

QED SCREEN EDITOR

Introduction

The QED Screen Editor is a powerful yet easy-to-use text editor that runs on a standard QL under QDOS. It was developed on the QL in C (using GST's QC compiler) and its size is around 42Kb. QED can be used to edit program source files for all GST products (such as QC or the QL Macro Assembler) and can also be used to edit(SuperBASIC program sources and the source code for languages from other QL software houses such as Metacomco, Prospero or Computer One.

In style, QED is a reasonably standard text editor which uses the screen as a window into the file being edited. Text can be scrolled (both vertically and horizontally) through the window by using the cursor keys or by command. Facilities are provided to insert, delete and overwrite text, together with extensive search and replace and text block operations.

QED has been designed to be very simple to learn and operate: comprehensive help information and function key menus are provided, and you should be fully able to operate the program without reference to the manual.

How to Run the QED Screen Editor

Before running QED we recommend that you take a backup copy of the program.

To run the QED Screen Editor use either EXEC or EXEC_W, or, if you possess the QL Toolkit, EX or EW. Thus EXEC MDV1_QED will load QED from MDV1 and execute it. Note that if you use EXEC or EX you will have to press CTRL+C to switch control to QED, but you will retain the option of switching back to SuperBASIC to take appropriate action if you encounter an error such as disk (or Microdrive) full.

QED will then prompt you for the name of the file to be edited which may be either a new or existing file: respond with <device> <file> as usual. If you are creating a file you can now commence text input, otherwise QED will prompt for the name of a second file. If you are using Microdrives you must respond with a second <device> <file> but if you are using floppy disks you can choose either a second file name or retention of the existing file name by pressing ENTER.

If two different file names are used, QED will edit from the original file into the new file leaving the original unchanged. If a single file name is used, QED will edit from <file> into <file>_TOP these being renamed <file>_BAK and <file> respectively at the end of the edit. Note that QED also uses the temporary work files named <file>_BOTTOM and <file>_EMP.

The benefit of this method of file handling is that an original version of the file will always be preserved no matter what happens. The penalty is the requirement for sufficient room on the device for a second copy of the file. Other than this there is no restriction on file size, and files much larger than the available RAM space can be edited without problem.

Use of Windows

QED makes full use of QDOS windows. The default screen area used by QED is identical to the default used by QDOS devices CON_ and SCR_, but this size and position can be modified using the GST program WINDOW_MGR (though note that QED will ignore any specification of paper and ink colours and tag data). QED can only be used sensibly in monitor mode (or mode 4 text on a TV - sized screen).

Up to four windows are displayed as follows:

- **Status Window.** This is a black one-line window at the top of the QED screen. This line displays the name of the file being edited, the current tab value, insertion mode and the line and column numbers.
- **Help Window.** If help menus are switched on, a green window will be positioned immediately below the status line. This will contain details of the current command options. If this menu is switched off, the space it occupies is allocated to the text window.
- **Text Window.** This is a white window that holds the text to be edited that will scroll both vertically and horizontally (up to a maximum line length of 158 characters) if necessary.
- **Menu Window.** Even if help information is switched off, a green, single-line menu is always displayed at the bottom of the screen area. This usually displays the currently valid command keys and their actions, but is occasionally used to hold one line prompts or error messages (in the latter case the background colour is changed to red).

Once you are familiar with QED operation, the one-line menu and status line together provide sufficient information for text editing, the help window being useful for the initial learning phase and for occasional reference.

QED Command Structure

All QED commands fall into one of two categories:

- **Function Key Commands.** The more complex commands are invoked via a menu system whose choices are displayed in the single-line menu at the bottom of the screen area. Commands are actioned by depressing a function key in the range F1 - F4 followed by zero or more alphanumeric keys, normally a single alphabetic key. If a sequence of keystrokes is required, menu and/or help information is displayed in the appropriate windows for each stage of the operation.
- **Cursor and Edit Commands.** These commands are concerned with cursor movement (and hence text pan and scroll functions) and character, word and line deletion. They are invoked by a cursor key together with zero or more of the shift keys (ALT, CTRL, SHIFT) depressed simultaneously. A table summarising these commands is given in the CURSOR COMMANDS help window.

A detailed command summary is given below, though it should not be necessary to consult this during normal operation.

Function Key Command Summary

In the table below commands are invoked by a function key in the range F1-F4 followed by the capitalised letter(s) of the words shown in the second and third columns (if any).

Certain commands invoke a further dialogue by prompting for a filename, option selection or Yes/No confirmation. In these cases the action required should be obvious.

<u>F Key</u>	<u>Alpha 1</u>	<u>Alpha 2</u>	<u>Action</u>
F1			help window on/off
F2	Again		repeat last find or replace command
F2	Find		search for a text string
F2	Goto	1	goto predefined mark 1
F2	Goto	2	goto predefined mark 2
F2	Goto	3	goto predefined mark 3
F2	Goto	4	goto predefined mark 4
F2	Goto	Bottom	goto bottom of file
F2	Goto	End	goto end of block
F2	Goto	Previous	goto cursor position before previous command
F2	Goto	Start	goto start of block
F2	Goto	Top	goto top of file
F2	Insert		insert mode on/off
F2	Mark	1	define mark position 1
F2	Mark	2	define mark position 2
F2	Mark	3	define mark position 3
F2	Mark	4	define mark position 4
F2	Quit		abandon edit and retain original file
F2	Replace		find and replace a text string
F2	Save	Continue	save and continue editing current file
F2	Save	New	save current file and reprompt for new edit
F2	Save	eXit	save current file and exit to QDOS
F3	Copy		copy marked block
F3	Delete		delete marked block
F3	End		mark end of block
F3	Hide		delete block markers
F3	Move		move marked block to cursor position
F3	Read		read named file into text at cursor position
F3	Start		mark start of block
F3	Write		write marked block to named file
F4			redisplay the entire QED screen

Note that the ESCape key can be used to abort commands during the command entry sequence.

Cursor and Edit Command Summary

In the table below the character '+' indicates that the key combination must be depressed simultaneously:

<u>Keys</u>	<u>Action</u>
←	move cursor left one character
→	move cursor right one character
↑	move cursor up one line
↓	move cursor down one line
← + SHIFT	move cursor left one word
→ + SHIFT	move cursor right one word
← + ALT	move cursor to start of line
→ + ALT	move cursor to end of line
↑ + ALT	move to previous page
↓ + ALT	move to next page
← + CTRL	delete character left
→ + CTRL	delete character right
← + CTRL + SHIFT	delete word left
→ + CTRL + SHIFT	delete word right
← + CTRL + ALT	delete line

Note that these commands will automatically invoke horizontal and/or vertical scrolling as necessary to ensure that the cursor is always visible.

Error Handling

In general, QED is helpful and easy-to-use by having a well-defined command interface with few special cases and no obscure features. Because of this, QED assumes that when you invoke a command you mean it, and consequently there are no facilities to undo the action of a command once the command entry sequence has been completed.

When QED detects an error that must be brought to your attention, it does one of two things: either an alarm bleep is sounded (if you type an invalid keystroke) or an error message with a red background is displayed in the menu window. The error messages will indicate what has occurred and what action must be taken.

In the case of an unrecoverable I/O error, the original version of the file will remain unchanged.

If the disk or Microdrive becomes full during editing, this is reported to you, and the command is usually aborted when you type ESCape. However, there are three commands that are retried when you type ESCape, these are: F2 Save, F3 Read and F3 Write. If you have started QED using the EXEC or EW commands, then you have the option of switching back to SuperBASIC with CTRL+C (in order to make sufficient space available for the file in question) prior to typing ESCape in QED.

To avoid these problems altogether it is advisable to ensure that you have enough room on your disk or Microdrive before starting the edit.