QVT.INI. This file should be identical to the old QVT.GLB, with these exceptions:

- a) The first line in the file should be '[WinQVT]'.
- b) The 'init' directive has been renamed as 'modem\_init'. Any 'init' directives that you may have in .VT files should be changed also.
- c) Comment lines in QVT.INI must begin with a ';', instead of the '/'\* used in QVT.GLB. Either ';' or '/'\* will be accepted as a comment line in a .VT file.
- d) The QVT.INI file should be placed in the \WINDOWS directory.

136. WinQVT now checks for the existence of the download directory before beginning a file transfer.

137. WinQVT now supports COM4. Note that in order to use COM3 or COM4 under Windows, it may be necessary to modify your SYSTEM.INI file.

138. WinQVT now supports baud rates up to 19,200 baud. Support for 300 baud has been dropped.

139. The <NumLock> key is now released when switching from WinQVT to another application.

140. Xmodem and Ymodem error recovery has been improved.

141. The local user-defined keys F10 through F12 now work properly.

142. It is now possible to select 132-column or 80-column mode locally, via new options on the 'Setup' menu. These menuitems are enabled only when the DEC character set is selected.

143. Support has been added for the 4800- and 9600-baud MNP result codes, as well as for the Telebit 'Fast' series of result codes. Note that the Telebit 'error-control call-progress' reporting feature is not supported, only the result codes 50, 61-63, and 70-73.

144. WinQVT now supports Zmodem 'autodownload'. The Zmodem dialog will be initiated automatically when the Zmodem lead-in sequence is detected in the data stream. You can use the 'zauto=on|off' config directive to selectively enable or disable this feature. It is 'on' by default.

145. A new screen-based method has been added for performing downloads. This new method employs two config directives: 'default\_protocol' and 'download\_cmd', the second of which is new in this release.

The 'default\_protocol' should be set up as usual. The 'download\_cmd' directive should be used to store the HOST command that is used to begin a download (using the default protocol). For example, if your default protocol is Zmodem, your 'download\_cmd' directive would be 'download\_cmd=sz' (or equivalent).

The download command can also be a WinQVT script file. To specify a script file, use the form 'download\_cmd=@scriptfilename'; i.e., precede the name of the script file with an '@'. This form can be advantageous when using newer versions of Kermit as your download protocol.

With a default protocol and download command set up, you can download files by picking their names off the screen. Assuming that the name of the file that you want to download is presently on the screen, you can download it using this procedure:

- a. Use the mouse to 'select' the filename in the usual manner;
- b. Press the right mouse button to copy the filename to the clipboard;
- c. Invoke the 'Download Selected' menuitem ('Transfer' menu).

Note that you can also pick filenames from the scroll-back buffer as well as the current 'live' screen. If you do so, remember to scroll back to the 'normal' screen position before beginning the download.

CAUTION: only files whose names are 32 characters or fewer in length can be downloaded using this method.

146. Some problems with Kermit block-check types 2 and 3 have been fixed.

147. WinQVT has always checked for certain error conditions before allowing a file transfer to begin. Unfortunately, if one of these conditions was discovered, it would be impossible to either cancel the transfer or to correct the problem and try to start the transfer again. The dialog box would sit on the screen, and nothing could be done to make it go away, short of rebooting.

With release 4.45, this problem has been fixed.

148. The DECCOLM escape sequence will always clear the screen when received, even if no change is made to the screen width.

149. All WinQVT fonts have been converted to Windows 3.0 format. One consequence of this is that WinQVT will no longer run in real mode. You can only run WinQVT in Standard mode or 386-enhanced mode.

## Version 4.5x

150. When a config file is selected, WinQVT will now check for a 'port=' directive in that file, and attempt to open the specified serial port BEFORE actually loading the file. This will avoid an inconsistent situation where a config file is loaded and presumably 'active', but no serial port is actually open.

This check will not be made if the specified port is the same as the currently open port or there is no 'port=' directive.

151. The 'Config Files' list box is now a multi-column listbox. This allows a more efficient display format when there are many files in a directory.

152. The 'Download Selected' functionality has been modified to use a mouse-driven procedure. Using this method, you can select a file from the current host screen, then download the file by dragging it to a destination folder.

See note 145 above for information on how to configure WinQVT so that this functionality is available.

The mouse-based download procedure is as follows:

- a. Select the file to be downloaded using the mouse cursor and the left mouse button.
- b. Press the <Ctrl> key, then the RIGHT mouse button. The cursor which change to a 'folder' shape, and a 'folder' icon will appear in the lower-right corner of the screen.
- c. While holding down the right mouse button, drag the cursor over to the folder icon so that the upper-left corner of the cursor is inside the image of the folder icon.
- d. Release the right mouse button (the <Ctrl> key can be released at any time).

The download sequence specified by the 'download\_cmd' config directive will be initiated, using the selected filename as an argument.

153. The keyboard mapping for the 'Copy' function has been changed from <Shift+Del> to <Ctrl+Ins>. This is more in line with standards established by Microsoft.

154. A bug has been fixed which caused WinQVT to crash when switching from a 'maximized' window back to a 'normal' sized window.

155. The 'Colors' dialog now has a new set of radio buttons that can be used to control the intensity of the background color. The 'Low' and 'High' settings will force the intensity to low and high, respectively. If 'Auto' is selected, WinQVT will make its own choice, based on which foreground color is selected.

Note that this capability will not be available on systems which provide less than 16 colors under Windows. The default for systems with 16 colors or more is 'Auto'.

156. The Windows 2.0 font format has been restored. This will allow WinQVT to run in real mode.

157. A bug in the handling of blinking double-high characters has been fixed.

158. A bug has been fixed which caused Zmodem uploads to stop after the first file, even if a wildcard filespec was provided.

Note: this bug did not affect uploads done with an arbitrarily selected list of files.

159. Some anomalies in the behavior of the scroll bar have been fixed.

160. A new keyboard-remapping facility has been added. You can now assign arbitrary strings of up to 20 characters to most of the keys on the 101-key keyboard.

To use this new feature, select the 'Keymaps' option from the 'Setup' menu, then select either 'Main Keyboard' or 'Keypads', depending on whether you want to program keys on the main alphanumeric keyboard, or one of the keys on the two smaller keypads which reside on the right-hand side of the keyboard unit.

To program a key, simply click on the symbol for the key, then enter the string for that key into the popup dialog box. As always, control characters may be entered by using the '^' character followed by the letter that corresponds to the control character. Click on the 'Ok' button to save your entry.

NOTE: keyboard mappings are not saved to disk until you save the entire current configuration ('Save as...' option).

If you have existing config files which contain function-key assignments, you can convert from the old format to the new by following these steps:

- a. make a copy of the config file with the extension '.KM'
- b. edit the new file, and remove all of the lines except those which begin with 'Fn=' (where 'n' is a number 1 through 12)
- c. replace the 'Fn' with a hexadecimal number in the range 70 through 7B, where '70' replaces 'F1', '71' replaces 'F2', and so on.
- d. edit the original config file, and add the line 'keymap=<filename>', where <filename> is the name of the new keymap file. Full DOS pathnames may be used, if necessary.

161. The 'Setup' menu has been reorganized. There are now four submenu options for 'Terminal': Display, Keyboard, Window, and Colors. The 'Display' and 'Keyboard' dialogs are basically the old 'Terminal' dialog broken up into two. The new arrangement is far less cluttered visually. The 'Colors' dialog is basically unchanged.

The new 'Window' dialog allows you to make all of the choices that affect the size of the WinQVT window in one place. There is also a new option that allows you to change the height of the window. The 'Small' setting is 12 lines, 'Normal' is 24, and 'Tall' is as many as will fit on the screen without overflow (max 60).

162. The 'paste' function has been rewritten. There is now much less likelihood of overflowing the output buffer when pasting large amounts of data.

163. The performance of the mouse-driven text-selection operation has been improved.

164. Support for 'mark' parity has been added.

165. A bug has been fixed which would cause WinQVT to crash if, while using the mouse to select text, the mouse button was released while the mouse cursor was outside the WinQVT window.

166. When copying screen data which contains DEC line-drawing characters to the clipboard or to a file, WinQVT will translate the graphics characters to their nearest ASCII equivalents.

167. The 'Color' setup dialog now includes an option to set the 'bold' color, as well as the standard foreground and background colors.

168. The key combination <Ctrl-Break> can now be used to transmit a <Break> to the host. This allows the use of the F5 key as a programmable function key without losing the ability to send a break signal.

169. The file transfer protocols have been modified for better background operation. Zmodem downloads will now work when the screen is taken over by a screensaver such as 'Screen Peace'.

170. (this note has been deleted)

171. Some bugs have been fixed in the remapping of the F10, F11, F12, and keypad <Enter> keys.

172. It is now possible to use a backslash ('\') followed by exactly three octal digits as a method of specifying arbitrary byte values in most of the strings used by WinQVT. These include:

- \* key redefinition strings
- \* modem initialization strings
- \* dial prefix strings
- \* dial suffix strings
- \* arguments to the 'type' command in login scripts

This notation allows the specification of arbitrary byte values, including those which have no 'control character' representation (e.g., byte values higher than 7Fh). For example, using this syntax, the <Escape> character would be specified as '\033'.

Note: in order to include a literal backslash in a string, it must now be notated as a double backslash ('\') in order to be processed correctly.

173. Version 4.51 clears up some problems which result from using the EGA font on a VGA system (e.g., 'Unrecoverable Application Error' when maximizing the window).

175. When performing B-Plus uploads, the download directory will no longer be prepended to the user-supplied filespec.

176. The window height and background color intensity are now saved in the .VT file, using the new 'win\_height=' and 'bkg\_intensity=' directives. For 'win\_height', the possible values are 'short', 'normal', and 'tall'; for 'bkg\_intensity', possible values are 'low', 'high', and 'auto'.

177. Keyboard processing has been modified for better compatibility with non-US keyboards.

178. The 'session\_log' config directive has been added. The purpose of this directive is to provide a filespec where WinQVT will store information on connect time. An 'in' record will be written when a dialup connection is established, and an 'out' record will be written when the connection is dropped. This allows you to keep your own record of connect time to compare against billing information from services which charge by connect time.

179. The <Alt-Up>, <Alt-Down>, <Alt-PageUp>, <Alt-PageDown>, <Alt-Home>, and <Alt-End> key combinations can be used to access the scrollbar buffer. Note that the keys on the separate keypads should be used, not the keys on the main numeric keypad.

180. For a key which has been reprogrammed, the custom key definition will be used only when the key is pressed by itself (i.e., no <Ctrl> or <Shift> key). Otherwise, the default usage for the key will take over.

181. The 'password' statement has been added to WinQVT's script language. It is used in situations where a password is required by the login procedure, but where including a password in a script file is unacceptable for security reasons. When the 'password' statement is executed, a dialog box will pop up, and the password can be entered at the keyboard (without echo).

182. The default key assignment for the keypad <Plus> key has been modified. It now emulates the DEC keypad <comma> as the default, and the DEC <minus> when pressed in conjunction with the <Ctrl> key. This is the exact opposite of the previous mapping.

183. A 'Shutdown' option has been added to all file transfer dialogs. If this option is selected, WinQVT will break the phone connection (if any) and shut itself down after the transfer is complete.

184. A bug has been fixed which caused the file transfer dialog boxes to ignore a carriage-return when attempting to erase the dialog when the transfer finishes.

185. A bug has been fixed which caused Windows to crash when the <Alt-Tab> key combination was used to activate WinQVT.

186. The method for specifying window and text colors has been simplified and extended. The old method of specifying colors by name will still work, in order to maintain partial backward compatibility. However, the 'bkg\_intensity' directive has been dropped.

If you want to specify colors that are outside the 'basic eight', you can now do so by creating an RGB color spec of the form 'nnn,nnn,nnn', where each 'nnn' is a decimal number between 0 and 255. For example, 'backcolor=0,128,128' indicates that a low-intensity cyan should be used as the background color.

Note that the actual number of color variations that you can achieve depends on your video hardware and its associated device driver. A driver that provides 16 colors is limited to those 16 colors, regardless of the specifications you use.

187. The 800x600 Super-VGA font has been improved, and a new 1024x786 font is



now available to registered users.

188. 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.

189. WinQVT now supports a local 'print screen' function, using the <F2> key.

190. WinQVT now employs a freely-resizable window. If the window is expanded to beyond the normal 24x80, the 'logical' screen will also be expanded by the same amount. If the window is downsized, however, the base 24x80 logical screen will be maintained, and the scroll bars can be used to expose the desired text area.

191. A bug has been fixed which prevented running multiple instances of WinQVT. This bug appeared in only a few of the later 4.5x releases.

192. A bug has been fixed which caused the 'winpos=' config directive to fail.

193. WinQVT now employs 'phonebook' files to store sets of phone numbers, instead of putting them directly into the .VT file as arguments to the 'phone=' config directive.. You can put as many phone numbers as you want into a phonebook file, as opposed to the previous limit of ten per .VT file.

The name of the phonebook file that should be used with a configuration is specified by the 'phone\_book=' directive. The use of fully-qualified pathnames is both permitted and encouraged.

Phonebook files should be plain ASCII text files, such as those created by the Windows 'Notepad'. Numbers should be entered into the phonebook file in the following format: first, the phone number, then a colon (':') separator, then a brief name or label which identifies the number. The separator and name are optional; only the number itself is required.

The 'phone=' directive is still supported, but only the first number encountered in the .VT file will actually be stored.

194. The key combinations <Alt-Right> and <Alt-Left> can be used to scroll the display horizontally.

195. The 'Setup' menu has been modified slightly. First, the 'Phone Numbers' menuitem has been dropped (see item 193, above). Multiple phone numbers are now stored in separate files which can be edited using the Windows Notepad. Second, the setup items which used to be found on the 'Save as...' dialog have been placed in a new 'Names' dialog which is accessed from the 'Setup' menu. The 'Save as...' dialog now contains only the name of the configuration file.

196. Moving the mouse cursor outside the WinQVT window while selecting text will no longer cause problems (e.g., UAE).

197. WinQVT will now make sure that its window is sized to an integral multiple of the base character size.

198. The printer will no longer be reset when the printer port is opened.

199. The maximum logical line length has been extended from 132 characters to 160.

200. The mapping of the local 'print screen' function has been changed from <F2> to <Ctrl-F2>. This way, the 'print screen' function is available even though the <F2> key may have been locally reprogrammed.

201. If WinQVT is included in your 'LOAD=' directive in WIN.INI, the WinQVT icon will now display properly.

202. The 'dial\_on\_load' config directive has been fixed. It will now take effect only when the config file is loaded, and not on subsequent invocations of the 'Dial' menuitem.

203. Four new config directives have been added to work with the Kermit protocol. They are 'kerm\_parity', 'kerm\_data\_bits', 'kerm\_stop\_bits', and 'kerm\_mode'.

The first three allow you to set up an RS232 environment for Kermit transfers which is different from that used by the WinQVT session generally. This is most useful when the host Kermit parameters have been given fixed values by the system manager and are not available to be changed by the user.

Possible values are the same as those used to set the regular RS232 parameters.

The fourth new directive - kerm\_mode - allows you to specify whether Kermit transfers will operate in text or binary mode by default. Possible values are 'binary' or 'ascii', with 'text' being accepted as a synonym for 'ascii'.

The default value of 'kerm\_mode' is 'binary'.

204. A new config directive - 'download\_confirm' - has been added. This directive controls whether or not WinQVT will require you to click on the 'OK' button to begin a download once the file transfer dialog box has come up. If 'download\_confirm=no', no confirmation will be required, and the download will begin immediately.

The default is 'download\_confirm=yes'.

The value of 'download\_confirm' can be changed interactively, using the new item on the 'Transfer' menu.

Note: the 'download\_confirm' directive does not affect XMODEM downloads.

205. A bug has been fixed which occasionally caused problems when displaying underlined blanks in a screen area which previously was occupied by non-blank characters.

206. WinQVT now employs a less severe failure mode when a 'comm port in use' error occurs while loading a config file. If the requested port cannot be opened, the program will not abort. Instead, WinQVT will continue to run, but with no comm port open. A comm port can then be opened manually, using the 'Serial Port' setup option.

Also, if the requested comm port cannot be opened at program startup, WinQVT will no longer abort with a UAE.

207. Keyboard control of the horizontal scrollbar has been improved. Now, the <Alt-Left> and <Alt-Right> key combinations will scroll by a single character; <Ctrl-Alt-Left> and <Ctrl-Alt-Right> will scroll by ten characters.

208. A bug has been fixed which sometimes caused a UAE under this circumstance: a config file is being loaded, using the 'Open' menuitem; the new configuration uses the DEC character set, while the previous configuration used the IBM character set.

209. The 'Remap Keypads' dialog box now includes the four keys which make up the top row of the numeric keypad (NumLock, /, \*, and -).

210. The 'Dialer' dialog box has been modified. The 'Dial Method' radio buttons have been dropped; the 'Dial Prefix' should be used to control tone or pulse dialing. Also, a check box has been added to allow setting the 'Autobaud' feature (automatic baud rate adjust on connect).

211. WinQVT will now execute login scripts at load time if the following conditions are met:

- \* There is no 'phone\_num' or 'phone\_book' specified in the configuration file;
- \* There is a login script defined by the 'login=' config directive;
- \* The 'dial\_on\_load' directive is set to 'yes'.

This is to provide the convenience of automatic login at startup to users who are operating in a direct-connect environment.

212. Support for the DEC 'single-shift' character-set selection mechanism has been added.

213. A bug has been fixed which caused the 'dialprefix' and 'dialsuffix' to load improperly from QVT.INI.

214. Support for the DEC LK250 keyboard has been improved. Specifically, it is no longer necessary to manually activate/deactivate 'Extended Scan Code' mode (by pressing <Alt-F17>). Also, the spurious '\*' has been removed from the processing of the <PF3> key.

215. A bug has been fixed which caused serious problems if WinQVT was launched from a config file which contained the line 'font\_size=small'.

216. Support has been added for reprogramming <Shift> and <Ctrl> key combinations, in addition to the 'unmodified' key programming that has been available for some time.

WinQVT will now use the '|' character as a separator within a key program. The substring which precedes the first '|' will be transmitted when the key is pressed unmodified; the substring after the first '|' 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 existing keymap files.

For example, take

abc|def|ghi

as a sample key program. 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.

Note: 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.

To make some room for this enhanced key programming capability, each key program may now be up to 30 characters in length (was 20). Further expansion is probable in a future release.

217. A bug has been fixed in the 'Reset' function. This bug caused the wrong font to be selected if the 'small' DEC font was enabled at the time that the 'Reset' button was hit.

218. A new config directive has been added to QVT.INI. 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, 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 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 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 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 mode. For these users, the 'nl\_mode' directive has been added to QVT.INI.

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 you need 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 state without transmitting a <PF1> sequence.

Because of the problem with the keypad '5' key, we recommend that

'nl\_mode=unlock' not be used if you frequently use host software that heavily uses this key, (e.g., the VAX text editor EDT).

219. Release note 172 describes the use of the '\' character as a leadin character for a string of octal digits. The addition of this feature may have caused backward compatibility problems with some modem initialization strings, particularly those used with MNP modems (e.g., '\N0'). This problem is corrected in version 4.73. Before deciding to treat the backslash as a leadin character, WinQVT will now inspect the next three characters, and only if all three are octal digits will the backslash be treated as a leadin to the octal string. In all other cases, the backslash will be treated as data, and will be transmitted to the host.

We still recommend that, when the backslash character is needed in an initialization string, that it be doubled ('\\').

220. WinQVT has been rebuilt using the Microsoft version 3.1 SDK. The resulting executable should run correctly under both Windows 3.0 and 3.1.

221. With version 4.79, support for the concept of a 'phone book' has been dropped. There didn't appear to be any effective way to retain both the global phone book and the separate listing of phone numbers in .VT files, and of the two, the latter seemed preferable, since it marries phone numbers with serial-port configurations, fonts, colors, scripts, and all the rest of the configuration values.

222. The length of the key redefinition strings has been extended from 30 to 80.

#### Version 4.8x

223. WinQVT is now a Windows 3.1 application. It will not run under Windows 3.0.

224. WinQVT now implements asynchronous scrolling, for faster full-screen scrolling performance.

225. All printing now goes through the Windows Print Manager. This obsoletes the 'printer' and 'printer\_init' configuration statements in QVT.INI. It also results in the addition of some new menu items to the File menu.

The first two are 'Select Printer', which you can use to select a 'current' printer, and 'Select Font', which is used to identify the font which will apply to subsequent print jobs. The selected printer and font will continue to be used for printing until changed, via another 'Select' operation.

If you perform any printing through a Terminal session without selecting a printer and font, the default printer will be selected, and a reasonable 'Courier' font will be used.

The final new menuitem is 'Transparent Print', which is a little more elusive:

There are two kinds of output that you might want to send to your printer. The first is plain text, including directory listings, and scrolling 'tty' output in general. The other type of output can be described as 'pre-formatted printer output'. This would include, in addition to the actual text, all of the various control codes that are used to format the

text (e.g., escape sequences). Postscript files fall into this category.

If you plan to print plain text, you should leave the Transparent Print option off. If, however, you intend to run a print job whose output will arrive at the PC already formatted, you should enable Transparent Print before you begin the job.

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