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FFFFFFFFFFFFFFFF 111 111 XXX XXX
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\_\$25  
Symt  
IOCI  
IO\_C  
IO\_C  
IO\_C  
IO\_P  
IO\_S  
KICL  
KILL  
KILL  
LB\_E  
LB\_C  
LB\_F  
LB\_H  
LB\_L  
LOCAL  
LOCK  
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LOCK  
LOCK  
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LOC\_  
L\_CC  
L\_CC  
L\_DA  
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MM	MM	AAAAAA	TTTTTTTTTT	CCCCCCCC	HH	HH	NN	NN	AAAAAA	MM	MM	EEEEEEEEEE	
MM	MM	AAAAAA	TTTTTTTTTT	CCCCCCCC	HH	HH	NN	NN	AAAAAA	MM	MM	EEEEEEEEEE	
MMMM	MMMM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MMMM	MMMM	EE
MMMM	MMMM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MMMM	MMMM	EE
MM	MM	AA	TT	CC	HH	HH	NNNN	NN	AA	AA	MM	MM	EE
MM	MM	AA	TT	CC	HH	HH	NNNN	NN	AA	AA	MM	MM	EE
MM	MM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MM	MM	EEEEEEEE
MM	MM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MM	MM	EEEEEEEE
MM	MM	AAAAAAAAAA	TT	CC	HH	HH	NN	NN	AAAAAAAAAA	MM	MM	MM	EE
MM	MM	AAAAAAAAAA	TT	CC	HH	HH	NN	NNNN	AAAAAAAAAA	MM	MM	MM	EE
MM	MM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MM	MM	EE
MM	MM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MM	MM	EE
MM	MM	AA	TT	CC	HH	HH	NN	NN	AA	AA	MM	MM	EE
MM	MM	AA	TT	CCCCCCCC	HH	HH	NN	NN	AA	AA	MM	MM	EEEEEEEEEE
MM	MM	AA	TT	CCCCCCCC	HH	HH	NN	NN	AA	AA	MM	MM	EEEEEEEEEE

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	

.....

MATCHNAME  
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Match General Wild Card Specification <sup>F 11</sup>

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FMGSMATCH\_NAME, general wild card matching

MOD  
V04

```
0000 1 .TITLE MATCHNAME Match General Wild Card Specification
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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0000 22 :* DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
0000 23 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0000 24 :*
0000 25 :*
0000 26 :*****
0000 27
0000 28 :++
0000 29
0000 30 : FACILITY: Files-11 Structure Level 2
0000 31
0000 32 : ABSTRACT:
0000 33
0000 34 : This routine performs the general embedded wild card matching
0000 35 : algorithm.
0000 36
0000 37 : ENVIRONMENT:
0000 38
0000 39 : VAX/VMS Operating System
0000 40
0000 41 :--
0000 42
0000 43
0000 44 : AUTHOR: Andrew C. Goldstein, CREATION DATE: 10-Aug-1979 11:36
0000 45
0000 46 : MODIFIED BY:
0000 47
0000 48 : V02-001 MLJ0031 Martin L. Jack, 4-Aug-1981 6:32
0000 49 : Reorganize for simplicity and speed.
0000 50
0000 51 :**
```

```

0000 53      .SBTTL  FMGSMATCH_NAME, general wild card matching
0000 54
0000 55      :++
0000 56      :
0000 57      : Functional Description:
0000 58      :   This routine performs the general embedded wild card matching
0000 59      :   algorithm.
0000 60
0000 61      : Calling Sequence:
0000 62      :   JSB
0000 63
0000 64      : Input Parameters:
0000 65      :   R2 = Length of candidate string.
0000 66      :   R3 = Address of candidate string.
0000 67      :   R4 = Length of pattern string.
0000 68      :   R5 = Address of pattern string.
0000 69
0000 70      : Implicit Inputs:
0000 71      :   none
0000 72
0000 73      : Output Parameters:
0000 74      :   none
0000 75
0000 76      : Implicit Outputs:
0000 77      :   none
0000 78
0000 79      : Routines Called:
0000 80      :   none
0000 81
0000 82      : Routine Value:
0000 83      :   True if the strings match.
0000 84
0000 85      : Signals:
0000 86      :   none
0000 87
0000 88      : Side Effects:
0000 89      :   R1-R5 destroyed.
0000 90
0000 91      :--
0000 92
00000000 93      .PSECT  $CODE$,NOWRT,EXE,WORD
0000 94
03C0 8F  BB 0000 95  FMGSMATCH_NAME::
50  D4 0004 96  PUSH  #^M<R6,R7,R8,R9>      ; Save registers
56  D4 0006 97  CLRL  R0      ; Assume failure
0008 98  CLRL  R6      ; Clear saved candidate count
0008 99  :
0008 100 : Main scanning loop.
0008 101 :
54  D7 0008 102 10$:  DECL  R4      ; Pattern exhausted?
24  19 000A 103  BLSS  30$      ; Branch if yes
51  85 9A 000C 104  MOVZBL (R5)+,R1      ; Get next character in pattern
2A  51 91 000F 105  CMPB  R1,#^A'+      ; Pattern specifies wild string?
28  13 0012 106  BEQL  60$      ; Branch if yes
52  D7 0014 107  DECL  R2      ; Candidate exhausted?
1F  19 0016 108  BLSS  50$      ; Branch if yes
83  51 91 0018 109  CMPB  R1,(R3)+      ; Compare pattern to candidate
    
```

```

25  EB 13 001B 110          BEQL 10$          ; Branch if pattern equals candidate
    51 91 001D 111          CMPB R1,#^A'%'    ; Pattern specifies wild character?
    E6 13 0020 112          BEQL 10$          ; Branch if yes
        0022 113          ;
        0022 114          ; We have detected a mismatch, or we are out of pattern while there is
        0022 115          ; candidate left. Back up to the last '*', advance a candidate character,
        0022 116          ; and try again.
        0022 117          ;
    56 D7 0022 118 20$:    DECL R6          ; Count a saved candidate character
    11 19 0024 119          BLSS 50$          ; Branch if no saved candidate
    57 D6 0026 120          INCL R7          ; Set to try next character
52  56 7D 0028 121          MOVQ R6,R2        ; Restore descriptors to backup point
54  58 7D 002B 122          MOVQ R8,R4
    D8 11 002E 123          BRB 10$          ; Continue testing
        0030 124          ;
        0030 125          ; Here when pattern is exhausted.
        0030 126          ;
    52 D5 0030 127 30$:    TSTL R2          ; Candidate exhausted?
    EE 12 0032 128          BNEQ 20$        ; Branch if no
        0034 129          ;
        0034 130          ; Here to return.
        0034 131          ;
50  01 D0 0034 132 40$:    MOVL #1,R0        ; Set success return
03C0 8F BA 0037 133 50$:    POPR #^M<R6,R7,R8,R9> ; Restore registers
        003B 134          RSB          ; Return
        003C 135          ;
        003C 136          ; We have detected a '*' in the pattern. Save the pointers for backtracking.
        003C 137          ;
    54 D5 003C 138 60$:    TSTL R4          ; Pattern null after '*'?
    F4 13 003E 139          BEQL 40$          ; Branch if yes
56  52 7D 0040 140          MOVQ R2,R6        ; Save descriptors of both strings
58  54 7D 0043 141          MOVQ R4,R8
    C0 11 0046 142          BRB 10$          ; Continue testing
        0048 143          ;
        0048 144          .END

```

MATCHNAME  
Symbol table

Match General Wild Card Specification

J 11

15-SEP-1984 23:44:15  
5-SEP-1984 01:14:02

VAX/VMS Macro V04-00  
[F11X.SRC]MATCHNAME.MAR;1

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(2)

MOD  
V04

```

ACL_TYPE      = 00000007
AQB_TYPE      = 00000005
BITMAP_TYPE   = 00000001
CACHE_TYPE    = 00000006
CHIP_TYPE     = 00000008
DATA_TYPE     = 00000004
DIRECTORY_TYPE = 00000002
FCB_TYPE      = 00000000
FMGSMATCH_NAME = 00000000 RG 01
HEADER_TYPE   = 00000000
INDEX_TYPE    = 00000003
MVL_TYPE      = 00000004
QUOTA_TYPE    = 00000005
RVT_TYPE      = 00000003
VCB_TYPE      = 00000002
WCB_TYPE      = 00000001

```

```

+-----+
! Psect synopsis !
+-----+

```

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 ( 0.)	00 ( 0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$CODE\$	00000048 ( 72.)	01 ( 1.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC WORD

```

+-----+
! Performance indicators !
+-----+

```

Phase	Page faults	CPU Time	Elapsed Time
Initialization	30	00:00:00.08	00:00:00.33
Command processing	127	00:00:00.69	00:00:02.53
Pass 1	85	00:00:00.67	00:00:02.66
Symbol table sort	0	00:00:00.00	00:00:00.00
Pass 2	42	00:00:00.44	00:00:01.15
Symbol table output	2	00:00:00.02	00:00:00.02
Psect synopsis output	2	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	290	00:00:01.93	00:00:06.72

The working set limit was 750 pages.  
2825 bytes (6 pages) of virtual memory were used to buffer the intermediate code.  
There were 10 pages of symbol table space allocated to hold 16 non-local and 6 local symbols.  
245 source lines were read in Pass 1, producing 11 object records in Pass 2.  
2 pages of virtual memory were used to define 2 macros.

: R

-----  
! Macro library statistics !  
-----

<u>Macro library name</u>	<u>Macros defined</u>
_\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	0
TOTALS (all libraries)	0

0 GETS were required to define 0 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:MATCHNAME/OBJ=OBJ\$:MATCHNAME MSRC\$:FCPPRE/UPDATE=(ENH\$:FCPPRE)+MSRC\$:MATCHNAME/UPDATE=(ENH\$:MATCHNAME)+EXECMLS/LIB



0171 AH-BT13A-SE  
VAX/VMS V4.0

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