WinQVT

A DEC VT220 Terminal Emulator
For Microsoft Windows
Version 4.5

WinQVT is a DEC VT220/102/52 terminal emulator and communications program which has been created to run under Microsoft Windows as a true 'Windows' application. WinQVT provides exceptionally complete VT emulation, including double-wide and double-high characters, the full 'Special Graphics' character set, smooth scrolling, 132-columns, and user-defined keys.

In addition to terminal emulation, WinQVT offers file transfer facilities using five popular protocols - Kermit, XMODEM, YMODEM, ZMODEM, and CompuServe B-Plus, as well as auto-dial and auto-login capabilities. Since WinQVT is a Windows application, these operations, once started, may be sent to the background, thereby permitting the use of the machine for other tasks.

This document does not constitute full user documentation, but it does tell you what you need to know to use and register WinQVT. For a list of recent changes, see the accompanying RELNOTES file.

Hardware Requirements

WinQVT, like most Windows applications, is not practical on anything less than an 8-mHz AT or compatible. In addition, WinQVT requires a VGA, EGA or Hercules Graphics Adapter. Even though Windows will run on a CGA-equipped machine, it is our judgment that the CGA does not provide adequate resolution for this application.

The font file included in this package is intended for use with EGA-type displays (resolution 640x350). Fonts which are optimized for Hercules, VGA, and Super-VGA displays are provided to registered users.

The only keyboard supported by WinQVT is the 101-key 'Enhanced' keyboard. This is the keyboard most frequently found on computers which are powerful enough to run Windows, and it also the one which is best suited to emulate the DEC LK201 keyboard.

If you intend to use the modem-control features of WinQVT, you must have a Hayes or Hayes-compatible modem. The modem must be set up to allow computer control of the DTR signal; consult the modem user's manual for instructions on how to do this.

Software Requirements

WinQVT version 4.5x requires Windows 3.0 or higher. WinQVT will not run on older versions of Windows.

<u>Files</u>

The files included in this archive are:

WINQVT.EXE	The executable program file
VT220.FON	The special fonts required by WinQVT
QVT.INI	A model 'global' configuration file
DEFAULT.VT	A model 'session' configuration file
RELNOTES.WRI	A list of recent improvements in WinQVT
README.WRI	This document

The file 'VT220.FON' should be copied to your \WINDOWS\SYSTEM directory, where it will be together with the rest of the fonts. The 'QVT.INI' file should be copied to the \ WINDOWS directory.

The other files should be kept together in a separate directory (e.g., \WINQVT).

Warning!

If you have a serial mouse attached to COM1, you must edit the file DEFAULT.VT <u>*before*</u> *you attempt to run WinQVT! This is because WinQVT will attempt to open the port specified in DEFAULT.VTat program startup. If a mouse is connected to that port, WinQVT's attempt to open the port wil probably cause your system to 'hang'. Using the Windows 'Notepad' editor, find the line that reads 'port=1', and change the '1' to whatever the correct port number is for your system.*

<u>Windows 3.0 Program Manager Setup</u>

WinQVT is fully compatible with the Windows Program Manager. You can create a Program Manager icon for the WinQVT executable itself, and also for individual .VT files. This second option allows you to load WinQVT and the desired config file from the Program Manager in a single step.

To enable this capability, you should include the line:

    vt=winqvt.exe ^.vt

in the [extensions] section of your WIN.INI file. This will associate all of your .VT files with the WinQVT executable WINQVT.EXE.

You can now create Program Manager icons for WinQVT and for .VT files by going through the usual procedure for creating icons. This is done by first selecting the 'New' option from the Program Manager 'File' menu, then selecting the 'Program Item' option from the subsequent dialog box. To create an icon for a .VT file, simply enter the .VT filename in the space for 'Command' on the 'Program Item Properties' dialog box.

The WinQVT screen contains a standard Windows menu bar across the top of the screen. There are five pull-down menus which are used to operate the program:

File	Perform file operations, e.g. load and save
Edit	For moving data to and from the Clipboard
Setup	Configure WinQVT operating parameters
Modem	Control a Hayes-compatible modem
Transfer	Perform protocol file transfers

After WinQVT is started, you must perform a config operation in order to begin communications. This may be done in one of two ways: you may invoke the 'Port' option from the 'Setup' menu, or you may load a pre-existing config file (using the 'Open' option from the 'File' menu). A sample config file, 'DEFAULT.VT', is provided with this package.

WinQVT config files are created by the 'Save As' menu option (File menu). They must have the extension '.VT' in order to be recognized by the 'Open' menu option. Note that WinQVT will automatically force the extension to .VT when a configuration is saved.

The file 'QVT.INI' is a 'global' configuration file; it contains settings that will be retained throughout your WinQVT session, regardless of which .VT file is loaded. The contents of this file can be modified only by editing it directly, using the Windows 'Notepad' or similar ASCII text editor.

Dialing

Phone numbers may be associated with specific host configurations by placing a 'phone=' directive in the .VT file for that host. This number will then come up automatically when the 'Dial' menu is invoked.

WinQVT also supports the use of a modem initialization string. You should store your initialization string as an 'modem_init=' directive in the QVT.INI file. A reasonable default initialization string - for Hayes 2400 modems - is included in the supplied copy of QVT.INI. If you modify the default initialization string, MAKE SURE that you do NOT edit out the 'q0' and 'v0' commands. These are CRITICAL to the proper functioning of the WinQVT dialer!

NOTE: if your modem responds to a carriage return as a command terminator (as most modems do), you MUST include a carriage return, notated as ^M, at the end of your initialization string. For example, 'init=at&c1&d2x1^M' would be a valid initialization string for a typical Hayes-compatible 2400-baud modem.

File Transfer

When performing Kermit file transfers, make sure that you set the parity of the remote Kermit so that it matches WinQVT's parity setting. Otherwise, the transfer will fail. Note that the remote Kermit will show no signs of misbehavior until the transfer is started, at which point the session will 'hang'.

The version of YMODEM included in WinQVT is a true 'batch' YMODEM implementation.

In order for the CompuServe B-Plus protocol to work, you must be operating at 8-bits, no parity. This may require that you modify your CompuServe user profile (with the 'GO TERMINAL' command). The best way to perform a B-Plus transfer is to enable the B-Plus protocol (using the 'Transfer' menu) just before selecting 'B Plus' from CompuServe's protocol menu. You should disable B-Plus after the transfer is finished.

After a file transfer has been started, you can use the mouse to switch to another Windows application while the transfer is proceeding. Note that this must be a true Windows application; switching to a 'standard' application will cause the file transfer to time out.

NOTE: WinQVT is quite careful to allow messages for other applications to be processed during file transfers. If there are many such messages, there may be a noticable impact on the speed of the file transfer. We recommend that you terminate applications which generate a continuous stream of messages before beginning a WinQVT file transfer.

<u>Keyboard Mapping</u>

The version of WinQVT provided here is intended for use on computers with the 101-key 'Enhanced' keyboard. As of version 3.82, WinQVT provides the preferred mapping of the four 'PF' keys, across the top of the numeric keypad (See the Release Notes for more on key mapping).

DEC	**IBM**
PF1	NumLock
PF2	'/' on keypad
PF3	'*' on keypad
PF4	'-' on keypad
, (comma)	'+' (on keypad)
- (minus)	<Ctrl> + '+' on keypad
Enter	Enter (on keypad)
HoldScreen	F1 or <Pause>
Setup	(no key, use menu)
Data/Talk	Not Supported
Break	F5 or <Ctrl-Break>
F6 - F10	F6 - F10
F11 - F20	Shift-F1 - F10
Help	F11
Do	F12
Find	Insert
InsertHere	Home
Remove	PageUp
Select	Delete
PrevScreen	End
NextScreen	PageDown

The DEC user-defined keys are accessed by pressing <Ctrl-F6> through <Ctrl-F10> for the first five, and <Ctrl-Shift-F1> through <Ctrl-Shift-F10> for the last ten.

Fonts

The font file included in this package is designed for use with EGA display adapters. It will work with VGA and Hercules displays, but the character size will be somewhat smaller than the optimum for those displays. Registered users will receive a complete set of fonts for all PC display systems, including VGA, Hercules, and Super-VGA.

High Baud Rates in 386-Enhanced Mode

Though not actually a bug in WinQVT, it is worth mentioning that, when running in 386-enhanced mode, the Windows 3.0 communications driver drops characters at very high baud rates (e.g., 19200 baud). This is because Windows spends too much time in modes which block the servicing of serial-port interrupts (for example, timer interrupts, which are of higher priority than comm interrupts).

If you want to run at high baud rates without dropping characters, we recommend that you use the 'Control Panel -386 Enhanced' dialog to select the 'Exclusive in Foreground' option. This will make background file transfers impossible, but it will at least protect the integrity of the foreground terminal session.

You may also consider acquiring a replacement comm driver, such as TurboCom from Bio-Engineering Research Labs, of Berkeley CA.

Registration Information

WinQVT is a shareware product. Should you find it useful and suitable for your requirements, we ask that you remit $50 to:

QPC Software
P.O. Box 226
Penfield, NY 14526

Your registration will entitle you to a copy of the latest version of the program, a complete set of fonts, and a printed user manual. You will also be eligible to receive free upgrades for a period of one year.

Contacting QPC

You can contact QPC Software electronically on Compuserve. Our account is [76676,1420]. You can send Internet mail to this account using this syntax: 76676.1420@compuserve.com.

Other Versions of QVT

QPC Software has a family of DEC emulation products for many popular personal

computer environments, including MS-DOS, Microsoft Windows, Apple Macintosh, and OS/2 Presentation Manager. Also available are networking versions - for both DOS and Windows - which run in an Ethernet-TCP/IP network environment.

Write to us for our complete product price list.

If you pass on your copy of WinQVT to others, we ask that you include all of the original files from this package.

Thank you for your interest in WinQVT!