


```

1 0001 0 %TITLE 'EDT$WFSPLBKT - split the current bucket'
2 0002 0 MODULE EDT$WFSPLBKT ( ! Split the current bucket
3 0003 0 IDENT = 'V04-000' ! File: WFSPLBKT.BLI Edit: JBS1010
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 *
10 0010 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
11 0011 1 * ALL RIGHTS RESERVED. *
12 0012 1 *
13 0013 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
14 0014 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *
15 0015 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
16 0016 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
17 0017 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
18 0018 1 * TRANSFERRED. *
19 0019 1 *
20 0020 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
21 0021 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
22 0022 1 * CORPORATION. *
23 0023 1 *
24 0024 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
25 0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
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 Split the current bucket.
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: October 16, 1978
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. DJS 23-Feb-1981. This module was created by
45 0045 1 extracting routine SPLIT BUKT from module EDTWF.
46 0046 1 1-002 - Regularize headers. JBS 19-Mar-1981
47 0047 1 1-003 - Modify to use EDT$WORKIO. STS 15-Feb-1982
48 0048 1 1-004 - Copy entire old bucket before split. STS 18-Feb-1982
49 0049 1 1-005 - Don't copy on 11's since it uses too much stack. STS 01-Mar-1982
50 0050 1 1-006 - Change stack storage to heap storage. STS 05-Mar-1982
51 0051 1 1-007 - Add literals for callable EDT. STS 10-Mar-1982
52 0052 1 1-008 - Give an error return if heap storage is exhausted. JBS 09-Jun-1982
53 0053 1 1-009 - Put code for edt$$wf_nxt_buf in line. STS 11-oct-1982
54 0054 1 1-010 - Improve listing appearance. JBS 20-Jun-1983
55 0055 1 --
56 0056 1

```

EDT\$WF SPLBKT
V04-000

EDT\$WF SPLBKT - split the current bucket
Declarations

K 15
16-Sep-1984 02:15:01
14-Sep-1984 12:25:45

VAX-11 Bliss-32 V4.0-742 Page 2
DISK\$VMMASTER:[EDT.SRC]WF SPLBKT.BLI:1 (2)

```
58 0057 1 %SBTTL 'Declarations'  
59 0058 1  
60 0059 1 : TABLE OF CONTENTS:  
61 0060 1 :  
62 0061 1  
63 0062 1 REQUIRE 'EDTSRC:TRAROUNAM';  
64 0501 1  
65 0502 1 FORWARD ROUTINE  
66 0503 1 EDT$WF_SPLTBUK;  
67 0504 1  
68 0505 1 :  
69 0506 1 : INCLUDE FILES:  
70 0507 1 :  
71 0508 1  
72 0509 1 REQUIRE 'EDTSRC:EDTREQ';  
73 0644 1  
74 0645 1 :  
75 0646 1 : MACROS:  
76 0647 1 :  
77 0648 1 : NONE  
78 0649 1 :  
79 0650 1 : EQUATED SYMBOLS:  
80 0651 1 :  
81 0652 1 :  
82 0653 1 : EXTERNAL LITERAL  
83 0654 1 : EDT$K_PUT;  
84 0655 1 :  
85 0656 1 :  
86 0657 1 : OWN STORAGE:  
87 0658 1 :  
88 0659 1 : NONE  
89 0660 1 :  
90 0661 1 : EXTERNAL REFERENCES:  
91 0662 1 :  
92 0663 1 : In the routine
```

```

: 94 0664 1 %SBTTL 'EDT$$WF_SPLTBUK - split the current bucket'
: 95 0665 1
: 96 0666 1 GLOBAL ROUTINE EDT$$WF_SPLTBUK ! Split the current bucket
: 97 0667 1 =
: 98 0668 1
: 99 0669 1 ++
100 0670 1 FUNCTIONAL DESCRIPTION:
101 0671 1
102 0672 1 This routine splits the current bucket at the current position into
103 0673 1 two buckets. In the special case that we are at the end of the bucket
104 0674 1 this is done simply by appending a new bucket, otherwise, we must allocate
105 0675 1 a new bucket and copy all the text from the current line to the end of the
106 0676 1 bucket into the new bucket.
107 0677 1
108 0678 1 FORMAL PARAMETERS:
109 0679 1
110 0680 1 NONE
111 0681 1
112 0682 1 IMPLICIT INPUTS:
113 0683 1
114 0684 1 EDT$$A_CUR_BUF
115 0685 1 EDT$$Z_WF_DESC
116 0686 1 EDT$$A_WK_BUK
117 0687 1 EDT$$G_WK_CURBUK
118 0688 1
119 0689 1 IMPLICIT OUTPUTS:
120 0690 1
121 0691 1 EDT$$G_WK_MODFD
122 0692 1 EDT$$A_WK_BUK
123 0693 1
124 0694 1 ROUTINE VALUE:
125 0695 1
126 0696 1 1 = OK
127 0697 1 0 = heap storage exhausted
128 0698 1
129 0699 1 SIDE EFFECTS:
130 0700 1
131 0701 1 NONE
132 0702 1
133 0703 1 --
134 0704 1
135 0705 2 BEGIN
136 0706 2
137 0707 2 EXTERNAL ROUTINE
138 0708 2 EDT$$ALO_HEAP, ! allocate heap storage
139 0709 2 EDT$$DEA_HEAP : NOVALUE, ! deallocate heap storage
140 0710 2 EDT$$CAL[WIO,
141 0711 2 EDT$$WF_NEWBUK : NOVALUE,
142 0712 2 EDT$$WF_ALOBUF : NOVALUE,
143 0713 2 EDT$$WF_MAKECUR : NOVALUE;
144 0714 2
145 0715 2 EXTERNAL
146 0716 2 EDT$$Z_WF_DESC : BLOCK [, BYTE], ! descriptor for the workfile record
147 0717 2 EDT$$G_WK_AVAIL,
148 0718 2 EDT$$G_WK_GRTSTBUK,
149 0719 2 EDT$$A_CUR_BUF : REF TBCB_BLOCK, ! Current text buffer control block
150 0720 2 EDT$$A_WK_BUK : ! Pointer to current bucket

```

```
151 0721 2 REF BLOCK [WF_BUKT_SIZE, BYTE] FIELD (WFB_FIELDS),
152 0722 2 EDT$$G_WK_CURBUK, ! Number of the current bucket
153 0723 2 EDT$$G_WK_MODFD; ! Flag indicating bucket was modified
154 0724 2
155 0725 2 LOCAL
156 0726 2 OLD_NEXT,
157 0727 2 LEN,
158 0728 2 ORIG_BUKT;
159 0729 2
160 0730 2 !+
161 0731 2 ! Remember the next bucket number, and the original one.
162 0732 2 !-
163 0733 2 OLD_NEXT = .EDT$$A_WK_BUK [WFB_NEXT_BUKT];
164 0734 2 ORIG_BUKT = .EDT$$G_WK_CURBUK;
165 0735 2 !+
166 0736 2 ! First check to see if we are at the end of a bucket.
167 0737 2 !-
168 0738 2
169 0739 2 IF (.EDT$$A_CUR_BUF [TBCB_LINE_ADDR] EQL .EDT$$A_WK_BUK [WFB_END])
170 0740 2 THEN
171 0741 2 !+
172 0742 2 ! We are at the end, just link a new bucket to this one
173 0743 2 !-
174 0744 2 BEGIN
175 0745 2
176 0746 2 IF (.EDT$$G_WK_AVAIL NEQ 0)
177 0747 2 THEN
178 0748 2 EDT$$A_WK_BUK [WFB_NEXT_BUKT] = .EDT$$G_WK_AVAIL
179 0749 2 ELSE
180 0750 2 EDT$$A_WK_BUK [WFB_NEXT_BUKT] = .EDT$$G_WK_GRTSTBUK;
181 0751 2
182 0752 2 EDT$$G_WK_MODFD = 1;
183 0753 2 EDT$$WF_NEWBUK (.OLD_NEXT, .ORIG_BUKT)
184 0754 2 END
185 0755 2 ELSE
186 0756 2 BEGIN
187 0757 2 !+
188 0758 2 ! We are not at the end of a bucket.
189 0759 2 ! Split the bucket into two, at the beginning of the current line.
190 0760 2 !-
191 0761 2
192 0762 2 LOCAL
193 0763 2 OLD_BUKT,
194 0764 2 NEW_BUKT;
195 0765 2
196 0766 2 LEN = .EDT$$A_WK_BUK [WFB_END] - .EDT$$A_CUR_BUF [TBCB_LINE_ADDR];
197 0767 2 EDT$$A_WK_BUK [WFB_END] = .EDT$$A_CUR_BUF [TBCB_LINE_ADDR];
198 0768 2
199 0769 2 IF (.EDT$$G_WK_AVAIL NEQ 0)
200 0770 2 THEN
201 0771 2 EDT$$A_WK_BUK [WFB_NEXT_BUKT] = NEW_BUKT = .EDT$$G_WK_AVAIL
202 0772 2 ELSE
203 0773 2 EDT$$A_WK_BUK [WFB_NEXT_BUKT] = NEW_BUKT = .EDT$$G_WK_GRTSTBUK;
204 0774 2
205 0775 2 EDT$$CALLWIO (EDT$K_PUT, .EDT$$G_WK_CURBUK, EDT$$Z_WF_DESC);
206 0776 2 !+
207 0777 2 ! Save the bucket contents so that later we can extract a portion.
```


				OFFC	00000			.ENTRY	
								EDT\$\$G_WK_CURBUK	
								EDT\$\$G_WK_MODFD	
								_EDT\$CODE, NOWRT, SHR, PIC, 2	
								EDT\$\$WF_SPLTBUK, Save R2,R3,R4,R5,R6,R7,R8,-;	0666
								R9,R10,R11	
								EDT\$\$A_CUR_BUF, R11	
								EDT\$\$A_WK_BUK, R10	
								#8, SP	
								EDT\$\$A_WK_BUK, R0	0733
								2(R0), -R3	
								(R3), OLD_NEXT	
								EDT\$\$G_WK_CURBUK, R4	0734
								R4, ORIG_BUKT	
								EDT\$\$G_WK_AVAIL, R2	0746
								EDT\$\$A_CUR_BUF, R1	0739
								(R1), 4(R0)	
								3\$	
								R2	0746
								1\$	
								R2, (R3)	0748
								2\$	
								EDT\$\$G_WK_GRTSTBUK, (R3)	0750
								#1, EDT\$\$G_WK_MODFD	0752
								ORIG_BUKT	0753
								OLD_NEXT	
								#2, EDT\$\$WF_NEWBUK	
								9\$	
								(R1), 4(R0), LEN	0766
								(R1), 4(R0)	0767
								R2	0769
								4\$	
								R2, NEW_BUKT	0771
								R2, (R3)	
								5\$	
								EDT\$\$G_WK_GH_STBUK, NEW_BUKT	0773
								NEW_BUKT, (R3)	
								EDT\$\$Z_WF_DESC	0775
								R4	
								#EDT\$K_PUT	
								#3, EDT\$\$CALLWIO	
								OLD_BUKT	0780
								#512, 4(SP)	
								4(SP)	
								#2, EDT\$\$ALO_HEAP	
								R0, 6\$	
								10\$	
								EDT\$\$A_WK_BUK, R0	0782
								#512, (R0), @OLD_BUKT	
								#0, EDT\$\$WF_ALOBUF	0786
								EDT\$\$A_WK_BUK, R0	0787
								OLD_NEXT, 2(R0)	
								ORIG_BUKT, (R0)	0788
								EDT\$\$A_CUR_BUF, R1	0793
								(R1), OLD_BUKT, R1	
								LEN, (R1), 8(R0)	

EDT\$WFSPLBKT
V04-000

EDT\$WFSPLBKT - split the current bucket
EDT\$\$WF_SPLTBUK - split the current bucket

C 16
16-Sep-1984 02:15:01
14-Sep-1984 12:25:45

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

Page 7
(3)

			04	AE	9F	000D1	PUSHAB	OLD_BUKT	:	0797
	04	AE	0200	8F	3C	000D4	MOVZWL	#512, 4(SP)	:	
			04	AE	9F	000DA	PUSHAB	4(SP)	:	
	00000000G	00		02	FB	000DD	CALLS	#2, EDT\$\$DEA_HEAP	:	
		50		6A	D0	000E4	MOVL	EDT\$\$A_WK_BUR, R0	:	0798
	04	A0	08	A7	9E	000E7	MOVAB	8(R7), -4(R0)	:	
	00000000G	00		01	D0	000EC	MOVL	#1, EDT\$\$G_WK_MODFD	:	0799
				59	D5	000F3	TSTL	OLD_NEXT	:	0801
				11	12	000F5	BNEQ	7\$:	
		50		6B	D0	000F7	MOVL	EDT\$\$A_CUR_BUF, R0	:	0805
58		10	A0	00	ED	000FA	CMPZV	#0, #8, 16(R0), ORIG_BUKT	:	
				1C	12	00100	BNEQ	8\$:	
		10	A0	56	B0	00102	MOVW	NEW_BUKT, 16(R0)	:	0807
				16	11	00106	BRB	8\$:	0801
				59	DD	00108	7\$: PUSHL	OLD_NEXT	:	0812
	00000000G	00		01	FB	0010A	CALLS	#1, EDT\$\$WF_MAKECUR	:	
		50		6A	D0	00111	MOVL	EDT\$\$A_WK_BUK, R0	:	0813
		60		56	B0	00114	MOVW	NEW_BURT, (R0)	:	
	00000000G	00		01	D0	00117	MOVL	#1, EDT\$\$G_WK_MODFD	:	0814
				58	DD	0011E	8\$: PUSHL	ORIG_BUKT	:	0817
	00000000G	00		01	FB	00120	CALLS	#1, EDT\$\$WF_MAKECUR	:	
		50		01	D0	00127	9\$: MOVL	#1, R0	:	0820
					04	0012A	RET		:	
				50	D4	0012B	10\$: CLRL	R0	:	0821
				04	0012D		RET		:	

; Routine Size: 302 bytes. Routine Base: _LUT\$CODE + 0000

: 252 0822 1
: 253 0823 1 !<BLF/PAGE>

EDT\$WFSPLBKT
V04-000

EDT\$WFSPLBKT - split the current bucket
EDT\$\$WF_SP_TBUK - split the current bucket

D 16
16-Sep-1984 02:15:01
14-Sep-1984 12:25:45

VAX-11 Bliss-32 V4.0-742
DISK\$VMMASTER:[EDT.SRC]WFSPLBKT.BLI;1 (4)
Page 8

: 255 0824 1 END
: 256 0825 1
: 257 0826 0 ELUDOM

! of module EDT\$WFSPLBKT

PSECT SUMMARY

Name Bytes Attributes
_EDT\$CODE 302 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	31	8	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\$:WFSPLBKT/OBJ=OBJ\$:WFSPLBKT MSRC\$:WFSPLBKT.BLI/UPDATE=(ENH\$:WFSPLBKT)

: Size: 302 code + 0 data bytes
: Run Time: 00:16.9
: Elapsed Time: 00:20.8
: Lines/CPU Min: 2939
: Lexemes/CPU-Min: 10256
: Memory Used: 120 pages
: Compilation Complete

