


```

1 0001 0 MODULE OTSS$CCB_DATA ( ! Data base for LUB/ISB/RAB
2 0002 0 -IDENT = '1-002' ! File: OTSCCB DAT.B32 Edit: JBS1002
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
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26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1 ++
30 0030 1 FACILITY: language support library
31 0031 1
32 0032 1 ABSTRACT:
33 0033 1
34 0034 1 This module holds the OWN storage for manipulating
35 0035 1 the CCB (the LUB/ISB/RAB). The data in this module
36 0036 1 is referenced by OTSS$CCB and FOR$CCB.
37 0037 1
38 0038 1 ENVIRONMENT: User mode, AST level or not or mixed
39 0039 1
40 0040 1 AUTHOR: John Sauter, 16-AUG-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original, from OTSS$CCB version 1-047. JBS 16-AUG-1979
45 0045 1 1-002 - Initialize OTSS$L_CUR_LUN and OTSS$L_LVL_CTR at link time,
46 0046 1 since FORTRAN doesn't call any initialization code.
47 0047 1 JBS 14-JAN-1980
48 0048 1 --
49 0049 1
50 0050 1 !<BLF/PAGE>

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52 0051 1 |
53 0052 1 | SWITCHES:
54 0053 1 |
55 0054 1 |
56 0055 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
57 0056 1 |
58 0057 1 |
59 0058 1 | LINKAGES:
60 0059 1 |
61 0060 1 |     NONE
62 0061 1 |
63 0062 1 | TABLE OF CONTENTS:
64 0063 1 |
65 0064 1 |     NONE
66 0065 1 |
67 0066 1 | INCLUDE FILES:
68 0067 1 |
69 0068 1 |
70 0069 1 | REQUIRE 'RTLML:OTSISB';           ! get length of ISB
71 0237 1 |
72 0238 1 | REQUIRE 'RTLML:OTSLUB';           ! get length of LUB
73 0378 1 |
74 0379 1 | REQUIRE 'RTLIN:RTLPSECT';         ! Define DECLARE_PSECTS macro
75 0474 1 |
76 0475 1 | REQUIRE 'RTLIN:OTSS$CCBREQ';      ! Define interface to OTSS$PUSH_CCB
77 0573 1 |
78 0574 1 | LIBRARY 'RTLSTARLE';              ! STARLET library for macros and symbols
79 0575 1 |
80 0576 1 |
81 0577 1 | MACROS:
82 0578 1 |
83 0579 1 |     NONE
84 0580 1 |
85 0581 1 | EQUATED SYMBOLS:
86 0582 1 |
87 0583 1 |     NONE
88 0584 1 |
89 0585 1 | PSECT DECLARATIONS:
90 0586 1 |
91 0587 1 | DECLARE_PSECTS (OTS);              ! declare PSECTS for OTSS$ facility
92 0588 1 |
93 0589 1 | GLOBAL STORAGE:
94 0590 1 |
95 0591 1 |
96 0592 1 | GLOBAL
97 0593 1 |     OTSS$A_CUR_LUB : INITIAL (0),   ! Contains the address of the current I/O
98 0594 1 | +
99 0595 1 | | Bit 0 of the following longword is zero if the queue headers have not
100 0596 1 | | yet been set up.
101 0597 1 | -
102 0598 1 |     OTSS$V_CCB_INIT : VOLATILE INITIAL (0),
103 0599 1 | +
104 0600 1 | | The following quadwords constitute queue headers, one for each LUN.
105 0601 1 | | Each queue will normally either be empty (meaning that no LUB is
106 0602 1 | | allocated) or contain one item, the LUB. The field LUB$Q_QUEUE is
107 0603 1 | | used for the queue linkage. Under certain circumstances a second
108 0604 1 | | LUB may be placed in the queue and then quickly removed.

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: 109 0605 1 :-
: 110 0606 1 OTSS$AA_LUB_TAB : VOLATILE OTSS$LUB_TAB ST !
: 111 0607 1 [-LUB$K_ILUN_MIN + LUB$K_LUN_MAX + T, LUB$K_ILUN_MIN],
: 112 0608 1
: 113 0609 1 +
: 114 0610 1 Each bit of the following BITVECTOR corresponds to a LUN. The bit is
: 115 0611 1 set if there is any I/O activity outstanding for the LUN. The bit
: 116 0612 1 must be kept here rather than in the LUB because there can be I/O
: 117 0613 1 activity outstanding even before the LUB is allocated.
: 118 0614 1
: 119 0615 1 OTSS$V_IOINPROG : VOLATILE BITVECTOR !
: 120 0616 1 [(T-LUB$K_ILUN_MIN + LUB$K_LUN_MAX + %BPVAL)/%BPVAL]*%BPVAL],
: 121 0617 1
: 122 0618 1 +
: 123 0619 1 The following cell contains the logical unit number of the current
: 124 0620 1 unit. It is used in place of OTSS$AA_CUR_LUB when pushing to avoid
: 125 0621 1 a problem with removing the LUB from the LUB table prior to
: 126 0622 1 deallocating it. When it contains a value one greater than the max
: 127 0623 1 permitted value then there is no current LUB.
: 128 0624 1
: 129 0625 1 -
: 130 0626 1 OTSS$L_CUR_LUN : INITIAL (LUB$K_LUN_MAX + 1),
: 131 0627 1
: 132 0628 1 +
: 133 0629 1 The following cell acts as a level counter. For efficiency the
: 134 0630 1 LUN pushing and popping routines are not called at the top level
: 135 0631 1 because, first, they would have nothing useful to do and, second,
: 136 0632 1 the top level is used much more frequently than the lower levels.
: 137 0633 1
: 138 0634 1 -
: 139 0635 1 OTSS$L_LVL_CTR : INITIAL (-1),
: 140 0636 1
: 141 0637 1 +
: 142 0638 1 The following vector of bits is used to record ownership of each LUN.
: 143 0639 1 If the bit corresponding to a particular language is set, the language
: 144 0640 1 owns the LUN.
: 145 0641 1
: 146 0642 1 -
: 147 0643 1 OTSS$V_LUN_OWN : BLOCKVECTOR [-LUB$K_ILUN_MIN + LUB$K_LUN_MAX + 1, !
: 148 0644 1 ((LUB$K_LANG_MAX + %BPUNIT)/%BPUNIT), BYTE];
: 149 0645 1
: 150 0646 0 ELUDOM

```

EXTERNAL REFERENCES:

NONE

! End of module OTSS\$CCB_DATA

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.TITLE OTSS$CCB_DATA
.IDENT \1-002\
.PSECT _OTSS$DATA,NOEXE, PIC,2

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```

00000000 0000 OTSS$A_CUR_LUB::
               .LONG 0
00000000 0004 OTSS$V_CCB_INIT::
               .LONG 0
00008 OTSS$AA_LUB_TAB::
               .BLKB 1024
00408 OTSS$V_IOINPROG::
               .BLKB 16

```

00000078 00418 OTSS\$L_CUR LUN::
 .LONG 120
FFFFFFFF 0041C OTSS\$L_LVL_CTR::
 .LONG -1
00420 OTSS\$V_LUN_OWNR::
 .BCKB 128

;
;

PSECT SUMMARY

Name	Bytes	Attributes
_OTSSDATA	1184	NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, CON, PIC,ALIGN(2)

Library Statistics

File	Symbols		Pages Mapped	Processing Time
	Total	Loaded Percent		
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	0 0	581	00:00.8

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS\$:OTSCCB DAT/OBJ=OBJ\$:OTSCCB DAT MSRC\$:OTSCCB DAT/UPDATE=(ENH\$:OTSCCB DAT)

: Size: 0 code + 1184 data bytes
: Run Time: 00:04.3
: Elapsed Time: 00:23.7
: Lines/CPU Min: 9120
: Lexemes/CPU-Min: 63190
: Memory Used: 86 pages
: Compilation Complete

