

[illegible]

EXE

Mod

EDT

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CCCCCCCC HH HH MM MM EEEEEEEEE IIIIII NN NN PPPPPPP UU UU TTTTTTTTT
CCCCCCCC HH HH MM MM EEEEEEEEE IIIIII NN NN PPPPPPP UU UU TTTTTTTTT
CC HH HH MMM MMM EE II NN NN PP PP PP
CC HH HH MMM MMM EE II NN NN PP PP PP
CC HH HH MM MM EE II NN NN PP PP PP
CC HH HH MM MM EE II NN NN PP PP PP
CC HHHHHHHH MM MM EEEEEEE II NN NN PPPPPPP
CC HHHHHHHH MM MM EEEEEEE II NN NN PPPPPPP
CC HH HH MM MM EE II NN NN NN NN PP
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CC HH HH MM MM EE II NN NN NN NN PP
CC HH HH MM MM EE II NN NN NN NN PP
CCCCCCCC HH HH MM MM EEEEEEEEE IIIIII NN NN PP
CCCCCCCC HH HH MM MM EEEEEEEEE IIIIII NN NN PP

LL IIIIII SSSSSSSS
LL IIIIII SSSSSSSS
LL II SS
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LL II SSSSSS
LL II SS
LL II SS
LL II SS
LLLLLLLLLL IIIIII SSSSSSSS
LLLLLLLLLL IIIIII SSSSSSSS
```



```
0001 0 %TITLE 'EDT$CHMEINPUT - read with echo if possible'
0002 0 MODULE EDT$CHMEINPUT ( ! Read with echo if possible
0003 0 IDENT = 'V04-000' ! File: CHMEINPUT.BLI Edit: JBS1040
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0026 1 *
0027 1 *****
0028 1
0029 1
0030 1
0031 1 ++
0032 1 FACILITY: EDT -- The DEC Standard Editor
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 This module determines whether a special read can be performed
0037 1 which leaves character echoing to the terminal driver, and does the
0038 1 read if so.
0039 1
0040 1 ENVIRONMENT: Runs at any access mode - AST reentrant
0041 1
0042 1 AUTHOR: Bob Kushlis, CREATION DATE: Unknown
0043 1
0044 1 MODIFIED BY:
0045 1
0046 1 1-001 - Original. DJS 04-Feb-1981. This module was created by
0047 1 extracting the routine EDT$SRD ECHO from module CHANGE.BLI.
0048 1 1-002 - regularize headers. JBS 27-Feb-1981
0049 1 1-003 - Fix module name. JBS 02-Mar-1981
0050 1 1-004 - Revise journaling, and only do line reads if we can read at least
0051 1 four characters. JBS 18-Jun-1981
0052 1 1-005 - Prompt from the global string, if requested. JBS 21-Oct-1981
0053 1 1-006 - Remove length of prompt string. JBS 23-Oct-1981
0054 1 1-007 - Make the reads shorter to allow for the cursor positioning sequence.
0055 1 JBS 29-Jan-1982
0056 1 1-008 - Don't make the lengths of the reads depend on the special prompt;
0057 1 otherwise the QA system has trouble. JBS 29-Jan-1982
```



```
58 0058 1 1-009 - Add EDT$$G JOU_VALID. JBS 09-Apr-1982
59 0059 1 1-010 - Worry about control C. JBS 24-May-1982
60 0060 1 1-011 - New screen update logic. JBS 13-Sep-1982
61 0061 1 1-012 - Include the EOL test routine, since it was only called from here. JBS 22-Sep-1982
62 0062 1 1-013 - Correct a misspelling in edit 1-012. JBS 23-Sep-1982
63 0063 1 1-014 - Add insert mode for VT102s. JBS 27-Sep-1982
64 0064 1 1-015 - Use a local text buffer, to avoid clobbering text if we are inserting. JBS 27-Sep-1982
65 0065 1 1-016 - Fix journaling of inserted text. JBS 28-Sep-1982
66 0066 1 1-017 - Remove EDT$$G LN_NO for new screen update logic. JBS 29-Sep-1982
67 0067 1 1-018 - Keep EDT$$G PRV_COL up to date. JBS 05-Oct-1982
68 0068 1 1-019 - Allow for fat characters to the right of the cursor. JBS 06-Oct-1982
69 0069 1 1-020 - Don't do optimized input if there is text on the message line. JBS 06-Oct-1982
70 0070 1 1-021 - Don't write out to the journal file here. STS 07-Oct-1982
71 0071 1 1-022 - Fix call to EDT$$FMT CHWID. JBS 13-Oct-1982
72 0072 1 1-023 - Don't send the CR and reposition the cursor unless the terminal
73 0073 1 driver needs it. JBS 16-Oct-1982
74 0074 1 1-024 - Handle some cases of DEL. JBS 10-Nov-1982
75 0075 1 1-025 - Don't redundantly enter insert mode. JBS 11-Nov-1982
76 0076 1 1-026 - Take into account characters already read when allowing for end of line. JBS 16-Nov-1982
77 0077 1 1-027 - Take into account characters already read when positioning the cursor. JBS 22-Nov-1982
78 0078 1 1-028 - Don't forget that DEL also repositions the cursor. JBS 24-Nov-1982
79 0079 1 1-029 - Don't forget to journal the DEL. Also, repaint the line if NOTRUNCATE. JBS 25-Nov-1982
80 0080 1 1-030 - Journal the correct text after DEL. JBS 25-Nov-1982
81 0081 1 1-031 - Change the call to EDT$$TST KEYDEF. JBS 14-Dec-1982
82 0082 1 1-032 - Remove EDT$$G SHF. JBS 14-Dec-1982
83 0083 1 1-033 - Don't do it at the front of any line, even a continuation line. JBS 20-Dec-1982
84 0084 1 1-034 - Change the call to EDT$$MRK_LNCHG. JBS 27-Dec-1982
85 0085 1 1-035 - Maintain EDT$$G CS_OLDCHNO. JBS 27-Dec-1982
86 0086 1 1-036 - If the screen is shifted don't do it. JBS 29-Dec-1982
87 0087 1 1-037 - Start on improving quality by going closer to the right margin before quitting. JBS 14-Jan-1982
88 0088 1 1-038 - Never read more than 70 characters at a time. JBS 08-Feb-1983
89 0089 1 1-039 - Read closer to the right margin. JBS 09-Feb-1983
90 0090 1 1-040 - Use EDT$$SC_INS_MODE to avoid entering and leaving insert mode so often. JBS 01-Apr-1983
91 0091 1 --
92 0092 1 --
```



```
: 94      0093 1 %SBTTL 'Declarations'
: 95      0094 1
: 96      0095 1 : TABLE OF CONTENTS:
: 97      0096 1 :
: 98      0097 1
: 99      0098 1 REQUIRE 'EDTSRC:TRAROUNAM';
100      0537 1
101      0538 1 FORWARD ROUTINE
102      0539 1     EDT$SRD_ECHO;
103      0540 1
104      0541 1 :
105      0542 1 : INCLUDE FILES:
106      0543 1 :
107      0544 1
108      0545 1 REQUIRE 'EDTSRC:EDTREQ';
109      0680 1
110      0681 1 :
111      0682 1 : MACROS:
112      0683 1 :
113      0684 1 :     NONE
114      0685 1 :
115      0686 1 : EQUATED SYMBOLS:
116      0687 1 :
117      0688 1 :
118      0689 1 LITERAL
119      0690 1     CHAR_LIMIT_1 = 2,
120      0691 1     CHAR_LIMIT_2 = 1;
121      0692 1
122      0693 1 :
123      0694 1 : OWN STORAGE:
124      0695 1 :
125      0696 1 :     NONE
126      0697 1 :
127      0698 1 : EXTERNAL REFERENCES:
128      0699 1 :
129      0700 1 :     In the routine
```

! Try to optimize terminal input

! Do optimized input even if only this many characters can be read
! Read this many chars less than we can


```
131 0701 1 %SBTTL 'EDT$$RD_ECHO - read with echo if possible'
132 0702 1
133 0703 1 GLOBAL ROUTINE EDT$$RD_ECHO ! Read with echo if possible
134 0704 1 =
135 0705 1
136 0706 1 ++
137 0707 1 FUNCTIONAL DESCRIPTION:
138 0708 1
139 0709 1 This routine determines whether or not an optimization for terminal
140 0710 1 input can be done. If we are currently positioned at the end of a line,
141 0711 1 or if the terminal has the VT102 "insert character mode" feature,
142 0712 1 then it is possible to let the terminal driver do the echoing of printable
143 0713 1 characters for us up to the input of a character which may be a definable
144 0714 1 key, or to near the end of the line, where even a non-definable key needs
145 0715 1 special handling, such as wrap or display of a diamond. This is much more
146 0716 1 efficient than the single character input with no echo which is normally done.
147 0717 1
148 0718 1 This routine checks a whole series of conditions which must be met before
149 0719 1 optimized input is possible, then comes up with the number of
150 0720 1 characters which can be read with echo. If this is large enough then a special
151 0721 1 read routine is called to do the input. If the input is terminated by an
152 0722 1 escape or control character, that character will be put in the type-ahead
153 0723 1 character, so it will be the next character returned by EDT$$TI_INPCH.
154 0724 1
155 0725 1 FORMAL PARAMETERS:
156 0726 1
157 0727 1 NONE
158 0728 1
159 0729 1 IMPLICIT INPUTS:
160 0730 1
161 0731 1 EDT$$G_CUR_COL
162 0732 1 EDT$$G_CS_CNO
163 0733 1 EDT$$A_SEC_BUF
164 0734 1 EDT$$G_KPAD
165 0735 1 EDT$$G_RCOV_MOD
166 0736 1 EDT$$A_CUR_BUF
167 0737 1 EDT$$G_TI_QID
168 0738 1 EDT$$G_WD_WRAP
169 0739 1 EDT$$T_LN_BUF
170 0740 1 EDT$$A_LN_PTR
171 0741 1 EDT$$A_LN_END
172 0742 1 EDT$$A_WK_LN
173 0743 1 EDT$$G_PRV_COL
174 0744 1 EDT$$T_PMT_KPD
175 0745 1 EDT$$G_TI_EDIT
176 0746 1 EDT$$G_MSGFLG
177 0747 1 EDT$$G_TI_DUMB
178 0748 1 EDT$$G_RDAHED
179 0749 1 EDT$$T_RDAHED
180 0750 1 EDT$$G_TRUN
181 0751 1 EDT$$A_CSR_SCRPTR
182 0752 1 EDT$$G_SHF
183 0753 1 EDT$$G_INSERT_MODE
184 0754 1
185 0755 1 IMPLICIT OUTPUTS:
186 0756 1
187 0757 1 EDT$$A_LN_PTR
```



```
188 0758 1 | EDT$$G_PRV_COL
189 0759 1 | EDT$$G_LN_CHGD
190 0760 1 | EDT$$G_JOU_VALID
191 0761 1 | EDT$$G_CC_DONE
192 0762 1 | EDT$$G_RDAHED
193 0763 1 | EDT$$G_VERT
194 0764 1 | EDT$$T_DEL_CH
195 0765 1 | EDT$$G_DEL_CHLEN
196 0766 1 | EDT$$G_CS_OLDCHNO
197 0767 1 |
198 0768 1 | ROUTINE VALUE:
199 0769 1 |
200 0770 1 | 0 = read with echo not possible, 1 = read with echo done.
201 0771 1 |
202 0772 1 | SIDE EFFECTS:
203 0773 1 |
204 0774 1 | NONE
205 0775 1 |
206 0776 1 | --
207 0777 1 |
208 0778 2 | BEGIN
209 0779 2 |
210 0780 2 | EXTERNAL ROUTINE
211 0781 2 | EDT$$CHK_CC, | Test for a control C
212 0782 2 | EDT$$FMT_LIT : NOVALUE, | Format a literal string
213 0783 2 | EDT$$TI_RDSTR : NOVALUE, | Read with echo
214 0784 2 | EDT$$TI_BUFCH : NOVALUE, | Put characters in the journal buffer
215 0785 2 | EDT$$SUPD_LNLEN : NOVALUE, | Update the length of the current line
216 0786 2 | EDT$$SC_POSCSIF : NOVALUE, | Position the cursor if necessary
217 0787 2 | EDT$$SC_NONREVID : NOVALUE, | End reverse video
218 0788 2 | EDT$$SC_REVID : NOVALUE, | Start reverse video
219 0789 2 | EDT$$SEC_RNGPOS, | Compare the select line with the current line
220 0790 2 | EDT$$FMT_CHWID, | Compute the width of a character
221 0791 2 | EDT$$TST_KEYDEF, | Test a key for a given definition
222 0792 2 | EDT$$SC_ERATOEOOL : NOVALUE, | Erase to end of line
223 0793 2 | EDT$$MRR_LNCHG : NOVALUE, | Mark a line as having changed
224 0794 2 | EDT$$SC_INS_MODE : NOVALUE; | Enter insert mode
225 0795 2 |
226 0796 2 | EXTERNAL
227 0797 2 | EDT$$G_CUR_COL, | current column
228 0798 2 | EDT$$G_LN_CHGD, | Indicates current line has changed.
229 0799 2 | EDT$$G_CS_LNO, | cursor line.
230 0800 2 | EDT$$A_SEC_BUF, | Pointer to select buffer.
231 0801 2 | EDT$$G_VERT, | Last entity was VERT flag.
232 0802 2 | EDT$$G_KPAD, | Keypad activated?
233 0803 2 | EDT$$G_RCOV_MOD, | In recovery mode?
234 0804 2 | EDT$$A_CUR_BUF : REF TBCB_BLOCK, | The current buffer tbcB
235 0805 2 | EDT$$G_TL_WID, | Width of terminal line
236 0806 2 | EDT$$G_WD_WRAP, | Word wrap
237 0807 2 | EDT$$T_LN_BUF, | Current line buffer
238 0808 2 | EDT$$A_LN_PTR : REF VECTOR [, BYTE], | Current character pointer
239 0809 2 | EDT$$A_LN_END, | Pointer to end of current line
240 0810 2 | EDT$$G_PRV_COL, | Previous column number
241 0811 2 | EDT$$T_PMT_KPD : VECTOR [, BYTE], | Counted ASCII string for keypad prompt
242 0812 2 | EDT$$G_JOU_VALID, | The journal record is valid
243 0813 2 | EDT$$G_CC_DONE, | Control C actually aborted something
244 0814 2 | EDT$$A_WK_LN, | The current work line
```


EDT\$CHMEINPUT
V04-000

EDT\$CHMEINPUT - read with echo if possible
EDT\$SRD_ECHO - read with echo if possible

G 16
15-Sep-1984 23:50:01
14-Sep-1984 12:22:26

VAX-11 Bliss-32 V4.0-742
[EDT.SRC]CHMEINPUT.BLI;1

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(3)

```
245 0815 2 EDT$$Z_EOB_LN,
246 0816 2 EDT$$G_TI_EDIT,
247 0817 2 EDT$$G_MSGFLG,
248 0818 2 EDT$$G_TI_DUMB,
249 0819 2 EDT$$G_RDAHED,
250 0820 2 EDT$$T_RDAHED,
251 0821 2 EDT$$T_DEL_CH : VECTOR [2, BYTE],
252 0822 2 EDT$$G_DEL_CHLEN,
253 0823 2 EDT$$G_TRUN,
254 0824 2 EDT$$A_CSR_SCRPTR : REF SCREEN_LINE,
255 0825 2 EDT$$G_CS_OLDCHNO,
256 0826 2 EDT$$G_SHF,
257 0827 2 EDT$$G_INSERT_MODE;
258 0828
259 0829 2 LOCAL
260 0830 2 BUF_LEFT,
261 0831 2 NUM_CHARS,
262 0832 2 READ,
263 0833 2 NUM_READ,
264 0834 2 READ_DONE,
265 0835 2 TERMINATOR_PROCESSED,
266 0836 2 TEXT_BUF : VECTOR [132, BYTE];
267 0837
268 0838 2 !+
269 0839 2 ! We can only do this in keypad mode.
270 0840 2 !-
271 0841
272 0842 2 IF ( NOT .EDT$$G_KPAD) THEN RETURN (0);
273 0843
274 0844 2 !+
275 0845 2 ! If we are on a continuation line don't do it.
276 0846 2 !-
277 0847
278 0848 2 IF (.EDT$$A_CSR_SCRPTR EQLA 0) THEN RETURN (0);
279 0849
280 0850 2 IF (.EDT$$A_CSR_SCRPTR [SCR_CHR_FROM] NEQ 0) THEN RETURN (0);
281 0851
282 0852 2 !+
283 0853 2 ! If we are at the left margin don't do it.
284 0854 2 !-
285 0855
286 0856 2 IF (.EDT$$A_CSR_SCRPTR [SCR_CHR_FROM] EQL (.EDT$$A_LN_PTR - EDT$$T_LN_BUF)) THEN RETURN (0);
287 0857
288 0858 2 !+
289 0859 2 ! If in recovery mode don't do it.
290 0860 2 !-
291 0861
292 0862 2 IF .EDT$$G_RCOV_MOD THEN RETURN (0);
293 0863
294 0864 2 !+
295 0865 2 ! If at end of buffer don't do it.
296 0866 2 !-
297 0867
298 0868 2 IF (.EDT$$A_WK_LN EQLA EDT$$Z_EOB_LN) THEN RETURN (0);
299 0869
300 0870 2 !+
301 0871 2 ! If there is text on the message line don't do it, since we want
```

```
! The special line that marks end of buffer
! 1 = this terminal has Insert Character Mode
! 1 = there is text on the message line
! 1 = terminal driver needs CR to avoid wrapping lines
! Number of chars in read-ahead buffer
! The read-ahead buffer
! Deleted character buffer.
! Length of deleted character buffer
! 0 = NOTRUNCATE mode
! Pointer to current screen info for current line
! Old character position on the line
! Screen shift amount
! 1 = screen is in insert mode
```

```
302 0872 2 | to erase the text at the next keystroke. After that keystroke
303 0873 2 | the message line will be erased and we will come back here to
304 0874 2 | check again for optimized input.
305 0875 2 |
306 0876 2 |
307 0877 2 | IF (.EDT$$G_MSGFLG) THEN RETURN (0);
308 0878 2 |
309 0879 2 | +
310 0880 2 | If the screen is shifted don't do it.
311 0881 2 |
312 0882 2 |
313 0883 2 | IF (.EDT$$G_SHF NEQ 0) THEN RETURN (0);
314 0884 2 |
315 0885 2 | +
316 0886 2 | If this terminal has editing features don't do it if there is
317 0887 2 | a tab to the right of the cursor. If this terminal does not
318 0888 2 | have editing features, don't do it if there is anything to the
319 0889 2 | right of the cursor.
320 0890 2 |
321 0891 2 |
322 0892 2 | IF .EDT$$G_TI_EDIT
323 0893 2 | THEN
324 0894 2 | BEGIN
325 0895 3 |
326 0896 4 | IF ( NOT CH$FAIL (CH$FIND_CH (CH$DIFF (.EDT$$A_LN_END, .EDT$$A_LN_PTR), .EDT$$A_LN_PTR, ASC_K_TAB)))
327 0897 3 | THEN
328 0898 3 | RETURN (0);
329 0899 3 |
330 0900 3 | END
331 0901 2 | ELSE
332 0902 2 |
333 0903 2 | IF (CH$DIFF (.EDT$$A_LN_END, .EDT$$A_LN_PTR) NEQ 0) THEN RETURN (0);
334 0904 2 |
335 0905 2 | +
336 0906 2 | Finally, it looks possible. Keep doing it as long as we can.
337 0907 2 |
338 0908 2 | READ_DONE = 0;
339 0909 2 | READ = 0;
340 0910 2 |
341 0911 2 | DO
342 0912 2 | BEGIN
343 0913 2 | TERMINATOR_PROCESSED = 0;
344 0914 2 | +
345 0915 2 | Compute the number of characters left on the line.
346 0916 2 |
347 0917 2 | NUM_CHARS = .EDT$$G_TI_WID - 1;
348 0918 2 | +
349 0919 2 | If we are in wrap mode, make sure we get control at the wrap column.
350 0920 2 |
351 0921 2 |
352 0922 2 | IF (.EDT$$G_WD_WRAP LSS .NUM_CHARS) THEN NUM_CHARS = .EDT$$G_WD_WRAP;
353 0923 2 |
354 0924 2 | +
355 0925 2 | Subtract the current cursor position.
356 0926 2 |
357 0927 2 | NUM_CHARS = .NUM_CHARS - .EDT$$G_CUR_COL - .READ;
358 0928 2 | +
```



```
359 0929 3 Subtract the width of the characters to the right of the cursor. Note that
360 0930 3 unless we are on a terminal with screen editing features this will always
361 0931 3 be zero. Note also that there can be no HTs to the right of the cursor,
362 0932 3 so the widths of the characters are independent of their position on the line.
363 0933 3 Hence the second parameter to EDT$$FMT_CHWID will not be used.
364 0934 3 -
365 0935 3
366 0936 3 INCR CPTR FROM .EDT$$A_LN_PTR TO .EDT$$A_LN_END - 1 DO
367 0937 3 NUM_CHARS = .NUM_CHARS - EDT$$FMT_CHWID (CH$RCHAR (.CPTR), 0);
368 0938 3
369 0939 3 +
370 0940 3 Make sure there is enough room left in the line buffer.
371 0941 3 -
372 0942 3 BUF_LEFT = 255 - CH$DIFF (.EDT$$A_LN_PTR, EDT$$T_LN_BUF);
373 0943 3
374 0944 3 IF (.BUF_LEFT LSS .NUM_CHARS) THEN NUM_CHARS = .BUF_LEFT;
375 0945 3
376 0946 3 +
377 0947 3 Don't try to read more than the space we have in our local buffer.
378 0948 3 -
379 0949 3
380 0950 3 IF ((.NUM_CHARS + .READ) GTR 132) THEN NUM_CHARS = 132 - .READ;
381 0951 3
382 0952 3 +
383 0953 3 Now, if we have a reasonable size, we can read with echo.
384 0954 3 -
385 0955 3
386 0956 3 IF (.NUM_CHARS GTR CHAR_LIMIT_1)
387 0957 3 THEN
388 0958 3 BEGIN
389 0959 3 +
390 0960 3 We will do a read with echo. Make sure the video attributes are right.
391 0961 3 -
392 0962 3
393 0963 3 IF (.EDT$$A_SEL_BUF EQL .EDT$$A_CUR_BUF)
394 0964 3 THEN
395 0965 3 BEGIN
396 0966 3
397 0967 3 IF (EDT$$SEL_RNGPOS () LEQ 0) THEN EDT$$SC_REVID () ELSE EDT$$SC_NONREVID ()
398 0968 3
399 0969 3 END
400 0970 3 ELSE
401 0971 3 EDT$$SC_NONREVID ();
402 0972 3
403 0973 3 +
404 0974 3 If we are not at the end of the line, put the terminal in insert mode. This can only
405 0975 3 be done on terminals that have the 'edit' feature.
406 0976 3 -
407 0977 3
408 0978 3 IF ((CH$DIFF (.EDT$$A_LN_END, .EDT$$A_LN_PTR) NEQ 0) AND (.EDT$$G_INSERT_MODE EQL 0))
409 0979 3 THEN
410 0980 3 EDT$$SC_INS_MODE ();
411 0981 3
412 0982 3 +
413 0983 3 Put out a carriage return to make the terminal driver think we are at the
414 0984 3 beginning of a line, then reposition the cursor. This is needed only for
415 0985 3 some terminal drivers, that lose track of the cursor and output a CRLF
```

```
416 0986 4 ! if they think that the user is about to type to the right of the screen.
417 0987 4 !-
418 0988 4
419 0989 4 IF .EDT$SG_TI_DUMB
420 0990 4 THEN
421 0991 5 BEGIN
422 0992 5 EDT$FMT_LIT (UPLIT (%STRING (%CHAR (ASC_K_CR))), 1);
423 0993 5 EDT$SG_PRV_COL = 0;
424 0994 4 END;
425 0995 4
426 0996 4 !+
427 0997 4 ! Make sure the cursor is positioned correctly.
428 0998 4 !-
429 0999 4 EDT$SC_POSCSIF (.EDT$SG_CS_LNO, .EDT$SG_CUR_COL + .READ);
430 1000 4 !+
431 1001 4 ! Do the special read with echo. Optionally prompt. Since the terminal driver may
432 1002 4 ! count the length of the prompt, it must be short enough that our "worst case" estimate
433 1003 4 ! of 10 characters in the repositioning allows for it. Don't read more than 70 characters
434 1004 4 ! at a time.
435 1005 4 !-
436 1006 4
437 1007 4 IF (.EDT$ST_PMT_KPD [0] GTR 0) THEN EDT$FMT_LIT (EDT$ST_PMT_KPD [1], .EDT$ST_PMT_KPD [0]);
438 1008 4
439 1009 4 EDT$TI_RDSTR (TEXT_BUF [.READ], MIN (70, .NUM_CHARS - CHAR_LIMIT_2), NUM_READ);
440 1010 4 EDT$SG_PRV_COL = .EDT$SG_PRV_COL + .NUM_READ;
441 1011 4 READ_DONE = 1;
442 1012 4 END
443 1013 4 ELSE
444 1014 4 NUM_READ = 0;
445 1015 4
446 1016 4 !+
447 1017 4 ! Cause the characters to appear in the next journal record.
448 1018 4 !-
449 1019 4
450 1020 4 INCR COUNTER FROM 0 TO (.NUM_READ - 1) DO
451 1021 4 EDT$TI_BUFCH (.TEXT_BUF [.READ + .COUNTER]);
452 1022 4
453 1023 4 EDT$SG_JOU_VALID = 1;
454 1024 4 READ = .READ + .NUM_READ;
455 1025 4 !+
456 1026 4 ! If the line was terminated by a control C bail out. If any characters were
457 1027 4 ! read the insert is aborted; otherwise the control C is effectively ignored.
458 1028 4 !-
459 1029 4
460 1030 4 IF EDT$CHK_CC ()
461 1031 4 THEN
462 1032 4 BEGIN
463 1033 4
464 1034 4 IF (.READ GTR 0) THEN EDT$SG_CC_DONE = 1;
465 1035 4
466 1036 4 RETURN (0);
467 1037 4 END;
468 1038 4
469 1039 4 !+
470 1040 4 ! If there is a single terminator, and if it is defined to delete
471 1041 4 ! the last character, shorten the string by one and do another read.
472 1042 4 !-
```



```

473 1043 3
474 1044 4 IF ((.EDT$$G_RDAHED EQL 1) AND
475 1045 4 EDT$$ST_KEYDEF (CH$RCHAR (EDT$$T_RDAHED), UPLIT (BYTE ('D-C.')), 4, 0) AND
476 1046 4 (.READ GEQ 1))
477 1047 3 THEN
478 1048 4 BEGIN
479 1049 4 !+
480 1050 4 !- Make sure the delete character appears in the journal.
481 1051 4
482 1052 4 EDT$$TI_BUFCH (CH$RCHAR (EDT$$T_RDAHED));
483 1053 4 READ = .READ - 1;
484 1054 4 EDT$$SC_POSCSIF (.EDT$$G_CS_LNO, .EDT$$G_PRV_COL - 1);
485 1055 4
486 1056 5 IF (.EDT$$G_INSERT_MODE NEQ 0)
487 1057 4 THEN
488 1058 5 BEGIN
489 1059 5 !+
490 1060 5 !- We must delete exactly one character.
491 1061 5
492 1062 5 EDT$$FMT_LIT (UPLIT (BYTE (ASC_K_ESC, %C'[', %C'P')), 3);
493 1063 5 END
494 1064 4 ELSE
495 1065 5 BEGIN
496 1066 5 !+
497 1067 5 !- We are just before the character to delete, and there are no visible characters after
498 1068 5 the character to delete. We can erase to end of line.
499 1069 5
500 1070 5 EDT$$SC_ERATOEOL ();
501 1071 4 END;
502 1072 4
503 1073 4 !+
504 1074 4 !- Store the character deleted in the delete character buffer.
505 1075 4
506 1076 4 EDT$$G_DEL_CHLEN = 1;
507 1077 4 EDT$$T_DEL_CH [0] = DIR_BACKWARD;
508 1078 4 EDT$$T_DEL_CH [1] = .TEXT_BUF [.READ];
509 1079 4 EDT$$G_RDAHED = 0;
510 1080 4 EDT$$G_VERT = 0;
511 1081 4 TERMINATOR_PROCESSED = 1;
512 1082 3 END;
513 1083 3
514 1084 3 !+
515 1085 3 !- Keep reading if we processed the terminator.
516 1086 3
517 1087 3 END
518 1088 2 UNTIL ( NOT .TERMINATOR_PROCESSED);
519 1089 2
520 1090 2 !+
521 1091 2 !- Insert the characters read into the line.
522 1092 2
523 1093 2 EDT$$CPY_MEM (CH$DIFF (.EDT$$A_LN_END, .EDT$$A_LN_PTR), .EDT$$A_LN_PTR, !
524 1094 2 CH$PCUS (.EDT$$A_LN_PTR, .READ));
525 1095 2 EDT$$CPY_MEM (.READ, TEXT_BUF [0], .EDT$$A_LN_PTR);
526 1096 2 !+
527 1097 2 !- Add the number of characters read to the line size.
528 1098 2
529 1099 2 EDT$$UPD_LNLEN (.READ);
```

```

: 530 1100 2 !+
: 531 1101 2 !- If we actually read some characters update the cursor position.
: 532 1102 2 !-
: 533 1103 2 !-
: 534 1104 2 !-
: 535 1105 2 !- IF (.READ NEQ 0)
: 536 1106 2 !- THEN
: 537 1107 2 !- BEGIN
: 538 1108 2 !- EDT$$G_CUR_COL = .EDT$$G_CUR_COL + .READ;
: 539 1109 2 !- EDT$$G_VERT = 0;
: 540 1110 2 !+
: 541 1111 2 !- Note that the line is not marked as changed for the screen
: 542 1112 2 !- updater, since the modification to the screen has already
: 543 1113 2 !- been made. However, we must note for the work file system
: 544 1114 2 !- that the current line has been changed.
: 545 1115 2 !-
: 546 1116 2 !- EDT$$G_LN_CHGD = 1;
: 547 1117 2 !- END;
: 548 1118 2 !+
: 549 1119 2 !- Update the current character pointer.
: 550 1120 2 !-
: 551 1121 2 !- EDT$$A_LN_PTR = CH$PLUS (.EDT$$A_LN_PTR, .READ);
: 552 1122 2 !- EDT$$G_CS_OLDCHNO = .EDT$$G_CS_OLDCHNO + .READ;
: 553 1123 2 !- RETURN (.READ_DONE);
: 554 1124 1 !- END;

```

! of routine EDT\$\$RD_ECHO

```

.TITLE EDT$CHMEINPUT EDT$CHMEINPUT - read with echo if possible
.IDENT \V04-000\
.PSECT _EDT$CODE,NOWRT, SHR, PIC,2

```

```

00 00 00 0D 00000 P.AAA: .ASCII <13><0><0><0>
2E 43 2D 44 00004 P.AAB: .ASCII \D-C.\
50 5B 1B 00008 P.AAC: .BYTE 27, 91, 80

```

```

.EXTRN EDT$$CHK_CC, EDT$$FMT_LIT
.EXTRN EDT$$TI_RDSTR, EDT$$TI_BUFCH
.EXTRN EDT$$UPD_LNLEN, EDT$$SC_POSCSIF
.EXTRN EDT$$SC_NONREVID
.EXTRN EDT$$SC_REVID, EDT$$SEL_RNGPOS
.EXTRN EDT$$FMT_CHWID, EDT$$TST_KEYDEF
.EXTRN EDT$$SC_ERATOEOL
.EXTRN EDT$$MRK_LNCHG, EDT$$SC_INS_MODE
.EXTRN EDT$$G_CUR_COL, EDT$$G_LN_CHGD
.EXTRN EDT$$G_CS_CNO, EDT$$A_SEL_BUF
.EXTRN EDT$$G_VERT, EDT$$G_KPAD
.EXTRN EDT$$G_RCOV_MOD
.EXTRN EDT$$A_CUR_BUF, EDT$$G_TI_WID
.EXTRN EDT$$G_WD_WRAP, EDT$$T_LN_BUF
.EXTRN EDT$$A_LN_PTR, EDT$$A_LN_END
.EXTRN EDT$$G_PROV_COL, EDT$$T_PMT_KPD
.EXTRN EDT$$G_JOU_VALID
.EXTRN EDT$$G_CC_DONE, EDT$$A_WK_LN
.EXTRN EDT$$Z_EOB_LN, EDT$$G_TI_EDIT
.EXTRN EDT$$G_MSGFLG, EDT$$G_TI_DUMB

```


EDT\$CHMEINPUT
V04-000

EDT\$CHMEINPUT - read with echo if possible
EDT\$\$RD_ECHO - read with echo if possible

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VAX-11 Bliss-32 V4.0-742
[EDT.SRC]CHMEINPUT.BLI;1

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				OFFC 00000				
							.EXTRN	EDT\$\$G_RDAHED, EDT\$\$T_RDAHED
							.EXTRN	EDT\$\$T_DEL_CH, EDT\$\$G_DEL_CHLEN
							.EXTRN	EDT\$\$G_TRUN, EDT\$\$A_CSR_SCRPTR
							.EXTRN	EDT\$\$G_CS_OLDCHNO
							.EXTRN	EDT\$\$G_SHF, EDT\$\$G_INSERT_MODE
							.ENTRY	EDT\$\$RD_ECHO, Save R2,R3,R4,R5,R6,R7,R8,R9,-; 0703
								R10,R11
							MOVAB	EDT\$\$G_CUR_COL, R11
							MOVAB	EDT\$\$A_LN_END, R10
							MOVAB	EDT\$\$A_LN_PTR, R9
							MOVAB	-136(SP), -SP
							BLBS	EDT\$\$G_KPAD, 2\$ 0842
							BRW	31\$
							MOVL	EDT\$\$A_CSR_SCRPTR, R0 0848
							BEQL	1\$
							TSTB	9(R0) 0850
							BNEQ	1\$
							MOVL	EDT\$\$A_LN_PTR, R2 0856
							MOVAB	EDT\$\$T_LN_BUF, R1
							SUBL3	R1, R2, RT
							CMPZV	#0, #8, 9(R0), R1
							BEQL	1\$
							BLBS	EDT\$\$G_RCOV_MOD, 1\$ 0862
							MOVAB	EDT\$\$Z_EOB_LN, R0 0868
							CMPL	EDT\$\$A_WK_LN, R0
							BEQL	1\$
							BLBS	EDT\$\$G_MSGFLG, 1\$ 0877
							TSTL	EDT\$\$G_SHF 0883
							BNEQ	1\$
							MOVL	EDT\$\$A_LN_END, R0 0896
							BLBC	EDT\$\$G_TI_EDIT, 4\$ 0892
							SUBL3	R2, R0, RT 0896
							LOCC	#9, R1, (R2)
							BNEQ	3\$
							CLRL	R1
							TSTL	R1
							BRB	5\$
							CMPL	R0, R2 0903
							BNEQ	1\$
							CLRL	READ 0909
							CLRL	TERMINATOR_PROCESSED 0913
							SUBL3	#1, EDT\$\$G_TI_WID, NUM_CHARS 0917
							MOVL	EDT\$\$G_WD_WRAP, R0 0922
							CMPL	R0, NUM_CHARS
							BGEQ	7\$
							MOVL	R0, NUM_CHARS
							SUBL3	EDT\$\$G_CUR_COL, NUM_CHARS, R0 0927
							SUBL3	READ, R0, NUM_CHARS
							MOVL	EDT\$\$A_LN_END, R5 0936
							SUBL3	#1, EDT\$\$A_LN_PTR, CPTR
							BRB	9\$
							CLRL	-(SP) 0937
							MOVZBL	(CPTR), -(SP)
							CALLS	#2, EDT\$\$FMT_CHWID
							SUBL2	R0, NUM_CHARS
							AOBLSS	R5, CPTR, 8\$

50	00000000G	00	9E	000CE	MOVAB	EDT\$\$T_LN_BUF, R0	0942
50		69	C2	000D5	SUBL2	EDT\$\$A_LN_PTR, R0	
53	00FF	C0	9E	000D8	MOVAB	255(R0), BUF_LEFT	
52		53	D1	000DD	CMPL	BUF_LEFT, NUM_CHARS	0944
		03	18	000E0	BGEQ	10\$	
52		53	D0	000E2	MOVL	BUF_LEFT, NUM_CHARS	
50		57	C1	000E5	10\$: ADDL3	READ, NUM_CHARS, R0	0950
00000084	8F	50	D1	000E9	CMPL	R0, #132	
		08	15	000F0	BLEQ	11\$	
52	00000084	57	C3	000F2	SUBL3	READ, #132, NUM_CHARS	
	8F	52	D1	000FA	11\$: CMPL	NUM_CHARS, #2	0956
	02	03	14	000FD	BGTR	12\$	
		00AD	31	000FF	BRW	19\$	
00000000G	00	00000000G	00	D1	00102	12\$: CMPL	EDT\$\$A_SEL_BUF, EDT\$\$A_CUR_BUF
			14	12	0010D	BNEQ	13\$
00000000G	00		00	FB	0010F	CALLS	#0, EDT\$\$SEL_RNGPOS
			50	D5	00116	TSTL	R0
			09	14	00118	BGTR	13\$
00000000G	00		00	FB	0011A	CALLS	#0, EDT\$\$SC_REVID
			07	11	00121	BRB	14\$
00000000G	00		00	FB	00123	13\$: CALLS	#0, EDT\$\$SC_NONREVID
	69		6A	D1	0012A	14\$: CMPL	EDT\$\$A_LN_END, EDT\$\$A_LN_PTR
			0F	13	0012D	BEQL	15\$
	00000000G		00	D5	0012F	TSTL	EDT\$\$G_INSERT_MODE
			07	12	00135	BNEQ	15\$
00000000G	00		00	FB	00137	CALLS	#0, EDT\$\$SC_INS_MODE
	13	00000000G	00	E9	0013E	15\$: BLBC	EDT\$\$G_TI_DUMB, 16\$
			01	DD	00145	PUSHL	#1
	FEAA		CF	9F	00147	PUSHAB	P.AAA
00000000G	00		02	FB	0014B	CALLS	#2, EDT\$\$FMT_LIT
	00000000G		00	D4	00152	CLRL	EDT\$\$G_PRV_COL
			50	D0	00158	16\$: MOVL	EDT\$\$G_CUR_COL, R0
		6740	9F	0015B	PUSHAB	(READ)[R0]	0999
	00000000G		00	DD	0015E	PUSHL	EDT\$\$G_CS_LNO
00000000G	00		02	FB	00164	CALLS	#2, EDT\$\$SC_POSCSIF
	50	00000000G	00	9A	0016B	MOVZBL	EDT\$\$T_PMT_RPD, R0
			0F	15	00172	BLEQ	17\$
			50	DD	00174	PUSHL	R0
	00000000G		00	9F	00176	PUSHAB	EDT\$\$T_PMT_KPD+1
00000000G	00		02	FB	0017C	CALLS	#2, EDT\$\$FMT_LIT
			5E	DD	00183	17\$: PUSHL	SP
	50	FF	A2	9E	00185	MOVAB	-1(R2), R0
			50	DD	00189	PUSHL	R0
00000046	8F		6E	D1	0018B	CMPL	(SP), #70
			04	15	00192	BLEQ	18\$
	6E	46	8F	9A	00194	MOVZBL	#70, (SP)
		0C	AE47	9F	00198	18\$: PUSHAB	TEXT_BUF[READ]
			03	FB	0019C	CALLS	#3, EDT\$\$TI_RDSTR
00000000G	00		6E	C0	001A3	ADDL2	NUM_READ, EDT\$\$G_PRV_COL
00000000G	00		01	D0	001AA	MOVL	#1, READ_DONE
	58		02	11	001AD	BRB	20\$
			6E	D4	001AF	19\$: CLRL	NUM_READ
	54		01	CE	001B1	20\$: MNEGL	#1, COUNTER
			10	11	001B4	BRB	22\$
50	57		54	C1	001B6	21\$: ADDL3	COUNTER, READ, R0
	7E	04	AE40	9A	001BA	MOVZBL	TEXT_BUF[R0], -(SP)
00000000G	00		01	FB	001BF	CALLS	#1, EDT\$\$TI_BUFCH

EC	54	6E	F2	001C6	22\$:	AOBLSS	NUM_READ, COUNTER, 21\$	1023
00000000G	00	01	D0	001CA		MOVL	#1, EDT\$G_JOU_VALID	1024
57		6E	C0	001D1		ADDL2	NUM_READ, READ	1030
00000000G	00	00	FB	001D4		CALLS	#0, EDT\$CHK_CC	
0E		50	E9	001DB		BLBC	R0, 24\$	1034
		57	D5	001DE		TSTL	READ	
		07	15	001E0		BLEQ	23\$	
00000000G	00	01	D0	001E2		MOVL	#1, EDT\$G_CC_DONE	
		00D2	31	001E9	23\$:	BRW	31\$	1036
	01	00	D1	001EC	24\$:	CMPL	EDT\$G_RDAHED, #1	1044
		03	13	001F3		BEQL	25\$	
		0084	31	001F5		BRW	28\$	
	7E	04	7D	001F8	25\$:	MOVQ	#4, -(SP)	1045
		CF	9F	001FB		PUSHAB	P.AAB	
	7E	00	9A	001FF		MOVZBL	EDT\$T_RDAHED, -(SP)	
00000000G	00	04	FB	00206		CALLS	#4, EDT\$TST_KEYDEF	
6C		50	E9	0020D		BLBC	R0, 28\$	1046
		57	D5	00210		TSTL	READ	
		68	15	00212		BLEQ	28\$	
	7E	00	9A	00214		MOVZBL	EDT\$T_RDAHED, -(SP)	1052
00000000G	00	01	FB	0021B		CALLS	#1, EDT\$TI_BUFCH	
		57	D7	00222		DECL	READ	1053
7E	00000000G	00	C3	00224		SUBL3	#1, EDT\$G_PRV_COL, -(SP)	1054
		00	DD	0022C		PUSHL	EDT\$G_CS_CNO	
00000000G	00	02	FB	00232		CALLS	#2, EDT\$SC_POSCSIF	
		00	D5	00239		TSTL	EDT\$G_INSERT_MODE	1056
		0F	13	0023F		BEQL	26\$	
		03	DD	00241		PUSHL	#3	1062
		CF	9F	00243		PUSHAB	P.AAC	
00000000G	00	02	FB	00247		CALLS	#2, EDT\$FMT_LIT	
		07	11	0024E		BRB	27\$	1056
00000000G	00	00	FB	00250	26\$:	CALLS	#0, EDT\$SC_ERATOEOL	1070
00300000G	00	01	D0	00257	27\$:	MOVL	#1, EDT\$G_DEL_CHLEN	1076
		00	94	0025E		CLRB	EDT\$T_DEL_CH	1077
00000000G	00	04	AE	90	00264	MOVQ	TEXT_BUF[READ], EDT\$T_DEL_CH+1	1078
		00	D4	0026D		CLRL	EDT\$G_RDAHED	1079
		00	D4	00273		CLRL	EDT\$G_VERT	1080
	56	01	D0	00279		MOVL	#1, TERMINATOR_PROCESSED	1081
03		56	E9	0027C	28\$:	BLBC	TERMINATOR_PROCESSED, 29\$	1088
		FE	31	0027F		BRW	6\$	
	56	69	D0	00282	29\$:	MOVL	EDT\$A_LN_PTR, R6	1094
50	6A	56	C3	00285		SUBL3	R6, EDT\$A_LN_END, R0	
6746	66	50	28	00289		MOVC3	R0, (R6), (READ)[R6]	
66	04	57	28	0028E		MOVC3	READ, TEXT_BUF, (R6)	1095
		57	DD	00293		PUSHL	READ	1099
00000000G	00	01	FB	00295		CALLS	#1, EDT\$UPD_LNLEN	
		57	D5	0029C		TSTL	READ	1104
		10	13	0029E		BEQL	30\$	
	6B	57	C0	002A0		ADDL2	READ, EDT\$G_CUR_COL	1107
		00	D4	002A3		CLRL	EDT\$G_VERT	1108
00000000G	00	01	D0	002A9		MOVL	#1, EDT\$G_LN_CHGD	1115
	69	57	C0	002B0	30\$:	ADDL2	READ, EDT\$A_LN_PTR	1121
00000000G	00	57	C0	002B3		ADDL2	READ, EDT\$G_CS_OLDCHNO	1122
	50	58	D0	002BA		MOVL	READ_DONE, R0	1123
		04	002BD			RET		
		50	D4	002BE	31\$:	CLRL	R0	1124
		04	002C0			RET		

EDT\$CHMEINPUT
V04-000

EDT\$CHMEINPUT - read with echo if possible
EDT\$SRD_ECHO - read with echo if possible

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[EDT.SRC]CHMEINPUT.BLI;1

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; Routine Size: 705 bytes, Routine Base: _EDT\$CODE + 000B

; 555 1125 1
; 556 1126 1 !<BLF/PAGE>

EDT\$CHMEINPUT
V04-000

EDT\$CHMEINPUT - read with echo if possible
EDT\$SRD_ECHO - read with echo if possible

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VAX-11 Bliss-32 V4.0-742
[EDT.SRC]CHMEINPUT.BLI;1

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: 558 1127 1 END
: 559 1128 1
: 560 1129 0 ELUDOM

! of module EDT\$CHMEINPUT

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	716	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
-\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	39	10	40	00:00.2
-\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS\$:CHMEINPUT/OBJ=OBJ\$:CHMEINPUT MSRC\$:CHMEINPUT.BLI/UPDATE=(ENH\$:C
HMEINPUT)

: Size: 705 code + 11 data bytes
: Run Time: 00:30.2
: Elapsed Time: 00:34.5
: Lines/CPU Min: 2240
: Lexemes/CPU-Min: 7145
: Memory Used: 198 pages
: Compilation Complete

0130 AH-BT13A-SE
VAX/VMS V4.0

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0131 AH-BT13A-SE
VAX/VMS V4.0

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