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FFFFFFFFFFFFFFFFF
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    111
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          AAAAAAAAA
          AAAAAAAAA
          AAAAAAAAA
        AAA          AAA
        AAA          AAA
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        AAA          AAA
        AAAAAAAAAAAAAAAAA
        AAAAAAAAAAAAAAAAA
        AAAAAAAAAAAAAAAAA
        AAA          AAA
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        AAA          AAA
        AAA          AAA

```

```
DDDDDDDD    IIIIII    RRRRRRRR    FFFFFFFFFF    CCCCCCCC    BBBB8888
DDDDDDDD    IIIIII    RRRRRRRR    FFFFFFFFFF    CCCCCCCC    BBBB8888
DD      DD    II      RR      RR    FF      CC      BB      BB
DD      DD    II      RR      RR    FF      CC      BB      BB
DD      DD    II      RR      RR    FF      CC      BB      BB
DD      DD    II      RR      RR    FF      CC      BB      BB
DD      DD    II      RRRRRRRR    FFFFFFFF    CC      BB      BB
DD      DD    II      RRRRRRRR    FFFFFFFF    CC      BBBB8888
DD      DD    II      RR  RR    FF      CC      BB      BB
DD      DD    II      RR  RR    FF      CC      BB      BB
DD      DD    II      RR  RR    FF      CC      BB      BB
DD      DD    II      RR  RR    FF      CC      BB      BB
DDDDDDDD    IIIIII    RR      RR    FF      CCCCCCCC    BBBB8888
DDDDDDDD    IIIIII    RR      RR    FF      CCCCCCCC    BBBB8888
```

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



```

1 0001 0 MODULE DIRFCB (
2 0002 0
3 0003 0 LANGUAGE (BLISS32),
4 0004 0 IDENT = 'V04-000'
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 *****
9 0009 1 *
10 0010 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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27 0027 1 *
28 0028 1 *
29 0029 1 *****
30 0030 1
31 0031 1 ++
32 0032 1
33 0033 1 FACILITY: F11ACP Structure Level 1
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1 This routine makes the necessary adjustments to the FCP data
38 0038 1 base to make an FCB useful for directory operations.
39 0039 1 ENVIRONMENT:
40 0040 1
41 0041 1 STARLET operating system, including privileged system services
42 0042 1 and internal exec routines. This routine must be called
43 0043 1 in kernel mode.
44 0044 1
45 0045 1 --
46 0046 1
47 0047 1
48 0048 1 AUTHOR: Andrew C. Goldstein, CREATION DATE: 2-Jan-1977 23:37
49 0049 1
50 0050 1 MODIFIED BY:
51 0051 1
52 0052 1 A0100 ACG0001 Andrew C. Goldstein, 10-Oct-1978 20:01
53 0053 1 Previous revision history moved to F11A.REV
54 0054 1
55 0055 1 **
56 0056 1
57 0057 1

```

DIRFCB
V04-000

K 3
16-Sep-1984 00:58:19
14-Sep-1984 12:29:29

VAX-11 BLISS-32 V4.0-742
DISK\$VMSMASTER:[F11A.SRC]DIRFCB.B32;1 Page (1) 2

: 58
: 59

0058 1 LIBRARY 'SYSSLIBRARY:LIB,L32';
0059 1 REQUIRE 'SRCS:FCPDEF.B32';

DIRS

.....


```
61 0374 1 GLOBAL ROUTINE MAKE_DIR_FCB (FCB) : NOVALUE =
62 0375 1
63 0376 1 !++
64 0377 1
65 0378 1 FUNCTIONAL DESCRIPTION:
66 0379 1
67 0380 1 This routine makes the necessary adjustments to the FCB data
68 0381 1 base to make an FCB useful for directory operations.
69 0382 1
70 0383 1 CALLING SEQUENCE:
71 0384 1 MAKE_DIR_FCB (ARG1)
72 0385 1
73 0386 1 INPUT PARAMETERS:
74 0387 1 ARG1: address of FCB
75 0388 1
76 0389 1 IMPLICIT INPUTS:
77 0390 1 CURRENT_VCB: address of VCB of volume in process
78 0391 1
79 0392 1 OUTPUT PARAMETERS:
80 0393 1 NONE
81 0394 1
82 0395 1 IMPLICIT OUTPUTS:
83 0396 1 NONE
84 0397 1
85 0398 1 ROUTINE VALUE:
86 0399 1 NONE
87 0400 1
88 0401 1 SIDE EFFECTS:
89 0402 1 FCB may be linked into FCB list
90 0403 1 oldest FCB LRU entry may be gone
91 0404 1
92 0405 1 --
93 0406 1
94 0407 2 BEGIN
95 0408 2
96 0409 2 MAP
97 0410 2 FCB : REF BBLOCK; ! FCB argument
98 0411 2
99 0412 2 LOCAL
100 0413 2 DUMMY, ! dummy destination for REMQUE
101 0414 2 P : REF BBLOCK; ! random pointer
102 0415 2
103 0416 2 EXTERNAL
104 0417 2 CURRENT_VCB : REF BBLOCK; ! volume VCB
105 0418 2
106 0419 2 EXTERNAL ROUTINE
107 0420 2 DEALLOCATE; ! deallocate block
108 0421 2
109 0422 2
110 0423 2 ! If the FCB represents a contiguous file, and it is not accessed,
111 0424 2 ! hook it into the directory LRU list, if it is not already there.
112 0425 2 !
113 0426 2
114 0427 2 IF .FCB[FCB$SL STLBN] NEQ 0
115 0428 2 AND .FCB[FCB$D ACNT] EQL 0
116 0429 2 AND .CURRENT_VCB[VCB$B_LRU_LIM] GEQ 0
117 0430 2 THEN
```

```
118 0431 3 BEGIN
119 0432 3 IF NOT .FCB[FCB$V_DIR]
120 0433 3 THEN
121 0434 4 BEGIN
122 0435 4 CURRENT_VCB[VCB$B_LRU_LIM] = .CURRENT_VCB[VCB$B_LRU_LIM] - 1;
123 0436 4
124 0437 4 ! If we just overflowed the LRU, search the FCB list for the first
125 0438 4 ! (and therefore oldest) directory FCB and dump it.
126 0439 4 !
127 0440 4
128 0441 4 IF .CURRENT_VCB[VCB$B_LRU_LIM] LSS 0
129 0442 4 THEN
130 0443 5 BEGIN
131 0444 5 P = .CURRENT_VCB[VCB$L_FCBFL];
132 0445 5 IF NOT
133 0446 6 (
134 0447 6 WHILE .P NEQ .CURRENT_VCB DO
135 0448 7 BEGIN
136 0449 7 IF .P[FCB$V_DIR] THEN EXITLOOP 0;
137 0450 7 P = .P[FCB$L_FCBFL];
138 0451 7 END
139 0452 6 )
140 0453 5 THEN ! FCB found
141 0454 6 BEGIN
142 0455 6 REMQUE (.P, DUMMY); ! remove FCB from list
143 0456 6 DEALLOCATE (.P); ! deallocate the block
144 0457 6 CURRENT_VCB[VCB$B_LRU_LIM] = .CURRENT_VCB[VCB$B_LRU_LIM] + 1;
145 0458 6 END
146 0459 5 ELSE ! FCB not found - LRU not in use
147 0460 5 CURRENT_VCB[VCB$B_LRU_LIM] = -1;
148 0461 4 END;
149 0462 4 ! If the LRU is not disabled (now indicated by a negative count value),
150 0463 4 ! insert the FCB into the list and mark it as a directory FCB.
151 0464 4 !
152 0465 4 !
153 0466 4
154 0467 4 IF .CURRENT_VCB[VCB$B_LRU_LIM] GEQ 0
155 0468 4 THEN
156 0469 5 BEGIN
157 0470 5 FCB[FCB$V_DIR] = 1;
158 0471 5 INSQUE (.FCB, .CURRENT_VCB[VCB$L_FCBBL]);
159 0472 4 END;
160 0473 4 ! If the FCB was already in the LRU, move it to the end of the FCB list
161 0474 4 ! to indicate its new use.
162 0475 4 !
163 0476 4 !
164 0477 4
165 0478 4 END
166 0479 3 ELSE
167 0480 4 BEGIN
168 0481 4 REMQUE (.FCB, DUMMY);
169 0482 4 INSQUE (.FCB, .CURRENT_VCB[VCB$L_FCBBL]);
170 0483 4 END;
171 0484 2 END;
172 0485 2
173 0486 1 END; ! end of routine MAKE_DIR_ACCESS
```


PSECT SUMMARY

```
:  
: Name Bytes Attributes  
: $CODE$ 113 NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
```

Library Statistics

```
:  
: File Total Symbols Loaded Percent Pages Mapped Processing Time  
: _$255$DUA28:[SYSLIB]LIB.L32;1 18619 8 0 1000 00:01.9
```

COMMAND QUALIFIERS

```
:  
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:DIRFCB/OBJ=OBJ$:DIRFCB MSRC$:DIRFCB/UPDATE=(ENH$:DIRFCB)
```

```
: Size: 113 code + 0 data bytes  
: Run Time: 00:07.0  
: Elapsed Time: 00:20.7  
: Lines/CPU Min: 4203  
: Lexemes/CPU-Min: 13994  
: Memory Used: 91 pages  
: Compilation Complete
```


