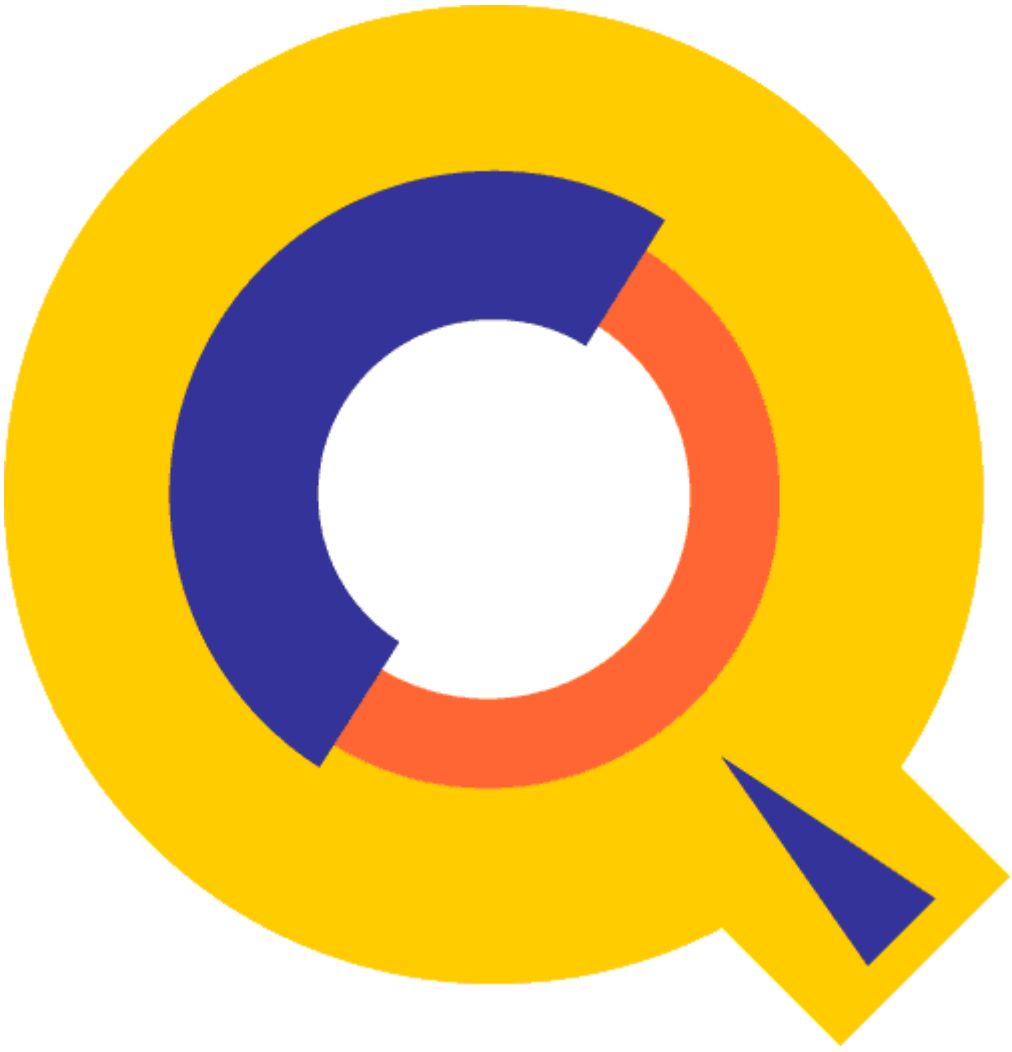
Qedit 6.3.50 for LINUX

User Manual

by Robelle Solutions Technology Inc.



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Welcome to Qedit

Introduction

Welcome to Qedit, the fast, full-screen text editor for MPE, HP-UX and LINUX. To get into Qedit/Open, enter this command:

```
/opt/robelle/bin/qedit
```

Qedit version 6.3 has line mode editing and commands:

Commands:

Add	FINDUp	Open	ZZ
Add(=copy)	FORM	Proc	%ext
Add(<move)	FORward	Q	shell
Add(=file)	GARbage	REDO	
Append	Glue	RENum	
Backward	Help	Replace	
Before	HOld	Set	
Change	Justify	SHut	
COLcopy	Keep	SPell	
COLMove	List	Text	
Delete	LISTREDO	UNDo	COmp
DEStroy	LISTUndo	Use	RUN
Divide	LSort	Verify	mpe
DO	MErge	Visual*	Udc
Exit	Modify	Words	Cmdfile
Find	New	Zave	=calc

Documentation

Qedit comes with a User Manual and a Change Notice. You may have received printed copies of these. If you wish to have printed copies, you can order them by filling out the form on our web site.

They are also available as PDF or HTML files. You can download the files from the Robelle web site at:
http://www.robelle.com/library/manuals/.

User Manual

The user manual contains the full description of all the Qedit commands, as well as usage tips. The manual is up-to-date with all the latest changes incorporated in Qedit.

Additional Software

Qedit comes with additional software:

- qcat for converting Qedit files,
- qaccess archive library for reading Qedit files

Qcat

Qcat is a filter program similar to cat and zcat. Qcat reads a set of Qedit files and prints the lines on standard output. Type `man qcat` for more information.

```
qcat QeditFile > TextFile
```

Qaccess

Qaccess is an archive library for reading Qedit files. It has two parts:

- a header file qaccess.h in /opt/robelle/include,
- and an archive library qaccess.a in /opt/robelle/lib.

Type `man qaccess` for more information.

Notation

This manual uses a standard notation to describe commands. Here is a sample definition:

VERIFY [@ | ALL]

[keyword ...]

1. UPPERCASE - If the commands and keywords are shown in uppercase characters in a syntax statement, they must be entered in the **order** shown (example: ALL). However, you can enter the characters in either uppercase or lowercase.
2. *Lowercase, highlighted* - These are "variables" to be filled in by the user (example: *keyword*). The variables may be highlighted by underlining or italics. Each such "variable" is defined elsewhere (see the "Qedit Glossary" on page 211 when you have trouble). In the Help command, highlighting is not available, so these variables appear simply in lowercase.
3. Brackets - enclose optional fields (example: [ALL]).
4. Braces - enclose comments which are not part of the command. However, braces and comments are accepted in actual Qedit commands.
   /listq filename {Q means without line numbers}
5. Up lines - separate alternatives from which you select (example: SET CHECK [ON|OFF]). The choices are sometimes listed on several lines without "up lines".
6. Dot-dot-dot (...) - indicates that the variable may be repeated many times in the command.
7. Other special characters - literal symbols that must appear in the command as they appear in the manual (for example, "=" in Add *linenum* = *rangelist*).

In examples, there is an implied Return key at the end of each line.

In examples in our documentation, we generally show Qedit commands preceded by the Qedit "/" prompt. However, in Qedit/Open the default prompt is actually "qux/". Note that you can change the prompt string with Set Prompt.

Control characters, generated by holding down Control while striking another key, are either spelled out (e.g., Control-H) or abbreviated with a circumflex prefix (e.g., ^H).

When Qedit asks you a question, the default answer is shown in [brackets]. The default is the answer that Qedit will assume if you press only the Return key.

Highlights

Highlights In Version 6.3.50

- Add with move syntax would abort, this is now fixed. A typical syntax is add last < 1/3.
- Adding a block of text would incorrectly print out line numbers at the end of the block of text. For the time being ADD will revert to ADDQ while we investigate this issue.
- The Modify command will default to Modifyq for the time being as to when we resolve some terminal issues.
- Qedit has been ported to Linux, specifically Small Endian Linux Machines.

Getting a Quick Start with Line Mode Editing

Introduction

You don't have to learn every command in order to use Qedit. With just a few of the basic functions, you can take care of editing job streams, programs, memos, or big text files. First, find out how to run Qedit on your system. Your system manager may have set up an easy way to access Qedit (try typing `qedit`). Look for a slash prompt (/ on MPE or qux/ on LINUX), which tells you Qedit is ready to go.

This introduction will make the following activities familiar to you: adding lines to a file, looking at the contents of files, searching files for specific characters, changing one line or many lines, deleting, moving, and copying lines, and saving files. In the examples to follow, watch for comments on the right-hand side, enclosed in curly braces. Whatever you see in { } is an explanation, not part of the command, although Qedit will accept it. Press Return after each command line. When you finish your session, getting back out of Qedit is easy. Type Exit, and press the Return key:

```
/exit
```

Adding Lines to a File

You add text with the Add command. Qedit numbers each line you add. Pressing Return at any spot in the line moves you to a new line. This means that you can put a blank line into your text if you press Return twice in a row. Qedit continues to add your lines of text until you type // (two slashes) at the beginning of a new line and press Return. Try typing Add right now, and Qedit moves the cursor and prints some identifying information:

```
/add                          {remember to press Return}
 QEDITSCR                     {Qedit displays this line}
 Temporary File List * = 1    {and this line too}
  1  _                        {go on, Qedit is waiting for you}
```

Continue to "add" by typing in this example:

```
  1    MEMO TO: Drama Staff, News Simulation Dept.
  2
  3    FROM:    Marie Reimer, Publicity Dept.
  4
  5    Please check your in-baskets daily and
  6    respond to your fan mail within a week.
  7    //                       {stop adding for now}
/                              {Qedit is waiting again}
```

You can add lines anywhere in the file by typing Add followed by the line number where you want to start your insertion. For example, if you decide to date this memo, type at the slash prompt:

```
/add 2
  2.1  DATE:  November 18, 2000
  2.2
  2.3  //
/
```

You have added line 2.1 for the date, and line 2.2, which is blank. Line 2.3 is not put into your file, since typing the double slash stopped the adding. Notice that Qedit used line numbers that would fit between line 2 and line 3. Now, if you want to see what the whole thing looks like, type List ALL at the slash prompt.

```
/list all
  1    MEMO TO: Drama Staff, News Simulation Dept.
  2
  2.1  DATE:  November 18, 2000
  2.2
  3    FROM:    Marie Reimer, Publicity Dept.
  4
  5    Please check your in-baskets daily and
  6    respond to your fan mail within a week.
/
```

Looking at the File

The command for looking at the file is List. But you can do much more than List ALL. For example, you can list a file you're not even working on. Our sample memo is a temporary file, in your group, named Qeditscr, but you could look at a file in another group now without harming the memo by typing, for example:

```
/list /etc/profile
```

The file */etc/profile* may be scrolling by on your screen, but don't panic.

Browsing the File

If you want to browse through the file, the command you need is **LJ**. LJ stands for List-Jump. Qedit shows you a screen of text, prints

```
More?[yes]
```

at the bottom of the screen, and waits for you. If you press Return, Qedit displays the next screen. You can stop browsing by pressing Control-Y, typing NO or just N, or by typing //. Also, you can type any command, and Qedit stops browsing to execute it. To request a List-Jump:

```
/lj 6                       {begin browsing at line 6}
/lj /etc/profile            {browse configuration file}
```

Searching the File

So far, you typed line numbers to specify which lines you wanted to see. There is another way to list lines, and that is to specify an identifying *string*. Put anything in quotes and it's a string. Qedit lists all the lines that contain that exact same "anything".

```
/list "your"
  5    Please check your in-baskets daily and
  6    respond to your fan mail within a week.
2 lines found
```

There are two occurrences of "your" in the file, one on line 5 and one on line 6.

Strings can help you find a particular place in the file quickly.

With the commands Find and Findup, you can go to the next consecutive location of a string. Find searches the file from your current location to the end. Findup searches backwards from where you are to the beginning. So in order to search a file for a date scattered throughout it, type:

```
/find "January 18"       {search forward from current line}
```

Or, search back through the file with

```
/findup "January 18"
```

Qedit displays the next line containing "January 18". To search again for the same string, just type Find (or Findup). You can abbreviate "Find" to "F" and "Findup" to "^".

```
/f
```

To search for a different string, just type F "*new string*".

Editing Lines

Suppose you want to change the date of your memo. You could do it the slow way, first deleting the line, then adding a replacement line with the new date. But instead of all that retyping, try the Modify command. Modify has a lot of power. Here's how to use it:

1. Type *M* and the line number.
2. Qedit displays the line, and you move along on the line below it by pressing the space bar.
3. Stop at the point where you want to make your correction.
4. Type in the change to be inserted and press Return.
5. Qedit displays the entire corrected line for your approval. Make another correction if you want, and when satisfied, press Return again to accept the corrected line and get back to the slash prompt.

An example:

```
/m2.1
  2.1  DATE:  November 18, 2000
                        9        {move with the space bar}
                                 {press Return}
  2.1  DATE:  November 19, 2000  {press Return again}
```

Here is a partial list of special things you can do with Modify:

^B	insert text Before this column
^D	DELETE text from this column onward
^L	add text after the LAST column in the line
^O	OVERWRITE (or replace) columns
^T	TRAVEL over the line without changing it
^G	GOOFED. Put the line back the way it was, please

Note: The little symbol ^ is a shorthand way of saying that you hold down the Control key (on some keyboards abbreviated Ctrl) while at the same time pressing the letter. For example, ^B (or Control-B): keep the Control key down with one finger while with another, type a B. These symbols won't show up on your screen.

LINUX reacts to certain control characters which might conflict with the Qzmodify codes. For example, control-D sends an end-of-file signal to LINUX but is also the delete character in Qzmodify. You should use the LINUX `stty` program to change the default end-of-file signal. Please see the section "**Error! Reference source not found.**" for more details.

This command is easy to use but awkward to describe; you'll understand how to use it much faster if you give it a try. Let's take a typical example, and modify line 5 of our memo. Begin by typing "m5" and, of course, pressing Return. Then, to replace "daily" with "every day", our first step is to delete the word. Use the space bar to move to the column under the "d" in "daily". Press ^D (you won't see anything, remember), then space across all the columns you want to delete. **Don't press Return yet**.

The second step is to insert the two new words. Press ^B and type "every day". Now press Return to see the line with the revisions.

Qedit lets you see your revisions and continue modifying with as many different changes as you can fit into one pass, before you press Return. In order to make changes at different locations in a line, press ^T to space over the intervening characters without disturbing them. If you goofed, press ^G instead: you'll get your original line back.

The final step is to accept the revisions by pressing Return one last time.

If your fingers are so trained to MPE's style of Modify (e.g., D for delete) that you cannot remember to use the Control key, do not despair. As with most things in Qedit, there is a configuration option to solve this problem. The command Set Mod HP instructs Qedit to accept HP-style modifies (i.e., MPE modifies such as D and I), instead of Qedit-style. See the *Modify* section of the Set command.

Global Changes

There is another way to modify lines in your workfile. The Change command allows you to make changes throughout the entire file, without the bother of working on each line one by one. For example, with one Change command to your memo, you can replace all the colons with dashes.

```
/change ":"-" all
  1    MEMO TO- Drama Staff, News Simulation Dept.
  2.1  DATE-  November 19, 2000
  3    FROM-    Marie Reimer, Publicity Dept.
3 lines changed
```

Using the Change All command is a one-way street. If we now decide we don't like the dashes and want to get the colons back, observe what happens to Line 5.

```
/change"-":" all
  1    MEMO TO: Drama Staff, News Simulation Dept.
  2.1  DATE:  November 19, 2000
  3    FROM:    Marie Reimer, Publicity Dept.
  5    Please check your in:baskets daily and
4 lines changed
```

This second Change command has gotten us into hot water. Luckily, Qedit has an Undo command that takes your file step-by-step backwards to put it back to the way it was. See the Undo command in the "Qedit Commands" chapter.

CJ Command

If you're not sure what the consequences of a global change will be, use the CJ command. CJ stands for Change-Jump. Qedit shows you each line it means to change, and waits for you to approve, to change your mind, or to modify that line. Then Qedit jumps to the next occurrence of your string, and repeats its question until you have dealt with all occurrences of the string in the file. To accept the default answer of NO (i.e., *don't* replace the string), shown in square brackets, just press Return.

```
/cj":"-" all
  1    MEMO TO: Drama Staff, News Simulation Dept.
Change okay (Y,N or Modify) [No]:  {press Return}
  2.1  DATE:  November 19, 2000
Change okay (Y,N or Modify) [No]:  {press Return}
  3    FROM:    Marie Reimer, Publicity Dept.
Change okay (Y,N or Modify) [No]:  {press Return}
  5    Please check your in:baskets daily and
Change okay (Y,N or Modify) [No]:Yes
1 line changed
```

You can use the handy ^Y to stop in the midst of change-jumping just as you used it to stop listing.

Rangelist

You can also specify individual lines or a rangelist to Change. For example,

```
/change "Dept."Department" 1/3
  1    MEMO TO: Drama Staff, News Simulation Department
  3    FROM:    Marie Reimer, Publicity Department
2 lines changed

/change "Drama Staff, "" 1  {changes string to nothing}
                            {i.e., deletes it}
  1    MEMO TO: News Simulation Department
1 line changed
```

Copying Lines

Copying lines is a variation of the Add command. One reason we might want to copy lines is to make a general-purpose form out of our memo. We can keep a sample memo form at the beginning of the file, then copy it to the end of the file and fill it in whenever we need to communicate. This is how to do it:

```
/add last = first/4
  7    MEMO TO: News Simulation Department
  8
  9    DATE:  November 18, 2000
 10
 11    FROM:    Marie Reimer, Publicity Department
 12
6 lines COPIED
```

Qedit copies the *rangelist* (*first/4* = first line to line 4) *after* the indicated line (here, *last* line in file). To accomplish our goal of placing the sample memo template at the *beginning* of the file, we'll have to move the first six lines so they follow our new sample. Before we try *moving* lines, a last tip on copying: you can copy lines from an external file by including the file name in the command, placed after the equals sign and right before the rangelist.

Moving Lines

Moving is very similar to copying; it's another form of the Add command. But, instead of using the *equals* sign, use the *less-than* sign. You can specify:

```
/add 12 < 1/6
 13    MEMO TO: News Simulation Department
 14
 15    DATE:  November 18, 2000
 16
 17    FROM:    Marie Reimer, Publicity Department
 18
 19    Please check your in-baskets daily and
 20    respond to your fan mail within a week.
8 lines MOVED
```

Qedit moves the *rangelist* (in this case, lines 1 to 6) *after* the indicated line (in this case, 12). In case you were wondering, we could have used "last" instead of the number "12". You can add, move, or copy lines to any spot. In fact, we could have copied the first six lines to the beginning of the file in the first place, but then we wouldn't have had this fascinating "move" example. The result of this particular move is

```
/list all
  7    MEMO TO: News Simulation Department
  8
  9    DATE:  November 18, 2000
 10
 11    FROM:    Marie Reimer, Publicity Department
 12
 13    MEMO TO: News Simulation Department
 14
 15    DATE:  November 18, 2000
 16
 17    FROM:    Marie Reimer, Publicity Department
 18
 19    Please check your in-baskets daily and
 20    respond to your fan mail within a week.
```

Deleting Lines

To demonstrate the Delete command, we'll get rid of our memo template. On some systems, Qedit asks for confirmation before deleting a large number of lines. If so, you can cancel the deletion just by pressing Return; to confirm the deletion, type "yes" and press Return. The abbreviation for Delete is simply D :

```
/d first/12
  7   _MEMO TO: News Simulation Department
  8   _
  9   _DATE:  November 18, 2000
 10   _
 11   _FROM:    Marie Reimer, Publicity Department
 12   _
DELETE 6 lines [no]? yes
```

If you typed "yes" without due consideration, you now have a chance to take it back. Press Control-Y, and Qedit saves your bacon with the message "Undeleted!" But you must press Control-Y immediately: if you do anything else between the deletion and the rescue, Qedit will commit to the deletion. However, in this situation the Undo command can bring your lines back, even if you have made more changes. You must undo each change to the file in reverse order. See the "Qedit Commands" chapter of the manual for details.

Saving the File

There are two commands that preserve your work: Keep and Shut. First, invent a name for your file. Naturally, two files cannot have the same name. The name must be a valid LINUX file name. We've been working on a temporary file. To save it, name it:

```
/keep myfile1
```

When you want to work on Myfile1 again, type:

```
/text myfile1
```

and Qedit will copy Myfile1 for you to use. If you make changes to the file, remember to Keep it again before you leave Qedit to make the changes a permanent part of the file.

Open and Shut for Instant Access

Only Qedit files can be opened and shut. It is much faster to use the Open command than it is to use the Text command, because you make changes directly to the Open file. With a Text file, you must wait for Qedit to make a copy to which you make your changes.

Using the Shut command saves the current scratchfile as a permanent Qedit workfile. In the case of a scratchfile, the name of the new workfile must not exist. You can Shut a new file, or a file that you made a copy of (with the Text command). Name the file as described above.

If you are working on a Qedit workfile, Qedit renames it before closing.

```
qux/t myfile1
'Language' is now DATA                    {copy of myfile1 in scratchfile}
20 lines in file
qux/sh myfile1
Retained existing file for you.           {myfile1 already exists. No change.}
qux/sh myfile1.work                       {renamed to myfile1.work}
qux/open *
Open /home/user1/myfile1.work Current = 1 Margins = 1/80
qux/sh myfile1.newwork
File renamed.
```

A workfile looks like any other file from the outside. For example,

```
ll myfile1*
-rw-rw-rw-   1 francois   users          533 Aug 17 18:33 myfile1
-rw-rw-rw-   1 francois   users        16384 Dec  8 07:15 myfile1.work
```

However, you can use the LINUX `file` command to determine the file type. In order for `file` to recognize Qedit files, you need to edit `/usr/share/file`

```
login as root
$ cd /usr/share/file
$ qedit
qux/Text magic
qux/Add last
0\tstring\tQEDIT\tQedit                   {\t indicates tab characters}
//
qux/Set Decimal On
qux/Change "\t" '9 *                      {change \t to actual tab characters}
qux/Keep
```

You can now use the `file` command on these files.

```
$ file myfile1*
myfile1:       ascii text
myfile1.work:  Qedit
```

Running Qedit under LINUX

Running Qedit

To run Qedit for LINUX, type this command:

```
/opt/robelle/bin/qedit
Qedit. Copyright Robelle Solutions Technology Inc. 1977-2001.
(Version cd ) Type ? for help.
qux/
```

Qedit prints its version number and prompts with "qux/". You type commands, ending each with Return. For example, to edit a file enter a Text command:

```
qux/text filename
```

To save your edits, use the Keep command.

Edit Several Files at Once

Qedit's primary scratch file is called "Qeditscr." By default, this file is created in `/var/tmp` (`/usr/tmp` is the default on older versions of LINUX) or the path name specified in the `TMPDIR` environment variable. The scratchfile name is `qscr.`*`xxxxxxxxx`* where "xxxxxxxxx" is a random string generated by the LINUX `tempnam` routine.

If you want to move scratch files to a different directory, you can set the TMPDIR environment variable.

```
TMPDIR=/home/user1/tmp
export TMPDIR
```

Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters. Whenever you use the default options for Opening or Texting a file, your work will be in the Qeditscr scratch file.

How to Edit Several Files?

What if you want to edit two or more files and copy lines between them? You could Text the first file, Hold the selected lines, Keep your changes, then Text the second file and insert the lines. However, if you are doing numerous edits, the constant Text and Keep operations are inconvenient.

It is faster to Text each file into an *extra scratch file* of its own. Then use the "Open ?" or the "Open *-*n*" command to switch quickly between them. By default, Text always copies the file into the Qeditscr scratch file. However, Qedit can supply up to eight extra scratch files. To Text a file called abcd into an extra scratch file, type:

```
qux/text abcd,new
```

When you Exit, Qedit checks whether you have any unsaved edits in any of your scratch files. If there are some unsaved edits, Qedit prompts you to "Discard?" them or to stay in Qedit to save them with the Keep command.

Starting a New Scratch File

Sometimes you start editing a new document and have nothing to Text to create the extra scratch file. In this case, use the New command *without parameters*.

```
/new
```

Qedit creates a new extra scratch file and assigns it a sequential number (1,2,3...). If you use an Open ? command, you would see "Extra Scratch file #2" in the list of files. If you do a Keep or Set Keep Name command, you would see the Keep file as the Text name in Open ?.

Configuring Different Shells

When you log on to LINUX, a program is run called the shell. The shell program interprets commands, executes them, and controls command execution. Making configuration changes requires that you know which shell you are using and what files are automatically executed.

Bash Shell

The BASH shell on Linux is the default shell on most versions of Linux. The Bourne Again Shell, is named as such in tribute to Steve Bourne’s shell.

The BASH shell executes the file /etc/profile and your local cd / .bash_profile when you log on to Linux.

Setting Up a PATH for Qedit

You can invoke Qedit with the command:

```
/opt/robelle/bin/qedit
```

If you want to be able to just type

```
qedit
```

to invoke Qedit/Open, you must either add /opt/robelle/bin to your PATH or copy /opt/robelle/bin/qedit to a directory that is currently on your PATH. Similarly, the man pages for Qedit are found in /opt/robelle/man/man1/qedit.1. To make the man pages available to everyone, you can either add /opt/robelle/man to your MANPATH or you can copy the man pages to a directory that is currently on your MANPATH.

Bash Shell

The easiest way to change the two PATHs for all users on your LINUX machine is to log on as root and add these two lines to the file /etc/profile after any existing PATH or MANPATH statements:

```
PATH=$PATH:/opt/robelle/bin
MANPATH=$MANPATH:/opt/robelle/man
```

Remember to delete any PATH or MANPATH settings in /etc/d.profile, so that new users do not override your changes. You also have to warn existing BASH shell users to change the .bash_profile file in their home directories.

Qeditmgr Configuration Files

When you run Qedit, it automatically "uses" two configuration files if they exist: `/opt/robelle/qeditmgr` and `.qeditmgr` in your home directory. The system manager usually creates `/opt/robelle/qeditmgr` and puts Qedit commands in it to set Qedit options. To check the options for your site, List this file.

If you want a personal Qeditmgr file, create the file `.qeditmgr` in your home directory. This file is in addition to the global Qeditmgr file which is always executed first.

Default Set Commands

Qedit treats the Qeditmgr file exactly like a usefile, so Qeditmgr can include *any* Qedit commands. The Set commands let you configure Qedit so it has the ideal defaults for your shop (e.g., Set Lang Cobol ...). Here is a typical Qeditmgr file:

```
{These are default qedit values for all users:}
set lang cobolx all on
set x date list off                    {mark changed lines with date}
set check on                           {verify delete/format of >5 lines}
set list page on                       {lp listings interpret $page}
z=list */last                          {define z command}
```

For details on Set commands, refer to the "Qedit Commands" chapter.

If one set of defaults is not appropriate for everyone on your system, it is possible to set up personal Qeditmgr files in each user's home directory. See the chapter "Running Qedit on LINUX" for details.

On-Line vs. Batch Access

You normally run Qedit as an on-line session. You type Qedit commands on your terminal and Qedit prints responses on your terminal. If you redirect stdin or stdlist, Qedit assumes that it is in batch.

Qedit in batch is almost identical to Qedit on-line, except for answering questions. When Qedit asks a question in batch, no one is there to answer it. Therefore, Qedit *does not* expect an answer from stdin. Qedit assumes that you want your batch task to complete, so it always selects the option that will complete the command successfully. This is normally a "YES" answer, as in "yes, clear the file" or "yes, upshift the line". Qedit prints the question on stdlist, as well as the answer that it has selected for you.

When Qedit encounters an error in batch, no one is there to correct it. Therefore, Qedit normally aborts. However, you can use Set Autocont On to override this abort, instructing Qedit to keep processing after errors in batch.

Command Line Options

You can invoke Qedit/Open with options, or an initial file name to edit, or both (or neither). The syntax for invoking Qedit/Open is:

```
qedit [-csv] [filename]
```

See below for suggestions on setting the EDITOR environment variable so that Qedit is automatically invoked as your editor from other tools like elm.

Initial Command Line: -ccmdstring

You can specify commands to be executed using the -c option before the file name. The -c is followed by commands to be executed. There must be no space between the -c and the command list.

If those commands contain a space, they must be enclosed in single or double quotes; otherwise, the quotes are optional. When both -c and a file name occur, the –c commands are executed after the file is accessed for editing. Here are some examples:

```
qedit -cvisual myfile
qedit -c"visual" myfile
qedit -c'set vis ab 3 bel 12;visual' myfile
qedit -c"text abc;use fixit;k,y;e"
```

Editing a Single File: -s

Sometimes you want to invoke Qedit for a specific purpose, such as writing a message in elm. You are using Qedit as a dedicated tool for a specific purpose. In these cases, specify -s and a file name. You can only edit that file and it will be saved on exit. You will not be allowed to edit any other files.

```
qedit -cvisual -s myfile
/exit
Save your changes (yes/no)?
```

Exit with Verify: -v

Some users find that they Exit from Qedit inadvertently by pressing F8 too many times. To require user approval on Exit, use the -v option.

```
qedit -v
/e
Okay to exit [no]:
/
```

"Discard Changes?" on Exit

Qedit needs to purge your random-named scratch files when it terminates. But you may not have saved your editing work yet. In that case, Qedit asks you "Discard changes?" and will not Exit/Purge unless you answer Yes:

```
qedit myfile
/visual
/exit
Discard your changes [no]:
/
```

LINUX Notes

This section describes features of Qedit/Open that interact with the LINUX environment.

EDITOR Variable

LINUX utilities that invoke an external editor use the variable EDITOR to determine which editor and run-time options are invoked.

The electronic mail tool elm is an example of a utility that uses an external editor to write all messages.

If you want to use Qedit as your standard editor, you need to set the EDITOR variable. We recommend using the -s option for application use.

BASH Shell:

```
$EDITOR="qedit -s";export EDITOR
```

Scratch File

When Qedit needs a disposable scratch file (e.g., for Text or Add), it creates a Qedit format file in `/var/tmp` by default (/usr/tmp is the default on older versions of LINUX) or the path name specified in the `TMPDIR` environment variable. The scratchfile name is `qscr.`*`xxxxxxxxx`* where "xxxxxxxxx" is a random string generated by the LINUX `tempnam` routine.

Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters.

Because all LINUX files are permanent, Qedit must purge this scratch file when you exit Qedit. If you have made any changes, Qedit asks whether you want to discard the changes that you have made.

Hold Files

Qedit has two Hold files: Hold and Hold0. The first one is created using the Hold command.

Lines are written to the Hold0 file every time you move or copy with the Add command.

By default, these Hold files are created in `/var/tmp` (/usr/tmp is the default on older versions of LINUX) or the path name specified in the `TMPDIR` environment variable. The Hold files are called `qhold`*`xxxxxxxxx`* (explicit Hold) and `qhold`*`xxxxxxxxx`*`.0` (implicit hold file) where "xxxxxxxxx" is a random string generated by the LINUX `tempnam` routine.

If you want to have these files in a different location, you can set the `TMPDIR` environment variable to the new path name.

```
TMPDIR=/home/user1/tmp
export TMPDIR
```

Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters. So that you don't have to remember these names, you can refer to these files as Hold or Hold0 in Qedit commands. For example,

```
/hold 50/60                    {save lines in the Hold file}
/open report.cob               {switch files}
/aq last=hold                  {lines copied from the Hold file}
```

The value of TMPDIR can be a relative or absolute path. Internally, Qedit always uses the absolute path. It converts the relative path if needed.

You cannot use Qedit to look at files in your current directory called hold or hold0, unless you qualify them with the directory or a relative path name, as in ./hold.

The Hold files are removed when you exit Qedit.

Shell Commands

You can execute shell commands by typing them at anywhere you can type a Qedit command. If Qedit determines that it is not one of its own commands, it assumes it's a shell command and tries to execute it as such. If the shell command matches an existing Qedit command, you must precede it by a colon (:) or an exclamation mark (!). Shell commands are executed by your default shell (the one configured in /etc/passwd for your user name).

If you want to enforce the use of the colon or exclamation mark prefix, you can enter Set Limits Colonreq ON.

Shell commands are executed by a child copy of your shell. Child shells cannot change environment variables in the parent's environment. To change the value of an environment variable, you must first exit Qedit.

Tab Stops

The default Qedit/Open tab stops are every 8 characters. You can override this using Set Tabs Stop *n* (every 2 to 15 characters). If you Exit from Qedit with the tabs set to anything other than Set Tabs Stop 8, Qedit resets your terminal to the default tab stops.

When you Text or List a file with tab characters in it, Qedit/Open does not expand them to spaces. If you want to expand tabs into spaces when Texting a file, use the Expandtabs option:

```
/text abcwork,expandtabs
```

Control Characters and stty

Most Linux environments have Control-D configured as the end-of-file character. If you use Robelle-style modify, you must reassign Control-D to a different control character.

```
stty eof "^E"
```

Another character you may want to have available in Set Mod Robelle is Control-V, which is split a line, in order to allow for that, you may need to use stty to change the lnext, so something other than Ctrl-V.

```
stty lnext "^K"
```

Hardcoded File Names

Some file names are hardcoded into Qedit. This section describes these file names for Qedit/Open.

/opt/robelle/qeditmgr

This is an optional file that is designed to contain configuration commands. You cannot change this file name. Even if you move Qedit/Open to a different directory, Qedit/Open still looks for /opt/robelle/qeditmgr as the default configuration file.

$HOME/.qeditmgr

In addition to the system wide /opt/robelle/qeditmgr, each user can have a personal (optional) configuration file. When you invoke Qedit/Open, it reads commands from the file .qeditmgr in your home directory.

Variables that Drive Qedit

ROBELLE Environment Variable

Qedit looks for the files it needs in the /robelle directory. Normally, Qedit is installed in /opt/robelle. For example, the Qedit server expects to find its log files in a subdirectory called log/qedit. It would expect to find the error log file in

```
/opt/robelle/log/qedit/error.log
```

which is the default full path name of the error log. If you install Qedit in a directory other than /opt/robelle, Qedit should be able to determine the new location and adjust the path for its support files

If Qedit is unable to correctly determine its current location, it is going to revert back to /opt/robelle.

If you wish to use a specific path explicitly, you need to set the ROBELLE environment variable to the new directory. For example,

```
ROBELLE=/usr/apps/robelle
export ROBELLE
```

There are two limitations to the path name: the full path name of the file must be no more than 240 characters, and the path name to the /robelle directory must be no more than 219 characters. A slash mark (/) is optional at the end of your ROBELLE environment variable. To set up the log files in the new directory, you have to manually create the "log" or "help" subdirectory in the alternate search path.

So, in order to determine the location of support files, Qedit goes through the following:

- Uses the ROBELLE variable, if it exists.
- If the ROBELLE variable does not exist, Qedit tries to identify the location it is running from and, if successful, determines the location based on that information.

If the information from the previous steps is not available, Qedit assumes the files are in the /opt/robelle directory.

QEDCURWFILE Variable

Qedit updates a variable, QEDCURWFILE, with the name of your current or last workfile. This gives you the ability to reference the current workfile easily from within a shell script without having to pass it in as a parameter.

Converting Qedit Files with qcat

Qcat is a filter program similar to cat and zcat. Qcat reads a set of Qedit files and prints the lines on standard output. Type `man qcat` for more information.

```
qcat QeditFile > TextFile
```

Differences Between MPE and LINUX

We have tried to make the MPE and LINUX versions of Qedit as compatible as possible. This section describes how Qedit/Open is different from Qedit/MPE.

Open/Shut

Qedit/Open uses three forms of workfiles: original, Jumbo, and Wide-Jumbo. The Wide-Jumbo format is new and is used for most files on which you use the Text command. On LINUX, the original format is unable to save some information about your file (due to technical

differences in how the Qedit workfiles are stored on MPE versus LINUX). Once you shut an original file, the following is lost:

- The name of the file from which you texted.
- The current line number.
- The ability to immediately reopen the file and "Undo" changes.
- The settings for Set Left and Set Right.

For these reasons, Wide-Jumbo workfiles will be the standard in Qedit/Open.

Current "*" File Name

Qedit/Open does not allow substitution of the current file name into shell scripts and commands, because the asterisk (*) is an important substitution character in LINUX. For example,

```
/cc *
```

cannot compile your current file. Instead, it compiles all files in your current directory.

Missing Features

The following features do not work in Qedit/Open:

- Beginfile/Endfile commands.
- Hints are not available.
- Verify to a line printer.
- Any MPE-style command such as :Pause, :Run, etc.
- Proc command, except for Up and Down.
- I/O redirection of Qedit commands.
- Spell and Words commands.
- Out= option of the Listredo command.
- User Defined Commands and command files.
- The QEDITCOUNT variable

Qedit Issues and Solutions

Files without NewLine Characters

On Linux, files can contain NewLine (nl) characters at the end of each line. However, the NewLine characters are optional. Some files have them. Others don't.

Qedit/Open requires that lines be separated by a NewLine (NL) character. If that's not the case, Qedit/Open assumes the file does not contain anything. Thus, the Text command might display:

```
/Text longfile
'Language' is now DATA
0 lines in file
```

If you run into this problem, you have to find a way to insert these NewLine characters in appropriate places and break the file into manageable pieces.

Starting with version 5.3.13 of Qedit/Open, you can use the **Length** option of the **Text** command. This option allows you to specify the maximum size in bytes of each line. The file will be split in a number of same-size lines except the last one if the total size of the file is not evenly divisable by the specified length.

If the file contains Newline characters, these characters are processed as data. You should be very careful when editing such files. If you inadvertently remove one or more of these characters, other programs might have problems using the file again. Since Newline characters causes terminals to move to the next line, we recommend that you use the $Char or the $Hex option on List commands.

For example, to break a file into 80-byte lines, you should use:

```
/Text longfile,length 80
```

Another way to accomplish this is by using the `fold` command.

```
fold -w 80 longfile > shortfile
```

In this example, the file `longfile` is broken down into fixed-length lines, each line containing a maximum of 80 bytes. The result is written

to a new file called `shortfile`. It is then possible to edit the new file using Qedit/Open.

Once you have made all the necessary changes, you can put the short lines back together by removing the NewLine characters. You can use the UNIX `awk` to perform this operation.

```
awk -v ORS="" '{ print $0 }' shortfile > longfile
```

The Output Record Separator (`ORS`) argument is used to specify the character to be inserted between lines. In this case, you don't specify any.

Because of a limitation in awk, you cannot assemble lines with more than 3,071 bytes. So, you have to remember not to exceed this maximum in the fold command.

Another option is to use the UNIX `tr` command and remove all Newline characters.

```
tr -d "/n" < shortfile > longfile
```

Lines, Strings and Ranges

Character strings can be used of line numbers to qualify lines on most commands. In its simplest form, a command can have a single string using all the search window defaults.

```
/List "enhancement"
```

The search string can be further qualified using temporary window settings as in:

```
/List "enhancement" (Upshift 20/50)
```

This example searches for the word `enhancement` regardless of the case used in columns 20 to 50.

Qedit allows up to 10 search strings on a single command. Individual strings are separated from each other with the **OR** keyword. Each string can have its own temporary window.

```
/List "enhancement" (U 20/50) or "bug" or "customer" (1/30)
```

The search range can be different depending on the command it is used on. For example, a **List** command searches all the lines in the file by default while a **Find** command starts from the current line. The search range can be specified on individual commands using a rangelist. A rangelist is often specified using line numbers (absolute or relative), special keywords (**First**, **Last**, **All**) or characters (**@**, *****, **[**, **]**). To define a block of lines, the user can enter 2 line numbers separated a slash "/" e.g. 1/6.

It is also possible to define a block of lines using a string range. This syntax allows the use of strings to define the start and end of the range. A string range can also be combined with a numeric line range to further define the block. Here are some examples:

```
/List "start-proc" / "end-proc"
/Change "a" "b" "start-proc" / "end-proc"
/Delete "start-proc" / "end-proc" 20/100
```

The **List** command above finds the first occurrence of `start-proc` in the file and uses it as the range start location. It then finds the first occurrence of `end-proc` starting from the start location. It uses that line as the range end location. Finally, it lists all the lines between the 2 locations. By default, **List** starts at the beginning of the file.

The **Change** command above replaces all occurrences of the letter `a` with a `b` in the lines between (and including) `start-proc` and `end-proc`. By default, **Change** starts at the current line.

The **Delete** command above removes all the lines between (and including) `start-proc` and `end-proc` found in lines 20 to 100. By default, **Delete** starts at the beginning of the file.

A string range does not behave like a rangelist e.g. 1/20 in all cases. For example, the first statement is not a valid construct with the second statement is.

```
/Delete "bug" "start-proc"/"end-proc"
Error: Linenum
/Delete "bug" 10/30
```

You can use the **Find** command and the **ZZ** marker to work around the problem. If you enter a simple strings on a **Find** command, Qedit stops at the first string occurrence and sets the current line. You can then perform any operation on that line or use it as a starting point. If you specify a line range, the **Find** command sets the **ZZ** marker to the block of lines. You then use the **ZZ** marker on subsequent commands.

```
/F "start-proc" first
   5     Start-Procedure.
      (1)^
/F "start-proc"/"end-proc" first
Lines 5/11 saved in ZZ
/Delete "bug" zz
    8    _bug-display-section.
1 line Deleted!
```

Qedit Commands

Introduction

Qedit/ Linux operates in Line mode on Linux. We are investigating Screen mode for the Linux version. We are interested in getting information about the environments you would be using Qedit in.

Here we describe the Qedit commands in alphabetic order. For each command, we show both the longest and the shortest name that Qedit can recognize, as in Add [A]. Highlighted terms (e.g., *linenum*) and jargon words (e.g., "workfile") are defined in the "Glossary".

General Notes

Here are general guidelines that apply to using the Qedit commands.

Abbreviations

Each Qedit command has a name such as List that you can abbreviate to any leading subset. Thus, L means List. Some commands require more than one letter: GARbage, DEStroy, RENumber, SHut. You may append option letters to the command: Q, T, or J. Q means "quiet", T means "template", and J means various things, depending on the command.

```
list all      {fully spelled out}
l @           {maximal abbreviation}
lq            {list quietly}
listqt        {list quietly, with template}
lqjt          {list quiet, jumping, with template}
list $        {most recent external file name}

s dec on      {Set Decimal command}
sh            {Shut command}
```

Uppercase or Lowercase

You can enter the commands in uppercase or lowercase. Shell commands such as ls and cd can only be in lowercase. These commands are identical:

```
LIST ALL    {uppercase}
list all    {lowercase}
```

Multiple Commands per Line

You can enter several commands on a single line, if you separate them with semicolons. The maximum command line is 256 characters, and \ is not supported for continuation. If you want to have an LINUX command or a calculator command in the stack, you should enclose it in parentheses. This prevents Qedit from passing the rest of the line as parameters. For example,

```
List 5;!find . -name testfile -exec cat {} ;      {fails}
List 5;(!find . -name testfile -exec cat {} ;)    {works}
```

If the syntax requires semicolons and parentheses, you have to put the problematic command in a shell script and use it in the command list instead.

Any error causes Qedit to flush the remaining commands in the line.

```
list 505;add *-1   {list line 505; add just before it}
shut;who
```

When combining Qedit commands, be certain to use the same quote character in all the commands.

Wrong:

```
/c7/7"DISPLAY";c\.\\
```

Right:

```
/c7/7"DISPLAY";c"."
```

Comments on Command Lines

You may annotate Qedit commands by putting comment text in curly braces at the end of the line:

```
keep sample,yes    {update disc file}
```

Such comments are recognized at the "/" prompt, in usefiles, Next? prompt and List's More? prompt.

Stopping Commands with Control-Y

You can stop most Line mode functions by pressing the Control-Y key. For example, to stop an inadvertent List ALL, use Control-Y. To stop the Add, Modify, or Replace commands, use either Control-Y or two slashes (//).

Implicit Commands

Some commands have no alphabetic name. In Line mode, pressing only Return means display the next line and a backslash (\) means display the previous line, $ means enable Memory Lock and $- means disable Memory Lock. In either mode, ? means Help, any line number means go to that line, a string means display the next line with that string, and "^" means search backwards for a string:

55	find and display line 55 or higher
FIRST	find and display first line
;;;;	display the next 5 lines
\	display the previous line
-5	move current line back 5 lines
"string"	display next line with *string*
^"string"	display previous line with *string*
$	turn on memory lock at this line
$-	turn off memory lock

Shell Commands

Qedit accepts most LINUX commands and scripts. If the shell command matches an existing Qedit command, you must precede it with a colon (:) or an exclamation (!). See *Running Qedit on LINUX* for more details.

Calculator Commands

Any command that begins with an equal sign (=) is treated as a calculator expression. This feature can be used to compute temporary values and do conversions from one number base to another.

```
=64,O
Result= %000100
```

Add Command [A]

Adds lines into the workfile. There are five varieties of Add that cover all the ways you can add lines into a Qedit workfile:

NEW	Add new lines to your workfile from Stdin.
STRING	Add a new line from the command prompt.
COPY	Copy lines from one place to another.
MOVE	Move lines from one place to another.
FILE	Bring lines in from an external file.

Add (Adding New Lines)

Add some new lines from the terminal keyboard. Insert them at a given line number or after it.

ADD [*linenum*]

(Q=no linenums, J=justified, T=template)

(Default: *linenum* = *)

The *linenum* parameter specifies where to add new lines and also determines the increment between new lines. If *linenum* is 9.1, lines will be incremented by 0.1; if 9.01, then 0.01. If *linenum* already exists, Qedit increments it and begins adding after the existing line. If *linenum* is 0, Qedit adds new lines before the first existing line in the file. If you don't say which *linenum*, Add inserts the lines after the current position (*). (See Miscellaneous Points below.)

Examples

```
/add 5              {add new lines after line 5}
    5.1   line a    {Qedit prompts with line number}
    5.2   line b    {you enter line of text and Return}
    5.3   //       {you enter // or Control-Y to stop}

/aq                 {add after * line; no prompt}
This is new text
//                  {end the Add command}
```

Temporary Workfile

If you do not have a named workfile Open when you Add, Qedit automatically builds a temporary workfile for you. This file has a random file name and is created in `/var/tmp` by default. If you want to have temporary files in a different directory, enter the new path name in the TMPDIR environment variable.

```
TMPDIR=/home/user1/tmp
export TMPDIR
```

Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters.

If you make any changes to the file (e.g., by adding lines), Qedit will ask if you want to save your changes when you exit.

Using the Tab Key

By default, Qedit defines tabs every 8 columns across the line (every 10 for Qedit/MPE). You can override these default tab stops using Set Tabs Stop **n** (every 2 to 15 characters) or Set Tabs 5 10 22 28 ... for completely custom tab stops. When you press the tab key as you Add lines, Qedit correctly inserts spaces in your lines and skip to the correct column on your screen (assuming you are using an HP terminal).

Overflowing Lines or Line Numbers

The Add command continues prompting until you press Control-Y, or you type "//" at the end of a line, or you run out of line numbers. When you exhaust the line numbers possible between two lines, Qedit prints "Error: Already". You can continue by doing a range Renumber on the area where you wish to add more lines. Thus, if your last line added was 4.999, use Renum 4/5 to spread out the lines between 4 and 5.

You can configure Qedit to automatically renumber part of the file so that you do not have to renumber it manually. See the Set Visual Renum option.

Line Wraparound

If you enter a line that is too long, Qedit divides it into several lines. Set Wraparound ON divides lines on "word" boundaries only. Any words that will not fit on the current line are moved to the next line. If only a small number of words are moved to the next line, Qedit prompts you to complete the line. To end the Add when this happens, press Return before typing "//". If you are editing FORTRAN source code, Qedit generates a valid continuation line for you.

Automatically Indenting Lines

AJ for justified is a special option to indent new lines. The *linenum* you specify must be an existing line. You enter new lines beneath it. Qedit will then indent the new lines by exactly the same number of spaces as the existing line. You can shift the indentation left by typing {'s at the start of a line, or shift it right with }'s. To redefine the { and } characters, use Set Zip.

Modifying a Line During Add

When you know you made a typo, and prefer to fix it now instead of going on, the auto-modify character will help you. Enter the command

Set Zip []@{}#, or better yet, put it in your Qeditmgr configuration file. The # character (or other special character of your choice) is called the auto-modify character. It allows you to modify the line you are currently entering. Type "#" at the end of the line, and Qedit redisplays the line for you to modify. When you are done with the Modify, you press Return to continue adding new lines.

Miscellaneous Points to Note

If you have Set Left/Right margins, the new lines added will have spaces to the left and right of the margins. That is, the line you enter will be left-justified within the current margins of the workfile.

The maximum default increment between new lines is 1.0 (or 0.1 for standard COBOL files). You can change this default with Set Increment.

You can ask Qedit to remove nonprinting characters from your input lines using Set Editinput Data ON. If you do not wish to allow the extended Roman-8 characters, use Set Editinput Data ON Extend OFF.

Add (Adding a String as a Line)

Add one new line, with the text coming from a string in the command itself. This is handy when you need some literal text within a User Command or Use file, but don't want to create a temporary file to hold it.

ADD linenum string

(Q=no linenums, J=justified, T=template)

(Default: *linenum* = *)

The *linenum* parameter specifies where to insert the new line containing the string.

Examples

```
/add 5 "new line"
   5.1    new line
/add 10.01 "change datasetdata setall"
  10.01   change datasetdata setall
```

Add (Copying Lines within a File)

Add lines by copying duplicates of existing lines.

ADD linenum = rangelist

(Q=no display)

(Defaults: none)

The *linenum* parameter tells Qedit where to insert the copied lines. The number of decimal places in *linenum* tells Qedit how finely to number the new lines:

```
/add 50 = 1/9           {new lines will be 50.1, 50.2, 50.3...}
/add 50.10=1/9          {new lines will be 50.10, 50.11, 50.12...}
```

The *rangelist* parameter tells Qedit which lines to copy:

```
/add 50.1 = 1/9 10/15 {'1/9 10/15' is the rangelist}
```

Examples

```
/list 4/8               {how lines look before the copy command}
    4     aaaaaaaa
    5     bbbbbbbb
    6     cccccccc
    7     dddddddd
    8     eeeeeeee
/add 5 = 7/8            {copy lines 7 and 8 after line 5}
    5.1   dddddddd
    5.2   eeeeeeee
2 lines COPIED
/list 4/8               {how lines look after the copy command}
    4     aaaaaaaa
    5     bbbbbbbb
    5.1   dddddddd
    5.2   eeeeeeee
    6     cccccccc
    7     dddddddd
    8     eeeeeeee

/aq 5 = 5               {duplicate line 5 after itself}
```

Notes

Add prints each new line, unless you use AQ. When you copy lines, the *rangelist* must not include the *linenum* (e.g., /Add 5 = 4/6 is rejected because it would be an infinite loop). Qedit prints "Error: Already". The lines copied are not deleted from the original location. You now have two copies of the lines (and a copy in the Hold0 file, see Add-Move).

If you have Set Left/Right margins, Qedit prints only the portion of each line within the margins. However, it will actually copy the entire line, including the portion outside of the current margins.

Add (Moving Lines within a File)

Move some lines from one place in the file to another, deleting them from the original position.

ADD linenum < rangelist

(Q=no display)

(Defaults: none)

The *linenum* tells Qedit where to move the lines. The number of decimal places in *linenum* determines the line number increment. For example, "/add 5.10<100/200" creates lines 5.10, 5.11, 5.12, etc.

The *rangelist* tells Qedit which lines to move. Add deletes the original lines after moving them. You still only have one copy of each line.

Examples

```
/list 4/7         {how lines look before the move}
    4     aaaaaaaa
    5     bbbbbbbb
    6     dddddddd
    7     cccccccc

/add 5 < 7        {move line 7 after line 5}
    5.1   cccccccc
1 line MOVED

/list 4/7         {how lines look after the move}
    4     aaaaaaaa
    5     bbbbbbbb
    5.1   cccccccc
    6     dddddddd
```

Notes

Control-Y during a move stops the move, but it also changes the move into a copy. The lines being moved in the current range are not deleted.

Add-Move ignores Set LEFT/RIGHT margins; it moves entire lines. However, it only prints the portion of the line within the current margins.

When you copy or move lines using Add= or Add<, Qedit first puts the lines into a "Hold" file called Hold0. It then counts the lines. If you do not have sufficient line numbers to insert the new lines, Qedit stops and prints "Error: Already". Use Renum to renumber the range of line numbers and then copy the lines from the Hold0 file. See also the Hold command.

```
/list hold0
/add 55=hold0     {add from Hold file}
```

Add (Copying Lines Between Files)

Add lines to the workfile from an external file.

ADD linenum = filename [,UNN] [rangelist]

(Q=no display)

(Default: entire file)

The *linenum* tells Qedit where to begin adding the lines from the external file.

The *filename* tells Qedit which file to copy from. It can be any type of disc file. If any of the lines are too long, they will be truncated with a warning. Use *filename*,UNN when you are adding from a data file with numeric characters in the last eight columns which are not really sequence numbers.

The *rangelist* tells Qedit how much of the file to copy. The default is to copy the entire file. If the external file does not have sequence numbers, Qedit assumes that the file is numbered from 1 by the current Set Increment. When you specify a rangelist, Add leaves a copy of the lines from the external file in the Hold0 file, as well as in your workfile.

Examples

```
/add 500.01 = abc       {copy in the file ABC after 500.01}
  500.001 abc line-1    {prints each line copied from file}
  500.002 abc line-2    {prints new line numbers too}

/aq 5 = xyz 5/10        {copy in lines 5/10 of the file XYZ}

/l template "$page"(up) {list page breaks in a file}
    1    $PAGE "xx"     {select the template you want}
   24    $PAGE "yy"
   37    $PAGE "zz"
/add 5=template 24/36   {copy the lines between $pages}

/shut /dev/src/test.c   {establishing "previous" file}
/new cust               {open another file}
/a 1 = $ 50/60          {$ stands for /dev/src/test.c}
```

Notes

Add prints each line as it copies it, unless you use AQ. If Qedit finds invalid sequence numbers in a file, it begins assigning "logical" sequence numbers using the last valid sequence number and the current Set Increment.

If you have Set Left/Right margins, Qedit inserts blanks before the left margin in each line. That is, the lines from the external file are left-justified within the current margins of the workfile.

Append Command [AP]

Appends a string to the end of each line in the rangelist.

APPEND "string" [rangelist]

(Q=no display)

(Default: *rangelist* = *)

Append allows you to add a semi-colon (or any other string of characters) to the end of a line (/AP ";" 5/10). Append prints each line that it changes. If the resulting line would be too long, Append goes into Modify on that line.

Examples

```
/list 25
   25    to the end of the line
/append "!"
   25    to the end of the line!
/ap ")" 1/4
    1       (redo function)
    2       (modify function)
    3       (append function)
    4       (list function)
```

Backward Command [BA/F5]

Starts "browsing" the current file by displaying one page "backward". You stay in "browse" mode until you enter any command (see List, jumping option).

BACKWARD

(F5 key does the same)

In Line mode, Backward and Forward (or F5/F6) throw you into List-Jumping's browse-mode. Qedit displays a screen of text, where the screen size is either 23 lines or what you specify with Set List LJ, then waits for you by asking "More?". Press Return to see the next screen. Typing a line number moves you to the screen starting at that line, pressing F2-F6 does the appropriate action, and F8 or "//" or Control-Y or typing any command gets you out of browse-mode. At the "More" prompt, the * "current" line is the last line displayed.

Before Command [B]

Repeat any combination of the previous 1,000 command lines, with or without editing.

BEFORE

[*start* [/ *stop*]]

[string]

[ALL | @]

(Default: redo previous line)

(BQ=redo without change)

(BJ=listredo)

The Before command allows you to modify the commands before it executes them. If you don't need to change them, use BQ or :Do. Commands are numbered sequentially, starting with 1 for the first command entered and, by default, the last 1,000 commands are accessible. This numbering sequence applies only to the temporary redo stack, because this stack is discarded when you exit Qedit. The numbering sequence in a persistent redo stack, which is accessible across Qedit invocations, continues between invocations. Use the :Listredo or BJ command to display the previous commands. You can redo a single command, a range of commands, or the most recent command whose name matches a string.

The Before command uses Qedit-style Control characters for modifying the commands. The default mode is to replace characters. To delete use Control-D, and to insert use Control-B. If you prefer HP-style modify (D, R, I, and U), use the :Redo command instead of Before, or do Set Modify HP.

Examples

```
/ls /users/obb                {"bob" is not spelled right}
/users/obb not found
/Before                       {redo most recent command}
ls /users/obb                 {last command is printed}
          bob                 {you enter changes to it}
ls /users/bob                 {the edited command is shown}
                              {you press Return}

/listredo -10/                {show last 10 commands}
/before 5                     {redo 5th command in stack}
/bef 8/10                     {redo 8th through 10th}
/b ls                         {redo last ls command}
/b @temp                      {redo last containing "temp"}
/before -2                    {redo command before previous}
/before -5/-2                 {redo by relative lines}
```

Notes

LINUX reacts to certain control characters which might conflict with the Robelle codes. For example, control-D sends an end-of-file signal

to LINUX but is also the delete rest of line in Robelle Modify. You should use the LINUX `stty` program to change the default end-of-file signal. See Control Characters and stty for more details.

If you wish to change any characters within the line, the modify operators are the regular Control Codes used in Qedit:

Any printing characters replace the ones above.

Control-D plus spaces deletes columns above.

Control-B puts you into "insert before" mode.

Control-A starts appending characters at the end of line.

Control-A, Control-D, plus spaces, deletes from the end.

Control-T ends Insert Mode, allowing movement to a new column.

Control-G recovers the original line.

Control-O specifies "overwrite" mode (needed for spaces).

CD Command [CD]

Change current working directory.

CD [directory]

(Default: $home directory)

You can switch directories using the cd command. The cd command affects your Qedit processes and any processes that you create. When you exit Qedit, you will be in the same directory that you were in when you invoked Qedit.

Examples

```
cd /usr/local/bin
cd                          {return to home}
cd $HOME                    {return to home}
cd ~                        {return to home}
cd $SAVEDIR                 {Error!!!}
```

The last example shows a limitation of cd inside Qedit. You can't refer to a directory name that is saved in a variable, because Qedit simulates the cd command, instead of passing it to your shell program for execution. Qedit does not simulate the shell command processing such as variable substitution. (The three special cases for "home" are hardcoded into Qedit's cd.)

In addition, a few things still do not work well when doing shell commands in Qedit. If you launch a command in the background using "&", the jobs command will not show the status of it. If you set an environment variable, it will not be set for Qedit. Both of these problems are caused by the fact that shell commands are executed by a child process which is unable to change the status of Qedit.

Change Command [C]

Changes one string or column range to another string in some or all of your lines. There are two basic varieties of Change:

STRINGS	replace one string with another
COLUMNS	replace a column range with a string

Change (Changing Strings)

Replaces one string of characters by another string, the two strings being separated by a single quote character.

CHANGE "string1"string2" [rangelist]

(Q=no display, J=verify, T=CobX Tag)

(Default: *rangelist* = *)

The *string1* tells Change what string of characters to find. The default for *string1* is the last string used, and you specify this default via the null string (e.g., `change ""xxx"`). The null string recalls the last string and the window used with it. If the target *string1* occurs more than once in a line, Qedit changes every occurrence.

The *string2* tells Change what characters to substitute. In this format of the Change command, only three quote characters are used to define the two strings, not four as you would normally expect. Another oddity is that *string2* does not become the current string. This is so that you can do another Change or Find command using "" as the target (i.e., the last string), finding and fixing multiple occurrences of the same string (e.g., `find "nad"; CH ""and"; F; CH ""and"; ...`). The third difference of *string2* is that a null string for this parameter actually means "null". `change "very"" 100` means remove "very" from line 100.

The *rangelist* tells Change what lines to search for *string1*. The default *rangelist* is the current line only.

If *string2* is shorter than *string1* (e.g., `change "Robert"Bob"`), Qedit shortens the line by shifting the rest of the line left. If *string2* is longer (e.g., `change "Bob"Robert"`), Qedit lengthens the line by shifting characters right. If *string2* is so much longer that the line would be too long, Qedit sends you into the Modify command to fix the line by hand.

Change prints each line that it updates, unless you use CQ.

Examples

```
/list 55                {display line with mistake}
   55     select lines contaning both of two
/change "contan"contain" {change string in current line}
   55     select lines containing both of two

/change "sub"subindex" all    {make a global change}
   10     subindex = subindex + 1
   11     table(subindex) = 0
  213     if subindexway = 0  {oops-bad change!}

/cj "cust"Customer" 200/300   {change with user approval}
  225    Display Customer     {shown for approval}
Change okay (Y,N,or Modify) [No]: yes

/list 9           {display line to review}
    9     The test results were very exciting.
/c "very""        {remove word, change to null string}
    9     The test results were exciting.

/find "wiith"     {search forward for line with error}
   99    the string is combined wiith the second string
/c ""with"        {change "wiith" to "with"}
   99    the string is combined with the second string
```

Using Alternates to Quote

You may select your own quote character if you find " too much work because it is a shifted key. Among the alternatives are \ : and ' (apostrophe). See the "Glossary" for more on strings and other alternates to quotes.

```
/c :wiith:with:
/c \wiith\with\
```

Approving Each Changed Line

Use CJ to give yourself approval over each change before it is updated. With CJ, Qedit displays the line as it would be and asks you for a Yes, No, or Modify answer. Use CJ when you have trouble working out the precise strings to change.

Searching for Two Strings at Once

Because the *rangelist* can contain a search string, you can actually select lines containing both of two strings:

```
/c "xxx"filename" all          {"xxx" becomes "filename" in ALL}
/c "xxx"filename" "rename"     {line must contain "rename" too}
```

Including a Window

The form of Change command just described requires only three quotes per command, but does not allow all options. You cannot specify a special *window* - you will always use the default Set Window value. To do a Change with a special window, you must specify four quote characters, two for each string:

CHANGE "string1" (window) "string2" [rangelist]

Each string is delimited by two quote characters and the two strings must be separated by a space or a comma. Between the two strings you may insert a *window* such as (SMART) or (20/30) or (UPSHIFT).

Changing Within a Column Range

If you insert a column window, Qedit changes only the columns within the *window*. Columns outside the *window* are untouched:

```
/change "CUSTREC" (10/39) "CUSTOMER-RECORD"
```

In this example, "CUSTREC" is expanded to "CUSTOMER-RECORD", but the data at column 40 and beyond is not moved. In addition, the Change must not cause the rest of the window to overflow.

Changing Uppercase and Lowercase

If you specify an upshift window, Qedit ignores the case of letters when matching the target string. It will match words that are spelled with caps or without:

```
/change "JONES" (upshift) "Fitz-Jones" all
```

In this example, Change selects lines containing "JONES", "Jones", or even "joneS".

Avoiding Changes to Embedded Words

If you specify a Smart window, Qedit rejects those matches in which the target string is actually in the middle of another word:

```
/change "FRANK" (smart) "Frank" all
```

This example selects "FRANK", but reject "FRANKLYN." You can combine Smart and Upshift.

Patterns and Windows

In other commands the *window* can specify a *pattern* to match. In the Change command patterns are not allowed, because Change cannot perform pattern changes. However, a string specified in the rangelist portion of the Change command may be a pattern. For example:

```
/change "CUSTREC" "CUST-REC" "@01@PIC@" (pattern)
                 {change custrec to cust-rec in all lines that}
                 {   also contain "01" and "PIC" in that order}
```

CobX Tags

Cobol tags are short strings stored in columns 73 to 80 of CobX source files. The Cobol tag value is defined using the Set X command. Once enabled, updated lines and added lines are automatically updated with the tag. They can also be modified manually with custom tag values.

In its regular form, the Change command affects only the text area in columns 7 to 72. If you wish to make changes to Cobol tags, use the `T` suffix. You can think of it as the `Tag` option. This option operates only on the tag area itself, columns 73 to 80.

```
/change "CUST" "SUPP" all
                 {change cust to supp in all lines.   }
                 { cust must be between columns 7 and 72.  }
/changeT "CUST" "SUPP" all
                 {change cust to supp in all lines.        }
                 { cust must be between columns 73 and 80.  }
```

To to this, the `Tag` option temporarily changes the margins to `(73/80)`. Qedit displays a warning every time this option is used. Because the margin values have changed, explicit column range in a Window can only be between 73 and 80.

```
/changeT "CUST" (50/60) "SUPP" all
Warning:  ChangeT: editing the Cobol tag area only (73-80).
Error: Window
/changeT "CUST" (73/80) "SUPP" all
Warning:  ChangeT: editing the Cobol tag area only (73-80).
   10      SUPP0102
1  line changed
```

Because the margins have been changed, Qedit displays text in the tag area only except when the Justify option is used. In this case, Qedit prompts for confirmation before making the change. It would be hard to determine if a line needs to be changed based only on the tag value. So, when the Justify option is used, Qedit displays the complete line. The user has the option to accept the changes, reject the changes or manually modify the line. If the user chooses to modify the line, only the tag is displayed.

Change (Changing Columns)

Replace some columns in some lines with a new string of characters. Use Change to insert columns, shift text left, or shift text right.

CHANGE column [/column] [(window)] "string" [rangelist]

(Q=no display, J=verify)

(Default: *rangelist* = *)

Change replaces the target *column* range with the *string* in the lines of the *rangelist*. You can use this to insert a string at a specified column. You can also use it to replace, expand, or contract specified columns.

If you specify a single *column* instead of a range, Qedit inserts the *string* before that column and shifts the rest of the line to the right. You can create new columns by inserting blanks in front of a position (e.g., `change 5 " "`).

If you specify a range of columns, Qedit replaces that column range with the *string*. The *string* may be the same length as the column range, longer, or shorter. If the string is shorter than the column range deleted, the rest of the line shifts left. If longer, the rest of the line shifts right. You can remove columns entirely by changing them to a null string (e.g., `change 5/7 ""`).

Examples

```
/change 5"|"all       {draw vertical line of "|"s in file}
/cq 1/2 "" 10/15      {shift lines 10/15 left 2 spaces}

/cq 1 "   " 10/15     {shift lines 10/15 right 3 spaces}

/cq 1(1/8)" " all     {shift columns 1/8 right 1 space}
                      {don't change text beyond column 8}

/change 12/12 ::      {delete column 12 in the current line}
```

Notes

See the discussion of *windows* under "Changing Strings". Those notes also apply to column changes.

The first column number is usually 1, except for standard COBOL source files, where it is 7 (seven). The last column number depends on the current values for Set Language, Set Length, and Set Right.

Change prints each line modified, unless you use CQ. CJ asks you to verify each change.

Close Command [CL]

Shut the current work file and remove it from the recently accessed file list.

CLose

(Default: none)

The Shut command is the normal way to close a workfile. When you Shut a file (or Open another one), Qedit remembers the name of the current workfile in a list of recently accessed files. This allows you to reopen the file using `open ?`. However, the list is of limited size. If you are not coming back to edit the current file again, use the Close command instead of Shut. This keeps other file names from falling off the bottom of the list.

Examples

```
/open abc
/open def
/close       {close "def" and forget it}
/open *      {current file is now "abc"}
```

Colcopy Command [COL]

Copies one or more columns to a different location on the same line.

COLCOPY source [/source2] destination1 [/destination2] [rangelist]

(Q=no display, J=verify, T=CobX Tag)

(Default: *rangelist* = *)

Colcopy copies text in columns specified by *source1* and *source2* to the destination columns specified by *destination1* and *destination2* in the lines of *rangelist*. Even though Colcopy can modify multiple lines using a *rangelist*, it really operates on one line at a time. You can not copy columns from one line to another.

Source and destination columns always represent the original location. All changes are based on that assumption.

If *source1* only is specified, Qedit copies just that column (length of 1). If *destination1* only is specified, the source columns are inserted at that location. If you wish to replace a single column, enter a destination range where *destination1* and *Destination2* are the same e.g. `Colcopy 1 10/10`.

```
/list 1
   1     abcdefghijklmnopqrstuvwxyz
/colcopy 1 10          { insert column 1 at column 10 }
   1     abcdefghiajklmnopqrstuvwxyz
1 line changed
/colcopy 1/5 10        { insert columns 1/5 at column 10 }
   1     abcdefghiabcdejklmnopqrstuvwxyz
1 line changed
```

If *destination1* and *destination2* are specified, text in these columns is replaced by the source text. If the source text is narrower or wider, the line is shortened or expanded as needed.

```
/colcopy 1 10/15     { copy column 1 to columns 10/15 }
   1     abcdefghiapqrstuvwxyz
1 line changed
/colcopy 1/5 10/11   { copy columns 1/5 to 10/11. Line expands. }
   1     abcdefghiabcdelmnopqrstuvwxyz
1 line changed
/colcopy 1/5 10/20   { copy columns 1/5 to 10/20. Line shortens. }
   1     abcdefghiabcdeuvwxyz
1 line changed
```

Trailing Spaces

Trailing spaces on the line are not significant. This means that a line can expand until a non-space character reaches the current right margin (**Set Right**). However, trailing spaces from the source text are significant and are copied in the operation. If the line can not be expanded further, Qedit displays a warning message and allows the user to modify it.

```
/list 2
   2     abcd     efghiabcdeuvwxyz
/colcopy 1/8 20        { insert columns 1/8 at 20 }
   1     abcd     efghiabcdeabcd    uvwxyz
1 line changed
/Set right 30
/colcopy 1/5 30        { insert columns 1/5 at 30 }

Warning: Source columns could not be inserted. Please modify. (Warning
2)
   1     abcd     efghiabcdeabcd    uvwxyz
1 line modified
```

Overlapping Columns

When source and destination columns do not overlap, the results are straightforward. If source and destination columns overlap partially or completely, the results might not be as expected. Keep in mind that:

- source and destination columns are always based on the original line
- the destination columns are removed
- the source columns are put in their place

Approving Each Changed Line

Use COLJ to give yourself approval over each change before it is updated. With COLJ, Qedit displays the line as it would be and asks you for a Yes, No, or Modify answer.

CobX Tags

Cobol tags are short strings stored in columns 73 to 80 of CobX source files. The Cobol tag value is defined using the Set X command. Once enabled, updated lines and added lines are automatically updated with the tag. They can also be modified manually with custom tag values.

In its regular form, the Colcopy command affects only the text area in columns 7 to 72. If you wish to make changes to Cobol tags, use the `T` suffix. You can think of it as the `Tag` option. This option operates only on the tag area itself, columns 73 to 80.

```
/ColT 73/74 79/80 all      { copies content of columns 73 and 74 }
                           { into columns 79/80                  }
/ColT 73/74 75 all         { inserts content of columns 73 and 74     }
                           { in column 75. Columns 76-80 are shifted. }
```

To to this, the `Tag` option temporarily changes the margins to `(73/80)`. Qedit displays a warning every time this option is used. Because the margin values have changed, explicit column range in the source and destination columns can only be between 73 and 80.

```
/ColT 23/24 79/80 all
Warning:  ColcopyT: editing the Cobol tag area only (73-80).
Error:  The Sourcestart column (23) is not between 73 and 80

/ColT 73/74 79/80 10
Warning:  ColcopyT: editing the Cobol tag area only (73-80).
   10      ME0307ME
1  line changed
```

Because the margins have been changed, Qedit displays text in the tag area only except when the Justify option is used. In this case, Qedit prompts for confirmation before making the change. It would be hard to determine if a line needs to be changed based only on the tag value. So, when the Justify option is used, Qedit displays the complete line. The user has the option to accept the changes, reject the changes or manually modify the line. If the user chooses to modify the line, only the tag is displayed.

Colmove Command [COLM]

Moves one or more columns to a different location on the same line.

COLMOVE source [/source2] destination1 [/destination2] [rangelist]

(Q=no display, J=verify, T=CobX Tag)

(Default: *rangelist* = *)

Colmove moves text in columns specified by *source1* and *source2* to the destination columns specified by *destination1* and *destination2* in the lines of *rangelist*. The source columns are removed from their original location. Even though Colmove can modify multiple lines using a *rangelist*, it really operates on one line at a time.

You can not move columns from one line to another. Source and destination columns always represent the original location. All changes are based on that assumption.

If *source1* only is specified, Qedit moves just that column (length of 1). If *destination1* only is specified, the source columns are inserted at that location. If you wish to replace a single column, enter a destination range where *destination1* and *Destination2* are the same e.g. `Colcopy 1 10/10`. A move means the original columns are removed and the line is shifted left. Then the source text is inserted at the destination.

```
/list 1
   1     abcdefghijklmnopqrstuvwxyz
/colmove 1 10          { move column 1 to column 10 }
   1     bcdefghiajklmnopqrstuvwxyz
1 line changed
/colmove 1/5 10        { move columns 1/5 to column 10 }
   1     fghiabcdejklmnopqrstuvwxyz
1 line changed
```

If *destination1* and *destination2* are specified, text in these columns is replaced by the source text. If the source text is narrower or wider, the line is shortened or expanded as needed.

```
/colmove 1 10/15     { move column 1 to columns 10/15 }
   1     bcdefghiapqrstuvwxyz
1 line changed
/colmove 1/5 10/11   { move columns 1/5 to 10/11 }
   1     fghiabcdelmnopqrstuvwxyz
1 line changed
/colmove 1/5 10/20   { move columns 1/5 to 10/20 }
   1     fghiabcdeuvwxyz
1 line changed
```

Trailing Spaces

Trailing spaces on the line are not significant. This means that a line can expand until a non-space character reaches the current right margin (**Set Right**). However, trailing spaces from the source text are significant and are moved in the operation.

```
/list 2
   2     abcd     efghiabcdeuvwxyz
/colmove 1/8 20        { move columns 1/8 to 20 }
   1      efghiabcdeabcd    uvwxyz
1 line changed
```

Overlapping Columns

When source and destination columns do not overlap, the results are straightforward. If source and destination columns overlap partially or completely, the results might not be as expected. Keep in mind that:

- source and destination columns are always based on the original line
- the source columns are removed
- the destination columns are removed
- the source columns are put in their place

Here is an example:

```
/list 1
   1     abcdefghijklmnopqrstuvwxyz
/colm 6/20 15
   1     abcdefghijklmnopqrstuvwxyz
1 line changed
```

Apparently, nothing has changed but, in fact, something did happen to the line. Qedit removed the source columns "fghijklmnopqrst" and tried to insert the original text where column 15 used to be. Column 15 was part of the area that has been removed so Qedit inserts the text where it should have been i.e. between "e" and "u". So, it's putting the original text back where it was.

Moving Passed the Right Margin

Destination columns can exceed the current right margin. In this case, Qedit assumes the columns should be moved to the end of the line. Effectively, the source columns are inserted in the rightmost columns of the line. The destination columns do not have to be a precise value. They just need to be larger than the current right margin. If the right margin is currently set at 80, the following commands yield the same results.

```
/v right
Set Right 50
/lt2
         ....+....10...+....20...+....30...+....40...+....5
   2     abcdefghijklmnopqrstuvwxyz
/colm 1/5 51
   2     fghijklmnopqrstuvwxyz                          abcde
1 line changed
/colm 1/5 88/90
   2     fghijklmnopqrstuvwxyz                          abcde
1 line changed
```

Approving Each Changed Line

Use COLMJ to give yourself approval over each change before it is updated. With COLMJ, Qedit displays the line as it would be and asks you for a Yes, No, or Modify answer.

CobX Tags

Cobol tags are short strings stored in columns 73 to 80 of CobX source files. The Cobol tag value is defined using the Set X command. Once enabled, updated lines and added lines are automatically updated with the tag. They can also be modified manually with custom tag values.

In its regular form, the Colmove command affects only the text area in columns 7 to 72.If you wish to make changes to Cobol tags, use the `T` suffix. You can think of it as the `Tag` option. This option operates only on the tag area itself, columns 73 to 80.

```
/ColmT 73/74 79/80 all     { copies content of columns 73 and 74 }
                           { into columns 79/80                  }
/ColmT 73/74 75 all    { inserts content of columns 73 and 74     }
                           { in column 75. Columns 76-80 are shifted. }
```

To to this, the `Tag` option temporarily changes the margins to `(73/80)`. Qedit displays a warning every time this option is used. Because the margin values have changed, explicit column range in the source and destination columns can only be between 73 and 80.

```
/ColmoveT 23/24 79/80 all
Warning:  ColcopyT: editing the Cobol tag area only (73-80).
Error:  The Sourcestart column (23) is not between 73 and 80

/ColmoveT 73/74 79/80 10
Warning:  ColcopyT: editing the Cobol tag area only (73-80).
   10      ME0307ME
1  line changed
```

Because the margins have been changed, Qedit displays text in the tag area only except when the Justify option is used. In this case, Qedit prompts for confirmation before making the change. It would be hard to determine if a line needs to be changed based only on the tag value. So, when the Justify option is used, Qedit displays the complete line. The user has the option to accept the changes, reject the changes or manually modify the line. If the user chooses to modify the line, only the tag is displayed.

Delete Command [D]

Deletes lines from the workfile.

DELETE [*rangelist*]

(Q=no display, J=verify)

(Default: *rangelist* = *)

Delete prints each line in *rangelist*, with an underline character after the line number, as it deletes them, unless you use DQ.

Notes

If you do Delete All, you must answer "Y" to a verifying question before the lines will be deleted. This also applies if you Set Check Delete is ON and you delete more than 5 lines.

If you delete the wrong lines, you can cancel the Delete by striking Control-Y. However, you must use Control-Y before you press Return on the next command line. Qedit responds by printing "Undeleted" or "Canceled". Once you have typed in the next command line and press Return, your chance to recover using Control-Y is gone and the previous Delete command is final. You can still undo the deletion using Undo.

Delete All resets the Set Keep Name (default for **Keep** command) so that a later Keep command will not wipe out the wrong file by mistake.

Confirm Each Deletion

Use DJ to give yourself approval over each delete before it is carried out. With DJ, Qedit displays the line (even if the Quiet option is used) and asks you for a Yes, No, or Stop answer.

Answer `No` or Return to keep the line.

Answer `Yes` to delete the current line. Unlike the basic Delete operation where lines are removed with the next command, lines confirmed in DJ are deleted immediately. They can be recovered with an **Undo** command.

Answer `Stop` if you wish to stop the delete process. When you use Stop, lines that have been deleted are not recovered automatically. Use Undo to recover them.

Examples

```
/delete 5/6           {remove lines 5 and 6 from file}
    5    _this is line 5
    6    _and this is line 6!

/dq 2 10/49           {delete lines 2 and 10/49}

/delete "."(1/1)      {delete lines with "." in column 1}
                      {Implied rangelist is ALL}

/del "."(1/1 nomatch) {delete lines without "."}

/d "~"(pattern)       {delete all blank lines}

/dj 3/66
    3    this is line 3
Delete it (Y,N or Stop) [No]:
    4    this is line 4
Delete it (Y,N or Stop) [No]:Y
    5    this is line 5
Delete it (Y,N or Stop) [No]:n
    6    this is line 6
Delete it (Y,N or Stop) [No]:S
1 line Deleted!
```

Destroy Command [DES]

Purges the current workfile, or a named LINUX file, after first verifying with the user.

DESTROY [*filename*]

(Default: current workfile)

The *filename* parameter can be the name of any file that you have write access to, "$" to refer to the "last" file name mentioned in another command, or "*" to refer to either the current workfile or, if none is currently open, the one just Shut.

Examples

```
/destroy /dev/src/test.c
/dev/src/test.c # of lines=162
Purge file [no]? Oui      {that's French for "yes"}
/open ctemp
/des *
ctemp Qedit file, # of lines=15
Purge file [no]?          {Return key means "no"}
File NOT purged
/list datapg2             {check contents of file}
/destroy $                {...then purge it}
```

Divide Command [DI]

Divides a line into two or more lines at specified columns. Divide can turn a field-oriented record into a series of lines with one field per line. It can also append a blank line after every line in a file. See also VV in Visual. For the opposite of Divide, see the Glue command.

DIVIDE [(columnlist)] [rangelist]

(Default: columnlist =], rangelist = *)

The *columnlist* parameter is one or more valid column numbers in ascending order such as (10 20 30), or it may be a (]) for "after end-of-line" (i.e., append a blank line). All characters from the specified column to end-of-line are moved to a new line after the original line.

The *rangelist* parameter specifies one or more lines in the file. Each line is split into two or more lines according to the column parameter. The default *rangelist* is the current line.

The default *columnlist* is "]", except when the Divide command has no parameters or only a "string" *rangelist*. Then the current line is split at the "current column". When Divide has no parameters, the current column is "]". Following a successful string match, the current column is the first column of the string position in the line(s).

Examples

```
/find "abc";divide     {move "abc..." to a new line}
/list *+2;divide       {move ahead 2 lines, add a blank line}
/divide (20) all       {split every line at column 20}
/divide (20 40) @      {split every line at columns 20 and 40}
/divide (10 20 30)     {split current line at 3 places}
/divide (]) */*+10     {add blank line after lines */*+10}
/divide (20)"Qedit"    {split all "Qedit" lines at column 20}
/divide "Qedit"        {split all "Qedit" lines at "Qedit"}
/divide (])"Qedit"     {add blank line to all "Qedit" lines}
```

Notes

After a Divide command, the current line is the last line divided. To not print the lines, use DivideQ.

Divide works within the current Left and Right margins. That is, characters to the right or left of the current margins are not moved.

When working with COBOLX files, the Divide command does not consider the tag (columns 73 to 80) as part of the data. This means that the current tag data is not moved to the new split line. It also means that you cannot divide a line past column 73.

:Do Command [DO]

The :Do command repeats (without changes) any of the previous 1,000 commands.

DO [*start* [/ *stop*]]
[string]
[ALL | @]

(Default: repeat the previous command)

Commands are numbered sequentially from 1 as entered and the last 1,000 of them are retained. Use the :Listredo command to display the previous commands. You can repeat a single command (`do 5`), a range of commands (`do 5/10`) or the most recent command whose name matches a string (`do list`). If you want to modify the commands before executing them, use :Redo or Before.

Examples

```
/listredo          {or /bj or ,, }
/do                {do previous command again}
/do 39             {do command line 39 again}
/do 5/8            {do command lines 5 to 8 again}
/do list           {do most recent List command}
/do ls             {do last starting with "ls"}
/do ls job         {do last "ls job" command}
/do @job           {do last containing "job"}
/do -2             {do command before previous}
/do -7/-5          {do by relative line number}
/do 5/             {do command lines 5 to "last"}
```

Notes

To stop a :Do All, use Control-Y.

Exit Command [E/F8]

Exit from Qedit and return to the operating system.

EXIT [*string*]

The current workfile is closed and Qedit terminates. The F8 user key is the same as Exit.

To close the current workfile without exiting, use Shut.

When you Exit, Qedit checks whether you have any unsaved edits in any of your scratch files. If so, you are prompted to **Discard?** them, or stay in Qedit to save them.

Examples

```
/opt/robelle/bin/qedit
/open qedit.doc              {open file to work on}
/modify 2482.5/              {do some editing...}
    .
    .
    .
/exit                        {ready to quit for the day!}
```

Notes

To avoid accidental Exit as a result of pressing F8 one time too many, you can run Qedit with the –v option. This forces user approval of Exit.

The string parameter is only allowed when Qedit is running as a server. The string is a message sent to the Qedit for Windows client. The client receives the exit notification, displays the message and disconnects immediately. If no string is specified, a default message is displayed.

Find Command [F/F4]

Finds the next line in the workfile that contains a string. Use Findup if you want to search for the previous line. Find always finds a single line that matches a string. Use the List command if you want to find many lines that match a string.

FIND [string] [linenum]

FIND [string range] [linenum]

(Q=no display)

(Default: *string* = recent; *linenum* = *+1)

Find defaults *string* to be "same as last string" and *linenum* to be "starting from the next line". This saves having to repeatedly type the *string* and *linenum*. Once you have defined your *string* and starting position, just enter "F" to find the next line.

Find does not start searching at the beginning of your file. Find will start searching for the string at the *line after the current line*, unless you specify a *linenum* to start the search. If you want to search from the beginning of your file, use Find *string* FIRST.

Examples

```
/find "exit" first     {find first line with "exit"}
    45     this command will cause an exit from the
                                  (28)^
/f                     {find next line with "exit"}
    90     after you exit from a module, the program
                 (11)^
/f                     {continue finding lines...}
   ...
/f                     {...until you reach end of file}
Warning: No Line         {prints error and rewinds}
Error: End of File
/f                     {next Find wraps around!}
Warning: Rewind to FIRST
    45     this command will cause an exit from the
                                  (28)^
/fq"$page"(1/5);m      {find next $page and modify it}

/fq;c""exit"           {find next string and change it}

/fq;c"""               {find next string and remove it}
/f "start"/"end" [     {find string range and set ZZ}
Lines 5/11 saved in ZZ
```

Notes

The Q option lets you find the line without printing it. Use FQ if you intend to Modify the line after you find it.

Find prints an error when the search reaches the LAST line without locating the string. Then, if you enter another Find without a line number, the search starts from the FIRST line in the file, after printing a warning.

To find/see all occurrences of a string in a file, use the List command.

When a string range is used and a corresponding block is found, the start and end line numbers are stored in the **ZZ** marker.

Findup Command [FINDU/F3]

Finds the previous line in the workfile that contains a string. Findup can be shortened to ^. Use Find if you want to search for the next line.

FINDUP [string] [linenum]

(Q=no display)

(Default: *string* = recent; *linenum* = *-1)

Findup defaults *string* to be "same as last string" and *linenum* to be "starting from the previous line". This saves having to repeatedly type the *string* and *linenum*. Once you have defined your *string* and starting position, all you need to enter is "^" or "FINDU" to find the next string.

The F3 user key does the same function as Findup without parameters.

Examples

```
/findup "exit" last   {find last line with "exit"}
    90     after you exit from a module, the program
                (11)^
/findup               find previous line with "exit"
    45     this command will cause an exit from the
                                    (28)^
/^                    {continue finding lines...}
   ...
/^                    {...until you reach start of file}
Warning: No Line      {prints error and rewinds}
Error: Beginning of File
/findup               {next Findup wraps around!}
Warning: Rewind to LAST
    90     after you exit from a module, the program
                (11)^
/findupq;mod          {find string and modify it}

/findupq;c""exit"     {find string and change it}

/findupq;c"""         {find string and remove it}
```

Notes

Refer to the notes under the Find command.

Form Command [FORM]

Displays information about a self-describing file created by programs such as Suprtool. These programs store information about the record layout such as field names, data types, length.

FORM [$LP | $LPA | $LPB] [*filename*]

(Default: *filename* = current Text file)

If *filename* is omitted and a workfile is currently active, Qedit uses the name of the Text file (see **Verify Keep**). An external filename can be specified. In this case, the name must be the name of the data file.

If the file is not self-describing, Qedit displays the following message:

```
Error:  File is not self-describing.
```

Self-describing files on Linux have 2 components: the data file and the data description file. The name of the data description file is the name of the data file followed by the `.sd` extension. For example,

```
/home/user1/mydata.dat          { data }
/home/user1/mydata.dat.sd       { data description }
```

The Form output looks like this:

```
Self-describing information for /home/user1/mydata.dat
    File: /home/user1/mydata.dat     (SD Version B.00.00)  Has
linefeeds
       Entry:                      Offset
          CHAR-FIELD           X5      1  <<Sort# 1 >>
          INT-FIELD            I1      6
          DBL-FIELD            I2      8
          PACKED-FIELD         P12    12
          PACKED*-FIELD        P12    18
          QUAD-FIELD           I4     24
          ID-FIELD             I1     32
          LOGICAL-FIELD        K1     34
          DBLLOG-FIELD         K2     36
          ZONED-FIELD          Z5     40
    Entry Length: 80  Blocking: 1
```

LP Listing

$lp, $lpa and $lpb send output to a device associated with an environment variable of the same name. For example, to print to the device called Laser with the $lpa option, you must set the |4LPA| environment variable to Laser, as in |2export lpa=laser|. If the LP environment variable is not set, Qedit will attempt to send the output to the default system printer. But if the LPA or LPB environment variables are not set with a valid device name, an error will occur.

Forward Command [FO/F6]

Starts "browsing" the current file by displaying the next page "forward". You stay in "browse" mode until you enter any command (see List, jumping option).

FORWARD

(F6 key does the same)

In Line mode, Backward and Forward (or F5/F6) throw you into List-Jumping's Browse mode. Qedit displays a screen of text, where the screen size is either 23 lines or what you specify with Set List LJ, then waits for you by asking "More?". Press Return to see the next screen, typing a line number moves you to the screen starting at that line, pressing F2-F6 does the appropriate action, and F8 or "//" or Control-Y or typing any command gets you out of browse mode. At the "More" prompt, the * "current" line is the last line displayed.

Garbage Command [GAR]

Finds and recovers wasted space in the current workfile.

GARBAGE

(Q = no summary)

If you keep adding lines to a workfile and editing them, eventually you will get an "Error: Full" message in Line mode or "File nearly full!" in Visual mode, and be unable to add more lines. One method of continuing at this point is to use the Garbage command.

```
/garbage
/gar        {minimal command name}
```

Garbage combines partially full blocks to squeeze out free blocks, but it also searches the workfile for any blocks that have been "lost" (i.e., are no longer on the "free list" or the "text list"). It does not make your file any smaller, it just allows you to continue editing by finding usable space within the file.

Garbage prints a summary of how much space it recovered and how much is available in the file. The summary report can be suppressed using GarbageQ.

```
5 blocks squeezed out, 2 found, 55 used,
    10 on free list, 9 for expansion.
```

In this example, Garbage reports that 5 blocks were retrieved via squeezing, 2 lost blocks were found, 55 blocks are currently used to hold text, 10 empty blocks are held on a "deleted-block" list (the free list), and 9 blocks are available if the EOF is expanded toward the LIMIT.

Glue Command [G]

Joins a line with one or more following lines, either concatenated or at specified tab positions. Use Glue to turn a list of fields into a single record-oriented line. See also GG in Visual mode. For the opposite of Glue, see the Divide command.

GLUE [(columnlist)] [rangelist]

(Defaults: *columnlist* =], *rangelist* = */*+*n*)

The *columnlist* is a list of ascending column numbers in parentheses such as (10 20 30), or ( ]) for "after the end-of-line", which is the default.

The *rangelist* specifies which lines to combine. The default *rangelist* is the current line plus *n*. When you specify a range of lines, Glue joins the lines in "pairs".

Examples

```
/glue              {joins *+1 to *}
/gluej             {joins *+1 to * with space between}
/glue;glue         {join *+1 and *+2 to *}
/glue (10) all     {joins lines in "pairs" at column 10}
/glue (10 20 30)   {joins 4 lines into 1 record}
/glue "string"     {glue "string" lines to lines that follow}
```

Notes

If there are not enough lines at the end of a *rangelist* to fill in each column of the list, Glue **does not** go beyond the *rangelist*. If there is not enough room to move all of the characters into the line, as many characters as will fit are moved, the following line is not deleted, and Qedit prints an "overflow" warning.

After a Glue command, the current line is the line last spliced together. To suppress printing of the spliced lines, use GlueQ.

If you don't specify a list of column fields, Glue removes leading spaces from the following lines before moving them. To insert a single space between them, use GlueJ instead. If you do specify columnar fields, Glue treats spaces as valid data and moves them intact. If you specify more than one field, some nonblank data may be overwritten if the columns are too close together or the lines to be glued are too long. You can always use Undo to cancel a Glue command.

If Left or Right margins have been Set, only the text within the margins is copied and the following lines are not deleted.

When editing COBOLX files, the tag area (columns 73 to 80) is not considered part of the data. This means that the tag string on the next line is not moved to the new line. It also means you cannot glue to columns past 73.

Help Command [H/?]

Only the Quick help option is available in Qedit/Open.

HELPQ

(Default: browse through the entire help file)

(Q = Quick Reference Guide "Quick Help")

HQ looks for entries under the keyword Quick in the helpfile. Quick contains the text from the Qedit *Quick Reference Guide*, offering the experienced user a review of command syntax.

```
/hq shortcuts          {quick list of shortcuts}
```

Hold Command [HO]

Lets you explicitly write lines to the Hold file.

HOLD [filename] [rangelist]

(Default: hold current line)

(Q=hold without display)

(J=append, without erasing)

You can refer to the current contents of the Hold file by the actual file name, "hold", in any of the commands that access external files (Add-File, List, Use).

Examples

```
/hold 50/60         {erase Hold, hold lines}
/holdj 100/198      {append more lines to Hold}
/ho "direct"        {hold lines with string}
/open abc.src
/add 33=hold        {adds held lines to abc.src}
/holdq /etc/profile
/list hold
```

Implicit Hold

When using the Add command to move or copy lines within a file, Qedit overwrites a file named Hold0 with a copy of the lines. It counts the lines and tries to select a line number increment that will accommodate the number of lines being added to your workfile. So, if the command fails or if you wish to copy the same lines again, you can refer to the Hold0 file. Adding from an external file also holds the lines if you specify a rangelist for the file, and if the file is not the Hold file itself.

```
/add 55=hold0
/list hold0          {the Hold file is temporary}
```

Notes

By default, the Hold files are created in `/var/tmp` (/usr/tmp is the default on older versions of LINUX). If you want to keep your Hold files in a different location, you can enter the new path name in the TMPDIR environment variable.

```
TMPDIR=/home/user1/tmp
export TMPDIR
```

The file name starts with "qhold" and ends with a random string of characters. The Hold0 file ends with ".0". Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters.

Every time you use "hold" or "hold0" by themselves as a file name in any command, Qedit replaces the word with the fully-qualified file name of the appropriate Hold file.

```
/Add 1=hold
```

translates to

```
/Add 1=/var/tmp/qholdDAAa05429.0
```

Justify Command [J]

With Justify, you can do text formatting: center lines, right-justify lines, left-justify lines, and fill text into margins.

JUSTIFY [option] [keyword ...] [rangelist]

(Q=no display)

(Default *option*: Null or Set Justify)

When the Justify command is processing the range of lines you specified, if you decide not to continue, press Control-Y to stop the formatting.

Options Specify Which Function

Justify Right	right-justify each line
Justify Center	center each line
Justify Centre	Canadian spelling!
Justify Left	remove leading spaces
Justify Format	fill lines, ragged right margin
Justify Both	fill lines, straight right margin
Justify Null	default - no changes - safety

Keyword Parameters of Justify

MARGIN *column*	right edge, relative to left
TWO [ON|OFF]	maintain 2 spaces after **.** **?** and **!**
INDENT *spaces*	indentation for list of points
WITHINDENT	activate configured indentation
STOP "chars"	break justification when found
START "chars"	start new paragraph

You may shorten options and keywords to the leading letters.

Rangelist Specifies Which Lines

For the Format and Both options, the *rangelist* specifies some lines to format. Warning: if you type a single line number (e.g., `just both 5`), Qedit begins formatting lines from that line number to the end of the paragraph. Qedit sees blank lines as end-of-paragraph markers, so if you `justify format all` you end up with smooth and even

chunks of text, set off by blank lines. This is one of the few places in Qedit where a single line number implies a range of lines.

For the Left, Right and Center options, a single line *rangelist* means a single line. But, you can specify a "string" *rangelist* to center or justify only lines containing a string. Specifying a "string" rangelist with the Format or Both options is equivalent to specifying a single line number i.e. formatting starts with the line which has the string and continues to the end of the paragraph.

Verification Before Formatting

If Set Check Justify is ON, Justify Format and Both require user verification before formatting more than 5 lines. This should eliminate inadvertent formatting of entire source programs!

You can also use the Undo command to undo the effects of the Justify command.

Left and Right Edges for Justify

Justify works within borders called the left and right edge. The left edge is usually column 1, or column seven 7 in standard COBOL. The right edge is usually the highest column number allowed in the file (e.g., 80 for JOB files). However, if you use Set Left and Set Right to create margins for your file, Justify operates within those limits. Set Left will be the left edge and Set Right will be the right edge. You can also use the Margin keyword to establish the right edge for Justify, but remember that this edge is relative to any Set Left value.

Examples

```
/justify center 5/6    {center lines 5 through 6}
/j right 5/6           {right-justify lines 5 through 6}

/j left 5/6            {left-justify lines 5 through 6}

/j format 5/50         {format lines 5/50 into margins}

/j f 5/6               {splice lines 5 and 6 into one line}

/j both 5              {format a paragraph, even right edge,}
                       {  from line 5 to the next blank line}
```

Right Justifying Lines

Justify Right shifts each line of *rangelist* to the right until the last nonblank character is at the right edge. For example:

```
/justify right margin 50 rangelist
```

Input lines:

```
Robelle Solutions Technology Inc.
Tools for HP3000
```

Output lines:

```
                Robelle Solutions Technology Inc.
                                    Tools for HP3000
```

Centering Lines

Justify Center adjusts each *rangelist* line so that it is centered between the left edge and the right edge. For example:

```
/justify center margin 50 rangelist
```

Input lines:

```
Robelle Solutions Technology Inc.
Tools for HP3000
```

Output lines:

```
         Robelle Solutions Technology Inc.
                  Tools for HP3000
```

Left Justifying Lines

Justify Left removes leading spaces from each *rangelist* line, until the left-most nonblank character is at the left edge. This will left-justify the lines. Use for this option to recover from an inadvertent Center or Right option. For example:

```
/justify left rangelist
```

Input lines:

```
                  Robelle Solutions Technology Inc.
                     Tools for HP3000
```

Output lines:

```
Robelle Solutions Technology Inc.
Tools for HP3000
```

Filling Words into Tidy Paragraphs

Justify Format adjusts the processed lines so that the words fill the space between the left edge and the right edge, but allows the right edge to be ragged:

```
/justify format margin 50 rangelist
```

Input lines:

```
The Format keyword performs a
function which is equivalent to .ad l
(left-justify) in nroff and troff.
Uneven lines are converted into lines
of about the same length.
```

Output lines:

```
The Format keyword performs a function which
is equivalent to .ad l (left-justify) in
nroff and troff. Uneven lines are converted
into lines of about the same length.
```

Making Both Edges Even

Justify Both is similar to Justify Format, except that both the left and right edges of the text are even. This is accomplished by inserting blanks between words. For example:

```
/justify both margin 50 rangelist
```

Input lines:

```
The Both keyword performs a
function which is equivalent to .ad b
(adjust both) in nroff and troff. Uneven
lines are converted into lines
of exactly the same length.
```

Output lines:

```
The Both keyword  performs  a  function  which  is
equivalent  to  .ad  b  (adjust both) in nroff and
troff.  Uneven lines are converted into  lines  of
exactly the same length.
```

Null Option

Justify Null is included as an option to serve as a default. If Both were the default option, most of your file would be quickly formatted if you accidentally typed "J 5" instead of "LJ 5".

Configuring the Justify Command

The five *options* (Right, Center, Left, Format, and Both) and the four keywords (Margin, Two, Indent, and Withindent), configure the Justify command. The hierarchy of configuration values is as follows:

Startup default (the "default default")

overridden by

SET Justify (the configured default)

overridden by

Keywords in Justify command

You set your own defaults for the Justify *option* and *keyword* values using Set Justify. Once you find the setting you like, you may want to put them in your Qeditmgr configuration file so you won't have to do the Set Justify command every time you run Qedit. For example:

```
/set justify null margin 50 two on
```

causes

```
/justify both 5
```

to be interpreted as

```
/justify both margin 50 two on 5
```

but you can override your own defaults, as in

```
/justify both margin 60 10/20
```

which merges with your Set Justify values to produce

```
/justify both margin 60 two on 10/20
```

Configuring the Right Edge

The Margin keyword specifies the right-most column for processed lines. This column is needed for the Right, Center, Format and Both options. The value you specify is relative to any Set Left margin that is effective at the time of the Justify command.

Determining the Left Edge

For the Both and Format options, the left margin is determined by looking at the first and second lines of each "paragraph". If the first and second line are indented, the entire paragraph will be indented. Of course, this indentation is relative to any Set Left.

```
/justify both margin 50 linenum
```

Input lines:

```
     The Both keyword performs a
     function which is equivalent to
.ad b (adjust both) in nroff and troff.
Uneven lines are converted into lines
of exactly the same length.
```

Output lines:

```
     The Both keyword performs a function which is
     equivalent to .ad b (adjust  both)  in  nroff
     and  troff.  Uneven  lines are converted into
     lines of exactly the same length.
```

Two Spaces at End of Sentence

Normally, when Qedit adjusts text with Format and Both, it inserts one space between each symbol, regardless of the number of spaces between symbols in the input text. If the Two keyword is ON, Justify maintains two blanks after the end of a sentence (i.e., after a . ? or !, or one of those three followed by a quote mark or a right parenthesis and a space). The default for this keyword is OFF.

Justify does not insert two spaces if the input only contains one; it merely maintains two spaces if they are there already (this means you don't have to worry about getting two spaces in a name like Calvin C. Cook).

```
/justify format two on margin 70  99.5/
```

Formatting a List of Points

The Indent keyword is a special capability for handling lists of numbered points (1., 2., 3., ...). It assumes that your text is indented and that the numbers for each point appear to the left of that indentation. The Indent parameter specifies the number of spaces at the start of each line that will not contain text to format. Justify leaves anything to the left of this border "as is". In fact, the existence of text to the left of the border acts as an "end-of-point" indicator, eliminating

the need for a blank line between points to stop the justification. Indent is relative to any Set Left.

The end of each point in a list is effectively an end of paragraph. Here is a sample of what happens when you attempt to format a list of points without the Indent keyword:

```
/justify both margin 50 rangelist
```

Input lines:

```
1.  Text which occurs in
    a list of points should also
    be formatted into even lines.
2.  Any text to the left of column 5
    causes a
    "justification break".
```

Output lines:

```
1.  Text which occurs in a list of  points  should
    also  be  formatted  into even lines.  2.  Any
    text  to  the  left  of  column  5  causes   a
    "justification break".
```

All of the points have been run together into a single point. You can avoid this result by inserting a blank line at each point, or by doing Justify on each point individually, or by using the Indent keyword:

```
/justify both margin 50 indent 4 rangelist
```

Input lines:

```
1.  Text which occurs in
    a list of points should also
    be formatted into even lines.
2.  Any text to the left of column 5
    causes a
    "justification break".
```

Output lines:

```
1.  Text which occurs in a list of  points  should
    also be formatted into even lines.
2.  Any  text  to  the  left  of column 5 causes a
    "justification break".
```

Activating Indentation

Withindent activates an Indent value that you have previously configured with Set Justify Indent. Withindent allows you to settle on a single indentation for all "lists of points" without having to respecify that value on every Justify command. You merely specify Withindent when you format a list of points:

```
/set justify indent 4     {configure potential indentation}
/justify format 5         {this is not a list of points}

/just f with  9           {this is a list of points}
```

Justification Breaks and Formatting Commands

Justify has options to define characters that start and/or stop justification when found in column one. These options make it much

easier to justify text in files which contain embedded commands and special characters for a format program (e.g., Prose, TDP, etc.). The specific characters are defined using the Start and Stop options:

```
/set justify stop ".+" start "` "
```

This command says that any line with "." or "+" in column one stops text justification and that line is not changed. Any line with "`" or " " (space) in column one ends justification of the previous paragraph and signals a new paragraph (i.e., that line is formatted as part of the next paragraph).

It's important to note that a "string" rangelist has precedence over Start and Stop characters. In other words, the latter options are ignored.

Here is an example which justifies some text from a Robelle document that consists of both text and embedded Prose formatting directives. Note that lines beginning with "." and "+" are not altered, and the line beginning with "`" properly appears as a new paragraph.

```
/justify start "` " stop ".+" margin 50 format all
```

Input lines:

```
.for([ T   S:40 // l55 /   "-" pn:1 "-" /]
+    [ S   T:40 // l55 /   "-" pn:1 "-" /])
.par(f` p5 s1 u3).com  Define ` as Start of Paragraph
.ent `|1Welcome to Compare|
.beginkey compare
     Welcome to version 2.2 of Compare -- a
file comparison program for text files.
`Compare answers the question,
"How different are these two text files?"
Compare will tell you whether lines
have been added, or whether a block of
lines is now different.
```

Output lines:

```
.for([ T   S:40 // l55 /   "-" pn:1 "-" /]
+    [ S   T:40 // l55 /   "-" pn:1 "-" /])
.par(f` p5 s1 u3).com  Define ` as Start of Paragraph
.ent `|1Welcome to Compare|
.beginkey compare
     Welcome to version 2.2 of Compare -- a file
comparison program for text files.
`Compare answers the question, "How different are
these two text files?" Compare will tell you
whether lines have been added, or whether a block
of lines is now different.
```

Keep Command [K]

Creates a standard disc file and writes the workfile into it. Keep is the reverse of Text, which copies a standard disc file into a workfile that you can edit. Use Text when you need to duplicate a file.

KEEP [filename][,options] [rangelist]

(Q=no linenums)

(Defaults: *rangelist*=ALL, *filename*=last)

Keep Options

Qedit allows several options on the Keep command. Note that the comma preceding the option name is mandatory, and that spaces are not allowed before the comma or the option name.

Keep filename,**UNN**	unnumbered (same as KQ)
Keep filename,**YES**	go ahead and purge old file
Keep filename,**NO**	never purge an old file
Keep filename,**XEQ**	assign xeq access
Keep filename,**IFDIRTY**	only if changes made
Keep filename,**LF**	insert Newline delimiters
Keep filename,**NOLF**	Do not insert Newline delimiters

Keep creates a new disc file named *filename*. You can combine several options on the same Keep command. The default *filename* is the name of the last Text or full Keep (i.e., it does not count if you use a *rangelist* or have reduced the margins with Set Left or Set Right). If *filename* already exists, Qedit will ask you to verify that it is okay to purge it unless you specify the ,YES or ,NO option.

Sometimes the file will have sequence numbers in each line (this is called numbered), but you can omit the sequence numbers with KQ, or by specifying the ,UNN option.

Keep transfers *rangelist* lines from the workfile to *filename*. The default *rangelist* is ALL. Warning: Qedit writes only the data within the current left and right margins, so reset the margins first if you want the entire line (e.g., Set Left; Set Right).

Examples

```
/text /src/report.cob        {make a copy}
Scratch file
/find "FUNCTION-CODE"
   14       05  FUNCTION-CODE      PIC X8.
/change "X8"X10"
   14       05  FUNCTION-CODE      PIC X10.
/keep /src/new.cob           {create a new file}
    ...                      {do some more changes}
/keep                        {save again with same name...}
/src/new.cob # of records = 127
Purge existing file [No]? yes  {you must authorize purge!}

/s left 1;s right 50         {define margins as first 50 columns}
/kq /data/nov99              {unnumbered with 50-byte records}

/k notes,UNN,YES             {unnumbered, purge old file}
/keep ,yes                   {keep to last text, purging old}
```

Absolute File Name

When you are using CD, you may find yourself doing the following: Text file xxx, change to another directory to add from some other files, then Keep to update your original file. Keep defaults to the "absolute" name (e.g., /user/dev/lib/src/xxx). This means you can change to other directories after a Text, but still easily Keep the file back under its original name. In the past, Keep would default to the "relative" name of the Text file (e.g., xxx), saving the file in your current working directory.

Keep Only When Changes Were Made

Keep,Ifdirty only does the Keep operation if the workfile has been modified since the last Text or Keep. This can be useful in scripts that do Changes: by not Keeping files where no string changes occurred, you reduce the number of files that appear on the partial backup. To see whether your workfile is clean or dirty, do Verify Open.

File Modification Timestamp

When you use the Text command on a file, Qedit stores the file's modification timestamp in the workfile. If you try to Keep the file, Qedit compares the stored timestamp with the file's current timestamp. If they are different, it means the original file has changed since you first opened it. Qedit will alert you to the difference by displaying a message similar to the following:

```
Warning: Original file has been modified since the initial
Text or last Keep
```

The file timestamp can change for a number of reasons. Here are few examples:

- Someone else might have been working on that same file with Qedit and saved their changes before you did.
- The file could have been restored.

- Maybe you used the file to test a program which modified the file in some way.

Because the timestamp message is just a warning, Qedit continues its processing. It then asks for Keep confirmation. If you answer "Yes", the file will be purged and you might lose someone else's changes. Qedit will also store the new modification timestamp.

If you answer "No", you should compare the contents of the file with your workfile and decide if it is safe to Keep your changes. This is one way to compare the files:

- Keep the workfile under a different name
- Use our Compare bonus program to display the differences between the original file and the new version you just created
- Look at the report and separate the lines that you changed from the ones you did not touch
- If needed, apply changes to your copy so you are not missing anything important

By default, timestamp checking on Keep is enabled. If you want to change this setting, use the Set Keep Checktimestamp command.

If you want to erase the saved timestamp, you can use the Set Keep Name command.

Variables for Suprtool

Suprtool needs to know two things about a file when inputting a non self-describing file. The Input command can now use two .dotfiles which will be set by Qedit upon keeping a fixed length file.

The first file is ./.qxrecsize, which will have the record size that the keep command and qedit used to make the file fixed length. The second file is ./.qxlf lets suprtool know if the file will have Line Feeds at the end of each record or not. Currently the .qxlf will only have ON in it.

You can easily turn the contents of the two .dotfiles, into variables by doing the following:

```
Set keep var off lf on
Keep myfile,unn
exit
export ROBQXRECSIZE=`cat .qxrecsize`
```

You can then use the variables in Suprtool by doing the following:

```
suprtool << EOD
set varsub on
in myfile, rec $ROBQXRECSIZE, LF
```

Newline Delimiters

Normally, lines in a UNIX or Linux file are terminated by a NewLine character. Even the last line of the file has to be terminated. For cases in which the last NewLine character is missing, Qedit is still able to read all the lines. However, if the file is saved back, Qedit adds a NewLine terminator. This makes the new file a little different than the original, even if you have not made any changes to it.

By default, Qedit inserts a Newline delimiter after each line. If you do not want Newline terminators, use the **NOLF** option. The only Newline characters written to the file are the ones included in the data. Using the **Length** option on the **Text** command disables the **LF** Keep feature (**Set Keep LF Off**). If you wish to override this, you can use the **LF** option.

Notes

When you Text a file and Keep it again, Qedit attempts to duplicate the original file. The form of the Keep file depends upon the current language and Set options, especially Set Keep. To see what the Keep file will look like, use Verify Keep.

Keep will retain the security of your existing file (i.e., the file's ACL) if you answer Yes to the "Purge old?" question.

List Command [L]

Prints lines of the current workfile or an external file either on your screen or to a printer device.

LIST [$*option*...] [*rangelist*]

(Default: *rangelist* = *)

LIST [$option...] filename[,UNN] [rangelist]

(Default: *rangelist* = ALL)

(Q=no linenums, T=template, J=jumping)

If you do not specify a *filename*, List displays lines of the current workfile. If you do specify a *filename*, List displays lines from that file without Shutting your current workfile. You can refer to the "previous" file by a shorthand method, a "$".

If you specify a single line number as a rangelist and that line does not exist in the current file, Qedit's action depends on the Set List Nearest setting. If the option is Off, the default, Qedit displays a No Line warning. If the option is On, Qedit displays the nearest line. For example, if lines 100 to 120 are missing from a file, here is what would happen:

```
/List 100
Warning: No Line
/Set List Nearest On
/List 100
   121    This is line #121.
```

If you are trying to do something similar on an external file, Qedit does not display anything.

Specify *filename*,UNN when listing a data file which has numeric characters in the last 8 column positions and they are not valid sequence numbers.

When you list lines of your current workfile, Qedit shows only the columns within the current left and right margins, and the default *rangelist* is the current line (e.g., List = List *). When you List an external *filename*, margins are ignored and the default *rangelist* is ALL.

Examples

```
/list 5               {display line 5 only}
/listq 5/             {List-Quiet from 5 to Last}

/list "customer"      {all lines containing "customer"}

/list -5/+5           {display current vicinity}

/l report.cob         {display entire source file}

/l report.cob ]-10/   {print last 11 lines of file}

/l $ "$page"(1/5)     {"$page" in column 1 of previous file}

/set left 55;set right 132  {set margins in wide file}
/listt all            {show template above columns}

/list "bob"  (upshift)      {"bob","BOB","Bob",etc.}

/list "@UPD@MAST@" (pat)  {strings UPD and MAST both in line}
                             {pattern matching}
```

$-Options

You can configure **permanent** options for the List command using Set List; you can also select **temporary** options within a specific List command. The temporary options are preceded by a dollar sign.

LIST [$*option* ...] [*filename*[,UNN]] [*rangelist*]

The temporary $-options come after the command name and before the external *filename* and *rangelist*.

Here are the $-options accepted in the List command:

[$DEVice device]	The $device option sends output to a specified device. The device must be a valid printer name or class. The following command sends lines 1 through 30 in the current file to the device printer: `/list $device printer 1/30`
[$lp | $lpa | $lpb | $record]	$lp, $lpa and $lpb send output to a device associated with an environment variable of the same name. For example, to print to the device called Laser with the $lpa option, you must set the LPA environment variable to Laser, as in `export lpa=laser`. If the LP environment variable is not set, Qedit will attempt to send the output to the default system printer. But if the LPA or LPB environment variables are not set with a valid device name, an error will occur. $Record sends output to LPCRT=stdlist via Record mode.

[$HEX | $OCTAL | $DECIMAL]	Numeric dump
$CHAR	Remove garbage; combines with Hex/Octal/Dec
$PCL code	LaserJet fonts and orientation
$DUPLEX	Double-sided printing on certain LaserJets
$EVEN | $ODD	Outputs even or odd number of pages

[$COLUMNS (range, ...)]	Lists only certain columns
	The $columns option allows you to list only the contents of certain columns. You can specify up to four column ranges. The ranges have to be enclosed in parentheses and can be separated by commas or spaces.
	A range must have a start column and, optionally, an end column. If only a start column is specified, the end column is assumed to be the same. In this case, Qedit lists only one column.
	For example
	`/List $columns (5) {lists only the contents of column 5}`
	`/List $columns (5/10) {lists the contents of columns 5 to 10}`
	`/List $columns (5 20/30) {lists column 5 and 20 to 30}`
	Column numbers must be valid for the Language of the file. For most files, the first column is 1. For COBOL-type files, the first column is 7. Column numbers must also be within the current left and right margins. The column numbers do not have to be entered in a particular order. For example, the column numbers in the first range can be greater than the column numbers in the second range. The text appears in range order (i.e., range1, range2, range3 and range4). The same column can be included in multiple column ranges. The total

number of columns listed cannot exceed the absolute line length maximum (8,172 characters). Although a template Listing is allowed with $columns, the output might not be very helpful. For example,

```
/LT $column (15/20)
 +....2
1 O
2 pp
3 QQQ
4 rrrr
```

List $include is supported with $columns, but included files are treated as if they are the same type as the main file. For example, if you include a COBOL file within a Data file, the COBOL file will start at column one. You can specify a rangelist (e.g., a search string with $columns). Qedit first searches for the string, which can appear anywhere on the line, then applies the $columns specification.

$DOUBLE	Double space the listing (or $DBL)
$SHIFT	Shift the listing four spaces to the right

[$RIGHTBY spaces]	Shift the listing to the right by the number of spaces
	The $rightby option works like the $shift option. It allows you to shift the printed output to the right. The $shift option shifts the output by four spaces. The $rightby option allows you to specify the number of spaces by which the output is shifted. This number can be between 1 and 30.
	`/List $shift LP {shifts output by four spaces}`
	`/List $rightby 4 LP {also shifts output by four spaces}`
	`/List $rightby 20 LP {shifts output by 20 spaces}`

$INCLUDE	List/search $include files as well
$USE	List/search usefiles as well

$PAGE [ON|OFF]	Override Set List Page option
$LINES *count*	Override Set List Lines (per page)
$LENGTH characters	Specify the maximum line length

Here is an example that uses three of the $-options:

```
/list $lpa $double $shift all
```

This command would list all of the current file to the LPA with double spacing, and the listing would be shifted four spaces to the right. To send the output of the List command to the device called Laser, an environment variable must be set to a valid printer name before running Qedit (`export LPA=laser`).

When listing an external file, the $-options must come before the file name:

```
/list $hex $char filename     {hex-char dump of file}
```

Include Files

Normally, Qedit only searches the current file for a string. If you specify the $include keyword, however, Qedit will also search the $include files for the string.

```
/list $include "global_variable"
```

The lines that specify Include files must begin with either "$", "#", "!", or ".". In SPL programs, an exclamation point indicates that the rest of the line should be treated as a comment. So, if a line starts with an exclamation point followed by the word Include, Qedit also assumes this to be a comment and not an actual Include statement.

The $include command must be spelled out in full, and it can be indented from the prefix character ($, #, etc.).

The prefix character can be in any column as long as it is preceded by spaces only. Even though Qedit allows prefix indentation, other programs such as compilers might require prefixes to be in specific columns e.g. column 1.

So, as far as Qedit is concerned, the following examples are valid Include source lines:

```
$include 'globals.source'
    $include constant.srcinc
    $    include headers
#include <strings.h>
#include "parser/bnf.c"
!   include somefile
.include    chapter1.book
```

You cannot combine the $use and $include options.

Listing C Include Files

Qedit/Open assumes that any include statement such as

```
#include <stdio.h>
```

is a C include file. If the file name starts with a letter, it is qualified with `/usr/include/`. This is where the standard C include files are located. C file names that start with "../h" are ignored because they indicate Include files for rebuilding the LINUX kernel.

Usefiles

The $use option is very similar to the $include option. If you specify the $use keyword, Qedit will also search any usefiles for a string. Usefiles are commonly used in PowerHouse source code, Qedit and Suprtool command files, and jobs streams that run Qedit and Suprtool.

```
/list $use "data.def"
```

The lines that contain the "use" directive must have the word "use" as the first word in the line. Leading blanks are allowed. Everything after the word "use" is assumed to be a file name.

You cannot combine the $use and $include options.

$Device Option

The List command now has an option to specify the LINUX print device. For example:

```
list $device printer 1/10
```

The above command prints lines 1 through 10 of the current file to the printer name or class called Printer. The name specified after the $device keyword must be a valid printer name or class. If both the $device and $lp keywords are used, the $device takes precedence.

Configuring Printers

By using environment variables before running Qedit, you can define LP, LPA and LPB in your .profile as three different printers on your system.

```
$LP;export LP
$LPA=serialp;export LPA
$LPB=shipping;export LPB
```

Merging Options

The $-options in the List command are merged with the Set List options, except that Set List Record ON applies only to the file LP, not LPA and LPB. The $-options can be combined wherever they make sense; they can be used with Jumping, Quiet and Template, and can work on the current workfile or an external file. $-Options may be shortened (e.g., $h = $hex).

Interrupting a Listing

Press the Control-S key to "pause" the listing for review. Then, press Control-Q to resume the listing. On newer HP terminals, the Stop key pauses a listing until you press Stop again. To stop the List command, press the Control-Y key.

Listing External Files

With the List command, you can look at any file on a system to which you have read access security.

```
/list /etc/profile
```

Qedit studies the file and determines whether it has sequence numbers or not. If you ask for a *rangelist* of lines, Qedit implicitly numbers a file without numbers. It starts at line 1.0 and adds the current Set Increment value. If the file has sequence numbers, Qedit uses them, unless it finds illegal numbers or numbers out of sequence. It then prints the following message:

```
Error: line number out of sequence (001200) - renumbering the rest
```

The string in parentheses is the incorrect line number. You should make sure it contains numeric digits only and that it is greater than the number on the previous line. To check this information, you should text the file using the **Unnumbered** option.

After reporting the information, Qedit then assigns new numbers to the lines, starting with the last valid number and adding the current increment.

Qedit uses this shorthand character to refer to the most recent external file name: "$". For example,

```
/list report.cob "$page"(1/5)
/list $ 500/600
```

Template Listing

The LT command prints a column-number template before the first line of the listing.

```
/lqt 5
....+....10...+....20...+....30...+....40...+....50..
    training of Qedit users is so easy that you will
```

Remember that the first column number in a standard COBOL source file is column 7, not column 1. For a COBFREE file, the first column is 1. In addition, if you have done Set Left and Set Right to define margins for your file, the template starts with the Left margin column and ends with the Right margin column.

```
/set left 20;set right 41
/lqt 5
20...+....30...+....40
it users is so easy th
```

Browsing or "List-Jumping"

When you add "J" to "List" it means list-jumping. This lists the lines specified, but stops every 23 lines (this pause is handy at 19.2K baud). Browse quickly throughout a file, viewing as much or as little of each section as you like. The default *rangelist* for ListJ is */Last, and ListJ *linenum* means start jumping at *linenum*. You can go into Browse mode quickly from Line mode by using the function keys. Press F6 to start browsing at the current line, press F5 to browse starting back a page, and press F2 to roll the screen forward a few lines before starting to browse.

At the end of each screen, ListJ prompts you for "what to do next?" and waits for your reply. If the user presses Return or F6, or types "yes", Qedit displays the next screen. If the user presses F8 or Control-Y, or types "no", Qedit stops the listing. If the user types a line number, a string, or a relative line count (e.g., -50, +5), or presses F2, F3, F4, or F5, Qedit moves to a new location within the file. When you enter any command, Qedit stops the listing, returns to Command mode, and executes the command. When you are on an HP terminal, ListJ enhances and erases the line with the "what to do next?" prompt.

You can combine ListJ with the $include option to browse through the specified files as well as their $include files. You can combine with ListJ with "Q" to display the lines without sequence numbers. Also, you can combine "ListJ" with "T" to print a column template at the top of each screen. In fact, you can combine all three options into "ListJQT" to List-Jump without line numbers, but with a column template.

The *screensize* can be changed from 23 lines to another number with Set List LJ *nn* (where *nn* is some number of lines from 5 to 100). If you put the command Set List QJ On in your Qeditmgr file, you can avoid seeing sequence numbers when you browse.

When List-Jumping reaches the last line of your file, it prints "End! Are you DONE? [yes]" and waits for your answer. "Yes" ends the listing, and "No" starts listing again from the beginning. Set List Endstop On disables this question; List-Jumping just prints the last line of the file and ends the LJ command.

Controlling Printer Listings

When you specify "$lp" (or "$lpa" or "$lpb") in a List command, Qedit looks for an LP environment variable, retrieves the value, and uses this as the device name. The lines that would have been printed on the terminal are written to the printer file instead. At the end of the command, Qedit closes the file, which releases it for printing.

The default Qedit listing to the printer is a raw dump of your lines, with or without line numbers. It has no page breaks, no headings, no title, and no page numbers. However, you can override this default with the Set List command.

Listing to Attached Printer

To list to a printer that is attached to your terminal, use List $record. If you want all listings to $lp to go to the attached printer, do Set List Record On and then List $lp. Qedit will use Record mode on your terminal or PC to print on the attached printer. This option opens a file named LPCRT instead of LP. If you are listing to an attached printer from a terminal, your terminal may remain locked after the printout is completed. This generally happens when you have handshaking enabled. (G-H straps set to No). You can do a soft reset to unlock your terminal.

If handshaking is disabled (G-H straps set to Yes), the List command works and returns control to the terminal, but two "S" characters are printed on the terminal. There is currently no known workaround to these problems.

If you have a LaserJet connected to your PC and are using Reflection, you will want to Set Printer-Passthru-Conv No in Reflection. Otherwise you will find that some characters are printing oddly, such as the square block printing as a plus-minus sign. If you are using Reflection for Windows, the above option may be called "Disable Printer Translation" or "Use Host Character Set." As well, you have to select "Bypass Windows Printing" and disable "Auto Form Feed."

You can combine this option with other listing options such as $PCL or $duplex. You cannot interrupt Record mode with Control-Y, but you can do a soft Reset. This unlocks the keyboard and causes the rest of the output to appear on the screen. You can then stop it with Control-Y.

LP Listings with Headings

To have Qedit do a page break every 60 lines and put a heading with a page number on each page, do List $page On $lp (or $record, $lpa, $lpb). To configure "paging" as the default, do Set List Page On. Two lines at the top of each page are used as a heading. The first line contains the page number, the file name (or the last Text file name in the case of Qeditscr), and the time of the listing, and the second line is blank.

In this mode, Qedit also looks for $title, $page, #pragma page, and #pragma title commands in your file and uses them to create page breaks. The optional string parameter of these commands replaces the date and time in the page heading (e.g., $page "Monthly Staff Review"). A $page or $title command without a string clears the title area of the heading.

To vary the number of lines per page, do List $lines *nn*, or use Set List Lines *nn* for a permanent override, where *nn* is a value between 1 and 256. (Assumes Set List Page On.).

```
/set list page on lines 59
```

To print the heading only on the first page, use $lines 0. This causes continuous printing with no page ejects.

```
/list $lp $lines 0 all     {ignores $page too}
```

To perform continuous printing with no automatic page ejects but skip to a new page on $Page directives, use $lines 999.

```
/list $lp $lines 999 all     {skips to a new page on $page only}
```

To drop the file name from the page heading, do Set List Name Off. (Assumes Set List Page On.)

```
/set list page on name off
```

To drop the page numbers from each page, do Set List Num Off. (Assumes Set List Page On.)

```
/set list page on name off num off
```

To drop the title from the heading, do Set List Title Off. (Assumes Set List Page On.)

```
/set list page on title off
```

To drop the two-line heading from each page while still doing page breaks, use Set List to disable the three components of the heading:

```
/set list page on name off num off title off
```

Getting an Even or Odd Number of Pages

There are times when the number of printed pages is important. For example, you could have a printer that is always loaded with pre-printed forms that come in pairs (e.g., Page 1 of 2 and Page 2 of 2) or the paper is folded in certain ways so that a report is easier to tear up and insert into a binder. In both examples, sending a report with an odd number of pages would cause the next output to be on a wrong page.

To prevent this from happening, you can now use the $even or $odd options on the List command and ask Qedit to "round up" the number of pages. The $even option ensures that the output has an even number of pages. Similarly, the $odd option ensures there is an odd number of pages by sending an extra page eject sequence before closing the output file.

These even and odd options are mutually exclusive (i.e., they cannot be both enabled at the same time). If you try use them both on the same command, Qedit uses the last one in the sequence. For example, you can type

```
/List $even $odd $lpa myfile
```

Qedit does not see this as an error and uses the $odd option, ignoring $even.

These options only make sense if you are sending the list to a printer, either attached or spooled. They have no effect when listing the file to the screen. For this reason, you have to specify a destination printer using $lp, $lpa, $lpb, $record or $device.

You can also use one of these options as the default by using the Set List command. Specifying a $-option on the List command overrides the Set value. There is currently no way to completely ignore the Set options. If you want both options to be disabled, you have to issue

```
/Set List Even Off Odd Off
```

prior to the List command.

Double-Spaced Listings

When listing to LP, you can force the result to be double spaced with List $double. This feature can be combined with most of the other features of List, including LT, LQ, and Set List Page On. To make all printer listings double spaced, do Set List Dbl On. LQ on a CCTL file disables the Double option because the CCTL codes in the file control the spacing on the listing.

LaserJet Listings

Qedit has two special options for HP LaserJets: $duplex and $PCL. Duplex means double-sided printing, and PCL means Printer Command Language, which is used to select fonts, spacing, and orientation.

$Duplex for Two-Sided Printing. Some LaserJets can print on both sides of the paper; use List $duplex to enable this option.

```
/list $lp $duplex all
```

PCL = Printer Command Language. All LaserJets have several sizes of character fonts and can print in either landscape or portrait orientation. To help you take advantage of these features, Qedit has a number of PCL codes that can do all the work for you. PCL stands for Printer Command Language, which is the HP standard for printers. To specify a LaserJet option for a single listing, use List $PCL; to configure all listings, use Set List PCL. To disable the special PCL option, use PCL 0. Get a quick on-line listing of the PCL options with

```
/hq set,list
```

Changing Fonts and Orientation

Landscape-Tiny: PCL 1. To list to the LaserJet in the tiny font that prints across the paper sideways (i.e., 16.67 pitch, landscape), use PCL 1.

```
/list $device printer $pcl 1 all
```

Landscape-Regular: PCL 2. To list with the regular Courier font in landscape orientation, use PCL 2.

The Standard: PCL 3. The normal default for LaserJet output is portrait orientation (across the narrow side) with the Courier font. However, once you insert a font cartridge into your LaserJet, it may select one of the cartridge fonts as the default instead of Courier. PCL 3 allows you to select the standard Courier font, even if another font cartridge is installed.

Portrait-Tiny: PCL 4. Some LaserJets provide the tiny "Line printer" font in portrait orientation as well as landscape orientation. PCL 4 selects this option.

A4 Special: PCL 5. To print 80 columns, instead of 77, across A4 paper using the standard Courier typeface, try PCL 5. This tightens the spacing between characters.

Legal-Landscape-Tiny: PCL 6. To print tiny letters in landscape orientation on legal-size paper, use PCL 6.

You can combine PCL 1, 2, 3, 4, 5, and 6 with Page On and Off, with Lines 0, with LQ, with $DBL, with $record, and with $duplex.

Two-Column Listings

If your LaserJet supports "Line printer" font in landscape orientation, you can print listings across the page with two columns of text side by side.

```
/list $lp $pcl 10 all  {two-column listing format}
/lq $rec $pcl 10 1/200
```

If you have a legal-size paper tray, you can use PCL 11 to print two wide columns of 110 characters each on a single piece of paper.

A4-Size Paper

Most of the PCL options, with the exception of PCL 5, were designed and tested with North American letter-size paper. PCL 5 is especially for A4 paper; it reduces the horizontal spacing between characters so that 80 columns of Courier output can fit on a single line. In addition, if you add 2000 to a PCL code, Qedit adjusts the number of rows and columns for that option to match A4 paper. For example, to print two-up landscape on A4 paper, use PCL 2010 instead of PCL 10.

In general, selecting A4 paper gives you more space along the long dimension of the paper and less space along the short dimension. If you are happy with the way letter-size rows and columns work on A4 paper, simply do not add 2000 to the PCL code.

Summary of Qedit PCL Codes

PCL	L/P	Font	A4 Rows	A4 Columns	Letter Rows	Letter Columns	Notes
1	L	lp	58	188	60	175	

2	L	courier	43	110	45	100	
3	P	courier	64	77	60	80	"standard"
4	P	lp	85	128	80	132	
5	P	courier	64	80	60	80	A4-squeeze
6	L	lp	60	223	60	223	legal-size*
10	L	lp	58	95	60	87	two columns
11	L	lp	60	110	60	110	2-up legal*

L/P mean landscape or portrait orientation.

* Note: PCL 6 and 11 were designed to print on North American legal-size paper and will select that size. However, you can see what happens with A4 paper by using 2006 and 2011. Some people have found this useful.

Roman-8 vs. ASCII

The PCL option requests a Roman-8 character set, but some combination font cartridges only supply the ASCII character set (half as many characters means twice as many fonts in a single cartridge). If you ask for landscape Line printer and get landscape Courier instead, your Line printer font probably has the ASCII character set instead of the Roman-8 character set. To request an ASCII font, add 1,000 to the PCL code. For example, if you have a Super Cartridge (55 fonts in one!), use PCL 1001, 1004, 1006, 1010 and 1011. To select both ASCII and A4 paper, add 3000.

Folding Wide Lines

Qedit/Open might have difficulty handling files without Newline delimiters at the end of each line or files with lines longer than 8,172 characters. To be able to access these files, you can use the **$length** option to specify the maximum number of characters you want on each line.

:Listredo Command [LISTREDO/F7]

The :Listredo command displays any of the previous 1,000 commands.

LISTREDO [*start* [/ *stop*]] [;ABS] [;OUT=*file*]
[*string*] [;REL]
[ALL | @] [;UNN]

(Default: display previous 20 commands)

(BJ, F7 and ,, are short for Listredo)

Commands are numbered sequentially from 1 as entered and the last 1,000 are retained. You can display a single command, a range of commands, all 1,000, or all the commands whose name matches the string. You can print the commands with ABSolute line numbers (the default), RELative line numbers (-5/-4), or UNNumbered. The OUT option is not available for Qedit/Open. If you want to redo any of these commands, see :Do, :Redo, and Before.

Examples

```
/listredo 5
/listredo 5/10
/listredo help           {print all Help commands}
/bj                      {historical shorthand!}
/listredo -10            {print last ten commands}
/listredo ALL            {print entire redo stack}
/listredo rm             {print all rm commands}
/listredo rm xx          {print all "rm xx" commands}
/listredo @rm            {print all with "rm" anywhere}
/listredo @;rel          {print all, relative numbers}
```

Notes

The :Listredo command can be abbreviated to ",," or BJ, or can be invoked by the F7 function key. Using F7 to invoke Listredo only works in Line mode, not Visual mode. You cannot use ";" to combine commands on the same line.

:Listundo Command [LISTU]

Displays the complete Undo change log of commands that modified text, starting with the most recent and working backward.

LISTUNDO

Listundo shows the complete Undo change log, including each command, the number of lines updated, deleted, added, or renumbered by that command, and the text lines. Text for deleted lines is preceded by an underscore ("_") as in the Delete command, and the "before" value of lines that were updated has a Greater Than ">".

Commands are printed in reverse order, with the most recent command first. This is the command that would undone by the next Undo command. To stop the Listundo report, use Control-Y.

Examples

```
/listundo
```

LS Command [LS]

Display contents of a directory.

LS names

(Default: current directory)

Qedit has a command called Lsort. Due to Qedit's shorthand command parsing, ls would be interpreted as Lsort. The Lsort command is retained for compatibility with the MPE version of Qedit, but Qedit/Open accepts ls to mean the LINUX ls command.

Examples

```
/ls                  {current directory}
/ls -a               {show hidden files also}
```

Lsort Command [LSO]

Sorts a range of lines.

LSORT *range* [KEYS *keylist*]

LSORT string range [KEYS keylist]

(Q=no display)

(Default: by entire line)

The simplest Lsort command just specifies a range of lines to be sorted and no other parameters. This means to use the entire line as the key and sort the lines into ascending order, printing them once sorted.

To stop Lsort from printing the sorted lines, use LsortQ. The Lsort command can be abbreviated to "lso", "lsq" (quiet), "lst" (template) and "lsj" (justify). "ls" followed by a space executes the LINUX shell command. "ls" followed by any other character is executed as a possible shell command.

Parameters

To sort by some other key fields in the lines (from one to four are supported) or to sort the lines in Descending Order, you need to specify the KEYS *keylist* parameters. The *keylist* consists of one to four keys separated by spaces or commas, with a key consisting of either a column range or a starting column and length:

column , length [DESC]

column / column [DESC]

Ascending Order is assumed by default, but you may specify DESC to sort this key in Descending Order.

Examples

```
/lsort all           {sort entire file}
/lsortq all          {sort without printing}
/lsort 10/33         {sort some lines only}
/lsort 30/last keys 10,5           {col 10 through 14}
/lsort zz keys 10/20               {col 10 through 20}
/lsort 20/last keys 1,10 20,5,desc  {two keys}
```

Merge Command [ME]

Merges an external file into the current workfile by line number. Use Merge to apply source-code "changes-files" containing new and revised text, that are distributed by some application vendors.

MERGE filename [(rangelist)]

(Q=no display, J=Justified)

(Default: *rangelist*: ALL)

MergeQ suppresses printing of the merged lines.

The optional *rangelist* specifies a subset of the external file to merge into the current file.

Examples

```
/text master.src  {start with the master file}
/merge changes    {update changed lines, add new}
```

Notes

To make your own "merge file", create a file that contains edits to be applied to your current workfile. Mark the lines of text that will replace existing lines in your workfile, with the corresponding line numbers. Give new line numbers to any completely new lines of text to be added to your workfile. $Edit Void removes the line number specified in the command and, optionally, lines up to and including a Void= line number. **Warning:** the Void= parameter **cannot** accept a decimal point so, for example, you must enter Qedit line 60.1 as 60100. To delete from line 55 to 60.1, you would use the following:

```
55  $edit void=60100
```

Justified

The default is to replace existing lines with the corresponding line from the external file. The Justified option appends the corresponding line from the external file. Text is appended immediately after the last non-blank character if **Set Work Trailingspaces** is disabled. If Trailingspaces is enabled, text is appended immediately after the last significant trailing space. If the resulting merged line is too long for the current length, the merged line is truncated. Let's say the current workfile contains:

```
abc
def
ghj
```

and the external file contains:

```
1111
2222
3333
```

A MergeJ would result in:

```
abc1111
def2222
ghj3333
```

If the maximum length was 5, the resulting file would be:

```
/mergej myfile
    1     11111
Warning:  Result line will be too long.  Truncating merged text.
    2     22222
Warning:  Result line will be too long.  Truncating merged text.
    3     33333
Warning:  Result line will be too long.  Truncating merged text.
3 lines merged
/l all
    1     abc11
    2     def22
    3     ghj33
```

Modify Command [M]

Editing characters within lines using either Control codes (default Set Mod Robelle), D-I-R-U edits (Set Mod HP). Set mod Qzmod is currently not supported and is mapped to Set Mod HP On.

MODIFY rangelist

(Q=no linenum, T=template)

(Default: *rangelist* = *)

By default, Modify displays the first line and puts the cursor under the first column. You enter an "edit-line" to specify a changes. You use spaces to move the cursor under the word you want to change, then type new characters to replace those in the columns above. For example:

```
/modify 5
   5    Over 2000 computers use Suprtool.  {prints line}
             750                           {you edit it}
   5    Over 2750 computers use Suprtool.  {prints new line}
        <Return>                           {end Modify}
```

Each time you press Return, Modify applies your changes to the line and prints the new result. This cycle continues until you enter only a Return (no more edits).

You use nonprinting Control codes for editing, such as Control-D to delete. If you would prefer to use MPE-style edits (D-I-R-U) instead of Control Codes, do Set Mod HP to reconfigure Modify.

To force the line number onto a separate line, use Set Mod Prompt OFF.

Examples

```
/modify 5/         {modify from line 5 until ^Y or end}
/find "corelate";m {find spelling error and modify line}

/mod "q_flag"      {modify all lines with "q_flag"}
```

Getting into Modify Mode

There are other commands that invoke Modify mode in Qedit:

- Change, when a line overflows or you use CJ.
- Add, when you use the *auto modify* character from Set Zip.
- Before, so that you can revise and redo a previous command.
- Redo, also enables you to revise and redo a previous command.

Edit Functions of Modify

Here are the edit functions of Modify and their Control codes, which may be changed with the Set Modify command.

Function	Key	Purpose
Overwrite	Control-O	Replace characters (default).
Delete	Control-D	Delete characters.
Before	Control-B	Insert characters before a column.
Append	Control-A	Add characters to end of the line.
Divide	Control-V	Divide line in two at this column.
Goof	Control-G	Restart Modify with original line.
Terminate	Control-T	End this edit so you can do another.
Lengthen	Control-L	Same as Append (Control-A).
Insert	Control-^	Same as Before (Control-B).

LINUX reacts to certain control characters which might conflict with the Robelle codes. For example, control-D sends an end-of-file signal to LINUX but is also the delete rest of line in Robelle. You should use the LINUX `stty` program to change the default end-of-file signal. Please see the section "**Error! Reference source not found.**" for more details.

You create Control codes by holding down the Control key while pressing the other key. Most Control codes are invisible and do not move the cursor. In the user manual, the symbol (^) as a prefix stands for the Control key (^-D for Control-D).

Some functions combine two of the Control codes: pressing ^-T then ^-V in the first column of a line *splices* two lines together (and deletes the second line if it's emptied). Actions not restricted to column 1 may be performed at any point on the line.

Function	Key	Col.	Purpose
Splice	^T ^V	1	Fills current line from next line.
Insert Line	^A ^V	1	Adds a blank line *before* current one.
Insert Line	^A ^V		Adds a blank line *after* current line.
Delete Last	^A ^D		Spaces remove characters at end of line.

Replace End	^A ^O		Replaces from end of line (overwrites).
Delete Line	^T ^D	1	Deletes current line.

Overwriting Characters

To overwrite characters in a line, type the new characters underneath the ones to be replaced. There is no need to type a control character; "overwrite" is the default edit function. Once you are in Overwrite mode, you can also use the Space bar to erase the columns that you move through. If you have not yet typed any characters, the Space bar just moves your column position to the right one place. You can get into Overwrite mode at any time while in modify by pressing Control-O. Terminate overwrite mode and go into space- transparency mode by typing Control-T.

Start Over Editing a Line

To correct a Modify mistake, enter the Goof control code (Control-G) and press Return. Qedit restores the line to its original contents and restarts the Modify cycle. Control-G does not undo Splits and Splices.

Doing Several Edits in One Line

You can do more than one edit operation in one edit-line if each edit is clearly separated from the preceding and following ones. When the edits are at different ends of the line, you must Terminate the first function so that you can move the cursor right to the next column. The Terminate control code (Control-T) provides this capability.

The following illustrates where to place your control codes (^ stands for the Control key), even though they will not appear on your screen. The first example capitalizes the "r" in "return", then replaces "in error" with "by mistake", which requires inserting the letters "ke." The second example inserts the word "Goof" and a space at the start of the line, and deletes the last two words at the end of the sentence, adding a final period.

```
/m 13
   13   a return. If you do this in error,      {displays line}
          R                     by mistake     {^codes are: }
 <spaces> R<^T, spaces>          by mista<^B>ke<Return>
   13   a Return. If you do this by mistake,    {redisplays}

/m+1
   14   control code restores the line for you. {displays line}
        Goof                           .        {^codes are: }
    <^B>Goof <^T, spaces>             .<^D, Return>
   14   Goof control code restores the line.    {redisplays}
```

Deleting Characters

To delete characters from the line, starting with the current column position, enter the Delete control code (Control-D). Then space to the

right the number of columns to be deleted. Any remaining characters in the line are left-shifted to fill in the deleted columns.

In all cases, the columns deleted are those immediately above the cursor, regardless of what other functions have been performed previously on the same line. The Delete function is stopped by the first nonblank character, either Return, a printing character to switch back into Overwrite function, or another control code.

LINUX reacts to certain control characters which might conflict with the modify codes. For example, control-D sends an end-of-file signal to LINUX but is also the delete character in modify. You should use the LINUX `stty` program to change the default end-of-file signal. Please see the section "**Error! Reference source not found.**" for more details.

Erasing the Line

To erase from the current column to the end of the line, enter the Delete control code, followed by a Return. If you do this by mistake, the Goof control code restores the line for you.

Inserting Characters

To insert characters in the line before the current column position, enter the Before control code (Control-B). Then type the characters to be inserted. The existing characters starting in the insert column are right-shifted to make room for the new characters.

Adding Characters to the End of a Line

To add characters to the end of the line after the last nonblank character in the line, enter the Append control code (Control-A). Then type the characters to be added. This function is independent of the current column position.

Dividing a Line into Two Lines

The Divide control code (Control-V) splits the current line into two lines at the current column position. If a line number is available, Qedit moves all characters from the current column to the end of the line to a new line that is added after the current line. The Goof function recalls the original contents of the line, but does not delete the new line (neither does Control-Y). See also Divide command.

Splicing Two Lines Together

To splice two lines together, you must be on the first column of the first line you wish to splice. Type Control-T, then Control-V, and quick as a wink, all the characters from the second line are appended to the end of your current one. Qedit moves only as many characters as will fit. If all the characters are moved, the second line, now empty, is deleted. See also the Glue command.

Editing Lines with More Than 80 Columns

To modify long lines (i.e., more than 80 columns), use Set Left and Set Right to define a slice through the lines.

```
/set left 55
/mqt *            {quiet, with template}
+....60...+....70...+....80...+....90...+....100..+....
ubsequent Sales Follow-up - Completion Ratio Report
```

Hpmodify Keys - Reference

Directive	Effect
i	INSERT. If text follows the i, this text is inserted in the current line, starting at the position of the i.
r	REPLACE. If text follows the r, this text replaces the same number of characters in the current line, beginning at the position of the r.
d	DELETE. Deletes a character from the current line for each d specified in the edit line. Note that "d d" does not specify a range as it does in MPE V but simply deletes one character above each d. Multiple d's may be followed by an Insert or Replace operation.
d>	DELETE. Deletes to the end of the current line from the position specified by d>. May be followed by an Insert or Replace operation.
>	APPEND. If text follows the >, this text is appended to the end of the current line. If a > without text is positioned beyond the end of the current line, then a simple replacement is performed instead.
>d	DELETE. Deletes from the end of the current line, right-to-left. Multiple d's and Insert and Replace strings may be specified after > .
>r	REPLACE. Replaces characters at the end of the command line. The last (rightmost) character of the replacement string is at the end of the line.
c	CHANGE. Changes all occurrences of one string to another in the current line starting at the c. The search string and replace string must be properly delimited. A proper delimiter is a nonalphabetic character (such as ' " or /) The substitution is specified as c*delim search-string delim* [*replace-string* [*delim*]]. Omitting the *replace-string* causes occurrences of *search-string* to be deleted, with no substitution.
u	UNDO. A single u in column one cancels the most recent edit of the current line. Using the Undo

	command twice in a row cancels all edits for the current line and re-establishes the original, unedited line. If u is placed anywhere other than column one of the current line, then a simple replacement is performed. Undo makes sense only if you have a line on which you have performed some editing that can be "undone."
other	Simple replacement. Any other character (not i, r, d, d>, >, >d, >r, c, or u) will be put into the current line at the position above where it is placed, replacing any existing character. Simple replacement also occurs for the editing characters i, r, c, or > if they are not followed by text; or if > appears at or beyond the current end of line.

Hpmodify Examples

Edit	Action
u	First occurrence undoes the previous edits. The u must be in column one.
u	Second occurrence undoes all edits on the current line. The u must be in column one.
rxyz	Replaces the current text with xyz starting at the position of r.
xyz	Replaces the current text with xyz starting at the position of x.
ixyz	Inserts xyz into the current line, starting at the position of the i.
ddd	Deletes three characters, one above each d.
d xyz	Deletes a single character above the d, skips one space, then replaces the current text with xyz starting at the position of x.
ddixy	Deletes two characters, then inserts xyz in the current line starting at the position of the i.
d d	Deletes one character above the first d, skips two spaces and deletes a second character above the second d. It does not delete a range of characters, making it unlike the MPE V version of Redo.
d d>xyz	Deletes a single character above the first d, skips two spaces and deletes to the end of the line beginning at the second d, and then places xyz at the end of line.

>xyz	Appends xyz to the end of the current line.
>ddxyz	Deletes the last two characters from the end of the current line and then places xyz at the end of the line.
>rxyz	Replaces the last three characters in the current line with xyz.
>ixyz	Appends xyz to the end of the line. In this case, the i command is superfluous, because > accomplishes the same result. Using >xyz would be sufficient.
c/ab/def	Changes all occurrences of ab to def, starting at c.
c"ab"	Deletes all occurrences of "ab" starting at c.
cxyz	Replace the current text with cxyz, starting at c. Because delimiters have not been specified (as they were in the previous two examples), this is a simple replacement with the four characters.

New Command [N]

Creates a new, empty Qedit workfile and opens it. This can be either an unnamed extra scratch file or a named workfile. The advantages of a workfile are that you can instantly Open and Shut it, and that it compresses your data. You can use Text to make a copy of a Qedit file when you wish to protect the work you have done.

NEW filename [,language [(size)]

NEW

(Default: extra scratch, 3200 lines)

Qedit shuts the current file and builds *filename*, which it then opens for editing. If you leave out *filename*, Qedit creates a new extra scratch file and assigns it a number (1,2,3..) so that you can recognize it in Verify Open and Open ?. Up to eight extra scratch files are allowed (see also the TextJ command). You cannot Exit without discarding or saving any edits you have done in an extra scratch file.

The *language* defaults to the current Set Lang value, but can be overridden.

If you want to force creating a Wide-Jumbo format, you should set the Length to a value larger than 1,000 before issuing the New command.

```
/Set Length 2500
/New newwork
```

These commands create a new permanent workfile called Newwork. If you want to create a new scratch file, enter the New command by itself.

The optional *size* is ignored by Qedit/Open. The maximum number of lines in a Qedit/Open workfile is 99,999,999.

Examples

```
/new                        {create an extra scratch file}
/new memos                  {create an empty file named Memos}
/set lang job               {define file as 80-column records}
/add

/new frankie                {build frankie}
/aq 1=johnny                {memos was shut automatically}
```

Building Workfiles with Text

You can also create new workfiles while doing a Text command.

```
/t frankie=johnny             {build Frankie file ...}
                              {and copy Johnny into it}
```

Open Command [O]

Instantly opens or reopens a Qedit file for editing or browsing, as opposed to the Text command which creates a copy of a file for editing.

OPEN *filename*[,BROWSE|DEFER|NODEFER]

*

*-*n*

?

(Default: edit primary scratch file)

Qedit shuts the current workfile and opens *filename*. The *filename* must exist (see New and Text) and must be a Qedit workfile or scratch file. You cannot Open a Keep file - you must first Text it into a scratch file.

Open *filename*,Browse opens a workfile for browsing in Qedit. You can use the List command, including List-Jumping, Hold, Visual mode HH and ZZ, and any other functions of Qedit which **do not modify the file**. Open-Browse protects you from making unplanned changes to a file.

If you try to Keep the file with its original name i.e. you enter a Keep without a filename, you will get an error.

```
/Open workfile,browse
/Verify Keep
Set Keep Name txtfile
/K
File opened with Browse, please specify a Keep file name
```

You can still force a Keep by specifying an explicit filename as in:

```
/Open workfile,browse
/Keep txtfile
TXTFILE.DATA.ACCT,OLD 80B FA # of records=16
Purge existing file [no]? y
```

Open *filename*,Defer opens the workfile without write access, but acquires write access later if you attempt to modify the file. Set Open Defer On makes Defer the default and Open *filename*,Nodefer overrides that command.

It is important to remember that certain workfile attributes and settings are normally saved when the file is opened with write access. Some of these settings are the ZZ marker, the current line marker (*), and a new default Keep name modified with Set Keep Name. If you open a workfile in Browse mode, these settings are not updated unless the file is re-opened with write access.

To reopen the file most recently accessed, do `open *`; for the file before that do `open *-1`, then `open *-2`, and so. To select from a list of recently accessed files, do `open ?`.

Examples

```
/open mail              {want to edit Mail}
/c "stop"start" @
/open *                 {reopen previous file}
/list all
/open ?                 {select a recent file}
/visual
/open *-1               {select file before last}
/list "function"
/open *-2               {select file before that}
/hold 400/500
/open                   {edit scratch file}
```

Notes

Since you must Open a file before editing, any command that requires an Open file creates a scratch file if none is Open.

If you attempt to Open a file which is not a Qedit workfile, you see a message similar to the following:

```
/open qpart2
Error:  Cannot open a non-Qedit file.  Use Text command.
```

You need to Text this file, not Open it.

The Open Stack

Qedit maintains an Open-Stack of the ten most recently Opened files. One of these is always reserved for the primary scratch file. You can have up to eight extra scratch files (see TextJ and New), which take priority over named workfiles in the Open-Stack. To reopen one of these files, do an `open ?` command. Open ? prints the list and prompts for a relative file number, starting with zero for the most recent (same as Open *).

`Open *-`*n* allows you to open one of the recently accessed files directly. `Open *-2` opens the third file in the list, since zero is the first.

When you open any file it moves to the top of the list and the other files are pushed down one position. The Close command shuts the current workfile and removes it from the list of recently accessed files. This is useful to stop desired file names from dropping off the bottom of the list. If the file is a scratch file, you are prompted to Discard Changes.

Set Open Defer On

If you use Set Open Defer On, the Open command does not acquire write access to a workfile until you make a change to it. The workfile is opened with read access by default, unless Qedit knows you are going to be writing to it (as when Text or Add force an Open). If you only browse through the file, the Last-Mod date does not change. This includes full-screen mode viewing. However, if you make any changes

to the file or use Set Left/Right/Length /Lang, Qedit reopens the workfile with write access.

It is important to remember that certain workfile attributes and settings are normally saved when the file is opened with write access. Some of these settings are the ZZ marker, the current line marker (*), and a new default Keep name modified with Set Keep Name. If you explicitly open a workfile in Browse mode or use Set Open Defer On, these settings are not updated permanently unless the file is re-opened with write access.

You can override the current Set Open Defer value by doing Open *filename*,Defer or Open *filename*,Nodefer.

There are a few error conditions that may occur if you attempt to modify a file because now someone else can edit the file while you have it open. For example, you cannot obtain write access if someone else already has write access to the file. In Visual mode, you may see the error "Unable to reopen file with write access. Concurrent usage/backup?".

If "Error: File open by another Qedit Process" appears when you try to open a file, it means that someone else is editing the file.

If you are working in Visual mode, someone can delete the lines you want to edit after Qedit has displayed them on your screen. If this happens, Qedit does not update your screen and displays this error message: "File has changed since page last displayed. Another user?"

Crash Recovery

Qedit ensures the validity of workfiles after a system crash or program termination. It checks to see whether the file was properly closed the last time. If the file was in the midst of Renumber, Qedit completes the renumber. If the file was in the middle of a Text, Qedit clears the file so you can do the Text over again. In all other cases, Qedit prints a RECOVERY warning and searches through the file to eliminate any duplicate lines. After a RECOVERY, examine the area of lines that you were last editing. A few lines may be missing or out-of-date, but that is all.

File Modification Timestamp

When you use the Text or Keep commands on a file, Qedit stores the file's modification timestamp in the workfile. If you Shut the workfile to do something else, the next time you Open it, Qedit will compare the stored value with the file's current timestamp. If they are different, it means that the original file has changed either since you last worked on it or since the last time you saved your changes. Qedit will alert you to the difference by displaying a message similar to the following:

Warning: Original file has been modified since the

initial Text or last Keep !

The file timestamp can change for a number of reasons. Here are few examples:

- Someone else might have been working on that same file with Qedit and saved their changes before you did.
- The file could have been restored.
- Maybe you used the file to test a program which modified the file in some way.

Because the timestamp message is just a warning, Qedit continues its processing. However, if you want to be sure you are not missing important data, you should compare the contents of the file with your workfile and decide if it is safe to continue editing your copy.

This is one way to compare the files:

- Use Verify Keep and write down the default Keep name
- Keep the workfile under a different name
- Use our Compare bonus program to display the differences between the original file and the new version you just created
- Look at the report and separate the lines that you changed from the ones you did not touch
- If needed, apply changes to your copy so that you do not miss anything important

It is important to remember that certain Qedit commands will shut and open workfiles on your behalf. The timestamp warning might appear when you do not expect it.

By default, timestamp checking on Open is disabled. If you want to change this setting, you can use the Set Open Checktimestamp command.

Proc Command [P]

The Proc command has been disabled in Qedit/Open.

Q Command [Q]

Prints a message on $stdlist.

Q ["*string*"]

(Default: print a blank line)

The *string* of up to 80 characters is printed on $stdlist.

Use the Q command to print prompts from usefiles. This works especially well when you use a file quietly.

:Redo Command [REDO]

Enables you to modify and repeat any of the previous 1,000 command lines.

REDO [*start* [/ *stop*]]

[string]

[ALL | @]

(Default: redo the previous command)

The :Redo command allows you to modify the commands before it executes them. If you don't need to change them, use the :Do command. Commands are numbered sequentially from 1 as entered and the last 1,000 are retained. Use the :Listredo command to display the previous commands. You can redo a single command, a range of commands, or the most recent command whose name matches a string.

The :Redo command uses MPE-style commands (D, I, R, U and >) to modify a line. The following are some common commands. A complete list of commands appears at the end of this section. The default mode is to replace characters. To delete, type DDDD under the characters to be removed. To insert, type I under the insertion spot, then the new characters. To undo your changes, type U. To append to the end of the line, use >xxx. To delete from the end of the line, use >DD. To replace at the end of the line, use >Rxxx. And to erase the rest of the line, use D>. See below for a complete list of edits.

Examples

```
/ls /users/obb        {"bob" is not spelled right}
/users/obb not found
/Redo                 {redo most recent command}
ls /users/obb         {last command is printed}
          bob         {you enter changes to it}
ls /users/bob         {the edited command is shown}
                      {you press Return}

/listredo all
/redo 5             {redo 5th command in stack}
/redo               {redo previous command}
/redo -2            {redo command before previous}
/redo 8/10          {redo 8th through 10th}
/redo -10/          {redo -10 through last}
/redo rm            {redo last rm command}
/redo rm test.c     {redo last "rm test.c"}
/redo @test         {redo last containing "test"}
```

Editing in :Redo

:Redo uses the same edits as the MPE/iX :Redo command, except that control characters in lines are printed as dots "." so that you can see them. Use Set Modify Hpmodify to select these MPE-style edits for all commands. If you prefer the Qedit-style edits, use Set Modify Robelle to select Qedit editing for all commands, including :Redo.

Persistent Redo

Redo commands can be saved in a permanent file and can therefore be used from another session. You can use the Set Redo command to specify a file name to save your redo commands. Please see the Set Redo command for details.

:Reflect Command [REFLECT]

Executes a Reflection command on your PC. Qedit checks whether the command succeeds or fails. :Reflect allows you to control a PC from within your Qedit Usefiles and shell scripts (send and receive files, backup your PC, execute PC programs, etc.).

:REFLECT reflection command

(Defaults: none)

Examples

```
/reflect type mreport.crt
/reflect shell lotus
```

Version of Reflection

The :Reflect command depends on Reflection's ability to accept commands using an escape sequence, and to be able to pass back a status code indicating whether the command succeeded. These features are implemented in the following versions of Reflection:

- Reflection 1 for DOS version 1.40 or later
- Reflection 3/7 for DOS version 1.55 or later
- All versions of Reflection for Windows
- All versions of Reflection for Macintosh

Debugging PC Errors

If the :Reflect command fails, Qedit will display the Reflection error-\code. For an explanation of Reflection error-\codes, refer to the Reflection Command Language reference manual.

Using Line Mode

Some Reflection command files work fine when executed from the Alt-Y command line, but fail (possibly leaving your terminal in a locked state) when invoked with Qedit's :Reflect command.

The reason is that Qedit's :Reflect command sends an escape code to Reflection to invoke the command. Then Qedit waits for Reflection to send back a status code to indicate when the command is finished. While Qedit is waiting for the result code from Reflection, it isn't capable of executing other Qedit commands -- it's already executing a Qedit command! The only thing that Qedit is capable of doing while it's waiting is to execute any shell commands that Reflection might send to the HP 9000. The reason shell commands must be accepted is that Reflection sends a command to run unxlink2 whenever a file transfer is requested.

As long as the command or command file doesn't attempt to *transmit* any data to the HP 9000, :Reflect will probably work the same way as Alt-Y.

For example, here is a Reflection command file that works from Alt-Y, but not from :Reflect.

```
; EXIT.RCL
; This command file gets me out of Qedit, logs me off
; the HP 9000 and exits from Reflection.
;
transmit "exit^M"
wait 0:01:00 for "[no]:"
transmit "yes^M"
wait 0:01:00 for "$"
transmit "exit^M"
wait 0:01:00 for "terminated>"
wait 0:00:05
hardexit
```

Also see the chapter "Qedit Issues and Solutions" for more information.

Renumber Command [REN]

Renumbers a range of lines or the entire workfile.

RENUM [firstline] [maxincr]

[startline / stopline] [maxincr]

(Default: entire file from 1.0 by current increment)

If you specify a range of lines (e.g., 101/102), Qedit spreads out the line numbers in that range to allow as much space as possible between each line. The numbers of the *startline* and *stopline* are not changed.

If you do not specify a range, Qedit renumbers the entire file, starting at 1.0 or from the optional *startline* value.

If you specify a *maxincr* value, Renum will attempt to renumber with that increment. If it must use a smaller value, it will print a warning. If you do not specify a *maxincr* value, Renum attempts to use the current Set Increment value which defaults to 1.0 (except for standard COBOL which is 0.1).

Examples

```
/ren             {assign new numbers to all lines}
/list 10/11      {show current line numbers}
   10     The Renumber command
   10.2   has two basic modes:
   10.21     1.  renumber an entire file
   10.211    2.  spread out a range of lines
   11     to make room for new lines.
/add 10.21       {attempt to add a line}
Out of line numbers.  Suggest Renumber.
/ren 10/11       {spread out line range evenly}
/list 10/11      {check new lines numbers}
   10     The Renumber command
   10.2   has two basic modes:
   10.4     1.  renumber an entire file
   10.6     2.  spread out a range of lines
   11     to make room for new lines.
/add 10.4        {now you can add some lines}
   10.5        (usually from 1.0 by 1.0).
   10.51   //
```

Notes

If you keep adding new lines at the same spot in a file, Qedit will assign incremental line numbers such as 3.01, 3.011, but it cannot add a line between 3.011 and 3.012. The smallest increment between lines is 0.001. When you run out of line numbers, Qedit warns you. You can Renumber a range of lines or the entire file to get around this problem.

Replace Command [R]

Replaces lines with new text, either from Stdinx or from the Hold file.

REPLACE [$HOLD] *rangelist*

(Q=no printing, T=template, J=justified)

(Default: *rangelist* = *)

Replace $hold looks for new lines of text in the Hold file (see the Hold command) and uses each to replace one of the lines of the *rangelist*. Replace without $hold prints each line of *rangelist*, then waits for you to type a new line at the keyboard. **Pressing Return only erases the line!** Replacej indents the new line the same number of columns as the original line. $Hold can be abbreviated to $h.

Examples

```
/rq $hold 50/70     {replace from the Hold file}
/rq $h 50/70        {replace from the Hold file}
/rep 5              {replace line 5 only}
    5     LINE 5      {prints existing contents}
    5     NEW LINE 5  {prompts you with linenum}
```

Column Editing with $Hold

You can use the $hold option of the Replace command to do extensive column editing:

```
/lt @
          ....+....10...+....20...+....30...+....40...
     1    *****************
     2    *   Page One    *
     3    *****************
     4    *****************
     5    *   Page Two    *
     6    *****************
/holdq 4/6      {hold the second page of text}
/deleteq 4/6    {now delete those lines}
/set left 20    {set your left margin to starting column}
/repq $hold 1/3 {overlay from the Hold file}
/set left 1     {don't forget to reset left margin}
/lt @
          ....+....10...+....20...+....30...+....40...
     1    *****************  *****************
     2    *   Page One    *  *   Page Two    *
     3    *****************  *****************
```

You can copy columns of text from one position in a line to another by setting margins with the Set Left and Set Right commands, holding the columns of text that you want to copy, setting new margins, and replacing the new column range with the text in the Hold file.

Set Command [S]

Changes configuration options of Qedit.

SET keyword [value ...]

You can use Qedit in its default mode, as it comes out of the box. To get the most out of Qedit, you will eventually want to try some of the optional features. To see all of the Set options available and their minimal abbreviations, type Verify All at the prompt.

```
/set modify hp                {select MPE-style modify}
/set visual save on update on {full-screen options}
```

Each Set command may specify one *keyword* from among those listed below.

Here is a list of the Set keywords:

Account	Where to find Qedified compilers and help files.
Alias	Redefine Qedit commands or create new commands.
Autocont	Do not abort in batch on errors.
Check	Verify Delete or Justify > 5 lines, hold programs.
Decimal	Apostrophe means Control Character ('7 = Bell).
DL	Reserve memory in DL area for user Procs.
Editinput	Remove line noise; allow Roman-8.
Expandtabs	Expand tab characters into spaces when Texting.
Extentsize	Minimum sectors/extent for Keep and New.
Extprog	Attach an external program such as MPEX to Qedit.
Filename	Override file names on Help, Hint files.
FORTRAN	External files default to FORTRAN, not SPL.
Hints	Disable the "hint of the day".
Hppath	Override default path for cmd/prog files (MPE V).
Increment	Default increment between added lines.
Interactive	Override batch/session mode.
Justify	Margins and options for justifying and centering.
Keep	Format of the next Keep file.
Language	Type of program or text to be kept in this file.
Left	Left margin for edit, list, keep (default=1).
Length	Maximum characters per line for a Lang=Text file.
Lib	Default Lib= for the :Run command.

Limits	Restricting features of Qedit available to user.
List	Format of LP listings; also LJ options.
Modify	Type of modify (Robelle or HP).
Open	Default modes for Open Command (Defer, etc.)
Pattern	Switch back to old pattern-matching.
Priority	Switch Qedit execution to a new MPE subqueue.
Prompt	Replace "/" with new prompt string.
Right	Right margin for edit, list, keep, etc.
RL	Default RL= value for the :Prep command.
Shift	Configure how to up- and down-shift.
Spell	Configure how spell checks lines and words.
Statistics	Print CPU and wall time of each command.
Suspend	Whether to suspend on Exit or not.
Tabs	Set "tab" key and columns; set on terminal.
Term	Adjust number of terminal display columns.
Totals	Print number of lines processed by a command.
UDC	Recognize User Defined Commands in Qedit.
Undo	Disable/enable ability to "undo" changes.
Visual	Full-screen options (save fkeys, update, etc.).
Warnings	Print warning messages (or not!).
Whichcomp	Which COBOL compiler, etc.
Window	Rules for string search (columns, upshift, etc.).
Work	Default size/function of workfiles.
Wraparound	Move words to next line when long line Added.
X	Tag changed lines in COBOL file with string.
Zip	Configure auto-modify, first, last, all, etc.

To configure Qedit to operate as you like best, put your favorite Set commands in a file named /opt/robelle/qeditmgr. These commands will apply to every user that invokes Qedit. If you can't build /opt/robelle/qeditmgr or you don't think your Set options will appeal to everyone, create the file $HOME/.qeditmgr with your personal Set commands.

A typical configuration file for a COBOL shop might look like this:

```
{These are default Qedit values for all users:}
set lang cobolx all on {always use 80 columns}
set x date list off    {mark changed lines with date}
set check on           {verify delete/format of >5 lines}
set vis save 1         {Visual saves function keys}
z=listj */last         {define Z command}
set shift down 3 up 3  {shift everything but strings}
```

Syntax of Set Commands

The syntax descriptions that follow list the initial values. These are also the defaults that are used if you omit values in Set commands. For example:

Set Foo [ON|OFF]

(Default: ON)

(Initially: OFF)

The (imaginary) Foo keyword may be set ON or OFF. Initially when Qedit starts up it is OFF. Thereafter, if you type `Set Foo` without specifying ON or OFF, the default will be as though you had specified ON.

Error Messages

If you type a Set command that Qedit does not understand, you usually get an error message telling you specifically what is wrong, sometimes suggesting valid values. Occasionally you will see the error message

```
Error: Param.
```

This is Qedit's catch-all message for when you have typed something that it doesn't like, and cannot guess what you meant.

Account

Set Account *accountname*

(Initially: same as the Qedit program)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Alias

Set Alias aliasname To aliasdefinition

Qedit commands have priority over any external commands, such as shell commands and scripts. The fact that Qedit commands can be abbreviated to a few characters (e.g., C for Change) and combined with various suffixes (e.g., CQ for Change Quiet) has caused some problems with seemingly different external commands.

The new Set Alias command now allows you to override Qedit's command priority. Aliases are always executed first. For example, "at"

is the abbreviation for Qedit's AddTemplate command (i.e., add new lines with a column template). If you want to use the UNIX "at" command, you can get at it only by explicitly using the exclamation mark prefix (!at).

Using the Alias feature, you can now use

```
/Set Alias "at" to "!at"
```

From that point on, entering "at" would always call the shell command.

The alias name and definition must be enclosed in a string delimiter such as quotes. You must use the same delimiter for both items.

```
/Set Alias "SPJ" to "!ls /home/joe/spj*"            {valid}
/Set Alias \SPJ\ to \!ls /home/joe/spj*\            {valid}
/Set Alias "SPJ" to \!ls /home/joe/spj*\            {invalid}
/Set Alias \SPJ\ to "!ls /home/joe/spj*"            {invalid}
```

The alias name can have up to 50 characters. It can contain only alphabetic characters. Although the alias should not contain numeric digits, special characters or spaces, the Set command does not currently prevent you from using these characters. If you do use them, the alias feature will not work properly. If you use an alias name that has already been defined, the new definition replaces the old one.

The alias definition can contain up to 77 characters and can include one or more commands. The definition can contain any command that can normally be entered at the Qedit prompt, including other aliases.

You can use Qedit's command stacking feature to enter a series of commands and create something that resembles a macro command.

```
Set Alias "Five" to "First;F 'string';List */*+5"
```

The length of all alias names and definitions cannot exceed 2,500 characters.

Stacked commands are separated by a semicolon (;). If you use UNIX commands or shell scripts, you might have to use semicolons to separate parameters. This will confuse Qedit. There are different ways to work around this problem.

You can put the command in another shell script that does not require parameters.

```
/echo find . -name core -exec rm {} \\\; > myscript
/chmod +x myscript
/Set Alias "SPJ" To "myscript"
```

The last option is to enclose the command and its parameters in parentheses.

```
/Set Alias "SPJ" To "L 1;(!find . -name core -exec rm {} \;);V"
```

If the command itself contains parentheses, you will have to use the shell script approach.

Function Key

Set Alias Fkey keynumber To aliasdefinition

You can also assign an alias definition to a function key. Let's say you want the F1 key to perform a series of commands, simply enter

```
/Set Alias Fkey 1 to "ls /home/joe"
```

The function key number can only have a value of 1 through 8. The function key aliases only work in Line mode. In full-screen mode, they are redefined to the standard Visual meanings.

You can define function keys by specifying the escape sequence they transmit. For example, the F1 key sends ESC+P. Thus you could use

```
/Set Decimal On
/Set Alias '27"p" To "ls /home/joe"        {'27 is the ASCII code}
```

Ignorecase

Set Alias Ignorecase [ON | OFF]

(Default: On)

(Initially: Off)

On LINUX, alias names are case-sensitive by default (i.e., spj and SPJ are not the same). You can disable sensitivity with Set Alias Ignorecase On, in which case spj is considered the same as SPJ.

Trace

Set Alias Trace [ON | OFF]

(Default: On)

(Initially: Off)

If you are nesting aliases and are experiencing problems, you can enable the alias trace with Set Alias Trace On. Qedit then displays aliases as it executes them.

Remove

Set Alias *aliasname* OFF

If you want to remove a single alias, you can use Set Alias "SPJ" Off.

Reset

Set Alias Reset

If you want to remove all your current aliases, enter Set Alias Reset.

Autocont

Set Autocont [ON|OFF]

(Default: ON)

(Initially: OFF)

Normally, Qedit aborts in batch mode if errors occur. Set Autocont ON disables this abort. If the ON|OFF parameter is omitted, ON is assumed.

Check

Set Check [[Delete | Justify] ON|OFF]

(Initially: both OFF, Hold Ask)

Causes Qedit to ask for approval before performing certain tasks.

Set Check Delete On asks approval before deleting more than 5 lines. Set Check Justify On asks approval before formatting (i.e., Justify Format or Both) more than 5 lines. Both options are OFF by default. Set Check ON turns them both on and Set Check OFF turns them both off. Or you can adjust them individually.

When Check Delete is ON, you are asked before deleting more than five lines.

```
/dq 1/10
Delete 10 lines [no]? yes
```

Regardless of whether Check is ON or OFF, you can always undo the effects of a Delete or Justify, using the Undo command.

Decimal

Set Decimal [ON|OFF]

(Default: ON)

(Initially: OFF)

If you need to find nonprinting characters, you can enable the Decimal option. When this option is active, character strings in Qedit can refer to characters by giving the ASCII character code in decimal, preceded by an apostrophe:

```
/set decimal on    {enable entry of control codes}
/list '7           {list all lines with Bell}
/c "~" '27 all     {change "~" to Escape}
```

Set Decimal ON disables use of the apostrophe (') as a string delimiter, and the use of ' as part of a string in the Change command.

Whenever you use the apostrophe with Set Decimal On, you have to use a space as a delimiter between the search string and the replacement string. This means that you cannot use the abbreviated syntax, as in

```
/c "abc"def" all
```

Qedit is able to determine that "abc" is the target string and "def" is the replacement string. With Set Decimal On, the space between the target string and the replacement string is mandatory. Also, it is possible to mix ASCII code values and regular characters. Regular characters must be enclosed in another set of string delimiters. For example,

```
/c '27"&d@" '27"&dJ" all   { target=<ESC>&d@, replacement=<ESC>&J }
/l "abc"'13                { target is abc<CR> }
/l '9"ColumnData"'9    { target is <tab>ColumnData<tab> }
```

DL size

Set DL [*size*]

(Default: 132)

(Initially: 132)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Editinput

Set Editinput option value ...

Data ON|OFF

Command ON|OFF

Extend ON|OFF

Asian ON|OFF

(Initially: Data=OFF, Command=OFF, Extend=ON, Asian ON)

Normally Qedit accepts whatever you type as being valid. However, if you are connected to the computer via a phone line you will probably find that strange, nonprinting characters are getting into your files. These are generated by line noise. You can use Set Editinput Data or Set Editinput Command to tell Qedit to remove nonprinting characters from your input. However, nonprinting characters include useful characters such as BELL and ESC. You can explicitly insert nonprinting characters into your text using Set Decimal and Change.

Set Editinput Data ON removes "noise" from text added to your file in Line mode (it has no effect on Visual mode).

Set Editinput Command ON removes "noise" from commands.

If you don't want to edit Roman-8 characters in either Line or Visual mode, use Set Editinput Extend OFF. This tells Qedit to discard the Roman-8 characters as noise, rather than allow them through as valid characters. The default setting is ON for the benefit of European users.

When Extend is ON, UPSHIFT string windows will work on Roman-8 characters (e.g., List "ü" (up)).

Asian terminals use a two-character code for each symbol in the language. When you set Extend ON, you also set Asian ON by default. This validates all possible character codes from 128 to 255, not just 161 to 254 as used by the Roman-8 character set.

If you want Roman-8 characters, but don't want Qedit Visual mode to display undefined control codes (such as decimal 130, which might be included in a file as a printer control), use Set Editinput Asian OFF. Otherwise, some terminals change the value of the codes, and other terminals just drop the codes from the file. When you turn Asian OFF, Roman-8 characters may still be displayed and edited, but control codes from 128 to 160 are displayed as dots (".") with a question mark to the left of the line, indicating that they can only be edited in Line mode, not Visual mode.

Expandtabs

Set Expandtabs ON | OFF

(Initially: Off)

When Qedit encounters tab characters in an external file, it can either copy them as is or it can expand them into the appropriate number of space characters (using the Set Tab Stops value). The default is to leave them as is, in the file. You can enable the removal of tab characters by expansion into spaces through use of Set Expandtabs On. However, there are some applications that use tab characters as field separators in their data files.

Extentsize

Set Extentsize *keepfile* [*workfile*]

(Initially: 100, 30 sectors)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Extprog

Set Extprog [*program* [*parm*] [Com [ON|OFF]]]

(Default: none)

(Initially: none)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Filename

Set Filename Help | Hint | Qzmod *filename*

(Initially: /opt/robelle/help/qedit)

By default, Qedit looks for the help file as /opt/robelle/help/qedit. You may force Qedit to open specific file names with the Set Filename command. The Hint and Qzmod options do not apply to Qedit/Open. They are still accepted for compatibility with the MPE version of Qedit.

```
/set filename /usr/local/help/qedit
```

FORTRAN

Set FORTRAN [ON|OFF]

(Default: ON)

(Initially: OFF)

When Qedit is TEXTing in a file, it must decide what language type that file has. If the file is a Qedit file, there is no problem, because the language type is stored as a field within the file.

If the file is a Keep file, Qedit examines the record length, and position of the sequence number field. Unfortunately, there is no foolproof way to distinguish between SPL, PASCAL and FORTRAN source files, since all have sequence numbers in columns 73-80. If the current language is set to FORTRAN, Qedit treats the external file as FORTRAN. If the current language is not set to FORTRAN (i.e., to JOB, COBOL, SPL, etc.), Qedit treats the file as an SPL (or Pascal) file. If a file is mistakenly created as SPL or Pascal, you can change it to FORTRAN with Set Lang FORTRAN. You can also resolve the ambiguity by specifying the language after the file name when you Text it (e.g., /text abc,fortran).

If you primarily edit FORTRAN source files, you can avoid this problem with Set FORTRAN. When this option is set, Qedit will always resolve decisions on external files in favor of FORTRAN, regardless of the current language setting. You may then have to convert the occasional file from FORTRAN to SPL or Pascal.

Halfbright

Set Halfbright ON|OFF

(Initially: ON)

Certain monitors do not support halfbright display enhancements very well. Some messages and prompts are hardly visible. To prevent Qedit from using halfbright, enter **Set Halfbright Off**.

Hints

Set Hints ON|OFF

(Initially: ON)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Hppath

Set Hppath "*path list*"

(Initially: "!hpgroup,pub,pub.sys")

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Increment

Set Increment *linenum*

(Initially: depends)

The default increment between new lines is 1.000 in SPL, FORTRAN, Pascal, TEXT, RPG, JOB and COBFREE, and 0.100 in standard COBOL. You can override this value with Set Increment. The linenum is a number between 0.001 and 10,000. This increment is also used as the default increment in Renumber and in assigning line numbers to external files that lack them.

Qedit will sometimes pick an increment smaller than your requested one. For example, if you Set Inc 0.2 and do Add 55.2, Qedit will increment by 0.1 based on the number of decimal places in 55.2.

Interactive

Set Interactive [ON|OFF]

(Default: no change)

(Initially: depends)

If you run Qedit from a Session, Set Interactive is ON. If you run Qedit with Stdin or Stdlist redirected, Set Interactive is OFF. When it is OFF, Qedit will abort on any error, will assume the default answer to any question, and will generally act as if there is not an intelligent being typing the commands. When it is ON, Qedit waits for answers to questions and does not trim trailing spaces from input lines (allowing you to enter // plus a space as a data line in the Add command).

Entering Set Interactive with no ON or OFF parameter does not change the current setting.

Justify

Set Justify [*keyword* [*value*] ...]

(Initially: NULL function, TWO OFF)

The Set Justify command allows you to configure Qedit for the type of justify operations that you are going to use most frequently. These are then the defaults.

For example, the command

```
/set justify margin 70 two on null
```

causes

```
/justify both 5       {J=justify, B=both}
```

to be interpreted as

```
/j both margin 70 two on 5
```

See the Justify command for further details.

Keep

Set Keep [*option value*]...

(Default: same as Text file)

Determines the format of the next Keep file. Attributes are taken from the previous Text or Keep, or they are based on the current Set Lang value. Qedit attempts to duplicate the Text file as much as possible when doing the Keep. Use Verify Keep to display the current Set Keep values, including the default file name.

The *option*s you can set for the Keep file are ASCII, CCTL Checktimestamp, Code, Lab, Name, Num, Var, Cobfree and Bytestream. All options are accepted by Qedit/Open for compatibility with the MPE version of Qedit. However, you should only use the CHECKTIMESTAMP, NAME, NUM and VAR options.

Set Keep ASCII ON|OFF

(Initially: ON)

Files can be either ASCII or Binary. Qedit takes this value from the file that you Text, but will revert to ASCII ON for any new workfile. Even though Qedit will create binary files with Keep, it is not recommended for use in editing binary files. The reason is that Qedit treats Carriage Return as end-of-line, which may truncate some records. ASCII files have their records padded with blanks; Binary files are padded with zeros (nulls).

Set Keep Bytestream ON|OFF

(Initially: OFF)

POSIX introduces a new type of file called Bytestream. These files do not necessarily have record structures that are similar to typical files on MPE. Bytestream files come from the UNIX environment. To application programs, they simply appear as a stream of bytes (hence the name). To MPE, these are variable-length files in which each record contains only one byte.

When a Text command is used on an existing bytestream file, Qedit is able to recognize the file and preserve its attributes on a Keep command. To create a new bytestream file, you have to use Set Keep Bytestream On.

Because bytestream is sort of an extension to variable-length files, these two options are closely linked. If you use Set Keep Bytestream On, the Variable option is also enabled. If you use Set Keep Bytestream Off, the Variable option is also disabled. If you use Set Keep Variable Off, the Bytestream option is also disabled. You can still enable Variable by itself, without enabling Bytestream.

Set Keep CCTL ON|OFF

(Initially: OFF)

Ordinary ASCII files have the CCTL value OFF. When CCTL is ON, the first column of each record must contain a carriage control value. Some of the common values are "1" for new page, "+" for overprint, and " " for normal single-space. When Qedit prints a file with CCTL in quiet-mode (i.e., no line numbers and no template), it interprets the carriage control values.

Set Keep Checktimestamp ON|OFF

(Initially: ON)

Qedit stores the file modification timestamp in the workfile. It uses the timestamp to determine whether the file has been modified since either the initial Text command or the last Keep command was used. By default, timestamp checking on Keep is enabled.

If you want to disable this feature, type

```
Set Keep Checktimestamp Off
```

If you wish to see the current saved timestamp, you have to use Verify Info.

```
Saved modification timestamp 2005/10/14  18:29:02
Trailing spaces in workfile are trimmed
```

Set Keep Cobfree ON|OFF

(Initially: On)

Qedit uses the file extension (.cbl, .CBL, .cob or .pco) to identify COBOL source files. The `.pco` extension is typically used to identify

Cobol source files that needs to be processed by the Oracle pre-compiler.

If Qedit detects this attribute, it assumes the lines have a specific format. In particular, it looks for the presence (or absence) of sequence numbers in the first six (6) columns of each line.

If these columns do not contain numeric digits or spaces, Qedit assumes the file is a free-format source file without a sequence number. The file is then assigned the COBFREE language.

The Set Keep Cobfree option controls the format of the file when you Keep it back. If this option is enabled (On), it means you allow Qedit to save files in the COBFREE format (i.e., without sequence numbers). If this option is disabled (Off), it means you don't want to create COBFREE files. When this option is disabled, Qedit converts the file to COBOL, assigns it sequence numbers and writes them to the saved file. A warning is displayed before this occurs.

```
/Keep
Warning: Lines are now numbered.
         Language changed from Cobfree to Cobol.
COBFON.COBSRC.APP,OLD EDTCT # of records=26
Purge existing file [no]?
```

Set Keep Code *nnn*

(Initially: <null>, 0)

Any file can have a special file code to help identify what kind of data it contains. Qedit workfiles, for example, always have a Code of 111, while COBOL source files have a Code of 1052 (EDTCT).

You can create files with any code you like using Set Keep Code and the Keep command. However, the file code cannot be changed if the Language is COBOL or COBOLX.

Set Keep Label *num*

(Initially: 0)

This value is set to the number of user labels attached to the file, when you Text it. Text *filename,***Labels** will copy the user labels into the new file. Keep will append those labels to the file, unless you do Keep *filename,***Nolabels**. If you want to change the number of user labels to be created on the new Keep file, do Set Keep Label *n*.

Set Keep LF ON|OFF

(Initially: ON)

To write Newline delimiters, use Set Keep LF ON. A delimiter is added at the end of each line whether there was one or not in the original file.

To create a file without Newline delimiters at the end of each line, use Set Keep LF OFF. The only Newline characters written to the file are the ones included in the data.

Set Keep Name [*filename*]

(Initially: <null>)

The default name for Keep is the same name as the last Text or full Keep command, if any. A "full" Keep is one without a limiting range or margins. The default is invoked when you do a Keep without any parameters. You can set the default name with this command.

If you do not specify a file name, the default Keep name is erased as if this was a brand new file. If you erase the default Keep name or replace it with a new name, the saved modification timestamp is erased.

Set Keep Num ON|OFF

(Initially: ON)

Keep files may or may not have sequence numbers. In standard COBOL files, the sequence numbers are in columns 1 through 6. In all other files they are in the last eight columns. When Qedit copies in an external file it remembers whether that file was numbered or not (if not, new sequence numbers are assigned to each line in the workfile).

When you set the language to Job or Text, Qedit turns the Num flag Off. This means that default Keeps of these files will be without sequence numbers. You can always override the Qedit default by doing an explicit Set Keep Num prior to the Keep.

Set Keep Var ON|OFF

(Initially: ON)

All LINUX files are inherently variable-length. However, if you turn Set Keep Var Off, Qedit/Open will keep your file with trailing spaces appended to each record to fill them out to the current Set Length value. There will still be a newline character at the end of each record. This appears to be what COBOL expects for a data file.

Language

Set Language *lang*

(Initially: SPL)

The lang codes accepted by Qedit are:

COBOL, COBOLX [ALL], SPL, FORTRAN, Pascal, RPG, Job, Text, Data, CC, CPP, PowerHouse (PH), COBFREE, Html, XML, Java and QSL (Qedit Scripting Language).

Initially when Qedit starts the language is assumed to be SPL, but this may be changed when you Text a file ("SPL" stands for Systems Programming Language, which is an obscure software tool on the original HP e3000 system; files have 80-character records with columns 73-80 containing a sequence number). You can override this default this with Set Lang. When you Set Lang, you also reset the Window, the Length, the Left margin, and the Right margin.

The "language" sets the following file attributes:

1. Increment between lines
2. Number of digits in line number
3. Placement of line number (left or right)
4. Maximum data line length
5. Number of first data column
6. Name of compiler program file
7. Delimiters for Set Window (SMART)
8. Numbered or not for Keeps

The following chart shows the values set for each language:

Lang	1	2	3	4	5	6	7	8
COBOL	0.100	6	Left	66	7	COBOL	Special, not "-"	Yes
COBOLX	0.100	6	Left	74	7	COBOL	Special, not "-"	Yes
SPL	1.000	8	Right	72	1	SPL	Special, not """	Yes
Fortran	1.000	8	Right	72	1	Fortran	Any special	Yes
Pascal	1.000	8	Right	72	1	Pascal	Special, not "_"	Yes
RPG	1.000	8	Right	80	1	RPG	Ignored	No
Job	1.000	8	Right	80	1	Null	Any special	No
Text	1.000	8	Right	256	1	Null	Any special	No
Data	1.000	8	Right	1,000	1	Null	Any special	No

CC	1.000	8	Right	1,000	1	Null	Special, not "_"	No
CPP	1.000	8	Right	1,000	1	Null	Special, not "_"	No
PH	1.000	8	Right	1,000	1	Null	Special, not "-"	No
COBFREE	1.000	8	Right	1,000	1	Null	Special, not "-"	No
HTML	1.000	8	Right	1,000	1	Null	Special	No
XML	1.000	8	Right	1,000	1	Null	Special	No
JAVA	1.000	8	Right	1,000	1	Null	Special, not "_"	No
QSL	1.000	8	Right	1,000	1	Null	Special, not "_"	No

COBOL and COBOLX are identical, except that COBOLX allows data to extend into columns 73-80, while COBOL does not. This is a protection against compile errors for those programmers who do not use columns 73-80 for comments. You can force all COBOL files to be in COBOLX format by using

```
/set lang cobolx all on
```

This is useful when you are using Set X to tag program changes with a string or the date. You can change from a non-COBOL to a COBOL language, if the highest line number in your file is less than or equal to 999.999.

The COBOL and COBOLX languages follow the COBOL standards very carefully. These standards describe the format of a statement. Most, if not all, compilers support the standards. Some compilers, however, allow a source file to be in a different format. Here is a quick summary of the differences between COBOL, COBOLX and COBFREE:

	COBOL	**COBOLX**	**COBFREE**
Line numbers	columns 1-6	columns 1-6	none
Control column	column 7	column 7	column 1
Statements	columns 8-72	columns 8-72	columns 1-1,000
Comments	none	columns 73-80	None

Starting column	7	7	1
Variable length	no	no	Yes
Record length	72	80	1,000

The Data Language setting defaults to 256 characters per record, but it can handle up to 8,172 characters in a Wide-Jumbo workfile. In a workfile of Jumbo format, the limit is actually 1,000. To use Data, your workfile must be in Jumbo or Wide-Jumbo format, which supports longer lines and more of them (99,999,999 instead of 65,535). If a non-Jumbo workfile is open, you will have to shut it before you can use Set Lang Data and create a new workfile. To check whether your open workfile is Jumbo or not, use Verify Open. If you see "No Recall" in the display, you are using an old workfile. If you see "Jumbo" or "W-Jumbo" after the Language value, you are using a Jumbo file.

Because RPG is a column-oriented language, SMART searches on RPG source files are performed in DUMB mode.

In FORTRAN, spaces in the middle of names have no significance (i.e., CUST BOOK is the same as CUSTBOOK).

If a workfile is empty, you can set the Language to anything you like.

When you change Language, you change the maximum line Length. If Length is reduced, as in going from Job to SPL, the lines are not actually truncated to the shorter Length. They are only permanently truncated if you modify the lines. Therefore, you can switch back to the previous Language at once and still recover the full lines. (Note: when you switch from COBOLX to COBOL, lines with comments are actually stripped of their comments.) Of course, when you Keep your file, only the data within the new margins are kept.

Left

Set Left [*n*]

(Default: first column)

Set Left specifies a temporary left margin for your file. Existing data to the left of the margin is not changed (unless you delete a line). When you copy or move a line with Add, the entire line is moved. If you add new lines, they will contain spaces to the left of the margin.

Set Left applies to all Qedit commands, including Visual, Modify, List, and Keep. Don't forget to reset Set Left when you want to Keep a file.

Set Left resets the Set Window columns for string searches. See also Set Right.

Length

Set Length *nn*

(Initially: from file TEXTed)

Most files have a fixed record length determined by the Language setting (e.g., SPL, COBOL, etc.). Workfiles with Language Text or Data can have their maximum line length set to a custom value. "Text" defaults to 256, but can be set to any value between 1 and 256 columns. "Data" defaults to 256 as well, but can be set to lengths of up to 8,172.

Set Length will reset the Set Left/Right margins and the Set Window columns for string searches.

When you reduce the Length, you should treat data beyond the new Length as gone, unless you immediately reset the Length. As soon as you begin modifying lines, Qedit begins reducing lines to their new maximum length. If you wish to reduce the line length temporarily, use Set Right.

Lib

Set Lib G|P|S

(Initially: S)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Limits

Set Limits [*option value*] ...

Sys OFF

Run OFF

Colonreq OFF

Hold *n*

Proc *x*

(Initially: Sys ON, Run ON, Colon OFF, Hold 10, Proc 4)

Set Limits Sys Off disables the execution of shell commands from within Qedit. It also prevents Qedit for Windows users from accessing host commands.

Qedit normally accepts shell commands with or without a prefix (colon or exclamation mark). To enforce the use of a prefix for shell commands, use Set Limits Colonreq ON.

These are one-way options -- once disabled, they cannot be enabled again by the user.

The rest of the options do not apply to Qedit/Open. They are still accepted for compatibility with the MPE version of Qedit.

List

Set List [*option value*] ...

The Set List command controls the format and functions of the List command. The valid options are:

Page ON|OFF	page breaks on List LP
Lines *nn*	lines per page with PAGE ON
Name ON|OFF	file name on each PAGE
Num ON|OFF	number on each PAGE
Title ON|OFF	title on each PAGE
Dbl ON|OFF	double-spacing of List LP
PCL *nn*	LaserJet fonts and orientation
Record ON|OFF	use attached printer via Record Mode
LJ nn	lines per screen for List-Jump
QJ ON|OFF	"quiet" for List-Jumping (no seq#)
Endstop ON|OFF	no "End?" question in List-Jumping.
Even ON|OFF	outputs even number of pages
Odd ON|OFF	outputs odd number of pages
Nearest ON|OFF	displays warning or nearest line

For more information on Set List options, including examples, see the List command. For a quick list of the PCL values and their meanings, see also the Quick-Help: /hq set,list

Maxdata

Set Maxdata *nnnn*

(Initially: no stack expansion)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Modify

Set Modify [*option* [*value*] ...]

Qzmodify | HP | Robelle

Prompt ON|OFF

codes

Set Modify controls what style of line modify is used throughout Qedit. The defaults are Qedit-style (^D for delete) in Modify and Before, with MPE-style (D for delete) in Redo only. Set Mod HP forces MPE-style in all places, while Set Mod Robelle selects Qedit-style and Set Mod Qzmod selects Qzmodify (a "what you see is what you get" version of the Qedit-style), which is not supported in Qedit/Open, so it is mapped to Set Modify HP On. If you type Set Modify with no parameters you go back to the defaults.

You also use Set Modify to control placement of the Modify line number and redefine the Qedit-style control codes.

Prompt Option: Where to Print Line Number. Robelle Modify normally prints the line number on the same line as the data. This makes lines look alike in List, Delete, Add, and Modify, and also makes maintaining your tab stops simpler. On the other hand, placing the line number on a separate line makes it easier to press Control-Y and re-enter edits. Set Mod Prompt OFF separates line and number ("_" represents the cursor):

```
/set modify prompt off
/modify 10.2
   10.2
Now is the time for all good people
_
/set modify prompt on
/modify 10.2
   10.2   Now is the time for all good people
          _
```

You can also use the Quiet option not to see line numbers at all.

Replacing Modify with Hpmodify. If you prefer the MPE-style edits provided in the :Redo command, do Set Modify Hpmodify.

Qedit will accept DDD to delete characters, Ixxx to insert xxx, Rxxx to replace with xxx, and U to undo. Other edits include > to append, >D to delete from the end, >Rxxx to replace from the end, and D> to clear the line. HP-style modify does not support tab stops and always prints the line number on a separate line from the data. See :Redo command for a complete list of edits. Hpmodify applies in Modify, Redo, Before and modify in Change and Add.

Forcing Redo to Use Qedit-Style. If you like the Qedit-style modify better than HP style and want to use it even in Redo, do Set Modify Robelle.

Replacing Modify with Qzmodify. To make Qzmodify the style throughout Qedit, use this command:

SET MODIFY QZMODIFY [TAE|TAEOFF]

(Default: disable Qzmodify)

The TAE options apply only if you have a Telamon Type Ahead Engine:

- TAEOFF means to disable your Type Ahead Engine.
- TAE means to enable your Type Ahead Engine.
- The default is to ignore the Type Ahead Engine.

Open

You can control the behavior of Qedit when opening workfiles. With the first option, you can get Qedit to warn you if the workfile you are working on is not synchronized with the file it is based on. The second option helps you preserve timestamps on workfiles so that you have a better idea when the workfile has actually been accessed and modified.

Set Open Checktimestamp ON|OFF

(Initially: OFF)

Qedit stores the file modification timestamp in the workfile. It uses the timestamp to determine whether the file has been modified since the initial Text command or since the last time the Keep command was used.

By default, timestamp checking on the Open command is disabled. If you want to enable it, type

```
Set Open Checktimestamp On
```

Set Open Defer ON|OFF

(Initially: Off)

The Open command is used to access a Qedit workfile for editing. Normally, the workfile is opened with write access, which updates the "Last Modified Date" of the file, even if you don't actually make any changes to it. However, by doing Set Open Defer On you can instruct Qedit to "defer" the write access until a modification is attempted. Qedit opens the workfile with Read Access initially, then reopens it with Write Access later if it is necessary to post a modification to the file. See the Open command for more details.

It is important to remember that certain workfile attributes and settings are normally saved when the file is opened with write access. Some of these settings are the ZZ marker, the current line marker (*), and the new default Keep name modified with Set Keep Name. If you explicitly open a workfile in Browse mode or use Set Open Defer On, these settings are not updated permanently, unless the file is re-opened with write access.

Pattern

Set Pattern Old|New

(Initially: New)

Qedit uses "@", "#", "?", and "~" to define a pattern to be matched. The original pattern-match logic in Qedit did not allow you to look for a pattern that contained a literal "@". The current pattern-match logic allows "&" as an "escape" character. This means that you can look for any reserved pattern-match character by putting & in front of it. For example,

```
/list "@first&@second@" (pat)
```

Note that the "escape" character does not match the ASCII escape character, whose value is decimal 27 or octal 33. In this case "escape" means the same as the "transparency" character in VPLUS/3000 pattern-matching: the next character following the escape is to be treated as a literal instead of a pattern-match metacharacter.

Two other characters have been reserved for future use: ^ and !.

To reset Qedit to the old pattern-match logic, use Set Pattern Old (the default is Set Pattern New).

Priority

Set Priority CS | DS | ES

(Initially: logon priority)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Prompt

Set Prompt "*string*"

(Initially: "qux/")

The default prompt string is "qux/", but you can change that with Set Prompt.

```
set prompt "Qedit /"
set prompt "Sys2 /"
```

Redo

Set Redo [*filename*]

(Default: none)

(Initially: temporary file)

Commands entered at the Qedit prompt are saved in something called the redo stack. You can recall commands from this stack by using other commands such as Before, Do and Redo. By default, the redo stack is stored in a temporary file and discarded as soon as you exit Qedit. This does no allow the stack to be preserved across Qedit invocations.

Set Redo allows you to assign a permanent file as the redo stack, allowing the stack to be available for future Qedit invocations. To assign the Myredo file as a persistent redo stack, enter

```
/Set Redo Myredo
```

If the file does not exist, Qedit creates it. Otherwise, Qedit uses the existing file. All your subsequent commands are written to the persistent redo stack. The setting is valid for the duration of the Qedit session. As soon as you exit Qedit, the setting is discarded. Next time you run Qedit, you will get the temporary stack. If you want to use a persistent stack every time you run Qedit, you have to insert the Set Redo command in one of the Qeditmgr files.

If the file name is not qualified, the redo stack is created in the current working directory. This may be desirable if you want to have separate stacks. If you prefer to always use the same persistent stacks, you should qualify the name.

The Verify command shows which stack is currently in use. If it shows <temporary>, then Qedit is using the default stack. Anything else is the name of the file used on the Set Redo command.

Concurrency

When Qedit uses the default, the temporary stack is only accessible to that particular instance of Qedit. You can run as many Qedit instances as you need, and each one gets its own redo stack. You will never have concurrency problems.

If you start using a persistent redo stack, however, you might start running into concurrency problems. A persistent redo stack can be used only by one Qedit instance at a time. If you try to use a persistent redo stack that is already in use, you will get the following message:

```
/Set Redo Myredo
The redo file is already in use.
Unable to open file for REDO stack
```

In this situation, Qedit continues to use the redo stack active at the time and lets you continue working as normal.

Suprtool, STExport and Suprlink also have the ability to have permanent redo stacks. It is advisable to have separate redo stacks for each product, because they will write commands to each other's redo stack if you supply the same file name.

For example if you use the command

```
set redo myredo
```

you will have a redo stack called Myredo for your Qedit commands. If you exit Qedit and run Suprtool and supply the same Set Redo command, your Suprtool commands will be written to the same file that is used for your Qedit commands.

This command is ignored if Qedit is run in server mode.

Right

Set Right [*n*]

(Default: same as Set Length)

(Initially: same as Set Length)

Set Right fixes a right margin for listing and editing lines in your workfile. Any existing data to the right of the margin is retained unchanged while you edit to the left of the margin. Set Right also resets the Set Window columns. See Set Left for setting the other margin.

Remember, the left and right margins apply to most commands, including Visual and Keep. To reset the margin to the far right edge, Set Right with no parameter.

RL file name

Set RL [*filename*]

(Default: none)

(Initially: none)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Shift

Set Shift [DOWN *n*] [UP *n*]

(Default: none)

(Initially: both 0)

Configures string logic for the built-in PROCedures, DOWN and UP. Valid values are 0 through 4:

0	not configured
1	shift every character in the line
2	ignore characters within double quotes
3	ignore characters within single quotes

4 ignore characters within either single or double quotes

Spell

Set Spell [*option value*]...

(Default: <null>)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Statistics

Set Statistics [ON|OFF]

(Default: OFF)

(Initially: OFF)

If you turn Set Stat ON, Qedit prints the CPU and wall time after each command.

Stringdelimiters

Set Stringdelimiters POSIX | *"DelimiterList"*

(Initially: |\~%:'")

The initial list indicates the characters that can be used as valid delimiters.

The single quote (') is removed from the list if Set Decimal is enabled (On). Quote characters (") are always valid delimiters (i.e., they cannot be removed from the list).

From full-screen mode's homeline, a tilde always represents the most recently accessed line number. If the tilde is removed from the delimiter list, it also becomes a reference in line-mode to full-screen's mode most recently accessed line.

The delimiter list itself must be enclosed between a pair of valid delimiters. The new delimiters must be chosen from the initial list. If you do not remember what the initial list is, simply enter the Set String command with a letter or a numeric digit as a list. For example,

```
/Set String "a"
Error:  Not an acceptable quote char: a
        select from |\~%:'"
```

You can reduce the list to just a few characters. If you want to reduce it to just a colon (:) and a number sign (#), enter:

```
Set String ":#"
```

From that point on, only quotes, colons and number signs can surround a string.

```
/List "filename"
/Find #procedure#
/Delete :badline:
/Change 1/7 \oldtext\ @       {this is invalid now}
```

The Posix option allows you to easily bring the delimiter list down to three characters: quotation marks ("), a backslash (\) and a colon (:). This option is useful when working with file names that contain a lot of special characters. It reduces the number of parsing errors.

There is no easy way to bring the defaults back. You have to enter the Set String command with all the characters in the initial list.

Tabs

Set Tabs ^*char* HP [ON|OFF]

(Default: Control-I, HP ON)

When you enter lines in Add, Modify, or Replace, Qedit looks for and interprets "tab" keys. Each time Qedit finds a "tab", it fills the input line with blanks to the next tab position. The default positions are every eight columns. If there are no more positions, Qedit terminates the current line and saves the remaining text for the next line.

Using Set Tabs, you can define the logical "tab" key to be any nonprinting control code such as BELL (^G, decimal 7) or a printing character such as tilde (~). Control-I is the default because it is the character most commonly used as the hardware TAB key on terminals. All HP terminals generate a Control-I when TAB is pressed.

```
/set tabs ^i
/set tabs "~"
```

Set Tabs Hp Off tells Qedit not to set physical tab stops on your terminal (for example it does not work on 2640 or non-HP terminals). With Set Tab Hp On (the default), Qedit will update your terminal's tab stops at once. With Hp On, each time you switch from Add to AQ (or any similar change that would shift the tabs left or right on the screen), Qedit also resets the tab stops.

When using the TAB Key, remember that you must not backspace past the last tab stop. If you do, Qedit will never see the TAB key.

Set Tabs STOP *columns* | NULL | *nn nn nn nn* **...**

(Default: every 8 columns

NULL means no tabs)

By default, Qedit sets the tab stops every 10 columns (MPE) or 8 columns (LINUX). You can override this with Set Tabs NULL to set no tab stops, Set Tabs STOP *n* (every 2 to 15 columns), or Set Tabs with a custom list of column numbers. The maximum number of custom tab stops is 32. Remember that the columns of input text are numbered differently depending on the source language. In SPL, Pascal, FORTRAN, RPG, Text, Data and Job, the first column is numbered 1; in standard COBOL, it is 7. You cannot set a tab in the first column.

```
/set tabs stop 8     {every 8 columns (9 17 25 33 ...)}
/set tabs 5 10 15    {SPL,FORTRAN,RPG,Job,Text,Pas}
/set tabs 12 16 20   {COBOL}
/set tabs null       {cancel all tabs}
```

Term

Set Term Columns *nnn*

(Default: 80)

(Initially: 80)

When you run Qedit, it tries to determine the number of columns in the display width of your terminal. The default is 80. You can override this value by setting the display width manually and putting the correct value in the RCRTWIDTH variable. If the variable is not set, Qedit queries your terminal for the width. If you change it manually from within Qedit, you can force a re-query by doing **Set Visual Stop**. However, there is an easier way.

On most terminals, Set Term Columns *nnn* adjusts the display width of your terminal. You must be on an HP-type terminal whose width can be varied, and the column value *nnn* can be between 80 and 999. It is better to use this command to change the number of columns than to do it manually because the command also adjusts your terminal listing file width, and other parameters within Qedit.

Set Term Columns is effective only for Line mode. When you enter Visual mode, Qedit may adjust your display width to suit the file being edited and resets the width when you exit completely from Visual mode or Qedit.

If you have set RCRTMODEL to 1234, Qedit assumes the terminal or emulator has limited capabilities. Qedit assumes the display width can only be changed manually. So, if Set Term Columns is used, Qedit displays:

```
Please change display width and press Enter:
```

and waits for confirmation from the user.

When you execute a command via the Home line and find yourself at the "Next Visual?" prompt, Qedit may not have reset your display

width because you often immediately press Return to go back into Visual mode. Flipping the width frequently is slow, erases your display memory, and sometimes causes irritating screen flicker.

Text

Set Text Exclusive ON|OFF Cobolfixed ON|OFF

(Initial: Exclusive OFF, Cobolfixed OFF)

Exclusive Access Control

When you text in a file, Qedit creates a workfile and copies the contents of the original file into it. The original file is then closed. This means that other users on the system can text in the file and make changes of their own. This is great for concurrency but not so great for version control.

A new option, Set Text Exclusive, provides increased control over files that you are editing. To enable, simply enter:

```
/Set Text Exclusive On
```

When this option is enabled, files that you text in are kept open for read-only access. This means the files are still accessible to compilers and other programs with non-conflicting access including Qedit with Set Text Exclusive disabled. In the latter case, a user will be able to text the file in but will not be able to save changes with a Keep command. When Set Text Exclusive is enabled, a user requires read and write permissions to be able to Text in a file. If he only has read permission, he has to use the **Browse** option on the **Text** command even if the file is not currently accessed.

Once Set Text Exclusive is enabled for all users and a particular file is being worked on, subsequent Text commands immediately fail with:

```
Error:  File open by another Qedit process
```

On a system where Qedit is the editor of choice, we recommend that Set Text Exclusive be inserted in the /opt/robelle/qeditmgr file.

Once a file has been texted in, the user retains control over it. The file is released when:

- another file is texted in
- the workfile is closed explicitly by a Shut command or implicitly by a New or Open command
- the workfile is purged e.g. purge *
- Qedit is terminated

All these operations signal Qedit that the work is done on this file. When the workfile is shut (explicitly or implicitly), Qedit tries to clear

its contents. If the file is clean (i.e., has not been modified), the file is erased. If the file has been modified, Qedit prompts for a confirmation:

```
/shut
Reminder: you have not saved the changes to /home/bob/testisql.c
/var/tmp/qscr.CAAa09829
Clear file [no]?
```

If you answer No, nothing happens. The workfile remains open, the original file is still in use and a warning is displayed.

```
File NOT cleared
Files still open. When Text Exclusive is On, workfile must be cleared
to Shut.
```

If you answer Yes, the workfile is cleared and the original file is released. This accomplishes two things:

- releases the file so it can be used by someone else and does not remain blocked
- forces the user to stop and decide what should be done with the changes
- forces the user to text the file in again to make sure he has the latest version

Fixed-length Cobol Source Files

By default, all UNIX files are processed as variable-length files. If needed, you can override this option using **Set Keep Var OFF**. Some Cobol compilers prefer to have fixed-length records. It can quickly become tedious to enter the Set Keep command after every **Text** command, not to mention the likelihood of forgetting to do it.

If you wish to force all Cobol source files to be processed as fixed-length files, use **Set Text Cobolfixed ON**. Every Cobol source texted in from that point will be fixed-length. If a file has already been texted in, the **Keep** command will switch to fixed-length records automatically. Qedit displays a warning in this case.

```
qux/v text
Set Text Exclusive OFF Cobolfixed OFF
qux/t mysource.cob
26 lines in file
qux/v k
Set Keep Ascii OFF Cctl OFF COde 0 Lab 0 Num ON Var ON Checktimestamp
ON
Set Keep COBfree ON NAme /users/robdev/qedit/test/file1CobFixed
Set Keep LF ON
qux/s text cobolfixed on
qux/k testcob.txt
Warning:  Set Text Cobolfixed is On. File will have fixed-length
records.
/users/robdev/qedit/testcob.txt #Records = 26
Purge existing file [no]? Y

qux/set keep var on
qux/t mysource.cob
26 lines in file
qux/v k
Set Keep Ascii OFF Cctl OFF COde 0 Lab 0 Num ON Var OFF Checktimestamp
ON
Set Keep COBfree ON NAme /users/robdev/qedit/test/file1CobFixed
Set Keep LF ON
```

Totals

Set Totals [ON|OFF]

(Default: ON)

(Initially: ON)

Shows the number of lines changed, deleted, added, texted and moved by each command.

The total line is considered a "warning" or status-type message. Therefore, Set Warnings Off will disable Set Totals, as will Option Nowarn in a User Command.

UDC

Set UDC [ON|OFF|*filename*] [LOCK]

(Default: ON)

(Initially: OFF)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Undo

Set Undo ON|OFF

(Initially: ON in session, OFF in batch)

"Undo" is the ability to cancel the effect of previous commands that modified your file. By default, Undo is enabled for interactive use and disabled in batch use of Qedit.

Set Undo allows you to override that default, or even disable Undo around some very large editing tasks, to speed it up.

Varsub

Set Varsub ON | OFF

(Default: Off)

When this option is enabled, Qedit parses entered commands looking for variable names. If a variable name is found and currently exists, its value is substituted before the command is executed. If the variable does not exist, the variable name is left unchanged.

Warning: The trailing comments limitation is an incompatibility with older versions.

Qedit commands are added to the Redo stack before the substitution occurs i.e. with the variable name. So, if the variable value changes between the time the command is entered and the time it is retrieved from the stack, the results may be different. It's also important to note that commands related to Redo stack operations such as **Listredo**, **Do**, **Before** can not have trailing comments enclosed in curly braces anymore. The comments are not removed and likely cause a syntax error.

```
/listredo  { see which commands I have entered so far }
Bad option, expecting ;UNN ;ABS ;REL or ;OUT
/listredo
     1) t testisql
     2) l "$myvar"
     3) s varsub on
     4) l "$myvar"
     5) setvar myvar "qed"
     6) l "$myvar"
     7) LISTREDO  { SEE WHICH COMMANDS I HAVE ENTERED SO FAR }
```

Variable names are identified by a leading dollar sign "$". For example, `$HOME` is replaced with the current value of the HOME environment variable. Some Qedit commands such as List have an extensive series of $-options which, as their name implies, also start with a dollar sign. These options have precedence over environment variables. In other words, if a variable has the same name as a $-option, the substitution does not occur. The only workaround is to change the name of the variable to something that does not conflict.

If you wish to prevent variable substitution and have Qedit interpret the dollar sign at face value, insert a backslash immediately in front of it as in `\$HOME`.

The tilde is a special character with different meanings in Qedit. Among other things, it can be a string delimiter or a shortcut pointing

to the most recent current line in full-screen mode. In LINUX shells, it's also commonly used to designate the user's home directory.

Here's how Qedit handles the tilde character. If it's still part of the string delimiter list (Verify Stringdelimiter), it is used as such. If it's not part of the list and is entered by itself on a line, it's interpreted as the most recent current line of full-screen mode. If it's not part of the list, Set Varsub is enabled and is used anywhere else in a command, it's replaced with $HOME. The Varsub feature would then substitute the appropriate value.

Set Varsub On automatically removes the tilde from the string delimiter list.

Visual

Set Visual *keyword* [*value*] ...

(Default: see Visual)

Set visual command is currently disabled.

Labels in Line Mode

This is not a Set command, but an environment variable value.

Normally, Qedit always displays the modes keys except within Visual mode. You have the option of displaying the User Keys instead, or removing the labels from the screen. This is done by setting a shell variable before running Qedit:

```
$RLABELDEFAULT=2; export RLABELDEFAULT
%setenv RLABELDEFAULT 2                {C shell}
```

Valid values for this variable are as follows:

0 don't care, Qedit displays modes

1 terminal has NO labels (2645)

2 display user keys

3 display modes keys

4 remove labels from screen

5 display default F1-F8 key labels

6 display the Qedit labels

These values define which key labels will be displayed when you are in Line mode rather than Screen mode.

Technical Notes

Qedit turns echo off (echo is reset to its previous state on exit), disables the Break key, and disables messages from other users (:Setmsg OFF on MPE and mesg n on LINUX). Visual disables your Type Ahead

Engine (if you have one and have not done Set Vis TAE Off), and puts your HP terminal into block-mode, page-mode, but with Format off. Qedit loads the function keys with their default values, and writes descriptive labels for them.

Warnings

Set Warnings [ON|OFF]

(Default: OFF)

(Initially: ON)

When you put commands in a usefile for an end-user, it is often irritating to have Qedit print numerous warnings and status messages (i.e., Shut Qeditscr, * = 55, Warning: Noline, etc.). Set Warnings OFF will suppress all of those warnings. It also suppresses printing the line when you enter a line number to move the current position (i.e., /55 sets * to 55, but does not print line 55).

Whichcomp

Set Whichcomp *keyword value ...*

(Initially: COBOL, FORTRAN 66, Pascal V, IN Robelle)

This option does not apply to Qedit/Open. It is still accepted for compatibility with the MPE version of Qedit.

Window

Set Window ([*window*])

(Default: all columns, exact match)

Set Window establishes the default window, or conditions, for string searches in all Qedit commands. You can override the default by specifying an explicit window in any command (e.g., `list ".BEGINKEY" (1/10 UPS)`). Once a window is set, it remains in effect until the next Set Window command. See the Change command and the "Glossary" for further details on window.

The window itself consists of two parts: a range of *column* numbers to search, and four independently enabled options that determine how to select a line.

([column / column] [option ...])

A *column* is a number between the Left and Right margins of the file. Qedit searches only the specified range. An *option* is one or more of these:

[NO]Match	select lines with[out] string
[NO]Upshift	upshift before searching [or not]
[NO]Smart	ensure match is a "symbol" [or not]
[NO]Pattern	string is a pattern to find [or not]
[NO]Regexp	string is a regular expression to find [or not]

The default window is all columns, Nosmart, Noupshift, Match, Nopattern and Noregexp.

A pattern may include at-signs (@) to match anything, # to match a single numeric character, ? to match a single alpha-numeric, and tilde (~, wavy line) to match zero or more blanks. Any other character must be matched exactly. (To match a pattern character itself, precede it with an ampersand: "& ".) For example, to look for "QEDIT" followed by "TOOL" in the same line, use:

```
/set window (pattern upshift)
/list "@Qedit@Tool@"
```

Either or both parts of the *window* can be Set in one command:

```
/set window (1/10)
/set window (smart upshift)
/set window (1/20 upshift)
/set window (pattern)
```

To reset the *window* to the defaults, enter:

```
/set window ( )
```

Work

Set Work keyword value **...**

(Initially: Block 8, Temp ON, Labels OFF,
Jumbo ON, Random ON, Trailingspaces ON, Size 3200)

Set Work specifies the default size, attributes and functions of Qedit workfiles. Most of Set Work does not apply to Qedit/Open. However, Set Work Jumbo, Set Work Random and Set Work Trailingspaces do apply. The syntax of Set Work is as follows:

Set WORK [*options*]

Jumbo	ON | OFF	Control use of Jumbo workfiles	default ON
Random	ON | OFF	Control use of random scratch file name	default ON

Trailingspaces	ON | OFF	Preserve or remove trailing spaces	default ON

Jumbo. Jumbo Off disables use of Jumbo workfiles. It can also be used if you want to build an original format workfile. For example,

```
/set work jumbo off
/new oldfmt
/set work jumbo on
```

Workfile. By default, Qedit creates a workfile named /var/tmp/qscr.*xxxxx* whenever it needs it. /var/tmp is used by default. If you want to specify a different location, enter the new path name in the TMPDIR environment variable. Keep in mind that Qedit works with absolute filenames and these names can not have more than 240 characters.

```
TMPDIR=/home/user1/tmp
export TMPDIR
```

You can force Qedit to use only the file named QEDITSCR by using Set Work Random Off.

Trailing Spaces. By default, Qedit preserves trailing spaces on all lines in a variable-length file. Set Work Trailingspaces ON requests that Qedit preserves trailing spaces and make them significant characters. The option also allows creation of odd-length lines.

Once enabled, all workfiles created or opened from that point will have trailing spaces preserved. To check the current status, do:

```
/Verify Work       { Checks global setting }
Set WOrk Jumbo ON Block 8 Labels OFF Temp ON Size 3200 Random ON
Set WOrk TRailingspaces ON
/Verify Keep       { Checks current workfile }
Set Keep Ascii OFF Cctl OFF COde 0 Lab 0 Num OFF Var ON Checktimestamp
ON
Set Keep COBfree ON NAme /home/user1/afile.txt
Set Keep LF ON
/Verify Info
Saved modification timestamp 2003/04/30  13:23:17
Trailing spaces preserved
```

The last line shows that trailing spaces are preserved in this workfile. If the option is disabled, that line reads `Trailing spaces trimmed`. Disabling the global setting with Set Work Trailing Off does not disable the option in the workfile. You have to clear the workfile after disabling it.

The Trailingspaces setting is stored in the workfile so it's recognized when the file is opened in the future. These workfiles may contain data specific to Trailingspaces. This may cause unexpected behavior if opened with versions prior to 5.4.11. Because trailing spaces are now treated as significant characters, Keep files created from these

workfiles may be different from Keep files created with an older version.

Wraparound

Set Wraparound [*chars* | ON|OFF]

(Default: ON)

(Initially: OFF)

The Wraparound option is intended to make line-overflow in the Add command more friendly. When it is enabled and a line-overflow occurs during entry of new lines, Qedit splits the long line between two "words" and prompts you with the overflow words on the next line. An appropriate continuation line is generated for FORTRAN and COBOL source files. There is no wraparound capability in Visual mode, due to limitations of the HP terminals. The Reflection for DOS terminal emulator, however, can do wraparound in Visual mode. See Set Visual Wrap for details.

The *chars* option allows you to specify the maximum number of characters you will be able to type before pressing the Return key. You can specify any number of *chars* between 150 and 5000. When Wraparound is ON, and no *chars* parameter is specified, the default maximum number of characters that you can type before pressing Return is 256.

When you do an Add command, you can "burst" enter an entire page without looking at the screen. Do not press Return at the end of each line -- just keep typing. Qedit will put the words into lines for you. Press Return once only at the end of each page of text.

At the end of a paragraph (or any other time that you need to do an "end of line"), type Control-C and start typing the next line. Do not put a space after the Control-C unless you want the next line indented. For a blank line, press Control-C twice in succession.

You end the Add command as always by entering "//". Then you may use Visual or Modify to correct any typing mistakes you may have made. Qedit will fill the words into lines that are less than or equal to the current Set Length value. To create lines of a specific length, use Set Lang Data and Set Length.

X

Set X keyword value **...**

(J=justified)

(Initially: <null> List ON Tab OFF Local OFF Global OFF)

Set X configures automatic tagging of source changes in COBOL programs. The syntax of Set X is as follows:

Set X [*options*]

["xx"][dateform]["xx"]	define the tag content	default is a null string
List ON | OFF	control the display of tag columns	default ON
Tab ON | OFF	allow manual editing of tag columns	default OFF
Local ON | OFF	tag value saved in workfile	default OFF
Global ON | OFF	allow use of local tags	default OFF
Null	reset global and local tags	

To check on the current tag value and options, use Verify X.

If you want all COBOL changes to be tagged, all files must be have Set Lang Cobolx, not Set Lang Cobol. You can enforce this for all users by putting Set Lang Cobolx All On into your Qeditmgr file.

Tag format. The Set X command allows several formats for the date tag, plus the ability to replace, precede or follow the date with a short string. Once you have configured your "X" tag, Qedit will automatically mark all changed lines in COBOLX files with that tag in columns 73 to 80.

The *dateform* parameter can be any of these options:

Keyword	Sample
DATE	22 NOV99
DDMMMYY	22 Nov99
CCYYMMDD	19991122
YYMMDD	991122
MMDDYY	112299
DDMMYY	221199

DDMMMYY and CCYYMMDD occupy 8 characters, but YYMMDD, MMDDYY and DDMMYY occupy only 6. Therefore, the last three

can be combined with a string giving your initials, before or after today's date.

```
/set x "rg" yymmdd       {tag is "rg991122" }
```

Null vs Blanks

Entering Set X without parameters, Set X Null, or Set X "" effectively turns off the tagging feature. Tags on modified lines are not changed. Lines without tags do not get one. Lines that already have tags retain their current values.

This is different from setting the value to blanks, as in Set X " ". With this setting, tags on modified lines are actually cleared.

List. The List option tells whether the comment tag should be shown during normal editing and listing of lines. The default value is ON, but you can disable listing with S X List OFF. Even though the comment tag is not listed, it is still part of the line and is retained when you Text or Keep the file.

When you edit a COBOLX file in Visual, Qedit sets the right margin in column 72 (instead of column 80). In this way, you can see the comment field (columns 73 through 80) but it won't shift left when you delete characters.

Line Overflow

Tagging can be disabled by specifying an empty string.

```
Set X Null
Set X ""
```

While disabled, the text and tag areas are treated as one. As such, edit commands, such as Change, are applied to the complete line.

Also, if a tag is specified and the List option is On, tag values are treated as part of the text.

If a line has a tag value and an edit operation, such as Change or Modify, causes the line to expand, Qedit reports an overflow error. To avoid this, you can Set X to Null, but you would have to remember the previous setting. A better solution is to turn the List option Off temporarily. The X value is preserved, but the tag area cannot be edited.

Margins. For those users who still must enter and edit the tag field manually, Set X Tab On puts Qedit's Visual right margin at column 80 instead of column 72. This makes it much easier to edit those columns because you can tab to them.

Local Tag. Users can define a tag that is specific to the workfile currently opened. The local tag value is stored in the Qedit control blocks. Thus, the local tag is preserved when you Shut the workfile.

You can also control the tag display for a specific workfile with the List option.

To enable the local tag option, simply enter

```
/Set X Local On
```

From that point, any changes to the tag are recorded in the workfile. The statement above sets the local tag to a null value. You can specify the new value on a similar statement so that it can be used immediately. Because a local tag is workfile-specific, if you switch to a different workfile, the local tag option is automatically disabled and Qedit starts to use the default tag again.

If you want to stop using the local tag, enter Set X Local Off. This clears the local tag value and Qedit starts using the default default tag. Enabling the local option again does not return the tag to its previous value.

If you are strictly using the Text and Keep commands to edit your source files, the information is lost as soon as the workfile is purged or cleared.

Global. By default, users can define their own local COBOL tag. If this is undesirable, system managers can enforce the use of a single tag for all COBOL files by using

```
/Set X Global On
```

Once enabled, users are not allowed to use the Local option of the Set X command. They can still use the Set X command, but only the global tag value can be changed.

To allow the use of local COBOL tags again, simply enter

```
/Set X Global Off
```

The global tag has priority over any local tag. If you are accessing a workfile with a local tag and you disable the Global option, Qedit resumes using the saved local tag.

```
/Set X "localtag" Local On
/Verify X
Set X "localtag" Local On Default "ME990204" List ON Tab OFF

/Set X Global On
/Verify X
Set X "ME990204" Global On List ON Tab OFF

/Set X Global Off
/Verify X
Set X "localtag" Local On Default "ME990204" List ON Tab OFF
```

When the local option is enabled, the first tag shown on the Verify output is the local value. It is followed by the words Local On. The global tag is displayed after the keyword Default.

Null. If you want to reset all COBOL tags currently in use (global and local), use the Set X Null command.

Change Confirmation. The justified option, "SetJ", displays the current X values including the active tag, the default tag and the local tag settings. It applies the changed settings entered on the command and, lastly, it displays the revised settings. When none of the Cobx tags are set, the output is:

```
Set X values before this command:
Active tag value=, List ON
Default tag value=, List ON
Local tag value. NONE  List  NOT SAVED

Set X values AFTER the command:
Active tag value=, List ON
Default tag value=, List ON
Local tag value. NONE  List  NOT SAVED
```

The first 4 lines show the current settings. The last 4 show the settings after the requested change has been applied. When there is no tag value, Qedit displays an empty string or the word "NONE". When the List option displays as "NOT SAVED", it means the Local feature is enabled but the List setting has not been explicitly set yet.

If the tag values are set, the result strings are displayed as in:

```
/set x local off
/set x "GB" yymmdd
/set x local on
/setj x "LC" yymmdd
Set X values before this command:
Active tag value=, List ON
Default tag value=GB011213, List ON
Local tag value. prefix=     suffix=     dateform=0 List  NOT SAVED

Warning:  Local ON: only updates tag for this workfile, not defaults.
Set X values AFTER the command:
Active tag value=LC011213, List ON
Default tag value=GB011213, List ON
Local tag value. prefix=LC   suffix=     dateform=2 List  NOT SAVED
```

In this example, the first Set command turns Local X off. The second Set command changes the default tag to the prefix "GB" followed by the current date in year-month-day format. The third Set command turns Local X back on and, finally, the SetJ command sets the local tag to the prefix "LC" followed by the date in the same format. Looking at the SetJ output, there is the then-current default tag, "GB011213", with List enabled. There was no local tag and List was not set at that point.

The new local tag is applied and produces a warning. After the change, the active tag is the local one and List is enabled (default value). The default tag is unchanged. The last line provides details on how the local tag was constructed. The List option still shows as NOT SAVED because it has not been changed explicitly after Local X was turned on.

Verify. The Verify command displays detailed information about the local and default settings.

```
/verify x
Set X Tab OFF "ME011214" List ON
/set x local on
/verify x
Set X Tab OFF Local On "LC011214" List ON Default: "ME011214" List ON
```

Zip

Set Zip characters

(Initially: []@{})

The Set Zip command changes the special abbreviation keys provided in Qedit. The Zip list of characters is positional and without quotes:

1st character	FIRST	[is the default
2nd character	LAST	] is the default
3rd character	ALL	@ is the default
4th character	Left	{ is the default (see Add)
5th character	Right	} is the default (see Add)
6th character	auto-mod	OFF by default (inactive)

Therefore, the default Zip list is: []@{}. The only way to reset ZIP to its default value is to re-enter these codes in a Set Zip command.

Auto-Modify in Add. The "auto-modify" character (the 6th one) is disabled by default. If you do Set Zip []@{}_ to specify "_" as the "auto-mod" character, whenever you end a command line, or a new text line in Add, with an underline, Qedit puts you into Modify on that line.

For example, Set Zip [%:~+? specifies [for FIRST, % for LAST, : for ALL, ~ for shift-left, + for shift-right, and ? for auto-modify. You may specify any special characters you like for these functions, but each must be unique and must not conflict with the other characters configured in Qedit (e.g., TAB, $).

Shut Command [SH]

Closes the current workfile. May also rename it.

SHUT [*filename*]

(Default: close with same name)

With no *filename* parameter, Qedit merely stops editing the current file. Although Qedit will close the current workfile for you when you Open another one, you may sometimes want to Shut explicitly. One thing that Shut does is guarantee that all of your changes are actually posted to the disc and will not be lost if the system fails or you disconnect yourself by attempting to make a phone call on your modem phone. To post your changes to the disc without closing the workfile, specify any shell-command (e.g., ls).

You may want to leave your terminal for lunch, in which case it is a good idea to Shut your current file. You can always use Open * to reopen it when you return.

```
/shut              {you may shorten Shut to SH}
/open *            {reopen same file later}
```

If you are using a scratchfile and specify a *filename* parameter, Qedit saves the scratchfile as a permanent Qedit workfile. In this case, the filename must not exist. If you are using a Qedit file, Qedit renames it before closing.

```
qux/t myfile1
'Language' is now DATA             {copy of myfile1 in scratchfile}
20 lines in file
qux/sh myfile1
Retained existing file for you.    {myfile1 already exists. No change.}
qux/sh myfile1.work                {renamed to myfile1.work}
qux/open *
Open /home/user1/myfile1.work Current = 1 Margins = 1/80
qux/sh myfile1.newwork
File renamed.
```

Examples

```
/open crept45.dev    {open source file to edit}
/modify 5/  ...      {make some changes...}
/shut                {close workfile}
```

Spell Command [SP]

The Spell command is not available in Qedit/Open.

Text Command [T]

Copies a file into Qedit. Use Text to convert a file into Qedit format or to make a copy of an existing file. After a Text, the new copy is "open" and ready to edit or browse.

TEXT filename [,type]

filename [,SAVETABS]

filename [,BROWSE]

filename [,NEW]

filename [,SETINCR]

filename [,LABELS]

filename [,LENGTH size]

workfile [,workformat] [(size)] = filename [,type]

(Q=unnumbered)

(J=extra scr file, same as ,NEW)

(Defaults: size = 50% bigger)

If you do not specify a *workfile*, Qedit checks to see if you have a workfile Open and it is empty. If it is, Qedit will Text *filename* into it. If not, Text uses the primary scratch file. If you do Text xx,New or TextJ, Qedit creates an extra scratch file to receive the copied file. You can have up to eight extra scratch files (as well as the primary scratch file) and switch among them with Open ?.

Use *filename,type* to override the attributes that Qedit assigns to your file. Use *workfile,workformat* to override the attributes assigned to the workfile. See below for details.

The Text command works on any file that you can read, but it truncates records longer than 8,172 columns and prints a warning. You can use Qedit to edit binary files.

The Text *filename*,Browse command copies a file into Qedit, but it won't let you modify the file. You can use the List command, including List-Jumping, Hold, Visual mode HH and ZZ, and any other Qedit functions that *do not modify the file*. There are two advantages to Browse mode: it protects you from making unplanned changes to a file, and it does not update the Mod-Date of the file.

An asterisk (*) as *filename* means the workfile most recently shut.

If you do specify a *workfile* name, Qedit shuts your current workfile and creates a new *workfile* to hold a copy of *filename*.

If you try to Keep the file with its original name i.e. you enter a Keep without a filename, you will get an error.

```
/Text txtfile,browse
/K
File opened with Browse, please specify a Keep file name
```

You can still force a Keep by specifying an explicit filename as in:

```
/Text txtfile,browse
/Keep txtfile
TXTFILE.DATA.ACCT,OLD 80B FA # of records=16
Purge existing file [no]? y
```

Examples

Make copy of source file, change and save it:

```
/text hwsy.src       {copy Hwsy.Src into scratch file}
/modify 10           {make changes}
/keep                {save changes}
```

Absolute File Name

When you Text a file, Qedit remembers the **absolute path** name of the file, not the relative name. This becomes the default for the Keep command. If you Keep with an explicit name, Qedit remembers the absolute path of that name. If you do Set Keep Name xxx to override the default Keep name, Qedit remembers xxx as a **relative** name, not as an absolute name. This gives you all the options you need to take advantage of the cd command within Qedit.

How to Text Several Files?

Qedit has a primary scratch file that is referred to as "Qeditscr". Any time you take the default options for Opening or Texting a file, your work will be in the Qeditscr primary scratch file.

What if you want to edit two or more files and copy lines between them? You could Text the first file, Hold the desired lines, Keep your changes, then Text the second file and insert the lines. However, if you are doing a large number of edits, the constant Text and Keep operations are inconvenient.

A faster method is to Text each file into an **extra scratch file** of its own. Then use the Open ? or Open *-*n* command to switch quickly among them. By default Text always copies the file into the primary Qeditscr scratch file. However, Qedit can supply up to eight extra scratch files. Use the New option (text abcdef,new) or do Text-J (textj abcdef).

The New command can also create extra scratch files. *Warning:* If you do New;Text file,New you will create two Extra Scratch Files, not one.

Saving Your Work

When you Exit, Qedit checks whether you have any unsaved edits in any of your scratch files. If so, you are prompted to Discard? them, or stay in Qedit to save them. Qedit also asks you to Discard your changes

if you Close a scratch file, which removes it from the Open-Stack and purges the file.

Clearing the Workfile

Sometimes Qedit will ask you if it is okay to clear the existing contents of the scratch file and sometimes it won't. If you have not made any changes to the scratch file since you last did a Text or Keep, Qedit assumes that you have another copy of the lines and it is okay to delete the copy in the scratch file.

In batch, the answer to the "Clear?" question will always be "yes". If you know the answer you want, you can append it to the file name parameter just as you do in the Keep command:

```
/text abc,yes
/text def,no
```

Using Set Keep for File Attributes

When you Text a file, Qedit remembers as many attributes of the file as possible. When you later Keep the file, Qedit attempts to reproduce the original file. The Text command does an implicit Set Keep command to record what it has discovered about the Text file.

Using TextQ for Numeric Data Files

TextQ means "text quiet" or "text unnumbered" and is the same as using ,UNN after the *filename*. Use TextQ to edit any data file that may contain numeric digits in the last eight columns. Otherwise, Qedit may interpret those digits as sequence numbers, if the first five records of the file contain data that looks like ascending sequence numbers.

Treatment of Sequence Numbers

Qedit retains whatever sequence numbers it finds in the external file. If Qedit finds an invalid number, it begins assigning new numbers starting from the last valid number and adding Increment.

If the file does not have sequence numbers, Qedit assigns new ones, starting at 1.0 and going up by a calculated increment. The calculated increment is based on the file's current characteristics such as the number of records.

This works well in the majority of cases. However, there are cases where the calculated increment is not accurate enough or the user wishes to have a specific increment. This can be done by setting the increment with the Set Increment command. Then, use the Setincr option on the Text command.

```
/Text bigfile                {Use calculated increment}
/Set Increment .02           {Set the increment value}
/Text bigfile,Setincr        {Override the calculated increment}
```

Files with Header Records

Text has an option to skip 1 to 9 records before deciding the "language" of the external file. The format is as follows:

TEXT lines/filename

where *lines* is the number of lines to skip over.

This is useful with source files from external sources, such as IBM machines, that may have control cards without sequence numbers, followed by a numbered COBOL source program. By skipping the control cards, Qedit may recognize the file as a COBOL program, instead of a Job file.

Tab Character

By default, Qedit retains tab characters in a file when it Texts the file. However, another option is to expand the tab characters into spaces (to the next tab as established by Set Tabs Stop). You can expand tabs on a specific file by using the Expandtabs option on the Text (or List or Add-File) command. To force all file accesses to expand tabs, do Set Expandtabs On (the default is Off). With Set Expandtabs On, use the Savetabs option to access a file without expanding tabs into spaces:

```
/text srcfile,expandtabs
/set expandtabs on
/text dbfile,savetabs  {override Set Expandtabs On}
```

If you are editing files with tab characters, see Set Vis Tab.

Overriding Qedit's File Type

Sometimes Qedit will interpret the format of the external file incorrectly. You can override the file type that Qedit would assign by appending a file type *keyword* to the file name:

filename,COBOL	
filename,FTN	or FORTRAN
filename,SPL	
filename,PASCAL	
filename,JOB	
filename,RPG	
filename,TEXT	
filename,COBFREE	
filename,DATA	forces Jumbo workfile
filename,UNNUMBERED	
filename,HTML	
filename,XML	

filename,QSL

filename,JAVA

The *keyword* may be shortened to any leading substring, but the *comma is required*. You cannot use this option to force Qedit to warp a file into something that it is not. You can only use it to resolve ambiguities (i.e., between FORTRAN, Pascal, and SPL, which look the same).

```
/text funny              {this should be a COBOL file}
Language is now JOB      {but it has a file code of 0}
678 lines in file
/text funny,cobol
Language is now COBX
678 lines in file
```

File Modification Timestamp

When you use the Text command on a file, Qedit stores the file's modification timestamp in the workfile. You can display the timestamp by using the Verify command. Qedit uses the stored timestamp to perform some verification if you try to either Keep the file or Shut and re-open the workfile.

$File Keyword

File names containing special characters might cause problems to Qedit. For example,

```
/Text file:name
Error:  Extra or invalid character in Text command
```

If you run into this problem, you can use the $file keyword instead. The $file keyword can be used wherever a file name is expected, such as in Text, Add, List. The syntax is:

```
$file[=]"filename"
```

$File is a reserved keyword, which is followed by an optional equal sign and the actual file name enclosed in string delimiters. Without doing anything to the string, Qedit tries to open the specified file. The previous example now becomes:

```
/Text $file="file:name"
10 lines in file
```

Implicitly Folding Wide Lines

When texting files, Qedit assigns a language to the file. This is done by looking at file characteristics such as the file extension. Each language has a set of predefined attributes. One of these attributes is the maximum line length. As it reads the file in, Qedit is able to detect lines exceeding the maximum length. When that occurs, Qedit folds the line. Characters exceeding the maximum are moved to separate lines.

Since folding lines is equivalent to inserting new lines, Qedit has to renumber the file from that point. When all this occurs, Qedit displays a warning message. For example, if Qedit is texting in a Cobol line which maximum length is 80, a line with 200 characters is going to turn into 3 lines.

```
qux/t /home/demo/longline.cbl
'Language' is now COBX

Warning:  Found line(s) over 80 characters. Lines folded and
renumbered.
Error: line number out of sequence (001200) - renumbering the rest
See line 1.2
16 lines in file
```

Line 1.2 is the beginning of the long line. The file now looks like this.

```
1     This is really the first line.
1.1   This is the second line.
1.2   This line is too long. Qedit will split it into multiple lines of
roughly
1.3   the same length. Line folding is not smart. In other words, words
can be s
1.4   plit in the middle.
1.5   "commit work" cw
```

Originally, lines 1.2, 1.3 and 1.4 were together forming one very long line.

Explicitly Folding Wide Lines

There are 2 file types on UNIX: files with Newline delimiters at the end of each line and files without Newline delimiters. By default, Qedit/Open can not handle files without Newlines or files with lines longer than 8,172 characters. It is possible to edit these files by folding the content into manageable pieces. This is done using the **Length** option. Use this option to specify the size of each line. The maximum value is 8,172.

When reading the file in, each Qedit/Open read retrieves the specified number of characters until it reaches the end of the file. Lines will all have the same size except the very last line, if the total size of the file is not evenly divisable by the specified size. For example, if the file contains 8,000 characters and the specified Length is 80, Qedit/Open creates 100 lines. If the file contains 8,020 characters, there will be 100 lines of 80 characters and the last line will only have 20 characters.

If the Length option is used, Qedit/Open assumes the file does not have any Newline delimiters even if it actually had some. These characters are processed as if they were part of the data. In this case, Qedit/Open automatically disables **Set Keep LF**. To insert Newline delimiters at the end of each line, you can enable the option with

```
/Set Keep LF On
```

or use the **LF** option on the **Keep** command as in

```
/Keep myfile,lf
```

Undo Command [UN]

Reverses the effect of the previous command that modified text, after showing you the command and asking your permission.

UNDO [ALL | REDO]

(Default: the last editing task)

Undo prints the command to be undone and how many lines it actually updated, added, deleted, and/or renumbered. The commands can only be undone in reverse order, one at a time, and no commands can be skipped. Therefore, you don't have to specify which command to Undo; you are always presented with the next one, then asked if you want to actually undo it.

If you want to see the commands in the Undo Stack, use the Listundo command.

After an Undo, another Undo will cancel the command that was one further back. In this way, you can Undo back to the time the file was first Texted or Opened. If you Undo one step too far, you can cancel your preceding Undo task using the Undo Redo command. This option is accepted until there are no more Undo tasks to be cancelled. Once you enter a non-Undo edit command, you have approved your Undo tasks and they can no longer be cancelled.

Or, you can use Undo All to undo all the updates since the last Text or Open. If you don't like the results after an Undo All, you can put the file back in the edited state by doing another Undo (i.e., you can Undo the Undo All).

Examples

```
/cq "Bob"Robret" all  {mistake in Change}
23 lines changed
/undo                 {reverse Change command}
Command to Undo:  CQ "Bob"Robret" all
   ( Update:8 )       {shows actual update counts}
```

Undoing Changes in Visual Mode

You can use the Undo command to cancel changes in Visual mode as well as in Line mode. All of the changes you make on the screen before pressing Enter are treated by Qedit as one "undo-able" command, except for cut-and-paste operations. Qedit always executes your cut-and-paste operation last after updating the file with any other changes, no matter what order the changes were made in. This means that you can choose to undo just the cut-and-paste operation, or undo it and all of the other changes. You can continue undoing your previous changes

from each Enter, one at a time, until your file is back to its original state.

Notes

An Undo cannot be undone, except by Undo All.

The Undo change log is reset by a Text command (but not a Keep), by a Delete All, or by shutting the file. The Undo log is temporary and is not retained if you exit Qedit or log off the system. You cannot go back and undo changes that you made to a file after you leave Qedit.

You can Undo any text-altering commands since the last Text or Open command, except for Delete All. Delete All can be canceled before the next command line is executed using Control-Y.

In the unlikely event that the undo log file (i.e., "undolog") overflows, Qedit will print a warning message and disable the Undo feature. Undo is disabled in batch by default, and active in session usage. Using the Set Undo command you may override this default or disable Undo for a particularly large edit, to save overhead.

```
/set undo on
/set undo off
```

Up Command [UP/F2]

Starts "browsing" the current file by displaying one page, starting about six lines forward. You stay in "browse" mode until you enter any command (see List, jumping option).

UP

(F2 key does the same)

In Line mode, Up (or F2) puts you into List-Jumping's browse-mode. The starting location is a few lines ahead of the current position, where the actual number of lines is determined by the Set Visual Roll amount. Qedit displays a screen of text, where the screen size is either 23 lines or what you specify with Set List LJ, then waits for you by asking "More?". Press Return to see the next screen, typing a line number moves you to the screen starting at that line, pressing F2-F6 does the appropriate action, and F8 or "//" or Control-Y or typing any command gets you out of browse-mode. At the "More" prompt, the * "current" line is the last line displayed.

Use Command [U]

Executes part or all of the commands in a file.

USE filename [rangelist]

(Q=no display, J=no open error)

(Default: * means current or last workfile, range=all)

Qedit opens *filename* and reads command lines from it, instead of from Stdin. "*" as the *filename* either closes the current workfile and Uses it, or Uses the workfile most recently closed, including a scratch file. Execution continues until the last line of the usefile or until you strike Control-Y.

Qedit prints the commands on Stdlist, unless you do UQ. To print instructions to the user even when UQ is in effect, put Q commands in your usefile.

Examples

```
/use fixspell               {execute a list of Changes}
ch "reveiw"review" @        {commands are printed}
ch "corelate"correlate" @
/use $ 30/                  {rangelist, last file}

/use *                      {* = last Open workfile}
/use fixit 2/5              {do lines 2/5 only}
/use compile "extfile"      {do lines with string}
```

{See the Q command for a sample usefile that compiles}

Notes

The Use command temporarily redirects Qedit's command input device, reading commands from a file. The same features and restrictions apply to the commands in a usefile as would apply to commands typed on the terminal. For example, a command cannot be continued from one line to the next, usefiles do not accept parameters, etc.

The usefile can be of any file type allowed in Text or Add. Although Qedit allows nested usefiles, you cannot have nested loops.

If the usefile does not exist, UJ suppresses the error message that would be printed, allowing optional Use commands in Qeditmgr files.

Verify Command [V]

Prints the status of Qedit, the current workfile, and Set options.

VERIFY [@ | ALL]

[*keyword* ...]

(Default: show nonstandard options)

The default is to show the options which are not in their default state. Verify All shows every Set option in the exact form that Qedit accepts (the shortest form is shown in uppercase).

The *keywords* may be any Set option, or Alias, Exit, Proc, Prog, Run, String, Lastfile, Visual, Version, Z for Zave, or ZZ for the marked range.

Examples

```
/verify            {show nondefault values}
/ver open          {describe the Open workfile}
/ver visual        {Visual mode status and options}
/v @               {print full status on Stdlist}
/verify version    {Qedit version number}
/verify string     {current "string" for F3/F4}
/verify lastfile   {previous file for List $}
/v $               {abbreviation for previous file}
/verify exit       {does Qedit suspend on Exit?}
/verify zz         {currently marked range}
```

Visual Command [VI/F1]

The Visual command is currently disabled in Qedit/Open.

Words Command [W]

The Words command is not available for Qedit/Open.

Zave Command [Z]

Saves or recalls a string of Qedit commands.

Z [= [*commands*]]

(Default: if no *commands*, Z= prompts)

Use Z= to save some Qedit *commands* for later use. Use ";" to combine multiple Qedit commands. If Qedit does not find anything after the "=", it reads the *commands* from the terminal. Qedit saves the *commands* and you can execute them again at any time by typing Z. There is only one "Z" in Qedit. When you enter a new Z string, you lose the existing one.

When you type Z with no = sign, Qedit inserts the saved *commands* in place of Z. The total length of the Z string plus the remainder of the original line must be 80 characters or less.

Examples

```
/z=           {redefine value of Z string}
list */last   {you enter new line of commands}
/z            {use Z to mean "list */last"}

/z=l*-5/*+5   {define z as "list vicinity"}
/fq "trish";z {find string and display around it}
/z=f"`|1@"(p); a*=*; c"`".ent "
              {find string that matches pattern; copy line}
              {change a string in the new line}
```

Notes

You can display and edit the current Z string only if you entered the Z string at the same time as the Z= command.

```
/z=q "hi"
/z
hi
/redo z=
/Z=q "hi"
      hello"
/z
Hello
```

Although the line saved in Z need not be a complete command, it is recommended that incomplete strings not be put in Z, as they may be upshifted.

"ListJ *" is a useful command string to save. Just type Z, and Qedit will start listing from your current position. When you find what you want, press Control-Y to stop the listing.

ZZ Command

Marks a block of lines so you can refer to them in any command.

ZZ [*line* [/ *line*] | OFF]

ZZ [[*string range*] | OFF]

(Q=no display)

(Default: * becomes start or end of block)

ZZ line/line marks a range of lines, while **ZZ line** marks the start or end of a range. ZZ marks one range only, not a rangelist. To mark a single line, say 5, use `zz 5/5`.

ZZ OFF cancels the currently marked range, eliminating the half-bright display enhancement in Visual.

Examples

```
/zz  5/10
/change "prog"program" zz

/find "procedure open" (up)
/zz                       {mark start of block}
/find "@end;~{open}@" (pattern up)
/zz                       {mark end of block}
/keep savefile zz         {save block in a file}
/verify zz                {check current range}
/zz off                   {cancel current range}
```

Notes

The marked range is adjusted for Renum operations. Use Verify ZZ or List ZZ to check the currently marked range. ZZ is also valid as a cut-and-paste operator in Visual mode.

Using a string range on a **Find** command automatically updates the ZZ marker. For example:

```
/v zz
ZZ OFF
/find "start"/"end" [
Lines 5/11 saved in ZZ
/v zz
ZZ 5/11
```

Calculator Command [=]

The calculator evaluates an expression and prints the result.

=*expression* [,O | D | B | H | A | # % $]

Any command that begins with an equal sign (=) is treated as an *expression* to be evaluated. An expression consists of numbers and operators, followed by an optional display format. The operators can be addition (+), subtraction (-), multiplication (*), division (/), or exponentiation (**). The value of the expression is printed immediately on Stdlist.

```
=20+15              {add two numbers together}
Result=35.0
=20*15              {multiply the same numbers}
Result=300.0
=20-15              {subtraction}
Result=5.0
=20/15              {divide, print precise result}
Result=1.33333333333
=20**15             {20 raised to the 15th power}
Result=.327680000000E+20
```

Order of Evaluation

Unlike most programming languages, the calculator always evaluates the calculation from left to right. This is similar to an electronic calculator, where each keystroke is operated on immediately. You can use parentheses to force the calculator to evaluate the expression in a different order.

```
=14+16+15/3       {compute an average}
Result=15.0
=14+16+(15/3)     {add 14, 16, and the result of 15/3}
Result=35.0
=14+((16+15)/3)   {divide 16+15 by 3, then add to 14}
Result=24.3333333333
```

Percentages

A number in the calculator *expression* may be followed by a percent sign (%). The calculator assumes that you want to qualify the number as a percentage.

```
=125*5%           {what is 5% of 125}
Result=6.25
=125+125*5%       {add 5% of 125 to 125}
Result=12.5
=125+(125*5%)     {oops, we needed to change the order}
Result=131.25     {this looks like the answer we wanted}
```

The last two examples show the importance of the order in which calculator evaluates the expression. We needed to use parentheses to force calculator to evaluate our *expression* in the correct order.

Display Formats

A calculator *expression* may be followed by a comma and a display letter. The default is decimal (#) and the options are Hex ($ or H),

Octal (% or O), Double (D), ASCII (A) and Binary (B). With these options, the result is treated as a 32-bit integer.

```
=10,%            {standard octal format}
Result=%000012
=-10,%           {negative number in octal}
Result=%37777777766
=100,$           {hexadecimal}
Result=$0064
```

In Double format, calculator prints the double result as two octal numbers. The first number represents the high-order 16-bits and the second number represents the low-order 16-bits.

```
=10,d            {treat result as two 16-bit octal words}
Result=%000000 %000012
=1000000000,d    {high-order 16-bits are nonzero}
Result=%035632 %145000
=-10,d           {note negative value, 2's complement}
Result= %177777 %177766
```

In ASCII format, up to four characters are printed in hexadecimal, decimal, and ASCII display format.

```
=$2020,a
Result=$2020: 32,32 :"  "
=%20161 %72145,a
Result=$2071: 32,113:" q"  $7465:116,101:"te"
```

In Binary format, the high-order 16-bits are examined. If these bits are not zero, they are printed as two groups of eight bits. A one (1) means that the bit is on and a zero (0) means that the bit is off. The low-order 16-bits are always printed as two groups of eight bits.

```
=10,b            {high-order 16-bits suppressed}
Result=%(2)00000000 00001010
=-10,b           {note negative value, 2's complement}
Result=%(2)11111111 11111111 %(2)11111111 11110110
=1000000000,b    {high-order 16-bits are nonzero}
Result=%(2)00111011 10011010 %(2)11001010 00000000
```

Input Format

The calculator supports different input formats for numbers. Octal values are prefixed with a percent sign (%) and hexadecimal values with a dollar sign ($). Decimal is assumed by default, but decimal values may be prefixed with # if desired. An ASCII string of up to 4 characters is entered in quotes. The result of the last calculation is referred to using #.

```
=%12              {octal 12 or decimal 10}
Result=10.0
=%12,o            {octal input and octal display format}
Result=%000012
=$10
Result=16.0
=%177766          {octal number that is really negative}
Result=-10.0
="abcd",h
Result=$61626364
=#,a
Result=$6162: 97,98 :"ab"  $6364: 99,100:"cd"
```

Calculator Help

The calculator offers a number of options. You can refresh your memory on the calculator's abilities by entering

```
=?                {? gives help}
                  {prints a summary of = functions}
```

Troubleshooting and Error Messages

Introduction

When Qedit encounters an error condition, it prints an error message (Error: xxx) or a warning message (Warning: xxx). For file errors, Qedit prints the intrinsic name (Fopen), the file system error number (Err. 50, or a message for common errors) and the file name, if available. An error message will cause the rest of the command line to be skipped, and, in batch mode, will cause Qedit to terminate with an error abort. A warning message, on the other hand, does not stop the rest of the command line from being executed, nor does it cause Qedit to abort in batch mode.

Messages

Most error and warning messages are self-explanatory. The older, more cryptic ones are explained below.

Message	Explanation
Already.	The line number that would next be created already exists in the workfile; duplicate line numbers are not allowed. This error often stops an Add command.
Com Name.	The first character of a line or after a semi-colon is not a valid command.
Empty.	The external file you have referenced does not contain any lines.
EOF In.	Caused by an end-of-file on stdin (e.g., pressing Control-E). This error always terminates Qedit.

Equals.	Equals sign (=) is missing from the command (example: Add 5 FILE); most are optional.
Extra.	A command is followed by extra characters when it should be ended (example: A 500?).
Fclose.	Unable to close a new workfile or Keep file.
Fcontrol.	Unable to perform a control operation (such as logical rewind) on a file.
Fgetinfo.	Unable to get file status.
Filename.	An invalid file name has been specified (e.g., K 123).
Fopen.	Unable to open a file. Most common reasons are "no such file" and "bad file name" (example: L ABC1234567).
Fread.	Unable to read sequentially from an external file. There is no good reason for this error that we are aware of.
Freaddir.	Unable to read a block from a workfile. Almost always indicates a "broken" Qedit workfile.
Full.	The current workfile is full, and the last line added is lost. You are either out of disc space or your file has 65,535 lines (if original-format workfile).
Fwrite.	Unable to write to a file (example: L LP,ALL; K KFILE).
Fwritedir.	Unable to write a block to the current workfile. Probably indicates a confused workfile.
In Use.	The external workfile cannot be accessed, because it is being edited on some other terminal, or someone aborted Qedit with the file open. You can recover such files by Opening them.
'Language' is now *xxx*	The current language setting has been changed by Open, Text or Set Lang. This may also change the INCR, WINDOW, etc.
Linenum.	The command contains an invalid line number (example: L 5.9999).
LP Open.	Unable to open a file to the LP.
Modify.	Illegal control character in a Modify line; an ASCII character with a value less than 32, that is not in the Set Modify list of codes.

No Line.	A specific line number is required, but does not exist (example: AJ 100, when line 100 doesn't exist).
No Open.	A workfile must be Opened before any editing can be done.
No Write.	The workfile cannot be Opened with write access. Someone else may be editing the file, or you may not have proper security access to the file.
Overflow.	A data line has been entered (Add, Replace) or created (Change, Modify) that is greater than the maximum length allowed by the current language setting. Or, a file has been Texted that is too large for the workfile (the Text is rejected; you may have to adjust Set Work Block to allow for line lengths greater than 60 bytes average).
Param.	A parameter of the command is illegal (example: S Work Size ABC)
Paren.	A required left or right parenthesis is missing (example: Set Window (Up)). Many are optional.
Proc.	Unable to load the procedure named from the library specified; you may have specified the wrong library, or spelled the procedure name incorrectly (example: P ROUTINE-1,S,1).
Range.	In a range, the second line number is less than the first (example: List 4/3).
Recovery.	The file just Opened was not closed properly the last time it was used; the file is being recovered. See Open command.
Size.	An illegal *size* in a new workfile (example: New ABC(1B3)).
String.	The string is not correctly formatted; either the ending quote is missing, or the string is too long (example: C 1,"ABC!,510).
Target.	Format error in the target area of the Change command (example: C 53,"ABC",1).
Too High.	In Renumber, the starting line number is too high. Qedit cannot find an increment small enough to renumber all of the lines in the file. (example: Ren 99999). Choose a lower starting line number.
Window.	Format error in column search window (example: Set Window (1020,MART)).

Quit Errors

After serious file system errors, Qedit will print the file system error and the following message, and then abort:

```
Warning: This error can only occur if 1) your UNIX file system is
corrupted, 2) your hardware has problems, 3) you have exceeded your
disc space limits, or 4) Qedit has a bug.
Make a copy of your workfile before attempting to Open it again.
If Open does not recover it satisfactorily, contact Robelle.
```

File Formats

Introduction

This appendix describes the format of Qedit workfiles and external files.

Qedit Workfiles

The Qedit workfile provides both random and sequential access to variable-length lines of text. The workfile is broken into blocks. Each block contains several Qedit lines (the exact number depends on the length of the lines). The lines in a block have contiguous line numbers and are extracted from the block by Qedit.

Block 0 of the workfile has a special format because it contains the control and indexing information.

The first Qedit line is always in block 1, and the start of block 1 points to the next sequential block in the file, which need not be block 2. Each block points to the next, and end-of-file occurs when the forward pointer is zero.

There are three different formats of Qedit workfiles: original, Jumbo, and Wide-Jumbo. All formats work in Qedit for MPE and Qedit for LINUX, but the default for MPE is the original format while the default for LINUX is Wide-Jumbo.

Original Format Workfiles

The original Qedit workfiles have a block size of 512 bytes and can hold up to 65,535 lines with a maximum length of 256 characters.

Within an original format data block, the structure is as follows:

```
Word Within Block    Contents            Comment
      (000)      Forward-pointer   First word in block
      (001)      Line-number       First word of first line
      (002)        (cont.)
      (003)      Data and Indent   Descriptor for first line
      (004)      "AB"              Contents of first line
      (005)      "CD"
      (...)        (cont.)
      (...)
 (Data+003)      "YZ"              End of first line
 (Data+004)      Line-number       Start of second line
 (Data+005)        (cont.)
 (Data+006)      Data and Indent
 (Data+007)      "12"
      (...)
      (...)      "89"              End of last line
      (...)      Binary-zero       Unused portion of block.
      (...)        (cont.)         Binary-zeros are missing
      (255)        (cont.)           if the block is full.
```

The following definitions are used above:

Forward-pointer: block number of the next block (16-bit unsigned).

Line-number: a 32-bit integer containing the line number in binary (1,000 = 1.0).

Data: the number of words of data in the line (byte).

Indent: number of full words of blanks before the data (byte).

Qedit Version Number

Open stores the version number of the Qedit program file into the workfile that it opens. A 16-bit integer is stored at word offset 363 of Block 0. The format is, for example, 4258 for version 4.2.58, 4300 for 4.3, and 4301 for 4.3.01.

Jumbo Workfiles

The Qedit Jumbo workfile is an extension of the original Qedit workfile. This format allows files to be up to 1,000 characters wide, and up to 99 million lines long. The blocks are 1024 bytes long instead of 512.

Wide-Jumbo workfiles allow lines of up to 8,172 characters and limit the number of lines to 99 million. The blocks are 8,192 bytes long instead of 1,024 for Jumbo workfiles.

As in the old Qedit format, each block in Jumbo or Wide-Jumbo contains several Qedit lines (the exact number depends on the length of

the lines). The lines in a block have contiguous line numbers and are extracted from the block by Qedit.

Block 0 of the workfile has a special format because it contains the language of the file and the number of lines, and provides indexing.

The first Qedit line is always in Block 1, and the first word of Block 1 points to the next sequential block in the file. Each block points to the next, and end-of-file occurs when the forward pointer is zero.

Within a data block, the structure is as follows:

```
Word Within Block    Contents            Comment
      (000)       Block type         First double-word in block
      (002)       Forward-pointer    Second double-word in block
      (004)       Line-number        First word of first line
      (005)         (cont.)
      (006)       Data length        Descriptor for first line
      (007)       Indent
      (008)       "AB"               Contents of first line
      (009)       "CD"
      (...)         (cont.)
      (...)
 (Data+004)       "YZ"               End of first line
 (Data+005)       Line-number        Start of second line
 (Data+006)         (cont.)
 (Data+007)       Data
 (Data+008)       Indent
 (Data+009)       "12"
      (...)
      (...)       "89"               End of last line
      (...)       Binary-zero        Unused portion of block.
      (...)         (cont.)          Binary-zeros are missing
      (511)         (cont.)            if the block is full.
```

The following definitions are used above:

Forward-pointer: block number of the next block (32-bit unsigned).

Line-number: a 32-bit integer containing the line number in binary (1,000 = 1.0).

Data: the number of words of data in the line (16-bit word).

Indent: number of full words of blanks before the data (16-bit word).

External Files

As well as its own workfiles, Qedit recognizes "external" files of other formats (in List *file*, Add 5=*file*, Text *file*, etc.). When Qedit opens an external file, it determines the language of the source program in that file according to the following chart. Files with a ".cbl," ".cob", ".CBL" or ".pco" extension are treated as COBOL source files. In this case, Qedit does not assume there is a sequence number in the first 6 columns; it checks the first 5 lines of the file. The `.pco` extension is typically used to identify Cobol source files that needs to be processed by the Oracle pre-compiler.

If the lines contain only numeric digits in these columns, Qedit assumes the file contains sequence numbers and uses them appropriately. These numbers are written back to the file when a Keep command is executed.

If the lines only contain spaces in these columns, Qedit assumes the file is unnumbered and automatically assigns numbers during the Text operation. If some of the lines have a sequence number already, this number is replaced with Qedit's calculated number. When the file is saved, the sequence numbers are replaced by spaces.

If the first 6 columns do not contain either numeric digits or spaces, Qedit assumes the file is free-format and assigns it line numbers in the same way that numbers are assigned to Text files. The file format might change on a Keep command, depending on the Set Keep Cobfree option.

When accessing files, Qedit checks the extension of the file, if any. It then tries to determine the language based on the extension. Currently, the following languages are recognized:

Language	Extensions
Cobol	CBL, COB
CC	H, C
CPP	CPP
HTML	HTM, HTML, ASP
XML	XML
JAVA	JAVA
QSL	QSL
PASCAL	P, PAS, PASCAL, MODULE, INCLUDE, FORWARD, EXTERNAL

Extensions are not case-sensitive i.e. cbl is the same as CBL.

Record Size (bytes)	Leading Columns (1-6) Contain	Last 8 Columns of First Line	Current Language Setting*	File Code / Ext.	Num / Unn?	LANG Used
74				ext.	Unn	COBOLX
66				ext.	Unn	COBOL
80	6 digits			ext.	Num	COBOLX

80	6 digits			not ext.	Unn	JOB
80	no digits	no digits	RPG		Unn	RPG
80	no digits	8 digits	FORTRAN		Num	FTN
80	no digits	8 digits	Pascal	ext/	Num	Pascal
80	no digits	8 digits	not Ftn/Pas		Num	SPL*
72	6 digits				Num	COBOL
72	no digits		FORTRAN		Unn	FTN
72	no digits		Pascal	ext.	Unn	Pascal
72	no digits		not Ftn/Pas		Unn	SPL*
80	no digits	no digits			Unn	JOB
88	8 digits				Num	JOB
9-264	8 digits				Num	TEXT
1-256	no digits				Unn	TEXT
1-1000	no digits or spaces			ext.	Unn	COBFREE
1-1000	no digits			ext.	Unn	HTML
1-1000	no digits			ext.	Unn	XML
1-1000	no digits			ext.	Unn	JAVA
1-1000	no digits			ext.	Unn	QSL

* see Set FORTRAN ON.

In this table, the "File code / Ext." column indicates how Qedit determines which language to use. **Code** means it uses the file code only. **Ext.** means it uses the file extension only. **Both** means it checks the file code and the file extension.

Qedit maps an ASCII external file into one of these file formats. Qedit checks the last eight columns of each of the first five lines for an ascending sequence number. If five lines with valid sequence numbers are found, the file is treated as a Numbered file. Qedit may sometimes mistake a data file for a source file with sequence numbers. If there is an ambiguity in identifying the language of an external file, you can

direct Qedit to the proper choice by appending a **file type** to the file name in the Text, List, and Add commands. For example, /List abc,unn;Text def,pascal.

External files with 80-character records and no valid SPL sequence numbers are treated as RPG files, if the current language setting is RPG; otherwise, they are treated as JOB files.

Regular Expressions

Introduction

Regular expressions might look like wildcards used in the Pattern search option. Regular expressions are sometimes compared to wildcards but, in fact, they are much more powerful and can be much more complex. You have to practice in order to use them efficiently and to their full potential. For brevity, we will often refer to regular expressions simply as regexp.

In Qedit's line-mode, you can use regular expression in most places where you can use a string or pattern. In fact, you specify regular expressions in Qedit similar to the way you specify patterns, by specifying the "regexp" keyword in a window:

```
/list "Robel+e"(regexp)  {Robelle or Robele}
/change "[rR]obel+e?"(reg) "ROBELLE"  {robell Robele...}
```

Although all regexp implementations share a basic set of metacharacters and syntax rules, other tools and programs might have different extensions and variations than Qedit. For example, the alternation metacharacter "|" (equivalent to an "or" function) is not provided in Qedit. As the first implementation of regular expressions in Robelle products, this version of Qedit might not have all the extensions you are currently familiar with. We will be looking at other tools as we explore the possibility of extending our own implementation in future releases.

If you are interested in learning more about regular expressions, you should get a copy of *Mastering Regular Expressions* written by Jeffrey E. F. Friedl and published at O'Reilly & Associates, Inc. This book covers most regular expression implementations, the differences between each one, how most regexp engines work and some tips on how to get the best performance from each type.

Metacharacters

Qedit supports the following metacharacters:

^	Start-of-line anchor
$	End-of-line anchor
.	Matches any character
?	Optional character
*	Matches zero or more of the preceding character
+	Matches one or more of the preceding character
[	Start a character class
]	End a character class
^	If first character in character class, negate class
(	Subpattern start
)	Subpattern end

Anchor Characters.

In general, a regexp can find a match anywhere in the text as long as it appears on a single line. There are two exceptions to this rule. The start-of-line (^) and the end-of-line ($) anchors. They are called anchors for very good reasons. These anchors actually indicate that the match must occur at fixed positions within the line.

The start-of-line anchor specifies that the string must appear at the very beginning of the line. If you enter

```
^abc
```

the line will be selected only if the string "abc" is the first thing on the line. Thus,

```
abcdefghij          {will be selected}
xyzabc              {will not be selected}
```

Similarly, the end-of-line anchor specifies that the string must appear as the last thing on the line. In this example,

```
abc$
```

the lines must end with the string "abc." There must not be anything else after it, not even spaces.

```
abcdef              {will not be selected}
xyzabc              {will be selected}
```

You can combine the anchors to verify that lines contain only a certain string and nothing else. Simply use

```
^abc$
```

Every line has a start and an end anchor. If you search for the start or the end anchor (^ or $) by itself, Qedit matches all the lines in the file.

TIP: If you edit your file in full-screen mode with Set Visual Home Off, searching for the start-of-line anchor moves to the next line and puts the cursor at the first position. If you search for the end-of-line anchor, Qedit goes to the next line and puts the cursor after the last character on the line (if the last character is visible).

If the anchor characters are used anywhere else, they lose their metacharacter status and become ordinary characters.

Match Any Character.

The period, or dot, is used to match any character. The character can be of any type. As long as there is something in that position, there will be a match. For example,

```
abc.xyz
```

selects any line that contains the strings "abc" and "xyz" separated by a single character. That character can be anything (e.g., 1, w, #, etc).

Optional Character.

You can check the absence or presence of a character by following it with a question mark (?). In a regexp, the question mark indicates that the preceding character is optional. If it is present, it must appear only once.

```
ab?c      {matches only "ac" and "abc"}
```

Repeating Characters.

There are different ways you can check for the repetition of characters. If there is potential for a character to appear more than once, you can use the asterisk (*) or the plus sign (+) quantifier. These quantifiers are applied only to the character to their immediate left.

There is a very small difference between the two quantifiers. The asterisk represents *zero* or more occurrences of the preceding character. In other words, the character is optional, but, if it is there, it can appear multiple times. The plus sign represents *one* or more occurrences. This means the character must appear at least once, but it can appear multiple times.

```
ab*c      {matches "ac," "abc," "abbc," etc.}
ab+c      {matches "abc," "abbc," but not "ac"}
```

Character Class

When you have to check for a fixed string of characters, it is easy enough to simply type it at the actual regexp. Entering "abc123" will only find exact matches. What if you want to find the string "abc" followed by a numeric digit? There are no specific metacharacters for digits or alphabetic characters. However, regular expressions have a concept called **character class** to address these issues. Actually,

character class is a lot more powerful and flexible than metacharacters for specific types of text.

A character class is enclosed between brackets. The closing bracket can be left out. However, it is good practice to code it explicitly to avoid ambiguity.

Note that most regexp metacharacters listed above lose their meaning inside a character class. The start-of-line anchor acquires a different definition and a new metacharacter, hyphen (-), appears.

A character class is a list of possible values for a specific position in the string. The character class can be as long as needed. A character class for numeric digits would be

```
[0123456789]
```

Note, the list does not have to be in sorted order. You could have entered the digits in reverse order or in random order and the character class would still be valid. It is just harder to verify that all digits are included. Similarly, a character class for lowercase letters would be

```
[abcdefghijklmnopqrstuvwxyz]
```

It is really important to understand that a match occurs if **one** of the characters in the class is found. Using the "abc" example above, if we want to find this string followed by a digit, we would enter

```
abc[0123456789]    {matches "abc0", "abc1", etc.  to "abc9"}
```

To further restrict the search, we could have used

```
abc[13579]         {matches "abc" followed by one odd digit}
```

Because a character class is only a list of possible values, you can mix and match all the characters in the ASCII code table.

```
p[imy246!.*]e      {matches "pie," "pme," "p4e," "p*e," etc.}
```

This example would find text starting with the letter *p* and ending with an *e* that encloses a single character matching one of the letters *a*, *m* or *y*, one of the digits 2, 4 or 6, an exclamation mark (!), a period (.) or an asterisk (*). Note the period and asterisk are not metacharacters anymore.

Of course, if the character class contains many possible values, it can be tedious and error-prone to enter each character. The hyphen is a character-class metacharacter that can be used as a range indicator. Simply specify the first and last characters in the range. Numeric digits could then be coded as [0-9]. Lowercase letters could be coded as [a-z]. You can also combine ranges with single values, as in

```
abc[0-9a-z!.*]
```

A character class range is based on the ASCII character set. You could specify a range of

```
[A-z]
```

and it would be perfectly valid. In this case, the range would include all uppercase letters, a series of special characters ([,\,],^,_,`) and all lowercase letters. Typically, you would enter the character with the smallest ASCII value as the lower limit and the character with the largest value as the upper limit. Qedit accepts characters even if they are reversed (i.e., the largest value first) as in:

```
[Z-A]
```

Qedit detects this situation and swaps the values internally so [a-z] and [z-a] are really equivalent. To avoid ambiguity, it is recommended that you use the first format.

The hyphen is interpreted as a range indicator only if it is at a logical place between two other characters. If it is somewhere else in the class, it is used at face value.

```
[-a-z]      {hyphen and lowercase letters}
[a-z-]      {lowercase letters and hyphen}
[a-z-9]     {lowercase letters, hyphen and digit 9}
[a-z0-9]    {lowercase letters and digits 0 to 9}
```

Negated Character Class.

The caret (^) takes on a different meaning inside a character class. It is used at face value anywhere in the class, except if it is the first character in which case the caret negates the whole class. This means a match is found if the text *does not* contain any of the characters in the class.

```
p[246^]e           {matches "p2e", "p^e", etc.}
p[^246]e           {matches "pae", "p3e", etc.}
```

In the last example, the caret negates 2, 4 and 6. The regexp is true if the text starts with the letter *p*, ends with the letter *e* and encloses a single character that is not 2, 4 or 6.

Repeating Character Class.

Because a character class is interpreted as a single character, you can use the optional (?) and quantifier (* and +) metacharacters to further qualify a character class. For example, if we want to allow one or more numeric digits after the "abc" string, we could use the following regexp:

```
abc[0-9]+
```

Escape Character

Other characters used in a regular expression might also have special meanings. The most important one is probably the escape character. In Qedit, the backslash is the escape character. A metacharacter, however, loses its special meaning if preceded by a backslash. In the example,

```
abc[123]
```

square brackets indicate a character class. This regexp would match "abc1," "abc2" or "abc3." If we escape the square brackets as in

```
abc\[123\]
```

the square brackets are then used as literals. This means they are now part of the string. The only matching value is then "abc[123]."

If you want to search for a backslash, simply enter two of them in a row (\\). The only exception to this is the start-of-line metacharacter. Because it (^) is also a valid escaped sequence (see next section), there is no way to tell Qedit to search for the caret as a literal. You should use an expression with the corresponding hexadecimal value.

```
x05e
```

Escaped Sequences in Regular Expressions

The escape character can be combined with other characters to represent nonprinting characters. Qedit recognizes the following escaped characters: (These should not be confused with escape sequences that control the display on HP-type terminals. They are also not metacharacters.)

\b	Backspace
\e	ASCII escape character (ESC)
\f	Form feed
\n	New line (line feed)
\r	Carriage return
\s	Space
\t	Horizontal tab
\DDD	1-3 octal digits representing a character's ASCII value
\xDDD	1-3 hex digits representing a character's ASCII value
\^C	Control code (e.g., Control-G (^G) is the Bell character)

For example, you would use:

```
\t          {all lines with a tab character}
\e&d@&      {terminal escape sequence ESC&d@}
```

Escaped characters can be used anywhere an ordinary character is used, including a character class and to declare a character range.

Backreferences in Regular Expressions

We have seen basic expressions in which almost everything revolves around single characters of text. Even character class lists are really used to match a single position.

You can use parentheses to divide a long regular expression into smaller portions. Each portion then becomes a regexp on its own. This does not affect the way a string search is done. However, each subpattern can then be used in a replacement operation.

Subpatterns are numbered from 0 to 9. Subpattern 0 is reserved and represents the complete matched string. Note that subpattern 0 is implicit and is always available, even if the expression does not contain parentheses. Explicit subpatterns are numbered from 1 to 9, starting from the left of the expression.

Subpatterns can be referenced in a replacement regexp by using the escape character, a backslash, followed by the subpattern number. When applying the replacement string, backreferences are substituted with the actual matching text. Backreferences can be used as many times as needed. Each reference ends up with the original text.

Let's say we have a file that contains a series of phone numbers. In North America (and possibly other countries), phone numbers contain a 3-digit area code followed by a 3-digit exchange number and, finally, a 4-digit individual number. Unfortunately, in our case, the phone numbers are just series of 10 numeric digits without separators. For example,

```
1234567890
1112224444
9087374456
```

We would like a fast and easy way to format them so that the numbers are easier to read. To find all these strings, we can use the following regexp:

```
([0-9][0-9][0-9])([0-9][0-9][0-9])([0-9][0-9][0-9][0-9])
```

We use the [0-9] character class to specify that we are expecting only numeric digits.

In this example there are three subpatterns in the regexp. Each subpattern is enclosed in a set of parentheses.

The first subpattern (\1) repeats the numeric character class 3 times. It represents the digits in the area code. The second subpattern (\2) also has the character class repeated 3 times. It represents the exchange number. The third and last subpattern (\3) repeats the character class 4 times. It represents the individual number.

Subpattern \0 represents all 10 digits.

To reformat this information, we can now combine backreferences with other characters to arrange the numbers any way we like. Let's say we want to put the area code in parentheses, insert a space after it and insert a dash (-) between the exchange number and the individual number. We would use the following substitution string:

```
(\1) \2-\3
```

The list would appear as follows:

```
(123) 456-7890
(111) 222-4444
(908) 737-4456
```

You can use subexpressions to reorder the text in lines. For example, if we want to reverse the telephone numbers (show the last four digits first, then the first three digits of the telephone number, followed by the area code), we could use

```
Last: \3 Middle: \2 Area: \1 Complete: \0
```

This substitution string produces the following list (assuming that we started with the same data in this example and used the same regexp):

```
Last: 7890 Middle: 456 Area: 123 Complete: 1234567890
Last: 4444 Middle: 222 Area: 111 Complete: 1112224444
Last: 4456 Middle: 737 Area: 908 Complete: 9087374456
```

Escaped Characters in Replacement String

Escaped sequences can also be used in the replacement string of a Change command, making it easier to insert special characters.

All escaped sequences are valid in the replacement, except for octal values (these are coded using octal digits). For example, "\007" can be used to represent the bell character. However, backreferences in the replacement string are represented by *n*, where *n* is a digit from 0 to 9. Because of that, \007 might be interpreted as backreference \0 followed by the literal 07 (bell character).

To work around this limitation, a backslash followed by a digit in a replacement string is always assumed to be a backreference. To specify special characters using numeric values, you should use hexadecimal notation (e.g., \x007).

Qedit Glossary

Introduction

Certain symbols and terms are common to many Qedit commands. They are defined here, in alphabetical order.

The slots for variables within the command definitions are highlighted in the text. You replace these variable fields with your real-life item. For instance, the syntax for the Use command is "Use *filename*". You replace the term *filename* with any valid filename. For example,

/use sample.quse

Terms

Abbreviating

You can abbreviate many Qedit commands. You can shorten command names, for example, to a single letter, unless more than one command starts with the same letter. If that's so, enter enough of the command name to distinguish it. The reserved words First, Last, and All can be replaced by [,] and @ in Qedit commands. Sometimes you can even dispense with the command completely: /? means help, /\ means back one line, /55 means go to line 55, /"string" means find this string, /^"string" means search backwards for this string, and a simple Return means go ahead one line.

Batch

Although Qedit is primarily designed for interactive editing, all commands except Visual can be used with stdin or stdlist redirected. If either stdin or stdlist is redirected, Qedit assumes that it is in batch mode. There are two differences in operation:

An error causes Qedit to terminate in batch mode, but only skips the current command line in session mode;

Where a "Yes-or-No" question is asked in session mode (e.g., "Clear?"), the question is printed with an implicit "Yes" answer in batch mode (e.g., "Clear? Yes").

In both session and batch, a "warning" message is nonfatal. Set Autocont ON causes errors to be nonfatal in batch mode. New work lines can be Added in batch, but because Control-Y cannot be used, the Add should be ended with "//".

Calculator

Qedit will treat any command that begins with an equal sign ("=") as an expression to be evaluated. To add two numbers together:

```
=125+512
Result= 637.0
```

An expression consists of numbers and operators. The operators can be addition (+), subtraction (-), multiplication (*), division (/), or exponentiation (**). The value of the expression is printed immediately.

For a complete description of calculator, type `help calc`.

Column

Individual character positions within lines are called columns and have column numbers. See *template* for a method of drawing a column template above any line. Column numbers are referenced in the Change command and string *windows*. For example:

```
/change 1/4 "" 23                    {delete first 4 columns in line 23}
/change 1 " " 4/9                    {insert 2 columns at front}
/l "begin"(1/10)                     {find "begin" in first 10 columns}
```

A *column* is an integer number between the lowest column of the line and the highest column. The lowest column number is 7 for standard COBOL, and 1 for SPL, FORTRAN, Pascal, RPG, Text, COBFREE, Data and Job files. The highest column number is 72 for standard COBOL, SPL, Pascal and FORTRAN files, 1,000 for COBFREE, 256 for TEXT, 80 for COBOLX, RPG and Job files, and 8,172 for Data files. When in doubt as to column numbers, use LT to list a line with column headings. Shorthand: (1) = (1/1), ([/30) = (first column/30), (30/]) = (30/last column).

Using Set Left *column* and Set Right *column*, you can set *margins* in specific columns. Any existing data beyond the margins is retained, but new lines added will have blanks outside the margins.

Command

Qedit accepts two basic types of commands: those such as Add, Change and Text that can be combined on a line using semicolon to separate them; and those such as who and ls which can only appear once on a command line because semicolon is reserved for separating parameters.

```
/text abc;modify 5          {two Qedit commands}
/ps                         {one shell command}
/new abc;who                {Qedit and shell command}
```

We call the first style "qedit" commands and the second style "shell" commands, although they are all equally Qedit commands. With the first style, the command name can usually be abbreviated to one letter (Add is A), although some commands require several letters (Findu for Findup). With the "shell" style, the command name must usually be spelled out completely.

```
/vi                         {"vi" means Visual}
/c "abc"xxx" all            {"c" means Change}
/ls                         {means show files, not lsort}
```

Control Character

You create a control character by holding down the Control key while you strike another key. Control plus "A" generates Control-A. These are normally nonprinting characters, but they may do things to your terminal. For example, Control-G rings the bell. We assume that Control-Y is your interrupt character and that you do not use Control-D for end-of-file. Qedit uses control characters for a number of purposes:

In Modify, control characters specify the edit functions:

- Control-D for delete, Control-B for before, etc.
- Control-Y stops execution of the current Qedit command.
- Control-H causes the cursor to backspace one position in the current line.
- Control-I skips to the next tab position.
- Control-X cancels the current input line.
- Control-S pauses a listing that is printing too fast for you to read.
- Control-Q resumes a listing that you have paused with Control-S.

Editing control characters can be tricky. If you use Set Editinput to clean your text of line "noise", Qedit will not let you enter control characters in Add or Replace. If you use Modify, it treats all control characters as edit functions. If you use Visual, the block-mode terminal

strips all control characters from the text. There are three things that you can do: 1) use Set Decimal ON and insert control characters using Change "$" '26, 2) use Set Editinput Data OFF and enter them using Display Functions in Add and Replace, and 3) use Set Mod Qzmod and insert them using Control-W, Control-P (put).

CRT

CRT (Cathode Ray Tube) is a generic term used to refer to the terminal. It refers equally to "real" HP terminals, clones of HP terminals made by other companies, and PCs that run terminal emulation software.

Current Line

The current line is the line you last accessed. You can refer to it using the special character "*" instead of a *linenum*. For most commands, * is also the default *rangelist*. For example, VIS sends you into full-screen mode around the current line.

Defaults

When Qedit asks you a question, it puts the "default" answer in brackets (e.g., Purge file? [no]). The default is usually the option that would do the least harm to your file. That is, "do not complete the task", "do not erase the file", or "do not upshift the line". If you press Return to the question, Qedit will take the default. In batch processing, there is no one available to answer the question, so Qedit must decide on the proper answer for you. Qedit assumes that you want your batch task to complete, so it always selects the option that will complete the command successfully. That is, "do clear the file", or "do upshift the line".

External File

Although you can only edit the workfile that is currently Open, Qedit accesses files for other purposes than editing.

Qedit reads external files in the Add, Hold, List, Merge, Text and Use commands:

```
/add 100.1=tfile          {adds lines from "tfile" at line 100.1}
/list tfile               {lists the contents of "tfile"}
/text tfile               {makes a copy of "tfile"}
/use tfile                {executes Qedit commands from "tfile"}
/merge tfile              {merge in contents of "tfile"}
/hold sample 1/5          {write lines 1/5 of sample to Hold file}
```

Qedit recognizes three types of external files:

- Other Qedit workfiles.

- NUMBERED text files. Each record contains a line number field. The lines are sorted by the line number. This is the file created by a Keep command.
- UNNUMBERED text files. Records with no line number field. These are created by a KQ command or by Keep file,UNN. The language is set to Data.

File Names

A *filename* is any valid LINUX file name and is used in Qedit commands to identify a *workfile* for editing (Open, New, Text) or an *external file* to be accessed in some way (Add, Keep, List, Text and Use). Qedit accepts file names up to 240 characters long, containing underbars (_) and dashes (-). The following commands all contain valid file names:

```
/open qedt3p1.source                    {open file for editing work}
/add 50.1 = abcd.pub                    {copy in lines from a file}
/new qedt3p2.qedit                      {create a new Qedit workfile}
/keep test.c                            {convert workfile to Keep file}
/text /GREEN/BOB/temp-dash
/list /GREEN/BOB/temp_underbar
```

File names that include special characters might cause problems to Qedit. For example,

```
/Text file:name
Error: Extra or invalid character in Text command
```

If you run into this, you can use the $file keyword instead. The $file keyword can be used wherever a file name is expected such as in the Text, Add, List commands. The syntax is:

```
$file[=]"filename"
```

$File is a reserved keyword, which is followed by an optional equal sign and the file name enclosed in string delimiters. Without doing anything to the string, Qedit tries to open the specified file. The previous example now becomes:

```
/Text $file="file:name"
10 lines in file
```

Full-Screen Editing

To use the full-screen editor of Qedit, use the Visual command. This feature works on most HP terminals with block-mode and provides many powerful features, including navigation while in Visual mode.

Hold File

There are two Hold files. You can explicitly save lines in the file called Hold by using the Hold command, or HH /HJ in Visual mode. Lines

are written to the Hold0 file every time you move or copy with the Add command (MM, CC, and DD in Visual mode). You can refer to the contents of these files by their file names in any of the commands that access external files, such as Add-File, List, and Use.

J Option

You may append one or two option letters to a command name: Q, T, or J. For example, the List command has these options: LQ, LT, LJ, LQJ, and LQT. The J option specifies left-justified or "jumping" or other options. For example:

```
/lj                                  {List-Jumping to browse; type N to stop}
/lqj                                 {List-Jumping without sequence numbers}
/cj"*"."                             {verify each change before updating}
/aj *                                {add-justified after *; same
indentation}
/rj 423                              {replace-justified; same indentation}
/hoj 1/9                             {append rangelist to end of holdfile}
```

Jumbo Files

Introduced in Qedit 4.3, Jumbo files are files in a new Qedit file format. They are similar in structure to original Qedit files, but Jumbo files can hold lines up to 1,000 characters. In addition, Jumbo files can contain up to 99 million lines.

Starting in Qedit 4.6.57, there is a new workfile format known as Wide-Jumbo. These expanded Jumbo files can hold lines up to 8,172 characters.

If you pass a Jumbo file to a program that knows about Qedit files but not Jumbo files, the file will appear to be empty to the program.

Keep File

A Keep file is a disc file that is created by the Keep command of Qedit. See *external file*. A Keep file cannot be edited per se, because you cannot insert lines in it. A Qedit workfile is designed to hold the same data as a Keep file, but more compactly and with the ability to insert lines. Use the Text command to copy a Keep file into Qedit format.

Language

Qedit works on files of standardized formats called *languages*. Most are programming languages: COBOL, FORTRAN, SPL, and Pascal. The "language" Data is provided for files with a nonstandard line length (e.g., Set Length 45, Set Length 132), but less than or equal to 1,000 columns per line. The "language" Text is like the language Data, but for lines with less than 256 columns. The *language* of a file tells

Qedit how long the records may be, where the sequence number goes, and much more.

For Qedit workfiles, the *language* is assigned to the file when it is created (see Set Lang, New and Text).

Qedit also determines a language for each external file (COBOL, COBOLX, SPL, FORTRAN, Pascal, RPG, Job, Text) by looking at the maximum record length, the file name extension and the format of the first record. When external files are accessed, Qedit determines these attributes following rules that are defined in appendix B. There is no need to specify the Lang explicitly, unless there is an ambiguity (e.g., /Text datafile,UNN because the file has numbers in last eight columns).

Left

The Set Left command allows you to set a left margin for lines in your workfile. When you do this, existing data to the left of the margin column is retained unchanged, even though you may edit the rest of the line. Of course, if you Delete a line, the entire line is gone. You can also use Set Right to create a right margin.

Length

The maximum *length* of lines in a Qedit workfile is 8,172 columns, if the file has Set Lang Data. Other Lang values are limited to length 80 or less (72 for SPL, FORTRAN, and Pascal, 74 for COBOLX and 66 for COBOL without the comment columns). For Text and Data files, the maximum line length can be defined using Set Length (maximum is 256 for Text, and 8,172 for Data).

Line

A *line* is a sequence of characters within a Qedit workfile. It has a length which may vary as the line is edited and a maximum *length*. Many Qedit commands are based on the *line*. List displays lines, Delete deletes lines, etc. If you use *margins* (Set Left, Set Right), you can only list and edit the portion of the line within the margins. Each unique line has a *linenum* that determines its position within the workfile.

```
55.01 Sample line of text.
```

Linenum

Each line in the workfile has a *linenum* (e.g., 999.99) that determines its relative location in the workfile. Because each line number has a fractional part, lines can be added between existing lines. For example:

```
/add 1.1
1.1 line inserted between 1 and 2.
1.2 line inserted between 1.1 and 2.
1.3 //
/list 1/2
1 *REMARK
1.1 line inserted between 1 and 2.
1.2 line inserted between 1.1 and 2.
2 IDENTIFICATION DIVISION.
```

The smallest increment that you can have between two lines is 0.001. After adding enough lines in a single spot, you will not be able to add any more. For example, lines cannot be added between 5.111 and 5.112. When this happens, use Renum to renumber all or part of your file, or use Set Vis Renum On.

The simplest form of Qedit commands refers to a single *linenum*:

- *nnnnn.nnn*: 1 1.0 1.05 .05 100 1000 10000.001
- FIRST: the first line in the file (lowest line number)
- LAST: the last line in the file (highest line number)
- [: default abbreviation for FIRST
-] : default abbreviation for LAST
- : the most recently accessed line

Examples of commands that refer to a single *linenum* are:

```
/add 50.1                    {add new lines at line 50.1}
/c "X"Y" 100                 {change X to Y in line 100}
/delete last                 {delete the last line in the file}
/list [                      {list the first line in the file}
/modify *                    {modify the "current" line}
/replace ]-1                 {replace penultimate line in file}
/list 200.1                  {list line 200.1, if it exists}
```

Qedit also supports *relative line numbers*, as in List LAST-5 or Modify *-5/*+5.

Margins

Using Set Left and Set Right you can define margins for your workfile. The existing data outside the margins is unchanged when you edit within the margins. This can be extremely useful for editing files with more than 80 columns per line.

Memory Lock

Qedit has commands for enabling and disabling the terminal Memory Lock. This is so that you can leave the User Keys displayed on your terminal and still access the Memory Lock function:

```
/$                                    {or $+enables memory lock}
/$-                                   {disables memory lock}
```

To use memory lock when prompted for a command, just move the cursor up to the desired line, type "$" and hit Return. This feature does not work in Visual mode.

Patterns

You can ask Qedit to look for a *pattern* instead of a specific string by using the Pattern *window* option:

```
/list ".@key@" (pattern)
```

The command above displays all lines that contain a period in column 1, and the string "key" with anything in between and at the end. The string window can also specify Upshift to ignore case and Nomatch to select lines that fail to match.

Qedit will only find the pattern within a single line of text, not spanning two lines.

The special characters in a pattern are:

- @ to match anything, including nothing
- # to match a single numeric digit
- ? to match a single alphanumeric character
- ~ (tilde or wavy line) to match zero or more spaces
- & match next character (use to match "@")
- ^ (reserved for future use)
- ! (reserved for future use)

Important: At-signs (@) are needed at both ends of a pattern if you want to search for a pattern at any spot in the line. List "QEDIT" (PATTERN) matches only lines consisting of "QEDIT" only, starting in column 1.

The Nomatch and Pattern options are ignored for the Change target *string*. If you try to use them, Qedit prints a warning.

Here are some sample commands containing window options:

```
/list "bob" (upshift)                  {"bob","BOB","Bob",etc.}
/list "@BOB@" (pattern)                {lines containing "BOB" anywhere}
/list "BOB@" (pattern)                 {lines with "BOB" in column 1}
/del "&@@" (pattern)                   {delete lines starting with @}
/mod "@fix@QEDIT@"(pat)                {lines with two strings}
/delete "~" (pattern)                  {delete all blank lines}
/list "^[A-Z][a-z]*" (regexp)          {lines starting with an uppercase}
```

Quiet-Q Option

You may append one or two option letters to a command name: J, T, and Q. For example, the Add command has these variations: AddQ, AddT, AddJ, AddQT, and AddQJ. The Q option means QUIET, without line numbers, or without printing the lines processed. For example:

```
/lq 5/10                               {list lines 5/10 without line numbers}
/kq paul                               {save lines without line numbers}
/aq 5.01                               {add new lines, but don't prompt}
/aq 10.00=abc                          {add file without printing the lines}
/hq 45.1/.9                            {replace Hold, but don't print lines}
/cq "X"Y"                              {change X to Y, but don't print line}
```

Range

A *range* is just a series of lines defined by a starting line number, a slash (/) and an ending line number. ALL is short for FIRST/LAST and @ is short for ALL. If the ending line is left off, Qedit assumes LAST. You can shorten a range like 516/516.554 to 516/.554.

```
/a 20=100/120                          {copy range 100/120 after line 20}
/c "X"Y" */200                         {change X to Y in current line to 200}
/delete all                            {delete the range ALL}
/keep tF3 [/200                        {write the range [/200 to a file}
/list 100/                             {list the range 100 to LAST}
/m 1111/.99                            {modify the range 1111/1111.99}
/list last-10/                         {list the last 11 lines in the file}
/l @                                   {list the entire workfile}
/zz 5/10;l zz                          {mark a range, then list it}
```

Rangelist

Qedit commands usually contain a part called the *rangelist*. A *rangelist* is simply a sequence of line *ranges* separated by spaces or commas. Here are some sample *ranges*:

Range	Means
1	a single line
1/4	lines 1 through 4, inclusive
25/100.1	lines 25 through 100.1
100/	lines 100 through the LAST line
ALL	lines FIRST through LAST
-9/+9	area around current line

Here are some sample *rangelists*:

Rangelist	Means
1,5	lines 1 and 5
1/5 10/20	lines 1 through 5 and 10 through 20
25,33/100	lines 25 and 33 through 100

A *rangelist* can contain overlapping lines. Qedit does not try to resolve the ranges into a list of ordered, unique lines. The ranges are processed as they appear in the list.

Rangelist	Means
30/40,1/10	lines 30 to 40, then 1 to 10
1/10 5/20	lines 5 to 10 are processed twice
all,all	process the entire file twice

A *rangelist* can also contain a string search:

Rangelist	Means
"strg"	search the entire file for "strg"
"strg" 10/20	search only lines 10 through 20

A rangelist can include up to 10 strings (see String for definition). Strings are separated from each other by an `OR` or `AND` keyword. Each string can have its own search setting such as column range and options. `OR` and `AND` keywords can not be mixed in a rangelist.

When OR is used, each string is compared in turn against the text. As soon as a match is found, the line is selected. Thus, most commonly found strings should be placed at the beginning of the list to increase speed.

For example,

```
/List "abc" or "xyz"                  { search for "abc" or "xyz" }
/C 1/2 "ME" "abc" (u 30/35) or "xyz" (50/60 s)
    { search for caseless "abc" in columns 30/35 or smart "xyz" in
columns 50/60 }
```

When `AND` is used, all strings are searched for on each line and all strings must be found for the line to be selected. The strings do not have to be in the same order. As soon as one string is not found, the line is rejected.

For example,

```
/List "abc" and "xyz"
    { search for "abc" and "xyz". Both strings must be present, }
    { anywhere on the line, in any order                       }
/C 1/2 "ME" "abc" (u 30/35) and "xyz" (50/60 s)
    { search for caseless "abc" in columns 30/35 and         }
    { smart "xyz" in columns 50/60                           }
    { If either string is missing, the line is not selected. }
```

The complete rangelist is saved and used when the "previous string" syntax (i.e., a null string) is entered. For example, `/List ""`.

Each command has a default *rangelist*. The following commands default to "*", the current line:

Add, Append, Change, Delete, Find (start search at *), Hold, List, Modify, Proc, Replace, Visual (enter Visual mode at current line), ZZ.

Justify defaults to "*" for Center, Left, or Right, and to */end (maintaining blank lines between paragraphs) for Format or Both.

Before, Do, and Redo defaults to the last command entered.

Relative Line Numbers

When you tell Qedit which line you are interested in, you can either specify the exact line number, as in

```
/list 5 or /list last
```

or you can specify a position relative to an exact line, as in

```
/list *+6 or /list last-1
```

The first lists a line that is 6 lines after the current line and second lists the second from last line in the file. The "*" is optional. Relative line numbers can go forward or backward 10,000 lines.

To modify the text around the current line, use

```
/modify *-5/                    {use Control-Y to stop the Modify}
/modify -5/                     {the * is optional}
```

Qedit will even let you use relative line numbers when looking at an external file, as in

```
 /list invoice.job last-10/last
```

Right

You can use the Set Right command to define a right margin for the lines in your file. Any data beyond the margin will remain unchanged as you edit the data to the left of the margin. You can also set a left margin with Set Left.

Shifting

The Qedit string *window* has an option to match strings even if they differ in case. If you want to match "speed demon", "SPEED DEMON" or even "Speed Demon", do:

```
/list "speed demon" (upshift)
```

String

Most Qedit commands can specify a *string* of characters to be searched for in the workfile. Only lines containing the string are processed by the command. A *string* is delimited by quote characters ("SAM") or by one of these other special characters:

```
'   \   ~   :   |   %
```

The delimiter list can be customized with the Set Stringdelimiters command.

The maximum length of a string is 80 characters. Apostrophe is a valid string delimiter when Set Decimal is OFF (handy because ' is an unshifted key on many keyboards). All these delimiters can be used within Qedit commands. Some delimiters, like the colon, cannot be used in an implied search or on the home line (===>) in full-screen mode.

```
/QEDIT                                  {find the next occurrence of the
word QEDIT}
/:QEDIT:                                {colon prefix identifies a
system command}
```

You can specify more precise string matching by appending a *window* to the string ("SAM" (UPSHIFT), etc.). A null string ("") refers to the previous string entered, with the same window as before. For example:

```
/c "QEDIT"Quedit"@                      {change spelling in all lines}
/l 'QEDIT' (upshift)                    {match uppercase and lowercase}
/find \withh\                           {find spelling error; fix it}
/change \\with\
```

Tab

The TAB key can be used to skip logically to the next Tab stop (also physically, if Tabs are set on the terminal). If more Tabs are included in a line than there are Tab stops, a new work line is created. The default tab key is Control-I (TAB), but it can be changed (Set Tabs "_"). The default Tab stops are every 10 columns (MPE) or every 8 columns (LINUX), but you can set the tabs to whatever columns you like with Set Tabs.

Template-T Option

You may append one, two, or three option letters to a command: Q, J, or T. For example, the List command has these variations: ListQ, ListT, ListJ, ListQJ, and ListQT. The T option causes a column-number template to be printed once before the command is processed. The T option is most useful with Add, List and Modify.

```
/LQT 1                                          {T=template of column numbers}
1...+....10...+....20...+....30...+....40...+....
LINE 1.
```

Window

A *window* is used to limit the extent of string matching. Normally, specifying a string in a rangelist implies processing all lines where the string occurs anywhere within the line, regardless of starting column and surrounding context.

With a *window*, string matching can be restricted to a specified column window (example: 10/30 means column 10 through column 30). Shorthand: (1) = (1/1), ([/30) = (first column/30), and (30/]) = (30/last column). Use a (1/132) window with "TEXT" files to reduce the record width to 132 columns. The column numbers begin with 7 in COBOL and 1 in the other languages.

The complete syntax for a *window* is: ([*column*/*column*] [*keyword*]...)

The window keywords are

Window keyword	Default
(SMART | NOSMART)	NOSMART
(UPSHIFT | NOUPSHIFT)	NOUPSHIFT
(PATTERN | NOPATTERN)	NOPATTERN
(MATCH | NOMATCH)	MATCH
(REGEXP | NOREGEXP)	NOREGEXP

A single window may specify multiple options separated by spaces or commas and following the column range, but if Pattern is included the Smart-NoSmart option is ignored. That is, (Upshift Pattern) makes sense, but (NoSmart Pattern) does not. The options are independent and setting or resetting one does not change the others.

With the Smart keyword, Qedit matches a string only if the string is preceded by a "special" character, or the start of the window, and is followed by a "special" character, or the end of the window. In SPL, the apostrophe is not "special". In COBOL, the hyphen is not "special". In Pascal, the underline is not "special". In FORTRAN, embedded spaces are allowed.

When you specify Nomatch, Qedit selects the lines that do not contain the string. The default of course is MATCH to select lines that do contain the string.

With the Upshift window keyword, Qedit ignores the case of letters in deciding whether to find a match.

Pattern means that the string in the window is to be treated as a pattern to be matched (i.e., "@UPD@MASTER@"). It may be combined with Upshift.

Regexp means that the string in the window is to be treated as a regular expression to be matched (i.e., "UPD.*MASTER"). It may be combined with Upshift.

Here are some example uses of windows:

```
/list ".begin" (1/10 upshift)           {.begin in 1st 10 cols}
/list "@begin@end@" (pattern upshift)   {...begin...end...}
/list "^begin.*end$" (regexp noup)      {begin...end}
```

A *window* can be specified permanently with the Set Window command, or temporarily after any *string* in a rangelist. For example:

```
/set window (smart)                     {use Smart for all string searches}
/list "sum"                             {defaults to Smart searching}
/l "Sam" (upshift)                      {upshift in this command only}
```

Workfile

Qedit manipulates a collection of text lines that is called a *workfile*. The workfile is a compact disc file with a permanent name that you can edit. Use New or Text to build them. The scratch file is a special workfile that is the default, temporary workfile.

To provide the fastest possible response time, Qedit does not write every word that you type out to the disc. Thus, after a system crash (or phone disconnection), you could lose up to 10 lines of text. If you wish to force Qedit to post your changes to the disc, you can either Shut the workfile or do an LINUX command (e.g., ls).

Qedit saves the "context" of the workfile (i.e., Set Left/Right, current line number, Set Length, etc.) when you Shut it. When you Open the workfile again, Qedit recalls the same context. The Open command prints a compact warning of any features it sets from the user label.

Special Characters

Certain nonalpha and nonnumeric characters like * and / have special meaning within Qedit:

?
Means Help, Nonprinting Characters, Alphanumeric (in Patterns) or Optional (in Regexp)

Typing a question mark in the Visual home line or in response to the Line mode prompt (/), is a request for on-line Help. In Visual you can get more detailed assistance by typing Help, instead of "?," in the home line.

When Visual prints a ? at the start of a line, it means that the line contains nonprinting characters, which are replaced by dots (.).

Question mark "?" in patterns matches a single alphabetic or numeric character:

```
/list "BASE??"(pattern)                    {"BASE" plus 2 alphanumerics}
```

A question mark (?) in regular expressions qualifies the preceding character and makes it optional. This means the character may or may not be there. In either case, the search is successful.

```
/list "cancell?ed" (regexp)                {"canceled" and "cancelled" are found}
```

$
Means Hex, Memory Lock, List Option, Previous File or End-Of-Line (in Regexp)

Dollar sign is used by Qedit to enable (/$) and disable (/$-) memory lock at the current line.

In the calculator, $ is the prefix for a hexadecimal value (=$FF).

The List command has a variety of temporary options preceded by $. For example:

```
/list $octal 5/6                           {octal dump}
/list $incl abc                            {Include files}
```

$ can be used as a shortcut to refer to the "previous" file name referenced in a Qedit command. For example, after List XXX, the $ file name is XXX. If you already have an open workfile or scratch file, a Text or Open command makes Qedit shut the current workfile. Thus, the $ file name now contains the previous workfile name. If you are not using a workfile, then $ is not updated by the Text or Open command. However, it is updated by a Shut command without a file name. You can use $ as a shortcut in commands that refer to an external file name (Open $, Add 1 = $, List $, Use $, etc.). Verify $ shows you the name of the "previous" file.

A dollar sign ($) in regular expressions identifies the end of a line. It takes on this meaning only if it is the last character in the regexp. If used anywhere else in the expression, the dollar sign is used as a literal.

When it represents the end of a line, the dollar sign can find a successful match only when the string is the last thing on a line.

```
/list "The END$" (regexp)                    {line must end with "The END"}
```

^

Means Findup, Control-Char, Start-of-line (in Regexp) or Negate (in Regexp)

The circumflex character (^) is a short name for the Findup command. In documentation, it often indicates a control character (^A is Control-A). If you are not on an HP terminal, you can use ^1 through ^8 to simulate the user function keys in Line mode. That's circumflex-1, not Control-1!

The circumflex (^) in regular expressions identifies the start of a line. It takes on this meaning only if it is the first character in the regexp. If used as the start-of-line, it indicates that the string must be the first thing on that line for a successful match.

```
/list "^Once upon" (regexp)                  {line must start with "Once upon"}
```

If it used anywhere in the expression and is not preceded by a backslash, it is used as a literal.

If the circumflex (^) in a regular expression is preceded by a backslash (\), it indicates a control-character combination. The character to the right of the circumflex makes up the actual control character.

```
/list "\^G" (regexp)                         {Control-G or Bell character}
```

The circumflex (^) in a character class within regular expressions negates the list of characters in the class. It takes on this meaning only if it is the first character in the class. If used anywhere else in the class, it is used as a literal.

If used as a negation, it indicates that the match is successful if the character in the specified position of the text *is not* in the class list.

```
/list "[^abc]" (regexp)                      {successful if not "a," "b," or "c"}
```

.

Means Nonprinting, Reset, Decimal Point or Any Character (in Regexp)

The most common use of a period is as a decimal point in line numbers: 12.3.

List $char uses a period to represent nonprinting characters in displays.

A period as a command at the Visual home line means "reset the current Cut and Paste task".

A period or dot (.) in regular expressions is a placeholder for any character.

```
/list "[a.c]" (regexp)                    {one character between "a" and "c"}
```

!
Means Shell Script or Too Long

Put an exclam "!" at the start of a line to indicate a shell script or command.

```
/!ls                                      {list current directory}
```

When a line is too long to print on the Visual screen, Qedit prints an exclamation mark at the start of the line.

%
Means Octal or String

Percent (%) means either an octal value (%454) or a string (/list %xxx%).

*
Means Current, Refresh, Multiply or Quantifier (in Regexp)

In the calculator, * means multiply, as in `=5*30`.

In Visual, an * at the `===>` command lines tells Qedit to Refresh the screen. When using Set Vis Update On to automatically update the screen, *> or *< moves ahead or back one page, without updating the current page.

You can refer to the current line in your workfile by means of "*" (e.g., Modify *-10/*+10). "*" is usually the default *rangelist* for a command if you do not specify one. The *-pointer is moved by these commands:

Command	Status of "*" After the Command
Add	last line added.
Change	last line changed.
Delete	previous or next line, it depends.
Find	last line found or end-of-file.
Findup	last line found or start-of-file.
Hold	last line held.
Justify	last line updated.
Keep	no change to current line.
List	last line listed.

Lsort	last line sorted.
Modify	last line modified.
Proc	last line passed.
Replace	last line replaced.
Text	first line in file.
Visual	*-line of last page displayed.

An * can also refer to the "current" (or recent) workfile; as in Open * or Use *. The * shortcut refers to the currently open Qedit workfile unless none is open, then it refers to the one most recently Shut.

An asterisk (*) in regular expressions indicates the preceding element might repeat zero (optional) or more times in the text.

```
/list "op*q" (regexp)                    {"p" might be missing or appears
many times}
```

\
Means Previous, String, Literal Match (in Regexp) or Special Characters (in Regexp)

If you enter only a Return in a command line, Qedit increments the current line pointer to the next line and displays it.

If you enter a command line containing only a backslash ("\"), Qedit decrements the current line to the previous line and displays it. Entering several backslashes ("\\\") displays backwards several lines.

You can also use \ as a string delimiter (e.g., /list \xxx\).

A backslash (\) in regular expressions is used to indicate the next character must be used as a literal. It removes any special meaning this character might otherwise have.

```
/list "\[" (regexp)                      {"[" is not start of character class}
```

A backslash (\) in regular expressions might qualify the next character as a special, nonprinting character. These are special characters:

- \b Backspace
- \f Form feed
- \n New line (line feed)
- \r Carriage return
- \s Space
- \t Horizontal tab
- \e ASCII escape character (ESC)

- \DDD 1-3 octal digits representing a character's ASCII value
- \xDDD 1-3 hex digits representing a character's ASCII value
- \^C Control code (e.g,. Control-G (^G) is the Bell character)

/
Means Prompt, Range Delimiter, Stop, Exit, or Divide

Qedit uses the slash "/" in many places:

- As the delimiter in a line *range* (e.g., 500/600).
- As the delimiter in a column range (e.g., Change 1/2 "").
- // (two slashes) terminate input in the Add command
- (same as Control-Y).
- In Visual, / at the ===> line means Exit from Visual mode.
- In the calculator, as a divide (e.g., =100/5).

[
Means FIRST, [default] or Start Class (in Regexp)

Left bracket ([) is short for the FIRST line in the file, by default. This abbreviation can be changed with Set Zip.

```
/list [                                    {list first line}
```

In questions, Qedit shows the default answer in square brackets:

```
Purge existing file [No]?
```

In the documentation, [and] indicate optional fields in commands (e.g., List [*rangelist*]).

Left square bracket ([) in regular expressions indicates the start of a character class.

```
/List "x[abc]z"                            {character class starts with "a"}
```

]
Means LAST or End Class (in Regexp)

Right bracket (]) is short for the LAST line in the file, by default. This abbreviation can be changed with Set Zip.

```
/delete ]                                   {delete last line}
```

In the documentation, [and] indicate optional syntax fields (e.g., Delete [*rangelist*]).

Right square bracket (]) in regular expressions indicates the end of a character class.

```
/List "x[abc]z"                             {character class ends with "c"}
```

{ }
Are for Comments or Indentation

Qedit commands can have comments attached to them, as long as they are enclosed in curly braces:

```
/keep test.c,yes    {update disc file}
```

Qedit recognizes these comments at the "qux/" prompt or in usefiles. Qedit also accepts comments on the home line in Visual mode, and at the **More?** prompt in Browse mode.

Braces are also used in the Add Justified and Replace Justified commands to indicate a change of indentation.

@
Means ALL

The at sign (@) means "all" in some fashion:

```
/list @                                     {all lines in a file}
/help list,@                                {all information about List}
/l "Cu@"(pattern)                           {all strings starting with "Cu"}
```

The abbreviation for "all lines" is @ by default, but can be changed with the Set Zip command.

&
Means Literal Match

Ampersand (&) in a pattern-match string means to match the next character literally, even if it is an "@" or other character with pattern meaning:

```
/list "&@@"(pat)                            {all lines starting with "@"}
```

:
Means Shell Commands or String

Colon ":" at the start of a command line indicates a shell script or command:

```
/:who                                   {show users logged on}
```

Colon is also a valid string delimiter:

```
/list :barbara:
```

;
Means Multiple Commands

Semicolon ";" combines two or more Qedit commands on a single line:

```
/list 5/10;add 5.5
```

Entering several semicolons ("**;;;**") displays forward several lines.

When combining Qedit commands, be sure to use the same quote character in all of them.

Incorrect:

```
/c7/7"DISPLAY";c\.\\
```

Correct:

```
/c7/7"DISPLAY";c"."
```

If you want to include LINUX commands in the list and their syntax requires semicolons, Qedit might not be able to parse the list correctly. To work around this problem, you can put parentheses around the whole command. For example,

```
/list 5;!find . -name testfile -exec cat {} \; fails
/list 5;(!find . -name testfile -exec cat {} \;) works fine
```

If some commands require semicolons and parentheses, you have to put the problematic command in a shell script and use it in the command list instead.

,
Means a List

Comma "," separates items in a list:

```
/modify 5, 10, 20/30, 44
```

Most commas are optional in Qedit.

=
Means Copy or Calculate

Equal sign "=" usually means copy something:

```
/add 5 = inclfile                       {copy "inclfile" into your file}
/add 5 = 10/20                          {copy lines 10/20 after line 5}
/text w2 = w1                           {build "w2" and copy "w1" into it}
```

Equal sign at the start of a command means to calculate something:

```
=10+25                                          {evaluate the expression}
Result= 35.0
```

<

Means Move, I/O Redirection or Backward Page

Less than "<" in the Add command means to move the lines instead of copying them:

```
/add 5 < 10/20                                  {move lines 10/20 after line 5}
```

Less than "<" in an HP/Open command means to read input from an external file.

```
!a.out < test.script
```

Less than "<" in the Visual home line means to move backwards one or more pages.

```
===><3                                          {move back 3 pages after Enter or F7}
```

>

Means Forward Page, I/O Redirection, Modify or Qhelp

Greater than ">" in the Visual home line means to move forward one or more pages.

```
===>>5                                          {move ahead 5 pages}
```

Greater than ">" in an LINUX command means redirection of output to a file other than stdlist.

```
 /ls > ls.result
```

The ">" symbol is used as a subcommand of HP-style modify, invoked as part of the Modify, Redo or Before command, and meaning "end of line".

">" is the prompt when in the QHELP subsystem.

"

Means String

Double quotes are the nominal string delimiter in Qedit (List "BOB"). However, you can use any of several special keys for string delimiters in a command:

```
/find "witth"                                   {double quotes as quote}
/find :witth:                                   {use colon instead of quote}
```

(
Means Start Parameter, Command or Subpattern (in Regexp)

Left parentheses "(" introduces the size of a file, a window for string matches, and is always matched by an ending ")".

```
 /list "string" (smart upshift)
```

Left parentheses "(" can be used to enclose commands which include commas or semicolons that might be confused with delimiters. Qedit considers everything between the left and right parentheses as one command. This is mostly useful when multiple commands appear on one line.

```
/F "test";(listspf o ;seleq=[owner=mgr.acct]);Li */*+5
```

Left parentheses "(" are used to divide regular expressions into smaller portions called subpatterns. Left parentheses identify the start of a subpattern.

```
/List "x(abc)z"                                 {subpattern starts with "a"}
```

)
Means End Parameter, Command or Subpattern (in Regexp)

Right parentheses ")" completes a file size, a window for string matches, and is irresistibly attached to "(".

```
/list "Robelle" (upshift)
```

Right parentheses ")" completes command enclosure which include commas or semicolons that might be confused with delimiters. Qedit considers everything between the left and right parentheses as one command. This is mostly useful when multiple commands appear on one line.

```
/F "test";(listspf o ;seleq=[owner=mgr.acct]);Li */*+5
```

Right parentheses ")" identify the end of subpatterns inside regular expressions.

```
/List "x(abc)z"                                 {subpattern ends with "c"}
```

+
Means Ahead Some Lines, Add or Quantifier (in Regexp)

Plus (+) means move ahead a relative number of lines.

```
/mod *+1
```

A plus sign at the Visual home line means move roll ahead a number of lines.

```
===>+15                                    {roll ahead 15 lines}
```

Plus in the calculator means add (e.g., =5+10).

A plus sign (+) in regular expressions indicates the preceding element might repeat one or more times in the text.

```
/list "op+q" (regexp)                      {"p" must be there one or more times}
```

-
Means Back Some Lines, Minus or Range (in Regexp)

Minus (-) means back a relative number of lines.

```
/list *-20/
```

Minus in the Visual home line means roll back a number of lines.

```
===>-10                                    {roll back 10 lines}
```

Minus in the calculator means subtract (e.g., =1010-40).

Minus (-) in a character class within regular expressions indicates a range of characters. It takes on this meaning if it appears between two other characters. If it appears at the beginning or end of the class, it is used as a literal.

```
/list "[a-z]" (regexp)                     {range of lowercase letters}
/list "[-az]" (regexp)                     {character class "-," "a" and "z"
```

#
Means Numeric Pattern

In pattern-matching, crosshatch "#" matches a single numeric character:

```
/list "rec##"(pattern)                     {"rec" followed by 2 digits}
```

In the calculator, you can use # to include the previous result in the next calculation.

~
Means Spaces (Pattern)

In a Pattern, ~ (tilde) means to look for zero or more spaces.

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