


```
LL      SSSSSSSS UU      UU  BBBB BBBB SSSSSSSS
LL      SSSSSSSS UU      UU  BBBB BBBB SSSSSSSS
LL      SS      UU      UU  BB      BB  SS
LL      SS      UU      UU  BB      BB  SS
LL      SS      UU      UU  BB      BB  SS
LL      SSSSSS  UU      UU  BBBB BBBB SSSSSS
LL      SSSSSS  UU      UU  BBBB BBBB SSSSSS
LL      SS      UU      UU  BB      BB  SS
LL      SS      UU      UU  BB      BB  SS
LL      SS      UU      UU  BB      BB  SS
LLLLLLLLLL SSSSSSSS UUUUUUUUU BBBB BBBB SSSSSSSS
LLLLLLLLLL SSSSSSSS UUUUUUUUU BBBB BBBB SSSSSSSS
```

```
....
....
....
....
```

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

```
0001 0 %TITLE 'EDT$LSUBS - SUBSTITUTE line-mode command'
0002 0 MODULE EDT$LSUBS ( ! SUBSTITUTE line-mode command
0003 0 IDENT = 'V04-000' ! File: LSUBS.BLI Edit: STS1011
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
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 executes the line mode SUBSTITUTE command.
0037 1
0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
0039 1
0040 1 AUTHOR: Bob Kushlis, CREATION DATE: February 3, 1978
0041 1
0042 1 MODIFIED BY:
0043 1
0044 1 1-001 - Original. DJS 30-JAN-81. This module was created by
0045 1 extracting the routine EDT$SLN SUBCMD from the module EXEC.BLI.
0046 1 1-002 - Regularize headers. JBS 20-Mar-1981
0047 1 1-003 - Change substitute to EDT$SUB_NXT. JBS 27-Mar-1981
0048 1 1-004 - Change paramter to FMT-STRCNT. SMB 5-Feb-1982
0049 1 1-005 - Give a message if there is an error setting search strings. JBS 04-May-1982
0050 1 1-006 - Stop processing on bad select range. SMB 01-Jul-1982
0051 1 1-007 - Use EDT$FMT_CRLF instead of EDT$OUT_FMTBUF. JBS 05-Jul-1982
0052 1 1-008 - Mark the screen as changed if we change anything. JBS 07-Jul-1982
0053 1 1-009 - Put edt$stst_eob in line. STS 22-Sep-1982
0054 1 1-010 - Remove EDT$G_SCR_CHGD, new screen logic doesn't need it. JBS 09-Oct-1982
0055 1 1-011 - Put edt$rng_frstln in line. STS 11-Oct-1982
0056 1 --
0057 1
```

EDT\$LSUBS
V04-000

EDT\$LSUBS - SUBSTITUTE line-mode command
Declarations

C 14
16-Sep-1984 01:01:28
14-Sep-1984 12:23:43

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]LSUBS.BLI;1 Page 2
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```

59 0058 1 %SBTTL 'Declarations'
60 0059 1
61 0060 1 : TABLE OF CONTENTS:
62 0061 1 :
63 0062 1
64 0063 1 REQUIRE 'EDTSRC:TRAROUNAM';
65 0502 1
66 0503 1 FORWARD ROUTINE
67 0504 1 EDT$LN_SUBCMD : NOVALUE;
68 0505 1
69 0506 1 :
70 0507 1 : INCLUDE FILES:
71 0508 1 :
72 0509 1
73 0510 1 REQUIRE 'EDTSRC:EDTREQ';
74 0645 1
75 0646 1 :
76 0647 1 : MACROS:
77 0648 1 :
78 0649 1 : NONE
79 0650 1 :
80 0651 1 : EQUATED SYMBOLS:
81 0652 1 :
82 0653 1 : NONE
83 0654 1 :
84 0655 1 : OWN STORAGE:
85 0656 1 :
86 0657 1 : NONE
87 0658 1 :
88 0659 1 : EXTERNAL REFERENCES:
89 0660 1 :
90 0661 1 : In the routine
```

! Process the SUBSTITUTE command

```

: 92 0662 1 %SBTTL 'EDT$$LN_SUBCMD - SUBSTITUTE line-mode command'
: 93 0663 1
: 94 0664 1 GLOBAL ROUTINE EDT$$LN_SUBCMD ! SUBSTITUTE line-mode command
: 95 0665 1 : NOVALUE =
: 96 0666 1
: 97 0667 1 ++
: 98 0668 1 FUNCTIONAL DESCRIPTION:
: 99 0669 1
: 100 0670 1 Command processing routine for SUBSTITUTE. Position to the first
: 101 0671 1 line of the range, then enter a loop getting the next line and
: 102 0672 1 calling EDT$$SUB_NXT to do substitutions within that line.
: 103 0673 1 If the range was null, then we do only a single substitution,
: 104 0674 1 otherwise all are done.
: 105 0675 1
: 106 0676 1 FORMAL PARAMETERS:
: 107 0677 1
: 108 0678 1 NONE
: 109 0679 1
: 110 0680 1 IMPLICIT INPUTS:
: 111 0681 1
: 112 0682 1 EDT$$G_INP_SRC
: 113 0683 1 EDT$$A_CUR_BUF
: 114 0684 1 EDT$$Z_RNG_SAVPOS
: 115 0685 1 EDT$$A_EXE_CURCMD
: 116 0686 1 EDT$$G_EXE_QRYQUIT
: 117 0687 1 EDT$$G_EXE_SUBCNT
: 118 0688 1 EDT$$A_WK_CN
: 119 0689 1
: 120 0690 1 IMPLICIT OUTPUTS:
: 121 0691 1
: 122 0692 1 NONE
: 123 0693 1
: 124 0694 1 ROUTINE VALUE:
: 125 0695 1
: 126 0696 1 NONE
: 127 0697 1
: 128 0698 1 SIDE EFFECTS:
: 129 0699 1
: 130 0700 1 NONE
: 131 0701 1
: 132 0702 1 --
: 133 0703 1
: 134 0704 2 BEGIN
: 135 0705 2
: 136 0706 2 EXTERNAL ROUTINE
: 137 0707 2 EDT$$FMT_STRCNT : NOVALUE,
: 138 0708 2 EDT$$FMT_CRLF, ! Terminate an output line
: 139 0709 2 EDT$$SET_STR,
: 140 0710 2 EDT$$FMT_MSG : NOVALUE,
: 141 0711 2 EDT$$NXT_LNRNG,
: 142 0712 2 EDT$$RNG_REPOS,
: 143 0713 2 EDT$$RD_CURLN,
: 144 0714 2 EDT$$SUB_NXT : NOVALUE,
: 145 0715 2 EDT$$STOP_WKINGMSG : NOVALUE, ! Turn off the 'working' message
: 146 0716 2 EDT$$CHK_CC; ! Check for a control C
: 147 0717 2
: 148 0718 2 EXTERNAL
```

```
149 0719 2      EDT$LN_LNO_ZERO : LN_BLOCK,
150 0720 2      EDT$G_INP_SRC,
151 0721 2      EDT$A_CUR_BUF : REF TBCB_BLOCK,
152 0722 2      EDT$Z_RNG_SAVPOS : POS_BLOCK,
153 0723 2      EDT$A_WK_LN : REF LN_BLOCK,
154 0724 2      EDT$G_RNG_FRSTLN,
155 0725 2      EDT$Z_RNG_ORIGPOS : POS_BLOCK,
156 0726 2      EDT$Z_EOB_LN,
157 0727 2      EDT$A_EXE_CURCMD : REF NODE_BLOCK,      ! Pointer to the current command.
158 0728 2      EDT$G_EXE_QRYQUIT,                      ! Quit flag for /QUERY operations.
159 0729 2      EDT$G_EXE_SUBCNT,                        ! No. of substitutions done.
160 0730 2      EDT$G_CC_DONE;                          ! Set if control C actually aborted something
161 0731 2
162 0732 2      MESSAGES ((INVSTR));
163 0733 2
164 0734 2      LOCAL
165 0735 2          STRINGS_OK,                          ! Flag indicating that there is a problem setting the strings
166 0736 2          TEMP_COUNT : LN_BLOCK,                ! 6 byte count field
167 0737 2          SINGLE,                              ! Flag indicating single subs only
168 0738 2          FIRST,                                ! Flag indicating whether this is the first one.
169 0739 2          SEEN_CC;                              ! Flag indicating we have seen a control C
170 0740 2
171 0741 2      !+
172 0742 2      !- Get the range node.
173 0743 2
174 0744 2
175 0745 2      BIND
176 0746 2          RANGE = .EDT$A_EXE_CURCMD [RANGE1] : NODE_BLOCK;
177 0747 2
178 0748 2      !+
179 0749 2      !- Position to the first line.
180 0750 2
181 0751 2
182 0752 2      EDT$G_RNG_FRSTLN = 1;
183 0753 2      EDT$COPY_MEM( POS_SIZE, .EDT$A_CUR_BUF, EDT$Z_RNG_ORIGPOS);
184 0754 2      IF ( NOT EDT$RNG_REPOS (.EDT$A_EXE_CURCMD [RANGE1])) THEN RETURN;
185 0755 2
186 0756 2      !+
187 0757 2      !- Set the single substitution flag if the range was null.
188 0758 2
189 0759 2      SINGLE = .RANGE [RAN_TYPE] EQL RAN_NULL;
190 0760 2
191 0761 2      !+
192 0762 2      !- Set flag indicating this if the first substitution, and zero the
193 0763 2      !- substitution count.
194 0764 2      FIRST = 1;
195 0765 2      EDT$G_EXE_SUBCNT = 0;
196 0766 2      STRINGS_OK = 1;
197 0767 2      SEEN_CC = 0;
198 0768 2
199 0769 2      !+
200 0770 2      !- Loop over the range.
201 0771 2
202 0772 2      WHILE (EDT$NXT_LNRNG (0) AND ( NOT .EDT$G_EXE_QRYQUIT) AND .STRINGS_OK AND ( NOT .SEEN_CC)) DO
203 0773 2
204 0774 2          IF (.EDT$A_WK_LN NEQA EDT$Z_EOB_LN)
205 0775 2          THEN
```

EDT\$LSUBS
V04-000

EDT\$LSUBS - SUBSTITUTE line-mode command
EDT\$SLN_SUBCMD - SUBSTITUTE line-mode command

F 14
16-Sep-1984 01:01:28
14-Sep-1984 12:23:43

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]LSUBS.BLI;1

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```

206 0776 3 BEGIN
207 0777 3
208 0778 3 + Must set up the search and replace string each time through
209 0779 3 in case the range involved a search string, which would clobber
210 0780 3 it.
211 0781 3 -
212 0782 3 STRINGS_OK = EDT$$SET_STR ();
213 0783 3
214 0784 3 IF .STRINGS_OK
215 0785 3 THEN
216 0786 4 BEGIN
217 0787 4 +
218 0788 4 Do substitutions in this line starting at position 0.
219 0789 4 -
220 0790 4 SEEN_CC = EDT$$CHK_CC ();
221 0791 4
222 0792 5 IF ( NOT .SEEN_CC)
223 0793 5 THEN
224 0794 5 BEGIN
225 0795 5 EDT$$SUB_NXT (.SINGLE, 0);
226 0796 5 +
227 0797 5 Check to see if this was the first line in the range.
228 0798 5 -
229 0799 5
230 0800 5 IF .FIRST
231 0801 5 THEN
232 0802 5 +
233 0803 5 Save position after first substitute so we can
234 0804 5 correctly reposition there. This is necessary since
235 0805 5 modifying the first line might change it's position in
236 0806 5 the text buffer, invalidating the previously saved position.
237 0807 5 -
238 0808 6 BEGIN
239 0809 6 EDT$$CPY_MEM (POS_SIZE, .EDT$$A_CUR_BUF, EDT$$Z_RNG_SAVPOS);
240 0810 6 FIRST = 0;
241 0811 5 END;
242 0812 5
243 0813 5 END
244 0814 4 ELSE
245 0815 4 EDT$$G_CC_DONE = 1;
246 0816 4
247 0817 3 END;
248 0818 3
249 0819 2 END;
250 0820 2
251 0821 2 EDT$$STOP_WKINGMSG ();
252 0822 2 +
253 0823 2 Report a case of an invalid string.
254 0824 2 -
255 0825 2
256 0826 2 IF ( NOT .STRINGS_OK) THEN EDT$$FMT_MSG (EDT$_INVSTR);
257 0827 2
258 0828 2 +
259 0829 2 If the command came from the terminal, report the number of
260 0830 2 substitutions.
261 0831 2 -
262 0832 2
```

EDT\$LSUBS
V04-000

EDT\$LSUBS - SUBSTITUTE line-mode command
EDT\$SLN_SUBCMD - SUBSTITUTE line-mode command

G 14
16-Sep-1984 01:01:28
14-Sep-1984 12:23:43

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]LSUBS.BLI;1

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```

: 263      0833      3      IF (.EDT$G_INP_SRC EQL INP_TERM)
: 264      0834      2      THEN
: 265      0835      2          BEGIN
: 266      0836      2          MOVELINE (EDT$SL_LNO_ZERO, TEMP_COUNT);
: 267      0837      2          TEMP_COUNT = .EDT$G_EXE_SUBCNT;
: 268      0838      2          EDT$FMT_STRCNT (TEMP_COUNT, UPLIT (' substitution'), 13);
: 269      0839      2          EDT$FMT_CRLF ();
: 270      0840      2          END;
: 271      0841      2
: 272      0842      2      +
: 273      0843      2      - And re-position.
: 274      0844      2
: 275      0845      2          EDT$CPY_MEM(POS_SIZE, EDT$Z_RNG_SAVPOS, .EDT$A_CUR_BUF);
: 276      0846      2          EDT$RD_CURLN();
: 277      0847      1      END;

```

! of routine EDT\$SLN_SUBCMD

00 00 6E 6F 69 74 75 74 69 74 73 62 75 73 20 0000 P.AAA:
00 000F

.TITLE EDT\$LSUBS EDT\$LSUBS - SUBSTITUTE line-mode comm
and

.IDENT \V04-000\

.PSECT _EDT\$CODE,NOWRT, SHR, PIC,2

.ASCII \ substitution\<0><0><0>

.EXTRN EDT\$FMT_STRCNT
.EXTRN EDT\$FMT_CRLF, EDT\$SET_STR
.EXTRN EDT\$FMT_MSG, EDT\$NXT_CNRNG
.EXTRN EDT\$RNG_REPOS, EDT\$RD_CURLN
.EXTRN EDT\$SUB_NXT, EDT\$STOP_WKINGMSG
.EXTRN EDT\$CHK_CC, EDT\$SL_LNO_ZERO
.EXTRN EDT\$G_INP_SRC, EDT\$A_CUR_BUF
.EXTRN EDT\$Z_RNG_SAVPOS
.EXTRN EDT\$A_WK_CN, EDT\$G_RNG_FRSTLN
.EXTRN EDT\$Z_RNG_ORIGPOS
.EXTRN EDT\$Z_EOB_LN, EDT\$A_EXE_CURCMD
.EXTRN EDT\$G_EXE_QRYQUIT
.EXTRN EDT\$G_EXE_SUBCNT
.EXTRN EDT\$G_CC_DONE, EDT\$INVSTR

.ENTRY EDT\$SLN_SUBCMD, Save R2,R3,R4,R5,R6,R7,R8,- : 0664
R9,R10,R11

MOVAB EDT\$G_EXE_SUBCNT, R11

MOVAB EDT\$A_CUR_BUF, R10

SUBL2 #8, SP

MOVL EDT\$A_EXE_CURCMD, R6

MOVL 4(R6), R7

MOVL #1, EDT\$G_RNG_FRSTLN

MOVL EDT\$A_CUR_BUF, R0

MOVC3 #14, (R0), EDT\$Z_RNG_ORIGPOS

PUSHL 4(R6)

CALLS #1, EDT\$RNG_REPOS

BLBS R0, 1\$

RET

CLRL R0

TSTB 1(R7)

```

                                OFFC 00000
                                5B 00000000G 00 9E 00002
                                5A 00000000G 00 9E 00009
                                5E 00000000G 08 C2 00010
                                56 00000000G 00 D0 00013
                                57 04 A6 D0 0001A
                                00000000G 00 01 D0 0001E
                                50 6A D0 00025
                                60 0E 28 00028
                                04 A6 DD 00030
                                00000000G 00 01 FB 00033
                                01 50 E8 0003A
                                04 0003D
                                50 D4 0003E 1$:
                                01 A7 95 00040

```

0759

EDT\$LSUBS
V04-000

EDT\$LSUBS - SUBSTITUTE line-mode command
EDT\$LN_SUBCMD - SUBSTITUTE line-mode command

H 14
16-Sep-1984 01:01:28
14-Sep-1984 12:23:43

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]LSUBS.BLI;1

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		02	12	00043	BNEQ	2\$		
		50	D6	00045	INCL	R0		
	59	50	D0	00047	2\$:	MOVL	R0, SINGLE	
	58	01	D0	0004A	MOVL	#1, FIRST		0764
		6B	D4	0004D	CLRL	EDT\$G_EXE_SUBCNT		0765
	56	01	7D	0004F	MOVQ	#1, STRINGS_OK		0766
		7E	D4	00052	3\$:	CLRL	-(SP)	0772
00000000G	00	01	FB	00054	CALLS	#1, EDT\$NXT_LNRNG		
	5D	50	E9	0005B	BLBC	R0, 5\$		
	56	00	E8	0005E	BLBS	EDT\$G_EXE_QRYQUIT, 5\$		
	53	56	E9	00065	BLBC	STRINGS_OK, 5\$		
	50	57	E8	00068	BLBS	SEEN_CC, 5\$		
	50	00	9E	0006B	MOVAB	EDT\$Z_EOB_LN, R0		0774
	50	00	D1	00072	CMPL	EDT\$A_WK_LN, R0		
		D7	13	00079	BEQL	3\$		
00000000G	00	00	FB	0007B	CALLS	#0, EDT\$SET_STR		0782
	56	50	D0	00082	MOVL	R0, STRINGS_OK		
	CA	56	E9	00085	BLBC	STRINGS_OK, 3\$		0784
00000000G	00	00	FB	00088	CALLS	#0, EDT\$CHK_CC		0790
	57	50	D0	0008F	MOVL	R0, SEEN_CC		
	1D	57	E8	00092	BLBS	SEEN_CC, 4\$		0792
		7E	D4	00095	CLRL	-(SP)		0795
		59	DD	00097	PUSHL	SINGLE		
00000000G	00	02	FB	00099	CALLS	#2, EDT\$SUB_NXT		
	AF	58	E9	000A0	BLBC	FIRST, 3\$		0800
	50	6A	D0	000A3	MOVL	EDT\$A_CUR_BUF, R0		0809
00000000G	00	0E	28	000A6	MOVC3	#14, (R0), EDT\$Z_RNG_SAVPOS		
	60	58	D4	000AE	CLRL	FIRST		0810
		A0	11	000B0	BRB	3\$		0792
00000000G	00	01	D0	000B2	4\$:	MOVL	#1, EDT\$G_CC_DONE	0815
		97	11	000B9	BRB	3\$		0784
00000000G	00	00	FB	000BB	5\$:	CALLS	#0, EDT\$STOP_WKINGMSG	0821
	0D	56	E8	000C2	BLBS	STRINGS_OK, 6\$		0826
		8F	DD	000C5	PUSHL	#EDT\$ INVSTR		
00000000G	00	01	FB	000CB	CALLS	#1, EDT\$FMT_MSG		
		00	D5	000D2	6\$:	TSTL	EDT\$G_INP_SRC	0833
		22	12	000D8	BNEQ	7\$		
6E 00000000G	00	06	28	000DA	MOVC3	#6, EDT\$Z_LNO_ZERO, TEMP_COUNT		0836
	6E	6B	D0	000E2	MOVL	EDT\$G_EXE_SUBCNT, TEMP_COUNT		0837
		0D	DD	000E5	PUSHL	#13		0838
		CF	9F	000E7	PUSHAB	P.AAA		
		AE	9F	000EB	PUSHAB	TEMP_COUNT		
00000000G	00	03	FB	000EE	CALLS	#3, EDT\$FMT_STRCNT		
00000000G	00	00	FB	000F5	CALLS	#0, EDT\$FMT_CRLF		0839
	50	6A	D0	000FC	7\$:	MOVL	EDT\$A_CUR_BUF, R0	0845
60 00000000G	00	0E	28	000FF	MOVC3	#14, EDT\$Z_RNG_SAVPOS, (R0)		
	00	00	FB	00107	CALLS	#0, EDT\$RD_CURCN		0846
		04	0010E	RET				0847

; Routine Size: 271 bytes, Routine Base: _EDT\$CODE + 0010

: 278 0848 1
: 279 0849 1 !<BLF/PAGE>

: 281
: 282
: 283

0850 1 END
0851 1
0852 0 ELUDOM

! of module EDT\$LSUBS

:
:
:
:

PSECT SUMMARY		
Name	Bytes	Attributes
_EDT\$CODE	287	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

:
:
:
:

Library Statistics					
File	-----		Symbols		Processing Time
	Total		Loaded	Percent	
\$255\$DUA28:[EDT.SRC]EDT.L32;1	377		99	26	00:00.2
-\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2		1	50	00:00.1

:
:
:

COMMAND QUALIFIERS

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

: Size: 271 code + 16 data bytes
: Run Time: 00:16.5
: Elapsed Time: 00:19.9
: Lines/CPU Min: 3101
: Lexemes/CPU-Min: 9811
: Memory Used: 120 pages
: Compilation Complete

0136

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