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000000 88888888 JJ 111111 NN NN PPPPPPPP UU UU TTTTTTTTTT
000000 88888888 JJ 111111 NN NN PPPPPPPP UU UU TTTTTTTTTT
00 00 88 88 JJ II NN NN PP PP UU UU TT
00 00 88 88 JJ II NN NN PP PP UU UU TT
00 00 88 88 JJ II NNNN NN PP PP UU UU TT
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00 00 88888888 JJ II NN NN PPPPPPPP UU UU TT
00 00 88888888 JJ II NN NN PPPPPPPP UU UU TT
00 00 88 88 JJ JJ II NN NNNN PP UU UU TT
00 00 88 88 JJ JJ II NN NNNN PP UU UU TT
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00 00 88 88 JJ JJ II NN NN PP UU UU TT
000000 88888888 JJJJJJ 111111 NN NN PP UUUUUUUUUU TT
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LL 111111 SSSSSSSS
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LL II SS
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LLLLLLLLLLLL 111111 SSSSSSSS
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```

```

1 0001 0 %title 'OBJINPUT - Handle Object Files & Libraries'
2 0002 0     module objinput (
3 0003 1         ident='V04-000') = begin
4 0004 1
5 0005 1
6 0006 1 .....
7 0007 1 *
8 0008 1 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
9 0009 1 *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
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11 0011 1 *
12 0012 1 *  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
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14 0014 1 *  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
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16 0016 1 *  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
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18 0018 1 *
19 0019 1 *  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
20 0020 1 *  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
21 0021 1 *  CORPORATION. *
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23 0023 1 *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
24 0024 1 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
25 0025 1 *
26 0026 1 *
27 0027 1 .....
28 0028 1
29 0029 1
30 0030 1 **
31 0031 1 Facility:      VAX/VMS Analyze Facility, Handle Object Files & Libraries
32 0032 1
33 0033 1 Abstract:      This module is responsible for handling file specs from
34 0034 1               the command line, and reading data from object files and
35 0035 1               libraries.
36 0036 1
37 0037 1
38 0038 1 Environment:
39 0039 1
40 0040 1 Author: Paul C. Anagnostopoulos, Creation Date: 8 January 1981
41 0041 1
42 0042 1 Modified By:
43 0043 1
44 0044 1     V03-005 BLS0286      Benn Schreiber      .20-MAR-1984
45 0045 1     Correct 004.
46 0046 1
47 0047 1     V03-004 LJA0113      Laurie J. Anderson      24-Feb-1984
48 0048 1     Add new related file parsing arguments to LIB$FIND_FILE
49 0049 1     to make search lists behave properly.
50 0050 1
51 0051 1     V03-003 PCA1011      Paul C. Anagnostopoulos 1-Apr-1983
52 0052 1     Change the message prefix to ANLOBJ$ to ensure that
53 0053 1     message symbols are unique across all ANALYZEs. This
54 0054 1     is necessitated by the new merged message files.
55 0055 1
56 0056 1     V03-002 PCA0022      Paul Anagnostopoulos   24-Mar-1982
57 0057 1     Signal errors using the correct SIV values.

```


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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
Module Declarations

D 15
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14-Sep-1984 11:52:53

VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32;1

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```

: 64      0063 1 %sbttl 'Module Declarations'
: 65      0064 1
: 66      0065 1 : Libraries and Requires:
: 67      0066 1 :
: 68      0067 1
: 69      0068 1 library 'starlet';
: 70      0069 1 require 'objexereq';
: 71      0505 1
: 72      0506 1
: 73      0507 1 : Table of Contents:
: 74      0508 1 :
: 75      0509 1
: 76      0510 1 forward routine
: 77      0511 1     anl$open_next_object_file,
: 78      0512 1     anl$object_include,
: 79      0513 1     anl$get_object_record;
: 80      0514 1
: 81      0515 1 :
: 82      0516 1 : External References:
: 83      0517 1 :
: 84      0518 1
: 85      0519 1 external routine
: 86      0520 1     anl$object_positionals,
: 87      0521 1     cli$get_value: addressing_mode(general),
: 88      0522 1     lbr$close: addressing_mode(general),
: 89      0523 1     lbr$get_index: addressing_mode(general),
: 90      0524 1     lbr$get_record: addressing_mode(general),
: 91      0525 1     lbr$ini_control: addressing_mode(general),
: 92      0526 1     lbr$lookup_key: addressing_mode(general),
: 93      0527 1     lbr$open: addressing_mode(general),
: 94      0528 1     lib$find_file: addressing_mode(general),
: 95      0529 1     lib$free_vm: addressing_mode(general),
: 96      0530 1     lib$get_vm: addressing_mode(general),
: 97      0531 1     str$trim: addressing_mode(general);
: 98      0532 1
: 99      0533 1 :
100     0534 1 : Own Variables:
101     0535 1 :
102     0536 1 : The following data is needed to keep track of what kind of file we
103     0537 1 : are processing.
104     0538 1
105     0539 1 own
106     0540 1     own_described_buffer(resultant_spec,nam$c_maxrss),
107     0541 1     object_library: byte,
108     0542 1     library_index: long;
109     0543 1
110     0544 1 ! The following data structures are used to access and read records from
111     0545 1 ! a file we are to analyze.
112     0546 1
113     0547 1 own
114     P 0548 1     object_fab: $fab(fac=get,
115     0549 1         shr=get),
116     0550 1
117     0551 1     own_described_buffer(object_buffer,obj$c_maxrecsiz),
118     0552 1
119     P 0553 1     object_rab: $rab(fab-object_fab,
120     0554 1         rac=seq,
```

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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
Module Declarations

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: 121
: 122
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P 0555 1
P 0556 1
0557 1

rop=loc,
ubf=object_buffer+8,
usz=obj\$&_maxrecsiz);

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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANL\$OPEN_NEXT_OBJECT_FILE - Right

F 15
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VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32;1

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```
125 0558 1 %sbttl 'ANL$OPEN_NEXT_OBJECT_FILE - Right'
126 0559 1 : **
127 0560 1 : Functional Description:
128 0561 1 :     This routine is called to open the next object file we are to analyze.
129 0562 1 :     It handles multiple file specs, wildcarding, and object libraries.
130 0563 1 :
131 0564 1 : Formal Parameters:
132 0565 1 :     opened_spec      Address of descriptor of buffer in which to return
133 0566 1 :                     the spec of the file we open. We set the length.
134 0567 1 :
135 0568 1 : Implicit Inputs:
136 0569 1 :     global data
137 0570 1 :
138 0571 1 : Implicit Outputs:
139 0572 1 :     global data
140 0573 1 :
141 0574 1 : Returned Value:
142 0575 1 :     True if there is another object file, false otherwise.
143 0576 1 :
144 0577 1 : Side Effects:
145 0578 1 :
146 0579 1 : --
147 0580 1 :
148 0581 1 :
149 0582 2 global routine anl$open_next_object_file(opened_spec) = begin
150 0583 2
151 0584 2 bind
152 0585 2     opened_spec_dsc = .opened_spec: descriptor;
153 0586 2
154 0587 2 own
155 0588 2     own_described_buffer(wildcard_spec,nam$c_maxrss),
156 0589 2     wildcard_context: long initial(0),
157 0590 2     all_modules: byte,
158 0591 2     module_list: ref blockvector[,obj$c_symsiz,byte],
159 0592 2     module_list_size: long,
160 0593 2     module_list_index: signed long,
161 0594 2     get_new_spec: long initial(true);
162 0595 2
163 0596 2 local
164 0597 2     stv: long,
165 0598 2     status: long;
```

```

: 167 0599 2 ! The following internal routine is called by the librarian when we need to
: 168 0600 2 ! scan an object library index. We do this if the user asks us to analyze
: 169 0601 2 ! all the modules in the library. The routine is called once for each module.
: 170 0602 2
: 171 0603 3 routine add_module_to_list(module_name) = begin
: 172 0604 3
: 173 0605 3 bind
: 174 0606 3     module_name_dsc = .module_name: descriptor;
: 175 0607 3
: 176 0608 3 ! Copy the module name into the next module_list entry.
: 177 0609 3
: 178 0610 3 ch$copy(.module_name_dsc[len],.module_name_dsc[ptr],
: 179 0611 3     ',obj$c_symsiz,module_list[.module_list_size,0,0,0,0]);
: 180 0612 3
: 181 0613 3 ! Increment the module list size.
: 182 0614 3
: 183 0615 3 increment (module_list_size);
: 184 0616 3
: 185 0617 3 return ss$_normal;
: 186 0618 3
: 187 0619 2 end;

```

```

.TITLE OBJINPUT OBJINPUT - Handle Object Files & Libra
ries
.IDENT \V04-000\
.PSECT $OWNS,NOEXE,2

```

```

000000FF 00000 RESULTANT_SPEC:
00000000' 00004 .LONG 255
00008 .ADDRESS RESULTANT_SPEC+8
00107 .BLKB 255
OBJECT_LIBRARY:
00108 .BLKB 1
LIBRARY_INDEX:
03 0010C .BLKB 4
OBJECT_FAB:
50 0010D .BYTE 3
0000 0010E .BYTE 80
00000000 00110 .WORD 0
00000000 00114 .LONG 0
00000000 00118 .LONG 0
00000000 0011C .LONG 0
0000 00120 .WORD 0
02 00122 .BYTE 2
02 00123 .BYTE 2
00000000 00124 .LONG 0
00 00128 .BYTE 0
00 00129 .BYTE 0
00 0012A .BYTE 0
02 0012B .BYTE 2
00000000 0012C .LONG 0
00000000 00130 .LONG 0
00000000 00134 .LONG 0
00000000 00138 .LONG 0

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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

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```

00000000 0013C .LONG 0
      00 00140 .BYTE 0
      00 00141 .BYTE 0
    0000 00142 .WORD 0
00000000 00144 .LONG 0
      0000 00148 .WORD 0
      00 0014A .BYTE 0
      00 0014B .BYTE 0
00000000 0014C .LONG 0
00000000 00150 .LONG 0
      0000 00154 .WORD 0
      00 00156 .BYTE 0
      00 00157 .BYTE 0
00000000 00158 .LONG 0
00000800 0015C OBJECT_BUFFER:
      .LONG 2048
00000000* 00160 .ADDRESS OBJECT_BUFFER+8
      00164 .BLKB 2048
      01 00964 OBJECT_RAB:
      .BYTE 1
      44 00965 .BYTE 68
      0000 00966 .WORD 0
00010000 00968 .LONG 65536
00000000 0096C .LONG 0
00000000 00970 .LONG 0
      0000# 00974 .WORD 0[3]
      0000 0097A .WORD 0
00000000 0097C .LONG 0
      0000 00980 .WORD 0
      00 00982 .BYTE 0
      00 00983 .BYTE 0
      0800 00984 .WORD 2048
      0000 00986 .WORD 0
000000C0* 00988 .ADDRESS OBJECT_BUFFER+8
00000000 0098C .LONG 0
00000000 00990 .LONG 0
00000000 00994 .LONG 0
      00 00998 .BYTE 0
      00 00999 .BYTE 0
      00 0099A .BYTE 0
      00 0099B .BYTE 0
00000000 0099C .LONG 0
00000000* 009A0 .ADDRESS OBJECT_FAB
00000000 009A4 .LONG 0
000000FF 009A8 WILDCARD_SPEC:
      .LONG 255
00000000* 009AC .ADDRESS WILDCARD_SPEC+8
      009B0 .BLKB 255
      00AAF .BLKB 1
00000000 00AB0 WILDCARD_CONTEXT:
      .LONG 0
      00AB4 ALL_MODULES:
      .BLKB 1
      00AB5 .BLKB 3
      00AB8 MODULE_LIST:
      .BLKB 4
      00ABC MODULE_LIST_SIZE:

```

.....

OOACO MODULE_LIST_INDEX: .BLKB 4
00000001 OOAC4 GET_NEW_SPEC: .BLRB 4
.LONG 1

- .EXTRN ANLOBS\$-OK, ANLOBS\$-ANYTHING
- .EXTRN ANLOBS\$-DATATYPE
- .EXTRN ANLOBS\$-ERRORCOUNT
- .EXTRN ANLOBS\$-ERRORNONE
- .EXTRN ANLOBS\$-ERRORS, ANLOBS\$-EXEFIXA
- .EXTRN ANLOBS\$-EXEFIXAIMAGE
- .EXTRN ANLOBS\$-EXEFIXALINE
- .EXTRN ANLOBS\$-EXEFIXCOUNT
- .EXTRN ANLOBS\$-EXEFIXEXTRA
- .EXTRN ANLOBS\$-EXEFIXFIXED
- .EXTRN ANLOBS\$-EXEFIXFLAGS
- .EXTRN ANLOBS\$-EXEFIXG
- .EXTRN ANLOBS\$-EXEFIXGIMAGE
- .EXTRN ANLOBS\$-EXEFIXGLINE
- .EXTRN ANLOBS\$-EXEFIXLIST
- .EXTRN ANLOBS\$-EXEFIXNAME
- .EXTRN ANLOBS\$-EXEFIXNAME0
- .EXTRN ANLOBS\$-EXEFIXP
- .EXTRN ANLOBS\$-EXEFIXPSECT
- .EXTRN ANLOBS\$-EXEFIXUP
- .EXTRN ANLOBS\$-EXEFIXUPNONE
- .EXTRN ANLOBS\$-EXEGST, ANLOBS\$-EXEHDR
- .EXTRN ANLOBS\$-EXEHDRACTIVE
- .EXTRN ANLOBS\$-EXEHDRBLKCOUNT
- .EXTRN ANLOBS\$-EXEHDRCHANCOUNT
- .EXTRN ANLOBS\$-EXEHDRCHANDEF
- .EXTRN ANLOBS\$-EXEHDRDECECO
- .EXTRN ANLOBS\$-EXEHDRDMT
- .EXTRN ANLOBS\$-EXEHDRDST
- .EXTRN ANLOBS\$-EXEHDRFILEID
- .EXTRN ANLOBS\$-EXEHDRFIXED
- .EXTRN ANLOBS\$-EXEHDRFLAGS
- .EXTRN ANLOBS\$-EXEHDRGBLIDENT
- .EXTRN ANLOBS\$-EXEHDRGST
- .EXTRN ANLOBS\$-EXEHDRIDENT
- .EXTRN ANLOBS\$-EXEHDRIMAGEID
- .EXTRN ANLOBS\$-EXEHDRISD
- .EXTRN ANLOBS\$-EXEHDRISDBASE
- .EXTRN ANLOBS\$-EXEHDRISDCOUNT
- .EXTRN ANLOBS\$-EXEHDRISDFLAGS
- .EXTRN ANLOBS\$-EXEHDRISDGBLNAM
- .EXTRN ANLOBS\$-EXEHDRISDNUM
- .EXTRN ANLOBS\$-EXEHDRISDPFCDEF
- .EXTRN ANLOBS\$-EXEHDRISDPFCISZ
- .EXTRN ANLOBS\$-EXEHDRISDTYPE
- .EXTRN ANLOBS\$-EXEHDRISDVBN
- .EXTRN ANLOBS\$-EXEHDRLINKID
- .EXTRN ANLOBS\$-EXEHDRMATCH
- .EXTRN ANLOBS\$-EXEHDRNAME
- .EXTRN ANLOBS\$-EXEHDRNOPATCH
- .EXTRN ANLOBS\$-EXEHDRPAGECOUNT

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- .EXTRN ANLOBS\$_EXEHDRPAGEDEF
- .EXTRN ANLOBS\$_EXEHDRPATCH
- .EXTRN ANLOBS\$_EXEHDRPATCHDATE
- .EXTRN ANLOBS\$_EXEHDRPRIV
- .EXTRN ANLOBS\$_EXEHDRROPATCH
- .EXTRN ANLOBS\$_EXEHDRRWPATCH
- .EXTRN ANLOBS\$_EXEHDRSYMDBG
- .EXTRN ANLOBS\$_EXEHDRSYSVER
- .EXTRN ANLOBS\$_EXEHDRTXTVBN
- .EXTRN ANLOBS\$_EXEHDRTIME
- .EXTRN ANLOBS\$_EXEHDRTYPEEXE
- .EXTRN ANLOBS\$_EXEHDRTYPELIM
- .EXTRN ANLOBS\$_EXEHDRUSERECO
- .EXTRN ANLOBS\$_EXEHDRXFER1
- .EXTRN ANLOBS\$_EXEHDRXFER2
- .EXTRN ANLOBS\$_EXEHDRXFER3
- .EXTRN ANLOBS\$_EXEHEADING
- .EXTRN ANLOBS\$_EXEPATCH
- .EXTRN ANLOBS\$_FLAG, ANLOBS\$_HEXDATA
- .EXTRN ANLOBS\$_HEXHEADING1
- .EXTRN ANLOBS\$_HEXHEADING2
- .EXTRN ANLOBS\$_INDMSGSEC
- .EXTRN ANLOBS\$_INTERACT
- .EXTRN ANLOBS\$_MASK, ANLOBS\$_OBJCPRECC
- .EXTRN ANLOBS\$_OBJDBGREC
- .EXTRN ANLOBS\$_OBJENV, ANLOBS\$_OBJEOMFLAGS
- .EXTRN ANLOBS\$_OBJEOMREC
- .EXTRN ANLOBS\$_OBJEOMSEVABT
- .EXTRN ANLOBS\$_OBJEOMSEVERR
- .EXTRN ANLOBS\$_OBJEOMSEVIGN
- .EXTRN ANLOBS\$_OBJEOMSEVRES
- .EXTRN ANLOBS\$_OBJEOMSEVSUC
- .EXTRN ANLOBS\$_OBJEOMSEVWRN
- .EXTRN ANLOBS\$_OBJEOMWREC
- .EXTRN ANLOBS\$_OBJFADPASSMECH
- .EXTRN ANLOBS\$_OBJGSDENV
- .EXTRN ANLOBS\$_OBJGSDENVFLAGS
- .EXTRN ANLOBS\$_OBJGSDENVPAR
- .EXTRN ANLOBS\$_OBJGSDPEM
- .EXTRN ANLOBS\$_OBJGSDPEMW
- .EXTRN ANLOBS\$_OBJGSDIDC
- .EXTRN ANLOBS\$_OBJGSDIDCENT
- .EXTRN ANLOBS\$_OBJGSDIDCFLAGS
- .EXTRN ANLOBS\$_OBJGSDIDCMATCH
- .EXTRN ANLOBS\$_OBJGSDIDCOBJ
- .EXTRN ANLOBS\$_OBJGSDIDCVLA
- .EXTRN ANLOBS\$_OBJGSDIDCVLB
- .EXTRN ANLOBS\$_OBJGSDLEPM
- .EXTRN ANLOBS\$_OBJGSDLPRO
- .EXTRN ANLOBS\$_OBJGSDLSY
- .EXTRN ANLOBS\$_OBJGSDPRO
- .EXTRN ANLOBS\$_OBJGSDPROW
- .EXTRN ANLOBS\$_OBJGSDPSC
- .EXTRN ANLOBS\$_OBJGSDPSCALIGN
- .EXTRN ANLOBS\$_OBJGSDPSCALLOC
- .EXTRN ANLOBS\$_OBJGSDPSCBASE
- .EXTRN ANLOBS\$_OBJGSDPSCFLAGS

- .EXTRN ANLOBS\$ _OBJGSDREC
- .EXTRN ANLOBS\$ _OBJGSDSPSC
- .EXTRN ANLOBS\$ _OBJGSDSYM
- .EXTRN ANLOBS\$ _OBJGSDSYMW
- .EXTRN ANLOBS\$ _OBJGTXREC
- .EXTRN ANLOBS\$ _OBJHDRIGNREC
- .EXTRN ANLOBS\$ _OBJHEADING
- .EXTRN ANLOBS\$ _OBJLITINDEX
- .EXTRN ANLOBS\$ _OBJLNKREC
- .EXTRN ANLOBS\$ _OBJLNMREC
- .EXTRN ANLOBS\$ _OBJMHDCREATE
- .EXTRN ANLOBS\$ _OBJMHDNAME
- .EXTRN ANLOBS\$ _OBJMHDPATCH
- .EXTRN ANLOBS\$ _OBJMHDMREC
- .EXTRN ANLOBS\$ _OBJMHDMRECSIZ
- .EXTRN ANLOBS\$ _OBJMHDSTRLVL
- .EXTRN ANLOBS\$ _OBJMHDVERSION
- .EXTRN ANLOBS\$ _OBJMTCORRECT
- .EXTRN ANLOBS\$ _OBJMTCINPUT
- .EXTRN ANLOBS\$ _OBJMTCNAME
- .EXTRN ANLOBS\$ _OBJMTCREC
- .EXTRN ANLOBS\$ _OBJMTCSEQNUM
- .EXTRN ANLOBS\$ _OBJMTCUIC
- .EXTRN ANLOBS\$ _OBJMTCVERSION
- .EXTRN ANLOBS\$ _OBJMTCWHEN
- .EXTRN ANLOBS\$ _OBJPROARGCOUNT
- .EXTRN ANLOBS\$ _OBJPROARGNUM
- .EXTRN ANLOBS\$ _OBJPSECT
- .EXTRN ANLOBS\$ _OBJSRCREC
- .EXTRN ANLOBS\$ _OBJSTATHEADING1
- .EXTRN ANLOBS\$ _OBJSTATHEADING2
- .EXTRN ANLOBS\$ _OBJSTATLINE
- .EXTRN ANLOBS\$ _OBJSTATTOTAL
- .EXTRN ANLOBS\$ _OBJSYMBOL
- .EXTRN ANLOBS\$ _OBJSYMFLAGS
- .EXTRN ANLOBS\$ _OBJTIRARGINDEX
- .EXTRN ANLOBS\$ _OBJTIRCMD
- .EXTRN ANLOBS\$ _OBJTIRCMDSTK
- .EXTRN ANLOBS\$ _OBJTBTRC
- .EXTRN ANLOBS\$ _OBJTIRREC
- .EXTRN ANLOBS\$ _OBJTIRSTOIM
- .EXTRN ANLOBS\$ _OBJTIRVIELD
- .EXTRN ANLOBS\$ _OBJTTLREC
- .EXTRN ANLOBS\$ _OBJVALUE
- .EXTRN ANLOBS\$ _OBJUVALUE
- .EXTRN ANLOBS\$ _PROTECTION
- .EXTRN ANLOBS\$ _SEVERITY
- .EXTRN ANLOBS\$ _TEXT, ANLOBS\$ _TEXTHDR
- .EXTRN ANLOBS\$ _NOSUCHMOD
- .EXTRN ANLOBS\$ _BADDATE
- .EXTRN ANLOBS\$ _BADHDRBLKCOUNT
- .EXTRN ANLOBS\$ _BADSEVERITY
- .EXTRN ANLOBS\$ _BADSYM1ST
- .EXTRN ANLOBS\$ _BADSYMCHAR
- .EXTRN ANLOBS\$ _BADSYMLEN
- .EXTRN ANLOBS\$ _EXEBADFIXUPEND
- .EXTRN ANLOBS\$ _EXEBADFIXUPISD

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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

L 15
15-Sep-1984 23:41:35
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[ANALYZ.SRC]OBJINPUT.B32;1

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.EXTRN ANLOBS$_EXEBADFIXUPVBN
.EXTRN ANLOBS$_EXEBADISDS1
.EXTRN ANLOBS$_EXEBADISDTYPE
.EXTRN ANLOBS$_EXEBADMATCH
.EXTRN ANLOBS$_EXEBADPATCHLEN
.EXTRN ANLOBS$_EXEBADOBJ
.EXTRN ANLOBS$_EXEBADTYPE
.EXTRN ANLOBS$_EXEBADXFERO
.EXTRN ANLOBS$_EXEHDRISDLONG
.EXTRN ANLOBS$_EXEHDRLONG
.EXTRN ANLOBS$_EXEISDLENDZRO
.EXTRN ANLOBS$_EXEISDLENGBL
.EXTRN ANLOBS$_EXEISDLENPRIV
.EXTRN ANLOBS$_EXENOTNATIVE
.EXTRN ANLOBS$_EXTRABYTES
.EXTRN ANLOBS$_FIELDFIT
.EXTRN ANLOBS$_FLAGERROR
.EXTRN ANLOBS$_NOTOK, ANLOBS$_OBJBADIDCMATCH
.EXTRN ANLOBS$_OBJBADNUM
.EXTRN ANLOBS$_OBJBADPOP
.EXTRN ANLOBS$_OBJBADPUSH
.EXTRN ANLOBS$_OBJBADTYPE
.EXTRN ANLOBS$_OBJBADVIELD
.EXTRN ANLOBS$_OBJEOMBADSEV
.EXTRN ANLOBS$_OBJEOMMISSING
.EXTRN ANLOBS$_OBJFADBADAVC
.EXTRN ANLOBS$_OBJFADBADRBC
.EXTRN ANLOBS$_OBJGSDBADALIGN
.EXTRN ANLOBS$_OBJGSDBADSUBTYP
.EXTRN ANLOBS$_OBJHDRRES
.EXTRN ANLOBS$_OBJMHDBADRECSIZ
.EXTRN ANLOBS$_OBJMHDBADSTRLVL
.EXTRN ANLOBS$_OBJMHDMISSING
.EXTRN ANLOBS$_OBJNONTIRCMD
.EXTRN ANLOBS$_OBJNOPSC
.EXTRN ANLOBS$_OBJNULLREC
.EXTRN ANLOBS$_OBJPOSPACE
.EXTRN ANLOBS$_OBJPROMINMAX
.EXTRN ANLOBS$_OBJPSCABSLEN
.EXTRN ANLOBS$_OBJRECTOOBIG
.EXTRN ANLOBS$_OBJTIRRES
.EXTRN ANLOBS$_OBJUNDEFENV
.EXTRN ANLOBS$_OBJUNDEFLIT
.EXTRN ANLOBS$_OBJUNDEFPSC
.EXTRN ANALYZE$ FACILITY
.EXTRN ANLSOBJECT POSITIONALS
.EXTRN CLISGET_VALUE, LBR$CLOSE
.EXTRN LBR$GET_INDEX, LBR$GET_RECORD
.EXTRN LBR$INI_CONTROL
.EXTRN LBR$LOOKUP_KEY, LBR$OPEN
.EXTRN LIB$FIND_FILE, LIB$FREE_VM
.EXTRN LIB$GET_VM, STR$TRIM

.PSECT $CODE$,NOWRT,2

```

```

003C 0000 ADD_MODULE TO_LIST:
.WORD Save R2,R3,R4,R5

```

: 0603

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4)

OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

M 15
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			51	04	AC	D0	00002	MOVL	MODULE NAME, R1	:	0606	
	50	0000*	CF		1F	C5	00006	MULL3	#31, MODULE_LIST_SIZE, R0	:	0611	
1F	20	04	B1		61	2C	0000C	MOVCS	(R1), @4(R1), #32, #31, @MODULE_LIST[R0]	:		
					0000*DF40		00012			:		
					0000*	CF	D6	00016	INCL	MODULE_LIST_SIZE	:	0615
			50			01	D0	0001A	MOVL	#1, R0	:	0617
						04	0001D	RET		:	0619	

; Routine Size: 30 bytes, Routine Base: \$CODE\$ + 0000

```

: 189 0620 2 ! If the wildcard context is zero, it means this is the first call, or
: 190 0621 2 ! we finished with a file spec on the previous call. So we must obtain
: 191 0622 2 ! the next file spec from the command line.
: 192 0623 2
: 193 0624 3 if .get_new_spec then (
: 194 0625 3     wildcard_spec[len] = nam$c_maxrss;
: 195 0626 3     status = cli$get_value(describe('file_specs'),wildcard_spec);
: 196 0627 3
: 197 0628 3     ! If there are no more specs, we are all done.
: 198 0629 3
: 199 0630 3     if not .status then
: 200 0631 3         return false;
: 201 0632 3     str$trim(wildcard_spec,wildcard_spec,wildcard_spec);
: 202 0633 3
: 203 0634 3     ! Call a routine to process any positional qualifiers for this spec.
: 204 0635 3     ! We don't know how to do that.
: 205 0636 3
: 206 0637 3     anl$object_positionals();
: 207 0638 3
: 208 0639 3     ! Now we have to find out if this new spec has a /INCLUDE qualifier
: 209 0640 3     ! attached to it, meaning that it is an object library. If it is,
: 210 0641 3     ! then the module list will be filled in with the module names.
: 211 0642 3
: 212 0643 3     status = lib$get_vm(%ref(1000*obj$c_symsiz),module_list);
: 213 0644 3     check (.status, .status);
: 214 0645 3     object_library = anl$object_include(all_modules,module_list_size,.module_list);
: 215 0646 3     module_list_index = -1;
: 216 0647 2 );
: 217 0648 2
: 218 0649 2 ! On the other hand, if the previous call done is true, we may have just
: 219 0650 2 ! finished processing a file. This is only true if we're processing
: 220 0651 2 ! an individual object file. Better close it.
: 221 0652 2
: 222 0653 3 if (.object_fab[fab$w_ifi] nequ 0) then (
: 223 0654 3     status = $close(fab=object_fab);
: 224 0655 3     check (.status, anlobj$_closein,1,resultant_spec,.status,.object_fab[fab$l_stv]);
: 225 0656 2 );

```

```

227 0657 2 ! We have obtained a wildcard spec from the file parameter, and any associated
228 0658 2 ! positional qualifiers.
229 0659 2
230 0660 2 ! Now we have to see if we need to find the next file that matches the
231 0661 2 ! current file spec. This is always the case if it's not an object library.
232 0662 2 ! If it is, then we must search if this is the first time or we finished
233 0663 2 ! with the previous library.
234 0664 2
235 0665 2 if not .object_library or
236 0666 3 (.object_library and .module_list_index eql -1) then (
237 0667 3     resultant_spec[len] = nam$c_maxrss;
238 0668 3     status = lib$find_file(wildcard_spec,resultant_spec,wildcard_context,
239 0669 3         (if .object_library then describe('.0[B'] else describe('.OBJ')),
240 0670 3         0, stv, %ref(2) );
241 0671 3     str$trim(resultant_spec,resultant_spec,resultant_spec);
242 0672 3
243 0673 3     ! If we failed to find a file, then free up the module list, reset
244 0674 3     ! the wildcard context, and call ourselves recursively to do the
245 0675 3     ! next file spec. Also give an error, unless we just plain ran
246 0676 3     ! out of files.
247 0677 3
248 0678 4     if not .status then (
249 0679 4         if .status nequ rms$ nmf then
250 0680 4             signal (anobj$openin,1,resultant_spec,.stv);
251 0681 4             status = lib$free_vm(%ref(1000*obj$c_symsiz),module_list);
252 0682 4             check (.status, .status);
253 0683 4             get_new_spec = true;
254 0684 4             return anl$open_next_object_file(opened_spec_dsc);
255 0685 3     );
256 0686 3
257 0687 3     ! Hey, we got a file spec. Open the library or file, as appropriate.
258 0688 3
259 0689 3     get_new_spec = false;
260 0690 4     if .object_library then (
261 0691 4         status = lbr$ini_control(library_index,%ref(lbr$c_read),%ref(lbr$c_typ_obj)),
262 0692 4         check (.status, .status);
263 0693 4         status = lbr$open(library_index,resultant_spec ;
264 0694 4         check (.status, anobj$openin,1,resultant_spec,.status);
265 0695 4     ) else (
266 0696 4         object_fab[fab$b_fns] = .resultant_spec[len];
267 0697 4         object_fab[fab$l_fna] = .resultant_spec[ptr];
268 0698 4         status = $open(fab=object_fab);
269 0699 4         check (.status, anobj$openin,1,resultant_spec,.status,.object_fab[fab$l_stv]);
270 0700 5         if .status then (
271 0701 5             status = $connect(rab=object_rab);
272 0702 5             check (.status, anobj$openin,1,resultant_spec,.status,.object_rab[rab$l_stv]);
273 0703 4         );
274 0704 3     );
275 0705 3
276 0706 3     ! If the open failed, then we need to recurse to try the next file.
277 0707 3
278 0708 3     if not .status then
279 0709 3         return anl$open_next_object_file(opened_spec_dsc);
280 0710 3
281 0711 3     ! If this is an object library, it may be the case that our call
282 0712 3     ! to ANL$OBJECT_INCLUDE told us that the user wanted all modules.
283 0713 3     ! If so, let's ask the librarian for them; it will call ADD_MODULE_

```

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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

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```
: 284      0714 3      ! TO_LIST for each one.
: 285      0715 3
: 286      0716 4      if .object_library and .all_modules then (
: 287      0717 4          module_list_size = 0;
: 288      0718 4          status = lbr$get_index(library_index, %ref(1), add_module_to_list);
: 289      0719 4          check (.status, .status);
: 290      0720 3      );
: 291      0721 2 );
```

```

: 293 0722 2 ! We know that we have a good file opened.
: 294 0723 2
: 295 0724 2 ! OK, now we may be processing an object library. If so, we have to
: 296 0725 2 ! get the next module name out of the module list and prepare to read it.
: 297 0726 2
: 298 0727 3 if .object_library then (
: 299 0728 3     local
: 300 0729 3         module_name_dsc: descriptor,
: 301 0730 3         module_text_rfa: block[B,byte];
: 302 0731 3
: 303 0732 3     increment (module_list_index);
: 304 0733 3
: 305 0734 3     ! If we are at the end of the list, then call ourselves recursively
: 306 0735 3     ! to process the next file matching the current spec. But first we
: 307 0736 3     ! must close the library we just finished.
: 308 0737 3
: 309 0738 4     if .module_list_index eqlu .module_list_size then (
: 310 0739 4         status = lbr$close(library_index);
: 311 0740 4         check (.status, anlobj$closein, 1, resultant_spec, .status);
: 312 0741 4         module_list_index = -1;
: 313 0742 4         return anl$open_next_object_file(opened_spec_dsc);
: 314 0743 3     );
: 315 0744 3
: 316 0745 3     ! Prepare to read the next module. If it isn't in the library,
: 317 0746 3     ! recurse to try the next one.
: 318 0747 3
: 319 0748 3     module_name_dsc[0,0,32,0] = obj$c_symsiz;
: 320 0749 3     module_name_dsc[ptr] = module_list[.module_list_index,0,0,0,0];
: 321 0750 3     str$trim(module_name_dsc, module_name_dsc, module_name_dsc);
: 322 0751 3     status = lbr$lookup_key(library_index, module_name_dsc, module_text_rfa);
: 323 0752 4     if not .status then (
: 324 0753 4         check (.status, anlobj$nosuchmod, 2, resultant_spec, module_name_dsc);
: 325 0754 4         return anl$open_next_object_file(opened_spec_dsc);
: 326 0755 3     );
: 327 0756 2 );
: 328 0757 2
: 329 0758 2 ! Finally, we have to build the real resultant file spec. If we're not
: 330 0759 2 ! doing an object library, then we already have it. If we are, we have
: 331 0760 2 ! to append the module name. In all cases, trim trailing blanks.
: 332 0761 2
: 333 0762 2 str$trim(opened_spec_dsc, resultant_spec, opened_spec_dsc);
: 334 0763 3 if .object_library then (
: 335 0764 3     ch$copy(1, uplit byte(' '), obj$c_symsiz, module_list[.module_list_index,0,0,0,0],
: 336 0765 3     ' ', obj$c_symsiz+1, .opened_spec_dsc[ptr]+.opened_spec_dsc[len]);
: 337 0766 3     opened_spec_dsc[len] = .opened_spec_dsc[len] + obj$c_symsiz+1;
: 338 0767 3     str$trim(opened_spec_dsc, opened_spec_dsc, opened_spec_dsc);
: 339 0768 2 );
: 340 0769 2
: 341 0770 2 return true;
: 342 0771 2
: 343 0772 1 end;

```

.PSECT \$SPLITS, NOWRT, NOEXE, 2

73 63 65 70 73 5F 65 6C 69 66 0000 P.AAB: .ASCII \file_specs\

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OBJINPUT
V04-GCO

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

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			52	DD	000A8		PUSHL	STATUS	
			59	DD	000AA		PUSHL	R9	
			01	DD	000AC		PUSHL	#1	
		00B11052	8F	DD	000AE		PUSHL	#11604050	
	6A		05	FB	000B4		CALLS	#5, LIB\$SIGNAL	
	50	0107	C9	9A	000B7	4\$:	MOVZBL	OBJECT_LIBRARY, R0	0665
	0E		50	E9	000BC		BLBC	R0, 5\$	
FFFFFFF	8F	OAC0	C9	D1	000BF		CMPL	MODULE_LIST_INDEX, #-1	0666
			03	13	000C8		BEQL	5\$	
			015A	31	000CA		BRW	16\$	
	69	FF	8F	9B	000CD	5\$:	MOVZBW	#255, RESULTANT_SPEC	0667
04	AE		02	D0	000D1		MOVL	#2, 4(SP)	0670
		04	AE	9F	000D5		PUSHAB	4(SP)	
		0C	AE	9F	000D8		PUSHAB	STV	0668
			7E	D4	000DB		CLRL	-(SP)	
	07		50	E9	000DD		BLBC	R0, 6\$	0669
	50	0000'	CF	9E	000E0		MOVAB	P.AAC, R0	
			05	11	000E5		BRB	7\$	
	50	0000'	CF	9E	000E7	6\$:	MOVAB	P.AAE, R0	
			50	DD	000EC	7\$:	PUSHL	R0	
		0AB0	C9	9F	000EE		PUSHAB	WILDCARD_CONTEXT	0668
			59	DD	000F2		PUSHL	R9	
		09AB	C9	9F	000F4		PUSHAB	WILDCARD_SPEC	
00000000G	00		07	FB	000F8		CALLS	#7, LIB\$FIND_FILE	
	52		50	D0	000FF		MOVL	R0, STATUS	
			59	DD	00102		PUSHL	R9	0671
			59	DD	00104		PUSHL	R9	
			59	DD	00106		PUSHL	R9	
	6B		03	FB	00108		CALLS	#3, STR\$TRIM	
	40		52	E8	0010B		BLBS	STATUS, 10\$	0678
000182CA	8F		52	D1	0010E		CMPL	STATUS, #99018	0679
			10	13	00115		BEQL	8\$	
		08	AE	DD	00117		PUSHL	STV	0680
			59	DD	0011A		PUSHL	R9	
			01	DD	0011C		PUSHL	#1	
		00B1109A	8F	DD	0011E		PUSHL	#11604122	
	6A		04	FB	00124		CALLS	#4, LIB\$SIGNAL	
		0AB8	C9	9F	00127	8\$:	PUSHAB	MODULE_LIST	0681
08	AE	7918	8F	3C	0012B		MOVZWL	#31000, 8(SP)	
		08	AE	9F	00131		PUSHAB	8(SP)	
00000000G	00		02	FB	00134		CALLS	#2, LIB\$FREE_VM	
	52		50	D0	0013B		MOVL	R0, STATUS	
	05		52	E8	0013E		BLBS	STATUS, 9\$	0682
			52	DD	00141		PUSHL	STATUS	
	6A		01	FB	00143		CALLS	#1, LIB\$SIGNAL	
0AC4	C9		01	D0	00146	9\$:	MOVL	#1, GET_NEW_SPEC	0683
			0159	31	0014B		BRW	21\$	0684
		0AC4	C9	D4	0014E	10\$:	CLRL	GET_NEW_SPEC	0689
	48	0107	C9	E9	00152		BLBC	OBJECT_LIBRARY, 12\$	0690
04	AE		01	D0	00157		MOVL	#1, 4(SP)	0691
		04	AE	9F	0015B		PUSHAB	4(SP)	
04	AE		01	D0	0015E		MOVL	#1, 4(SP)	
		04	AE	9F	00162		PUSHAB	4(SP)	
		0108	C9	9F	00165		PUSHAB	LIBRARY_INDEX	
00000000G	00		03	FB	00169		CALLS	#3, LIB\$INI_CONTROL	
	52		50	D0	00170		MOVL	R0, STATUS	
	05		52	E8	00173		BLBS	STATUS, 11\$	

			52	DD	00176		PUSHL	STATUS		
	6A		01	FB	00178		CALLS	#1, LIB\$SIGNAL		
			59	DD	0017B	11\$:	PUSHL	R9		0693
		0108	C9	9F	0017D		PUSHAB	LIBRARY INDEX		
00000000G	00		02	FB	00181		CALLS	#2, LBR\$OPEN		
	52		50	D0	00188		MOVL	R0, STATUS		
	6A		52	E8	0018B		BLBS	STATUS, 15\$		0694
			52	DD	0018E		PUSHL	STATUS		
			59	DD	00190		PUSHL	R9		
		00B1109A	01	DD	00192		PUSHL	#1		
	6A		8F	DD	00194		PUSHL	#11604122		
			04	FB	0019A		CALLS	#4, LIB\$SIGNAL		
			56	11	0019D		BRB	14\$		0690
0140	C9		69	90	0019F	12\$:	MOVB	RESULTANT_SPEC, OBJECT_FAB+52		0696
0138	C9	04	A9	D0	001A4		MOVL	RESULTANT_SPEC+4, OBJECT_FAB+44		0697
		010C	C9	9F	001AA		PUSHAB	OBJECT_FAB		0698
00000000G	00		01	FB	001AE		CALLS	#1, SY\$OPEN		
	52		50	D0	001B5		MOVL	R0, STATUS		
	16		52	E8	001B8		BLBS	STATUS, 13\$		0699
		0118	C9	DD	001BB		PUSHL	OBJECT_FAB+12		
			52	DD	001BF		PUSHL	STATUS		
			59	DD	001C1		PUSHL	R9		
		00B1109A	01	DD	001C3		PUSHL	#1		
	6A		8F	DD	001C5		PUSHL	#11604122		
	24		05	FB	001CB		CALLS	#5, LIB\$SIGNAL		
		0964	52	E9	001CE		BLBC	STATUS, 14\$		0700
00000000G	00		C9	9F	001D1	13\$:	PUSHAB	OBJECT_RAB		0701
	52		01	FB	001D5		CALLS	#1, SY\$CONNECT		
	16		50	D0	001DC		MOVL	R0, STATUS		
		0970	52	E8	001DF		BLBS	STATUS, 15\$		0702
			C9	DD	001E2		PUSHL	OBJECT_RAB+12		
			52	DD	001E6		PUSHL	STATUS		
			59	DD	001E8		PUSHL	R9		
		00B1109A	01	DD	001EA		PUSHL	#1		
	6A		8F	DD	001EC		PUSHL	#11604122		
	69		05	FB	001F2		CALLS	#5, LIB\$SIGNAL		
	2A	0107	52	E9	001F5	14\$:	BLBC	STATUS, 19\$		0708
	25	OAB4	C9	E9	001F8	15\$:	BLBC	OBJECT_LIBRARY, 16\$		0716
		OABC	C9	E9	001FD		BLBC	ALL MODULES, 16\$		
		FDD8	C9	D4	00202		CLRL	MODULE_LIST_SIZE		0717
	08	AE	CF	9F	00206		PUSHAB	ADD_MODULE_TO_LIST		0718
		08	01	D0	0020A		MOVL	#1, 8(SP)		
		0108	AE	9F	0020E		PUSHAB	8(SP)		
00000000G	00		C9	9F	00211		PUSHAB	LIBRARY INDEX		
	52		03	FB	00215		CALLS	#3, LBR\$GET_INDEX		
	05		50	D0	0021C		MOVL	R0, STATUS		
			52	E8	0021F		BLBS	STATUS, 16\$		0719
			52	DD	00222		PUSHL	STATUS		
	6A		01	FB	00224		CALLS	#1, LIB\$SIGNAL		
	03	0107	C9	E8	00227	16\$:	BLBS	OBJECT_LIBRARY, 17\$		0727
		OACO	0080	31	0022C		BRW	22\$		
		OACO	C9	D6	0022F	17\$:	INCL	MODULE_LIST_INDEX		0732
OABC	C9	OACO	C9	D1	00233		CMPL	MODULE_LIST_INDEX, MODULE_LIST_SIZE		0738
			27	12	0023A		BNEQ	20\$		
00000000G	00	0108	C9	9F	0023C		PUSHAB	LIBRARY INDEX		0739
	52		01	FB	00240		CALLS	#1, LBR\$CLOSE		
			50	D0	00247		MOVL	R0, STATUS		

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V04-000

OBJINPUT - Handle Object Files & Libraries
ANLSOPEN_NEXT_OBJECT_FILE - Right

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		OF		52	E8	0024A		BLBS	STATUS, 18\$		0740
				52	DD	0024D		PUSHL	STATUS		
				59	DD	0024F		PUSHL	R9		
				01	DD	00251		PUSHL	#1		
		00B11052		8F	DD	00253		PUSHL	#11604050		
	6A			04	FB	00259		CALLS	#4, LIB\$SIGNAL		
	OACO	C9		01	CE	0025C	18\$:	MNEGL	#1, MODULE_LIST_INDEX		0741
				44	11	00261	19\$:	BRB	21\$		0742
	14	AE		1F	DO	00263	20\$:	MOVL	#31, MODULE_NAME_DSC		0748
50	OACO	C9		1F	C5	00267		MULL3	#31, MODULE_LIST_INDEX, R0		0749
	18	AE	0A88	D940	9E	0026D		MOVAB	@MODULE_LIST[R0], MODULE_NAME_DSC+4		
			14	AE	9F	00274		PUSHAB	MODULE_NAME_DSC		0750
			8	AE	9F	00277		PUSHAB	MODULE_NAME_DSC		
			1C	AE	9F	0027A		PUSHAB	MODULE_NAME_DSC		
		6B		03	FB	0027D		CALLS	#3, STR\$TRIM		
			0C	AE	9F	00280		PUSHAB	MODULE_TEXT_RFA		0751
			18	AE	9F	00283		PUSHAB	MODULE_NAME_DSC		
			0108	C9	9F	00286		PUSHAB	LIBRARY_INDEX		
	00000000G	00		03	FB	0028A		CALLS	#3, LBR\$LOOKUP_KEY		
		52		50	DO	00291		MOVL	R0, STATUS		
		18		52	E8	00294		BLBS	STATUS, 22\$		0752
			14	AE	9F	00297		PUSHAB	MODULE_NAME_DSC		0753
				59	DD	0029A		PUSHL	R9		
				02	DD	0029C		PUSHL	#2		
			00000000G	8F	DD	0029E		PUSHL	#ANLOBJ\$ NOSUCHMOD		
	6A			04	FB	002A4		CALLS	#4, LIB\$SIGNAL		
				57	DN	002A7	21\$:	PUSHL	R7		0754
	FD52	CF		01	FB	002A9		CALLS	#1, ANLSOPEN_NEXT_OBJECT_FILE		
				04	002AE			RET			
				57	DD	002AF	22\$:	PUSHL	R7		0762
			0280	8F	BB	002B1		PUSHR	#*M<R7,R9>		
				03	FB	002B5		CALLS	#3, STR\$TRIM		
			0107	C9	E9	002B8		BLBC	OBJECT_LIBRARY, 23\$		0763
	56	OACO		1F	C5	002BD		MULL3	#31, MODULE_LIST_INDEX, R6		0764
				67	3C	002C3		MOVZ'L	(R7), R8		0765
			04	A7	C0	002C6		ADDL2	4(R7), R8		
	68	0000'		01	28	002CA		MOV3	#1, P.AAG, (R8)		
63	OAB8	D946		1F	28	002D0		MOV3	#31, @MODULE_LIST[R6], (R3)		
				20	A0	002D7		ADDW2	#32, (R7)		0766
				57	DD	002DA		PUSHL	R7		0767
				57	DD	002DC		PUSHL	R7		
				57	DD	002DE		PUSHL	R7		
			6B	03	FB	002E0		CALLS	#3, STR\$TRIM		
			50	01	DO	002E3	23\$:	MOVL	#1, R0		0770
				04	002E6			RET			
				50	D4	002E7	24\$:	CLRL	R0		0772
				04	002E9			RET			

; Routine Size: 746 bytes, Routine Base: \$CODE\$ + 001E

```

: 345 0773 1 %sbttl 'ANL$OBJECT_INCLUDE - Process a /INCLUDE Qualifier'
: 346 0774 1 **
: 347 0775 1 : Functional Description:
: 348 0776 1 : This routine is called to process the /INCLUDE qualifier that
: 349 0777 1 : might be attached to a file spec. We need to return a list of
: 350 0778 1 : the module names in the qualifier.
: 351 0779 1
: 352 0780 1 : Formal Parameters:
: 353 0781 1 : all Address of a byte to set if the user wants all
: 354 0782 1 : modules analyzed.
: 355 0783 1 : list_size Address of a longword in which we return the size
: 356 0784 1 : of the module list.
: 357 0785 1 : list Address of a vector of blocks in which we
: 358 0786 1 : place the list.
: 359 0787 1
: 360 0788 1 : Implicit Inputs:
: 361 0789 1 : global data
: 362 0790 1
: 363 0791 1 : Implicit Outputs:
: 364 0792 1 : global data
: 365 0793 1
: 366 0794 1 : Returned Value:
: 367 0795 1 : True if there is a /INCLUDE qualifier, false if not.
: 368 0796 1
: 369 0797 1 : Side Effects:
: 370 0798 1
: 371 0799 1 :--
: 372 0800 1
: 373 0801 1
: 374 0802 2 global routine anl$object_include(all,list_size,list) = begin
: 375 0803 2
: 376 0804 2 bind
: 377 0805 2 all_modules = .all: byte,
: 378 0806 2 module_list_size = .list_size: long,
: 379 0807 2 module_list = .list: blockvector[,obj$c_symsiz,byte];
: 380 0808 2
: 381 0809 2 local
: 382 0810 2 status: long;
: 383 0811 2 local
: 384 0812 2 local_described_buffer(module_name,obj$c_symsiz);
: 385 0813 2
: 386 0814 2
: 387 0815 2 ! Try to get the first module name. If there is no qualifier, then
: 388 0816 2 ! just return false.
: 389 0817 2
: 390 0818 2 status = cli$get_value(describe('include'),module_name);
: 391 0819 2 if not .status then
: 392 0820 2 return false;
: 393 0821 2
: 394 0822 2 ! If the first name is an asterisk, then the user wants all modules.
: 395 0823 2
: 396 0824 3 if ch$eq1(.module_name[len],.module_name[ptr], 1,uplit byte('*'),' ') then (
: 397 0825 3 all_modules = true;
: 398 0826 3 return true;
: 399 0827 2 ) else
: 400 0828 2 all_modules = false;
: 401 0829 2

```

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```

0830 2 ! Now we loop for each module name and add it to the list.
0831 2
0832 2 module_list_size = 0;
0833 3 do (
0834 3     ch$move(obj$c_symsiz,.module_name[ptr], module_list[.module_list_ -*,0,0,0,0]);
0835 3     increment (module_list_size);
0836 3     status = cli$get_value( describe('include'), module_name);
0837 2 ) until not .status;
0838 2
0839 2 return true;
0840 2
0841 1 end;

```

.PSECT \$SPLITS,NOWRT,NOEXE,2

```

65 64 75 6C 63 6E 69 0002D P.AAI: .ASCII \include\
00000007 00034 P.AAH: .LONG 7
00000000' 00038 .ADDRESS P.AAI
2A 0003C P.AAJ: .ASCII *\
65 64 75 6C 63 6E 69 0003D P.AAL: .ASCII \include\
00000007 00044 P.AAK: .LONG 7
00000000' 00048 .ADDRESS P.AAL

```

.PSECT \$CODE\$,NOWRT,2

```

00FC 00000 .ENTRY ANL$OBJECT_INCLUDE, Save R2,R3,R4,R5,R6,R7 : 0802
57 00000000G 00 9E 00002 MOVAB CLISGET_VALUE, R7
5E 24 C2 00009 SUBL2 #36, SP
1F DD 0000C PUSHL #31 : 0812
04 AE 08 AE 9E 0000E MOVAB MODULE_NAME+8, MODULE_NAME+4
5E DD 00013 PUSHL SP : 0818
0000' CF 9F 00015 PUSHAB P.AAH
67 02 FB 00019 CALLS #2, CLISGET_VALUE
56 50 D0 0001C MOVL R0, STATUS
39 56 E9 0001F BLBC STATUS, 4$ : 0819
01 20 04 BE 6E 2D 00022 CMPCS MODULE_NAME, @MODULE_NAME+4, #32, #1, P.AAJ : 0824
0000' CF 00028
04 BC 06 12 0002B BNEQ 1$
01 90 0002D MOVAB #1, @ALL : 0825
24 11 00031 BRB 3$ : 0826
04 BC 94 00033 1$: CLRB @ALL : 0828
08 BC D4 00036 CLRL @LIST_SIZE : 0832
50 08 BC 1F C5 00039 2$: MULL3 #31, @LIST_SIZE, R0 : 0834
OC BC40 04 BE 1F 28 0003E MOVCS #31, @MODULE_NAME+4, @LIST[R0]
08 BC D6 00045 INCL @LIST_SIZE : 0835
5E DD 00048 PUSHL SP : 0836
0000' CF 9F 0004A PUSHAB P.AAK
67 02 FB 0004E CALLS #2, CLISGET_VALUE
56 50 D0 00051 MOVL R0, STATUS
E2 56 E8 00054 BLBS STATUS, 2$ : 0837
50 01 D0 00057 3$: MOVL #1, R0 : 0839
04 0005A RET
50 D4 0005B 4$: CLRL R0 : 0841

```

OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANL\$OBJECT_INCLUDE - Process a /INCLUDE Quali

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14-Sep-1984 11:52:53

VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32;1

04 0005D RET

; Routine Size: 94 bytes, Routine Base: \$CODE\$ + 0308

OBJINPUT
V04-000OBJINPUT - Handle Object Files & Libraries
ANL\$GET_OBJECT_RECORD - Read Record from Object

L 16

15-Sep-1984 23:41:35
14-Sep-1984 11:52:53VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32:1

```

: 415 0842 1 %sbttl 'ANL$GET_OBJECT_RECORD - Read Record from Object File'
: 416 0843 1 **
: 417 0844 1 : Functional Description:
: 418 0845 1 :   This routine is called to read the next record from the current
: 419 0846 1 :   object file, which is assumed to be open.
: 420 0847 1 :
: 421 0848 1 : Formal Parameters:
: 422 0849 1 :   buffer          Address of a descriptor to fill in.
: 423 0850 1 :
: 424 0851 1 : Implicit Inputs:
: 425 0852 1 :   global data
: 426 0853 1 :
: 427 0854 1 : Implicit Outputs:
: 428 0855 1 :   global data
: 429 0856 1 :
: 430 0857 1 : Returned Value:
: 431 0858 1 :   True if there is another record, false if not.
: 432 0859 1 :
: 433 0860 1 : Side Effects:
: 434 0861 1 :
: 435 0862 1 :--
: 436 0863 1 :
: 437 0864 1 :
: 438 0865 2 global routine anl$get_object_record(buffer) = begin
: 439 0866 2
: 440 0867 2 bind
: 441 0868 2     buffer_dsc = .buffer: descriptor;
: 442 0869 2
: 443 0870 2 local
: 444 0871 2     status: long;
: 445 0872 2
: 446 0873 2 : We split up depending upon whether it's an object library.
: 447 0874 2
: 448 0875 3 if .object_library then (
: 449 0876 3     statu = lbr$get_record(library_index,object_buffer,buffer_dsc);
: 450 0877 3     if .status eqlu rms$eof then
: 451 0878 3         return false;
: 452 0879 3     check (.status, anlobj$_readerr,1,resultant_spec,.status);
: 453 0880 3
: 454 0881 3 ) else (
: 455 0882 3
: 456 0883 3     status = $get(rab=object_rab);
: 457 0884 3     if .status eqlu rms$eof then
: 458 0885 3         return false;
: 459 0886 3     check (.status, anlobj$_readerr,1,resultant_spec,.status,.object_rab[rab$l_stv]);
: 460 0887 3     build_descriptor(buffer_dsc,.object_rab[rab$w_rsz],.object_rab[rab$l_rbf]);
: 461 0888 2 );
: 462 0889 2
: 463 0890 2 return true;
: 464 0891 2
: 465 0892 1 end;

```

.EXTRN SYSS\$GET

000C 00000

.ENTRY ANL\$GET_OBJECT_RECORD, Save R2,R3

: 086f

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6)
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OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANL\$GET_OBJECT_RECORD - Read Record from Object

M 16
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VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32;1

53	00000000G	00	9E	00002	MOVAB	LIB\$SIGNAL, R3	
52	04	AC	D0	00009	MOVL	BUFFER, R2	
30	0000'	CF	E9	0000D	BLBC	OBJECT_LIBRARY, 1\$	0868
			52	DD	PUSHL	R2	0875
	0000'	CF	9F	00014	PUSHAB	OBJECT_BUFFER	0876
	0000'	CF	9F	00018	PUSHAB	LIBRARY_INDEX	
00000000G	00	03	FB	0001C	CALLS	#3, LBR\$GET_RECORD	
0001827A	8F	50	D1	00023	CMPL	STATUS, #98938	0877
			51	13	BEQL	4\$	
	4A	50	E8	0002C	BLBS	STATUS, 3\$	0879
			50	DD	PUSHL	STATJS	
	0000'	CF	9F	00031	PUSHAB	RESULTANT_SPEC	
			01	DD	PUSHL	#1	
	00B110B2	8F	DD	00037	PUSHL	#11604146	
			04	FB	CALLS	#4, LIB\$SIGNAL	
			37	11	BRB	3\$	0875
	0000'	CF	9F	00042	PUSHAB	OBJECT_RAB	0883
00000000G	00	01	FB	00046	CALLS	#1, SYS\$GET	
0001827A	8F	50	D1	0004D	CMPL	STATUS, #98938	0884
			27	13	BEQL	4\$	
	15	50	E8	00056	BLBS	STATUS, 2\$	0886
	0000'	CF	DD	00059	PUSHL	OBJECT_RAB+12	
			50	DD	PUSHL	STATUS	
	0000'	CF	9F	0005F	PUSHAB	RESULTANT_SPEC	
			01	DD	PUSHL	#1	
	00B110B2	8F	DD	00065	PUSHL	#11604146	
			05	FB	CALLS	#5, LIB\$SIGNAL	
	63	0000'	CF	3C	MOVZWL	OBJECT_RAB+34, (R2)	0887
	62	0000'	CF	D0	MOVL	OBJECT_RAB+40, 4(R2)	
04	A2		01	D0	MOVL	#1, R0	0890
	50			04	RET		
			50	D4	CLRL	R0	0892
			04	0007F	RET		

; Routine Size: 128 bytes, Routine Base: \$CODE\$ + 0366

; 466 0893 1
; 467 0894 0 end eludom

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	2760	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	998	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$SPLITS	76	NOVEC, NOWRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

OBJINPUT
V04-000

OBJINPUT - Handle Object Files & Libraries
ANL\$GET_OBJECT_RECORD - Read Record from Object

B 1
15-Sep-1984 23:41:35
14-Sep-1984 11:52:53

VAX-11 Bliss-32 V4.0-742
[ANALYZ.SRC]OBJINPUT.B32;1

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File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
:_\$255\$DUA2B:[SYSLIB]STARLET.L32;1	9776	54	0	581	00:0'.0

COMMAND QUALIFIERS

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

: Size: 998 code + 2836 data bytes
: Run Time: 00:19.8
: Elapsed Time: 00:57.9
: Lines/CPU Min: 2706
: Lexemes/CPU-Min: 20240
: Memory Used: 268 pages
: Compilation Complete

0006 AH-BT13A-SE
VAX/VMS V4.0

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0007 AH-BT13A-SE
VAX/VMS V4.0

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OB MISC
LIS

RMS21DX
LIS

RMS31DX
LIS

RMS
LIS

OB TTR
LIS