

FILEID***LIBMATCH

N 8

L1

The diagram illustrates a sequence of binary strings arranged in three columns. The left column contains strings of length 1 to 10, where each string consists of a single character followed by a sequence of 'L's. The middle column contains strings of length 1 to 10, where each string consists of a single character followed by a sequence of 'I's. The right column contains strings of length 1 to 10, where each string consists of a single character followed by a sequence of 'S's.

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1 0001 0 MODULE LIB$MATCH_COND (%TITLE'Library Match Condition Value List'
2 0002 0 IDENT = '1-003' ! File: LIBMATCH.B32 (Conflicts with LIB$MATCHC.MAR)
3 0003 0 LINKAGE(FORTRAN) ! Edit: SBL1003
4 0004 0 )
5 0005 1 BEGIN
6 0006 1
7 0007 1
8 0008 1 ****
9 0009 1 *
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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: General Utility Library
34 0034 1
35 0035 1 ABSTRACT:
36 0036 1
37 0037 1 Check for a match between the condition value addressed by the
38 0038 1 first parameter and the condition value addressed by the subsequent
39 0039 1 parameters. Each parameter is the address of a condition value.
40 0040 1 Only the pertinent fields are checked within the condition value.
41 0041 1
42 0042 1 ENVIRONMENT: User Mode - AST re-entrant
43 0043 1
44 0044 1 AUTHOR: Donald G. Petersen, CREATION DATE: 30-Nov-1977
45 0045 1
46 0046 1 MODIFIED BY:
47 0047 1
48 0048 1 Donald G. Petersen, 30-Nov-1977: VERSION 0
49 0049 1 0-1 - original
50 0050 1 0-2 - RETURN I - 1 DGP 05-DEC-77
51 0051 1 0-3 - add . (dot) operator to COND VAL DGP 05-DEC-77
52 0052 1 0-4 - Change to STARLET library. DGP 20-Apr-78
53 0053 1 0-5 - Change REQUIRE files for VAX system build. DGP 28-Apr-78
54 0054 1 0-6 - Change STARLET to RTLSTARLE to avoid conflicts. DGP 1-May-78
55 0055 1 0-7 - Add check for facility specific bit. TNH 17-June-78
56 0056 1 0-8 - Add check for facility specific bit. TNH 17-June-78
57 0057 1 0-10 - Change file name to LIBMATCHC.B32, and change the name
      of the REQUIRE file similarly. JBS 14-NOV-78

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: 58 0058 1 | 0-011 - Change the file name to LIBMATCH.B32 to avoid conflict with
: 59 0059 1 | LIBMATCH.C.MAR (match characters) when producing object
: 60 0060 1 | files. JBS 15-NOV-78
: 61 0061 1 | 1-001 - Change the version number to 1 and update
: 62 0062 1 | the copyright notice. JBS 16-NOV-78
: 63 0063 1 | 1-002 - Declare ACTUALCOUNT, ACTUALPARAMETER and NULLPARAMETER
: 64 0064 1 | for the new BLISS compiler. JBS 22-NOV-78
: 65 0065 1 | 1-003 - Use prologue file. SBL 24-June-1983
: 66 0066 1 | --

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: 68      0067 1 !  
.: 69      0068 1 ! PROLOGUE FILE:  
.: 70      0069 1 !  
.: 71      0070 1 !  
.: 72      0071 1 REQUIRE 'RTLIN:LIBPROLOG';           ! LIB$ definitions  
.: 73      0142 1 !  
.: 74      0143 1 !  
.: 75      0144 1 ! TABLE OF CONTENTS:  
.: 76      0145 1 !  
.: 77      0146 1 !  
.: 78      0147 1 FORWARD ROUTINE  
.: 79      0148 1 LIB$MATCH_COND;                  ! The routine which performs the comparisons.  
.: 80      0149 1 !  
.: 81      0150 1 !  
.: 82      0151 1 ! MACROS:  
.: 83      0152 1 !  
.: 84      0153 1 !     NONE  
.: 85      0154 1 !  
.: 86      0155 1 ! EQUATED SYMBOLS:  
.: 87      0156 1 !  
.: 88      0157 1 !     NONE  
.: 89      0158 1 !  
.: 90      0159 1 ! OWN STORAGE:  
.: 91      0160 1 !  
.: 92      0161 1 !     NONE  
.: 93      0162 1 !  
.: 94      0163 1 ! EXTERNAL REFERENCES:  
.: 95      0164 1 !  
.: 96      0165 1 !     NONE
```

```
: 98      0166 1 GLOBAL ROUTINE LIB$MATCH_COND ( ! Routine which compares condition values
: 99      0167 1   COND_VAL,                                ! Adr. of desired condition value
:100     0168 1   COND_VAL_I)                            ! Adr. of condition value to compare
:101     0169 1   =
:102     0170 1   ++
:103     0171 1   FUNCTIONAL DESCRIPTION:
:104     0172 1
:105     0173 1   This routine will take a portion (STSSV_COND_ID) of the condition value pointed
:106     0174 1   to by the first parameter and compare it to the same portion of the condition
:107     0175 1   value pointed to by the second through nth parameters.
:108     0176 1   If the facility specific bit (STSSV_FAC_SP) is set, the facility
:109     0177 1   number (STSSV_FAC_NO), the facility-specific bit, and the message
:110     0178 1   code (STSSV_CODE) are included in the compare (STSSV_COND_ID).
:111     0179 1   Otherwise, only the facility specific bit and the code are included (STSSV_MSG_NO).
:112     0180 1   The routine returns a 0 if
:113     0181 1   a match is not found, a 1 if the second parameter matches, a 2 if the third
:114     0182 1   parameter matches and so on. A check is made for null parameter entries in the
:115     0183 1   parameter list although the index is still incremented.
:116     0184 1
:117     0185 1   FORMAL PARAMETERS:
:118     0186 1
:119     0187 1   cond_val.rlc.r          Adr. of desired value
:120     0188 1   {cond_val_i.rlc.r}    Adr. of value to compare
:121     0189 1
:122     0190 1   IMPLICIT INPUTS:
:123     0191 1
:124     0192 1   NONE
:125     0193 1
:126     0194 1   IMPLICIT OUTPUTS:
:127     0195 1
:128     0196 1   NONE
:129     0197 1
:130     0198 1   ROUTINE VALUE:
:131     0199 1
:132     0200 1   index.wlu.v
:133     0201 1   0, if no match found
:134     0202 1   i, for match between the 1st and (i+1)th parameter
:135     0203 1
:136     0204 1   SIDE EFFECTS:
:137     0205 1
:138     0206 1   NONE
:139     0207 1
:140     0208 1   --
:141     0209 1
:142     0210 1   +
:143     0211 1   Check for a null parameter each iteration.
:144     0212 1   If not a null parameter then compare the 1st and (i+1)th parameters
:145     0213 1   If no match is found by the time all parameters are exhausted then return a 0.
:146     0214 1   -
:147     0215 1
```

```

: 149      0216 2   BEGIN
: 150      0217 2
: 151      0218 2   BUILTIN ACTUALCOUNT, ACTUALPARAMETER, NULLPARAMETER;
: 152      0219 2
: 153      0220 2   IF .BLOCK[COND_VAL, STSSV_FAC SP:, BYTE]
: 154      0221 2     THEN ! Facility specific bit set
: 155      0222 3   BEGIN
: 156      0223 3     INCR I FROM 2 TO ACTUALCOUNT() DO
: 157      0224 3     IF NOT NULLPARAMETER(.I)
: 158      0225 3     THEN
: 159      0226 3       IF .BLOCK[COND_VAL, STSSV_COND_ID;, BYTE] EQLU .BLOCK[ACTUALPARAMETER(.I), STSSV_COND_ID];
: 160      0227 3
: 161      0228 3       THEN RETURN .I - 1
: 162      0229 3   END
: 163      0230 3
: 164      0231 2   ELSE ! Facility specific bit not set
: 165      0232 2
: 166      0233 3   BEGIN
: 167      0234 3
: 168      0235 3     INCR I FROM 2 TO ACTUALCOUNT() DO
: 169      0236 3     IF NOT NULLPARAMETER(.I)
: 170      0237 3     THEN
: 171      0238 3       IF .BLOCK[COND_VAL, STSSV_MSG_NO;, BYTE] EQLU .BLOCK[ACTUALPARAMETER(.I), STSSV_MSG_NO;,
: 172      0239 3
: 173      0240 3       THEN RETURN .I - 1
: 174      0241 2   END;
: 175      0242 2
: 176      0243 2   RETURN 0
: 177      0244 1   END;

```

.TITLE LIB\$MATCH_COND Library Match Condition Value Li
st
.IDENT \1-003\

| | | | | PSECT | _LIB\$CODE,NOWRT, SHR, PIC,2 | |
|----|----|----|----|---------------|------------------------------------|------|
| | | | 04 | 000C 00000 | .ENTRY LIB\$MATCH_COND, Save R2,R3 | 0166 |
| | | | | BC B5 00002 | TSTW @COND_VAL | 0220 |
| | | | | 2B 18 00005 | BGEQ 3\$ | |
| | | 52 | | 6C 9A 00007 | MOVZBL (AP), R2 | 0223 |
| | | 50 | | 01 D0 0000A | MOVL #1, I | |
| | | | | 1D 11 0000D | BRB 2\$ | |
| | | | 08 | 00 ED 0000F | CMPZV #0, #8, (AP), I | 0224 |
| | | | | 16 19 00014 | BLSS 2\$ | |
| | | | | 6C40 D5 00016 | TSTL (AP)[I] | |
| | | | | 11 13 00019 | BEQL 2\$ | |
| 50 | 6C | | | 6C40 D0 0001B | MOVL (AP)[I], R1 | 0226 |
| | | 51 | | 03 EF 0001F | EXTZV #3, #25, (R1), R3 | |
| | | 19 | | 03 ED 00024 | CMPZV #3, #25, @COND_VAL, R3 | |
| | | 53 | 04 | 2A 13 0002A | BEQL 5\$ | |
| | | 61 | BC | 52 F3 0002C | AOBLEQ R2, I, 1\$ | 0224 |
| | | 19 | | 30 11 00030 | BRB 7\$ | 0222 |
| | | DF | | 6C 9A 00032 | MOVZBL (AP), R2 | 0235 |
| | | 52 | | 01 D0 00035 | MOVL #1, I | |

| | | | | | | |
|----|----|----|--|--|---|------|
| 50 | 6C | 08 | 24 00 00038 00 ED 0003A 4\$: | BRB CMPZV BLSS TSTL BEQL MOVL XORW3 BITW BNEQ MOVAB MOVL RET AOBLEQ CLRL RET | 6\$ #0, #8, (AP), I 6\$ (AP)[I] 6\$ (AP)[I], R1 @COND VAL (R1), R3 R3, #85528 6\$ -1(R0), R1 R1, R0 R2, I, 4\$ R0 R0 | 0236 |
| 53 | 51 | 04 | 6C 40 D5 00041 1D 19 0003F 6C 40 D0 00046 BC AD 0004A 53 B3 0004F 08 12 00054 A0 9E 00056 5\$: | | | 0238 |
| | 61 | | 51 00 0005A 51 D0 0005A 04 0005D F3 0005E 6\$: | | | 0240 |
| | 8F | | 50 D4 00062 7\$: | | | 0236 |
| D8 | 50 | | 04 00064 | | | 0243 |
| | | | | | | 0244 |

: Routine Size: 101 bytes, Routine Base: _LIB\$CODE + 0000

: 178 0245 1 END
: 179 0246 0 ELUDOM

PSECT SUMMARY

| Name | Bytes | Attributes |
|------------|-------|---|
| _LIB\$CODE | 101 | NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2) |

Library Statistics

| File | ----- Symbols ----- | | | Pages Mapped | Processing Time |
|---------------------------------------|---------------------|--------|---------|--------------|-----------------|
| | Total | Loaded | Percent | | |
| \$255\$DUA28:[SYSLIB]STARLET.L32;1 | 9776 | 3 | 0 | 581 | 00:00.7 |
| \$255\$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1 | 36 | 0 | 0 | 8 | 00:00.1 |

COMMAND QUALIFIERS

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

: Size: 101 code + 0 data bytes
 : Run Time: 00:03.0
 : Elapsed Time: 00:18.3

: Lines/CPU Min: 4871
: Lexemes/CPU-Min: 14415
: Memory Used: 58 pages
: Compilation Complete

0208 AH-BT13A-SE
VAX/VMS V4.0

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LIS LIBINTOUE
LIS LIBLEXICA
LIS

LIBPKARIT
LIS

LIBMATCHC
LIS

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LIS

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LIS

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LIBMSG
LIS

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LIS

LIBMATCH
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