


```

SSSSSSSS  CCCCCCCC  RRRRRRRR  ZZZZZZZZZZ  AAAAAA  PPPPPPPP  SSSSSSSS  IIIIII  NN  NN
SSSSSSSS  CCCCCCCC  RRRRRRRR  ZZZZZZZZZZ  AAAAAA  PPPPPPPP  SSSSSSSS  IIIIII  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SSSSSS  CC  RRRRRRRR  ZZ  AA  AA  PPPPPPPP  SSSSSS  II  NN  NN
SSSSSS  CC  RRRRRRRR  ZZ  AA  AA  PPPPPPPP  SSSSSS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SS  CC  RR  RR  ZZ  AA  AA  PP  PP  SS  II  NN  NN
SSSSSSSS  CCCCCCCC  RR  RR  ZZ  AA  AA  PP  PP  SSSSSSSS  IIIIII  NN  NN
SSSSSSSS  CCCCCCCC  RR  RR  ZZ  AA  AA  PP  PP  SSSSSSSS  IIIIII  NN  NN

```

```

LL  IIIIII  SSSSSSSS
LL  IIIIII  SSSSSSSS
LL  II  SS
LL  II  SS
LL  II  SS
LI  II  SS
LL  II  SSSSSS
LL  II  SSSSSS
LL  II  SS
LL  II  SS
LL  II  SS
LL  II  SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS

```



```

1 0001 0 %TITLE 'EDT$SCRZAPSIN - Mark lines to be repainted'
2 0002 0 MODULE EDT$SCRZAPSIN ( ! Mark lines to be repainted
3 0003 0 IDENT = 'V04-000' ! File: SCRZAPSIN.BLI Edit: JBS2012
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 *****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1
31 0031 1 **
32 0032 1 FACILITY: EDT -- The DEC Standard Editor
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 This module marks screen lines for repaint
37 0037 1
38 0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
39 0039 1
40 0040 1 AUTHOR: Bob Kushlis, CREATION DATE: September 8, 1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 2-001 - Original. SMB 20-Sep-1982. This module is a complete
45 0045 1 rewrite of the old SCRZAPSIN module.
46 0046 1 2-002 - Modify to use new 48 bit macro. STS 01-Oct-1982
47 0047 1 2-003 - Modify to mark screen pointers for repaint. SMB 08-Oct-1982
48 0048 1 2-004 - Fix up the format a little. SMB 10-Oct-1982
49 0049 1 2-005 - Put deleted lines on the free list. JBS 24-Oct-1982
50 0050 1 2-006 - Maintain the various screen pointers. JBS 24-Oct-1982
51 0051 1 2-007 - Don't check on EDT$SA_CUR_SCRPTR. JBS 25-Oct-1982
52 0052 1 2-008 - Call SC_LNDEL instead of hard coding delete lines. SMB 26-Oct-1982
53 0053 1 2-009 - Maintain SCR_EDIT_MINPOS. JBS 27-Oct-1982
54 0054 1 2-010 - Add the third parameter. JBS 09-Nov-1982
55 0055 1 2-011 - Remove the edit buffer. JBS 27-Dec-1982
56 0056 1 2-012 - Add two more parameters. JBS 27-Dec-1982
57 0057 1 --

```

EDT\$SCRZAPSIN
V04-000

EDT\$SCRZAPSIN - Mark lines to be repainted

16-Sep-1984 01:49:52
14-Sep-1984 12:24:44

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

Page 2
(1)

: 58

0058 1

E
V

```

: 60      0059 1 %SBTTL 'Declarations'
: 61      0060 1
: 62      0061 1 : TABLE OF CONTENTS:
: 63      0062 1 :
: 64      0063 1
: 65      0064 1 REQUIRE 'EDT$SRC:TRAROUNAM';
: 66      0503 1
: 67      0504 1 FORWARD ROUTINE
: 68      0505 1     EDT$SSC_REPAINT : NOVALUE;
: 69      0506 1
: 70      0507 1 :
: 71      0508 1 : INCLUDE FILES:
: 72      0509 1 :
: 73      0510 1
: 74      0511 1 REQUIRE 'EDT$SRC:EDTREQ';
: 75      0646 1
: 76      0647 1 :
: 77      0648 1 : MACROS:
: 78      0649 1 :
: 79      0650 1 :     NONE
: 80      0651 1 :
: 81      0652 1 : EQUATED SYMBOLS:
: 82      0653 1 :
: 83      0654 1 :     NONE
: 84      0655 1 :
: 85      0656 1 : OWN STORAGE:
: 86      0657 1 :
: 87      0658 1 :     NONE
: 88      0659 1 :
: 89      0660 1 : EXTERNAL REFERENCES:
: 90      0661 1 :
: 91      0662 1 :     In the routine
```

```

93 0663 1 %SBTTL 'EDTSSC_REPAINT - mark screen lines for repaint'
94 0664 1
95 0665 1 GLOBAL ROUTINE EDTSSC_REPAINT (
96 0666 1     FIRST,
97 0667 1     LAST,
98 0668 1     MINPOS,
99 0669 1     MAXPOS,
100 0670 1     INSDEL_FLAG
101 0671 1     ) : NOVALUE =
102 0672 1
103 0673 1 !++
104 0674 1 ! FUNCTIONAL DESCRIPTION:
105 0675 1 !
106 0676 1 !     This routine marks specified lines in the screen data structure for
107 0677 1 !     repaint, indicating that those lines must be completely updated.
108 0678 1 !
109 0679 1 ! FORMAL PARAMETERS:
110 0680 1 !
111 0681 1 !     FIRST      The first line to repaint
112 0682 1 !
113 0683 1 !     LAST       The last line to repaint
114 0684 1 !
115 0685 1 !     MINPOS     First position modified, in first line
116 0686 1 !
117 0687 1 !     MAXPOS     Last position modified, in last line (if < 0, don't repaint the last line)
118 0688 1 !
119 0689 1 !     INSDEL_FLAG  0 = skip deleted and inserted lines,
120 0690 1 !                 1 = free deleted lines, repaint inserted lines,
121 0691 1 !                 -1 = should be no deleted or inserted lines
122 0692 1 !
123 0693 1 ! IMPLICIT INPUTS:
124 0694 1 !
125 0695 1 !     NONE
126 0696 1 !
127 0697 1 ! IMPLICIT OUTPUTS:
128 0698 1 !
129 0699 1 !     EDTSSA_FST_SCRPTR
130 0700 1 !     EDTSSA_LST_SCRPTR
131 0701 1 !
132 0702 1 ! ROUTINE VALUE:
133 0703 1 !
134 0704 1 !     NONE
135 0705 1 !
136 0706 1 ! SIDE EFFECTS:
137 0707 1 !
138 0708 1 !     Marks the specified lines as modified.
139 0709 1 !
140 0710 1 ! --
141 0711 1 !
142 0712 2 ! BEGIN
143 0713 2 !
144 0714 2 ! MAP
145 0715 2 !     FIRST : REF SCREEN_LINE,
146 0716 2 !     LAST  : REF SCREEN_LINE;
147 0717 2 !
148 0718 2 ! EXTERNAL ROUTINE
149 0719 2 !     EDTSSC_LNDEL;
! Delete a line from the structure

```

```
150 0720 2
151 0721 2
152 0722 2 EXTERNAL
153 0723 2 EDT$$A_FST_SCRPTR : REF SCREEN_LINE, ! First screen pointer in the data base
154 0724 2 EDT$$A_LST_SCRPTR : REF SCREEN_LINE; ! Last screen pointer in the data base
155 0725 2
156 0726 2 LOCAL
157 0727 2 NXT_SCRPTR : REF SCREEN_LINE,
158 0728 2 SCRPTR : REF SCREEN_LINE,
159 0729 2 REPAINT_DONE;
160 0730 2 SCRPTR = .FIRST;
161 0731 2 REPAINT_DONE = 0;
162 0732 2
163 0733 2 !+ Update the lines for repaint until the last line is seen.
164 0734 2 ! Deleted lines, however, are put on the free list if so requested.
165 0735 2 !-
166 0736 2
167 0737 2 WHILE (( NOT .REPAINT_DONE) AND (.SCRPTR NEQA 0)) DO
168 0738 3 BEGIN
169 0739 3
170 0740 4 IF ((.SCRPTR [SCR_EDIT_FLAGS] AND (SCR_EDIT_INSLN OR SCR_EDIT_DELLN)) NEQ 0)
171 0741 3 THEN
172 0742 4 BEGIN
173 0743 4
174 0744 4 CASE .INSDEL_FLAG FROM 0 TO 1 OF
175 0745 4 SET
176 0746 4
177 0747 4 [0] : ! Skip over deleted and inserted lines
178 0748 5 BEGIN
179 0749 5 NXT_SCRPTR = .SCRPTR [SCR_NXT_LINE];
180 0750 5
181 0751 5 IF (.SCRPTR EQLA .LAST) THEN REPAINT_DONE = 1 ELSE SCRPTR = .NXT_SCRPTR;
182 0752 5
183 0753 4 END;
184 0754 4
185 0755 4 [1] : ! Free deleted lines, mark inserted lines for repaint
186 0756 5 BEGIN
187 0757 5 NXT_SCRPTR = .SCRPTR [SCR_NXT_LINE];
188 0758 5
189 0759 6 IF ((.SCRPTR [SCR_EDIT_FLAGS] AND SCR_EDIT_DELLN) NEQ 0)
190 0760 5 THEN
191 0761 6 BEGIN
192 0762 6 EDT$$$SC_LNDEL (.SCRPTR); ! Free the deleted line
193 0763 6 !+
194 0764 6 ! The first and last cells had better not have been set to zero.
195 0765 6 !-
196 0766 6 ASSERT (.EDT$$A_LST_SCRPTR NEQA 0);
197 0767 6 ASSERT (.EDT$$A_FST_SCRPTR NEQA 0);
198 0768 6 END
199 0769 5 ELSE
200 0770 6 BEGIN ! Mark the inserted line for repaint
201 0771 6 SCRPTR [SCR_EDIT_FLAGS] = .SCRPTR [SCR_EDIT_FLAGS] AND ( NOT SCR_EDIT_INSLN);
202 0772 6 SCRPTR [SCR_EDIT_FLAGS] = .SCRPTR [SCR_EDIT_FLAGS] OR SCR_EDIT_MODIFY;
203 0773 5 END;
204 0774 5
205 0775 5 IF (.SCRPTR EQLA .LAST) THEN REPAINT_DONE = 1 ELSE SCRPTR = .NXT_SCRPTR;
206 0776 5
```

```

207 0777 4          END;
208 0778 4
209 0779 4          [OUTRANGE] :
210 0780 4          ASSERT (0);
211 0781 4          TES;
212 0782 4
213 0783 4          END
214 0784 3      ELSE
215 0785 4          BEGIN
216 0786 4
217 0787 5          IF (.SCRPTR EQLA .FIRST)
218 0788 4          THEN
219 0789 4          SCRPTR [SCR_EDIT_MINPOS] = MINU (.SCRPTR [SCR_EDIT_MINPOS], .MINPOS)
220 0790 4          ELSE
221 0791 4          SCRPTR [SCR_EDIT_MINPOS] = 0;
222 0792 4
223 0793 5          IF ((.SCRPTR EQLA .LAST) AND (.MAXPOS GEQ 0))
224 0794 4          THEN
225 0795 4          SCRPTR [SCR_EDIT_MAXPOS] = MAXU (.SCRPTR [SCR_EDIT_MAXPOS], .MAXPOS)
226 0796 4          ELSE
227 0797 4          SCRPTR [SCR_EDIT_MAXPOS] = 255;
228 0798 4
229 0799 5          IF ((.SCRPTR NEQA .LAST) OR (.MAXPOS GEQ 0))
230 0800 4          THEN
231 0801 4          SCRPTR [SCR_EDIT_FLAGS] = .SCRPTR [SCR_EDIT_FLAGS] OR SCR_EDIT_MODIFY;
232 0802 4
233 0803 4          IF (.SCRPTR EQLA .LAST) THEN REPAINT_DONE = 1 ELSE SCRPTR = .SCRPTR [SCR_NXT_LINE];
234 0804 4
235 0805 3          END;
236 0806 3
237 0807 2      END;
238 0808 2
239 0809 1          END;

```

END;

! of routine EDT\$\$\$SC_REPAINT

```

.TITLE EDT$SCRZAPSIN EDT$SCRZAPSIN - Mark lines to be
        repainted
.IDENT  \V04-000\
.EXTRN EDT$$$SC_LNDEL, EDT$$$A_FST_SCRPTR
.EXTRN EDT$$$A_CST_SCRPTR
.EXTRN EDT$$$INTER_ERR

```

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

			003C 00000	.ENTRY	EDT\$\$\$SC_REPAINT, Save R2,R3,R4,R5	: 0665
55	00000000G	00	9E 00002	MOVAB	EDT\$\$\$INTER_ERR, R5	: 0730
52	04	AC	D0 00009	MOVL	FIRST, SCRPTR	: 0731
		53	D4 0000D	CLRL	REPAINT_DONE	: 0737
01		53	E9 0000F 1\$:	BLBC	REPAINT_DONE, 2\$: 0740
			04 00012	RET		
		52	D5 00013 2\$:	TSTL	SCRPTR	
		01	12 00015	BNEQ	3\$	
			04 00017	RET		
06	0D	A2	93 00018 3\$:	BITB	13(SCRPTR), #6	: 0744
		51	13 0001C	BEQL	11\$: 0744
01	00	14	AC CF 0001E	CASEL	INDEL_FLAG, #0, #1	: 0744

	000F	0009	00023	4\$:	.WORD	5\$-4\$,-	
	65	00	FB	00027	CALLS	#0, EDTSSINTER_ERR	0780
		E3	11	0002A	BRB	1\$	0744
	54	04	A2	D0 0002C	5\$: MOVL	4(SCRPTR), NXT_SCRPTR	0749
		32	11	00030	BRB	9\$	0751
21	54	04	A2	D0 00032	6\$: MOVL	4(SCRPTR), NXT_SCRPTR	0757
	OD	A2	02	E1 00036	BBC	#2, 13(SCRPTR), 8\$	0759
			52	DD 0003B	PUSHL	SCRPTR	0762
	00000000G	00	01	FB 0003D	CALLS	#1, EDTSSC LNDEL	
		00000000G	00	D5 00044	TSTL	EDTSSA_LST_SCRPTR	0766
			03	12 0004A	BNEQ	7\$	
	65		00	FB 0004C	CALLS	#0, EDTSSINTER_ERR	
		00000000G	00	D5 0004F	7\$: TSTL	EDTSSA_FST_SCRPTR	0767
			0D	12 00055	BNEQ	9\$	
	65		00	FB 00057	CALLS	#0, EDTSSINTER_ERR	
			08	11 0005A	BRB	9\$	0759
	OD	A2	02	8A 0005C	8\$: BICB2	#2, 13(SCRPTR)	0771
	OD	A2	01	88 00060	BISB2	#1, 13(SCRPTR)	0772
	08	AC	52	D1 00064	9\$: CMPL	SCRPTR, LAST	0775
			5B	13 00068	BEQL	20\$	
	52		54	D0 0006A	MOVL	NXT_SCRPTR, SCRPTR	
			A0	11 0006D	10\$: BRB	1\$	0744
	04	AC	52	D1 0006F	11\$: CMPL	SCRPTR, FIRST	0787
			14	12 00073	BNEQ	13\$	
	50	0B	A2	9A 00075	MOVZBL	11(SCRPTR), R0	0789
	0C	AC	50	D1 00079	CMPL	R0, MINPOS	
			04	1B 0007D	BLEQU	12\$	
	50	0C	AC	D0 0007F	MOVL	MINPOS, R0	
	0B	A2	50	90 00083	12\$: MOVB	R0, 11(SCRPTR)	
			03	11 00087	BRB	14\$	
		0B	A2	94 00089	13\$: CLRB	11(SCRPTR)	0791
			51	D4 0008C	14\$: CLRL	R1	0793
	08	AC	52	D1 0008E	CMPL	SCRPTR, LAST	
			1B	12 00092	BNEQ	16\$	
			51	D6 00094	INCL	R1	
		10	AC	D5 00096	TSTL	MAXPOS	
			14	19 00099	BLSS	16\$	
	50	0C	A2	9A 0009B	MOVZBL	12(SCRPTR), R0	0795
	10	AC	50	D1 0009F	CMPL	R0, MAXPOS	
			04	1E 000A3	BGEQU	15\$	
	50	10	AC	D0 000A5	MOVL	MAXPOS, R0	
	0C	A2	50	90 000A9	15\$: MOVB	R0, 12(SCRPTR)	
			04	11 000AD	BRB	17\$	
	0C	A2	01	8E 000AF	16\$: MNEGB	#1, 12(SCRPTR)	0797
	08	AC	52	D1 000B3	17\$: CMPL	SCRPTR, LAST	0799
			05	12 000B7	BNEQ	18\$	
		10	AC	D5 000B9	TSTL	MAXPOS	
			04	19 000BC	BLSS	19\$	
	OD	A2	01	88 000BE	18\$: BISB2	#1, 13(SCRPTR)	0801
		05	51	E9 000C2	19\$: BLBC	R1, 21\$	0803
		53	01	D0 000C5	20\$: MOVL	#1, REPAINT_DONE	
			A3	11 000C8	BRB	10\$	
	52	04	A2	D0 000CA	21\$: MOVL	4(SCRPTR), SCRPTR	
			9D	11 000CE	BRB	10\$	0737
			04	000D0	RET		0809

EDTSSCRZAPSIN EDTSSCRZAPSIN - Mark lines to be repainted 16-Sep-1984 01:49:52
V04-000 EDTSSC_REPAINT - mark screen lines for repair 14-Sep-1984 12:24:44

8 3

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

: Routine Size: 209 bytes, Routine Base: _EDTSCODE + 0000

: 240 0810 1
: 241 0811 1 !<BLF/PAG:>

EDT\$SCRZAPSIN
V04-000

EDT\$SCRZAPSIN - Mark lines to be repainted
EDT\$SC_REPAINT - mark screen lines for repair

C 3
16-Sep-1984 01:49:52
14-Sep-1984 12:24:44

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

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: 243 0812 1 END
: 244 0813 1
: 245 0814 0 ELUDOM

: of module EDT\$SCRZAPSIN

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	209	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	15	3	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\$:SCRZAPSIN/OBJ=OBJ\$:SCRZAPSIN MSRC\$:SCRZAPSIN.BLI/UPDATE=(ENH\$:S
(RZAPSIN)

: Size: 209 code + 0 data bytes
: Run Time: 00:16.2
: Elapsed Time: 00:19.0
: Lines/CPU Min: 3007
: Lexemes/CPU-Min: 11116
: Memory Used: 115 pages
: Compilation Complete

SCRUPDATM LIS	STARTED LIS	TISAVE LIS	TRACEMAC LIS	UFBUFFER LIS
SCRZAPSIN LIS	SETCOMMAN LIS	TIAUTO LIS	TIDELETE LIS	UFXCASE LIS
SCRUPDATM LIS	TITINE LIS	TITYPAD LIS	TSTKEYDEF LIS	
	TICLRAUD LIS	TIECHO LIS	TRAROUNAM LIS	
	SUPPORTS LIS	TRANSLATE LIS	UFSTRING LIS	
	TICHAR LIS	TRACELIT LIS	UCVTCASE LIS	
	SYSUAX LIS			
SCRWID LIS				