



```

000000  TTTTTTTTTT  SSSSSSSS  CCCCCCCC  LL  000000  SSSSSSSS  EEEEEEEEE  FFFFFFFFFF
000000  TTTTTTTTTT  SSSSSSSS  CCCCCCCC  LL  000000  SSSSSSSS  EEEEEEEEE  FFFFFFFFFF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SSSSSS  CC      LL      SSSSSS  EEEEEEEEE  FFFFFFFF
00      00      TT      SSSSSS  CC      LL      SSSSSS  EEEEEEEEE  FFFFFFFF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SS      CC      LL      SS      EE      FF
00      00      TT      SSSSSSSS  CC      LL      SSSSSSSS  EEEEEEEEE  FF
000000  TT      SSSSSSSS  CCCCCCCC  LLLLLLLLLL  000000  SSSSSSSS  EEEEEEEEE  FF
000000  TT      SSSSSSSS  CCCCCCCC  LLLLLLLLLL  000000  SSSSSSSS  EEEEEEEEE  FF

```

```

LL      111111  SSSSSSSS
LL      111111  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLLLL  111111  SSSSSSSS
LLLLLLLLLLLL  111111  SSSSSSSS

```

```

1 0001 0 MODULE OTSS$CLOSE_FILE ( ; CLOSE FILE
2 0002 0 IDENT = '1-012' ; File: OTSCLOSEF.B32
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1 **
30 0030 1 FACILITY: Language Intependent Library - Close File
31 0031 1
32 0032 1 ABSTRACT:
33 0033 1
34 0034 1 This module issues an RMS close to a file on a LUN.
35 0035 1
36 0036 1 ENVIRONMENT: User access level; re-entrant, AST level or not.
37 0037 1
38 0038 1 AUTHOR: John Sauter, CREATION DATE: 23-JAN-1979
39 0039 1
40 0040 1 MODIFIED BY:
41 0041 1
42 0042 1 1-001 - Original from FORCLOSE. JBS 23-JAN-1979
43 0043 1 1-002 - Set LUB$V_DEALLOC so that the LUN's virtual memory will be
44 0044 1 released. JBS 24-JAN-1979
45 0045 1 1-003 - Call OTSS$PURGE IOBU before closing to purge I/O buffers.
46 0046 1 JBS 24-JAN-1979
47 0047 1 1-004 - Put two dollar signs on non-user entry points. JBS 26-JAN-1979
48 0048 1 1-005 - Change purge external name to OTSS$PUR_IO_CLO. JBS 07-MAR-1979
49 0049 1 1-006 - Call through LUB$A_CLOSE if non-zero. JBS 04-APR-1979
50 0050 1 1-007 - Implement LUB$V_SUBMIT. JBS (via SBL) 20-APR-1979
51 0051 1 1-008 - Don't do a $CLOSE if FAB$W_IFI is zero and LUB$V_USEROPEN
52 0052 1 is set. SPR 11-25235 SBL 31-July-1979
53 0053 1 1-009 - Don't call OTSS$PUR_IO_CLO. Our caller must now purge I/O
54 0054 1 buffers. JBS 20-AUG-1979
55 0055 1 1-010 - If multi-stream connect, do a $DISCONNECT instead of a $CLOSE.
56 0056 1 JBS 28-SEP-1979
57 0057 1 1-011 - If $CLOSE, put STS and STV fields in the RAB for better
    
```

OTSS\$CLOSE\_FILE  
1-012

J 9  
16-Sep-1984 01:24:56  
14-Sep-1984 12:39:40

VAX-11 Bliss-32 V4.0-742  
[LIBRTL.SRC]OTSCLOSEF.B32;1

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(1)

```

: 58      0058 1 | error reporting. SBL 8-Oct-1979
: 59      0059 1 | 1-012 - Don't RMS close the file if IF1 is zero. Ignore USEROPEN. SBL 6-Dec-1979
: 60      0060 1 | --
: 61      0061 1 |
: 62      0062 1 | <BLF/PAGE>
```

```

64      0063 1 |
65      0064 1 | SWITCHES:
66      0065 1 |
67      0066 1 |
68      0067 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
69      0068 1 |
70      0069 1 |
71      0070 1 | LINKAGES:
72      0071 1 |
73      0072 1 |
74      0073 1 | REQUIRE 'RTLIN:OTSLNK';           ! define all linkages
75      0502 1 |
76      0503 1 |
77      0504 1 | TABLE OF CONTENTS:
78      0505 1 |
79      0506 1 |
80      0507 1 | FORWARD ROUTINE
81      0508 1 |     OTSS$CLOSE_FILE : CALL_CCB;   ! Internal file close
82      0509 1 |
83      0510 1 |
84      0511 1 | INCLUDE FILES:
85      0512 1 |
86      0513 1 |
87      0514 1 | REQUIRE 'RTLML:OTSLUB';         ! logical unit block definitions
88      0654 1 |
89      0655 1 | REQUIRE 'RTLIN:OTSMAC';         ! macros
90      0849 1 |
91      0850 1 | REQUIRE 'RTLIN:RTLPSECT';       ! Define DECLARE_PSECTS macro
92      0945 1 |
93      0946 1 | LIBRARY 'RTLSTARLE';           ! STARLET library for macros and symbols
94      0947 1 |
95      0948 1 |
96      0949 1 | MACROS:
97      0950 1 |
98      0951 1 |     None
99      0952 1 |
100     0953 1 | EQUATED SYMBOLS:
101     0954 1 |
102     0955 1 |     None
103     0956 1 |
104     0957 1 | PSECT DECLARATIONS:
105     0958 1 |
106     0959 1 | DECLARE_PSECTS (OTS);           ! declare PSECTS for OTSS facility
107     0960 1 |
108     0961 1 | OWN STORAGE:
109     0962 1 |
110     0963 1 |     None
111     0964 1 |
112     0965 1 | EXTERNAL REFERENCES:
113     0966 1 |
114     0967 1 |     NONE
115     0968 1 |
116     0969 1 |

```

```

118 0970 1 GLOBAL ROUTINE OTSS$CLOSE_FILE          ! Internal file closer
119 0971 1 : CALL_CCB =
120 0972 1
121 0973 1 !++
122 0974 1 FUNCTIONAL DESCRIPTION:
123 0975 1
124 0976 1     Do an RMS CLOSE or DISCONNECT of a LUN. This includes handling
125 0977 1     any of the disposition flags in the LUB, whether set by OPEN or CLOSE.
126 0978 1
127 0979 1 FORMAL PARAMETERS:
128 0980 1
129 0981 1     NONE
130 0982 1
131 0983 1 IMPLICIT INPUTS:
132 0984 1
133 0985 1     Various fields from the LUB, pointed to by CCB.
134 0986 1
135 0987 1 IMPLICIT OUTPUTS
136 0988 1
137 0989 1     Various fields in the LUB and RAB.
138 0990 1
139 0991 1 ROUTINE VALUE:
140 0992 1 COMPLETION CODES:
141 0993 1
142 0994 1     The same as RMS CLOSE. The caller generally only tests the
143 0995 1     low-order bit of the completion code: if 1 the close succeeded,
144 0996 1     if 0 it failed.
145 0997 1
146 0998 1 SIDE EFFECTS:
147 0999 1
148 1000 1     CLOSEs the LUN, and marks it for deallocation.
149 1001 1
150 1002 1 --
151 1003 1
152 1004 2 BEGIN
153 1005 2
154 1006 2 EXTERNAL REGISTER
155 1007 2     CCB : REF BLOCK [, BYTE];
156 1008 2
157 1009 2 LOCAL
158 1010 2     NAM_BLOCK : BLOCK [NAM$C_BLN, BYTE],      ! local name block for delete
159 1011 2     FAB_BLOCK : BLOCK [FAB$C_BLN, BYTE],      ! allocate LOCAL FAB
160 1012 2     FAB : REF BLOCK [FAB$C_BLN, BYTE],        ! declare FAB base pointer
161 1013 2     CLOSE_RESULT;                             ! RMS result of $CLOSE
162 1014 2
163 1015 2 !+
164 1016 2 Initialize FAB
165 1017 2 Copy FAB address into the LUB for proper error status reporting.
166 1018 2
167 1019 2     FAB = FAB_BLOCK;
168 1020 2     CH$FILL (0, FAB$C_BLN, .FAB);
169 1021 2     FAB [FAB$B_BID] = FAB$C_BID;
170 1022 2     FAB [FAB$B_BLN] = FAB$C_BLN;
171 1023 2     CCB [LUB$A_FAB] = .FAB;
172 1024 2 !+
173 1025 2 Copy the directory ID into the NAM block and link into FAB.
174 1026 2 Set pointer to resultant name string (in case this is print

```

```

175 1027 2  ! so spooler will use in banner).
176 1028 2  !-
177 1029 2  CHSFILL (0, NAM$C_BLN, NAM_BLOCK);
178 1030 2  NAM_BLOCK [NAM$B_BID] = NAM$C_BID;
179 1031 2  NAM_BLOCK [NAM$B_BLN] = NAM$C_BLN;
180 1032 2  CHSMOVE (NAM$S_DID, CCB [LUB$D_DID], NAM_BLOCK [NAM$W_DID]);
181 1033 2  FAB [FAB$S_NAM] = NAM_BLOCK;
182 1034 2  FAB [FAB$V_NAM] = 1;
183 1035 2  NAM_BLOCK [NAM$S_RSA] = .CCB [LUB$A_RSN];
184 1036 2  NAM_BLOCK [NAM$B_RSL] = .CCB [LUB$B_RSL];
185 1037 2  !+
186 1038 2  ! If V_DELETE is on in the LUB, set the DLT bit in the FAB.
187 1039 2  !-
188 1040 2
189 1041 2  IF .CCB [LUB$V_DELETE] THEN FAB [FAB$V_DLT] = 1;
190 1042 2
191 1043 2  !+
192 1044 2  ! If V_PRINT is on in the LUB, set the SPL bit in the FAB.
193 1045 2  !-
194 1046 2
195 1047 2  IF .CCB [LUB$V_PRINT] THEN FAB [FAB$V_SPL] = 1;
196 1048 2
197 1049 2  !+
198 1050 2  ! If V_SUBMIT is on in the LUB, set the SCF bit in the FAB.
199 1051 2  !-
200 1052 2
201 1053 2  IF .CCB [LUB$V_SUBMIT] THEN FAB [FAB$V_SCF] = 1;
202 1054 2
203 1055 2  !+
204 1056 2  ! Copy remembered RMS internal file id from LUB to FAB.
205 1057 2  !-
206 1058 2  FAB [FAB$W_IFI] = .CCB [LUB$W_IFI];
207 1059 2  !+
208 1060 2  ! Do the close cleanup, if any is provided.
209 1061 2  !-
210 1062 2
211 1063 2  IF (.CCB [LUB$A_CLOSE] NEQ 0) THEN CALL_CCB (.CCB [LUB$A_CLOSE]);
212 1064 2
213 1065 2  !+
214 1066 2  ! Now do the RMS close if IFI is not zero.
215 1067 2  !-
216 1068 2
217 1069 2  IF .FAB [FAB$W_IFI] NEQ 0
218 1070 2  THEN
219 1071 2  BEGIN
220 1072 2  !+
221 1073 2  ! If the file is just a stream from another file, do a $DISCONNECT.
222 1074 2  ! Otherwise, do a $CLOSF and put the error codes into the RAB so that
223 1075 2  ! our caller has a better idea of what the error was.
224 1076 2  !-
225 1077 2
226 1078 2  IF (.CCB [LUB$V_M_STREAM])
227 1079 2  THEN
228 1080 2  CLOSE_RESULT = $DISCONNECT (RAB = .CCB)
229 1081 2  ELSE
230 1082 2  BEGIN
231 1083 2  CLOSE_RESULT = $CLOSE (FAB = .FAB);

```

```

232      1084 4      IF NOT .CLOSE_RESULT
233      1085 4      THEN
234      1086 4      BEGIN
235      1087 5      CCB [RAB$L_STS] = .CLOSE_RESULT;
236      1088 5      CCB [RAB$L_STV] = .FAB [FAB$L_STV];
237      1089 4      END;
238      1090 4      END
239      1091 4      END
240      1092 3      ELSE
241      1093 3      CLOSE_RESULT = 1;
242      1094 2
243      1095 2      + Indicate that the FAB error status is not meaningful anymore.
244      1096 2      - CCB [LUB$A_FAB] = 0;
245      1097 2      + Indicate that the LUN has been closed, so further I/O to it will
246      1098 2      - fail.
247      1099 2      CCB [LUB$V_OPENED] = 0;
248      1100 2
249      1101 2      + Flag OTSS$POP_CCB that it is to deallocate the virtual storage
250      1102 2      - occupied by this LUN. This bit also prevents OPEN from opening
251      1103 2      + this LUN. OPEN will only see it if OTSS$POP_CCB does not deallocate
252      1104 2      - the LUB, which will happen only if there is recursive I/O active on
253      1105 2      + the LUN. When all of the recursive I/O has failed then the LUN
254      1106 2      - can be opened again.
255      1107 2      CCB [LUB$V_DEALLOC] = 1;
256      1108 2
257      1109 2      + Return the RMS status resulting from the CLOSE.
258      1110 2      - RETURN (.CLOSE_RESULT);
259      1111 2
260      1112 2      END;
261      1113 2
262      1114 2
263      1115 2
264      1116 2
265      1117 2
266      1118 1

```

```

.TITLE OTSS$CLOSE_FILE
.IDENT \1-012\

.EXTRN SYSS$DISCONNECT, SYSS$CLOSE

.PSECT _OTSS$CODE,NOWRT, SHR, PIC,2

.ENTRY OTSS$CLOSE_FILE, Save R2,R3,R4,R5,R6 : 0970
MOVAB -176(SP), SP : 1019
MOVAB FAB_BLOCK, FAB : 1020
MOVCS #0, (SP), #0, #80, (FAB) : 1021
MOVW #20483, (FAB) : 1023
MOVL FAB, -24(CCB) : 1029
MOVCS #0, (SP), #0, #96, NAM_BLOCK : 1030
MOVW #24578, NAM_BLOCK : 1032
MOVCS #6, -16(CCB), NAM_BLOCK+42 : 1033
MOVAB NAM_BLOCK, 40(FAB) : 1034
BISB2 #1, -7(FAB)

```

```

0050 8F 00 5E FF50 CE 007C 00000
56 6E 9E 00002
6E 00 2C 0000A
66 00011
66 5003 8F B0 00012
0060 8F 00 E8 AB 56 D0 00017
6E 00 2C 0001B
50 AE 00022
7A AE 50 AE 6002 8F B0 00024
FO AB 06 28 0002A
28 A6 50 AE 9E 00030
07 A6 01 88 00035

```

OTS  
Syn  
COE  
COM  
COM  
DEC  
DIC  
ERR  
EXI  
EXP  
E C  
FIN  
FLA  
FOR  
FRA  
INI  
LEA  
LEA  
OFF  
OTS  
OTS  
OTS  
OTS  
OTS  
OUT  
PAC  
RT  
SAM  
SIC  
SIG  
STR  
S\_D  
S\_D  
S\_D  
S\_S  
TRA  
VAL  
PSE  
---  
: 01  
Pha  
---  
In  
Com  
Pas  
Syn



|    |           |    |    |    |       |       |       |                      |      |
|----|-----------|----|----|----|-------|-------|-------|----------------------|------|
| 05 | S4        | AE | F8 | AB | D0    | 00039 | MOVL  | -8(CCB), NAM_BLOCK+4 | 1035 |
|    | S3        | AE | F7 | AB | 90    | 0003E | MOVB  | -9(CCB), NAM_BLOCK+3 | 1036 |
|    | FC        | AB |    | 06 | E1    | 00043 | BBC   | #6, -4(CCB), -1\$    | 1041 |
|    | 05        | A6 | 80 | 8F | 88    | 00048 | BISB2 | #128, 5(FAB)         |      |
|    |           |    | FC | AB | 95    | 0004D | TSTB  | -4(CCB)              | 1047 |
|    |           |    |    | 04 | 18    | 00050 | BGEQ  | 2\$                  |      |
| 05 | 05        | A6 |    | 20 | 88    | 00052 | BISB2 | #32, 5(FAB)          |      |
|    | FF        | AB |    | 05 | E1    | 00056 | BBC   | #5, -1(CCB), 3\$     | 1053 |
|    | 05        | A6 | 40 | 8F | 88    | 00058 | BISB2 | #64, 5(FAB)          |      |
|    | 02        | A6 | D0 | AB | 80    | 00060 | MOVW  | -48(CCB), 2(FAB)     | 1058 |
|    |           |    | A4 | AB | D5    | 00065 | TSTL  | -92(CCB)             | 1063 |
|    |           |    |    | 04 | 13    | 00068 | BEQL  | 4\$                  |      |
|    | A4        | BB |    | 00 | FB    | 0006A | CALLS | #0, @-92(CCB)        |      |
|    |           |    | 02 | A6 | B5    | 0006E | TSTW  | 2(FAB)               | 1069 |
|    |           |    |    | 27 | 13    | 00071 | BEQL  | 6\$                  |      |
| 0B | FF        | AB |    | 02 | E1    | 00073 | BBC   | #2, -1(CCB), 5\$     | 1078 |
|    | 00000000G | 00 |    | 5B | DD    | 00078 | PUSHL | CCB                  | 1080 |
|    |           |    |    | 01 | FB    | 0007A | CALLS | #1, SYSSDISCONNECT   |      |
|    |           |    |    | 1A | 11    | 00081 | BRJ   | 7\$                  |      |
|    | 00000000G | 00 |    | 56 | DD    | 00083 | PUSHL | FAB                  | 1083 |
|    |           |    |    | 01 | FB    | 00085 | CALLS | #1, SYSSCLOSE        |      |
|    |           | 0E |    | 50 | E8    | 0008C | BLBS  | CLOSE_RESULT, 7\$    | 1084 |
|    | 08        | AB |    | 50 | D0    | 0008F | MOVL  | CLOSE_RESULT, 8(CCB) | 1087 |
|    | 0C        | AB | 0C | A6 | D0    | 00093 | MOVL  | 12(FAB), 12(CCB)     | 1088 |
|    |           |    |    | 03 | 11    | 00098 | BRB   | 7\$                  | 1071 |
|    |           | 50 |    | 01 | D0    | 0009A | MOVL  | #1, CLOSE_RESULT     | 1094 |
|    |           |    | E8 | AB | D4    | 0009D | CLRL  | -24(CCB)             | 1099 |
|    | FC        | AB |    | 01 | 8A    | 000A0 | BICB2 | #1, -4(CCB)          | 1104 |
|    | FF        | AB |    | 10 | 88    | 000A4 | BISB2 | #16, -1(CCB)         | 1113 |
|    |           |    |    | 04 | 000A8 |       | RET   |                      | 1118 |

: Routine Size: 169 bytes, Routine Base: \_OTSSCODE + C000

```

: 267      1119  1
: 268      1120  1 END
: 269      1121  1
: 270      1122  0 ELUDOM

```

! END of OTSS\$CLOSE\_FILE module

PSECT SUMMARY

| Name      | Bytes | Attributes   |
|-----------|-------|--|
| _OTSSCODE | 169   | NOVEC,NOVRT, RD, EXE, SHR, LCL, REL, CON, PIC,ALIGN(2) |

Library Statistics

| File | ----- Symbols ----- |                | Pages Mapped | Processing Time |
|------|---------------------|----------------|--------------|-----------------|
|      | Total               | Loaded Percent |              |                 |

OTSS\$CLOSE\_FILE  
1-012

C 10  
16-Sep-1984 01:24:56  
14-Sep-1984 12:39:40

VAX-11 Bliss-32 V4.0-742  
[LIBRTL.SRC]OTSCLOSEF.B32;1

Page 8  
(3)

:  
: \_\$255\$DUA28:[SYSLIB]STARLET.L32;1                    9776            26            0            581            00:00.8

:  
:                    COMMAND QUALIFIERS

:        BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:OTSCLOSEF/OBJ=OBJ\$:OTSCLOSEF MSRCS\$:OTSCLOSEF/UPDATE=(ENHS\$:OTSCLOSEF  
:        )

: Size:            169 code + 0 data bytes  
: Run Time:        00:06.7  
: Elapsed Time:   00:27.6  
: Lines/CPU Min:   10002  
: Lexemes/CPU-Min: 58038  
: Memory Used:    134 pages  
: Compilation Complete

