

RIDGE TEXT EDITOR

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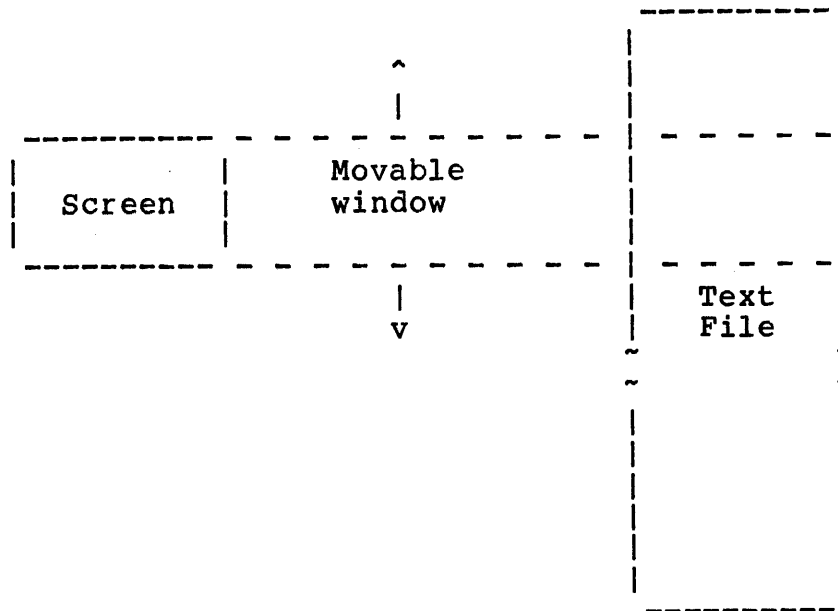
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INTRODUCTION

The Ridge Text Editor combines the attributes of a "screen-oriented" editor with the capabilities of a "line-oriented" editor.

"Screen-oriented" capabilities use a video display to provide a movable "window" on the text file; the displayed text can be edited using (possibly software-simulated) editing features of the terminal such as insert/delete line, insert/delete character, cursor movement, scrolling, etc. Text is added or altered by typing the text on the video display.



"Line-oriented" capabilities provide string search and replacement capabilities with ranging and repetition facilities. All editor capabilities, whether "screen-oriented" or "line-oriented", are controlled via user-entered commands.

GENERAL DESCRIPTION

This section describes the text file logical structure, the display format, and provides a summary of editor commands.

Text File Logical Structure

A text file consists of a set of records referred to as lines. Each line has a length attribute; the length describes the position of the last non-blank character in the line. The length of a line is from zero (0) through 128 characters; a length of zero denotes a blank line.

Each line can be identified by its position relative to the beginning of the file. The positions, line numbers, have values within the range of 0 to 99,999,999 inclusive. Lines are effectively "renumbered" if preceding lines are inserted or deleted.

Display Format

The following is the editor's display format for the Ridge display, 50 lines by 128 columns:

```

                                     3
      1..... 0.....128
+-----+-----+
1 <adv/cmd> |]<advisory>      :[ command input area>
2 <hdr/sel> |]<fname> @ <tlline>      | <sfname> <bline> <tline>[
3 <text1>   |
4 <text2>   |
5 <text3>   |
   .       |
   .       |
   .       |
48 <text48> |
+-----+-----+

```

Where:

text] denotes the beginning of an area where the user cannot enter
(ie, a protected area).

[denotes the beginning of an area where the user may enter text
(ie, an unprotected area).

<adv/cmd>, advisory and command area -

<advisory> is where error messages are displayed.

<command input area> is where editor commands can be entered.

<hdr/sel>, window header and selection status area:

The window header consists of three parts: 1) the name of the file visible in the window, 2) the currency indicator "@" displayed if the window is current, and 3) the line number of the line at the top of the window.

The selection status area is used to display the state of any currently selected block of text (see "Select" command). The selection status consists of three parts: 1) the name of the file containing the currently selected block, 2) the line number of the bottom line of the selected block, and 3) the line number of the top line of the selected block.

<text1> .. <text22> is where the text file window is displayed. The cursor may be placed at any position within this area for the purpose of editing; entering text over existing text automatically replaces that text.

ASCII File and Work File

The term "ASCII file" refers to a file that is directly readable by Ridge subsystems such as the editor, language compilers, and utility programs.

When editing of an existing ASCII file begins, the file is copied to a "work file". The purpose of the work file is to provide rapid, random access to any place in the text; the work file is not directly readable by other Ridge subsystems. As changes are made to the text, they are made only to the work file, not the ASCII file. When the editing session finishes, the text file in the work file is copied to a new ASCII file.

The work file is, by default, saved between editing sessions. This provides three benefits: 1) the time spent copying the ASCII file to the text file at the beginning of the editing session is eliminated 2) some contextual information such as current position in the file and tab settings are maintained across editing sessions, and 3) the work file provides an additional backup to the ASCII file.

Users are cautioned, however, that if other subsystems modify the ASCII file the changes won't be reflected in the work file. This can cause difficulty because the editor always uses the work file as the basis for editing if the work file exists.

Selected Block

The editor provides a method of selecting and operating on a block of text. The bounds of the block (ie, the bottom and top lines) are selected through use of the Select command. Many of the predefined operations are capable of operating on the selected block. Command syntax exists for referencing the selected block.

PREDEFINED OPERATIONS

This section describes the predefined operations defined for the Televideo TVI-950C. In general, screen operations are invoked by pressing one of the terminal's editing keys or one of the eleven function keys - F1 through F11 - either unshifted or in combination with the SHIFT key.

F1 Unshifted - Prev Page

moves the window back to the preceding page in the text file.

F1 Shifted - First Page

moves the window back to the first page in the text file.

F2 Unshifted - Next Page

moves the window forward to the next page in the text file.

F2 Shifted - Last Page

moves the window forward to the last page in the text file.

F3 Unshifted - Select

selects the current line (ie, the line where the cursor is located) as the bottom or top of a block if the current line does not fall within the bounds of the currently selected block. If the current line is not with the same file as the currently selected block, the previous selection is nullified. If no block is currently selected, the current line becomes both the bottom and top lines of the selected block. If a block is currently selected and the current line is below the bottom line of the block, the current line becomes the bottom line of the selection. Likewise, if a block is currently selected and the current line is above the top line of the block, the current line becomes the top line of the selection.

F3 Shifted - Clear Select

clears the current selection.

F4 Unshifted - Copy Block

inserts a copy of the currently selected block just before the current line, then nullifies the current selection.

F4 Shifted - Move Block

inserts a copy of the currently selected block just before the current line, deletes the lines in the currently selected block, then nullifies the current selection.

F5 Unshifted - Break Line

splits the current line from just before the cursor position into two lines.

F6 Unshifted - Full Line

fills text either from the next line to the current line, or from the current line so as to put as many words as possible within a 70 character line.

F7 Unshifted - Undo (Restore)

restores the last line deleted by use of the "Line Delete" key by inserting the line just before the current line.

F8 Unshifted - Window A

selects window A as the current window.

F9 Unshifted - Window B

selectes window B as the current window.

F10 Unshifted - Window C

selects window C as the current window.

F11 Unshifted - Enter/Execute Command

positions the cursor into the command input area if not already positioned there. If the cursor is positioned in the command input area, pressing F11 is a signal to interpret the command line for execution.

Note: If the cursor is positioned in the command input area but it is not desired to execute the command, press the appropriate window function key (ie, F8 to F10) to return the cursor to the desired window without executing the command.

F11 Shifted - Exit

copies the currently open files to disc (creating updated ASCII files), saves currently open workfiles, then exits the editor.

Char Insert and Control-O

inserts a space just before the cursor position. Text to the right of the cursor on the same line is moved to the right.

Char Delete and Control-W

deletes the character at the cursor position. Text to the right of the cursor on the same line is moved to the left.

Line Insert

inserts a blank line in front of the current line.

Line Insert Shifted

inserts a block of blank lines until the bottom of the window is in front of the current line.

Line Delete

deletes the current line.

Line Delete Shifted

deletes the lines in the currently selected block then nullifies the current selection.

Line Erase and Control-E

replaces the characters from the cursor position to the end of the line with spaces.

Backspace and Control-H and <-

moves the cursor back one position. If the cursor is in column one, it is moved to column 80 of the preceding line; if the preceding line is not displayed, the window is moved back in the text file by one line.

Tab and Control-I

moves the cursor to the next defined tab position. If tab is executed past the last defined tab, the cursor is moved to column 1 of the next line; if the next line is not displayed, the window is moved forward in the text file by one line.

Return and Control-M

moves the cursor to the beginning of the next line. If the next line is not displayed, the window is moved forward in the text file by one line.

Home

positions the cursor to the first unprotected column (column 1, except in the command area) of the first line displayed in the current window.

v (cursor down)

moves the cursor down to the next line. If the next line is not displayed, the window is moved forward in the text file by one line.

^ (cursor up)

moves the cursor up to the preceding line. If the preceding line is not displayed, the window is moved backward in the text file by one line.

<- (cursor left)

is the same as backspace.

-> (cursor right)

moves the cursor forward one position. If the cursor is in column 80, it is moved to column 1 of the next line; if the next line is not displayed, the window is moved forward in the text file by one line.

EDITOR COMMANDS

These commands are used singularly and in combination with one another to provide the editing capabilities. The screen functions described above are, in fact, implemented using various forms of the commands described below.

Syntax Notations

Keyword characters shown in uppercase are required; characters shown in lower case are optional except that all optional characters must be supplied if any are supplied. Metasymbols are shown surrounded by "<" and ">".

Optional components are surrounded by "[" and "]". Components surrounded by "{" and "}" means chose one from the set, with the default underlined. Lists are indicated by the presence of ellipsis "...".

ATTACH Command

```
ATTACH <filename> [, NEW ]  [, {A} ]  
                               -  
                               {B}  
                               {C}
```

The Attach command is used to attach a file to one of the editing windows (A, B, or C). this is normally the first command entered after starting the editor. If the file is not currently open, it is opened. The NEW parameter is used to create a new edit file. If NEW is specified, the ASCII file must not exist.

Example: The following command would open an existing file and attach it to window A -

```
ATTACH myfile.s
```

Example: The following command would open a new file and attach it to window B -

```
ATTACH newfile.s,NEW,B
```

CLEAR Command

```
CLEAR [ SELECT ]  
      [ TEMP ]
```

The Clear command is used to either clear the current selection (ie, CLEAR SELECT), clear the temporary text stack (ie, CLEAR TEMP), or clear both (ie, CLEAR).

CLOSE Command

```
CLOSE <filename> [, [ NO ] ASCII ]
                        -----
                        [, [ NO ] SAVE ]
                        -----
```

The Close command detaches the specified file from any windows that are attached, then closes the file. If ASCII is specified (a default condition) and the text has been modified since the last time the text has been copied, the work file is copied to the ASCII file. If SAVE is specified (also a default condition), the work file is closed. If NO ASCII is specified, the work file is not copied to the ASCII file. If NO SAVE is specified, the work file is purged after its contents are copied to the ASCII file. Specifying NO ASCII and NO SAVE together is not permitted.

COPY Command

```
COPY <range>
```

The Copy command inserts a copy of the line(s) specified by <range> just before the current line.

Example: The following command would copy lines 50 through 100 to the current line -

```
COPY 50..100
```

DELETE Command

```
DELETE
```

The delete command deletes the current line.

DETACH Command

```
DETACH { A }
        { B }
        { C }
```

The Detach command detaches the file from the specified window.

EXIT Command

```
EXIT
```

The Exit command is used to terminate the Editor. The equivalent of a CLOSE <filename>, ASCII, SAVE is done for all currently open files.

FIND Command

```
[ FIND ] <line-spec> [, LINE <row> ]  
[ F ]
```

The find command is used to locate a line or string within the text file and to make that location the current line.

<line-spec> is described below under "Range". In general, however, <line-spec> can be a line number (eg, 10), a quoted string (eg, 'this is a string'), or an occurrence (eg, F for first, L for last, P for previous, N for next, etc.) If a line number is specified, the cursor is placed within the specified line at the same column position it previously occupied. If a string is specified, the cursor is placed on the first character of the specified string. Specifying an occurrence by itself is equivalent to specifying a line number; specifying an occurrence in combination with a string locates a string relative to the start (F), end (L), or current (P or N) position in the file.

The optional LINE <row> parameter specifies where within the current window the new current line will be placed. If LINE <row> is not specified, an attempt is made to place the new current line at the same relative position within the window as the current line. Specifying <row> = 0 means the placement is not important.

Example: The following command would make line 50 the current line -

```
FIND 50
```

Example: The following command would make the next line the current line -

```
FIND N
```

Example: The following command would find the next occurrence of the string "abc" -

```
FIND N 'abc'
```

INSERT Command

```
INSERT [ <quoted-string> ]
```

The Insert command inserts a line ahead of the current line. If <quoted-string> is specified, the inserted line contains the string. If <quoted-string> is not specified, a blank line is inserted. The inserted line becomes the new current line.

JUST Command

JUST

The Just command is used to format text. The current line is left justified (ie, leaving "ragged right") between the columns 1 and 70. The line is filled with as many words as will fit between the margins, taking words from subsequent lines as necessary and if possible, if one or more words extend past the right margin, they are taken from the current line and inserted as a new line following the current line. Blank lines are skipped.

MOVE Command

MOVE <range>

The Move command inserts a copy of the line(s) specified by <range> at the current line, then deletes the line(s) in <range>.

Example: The following command would move lines 50 through 100 to the current line -

```
MOVE 50..100
```

POP Command

POP

The Pop command inserts the top element of the temporary data stack ahead of the current line; the top element is then deleted from the temporary data stack. If the stack is empty, no action occurs.

PUSH Command

PUSH

The Push command pushes a copy of the current line onto the top of the temporary data stack.

REPEAT Command

```
REPEAT ( <command> [ ; <command> ]... ) [, { IN <range> } ]  
                                           { COUNT <num> }  
                                           { QUIET          }
```

The Repeat command is used to repeatedly execute one or more commands until an implied or designated range (ie, IN <range>) or a specified number of iterations (ie, COUNT <num>) is executed.

If IN <range> is omitted, a range of "All" is implied. The first line of the file is made the current line prior to the first execution of the command list. If IN <range> is specified, the first line of the range is made the current line prior to the first execution of the command list. Note that the Repeat command will execute indefinitely if there are no commands in the command list which cause the current line to exceed the bounds of the implied or specified range.

The COUNT <num> parameter is used to specify a limit on the number of times the command list is iterated.

The QUIET parameter can be used to suppress update of the display while the Repeat command iterates. The display will be updated at command completion.

Example: The following command sequence would insert a blank line between each of lines 50 through 100 -

```
REPEAT (insert; FIND N 2) IN 50..100
```

REPLACE Command

REPLACE <quoted-string>

The Replace command is used to replace the currently selected text with the <quoted-string>. Text is either explicitly selected by the execution of a Find command or is implicitly selected by the current position of the cursor. If the cursor is currently positioned on a string located by a string search in the previous execution of the Find command, that string is replaced by the <quoted-string>. Otherwise, the <quoted-string> is inserted into the current line at the cursor position.

Example: The following command sequence would replace all occurrences of the string "abc" with the string "xyz" -

```
REPEAT( FIND N 'abc';REPLACE 'xyz' )
```

SELECT Command

SELECT

The Select command selects the current line as the bottom or top of a block if the current line does not fall within the bounds of the currently selected block. If the current line is not with the same file as the currently selected block, the previous selection is nullified. If no block is currently selected, the current line becomes both the bottom and top lines of the selected block. If a block is currently selected and the current line is below the bottom line of the block, the current line becomes the bottom line of the selection. Likewise, if a block is currently selected and the current line is above the top line of the block, the current line becomes the top line of the selection.

SET TAB Command

```
SET TAB <col> [ <col> ]...
```

The Set Tab command is used to specify tab settings. A maximum of sixteen settings may be specified.

WINDOW Command

```
WINDOW { A }  
       { B }  
       { C }
```

The Window command is used to select the current window for editing; the selected window must have a file attached to it.

XEQ Command

```
XEQ <filename>
```

The XEQ command is used to execute a series of editor commands contained in an ASCII file.

Range and Line Specification

The <range> is used to specify a block of text to be operated on by an editor command (sequence). <line-spec> is used to specify a single line.

<range> = [(<filename>) .] <line-spec> .. <line-spec>

<line-spec> = { <line number> } [{ + } <offset>]
{ @ }
{ B }
{ T }
{ F }
{ L }
{ N }
{ P }
{ [F] }
{ [L] { 'quoted string' } }
{ [N] { "quoted string" } }
{ [P] }

Where

@ - Indicates current line.
B - is bottom of selected block (toward beginning of file).
T - is top of selected block (toward end of file).
F - first.
L - last.
N - next.
P - previous.

<offset> may be an integer or the key word PAGELEN. "Pagelen" is the number of lines that can be displayed at once.