

## Editor V2.0 User's Guide

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This manual describes version V2.0 of the PERQ text editor. It includes a small amount of overview and philosophy behind the Editor and contains a list of the commands available. The reader is expected to have a general grasp of computers and computerized editors. Some experience or familiarity with a similar editor is helpful.

### Changes

The major feature introduced with this version of the editor is a set of commands to control the selection from the keyboard. A few features of the editor have been modified:

- Find can ignore the case of the text.
- Find and Replace can be interrupted with control-C.
- The reverse direction flag (<) is turned off by most commands.
- The verify flag (V for Replace Command) is turned off by most commands.
- The replot function is invoked by Q,R,Return (not X).

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## Introduction

It is probably a good idea to sit down at a PERQ and try out the Editor as you are reading. A good file to edit when you are first trying out the Editor is one of the Editor's help file. This way you can read the help file while you are editing. You should copy it to a scratch file so that you won't have to worry about accidentally changing it. Do this with the system "Copy" command:

```
Copy >HelpDir>EditorHelp>Introduction.Help Scratch.File
```

Now ask the Editor to edit this new scratch file:

```
Edit Scratch.File
```

The PERQ text Editor is a "point, act" Editor. This means that to perform an editing action, you first "point" to a piece of text in the file and then perform some action on it. Pointing is done with the tablet and puck or pen. When you move the puck on the tablet, the pointer on the screen moves to follow it. The pointer changes shape depending on where it is on the screen. It is usually an up-and-left pointing arrow, but changes in certain areas to an up-pointing arrow, a down-pointing arrow, or a circle. These different shapes indicate that different things will happen when you press the buttons on the puck (or press down with the pen).

To select a specific piece of text, move the puck so the pointer is at the text and press the yellow button. With one press a character is selected. A second press without moving the pointer selects the word of adjacent letters and digits. A third press selects the entire line. Another way to select an entire line is to press when the pointer is at the left margin line. The other buttons on the puck can also be used to make selections: the white button selects a word, the green button selects a line, and the blue button extends the selection to the location pointed at.

Once you have selected some text, you can extend the selection by moving the pointer to the end of the desired piece of text and then typing "E". The selection is extended to a character, word, or line boundary, depending on the type of your last selection. Commands that change the selection (other than Extend, W, and L) set the type to character. Unfortunately, you can make the selection larger with Extend, but you cannot make it smaller. To do so, you can start over with a fresh selection or use the M command described below.

After selecting text, you can perform some action on it. You can insert before or after it, delete it, search for a character string that follows it, or any of the other Editor actions. The top line of the screen usually shows editor version, file name, and time. It also displays repeat counts and flags for More, Verify, and direction. On occasion the line is used for error messages and prompts within commands.

When the first line of text is showing on the screen, it is indicated by a "►" in the left margin--this is the beginning-of-text marker. When the last character of the file is showing on the screen, it is followed by a "◄"--this is the end-of-text marker. You may select this character, but it is not affected by text modification commands.

The following sections describe the commands available. Each command description begins with the letter on the key used to perform the command.

### First Things First

#### HELP - Get explanations

Type the HELP key to get explanations of the editor commands. (If you are "in" a command, you may need to type DEL before typing HELP.) The editor will display a list of commands and keywords. You may then type the name of an entry (the word or letter before the dash) and the editor will display an explanation. To exit, just type the RETURN key.

#### Q - Quit from the Editor

To leave the editor, type the "Q" key. (If you are "in" a command, you may need to type DEL before typing "Q".) When you type "Q", the screen is erased, and a list of options is presented:

U	to update <your file name>
W	to write to another file
E	to exit without updating
R	to return to the Editor

Type one of these letters followed by RETURN. You may wish to pause before the RETURN to be sure you have the right choice.

If you update or write to a file that already exists, the Editor saves the old version of the file by adding a "\$" to the end of its name. This allows you to get the old version back if you decide you made a mistake. You can safely edit the backup file since it has a different name than the new version of the file.

While it is never a good idea to type control-C while you're in the Editor, you should not type it while the Editor is writing the new copy of your file. You will lose the new version of your file, and the old version will be in the backup file. If you type control-C before writing the new file or type "E" to exit without updating, your file will remain unchanged regardless of any changes you made with the Editor.

### Special Keys

The Text Modification commands are terminated by "Accept" or "Reject". The first of these indicates that the change is desired, the editor makes the change. The second foregoes the change, the editor leaves the text as it was before the command. Acceptance is signalled by typing the INS key. Rejection is signalled by typing the DEL key.

When inserting text with the Editor, BACK SPACE deletes the most recently typed character, control-BACK SPACE deletes the most recently typed word, and control-OOPS deletes the most recently typed line up to and including the carriage return. The RETURN key (carriage return) is used to mark the end of each line in your file. The Editor does automatic indenting for you by supplying leading blanks on the new line to match those on the previous line. You may BACK SPACE over them or type more.

The special keys have alternates as shown by this table:

<u>Action</u>	<u>Character</u>	<u>Alternate</u>
End-of-line	RETURN	control-M,control-J -or- control-M,LF
Erase character	BACK SPACE	control-H
Erase word	control-BACK SPACE	control-W
Erase line	control-OOPS	control-U
Accept	INS	control-Y
Reject	DEL	control-N
Quote	control-"	-none-

Since these special keys have special meanings, they must be "quoted" to insert them in your file; Type control-" (the Editor quote character) followed by the special key. When you type control-", the insert cursor changes from "\_" to "□" to indicate you typed the quote character.

INS - Repeat the last command

Typing the INS key at command level repeats the last command. Only certain commands may be repeated this way, since it does not make sense to repeat some commands like \* and Extend. Commands that may be repeated are A, I, R, S, D, and those which move the selection.

### Repeat Count

Typing a 1- to 4-digit number enters a repeat count; it is displayed in the prompt line after the letter "R". This number specifies how many times to execute the next command, but it only applies if the command is Find, Repeat, Goto character, LF(Scroll), Line, Word, or one of the Character Selection commands. The number of repetitions actually performed is displayed in the prompt line after the letter "C".

### Reverse Direction

Many commands move through the file. They can do this either forward toward the end of the file or in reverse toward the beginning of the file. The current direction is displayed by a "<" or ">" in the upper left corner of the screen. It effects the commands Find, Replace, Word, Line, and Goto character. The flag is turned forward by all other commands except More, Extend, Verify, and Note. It is also turned forward by Find, but the old direction is remembered if the Find is repeated with INS.

#### > - Forward Direction

Typing a ">" sets the forward direction (toward the end of the file). "+" and "." (unshifted ">") are synonyms for this command.

#### < - Reverse Direction

Typing a "<" sets the reverse direction (toward the beginning of the file). "-" and "," (unshifted "<") are synonyms for this command.

### View Selection

#### The Scroll Bar

The area to the left of the left-margin line is called the "scroll bar". If you move the pointer into this bar, it changes into an up-pointing arrow at the left side and a down-pointing arrow at the right side. If you press the yellow button when the arrow is pointing up, the line that the pointer is next to is scrolled to the top of the screen. If you press when the arrow is pointing down, the top line of the screen is scrolled down to the line that the pointer is next to. Thus if you put the pointer near the top of the screen, by pressing repeatedly, you can scroll slowly through the file. If you put the pointer near the bottom of the screen, you can move through the file in large jumps of pages. If you put the pointer near the middle of the screen, you can move through the file

in half-page jumps.

When the pointer is in the Scroll Bar area, the puck buttons have special meanings: the white button always scrolls the text up and the green button always scrolls it down.

#### LF, Control-LF - Scroll

LF repositions the screen window so it displays text starting with the 37th line of the previous display. Control-LF scrolls in the other direction so the previous top of the screen is at the new bottom.

#### T - Top

The line containing the end of the current selection is moved to the screen. If on-screen, it is moved to the bottom.

#### B - Bottom

The line containing the current selection is moved to the bottom of the screen. (If off-screen, it is moved to the middle.)

#### The Thumb Bar

The top-margin line is called the "thumb bar". When you move the pointer to this line, it changes into a circle. Think of the thumb bar as a linear representation of your file. The left end of the bar represents the beginning of your file. Special characters are used to represent other interesting parts of your file:

◄ - Represents the end of the file.

S - Represents the position of the beginning of the selection.

( - Represents the position of the beginning of the displayed text.

) - Represents the position of the end of the displayed text.

N - Represents the position of the Noted display.

O - Represents the position of the display at the last thumbing.

The thumb bar is used to rapidly move around in your file, but it is not very precise. When you put the pointer on the thumb bar and press down, the portion of the file represented by that portion of the bar is displayed on the screen. When you press at "S", the beginning of the selection is shown. For "N", the noted position is shown. And so on. Similar control can be achieved with the X



command described below.

The thumb bar can also be used to extend the selection. When you type "E" while in the thumb bar, the selection is extended to the position in the file which is represented by that particular portion of the thumb bar. This is usually only useful for extending to the beginning or end of the file.

#### N - Note

The current screen display is noted and an N is placed in the Thumb Bar. The thumb bar may be used to return to this current display by selecting the N.

### Text Selection

#### E - Extend the selection

This command extends the current selection from where it is to the text currently indicated by the pointer. See the M command for an alternative way to extend the selection.

#### \* - Select the entire file

The entire file is selected. This is useful for Find, which otherwise begins its search from the current selection. It is also useful for doing replacements throughout the text.

#### F - Find a character string

(N. B.: The search starts at the beginning of the selected text.) When you type "F", the top line shows the prompt

Find: enter target string

Type the string you want to search for and then Accept or Reject. Rejection aborts the Find command; Acceptance starts the search. If you Accept immediately after typing "F", the previous target string is used. Lower case letters in the target string will match both upper and lower case letters in the text, but UPPER case target letters will match only upper case text letters.

While searching for the target, the top line displays the cue "Finding". At this time, the search can be interrupted by typing control-c. The selection will be unchanged.

If the target string is found, it becomes the selected text. Note that the target string is shown at the top of the screen inside of

F{ ... } .

A Find command can be done in the reverse direction (toward the beginning of the file). See the section "Reverse Direction". You can ask the Editor to search for a certain number of occurrences of the target string by preceding the command with a number. See the section "Repeat Count".

### Text Modification

Text modification is done with the commands Insert, Append, Substitute, Replace, and Delete. The first two of these operate before and after the current selection, but the others operate on the current selection itself. After execution of one of these commands, it can be re-executed by pressing the INS key. This can be handy for inserting the same text in a number of places.

- A - Append text after the selection. Type text until you are done, then either Accept or Reject the insertion. If you Accept immediately after typing "A", the most recently inserted or deleted text is inserted. If you Accept, the text you have just typed is displayed at the top of the screen inside of

```
I{    ...    }    .
```

- D - Delete the selected text. If you delete text, it is displayed at the top of the screen inside of

```
D{    ...    }    .
```

The character which immediately follows the deleted text is selected.

- I - Insert text before the selection. Type text until you are done, then either Accept or Reject the insertion. If you Accept immediately after typing "I", the most recently inserted or deleted text is inserted. If you Accept, the text you have just typed is displayed at the top of the screen inside of

```
I{    ...    }    .
```

- R - Replace

This command finds all occurrences of a given string within the currently selected text. As each is found, it is replaced by a second given string. Typing "R" causes the prompt

Replace: enter target string

at the top of the screen. Type in a string and then Accept or Reject. Note that the target string is displayed inside of

F{ ... }

just as though you were using the the Find command. Lower case letters in the target string will match both upper and lower case letters in the text, but UPPER case target letters will match only upper case text letters. If you Accept, the prompt

Replace: enter replacement string

is shown at the top of the screen. Now you can type in the new string to replace occurrences of the target string. If you Accept before typing any characters of the replacement string, the previous replacement string is used. This means that to replace with nothing, you must first type a character and then delete it with the BACK SPACE key.

While the editor is "Replacing", you may interrupt by typing control-c. The Count field at the top of the screen will show how many replacements have been made.

In the absence of a Repeat Count, all occurrences within the selection are replaced. If a Repeat Count is typed immediately before the "R", the specified number of occurrences are replaced, starting at the beginning of the selection. See the section "Repeat Count". The direction can be changed as described in the section "Reverse Direction".

#### V - Toggle Verify mode

When you type "V", Verify mode is turned on or off, depending on whether it was off or on before. When Verify mode is on, a "V" is displayed in the prompt line. Most commands revert the verify flag to non-verify mode. Those that do not cause reversion are Word, Line, \*, Goto character, More, Extend, Note, and the Character Selection commands.

In Verify mode the Replace command gives you the option of replacing, not replacing, or aborting at each occurrence of the target string. The prompt

Replace: INS replaces, <space> doesn't, DEL aborts

is displayed for each occurrence of the target string. The target string is indicated by a double underline and by the pointer arrow (if you keep the puck or pen away from the tablet). This double underline is difficult to see, but it's there. You may now Accept the replacement with INS, you may skip over this occurrence by typing the space-bar, or abort the replace command with DEL.

## S - Substitute

New text is substituted for the selected text. This command is similar to the sequence "Delete, Insert". After typing "I", type text until you are done, then either Accept or Reject the insertion. If you Accept immediately after typing "S", the most recently inserted or deleted text is inserted. If you Accept, the text you have just typed is displayed at the top of the screen as the most recently inserted text inside of

```
I{ ... }
```

and the text you have just deleted is displayed at the top of the screen inside of

```
D{ ... } .
```

After substituting, the character immediately following the deleted text is selected.

Be careful. It is easy to confuse Substitute and Replace. There is no way to "undo" a Substitute command because you cannot re-insert the deleted text. Attempting to re-insert the most recently inserted or deleted text will merely re-insert the text you just typed in. The deleted text is gone forever. This means that if you type "S" when you meant to type "R", you may accidentally delete a large portion of your file and have no way of getting it back. (Should disaster strike, see the section below on "Transcript/Replay".)

## Character Selection

The Character Selection commands move the selection as though it were a cursor for insert. The new selection is a single character close to the former selection. None of these commands is affected by the Reverse Direction flag, but all are performed as many times as specified by the Repeat Count. They reset the Reverse Direction flag unless the More flag is set. When the More flag is set, these commands still move in their usual direction; thus they can be used to reduce the selection.

SPACE - Move to the character following the previous selection.

BACKSPACE - Go to the character preceding the previous selection.  
Control-H is synonymous with this command.

TAB - Advance five characters from end of previous selection.

Control-TAB - Go back five characters from beginning of previous selection.

Control BACKSPACE - Go to the beginning of the word preceding the current selection. Control-w and Control-W are synonymous with this command, but shift-control-W treats a word as any consecutive string of printable characters.

RETURN - Move to first character of line following the previous selection. Control-U is synonymous with this command.

Control-RETURN - Go back to first preceding non-blank that follows a CRLF. Control-OOPS is synonymous to this command.

X - Thumb bar (X-Coordinate selection)

An "X" is placed on the thumb bar at the top of the screen. The following keys are active:

INS - Display the part of file corresponding to current position of the "X".

DEL - Aborts. Display and current selection are unaffected.

TAB - Move "X" five positions to the right.

control-TAB - Move "X" five positions to the left.

SPACE - Move "X" one position to the right.

BACKSPACE - Move "X" one position to the left.

RETURN - Move "X" to end of file position.

Control-RETURN - Move "X" to beginning of file position.

Digits - Set repeat count for TAB's and SPACE's.

O - Move to O marker on line. This marker indicates what text was displayed prior to the last thumb bar selection.

N - Move to the N marker on the line. This marker is set by the N command.

The current selection is unchanged by X. However, if a keyboard command (C, W, L, G, space, ...) is given when the selection is off screen, the operation is treated as though the first character of the screen had been previously selected.

**G - Go to character**

After typing "G", one more character is typed. The editor searches the rest of the screen for the character. If found, it becomes the current selection. If the Reverse Direction flag is set, G searches from the current selection toward the top of the screen otherwise it searches only from the selection downward. INS will repeat a G command if it was the last command executed. A repeat count may also be given to select a character a known number of instances away. If the More Flag is set, the selection is extended to the found character.

**w, W - Select Word**

This command selects the word that follows, extends, or begins the current selection. If the current selection is a word or is outside a word, the following word is selected; if currently inside a word, the entire word is selected. When the current selection overlaps more than one word, the one overlapping the beginning of the selection is chosen. Unshift-w chooses words that are consecutive letters and digits; Shift-W defines a word as any sequence of printable characters.

A Repeat Count of (say) n will cause the selection of the n'th subsequent word. If the Reverse Direction flag is set, the search will be toward the beginning of the file. If the More flag is set, the selection is extended to the end of the word that would otherwise be selected by this command.

**L - Select Line**

If a line is currently selected, this command selects the next; otherwise it extends or contracts the current selection to be the line that included its start.

A Repeat Count of (say) n will cause the selection of the n'th subsequent line. If the Reverse Direction flag is set, the search will be toward the beginning of the file. If the More flag is set, the selection is extended to the end of the line that would otherwise be selected by this command.

**M - More in selection**

Turns on the More flag, indicated by an M in the prompt line. When this flag is on, selection commands extend the current selection rather than change it. The selection grows only at the end indicated by the Reverse Direction flag. The Character Selection commands (SPACE, BACKSPACE, RETURN, etc.) can cause the selection to shrink at that end. In More mode, these commands do not select a single character, nor do they change the direction flag. More mode is extinguished by More again or by executing \*, Extend, Quit, or one of the Text Modification commands.

### Transcript/Replay

The Editor writes a transcript file during every edit session. The transcript is a file which contains a description of every keystroke and puck or pen press performed during an edit session. This transcript is written to the file ">Editor.Transcript". The transcript may be replayed later. This feature is intended for use when the Editor or the PERQ crashes during an edit session or if you make some disastrous error with the Editor.

The Editor saves keystrokes and presses and writes them to the transcript file whenever:

- 1) A carriage-return is typed in Insert mode.
- 2) A command which changes the text is successfully completed.
- 3) The transcript buffer is filled.

If an old transcript file exists, it is destroyed the first time the buffer is flushed. This means that you can re-enter the Editor without destroying the old transcript file as long as you do not do something that causes the buffer to be flushed. Keep in mind that presses count against the 256-word buffer. If you do not want to destroy the old transcript file, do not type any commands, do not press more than a few times, and exit the Editor by typing control-shift-C.

To replay a transcript, type "Editor/Replay". The Editor replays the previous edit session and stops just before the first command. You can control the replay by typing one of the following keys:

SPACE	stop replaying after the next character or puck press.
CR	stop replaying after a carriage return in I command or after next command if not in I command.
LF	stop replaying after next command.
INS	begin replaying and stop when one of the above keys is typed.
DEL	exit replay mode.

If no DEL key is typed, the Editor automatically exits from replay mode when the end of the transcript is reached. Once you have exited replay mode you can begin editing normally, but we suggest that you Quit-Update as soon as possible.