

AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZ
AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZ
AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAAAAAA	NNN	NNNNNN	AAAAAAA	LLL	YYY	YYY	ZZZ
AAAAAAA	NNN	NNNNNN	AAAAAAA	LLL	YYY	YYY	ZZZ
AAAAAAA	NNN	NNNNNN	AAAAAAA	LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLL	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN AAA	AAA LLLL	YYY	ZZZZZZZZZZZZZ	
AAA	AAA	NNN	NNN AAA	AAA LLLL	YYY	ZZZZZZZZZZZZZ	
AAA	AAA	NNN	NNN AAA	AAA LLLL	YYY	ZZZZZZZZZZZZZ	



```
1 0001 0 %title 'OBJEOUT - Handle Report Output'
2 0002 0 module objeout(
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
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11 0011 1 *
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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 Report Output
32 0032 1
33 0033 1 Abstract: This module is responsible for generating report output
34 0034 1 for ANALYZE/OBJECT and ANALYZE/IMAGE. It provides the
35 0035 1 capability to create report files and fill them with
36 0036 1 output lines.
37 0037 1
38 0038 1
39 0039 1 Environment:
40 0040 1
41 0041 1 Author: Paul C. Anagnostopoulos, Creation Date: 8 January 1981
42 0042 1
43 0043 1 Modified By:
44 0044 1
45 0045 1 V03-005 DGB0067 Donald G. Blair 03-Jul-1984
46 0046 1 Support the /NOOUTPUT qualifier.
47 0047 1
48 0048 1 V03-004 DGB0053 Donald G. Blair 10-May-1984
49 0049 1 When an error occurs, save the error status so
50 0050 1 we can return it correctly at image exit.
51 0051 1
52 0052 1 V03-003 PCA1011 Paul C. Anagnostopoulos 1-Apr-1983
53 0053 1 Change the message prefix to ANLOBJS$ to ensure that
54 0054 1 message symbols are unique across all ANALYZEs. This
55 0055 1 is necessitated by the new merged message files.
56 0056 1
57 0057 1 V03-002 PCA0021 Paul Anagnostopoulos 24-Mar-1982
```

OBJEOUT  
V04-000

OBJEOUT - Handle Report Output

15-Sep-1984 23:36:57  
14-Sep-1984 11:52:52  
VAX-11 Bliss-32 v4.0-762  
[ANALYZ.SRC]OBJEOUT.B32;1

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: 58 0058 1 |  
: 59 0059 1 |  
: 60 0060 1 |  
: 61 0061 1 |  
: 62 0062 1 |--

Signal errors using the correct STV values.  
V03-001 PCA0015 Paul Anagnostopoulos 22-Mar-1982  
Don't constrain report file lines to 132 characters.

```
: 64      0063 1 %sbtll '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 'objexecreq';  
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$prepare_report_file: novalue,  
78      0512 1     anl$report_page: novalue,  
79      0513 1     anl$report_line: novalue,  
80      0514 1     anl$exit_with_status: novalue,  
81      0515 1     anl$format_line: novalue,  
82      0516 1     anl$format_error: novalue,  
83      0517 1     anl$error_count: novalue,  
84      0518 1     anl$format_hex: novalue,  
85      0519 1     anl$format_flags: novalue,  
86      0520 1     anl$format_data_type: novalue,  
87      0521 1     anl$format_mask: novalue,  
88      0522 1     anl$format_protection: novalue,  
89      0523 1     anl$format_severity: novalue,  
90      0524 1     anl$interact;  
91      0525 1 :  
92      0526 1 :  
93      0527 1 : External References:  
94      0528 1 :  
95      0529 1 :  
96      0530 1 external routine  
97      0531 1     cli$get_value: addressing_mode(general),  
98      0532 1     lib$get_input: addressing_mode(general),  
99      0533 1     lib$lp_lines: addressing_mode(general),  
100     0534 1     cli$present: addressing_mode(general),  
101     0535 1     str$trim: addressing_mode(general);  
102     0536 1 :  
103     0537 1 external  
104     0538 1     anl$gb_interactive: byte;  
105     0539 1 :  
106     0540 1 : Global Variables  
107     0541 1 :  
108     0542 1 :  
109     0543 1 :  
110     0544 1 global  
111     0545 1     anl$worst_error:           ! This contains either success status, or  
112     0546 1     initial(anlobj$ok);   ! if errors occur it contains the first error  
113     0547 1                           ! of the worst severity that occurred.  
114     0548 1                           ! This status is returned at image exit.  
115     0549 1 :  
116     0550 1 :  
117     0551 1 : Own Variables:  
118     0552 1 :  
119     0553 1 : The following data structures are needed to create and print to the  
120     0554 1 : report file. They include the FAB and RAB, and a buffer for the report
```

```
121      0555 1 : spec.  
122      0556 1  
123      0557 1 own  
124      0558 1     own_described_buffer(report_spec,nam$c_maxrss),  
125      0559 1  
126      P 0560 1     report_fab: $fab(dnm='ANALYZE.ANL',  
127      P 0561 1           fac=put,  
128      P 0562 1           fna=report_spec+8,  
129      P 0563 1           fns=nam$c_maxrss,  
130      P 0564 1           top=sq0,  
131      P 0565 1           org=seq,  
132      P 0566 1           rat=cr,  
133      0567 1           rfm=var),  
134      0568 1  
135      P 0569 1     report_rab: $rab(fab=report_fab,  
136      0570 1           rac=seq);  
137      0571 1  
138      0572 1 : The following variables are needed to format the report.  
139      0573 1  
140      0574 1 own  
141      0575 1     generating_report,  
142      0576 1     own_described_buffer(input_file_spec,nam$c_maxrss),  
143      0577 1     report_heading$msg: long,  
144      0578 1     page_number: long,  
145      0579 1     line_counter: signed long;  
146      0580 1  
147      0581 1 : We also need to keep track of how many errors were reported.  
148      0582 1  
149      0583 1 own  
150      0584 1     error_count: long initial(0);
```

```
152      0585 1  $sbttl 'ANL$PREPARE_REPORT_FILE - Prepare Report File'
153      0586 1  ++
154      0587 1  Functional Description:
155      0588 1  This routine is called whenever we begin the analysis of a new
156      0589 1  file. It sets up a report file to receive the analysis.
157      0590 1
158      0591 1  Formal Parameters:
159      0592 1  output_spec   The report file spec as specified by the user.
160      0593 1  This is used on the first call to create the file.
161      0594 1  input_spec    The spec of the input file we are analyzing.
162      0595 1  heading_msg   An optional message code specifying the report
163      0596 1  page heading.
164      0597 1
165      0598 1  Implicit Inputs:
166      0599 1  global data
167      0600 1
168      0601 1  Implicit Outputs:
169      0602 1  global data
170      0603 1
171      0604 1  Returned Value:
172      0605 1  none
173      0606 1
174      0607 1  Side Effects:
175      0608 1
176      0609 1  --
177      0610 1
178      0611 1
179      0612 2  global routine anl$prepare_report_file(output_spec,input_spec,heading_msg): novalue = begin
180      0613 2
181      0614 2  bind
182      0615 2  output_spec_dsc = .output_spec: descriptor,
183      0616 2  input_spec_dsc = .input_spec: descriptor;
184      0617 2
185      0618 2  local
186      0619 2  status: long;
187      0620 2
188      0621 2  builtin
189      0622 2  nullparameter;
190      0623 2
191      0624 2
192      0625 2  ! Are we generating a report?
193      0626 2
194      0627 2  generating_report = cli$present(describe('OUTPUT'));
195      0628 2
196      0629 2  ! If the report file is not open, then we want to create it and prepare
197      0630 2  ! for the report.
198      0631 2
199      0632 3  if (.report_rab[rab$w_isi] eqiu 0) and .generating_report then (
200      0633 3
201      0634 3  ! Save the output file spec as the principal name of the report file.
202      0635 3
203      0636 3  ch$copy(,output_spec_dsc[len],.output_spec_dsc[ptr],
204      0637 3  ,.report_spec[len],.report_spec[ptr]);
205      0638 3  str$trim(report_spec,report_spec,report_spec);
206      0639 3
207      0640 3  ! Now let's create the report file and connect it.
208      0641 3
```

```

: 209      0642 3     status = $create(tab=report_fab);
: 210      0643 3     check (.status, anlobj$openout,1,report_spec,,status,,report_fab[tab$1_stv]);
: 211      0644 3     status = $connect(rab=report_rab);
: 212      0645 3     check (.status, .status);
: 213      0646 2   );
: 214      0647 2   ! Now let's save the report heading message and the input file spec for
: 215      0648 2   ! a subheading.
: 216      0649 2
: 217      0650 2   report_heading_msg = .heading_msg;
: 218      0651 2   input_file_spec[len] = .input_spec_dsc[len];
: 219      0652 2   ch$copy(.input_spec_dsc[len],.input_spec_dsc[ptr],
: 220      0653 2   ;..input_file_spec[len],.input_file_spec[ptr]);
: 221      0654 2
: 222      0655 2   ! Now reset the page counter and start a new page.
: 223      0656 2
: 224      0657 2   page_number = 0;
: 225      0658 2   anl$report_page();
: 226      0659 2
: 227      0660 2   return;
: 228      0661 2
: 229      0662 2
: 230      0663 1 end;

```

.TITLE OBJEDEXOUT OBJEDEXOUT - Handle Report Output  
.IDENT \V04-000\

.PSECT SPLITS,NOWRT,NOEXE,2

4C 4E 41 2E 65 5A 59 4C 41 4E 41 00000 P.AAA:	.ASCII \ANALYZE.ANL\
54 55 50 54 55 4F 0000B P.AAC:	.ASCII \OUTPUT\
00000006 00014 P.AAB:	.BLKB 3
00000000 00018	.LONG 6
	.ADDRESS P.AAC

.PSECT SOWNS,NOEXE,2

000000FF 00000 REPORT_SPEC:	.LONG 255
00000000 00004	.ADDRESS REPORT_SPEC+8
00008	.BLKB 255
00107	.BLKB 1
03 00108 REPORT_FAB:	
50 00109	.BYTE 3
0000 0010A	.WORD 80
00000040 0010C	.LONG 64
00000000 00110	.LONG C
00000000 00114	.LONG 0
00000000 00118	.LONG 0
0000 0011C	.WORD 0
01 0011E	.BYTE 1
00 0011F	.BYTE 0
00000000 00120	.LONG 0
00 00124	.BYTE 0
00 00125	.BYTE 0
02 00126	.BYTE 2

OBJE~~E~~OUT  
V04-000

OBJE~~E~~OUT - Handle\_Report Output  
ANL\$PREPARE\_REPORT\_FILE - Prepare Report File

N 8  
15-Sep-1984 23:36:57  
14-Sep-1984 11:52:52

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[ANALYZ.SRC]OBJE~~E~~OUT.B32:1

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02 00127 .BYTE 2  
00000000 00128 .LONG 0  
00000000 0012C .LONG 0  
00000000 00130 .LONG 0  
00000000 00134 .ADDRESS REPORT\_SPEC+8  
00000000 00138 .ADDRESS P.AAA  
FF 0013C .BYTE -1  
0B 0013D .BYTE 11  
0000 0013E .WORD 0  
00000000 00140 .LONG 0  
0000 00144 .WORD 0  
00 00146 .BYTE 0  
00 00147 .BYTE 0  
00000000 00148 .LONG 0  
00000000 0014C .LONG 0  
0000 00150 .WORD 0  
00 00152 .BYTE 0  
00 00153 .BYTE 0  
00000000 00154 .LONG 0  
01 00158 REPORT\_RAB:  
44 00159 .BYTE 1  
0000 0015A .WORD 0  
00000000 0015C .LONG 0  
00000000 00160 .LONG 0  
00000000 00164 .LONG 0  
0000 00168 .WORD 0[3]  
0000 0016E .WORD 0  
00000000 00170 .LONG 0  
0000 00174 .WORD 0  
00 00176 .BYTE 0  
00 00177 .BYTE 0  
0000 00178 .WORD 0  
0000 0017A .WORD 0  
00000000 0017C .LONG 0  
00000000 00180 .LONG 0  
00000000 00184 .LONG 0  
00000000 00188 .LONG 0  
00 0018C .BYTE 0  
00 0018D .BYTE 0  
00 0018E .BYTE 0  
00 0018F .BYTE 0  
00000000 00190 .LONG 0  
00000000 00194 .ADDRESS REPORT\_FAB  
0000000C 00198 .LONG 0  
0019C GENERATING REPORT:  
000000FF 001A0 INPUT\_FILE\_SPEC:  
00000000 001A4 .LONG 255  
00000000 001A8 .ADDRESS INPUT\_FILE\_SPEC+8  
002A7 .BLKB 1  
002A8 REPORT\_HEADING\_MSG:  
002AC PAGE\_NUMBER:  
002B0 LINE\_COUNTER:

.BLKB 4  
00000000 00284 ERROR\_COUNT:  
.LONG 0  
  
.PSECT \$GLOBALS\$,NOEXE,2  
  
00000000G 00000 ANL\$WORST\_ERROR::  
.LONG ANLOBJS\_OK  
  
.EXTERN ANLOBJS\_OK, ANLOBJS\_ANYTHING  
.EXTERN ANLOBJS\_DATATYPE  
.EXTERN ANLOBJS\_ERRORCOUNT  
.EXTERN ANLOBJS\_ERRORNONE  
.EXTERN ANLOBJS\_ERRORS, ANLOBJS\_EXEFIXA  
.EXTERN ANLOBJS\_EXEFIXAIMAGE  
.EXTERN ANLOBJS\_EXEFIXALINE  
.EXTERN ANLOBJS\_EXEFIXCOUNT  
.EXTERN ANLOBJS\_EXEFIXEXTRA  
.EXTERN ANLOBJS\_EXEFIXFIXED  
.EXTERN ANLOBJS\_EXEFIXFLAGS  
.EXTERN ANLOBJS\_EXEFIXG  
.EXTERN ANLOBJS\_EXEFIXGIMAGE  
.EXTERN ANLOBJS\_EXEFIXGLINE  
.EXTERN ANLOBJS\_EXEFIXLIST  
.EXTERN ANLOBJS\_EXEFIXNAME  
.EXTERN ANLOBJS\_EXEFIXNAMEO  
.EXTERN ANLOBJS\_EXEFIXP  
.EXTERN ANLOBJS\_EXEFIXPSECT  
.EXTERN ANLOBJS\_EXEFIXUP  
.EXTERN ANLOBJS\_EXEFIXUPNONE  
.EXTERN ANLOBJS\_EXEGST, ANLOBJS\_EXEHDR  
.EXTERN ANLOBJS\_EXEHDRACTIVE  
.EXTERN ANLOBJS\_EXEHDRBLKCOUNT  
.EXTERN ANLOBJS\_EXEHDRCHANCOUNT  
.EXTERN ANLOBJS\_EXEHDRCHANDEF  
.EXTERN ANLOBJS\_EXEHDRDECCEO  
.EXTERN ANLOBJS\_EXEHDRDMT  
.EXTERN ANLOBJS\_EXEHDRDST  
.EXTERN ANLOBJS\_EXEHDRFILEID  
.EXTERN ANLOBJS\_EXEHDRFIXED  
.EXTERN ANLOBJS\_EXEHDRFLAGS  
.EXTERN ANLOBJS\_EXEHDRGBLIDENT  
.EXTERN ANLOBJS\_EXEHDRGST  
.EXTERN ANLOBJS\_EXEHDRIDENT  
.EXTERN ANLOBJS\_EXEHDRIMAGEID  
.EXTERN ANLOBJS\_EXEHDRISD  
.EXTERN ANLOBJS\_EXEHDRISDBASE  
.EXTERN ANLOBJS\_EXEHDRISDCOUNT  
.EXTERN ANLOBJS\_EXEHDRISDFLAGS  
.EXTERN ANLOBJS\_EXEHDRISDGBLNAM  
.EXTERN ANLOBJS\_EXEHDRISDNUM  
.EXTERN ANLOBJS\_EXEHDRISDPFCDEF  
.EXTERN ANLOBJS\_EXEHDRISDPFCSIZ  
.EXTERN ANLOBJS\_EXEHDRISDTYPE  
.EXTERN ANLOBJS\_EXEHDRISDVBN  
.EXTERN ANLOBJS\_EXEHDRLINKID  
.EXTERN ANLOBJS\_EXEHDRMATCH

```
.EXTRN ANLOBJS$_EXEHDRNAME
.EXTRN ANLOBJS$_EXEHDRNOPATCH
.EXTRN ANLOBJS$_EXEHDRPAGECOUNT
.EXTRN ANLOBJS$_EXEHDRPAGEDEF
.EXTRN ANLOBJS$_EXEHDRPATCH
.EXTRN ANLOBJS$_EXEHDRPATCHDATE
.EXTRN ANLOBJS$_EXEHDRPRIV
.EXTRN ANLOBJS$_EXEHDRROPATCH
.EXTRN ANLOBJS$_EXEHDRSYMDBG
.EXTRN ANLOBJS$_EXEHDRSYSVER
.EXTRN ANLOBJS$_EXEHDRTEXTVBN
.EXTRN ANLOBJS$_EXEHDRTIME
.EXTRN ANLOBJS$_EXEHDRTYPEEXE
.EXTRN ANLOBJS$_EXEHDRTYPELIM
.EXTRN ANLOBJS$_EXEHDRUSERECO
.EXTRN ANLOBJS$_EXEHDRXFER1
.EXTRN ANLOBJS$_EXEHDRXFER2
.EXTRN ANLOBJS$_EXEHDRXFER3
.EXTRN ANLOBJS$_EXEHEADING
.EXTRN ANLOBJS$_EXEPATCH
.EXTRN ANLOBJS$_FLAG, ANLOBJS$_HEXDATA
.EXTRN ANLOBJS$_HEXHEADING1
.EXTRN ANLOBJS$_HEXHEADING2
.EXTRN ANLOBJS$_INDMSGSEC
.EXTRN ANLOBJS$_INTERACT
.EXTRN ANLOBJS$_MASK, ANLOBJS$_OBJCPREC
.EXTRN ANLOBJS$_OBJDBGREC
.EXTRN ANLOBJS$_OBJENV, ANLOBJS$_OBJEOMFLAGS
.EXTRN ANLOBJS$_OBJEOMREC
.EXTRN ANLOBJS$_OBJEOMSEVABT
.EXTRN ANLOBJS$_OBJEOMSEVERR
.EXTRN ANLOBJS$_OBJEOMSEVIGN
.EXTRN ANLOBJS$_OBJEOMSEVRES
.EXTRN ANLOBJS$_OBJEOMSEVSUC
.EXTRN ANLOBJS$_OBJEOMSEWRN
.EXTRN ANLOBJS$_OBJEOMWREC
.EXTRN ANLOBJS$_OBJFADPASSMECH
.EXTRN ANLOBJS$_OBJGSDENV
.EXTRN ANLOBJS$_OBJGSDENVFLAGS
.EXTRN ANLOBJS$_OBJGSDENVPAR
.EXTRN ANLOBJS$_OBJGSDEPM
.EXTRN ANLOBJS$_OBJGSDEPML
.EXTRN ANLOBJS$_OBJGSDIDC
.EXTRN ANLOBJS$_OBJGSDIDCENT
.EXTRN ANLOBJS$_OBJGSDIDCFLAGS
.EXTRN ANLOBJS$_OBJGSDIDCMATCH
.EXTRN ANLOBJS$_OBJGSDIDCOBJ
.EXTRN ANLOBJS$_OBJGSDIDCVALA
.EXTRN ANLOBJS$_OBJGSDIDCVALB
.EXTRN ANLOBJS$_OBJGSDLEPM
.EXTRN ANLOBJS$_OBJGSDLPRO
.EXTRN ANLOBJS$_OBJGSDLSY
.EXTRN ANLOBJS$_OBJGSDPRO
.EXTRN ANLOBJS$_OBJGSDPROW
.EXTRN ANLOBJS$_OBJGSDPSC
.EXTRN ANLOBJS$_OBJGSDPSCALIGN
```

OBJEXEOUT  
V04-000

OBJEXEOUT - Handle Report Output  
ANL\$PREPARE\_REPORT\_FILE - Prepare Report File

D 9  
15-Sep-1984 23:36:57 VAX-11 Bliss-32 v4.0-742  
14-Sep-1984 11:52:52 [ANALYZ.SRC]OBJEXEOUT.B32;1

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```
.EXTRN ANLOBJS$_OBJGSDPSCALLOC
.EXTRN ANLOBJS$_OBJGSDPSCBASE
.EXTRN ANLOBJS$_OBJGSDFCFLAGS
.EXTRN ANLOBJS$_OBJGSDREC
.EXTRN ANLOBJS$_OBJGSDPSC
.EXTRN ANLOBJS$_OBJGSDSYM
.EXTRN ANLOBJS$_OBJGSDSYMW
.EXTRN ANLOBJS$_OBJGTXREC
.EXTRN ANLOBJS$_OBJHDRIGNREC
.EXTRN ANLOBJS$_OBJHEADING
.EXTRN ANLOBJS$_OBJLITINDEX
.EXTRN ANLOBJS$_OBJLNKREC
.EXTRN ANLOBJS$_OBJLNMREC
.EXTRN ANLOBJS$_OBJMHDCREATE
.EXTRN ANLOBJS$_OBJMHDNAME
.EXTRN ANLOBJS$_OBJMHDPATCH
.EXTRN ANLOBJS$_OBJMHDREC
.EXTRN ANLOBJS$_OBJMHDRECSIZ
.EXTRN ANLOBJS$_OBJMHDSTRLVL
.EXTRN ANLOBJS$_OBJMHDVERSION
.EXTRN ANLOBJS$_OBJMTCCORRECT
.EXTRN ANLOBJS$_OBJMTCINPUT
.EXTRN ANLOBJS$_OBJMTCNAME
.EXTRN ANLOBJS$_OBJMTCREC
.EXTRN ANLOBJS$_OBJMTSEQNUM
.EXTRN ANLOBJS$_OBJMTCUIC
.EXTRN ANLOBJS$_OBJMTCVERSION
.EXTRN ANLOBJS$_OBJMTCHEN
.EXTRN ANLOBJS$_OBJPROARGCOUNT
.EXTRN ANLOBJS$_OBJPROARGNUM
.EXTRN ANLOBJS$_OBJPSECT
.EXTRN ANLOBJS$_OBJSRCREC
.EXTRN ANLOBJS$_OBJSTATHEADING1
.EXTRN ANLOBJS$_OBJSTATHEADING2
.EXTRN ANLOBJS$_OBJSTATLINE
.EXTRN ANLOBJS$_OBJSTATTOTAL
.EXTRN ANLOBJS$_OBJSYMBOL
.EXTRN ANLOBJS$_OBJSYMFLAGS
.EXTRN ANLOBJS$_OBJTIRARGINDEX
.EXTRN ANLOBJS$_OBJTIRCMD
.EXTRN ANLOBJS$_OBJTIRCMDSTK
.EXTRN ANLOBJS$_OBJTBTRREC
.EXTRN ANLOBJS$_OBJTIRREC
.EXTRN ANLOBJS$_OBJTIRSTOIM
.EXTRN ANLOBJS$_OBJTIRFIELD
.EXTRN ANLOBJS$_OBJTTLREC
.EXTRN ANLOBJS$_OBJVALUE
.EXTRN ANLOBJS$_OBJUVALUE
.EXTRN ANLOBJS$_PROTECTION
.EXTRN ANLOBJS$_SEVERITY
.EXTRN ANLOBJS$_TEXT, ANLOBJS$_TEXTHDR
.EXTRN ANLOBJS$_NOSUCHMOD
.EXTRN ANLOBJS$_BADDATE
.EXTRN ANLOBJS$_BADHDRBLKCOUNT
.EXTRN ANLOBJS$_BADSEVERITY
.EXTRN ANLOBJS$_BADSYM1ST
.EXTRN ANLOBJS$_BADSYMCHAR
```

```
.EXTRN ANLOBJS$_BADSYMLEN
.EXTRN ANLOBJS$_EXEBADFIXUPEND
.EXTRN ANLOBJS$_EXEBADFIXUPISD
.EXTRN ANLOBJS$_EXEBADFIXUPVBN
.EXTRN ANLOBJS$_EXEBADISDS1
.EXTRN ANLOBJS$_EXEBADISDTYPE
.EXTRN ANLOBJS$_EXEBADMATCH
.EXTRN ANLOBJS$_EXEBADPATCHLEN
.EXTRN ANLOBJS$_EXEBADOBJ
.EXTRN ANLOBJS$_EXEBADTYPE
.EXTRN ANLOBJS$_EXEBADXFERO
.EXTRN ANLOBJS$_EXEHDRISDLONG
.EXTRN ANLOBJS$_EXEHDRLONG
.EXTRN ANLOBJS$_EXEISDLENDZRO
.EXTRN ANLOBJS$_EXEISDLENGBL
.EXTRN ANLOBJS$_EXEISDLENPRIV
.EXTRN ANLOBJS$_EXENOTNATIVE
.EXTRN ANLOBJS$_EXTRABYTES
.EXTRN ANLOBJS$_FIELDFIT
.EXTRN ANLOBJS$_FLAGERROR
.EXTRN ANLOBJS$_NOTOK, ANLOBJS$_OBJBADIDCMATCH
.EXTRN ANLOBJS$_OBJBADNUM
.EXTRN ANLOBJS$_OBJBADPOP
.EXTRN ANLOBJS$_OBJBADPUSH
.EXTRN ANLOBJS$_OBJBADTYPE
.EXTRN ANLOBJS$_OBJBADVIELD
.EXTRN ANLOBJS$_OBJEOMBADSEV
.EXTRN ANLOBJS$_OBJEOMMISSING
.EXTRN ANLOBJS$_OBJFADBADCVC
.EXTRN ANLOBJS$_OBJFADBADRBC
.EXTRN ANLOBJS$_OBJGSDBADALIGN
.EXTRN ANLOBJS$_OBJGSDBADSUBTYP
.EXTRN ANLOBJS$_OBJHDRRRES
.EXTRN ANLOBJS$_OBJMHDBADRECSIZ
.EXTRN ANLOBJS$_OBJMHDBADSTRLVL
.EXTRN ANLOBJS$_OBJMHDMINMISSING
.EXTRN ANLOBJS$_OBJNONTIRCMD
.EXTRN ANLOBJS$_OBJNOPSC
.EXTRN ANLOBJS$_OBJNULLREC
.EXTRN ANLOBJS$_OBJPOSPACE
.EXTRN ANLOBJS$_OBJPROMINMAX
.EXTRN ANLOBJS$_OBJPSCABSLEN
.EXTRN ANLOBJS$_OBJRECTOOBIG
.EXTRN ANLOBJS$_OBJTIRRES
.EXTRN ANLOBJS$_OBJJUNDEFENV
.EXTRN ANLOBJS$_OBJJUNDEFIT
.EXTRN ANLOBJS$_OBJJUNDEFPSC
.EXTRN ANALYZES$_FACILITY
.EXTRN CLISGET VALUE, LIB$GET INPUT
.EXTRN LIBSLP LINES, CLISPRES$ENT
.EXTRN STR$TRIM, ANL$GB INTERACTIVE
.EXTRN SYS$CREATE, SYS$CONNECT

.PSECT $CODE$,NOWRT,2
.ENTRY ANL$PREPARE_REPORT_FILE, Save R2,R3,R4,R5,- : 0612
R6,R7,R8
```

			58 0000000G	00 9E 0002	MOVAB LIB\$SIGNAL, R8	
			57 0000' CF 9E 0009		MOVAB REPORT_SPEC, R7	
			52 04 AC D0 0000E		MOVL OUTPUT_SPEC, R2	0615
			56 08 AC D0 00012		MOVL INPUT_SPEC, R6	0616
			0000' CF 9F 00016		PUSHAB P_AAB	0627
			0000G 00 01 FB 0001A		CALLS #1, CLISPRES	
			019C C7 50 D0 00021		MOVL R0, GENERATING_REPORT	
			015A C7 B5 00026		TSTW REPORT_RAB+2	
			54 12 0002A		BNEQ 2\$	
			019C 4F 62 2C 00031		BLBC GENERATING_REPORT, 2\$	
			04 B2 04 B7 00037		(R2), @4(R2), #32, REPORT_SPEC, -	
					@REPORT_SPEC+4	0637
					PUSHL R7	0638
					PUSHL R7	
					PUSHL R7	
			0000000G 00 03 FB 0003F		CALLS #3, STR\$TRIM	
			0108 C7 9F 00046		PUSHAB REPORT_FAB	0642
			0000000G 00 01 FB 0004A		CALLS #1, SYSSCREATE	
			52 13 50 D0 00051		MOVL RC, STATUS	
			0114 C7 52 E8 00054		BLBS STATUS, 1\$	0643
			00B110A4 68 52 DD 00057		PUSHL REPORT_FAB+12	
			0158 05 FB 00061		STATUS	
			0000000G 00 01 FB 0006E		PUSHL R7	
			52 05 50 D0 00075		PUSHL #1	
			01A0 04 01 FB 00078		PUSHL #11604132	
			02A8 C7 68 52 DD 0007B		CALLS #5, LIB\$SIGNAL	
			01A0 C7 0C AC D0 00080	1\$:	PUSHAB REPORT_RAB	0644
			04 B6 66 B0 00086		CALLS #1, SYSSCONNECT	
			02AC 01A4 D7 66 2C 0008B		MOVL R0, STATUS	0645
			0000V CF 02AC D4 00093		BLBS STATUS, 2\$	
			0000V CF 00 FB 0009A		PUSHL STATUS	
			04 0009F		CALLS #1, LIB\$SIGNAL	
					HEADING_MSG, REPORT_HEADING_MSG	
					(R6), INPUT_FILE_SPEC	0651
					(R6), @4(R6), #32, INPUT_FILE_SPEC, -	0652
					@INPUT_FILE_SPEC+4	0654
					CLRL PAGE_NUMBER	0658
					CALLS #0, ANL\$REPORT_PAGE	0659
					RET	0663

; Routine Size: 160 bytes.    Routine Base: \$CODE\$ + 0000

```
: 232 0664 1 %sbttl 'ANL$REPORT_PAGE - Eject Page in Report'
: 233 0665 1 /**
: 234 0666 1 Functional Description:
: 235 0667 1 This routine is called to eject the page in a report and print
: 236 0668 1 the heading on the new page.
: 237 0669 1
: 238 0670 1 Formal Parameters:
: 239 0671 1 none
: 240 0672 1
: 241 0673 1 Implicit Inputs:
: 242 0674 1 global data
: 243 0675 1
: 244 0676 1 Implicit Outputs:
: 245 0677 1 global data
: 246 0678 1
: 247 0679 1 Returned Value:
: 248 0680 1 none
: 249 0681 1
: 250 0682 1 Side Effects:
: 251 0683 1
: 252 0684 1 --
: 253 0685 1
: 254 0686 1
: 255 0687 2 global routine anl$report_page: novalue = begin
: 256 0688 2
: 257 0689 2
: 258 0690 2 ! Since we are starting a new page, reset the line counter.
: 259 0691 2
: 260 0692 2 line_counter = lib$lp_lines() - 7;
: 261 0693 2
: 262 0694 2 ! If this is an interactive session, don't print any page headings.
: 263 0695 2 ! They will really annoy the poor guy.
: 264 0696 2
: 265 0697 2 if .anl$gb_interactive then
: 266 0698 2     return;
: 267 0699 2
: 268 0700 2 ! Eject the page.
: 269 0701 2
: 270 0702 2 anl$report_line(-1,describe(%char(formfeed)));
: 271 0703 2
: 272 0704 2 ! Increment the page number for the new page and print the heading lines.
: 273 0705 2
: 274 0706 2 increment (page_number);
: 275 0707 2 anl$format_line(-1,0..report_heading_msg,0..page_number);
: 276 0708 2 anl$format_line(-1,0,anlobj$anything,input_file_spec);
: 277 0709 2 anl$report_line(-1);
: 278 0710 2 anl$report_line(-1);
: 279 0711 2
: 280 0712 2 return;
: 281 0713 2
: 282 0714 1 end;
```

.PSECT \$SPLITS,NOWRT,NOEXE,2

OC 0001C P.AAE: .ASCII <12>

:

00000001 0001D .BLKB 3  
 00000000 00020 P.AAD: .LONG 1  
 00000000 00024 .ADDRESS P.AAE

## .PSECT \$CODES,NOWRT,2

			.ENTRY ANL\$REPORT_PAGE, Save R2,R3	: 0687
		53 0000V	MOVAB ANL\$REPORT_LINE, R3	:
		52 0000'	MOVAB PAGE_NUMBER, R2	
00000000G	00	CF 9E 00002	CALLS #0, [IBSLP_LINES	
04	A2 F9	CF 9E 00007	MOVAB -(R0), LINE_COUNTER	: 0692
	3D 0000G	00 FB 0000C	BLBS ANL\$GB_INTERACTIVE, 1\$	
	0000'	AO 9E 00013	PUSHAB P.AAD	: 0697
	CF E8 00018	CF 9F 0001D	MNEG L #1, -(SP)	
	0000'	01 CE 00021	CALLS #2, ANL\$REPORT_LINE	
	7E 63	02 FB 00024	INCL PAGE_NUMBER	: 0702
		62 D6 00027	PUSHL PAGE_NUMBER	
		62 DD 00029	CLRL -(SP)	: 0706
		7E D4 0002B	PUSHL REPORT_HEADING_MSG	
		7E D4 00030	CLRL -(SP)	: 0707
	FC	A2 DD 0002D	MNEG L #1, -(SP)	
	7E	01 CE 00032	CALLS #5, ANLSFORMAT_LINE	
0000V	CF	05 FB 00035	PUSHAB INPUT_FILE_SPEC	: 0708
		C2 9F 0003A	PUSHL #ANLOBJS_ANYTHING	
	FEF4 0000000G	8F DD 0003E	CLRL -(SP)	
		7E D4 00044	MNEG L #1, -(SP)	
	7E	01 CE 00046	CALLS #4, ANLSFORMAT_LINE	
0000V	CF	04 FB 00049	MNEG L #1, -(SP)	: 0709
	7E	01 CE 0004E	CALLS #1, ANL\$REPORT_LINE	
	63	01 FB 00051	MNEG L #1, -(SP)	: 0710
	7E	01 CE 00054	CALLS #1, ANL\$REPORT_LINE	
	63	01 FB 00057	RET	: 0714
		04 0005A 1\$:		

; Routine Size: 91 bytes. Routine Base: \$CODES + 00A0

```
: 284 0715 1 Isbttl 'ANL$REPORT_LINE - Print a Line in Report'
: 285 0716 1 ++
: 286 0717 1 Functional Description:
: 287 0718 1 This routine is called to print a line into the report file.
: 288 0719 1
: 289 0720 1 Formal Parameters:
: 290 0721 1     widow_control Controls widowing as follows:
: 291 0722 1         positive      specifies number of lines that
: 292 0723 1             must remain on the page.
: 293 0724 1         zero        doesn't matter how many lines.
: 294 0725 1         negative    Force line onto current page.
: 295 0726 1     line          Address of descriptor of line. Optional.
: 296 0727 1
: 297 0728 1 Implicit Inputs:
: 298 0729 1     global data
: 299 0730 1
: 300 0731 1 Implicit Outputs:
: 301 0732 1     global data
: 302 0733 1
: 303 0734 1 Returned Value:
: 304 0735 1     none
: 305 0736 1
: 306 0737 1 Side Effects:
: 307 0738 1 --
: 308 0739 1 !--
: 309 0740 1
: 310 0741 1
: 311 0742 2 global routine anl$report_line(widow_control,line): novalue = begin
: 312 0743 2
: 313 0744 2 bind
: 314 0745 2     line_dsc = .line: descriptor;
: 315 0746 2
: 316 0747 2 local
: 317 0748 2     status: long;
: 318 0749 2
: 319 0750 2 builtin
: 320 0751 2     nullparameter;
: 321 0752 2
: 322 0753 2
: 323 0754 2 ! Don't do anything if we're not generating a report.
: 324 0755 2
: 325 0756 2 if not .generating_report then
: 326 0757 2     return;
: 327 0758 2
: 328 0759 2 ! If the caller isn't forcing this line onto the page, and there are not
: 329 0760 2 enough lines left for prevention of widowng, then eject the page.
: 330 0761 2
: 331 0762 2 if (.widow_control geq 0) and
: 332 0763 2     (.line_counter lss .widow_control) then
: 333 0764 2     anl$report_page();
: 334 0765 2
: 335 0766 2 ! Print the line if there is one. Otherwise put out a blank line.
: 336 0767 2
: 337 0768 2 if nullparameter(2) then
: 338 0769 2     report_rab[rab$w_rsz] = 0
: 339 0770 2 else (
: 340 0771 3     report_rab[rab$w_rsz] = .line_dsc[len];
```

```

: 341      0772 3      report_rab[rab$!_rbf] = .line_dsc[ptr];
: 342      0773 2 );
: 343      0774 2 status = $put(rab=report_rab);
: 344      0775 2 check (.status, anlobj$_writeerr,1,report_spec,.status,,report_rab[rab$_stv]);
: 345      0776 2 ! Account for the line on the page.
: 346      0777 2
: 347      0778 2 decrement (line_counter);
: 348      0779 2
: 349      0780 2 return;
: 350      0781 2
: 351      0782 2
: 352      0783 1 end;

```

## .EXTRN SYSSPUT

52 08 0004 00000 57 0000 CF D0 00002 04 0000 CF E9 00006 04 AC D5 0000B 0C 19 0000E  04 AC 0000 CF D1 00010 04 18 00016  89 AF 0000 00 FB 00018 02 6C 91 C001C 1\$: 05 1F 0001F 08 AC D5 00021 06 12 00024  0000 CF B4 00026 2\$: 0B 11 0002A 62 B0 0002C 3\$: 0000 CF 00031 04 0000 CF 9F 00037 4\$: 0000 0000G 00 01 FB 00038 19 50 E8 00042  0000 CF DD 00045 50 DD 00049 0000 CF 9F 0004B 01 DD 0004F  0000 0000G 00 00B110D4 8F DD 00051 0000 CF D7 0005E 5\$: 05 FB 00057 04 00062 6\$: 	.ENTRY ANL\$REPORT_LINE, Save R2 : 0742 MOVL LINE, R2 : 0745 BLBC GENERATING REPORT, 6\$ : 0756 TSTL WIDOW_CONTROL : 0762 BLSS 1\$ : CMPL LINE_COUNTER, WIDOW_CONTROL : 0763 BGEO 1\$ : CALLS #0, ANL\$REPORT_PAGE : 0764 CMPB (AP), #2 : 0768 BLSSU 2\$ : TSTL 8(AP) : BNEQ 3\$ : CLRW REPORT_RAB+34 : 0769 BRB 4\$ : MOVW (R2), REPORT_RAB+34 : 0771 MOVL 4(R2), REPORT_RAB+40 : 0772 PUSHAB REPORT_RAB : 0774 CALLS #1, SYSSPUT : BLBS STATUS, 5\$ : 0775 PUSHL REPORT_RAB+12 : PUSHL STATUS : PUSHAB REPORT_SPEC : PUSHL #11604180 : CALLS #5, LIB\$SIGNAL : DECL LINE_COUNTER : 0779 RET : 0783
--	---

: Routine Size: 99 bytes, Routine Base: \$CODE\$ + 00FB

```
354 0786 1 Zsbttl 'ANL$FORMAT_LINE - Format Line for Report'
355 0785 1 /**
356 0786 1 Functional Description:
357 0787 1 This routine is called to format a line and print it in the
358 0788 1 report file.
359 0789 1
360 0790 1 Formal Parameters:
361 0791 1      widow_control The number of lines that must be remaining on the
362 0792 1 current page.
363 0793 1      indent_level The number of tab stops to indent the line.
364 0794 1      template_msg The status code of the message defining the line
365 0795 1 template.
366 0796 1      fa01... $FA0 arguments to fill in the template.
367 0797 1
368 0798 1 Implicit Inputs:
369 0799 1      global data
370 0800 1
371 0801 1 Implicit Outputs:
372 0802 1      global data
373 0803 1
374 0804 1 Returned Value:
375 0805 1      none
376 0806 1
377 0807 1 Side Effects:
378 0808 1
379 0809 1 --
380 0810 1
381 0811 1
382 0812 2 global routine anl$format_line(widow_control,indent_level,template_msg,fa01): novalue = begin
383 0813 2
384 0814 2 local
385 0815 2      status: long;
386 0816 2
387 0817 2
388 0818 2 : First we obtain the text of the template message.
389 0819 2
390 0820 3 begin
391 0821 3 local
392 0822 3      local_described_buffer(template_buf,132);
393 0823 3
394 P 0824 3 status = $getmsg(msgid=.template_msg,
395 P 0825 3      msglen=template_buf,
396 P 0826 3      bufadr=template_buf,
397 P 0827 3      flags=%b'0001');
398 0828 3 check (.status..status);
399 0829 3
400 0830 3 : Now we can plug the $FA0 arguments into the message template.
401 0831 3
402 0832 4 begin
403 0833 4 local
404 0834 4      local_described_buffer(result_buf,132);
405 0835 4
406 P 0836 4 status = $fa0l(ctrstr=template_buf,
407 P 0837 4      outlen=result_buf,
408 P 0838 4      outbuf=result_buf,
409 P 0839 4      prmlst=fa01);
410 0840 4 check (.status..status);
```

```

611 0841 6
612 0842 4 ' Prefix the resulting text with enough tabs to effect the indentation.
613 0843 4
614 0844 4 ch$move(.result_buf[len],.result_buf[ptr], .result_buf[ptr]+.indent_level);
615 0845 4 result_buf[len] = .result_buf[len] + .indent_level;
616 0846 4 ch$fill(%char(tab), .indent_level,.result_buf[ptr]);
617 0847 4
618 0848 4 . Print the line, passing along the widow control number.
619 0849 4
620 0850 4 anl$report_line(.widow_control,result_buf);
621 0851 4
622 0852 3 end;
623 0853 2 end;
624 0854 2
625 0855 2 return;
626 0856 2
627 0857 1 end;

```

## .EXTRN SYSSGETMSG, SYSSFAOL

			007C 00000	.ENTRY ANL\$FORMAT_LINE, Save R2,R3,R4,R5,R6	: 0812
			00 9E 00002	MOVAB LIB\$SIGNAL, R6	
			5E FEE8 CE 9E 00009	MOVAB -280(SP), SP	
			CD 84 8F 9A 0000E	MOVZBL #132, TEMPLATE_BUF	: 0822
		FF74	CD FF7C CD 9E 00014	MOVAB TEMPLATE_BUF+8, TEMPLATE_BUF+4	
		FF78	7E 01 7D 0001B	MOVO #1, -(SP)	: 0827
			FF74 CD 9F 0001E	PUSHAB TEMPLATE_BUF	
			FF74 CD 9F 00022	PUSHAB TEMPLATE_BUF	
			OC AC DD 00026	PUSHL TEMPLATE_MSG	
		00000000G	00 05 FB 00029	CALLS #5, SYSSGETMSG	
			52 50 D0 00030	MOVL R0, STATUS	
			05 52 E8 00033	BLBS STATUS, 1\$	: 0828
			52 DD 00036	PUSHL STATUS	
			66 01 FB 00038	CALLS #1, LIB\$SIGNAL	
		04	6E 84 8F 9A 0003B	MOVZBL #132, RESULT_BUF	: 0834
			AE 08 AE 9E 0003F	MOVAB RESULT_BUF+8, RESULT_BUF+4	
			10 AC 9F 00044	PUSHAB FA01	: 0839
			04 AE 9F 00047	PUSHAB RESULT_BUF	
			08 AE 9F 0004A	PUSHAB RESULT_BUF	
		00000000G	00 FF74 CD 9F 0004D	PUSHAB TEMPLATE_BUF	
			04 FB 00051	CALLS #4, SYSSFAOL	
			52 50 D0 00058	MOVL R0, STATUS	
			05 52 E8 0005B	BLBS STATUS, 2\$	: 0840
			52 DD 0005E	PUSHL STATUS	
			66 01 FB 00060	CALLS #1, LIB\$SIGNAL	
		50 04 AE	08 AC C1 00063	ADDL3 INDENT_LEVEL, RESULT_BUF+4, R0	: 0844
		60 04 BE	6E 28 00069	MOVC3 RESULT_BUF, @RESULT_BUF+4, (R0)	
		6E 08 AC	A0 0006E	ADDW2 INDENT_LEVEL, RESULT_BUF	: 0845
08 AC	09 6E	04 00 2C 00072	MOVCS #0, (SP), #9, INDENT_LEVEL, @RESULT_BUF+4	: 0846	
		04 BE 00078	PUSHL SP	: 0850	
		5E DD 0007A	PUSHL WIDOW_CONTROL		
		04 AC DD U007C	CALLS #2, ANL\$REPORT_LINE		
	FF19 CF	02 FB 0007F	RET	: 0857	
		04 00084			

OBJE~~E~~OUT  
V04-000

OBJE~~E~~OUT - Handle Report Output  
ANL\$FORMAT\_LINE - Format Line for Report

; Routine Size: 133 bytes. Routine Base: \$CODE\$ + 015E

M 9  
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14-Sep-1984 11:52:52

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[ANALYZ.SRC]OBJE~~E~~OUT.B32;1

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```
629 0858 1 %sbttl 'ANL$FORMAT_ERROR - Put Error Message in Report'
630 0859 1 ++
631 0860 1 Functional Description:
632 0861 1 This routine is called to format an error message into the report
633 0862 1 file.
634 0863 1
635 0864 1 Formal Parameters:
636 0865 1 error_msg      Status code for the error message.
637 0866 1 fao1...      $FAO substitution parameters for the message.
638 0867 1
639 0868 1 Implicit Inputs:
640 0869 1 global data
641 0870 1
642 0871 1 Implicit Outputs:
643 0872 1 global data
644 0873 1
645 0874 1 Returned Value:
646 0875 1 none
647 0876 1
648 0877 1 Side Effects:
649 0878 1
650 0879 1 --
651 0880 1
652 0881 1
653 0882 2 global routine anl$format_error(error_msg,fao1,fao2,fao3,fao4): novalue - begin
654 0883 2
655 0884 2 bind
656 0885 2     flag_string = describe('**');
657 0886 2
658 0887 2 builtin
659 0888 2     actualcount;
660 0889 2
661 0890 2
662 0891 2 ! We case on the number of $FAO parameters and call ANL$FORMAT_LINE to
663 0892 2 do the work. In all cases, however, we add our own first parameter,
664 0893 2 which is the error message flag string.
665 0894 2
666 0895 2 case actualcount() from 1 to 5 of set
667 0896 2 [1]: anl$format_line(-1,0,.error_msg,flag_string);
668 0897 2 [2]: anl$format_line(-1,0,.error_msg,flag_string..fao1);
669 0898 2 [3]: anl$format_line(-1,0,.error_msg,flag_string..fao1..fao2);
670 0899 2 [4]: anl$format_line(-1,0,.error_msg,flag_string..fao1..fao2..fao3);
671 0900 2 [5]: anl$format_line(-1,0,.error_msg,flag_string..fao1..fao2..fao3..fao4);
672 0901 2 tes;
673 0902 2
674 0903 2 ! Keep track of the number of errors reported. Also keep track of
675 0904 2 ! most severe error which has occurred.
676 0905 2
677 0906 2 increment (error_count);
678 0907 2 if severity_level (.error_msg) gtr
679 0908 3     severity_Level (.anl$worst_error)           ! If higher than watermark
680 0909 2 then anl$worst_error = .error_msg;           ! -then set new worst error
681 0910 2
682 0911 2 return;
683 0912 2
684 0913 1 end;
```

						.PSECT \$PLITS,NOWRT,NOEXE,2	
			20 20 2A 2A 2A 00028	P.AAG:	.ASCII \*** \		:
				0002D	.BLKB 3		:
			00000005	00030 PAAF:	.LONG 5		:
			00000000	00034	.ADDRESS P.AAG		:
					FLAG_STRING= PAAF		
						.PSECT \$CODE\$,NOWRT,2	
			55 0000	003C 00000	.ENTRY ANL\$FORMAT_ERROR, Save R2,R3,R4,R5		: 0882
			54 FF70	CF 9E 00002	MOVAB FLAG STRING, R5		:
			52 04	CF 9E 00007	MOVAB ANL\$FORMAT_LINE, R4		: 0896
			01	AC D0 0000C	MOVL ERROR_MSG, R2		: 0895
			0016	6C 8F 00010	CASEB (AP) #1. #4		:
				000A 00014	.WORD 2\$-1\$,-		:
				0048 0001C	3\$-1\$,-		:
					4\$-1\$,-		:
					5\$-1\$,-		:
					6\$-1\$		:
			7E 64	24 BB 0001E	2\$: PUSHR #^M<R2,R5>		: 0896
				7E 64	7E D4 00020	CLRL -(SP)	:
					01 CE 00022	MNEGL #1. -(SP)	:
					04 FB 00025	CALLS #4, ANL\$FORMAT_LINE	:
					44 11 00028	BRB 7\$	:
				08	AC DD 0002A	3\$: PUSHL FA01	: 0897
					24 BB 0002D	PUSHR #^M<R2,R5>	:
					7E D4 0002F	CLRL -(SP)	:
					01 CE 00031	MNEGL #1. -(SP)	:
					05 FB 00034	CALLS #5, ANL\$FORMAT_LINE	:
					35 11 00037	BRB 7\$	:
				7E	08 AC 7D 00039	4\$: MOVQ FA01, -(SP)	: 0898
					24 BB 0003D	PUSHR #^M<R2,R5>	:
					7E D4 0003F	CLRL -(SP)	:
					01 CE 00041	MNEGL #1. -(SP)	:
					06 FB 00044	CALLS #6, ANL\$FORMAT_LINE	:
					25 11 00047	BRB 7\$	:
				7E	0C AC 7D 00049	5\$: MOVQ FA02, -(SP)	: 0899
					08 AC DD 0004D	PUSHL FA01	:
					24 BB 00050	PUSHR #^M<R2,R5>	:
					7E D4 00052	CLRL -(SP)	:
					01 CE 00054	MNEGL #1. -(SP)	:
					07 FB 00057	CALLS #7, ANL\$FORMAT_LINE	:
					12 11 0005A	BRB 7\$	:
				7E	10 AC 7D 0005C	6\$: MOVQ FA03, -(SP)	: 0900
					08 AC 7D 00060	MOVQ FA01, -(SP)	:
					24 BB 00064	PUSHR #^M<R2,R5>	:
					7E D4 00066	CLRL -(SP)	:
					01 CE 00068	MNEGL #1. -(SP)	:
					08 FB 0006B	CALLS #8, ANL\$FORMAT_LINE	:
				50 03	0000 CF D6 0006E	7\$: INCL ERROR COUNT	: 0906
					52 D0 00072	MOVL R2, TMP_CODE	: 0907
					00 EF 00075	EXTZV #0, #3, TMP_CODE, R1	:

OBJE\$OUT  
V04-000OBJE\$OUT - Handle Report Output  
ANL\$FORMAT\_ERROR - Put Error Message in Report

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14-Sep-1984 11:52:52VAX-11 Bliss-32 V4.0-742  
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50	50	01	00	EF 0007A	EXTZV	#0, #1, TMP_CODE, R0	
		50	04	C4 0007F	MULL2	#4, R0	
		51	50	C2 00082	SUBL2	R0, R1	
		51	03	C0 00085	ADDL2	#3, R1	
53	50	0000'	CF	D0 00088	MOVL	ANL\$WORST_ERROR, TMP_CODE	0908
50	03	00	EF 0008D	EXTZV	#0, #3, TMP_CODE, R3		
	01	00	EF 00092	EXTZV	#0, #1, TMP_CODE, R0		
	50	04	C4 00097	MULL2	#4, R0		
	53	50	C2 0009A	SUBL2	R0, R3		
	50	03	A3 9E 0009D	MOVAB	3(R3), R0		
	50	51	D1 000A1	CMPL	R1, R0		
		05	15 000A4	BLEQ	8\$		
	0000'	CF	52 D0 000A6	MOVL	R2, ANL\$WORST_ERROR	0909	
			04 000AB 8\$:	RET		0913	

: Routine Size: 172 bytes, Routine Base: \$CODE\$ + 01E3

```
: 486      0914 1 %sbttl 'ANL$ERROR_COUNT - Report Count of Errors'  
: 487      0915 1 **  
: 488      0916 1 Functional Description:  
: 489      0917 1 This routine is called to print a line telling how many errors  
: 490      0918 1 were discovered during the analysis.  
: 491      0919 1  
: 492      0920 1 Formal Parameters:  
: 493      0921 1     none  
: 494      0922 1  
: 495      0923 1 Implicit Inputs:  
: 496      0924 1     global data  
: 497      0925 1  
: 498      0926 1 Implicit Outputs:  
: 499      0927 1     global data  
: 500      0928 1  
: 501      0929 1 Returned Value:  
: 502      0930 1     none  
: 503      0931 1  
: 504      0932 1 Side Effects:  
: 505      0933 1  
: 506      0934 1 !--  
: 507      0935 1  
: 508      0936 1  
: 509      0937 2 global routine anl$error_count: novalue = begin  
: 510      0938 2  
: 511      0939 2  
: 512      0940 2 ! First we print the error count in the report.  
: 513      0941 2  
: 514      0942 2 if .error_count eqiu 0 then  
: 515      0943 2     anl$format_line(0,0,anlobj$_errornone)  
: 516      0944 2 else  
: 517      0945 2     anl$format_line(0,0,anlobj$_errorcount,.error_count);  
: 518      0946 2 anl$report_line(0);  
: 519      0947 2 anl$report_line(0);  
: 520      0948 2  
: 521      0949 2 ! If the report is not going to SYSSOUTPUT, we also want to display one line  
: 522      0950 2 for the user at the terminal. This contains the report heading text and  
: 523      0951 2 the error count.  
: 524      0952 2  
: 525      0953 2 if ch$neq(.report_spec[len],.report_spec[ptr], 10,uplit byte('SYSSOUTPUT'),' ') then  
: 526      0954 2     signal(anlobj$_errors,2,input_file_spec,.error_count);  
: 527      0955 2  
: 528      0956 2 ! Now we can reset the error counter for the next file.  
: 529      0957 2  
: 530      0958 2 error_count = 0;  
: 531      0959 2  
: 532      0960 2 return;  
: 533      0961 2  
: 534      0962 1 end;
```

.PSECT \$PLIT\$,NOWRT,NOEXE,2

54 55 50 54 55 4F 24 53 59 53 00038 P.AAH: .ASCII \SYSSOUTPUT\

:

				.PSECT	SCODE\$, NOWRT, 2	
				.ENTRY	ANL\$ERROR_COUNT, Save R2,R3,R4,R5	: 0937
				MOVAB	ANL\$FORMAT_LINE, R5	
				MOVAB	ERROR_COUNT, R4	
				MOVL	ERROR_COUNT, R0	
				BNEQ	1\$	
				PUSHL	#ANLOBJS_ERRORNONE	
				CLRQ	-(SP)	
				CALLS	#3, ANL\$FORMAT_LINE	
				BRB	2\$	
				PUSHL	R0	
				PUSHL	#ANLOBJS_ERRORCOUNT	
				CLRQ	-(SP)	
				CALLS	#4, ANL\$FORMAT_LINE	
				CLRL	-(SP)	
				CALLS	#1, ANL\$REPORT_LINE	
				CLRL	-(SP)	
				CALLS	#1, ANL\$REPORT_LINE	
				CMPC5	REPORT_SPEC, @REPORT_SPEC+4, #32, #10, -	
					P.AAH	
				BEQL	3\$	
				PUSHL	ERROR_COUNT	
				PUSHAB	INPUT_FILE_SPEC	
				PUSHL	#2	
				PUSHL	#ANLOBJS_ERRORS	
				CALLS	#4, LIB\$SIGNAL	
				CLRL	ERROR_COUNT	
				RET		
0A	20	FD50	D4	FEC9, 0000.	003C 00000	
				0000.	CF 9E 00002	
					64 DD 0000C	
					0D 12 0000F	
					8F DD 00011	
					7E 7C 00017	
					03 FB 00019	
					OD 11 0001C	
					50 DD 0001E 1\$:	
					8F DD 00020	
					7E 7C 00026	
					65 04 FB 00028	
					7E D4 00028 2\$:	
					01 FB 0002D	
					7E D4 00031	
					01 FB 00033	
					15 13 00043	
					64 DD 00045	
					FEEC C4 9F 00047	
					02 DD 0004B	
					00000000G 60 00000000G	
					8F DD 0004D	
					04 FB 00053	
					64 D4 0005A 3\$:	
					04 0005C	

; Routine Size: 93 bytes. Routine Base: SCODE\$ + 028F

```

: 536 0963 1 %sbttl 'ANLSEXIT_WITH_STATUS - Exit to VMS With a Status'
: 537 0964 1 ++
: 538 0965 1 Functional Description:
: 539 0966 1 This routine is called when it's time to exit back to VMS. We
: 540 0967 1 exit with the status in an$worst_error. (This contains
: 541 0968 1 success status if no errors have occurred.)
: 542 0969 1
: 543 0970 1 Formal Parameters:
: 544 0971 1 none
: 545 0972 1
: 546 0973 1 Implicit Inputs:
: 547 0974 1 global data
: 548 0975 1
: 549 0976 1 Implicit Outputs:
: 550 0977 1 global data
: 551 0978 1
: 552 0979 1 Returned Value:
: 553 0980 1 does not return
: 554 0981 1
: 555 0982 1 Side Effects:
: 556 0983 1
: 557 0984 1 --
: 558 0985 1
: 559 0986 1
: 560 0987 2 global routine anl$exit_with_status: novalue = begin
: 561 0988 2
: 562 0989 2 : if it was an interactive session, always return success. otherwise
: 563 0990 2 : return worst error
: 564 0991 2
: 565 0992 2 if .anl$gb_interactive then
: 566 0993 3   $exit(code=anlobj$_ok)
: 567 0994 2 else
: 568 0995 2   $exit(code=.anl$worst_error or sts$m_inhib_msg);
: 569 0996 2
: 570 0997 1 end;

```

## .EXTRN SYS\$EXIT

<pre> 08 0000G CF E9 0002       00000000G 8F DD 00007                   0A 11 0000D       7E 0000' CF 10000000 8F C9 0000F 1\$:       00000000G 00 01 FB 00019 2\$: </pre>	<pre> 0000 00000                   04 00020 </pre>	<pre> .ENTRY ANLSEXIT WITH STATUS, Save nothing BLBC ANL\$GB_INTERACTIVE, IS PUSHL #ANLOBJS_OK BRB 2\$ BISL3 #268435456, ANL\$WORST_ERROR, -(SP) CALLS #1, SYS\$EXIT RET </pre>	<pre> : 0987 : 0992 : 0993 : 0995 : 0997 </pre>
--	--	---	---

: Routine Size: 33 bytes. Routine Base: \$CODE\$ + 02EC

```
: 572      0998 1 %sbttl 'ANL$FORMAT_HEX - Format Hex Dump of Data'
: 573      0999 1 ++
: 574      1000 1 Functional Description:
: 575      1001 1 This routine is called to format a hex dump of some bytes.
: 576      1002 1 It includes the character representation of the bytes also.
: 577      1003 1
: 578      1004 1 Formal Parameters:
: 579      1005 1 indent_level The indentation level at which to place the dump.
: 580      1006 1 data Address of descriptor of data to be dumped.
: 581      1007 1
: 582      1008 1 Implicit Inputs:
: 583      1009 1 global data
: 584      1010 1
: 585      1011 1 Implicit Outputs:
: 586      1012 1 global data
: 587      1013 1
: 588      1014 1 Returned Value:
: 589      1015 1 none
: 590      1016 1
: 591      1017 1 Side Effects:
: 592      1018 1
: 593      1019 1 --
: 594      1020 1
: 595      1021 1
: 596      1022 2 global routine anl$format_hex(indent_level,data): novalue = begin
: 597      1023 2
: 598      1024 2 bind
: 599      1025 2     data_dsc = .data: descriptor,
: 600      1026 2     data_vector = .data_dsc[ptr]: vector[,byte];
: 601      1027 2
: 602      1028 2 local
: 603      1029 2     i: long,
: 604      1030 2     arg_list: vector[20,long],
: 605      1031 2     count: long;
: 6'6
: 607      1032 2
: 608      1033 2 builtin
: 609      1034 2     callg;
: 610      1035 2
: 611      1036 2
: 612      1037 2 ! If the data is null, just quit.
: 613      1038 2
: 614      1039 2 if .data_dsc[len] equ 0 then
: 615      1040 2     return;
: 616      1041 2
: 617      1042 2 ! We begin by printing two heading lines. The first shows the offsets
: 618      1043 2 ! of the bytes and the second is a line of dashes.
: 619      1044 2
: 620      1045 2 anl$format_line(3,.indent_level,anlobj$hexheading1);
: 621      1046 2 anl$format_line(0,.indent_level,anlobj$hexheading2);
: 622      1047 2
: 623      1048 2 ! We will be builing argument lists to ANL$FORMAT_LINE. It will always
: 624      1049 2 ! include widow control, indentation level, and the message code.
: 625      1050 2
: 626      1051 2 arg_list[1] = 0;
: 627      1052 2 arg_list[2] = .indent_level;
: 628      1053 2 arg_list[3] = anlobj$hexdata;
: 629      1054 2
```

```

: 629    1055 2 : Now we go into a loop, once through for each 8 bytes to be formatted.
: 630    1056 2
: 631    1057 2 i = 0;
: 632    1058 3 while .i < ssu.data_dsc[len] do (
: 633    1059 3   : Calculate the number of bytes that will go on this line.
: 634    1060 3   count = minu(.data_dsc[len]-.i,8);
: 635    1061 3
: 636    1062 3   : Next in the argument list we need a count of the spaces to skip
: 637    1063 3   : so the bytes will be lined up from right to left.
: 638    1064 3   arg_list[4] = (8 - .count) * 3;
: 639    1065 3
: 640    1066 3   ! Now we need the count itself.
: 641    1067 3
: 642    1068 3   arg_list[5] = .count;
: 643    1069 3
: 644    1070 3   ! Now we loop through 8 (or less) bytes and put them in the
: 645    1071 3   ! argument list (backwards, of course).
: 646    1072 3
: 647    1073 3   ! Now we loop through 8 (or less) bytes and put them in the
: 648    1074 3   ! argument list (backwards, of course).
: 649    1075 3
: 650    1076 4   decr j from .count-1 to 0 do (
: 651    1077 4     arg_list[6+j] = .data_vector[.i];
: 652    1078 4     increment (.i);
: 653    1079 3 )
: 654    1080 3
: 655    1081 3   ! Next we have the byte offset.
: 656    1082 3
: 657    1083 3   arg_list[6+.count] = .i - .count;
: 658    1084 3
: 659    1085 3   ! Now we have to add to the argument list the byte count and a
: 660    1086 3   ! pointer to the byte string.
: 661    1087 3
: 662    1088 3   arg_list[7+.count] = .count;
: 663    1089 3   arg_list[8+.count] = data_vector[.i - .count];
: 664    1090 3
: 665    1091 3   ! Finally, fill in the argument count.
: 666    1092 3
: 667    1093 3   arg_list[0] = 8 + .count;
: 668    1094 3
: 669    1095 3   ! Now we can print the hex data.
: 670    1096 3
: 671    1097 3   callg(arg_list,anl$format_line);
: 672    1098 2 )
: 673    1099 2
: 674    1100 2 return;
: 675    1101 2
: 676    1102 1 end;

```

55 FE4B CF 003C 00000 5E 80 AE 9E 00002 54 08 AC D0 0000B	003C 00000 .ENTRY ANL\$FORMAT_HEX, Save R2,R3,R4,R5 MOVAB ANL\$FORMAT_LINE, R5 MOVAB -80(SP), SP MOVL DATA, R4
---	---

: 1022  
: 1025

		64	B5 0000F	TSTW	(R4)	: 1039		
		33	13 00011	BEOL	28			
		04	BF DD 00013	PUSHL	#ANLOBJS_HEXHEADING1	: 1045		
		AC	DD 00019	PUSHL	INDENT_LEVEL			
		03	DD 0001C	PUSHL	#3			
		65	03 FB 0001E	CALLS	#3, ANL\$FORMAT_LINE			
		04	8F DD 00021	PUSHL	#ANLOBJS_HEXHEADING2	: 1046		
		AC	DD 00027	PUSHL	INDENT_LEVEL			
		7E	D4 0002A	CLRL	-(SP)			
		65	03 FB 0002C	CALLS	#3, ANL\$FORMAT_LINE			
		04 AE	D4 0002F	CLRL	ARG_LIST+4	: 1051		
	08	04	AC D0 00032	MOVL	INDENT_LEVEL, ARG_LIST+8	: 1052		
	0C	AE	00000000G	8F D0 00037	MOVL	#ANLOBJS_HEXDATA, ARG_LIST+12	: 1053	
		53	D4 0003F	CLRL	I	: 1057		
53	64	10	00 ED 00041	18:	CMPZV	#0, #16, (R4), I	: 1058	
			4F 1B 00046	28:	BLEQU	68		
		50	64 3C 00048	MOVZWL	(R4), R0			
		50	53 C2 0004B	SUBL2	I, R0	: 1062		
		08	50 D1 0004E	CMPL	R0, #8			
			03 1B 00051	BLEQU	38			
		50	08 D0 00053	MOVL	#8, R0			
		52	50 D0 00056	MOVL	R0, COUNT			
		50 F8	A2 9E 00059	MOVAB	-8(R2), R0	: 1067		
		50	03 C4 0005D	MULL2	#3, R0			
	10	AE	50 CE 00060	MNEGL	R0, ARG_LIST+16			
	14	AE	52 D0 00064	MOVL	COUNT, ARG_LIST+20	: 1071		
		50	52 D0 00068	MOVL	COUNT, J	: 1076		
			09 11 0006B	BRB	58			
	18	AE40	04 B443	9A 0006D	48:	MOVZBL	#4(R4)[I], ARG_LIST+24[J]	: 1077
				53 D6 00074	INCL	I	: 1078	
	50	F4	50 F4 00076	58:	SOBGEQ	J, 48	: 1076	
		53	52 C3 00079	SUBL3	COUNT, I, R0			
	18	AE42	50	D0 0007D	MOVL	R0, ARG_LIST+24[COUNT]		
	1C	AE42	52	D0 00082	MOVL	COUNT, ARG_LIST+28[COUNT]	: 1088	
	20	AE42	04 B440	9E 00087	MOVAB	#4(R4)[R0], ARG_LIST+32[COUNT]	: 1089	
		6E	08 A2 9E 0008E	MOVAB	8(R2), ARG_LIST	: 1093		
		65	6E FA 00092	CALLG	ARG_LIST, ANL\$FORMAT_LINE	: 1097		
			AA 11 00095	BRB	18			
			04 00097	68:	RET			

; Routine Size: 152 bytes.    Routine Base: \$CODE\$ + 030D

```
: 678 1103 1 %sbttl 'ANL$FORMAT_FLAGS - Format flag Bits'  
: 679 1104 1♦♦  
: 680 1105 1 Functional Description:  
: 681 1106 1 This routine is called to format the flags in a byte/word/longword  
: 682 1107 1 of flags.  
: 683 1108 1 Formal Parameters:  
: 684 1109 1 indent_level The level at which the introductory message is to  
: 685 1110 1 be indented. The flags are indented one more level.  
: 686 1111 1 intro_msg The introductory message.  
: 687 1112 1 flags The flag bits.  
: 688 1113 1 flag_def A longword vector defining the flags. The zeroth  
: 689 1114 1 entry specifies the highest-numbered flag. The  
: 690 1115 1 remaining longwords contain the address of a counted  
: 691 1116 1 string giving the name of the flag. If the flag is  
: 692 1117 1 undefined, the longword contains zero.  
: 693 1118 1  
: 694 1119 1  
: 695 1120 1 Implicit Inputs:  
: 696 1121 1 global data  
: 697 1122 1  
: 698 1123 1 Implicit Outputs:  
: 699 1124 1 global data  
: 700 1125 1  
: 701 1126 1 Returned Value:  
: 702 1127 1 none  
: 703 1128 1  
: 704 1129 1 Side Effects:  
: 705 1130 1  
: 706 1131 1--  
: 707 1132 1  
: 708 1133 1  
: 709 1134 2 global routine anl$format_flags(indent_level,intro_msg,flags,flag_def): novalue - begin  
: 710 1135 2  
: 711 1136 2 bind  
: 712 1137 2 flags_vector = flags: bitvector[],  
: 713 1138 2 flag_def_vector = .flag_def: vector[,long];  
: 714 1139 2  
: 715 1140 2 local  
: 716 1141 2 i: long;  
: 717 1142 2  
: 718 1143 2  
: 719 1144 2 : Begin by printing the introductory message.  
: 720 1145 2  
: 721 1146 2 anl$format_line(2,.indent_level,.intro_msg);  
: 722 1147 2  
: 723 1148 2 ! Now we loop through the flags and process each one that is defined.  
: 724 1149 2 ! We print the flag name, bit number, and current setting.  
: 725 1150 2  
: 726 1151 3 incr i from 0 to .flag_def_vector[0] do {  
: 727 1152 3 if .flag_def_vector[i+1] nequ 0 then  
: 728 1153 3 anl$format_line(0,.indent_level+1,anlobj$_flag,  
: 729 1154 3 .i,.flag_def_vector[i+1],.flags_vector[i]);  
: 730 1155 2 );  
: 731 1156 2  
: 732 1157 2 return;  
: 733 1158 2  
: 734 1159 1 end;
```

			0004 00000	.ENTRY	ANL\$FORMAT_FLAGS, Save R2	1134
		7E	04 AC 7D 00002	MOVQ	INDENT_LEVEL, -(SP)	1146
			02 DD 00006	PUSHL	#2	
		FDAC	CF 03 FB 00008	CALLS	#3, ANL\$FORMAT_LINE	1151
			52 D4 0000D	CLRL	I	
			29 11 00C7F	BRB	38	
			50 10 B(42 DE 00011 1\$:	MOVAL	@FLAG_DEF[I], R0	1152
			04 A0 D5 00016	TSTL	4(R0)	
			1D 13 00019	BEQL	2\$	
7F	0C AC	01	52 EF 0001B	EXTZV	I, #1, FLAGS_VECTOR, -(SP)	1154
			04 A0 DD 00021	PUSHL	4(R0)	
			52 DD 00024	PUSHL	I	
		7E	04 AC 00000000G	PUSHL	#ANLOBJS_FLAG	1153
			01 C1 0002C	ADDL	#1, INDENT_LEVEL, -(SP)	
		FD81	CF 7E D4 00031	CLRL	-(SP)	
			06 FB 00033	CALLS	#6, ANL\$FORMAT_LINE	1151
			52 D6 00038 2\$:	INCL	I	
		10 BC	52 D1 0003A 3\$:	CMPL	I, @FLAG_DEF	
			D1 1B 0003E	BLEQU	1\$	
			04 00040	RET		1159

: Routine Size: 65 bytes,    Routine Base: \$CODE\$ + 03A5

```
736 1160 1 zsbttl 'ANL$FORMAT_DATA_TYPE - Format a Data Type'
737 1161 1 !**
738 1162 1 . Functional Description:
739 1163 1 . This routine is called to format a nice line for a data type,
740 1164 1 . as defined in the VAX architecture manual.
741 1165 1 .
742 1166 1 . Formal Parameters:
743 1167 1 . indent_level The level of indentation for the line.
744 1168 1 . data_type The data type byte.
745 1169 1 .
746 1170 1 . Implicit Inputs:
747 1171 1 . global data
748 1172 1 .
749 1173 1 . Implicit Outputs:
750 1174 1 . global data
751 1175 1 .
752 1176 1 . Returned Value:
753 1177 1 . none
754 1178 1 .
755 1179 1 . Side Effects:
756 1180 1 .
757 1181 1 .--.
758 1182 1 .
759 1183 1 .
760 1184 2 global routine anl$format_data_type(indent_level,data_type): novalue = begin
761 1185 2 .
762 1186 2 own
763 1187 2 .
764 1188 2 data_type_table: vector[33,long] initial(
765 1189 2 . uplit byte(%ascic 'Z'),
766 1190 2 . uplit byte(%ascic 'V'),
767 1191 2 . uplit byte(%ascic 'AU'),
768 1192 2 . uplit byte(%ascic 'WU'),
769 1193 2 . uplit byte(%ascic 'LU'),
770 1194 2 . uplit byte(%ascic 'QU'),
771 1195 2 . uplit byte(%ascic 'B'),
772 1196 2 . uplit byte(%ascic 'W'),
773 1197 2 . uplit byte(%ascic 'L'),
774 1198 2 . uplit byte(%ascic 'Q'),
775 1199 2 . uplit byte(%ascic 'F'),
776 1200 2 . uplit byte(%ascic 'D'),
777 1201 2 . uplit byte(%ascic 'FC'),
778 1202 2 . uplit byte(%ascic 'DC'),
779 1203 2 . uplit byte(%ascic 'T'),
780 1204 2 . uplit byte(%ascic 'NU'),
781 1205 2 . uplit byte(%ascic 'NL'),
782 1206 2 . uplit byte(%ascic 'NLO'),
783 1207 2 . uplit byte(%ascic 'NR'),
784 1208 2 . uplit byte(%ascic 'NRO'),
785 1209 2 . uplit byte(%ascic 'NZ'),
786 1210 2 . uplit byte(%ascic 'P'),
787 1211 2 . uplit byte(%ascic 'ZI'),
788 1212 2 . uplit byte(%ascic 'ZEM'),
789 1213 2 . uplit byte(%ascic 'DSC'),
790 1214 2 . uplit byte(%ascic 'OU'),
791 1215 2 . uplit byte(%ascic 'O'),
792 1216 2 . uplit byte(%ascic 'G');
```

```

793 1217 2
794 1218 2
795 1219 2
796 1220 2
797 1221 2
798 1222 2
799 1223 2
800 1224 2 : If it is a standard data type, print it's name and number. Otherwise just
801 1225 2 : use the number.
802 1226 2
803 1227 2 anl$format_line(0,.indent_level,anlobj$datatype,
804 1228 3 (if .datatype {ssu %allocation(data_type_table)/4 then .data_type_table[.datatype]
805 1229 2
806 1230 2 .datatype);
807 1231 2
808 1232 2 return;
809 1233 2
810 1234 1 end;

```

## .PSECT SPLIT\$,NOWRT,NOEXE,2

	5A	01	00042 P.AAI:	.ASCII	<1>\Z\	
	56	01	00044 P.AAJ:	.ASCII	<1>\V\	
55	42	02	00046 P.AAK:	.ASCII	<2>\BU\	
55	57	02	00049 P.AAL:	.ASCII	<2>\WU\	
55	4C	02	0004C P.AAM:	.ASCII	<2>\LU\	
55	51	02	0004F P.AAN:	.ASCII	<2>\QU\	
	42	01	00052 P.AAO:	.ASCII	<1>\B\	
	57	01	00054 P.AAP:	.ASCII	<1>\W\	
	4C	01	00056 P.AAQ:	.ASCII	<1>\L\	
	51	01	00058 P.AAR:	.ASCII	<1>\Q\	
	46	01	0005A P.AAS:	.ASCII	<1>\F\	
	44	01	0005C P.AAT:	.ASCII	<1>\D\	
43	46	02	0005E P.AAU:	.ASCII	<2>\FC\	
43	44	02	00061 P.AAV:	.ASCII	<2>\DC\	
	54	01	00064 P.AAW:	.ASCII	<1>\T\	
55	4E	02	00066 P.AAX:	.ASCII	<2>\NU\	
4C	4E	02	00069 P.AAY:	.ASCII	<2>\NL\	
4F	4C	03	0006C P.AAZ:	.ASCII	<3>\NLO\	
4F	52	02	00070 P.ABA:	.ASCII	<2>\NR\	
	52	4E	03	00073 P.ABB:	.ASCII	<3>\NRO\
	5A	4E	02	00077 P.ABC:	.ASCII	<2>\NZ\
	50	01	0007A P.ABD:	.ASCII	<1>\P\	
	49	5A	02	0007C P.ABE:	.ASCII	<2>\ZI\
4D	45	5A	03	0007F P.ABF:	.ASCII	<3>\ZEM\
43	53	44	03	00083 P.ABG:	.ASCII	<3>\DSC\
	55	4F	02	00087 P.ABH:	.ASCII	<2>\OU\
	4F	01	0008A P.ABI:	.ASCII	<1>\O\	
	47	01	0008C P.ABJ:	.ASCII	<1>\G\	
	48	01	0008E P.ABK:	.ASCII	<1>\H\	
43	47	02	00090 P.ABL:	.ASCII	<2>\GC\	
43	48	02	00093 P.ABM:	.ASCII	<2>\HC\	
54	49	43	03	00096 P.ABN:	.ASCII	<3>\CIT\
56	50	42	03	0009A P.ABO:	.ASCII	<3>\BPV\
3F	3F	03	0009E P.ABP:	.ASCII	<3>\???\	

## .PSECT \$O\$NS,NO\$XE,2

00000000' 00000000' 00000000' 00000000' 00000000' 002B8 DATA\_TYPE\_TABLE:  
 00000000' 00000000' 00000000' 00000000' 00000000' 002D0  
 00000000' 00000000' 00000000' 00000000' 00000000' 002E8  
 00000000' 00000000' 00000000' 00000000' 00000000' 00300  
 00000000' 00000000' 00000000' 00000000' 00000000' 00318  
 00000000' 00000000' 00000000' 00000000' 00000000' 00330

.ADDRESS P.AAI, P.AAJ, P.AAK, P.AAL, P.AAM, -  
 P.AAN, P.AAO, P.AAP, P.AAQ, P.AAR, P.AAS, -  
 P.AAT, P.AAU, P.AAV, P.AAW, P.AAX, P.AAY, -  
 P.AAZ, P.ABA, P.ABB, P.ABC, P.ABD, P.ABE, -  
 P.ABF, P.ABG, P.ABH, P.ABI, P.ABJ, P.ABK, -  
 P.ABL, P.ABM, P.ABN, P.ABO

## .PSECT \$CODE\$,NOWRT,2

50        08        0000 0000 AC DD 00002 50 DD 00006 21        50 D1 00008 07 1E 0000B 0000'CF40 DD 0000D 07 11 00012 50        0000' CF 9E 00014    1\$: 50 DD 00019 04 AC DD 00021 7E D4 00024 FD4D    CF        05 FB 00026 04 0002B	.ENTRY ANL\$FORMAT_DATA_TYPE. Save nothing : 1184 MOVL DATA_TYPE, R0 : 1230 PUSHL R0 CMPL R0, #33 BGEOU 1\$ PUSHL DATA_TYPE_TABLE[R0] BRB 2\$ MOVAB P.ABP, R0 : 1229 PUSHL R0 PUSHL #ANLOBJS_DATATYPE : 1227 PUSHL INDENT_LEVEL CLRL -(SP) CALLS #5, ANL\$FORMAT_LINE RET
--	--

; Routine Size: 44 bytes.    Routine Base: \$CODE\$ + 03E6

```
: 812    1235 1 %sbttl 'ANL$FORMAT_MASK - Format an Entry Mask'
: 813    1236 1 '+'
: 814    1237 1 Functional Description:
: 815    1238 1 This routine is called to format an entry mask word.
: 816    1239 1
: 817    1240 1 Formal Parameters:
: 818    1241 1      indent_level   The level of indentation for the mask.
: 819    1242 1      mask        The mask itself.
: 820    1243 1
: 821    1244 1 Implicit Inputs:
: 822    1245 1      global data
: 823    1246 1
: 824    1247 1 Implicit Outputs:
: 825    1248 1      global data
: 826    1249 1
: 827    1250 1 Returned Value:
: 828    1251 1      none
: 829    1252 1
: 830    1253 1 Side Effects:
: 831    1254 1
: 832    1255 1 !--
: 833    1256 1
: 834    1257 1
: 835    2 global routine anl$format_mask(indent_level,mask): novalue = begin
: 836    2
: 837    2 bind
: 838    2      mask_vector = mask: bitvector[16];
: 839    2
: 840    2 own
: 841    2      bit_name: vector[16,long] initial(
: 842    2          'R0,', 'R1,', 'R2,', 'R3,'.
: 843    2          'R4,', 'R5,', 'R6,', 'R7,'.
: 844    2          'R8,', 'R9,', 'R10,', 'R11,'.
: 845    2          '--,', '--,', 'IV,', 'DV,');
: 846    2
: 847    2 local
: 848    2      i: long,
: 849    2      bit_name_len: long;
: 850    2 local
: 851    2      local_described_buffer(mask_buf,64);
: 852    2
: 853    2
: 854    2 ! We are going to scan the entry mask and concatenate together the names
: 855    2 ! of the bits that are on.
: 856    2
: 857    2 mask_buf[len] = 0;
: 858    3 incr i from 0 to 15 do (
: 859    4      if .mask_vector[i] then (
: 860    4          bit_name_len = (if .i eglu 10 or .i eglu 11 then 4 else 3);
: 861    4          ch$move(.bit_name_len,bit_name[i], .mask_buf[ptr]+.mask_buf[len]);
: 862    4          mask_buf[len] = .mask_buf[len] + .bit_name_len;
: 863    3      );
: 864    2 );
: 865    2
: 866    2 ! If any bits were set in the mask, we will have a spurious trailing comma.
: 867    2 ! Get rid of it.
: 868    2
```

OBJE XE OUT  
V04-000

**OBJEOUT** - Handle Report Output  
**ANL\$FORMAT\_MASK** - Format an Entry Mask

{ 11  
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14-Sep-1984 11:52:52 [ANALYZ.SRC]OBJEXECUT.B32;1

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```
869      1292 2 if .mask_buf[len] >= 0 then
870          1293 2     decrement (&mask_buf[len]);
871          1294 2
872          1295 2     ! Now we can print the mask.
873          1296 2
874          1297 2     anl$format_line(0,.indent_level,anlobj$_mask,mask_buf);
875          1298 2
876          1299 2     return;
877          1300 2
878          1301 1 end;
```

.PSECT SOWNS, NOEXE, 2

00	2C	30	52	0033C	BIT_NAME:	.ASCII	\R0.\<0>
00	2C	31	52	00340		.ASCII	\R1.\<0>
00	2C	32	52	00344		.ASCII	\R2.\<0>
00	2C	33	52	00348		.ASCII	\R3.\<0>
00	2C	34	52	0034C		.ASCII	\R4.\<0>
00	2C	35	52	00350		.ASCII	\R5.\<0>
00	2C	36	52	00354		.ASCII	\R6.\<0>
00	2C	37	52	00358		.ASCII	\R7.\<0>
00	2C	38	52	0035C		.ASCII	\R8.\<0>
00	2C	39	52	00360		.ASCII	\R9.\<0>
2C	30	31	52	00364		.ASCII	\R10.\<0>
2C	31	31	52	00368		.ASCII	\R11.\<0>
00	2C	2D	2D	0036C		.ASCII	\--.\<0>
00	2C	2D	2D	00370		.ASCII	\--.\<0>
00	2C	56	49	00374		.ASCII	\IV.\<0>
00	2C	56	44	00378		.ASCII	\DV.\<0>

.PSECT \$CODE\$,NOWRT,2

			00FC	00000	.ENTRY	ANL\$FORMAT MASK, Save R2,R3,R4,R5,R6,R7	1258
	SE	BC	AE	9E 00002	MOVAB	-68(SP), SP	
	7E	40	8F	9A 00006	MOVZBL	#64, MASK_BUF	1274
	G4	AE	08	AE 0000A	MOVAB	MASK_BUF+8, MASK_BUF+4	
			6E	B4 0000F	CLRW	MASK_BUF	
			56	D4 00011	CLRL	I	1280
25	08	AC	56	E1 00013 1\$:	BBC	I, MASK_VECTOR, SS	1281
		0A	56	D1 00018	CMPL	I #10	1282
			05	13 0001B	BEQL	2\$	1283
		OB	56	D1 0001D	CMPL	I #11	
			05	12 00020	BNEQ	3\$	
		57	04	D0 00022 2\$:	MOVL	#4, BIT_NAME_LEN	
			03	11 00025	BRB	4\$	
		57	03	D0 00027 3\$:	MOVL	#3, BIT_NAME_LEN	
		50	6E	3C 0002A 4\$:	MOVZWL	MASK_BUF, R0	1284
		50	04	AE C0 0002D	ADDL2	MASK_BUF+4, R0	
					PUSHAL	BIT_NAME[I]	
		9E		CF 46 DF 00031	MOVC3	BIT_NAME_LEN, a(SP)+, (R0)	
		6E		57 28 00036	ADDW2	BIT_NAME_LEN, MASK_BUF	1285
					INCL	I	1281

OBJE\$OUT  
V04-000

OBJE\$OUT - Handle Report Output  
ANL\$FORMAT\_MASK - Format an Entry Mask

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OF	56 D1 0003F	CMPL I #15	:
	CF 1B 00042	BLEQU 1\$	1292
	6E 85 00044	TSTW MASK_BUF	
	02 13 00046	BEQL 6\$	
	6E B7 00048	DECW MASK_BUF	1293
	5E DD 0004A 6\$: 0000000G	PUSHL SP	1297
	8F DD 0004C 04	PUSHL #ANLOBJS\$ MASK	
	AC DD 00052	PUSHL INDENT_LEVEL	
	7E D4 00055	CLRL -(SP)	
FIFO CF	04 FB 00057	CALLS #4, ANL\$FORMAT_LINE	
	04 0005C	RET	1301

: Routine Size: 93 bytes. Routine Base: \$CODE\$ + 0412

```
: 880      1302 1 %sbttl 'ANL$FORMAT_PROTECTION - Format Memory Protection Code'  
.: 881      1303 1 ++  
.: 882      1304 1 Functional Description:  
.: 883      1305 1 This routine is responsible for formatting a 4-bit memory  
.: 884      1306 1 protection code in a nice way.  
.: 885      1307 1  
.: 886      1308 1 Formal Parameters:  
.: 887      1309 1 indent_level The level of indentation for the line.  
.: 888      1310 1 prot_code The 4-bit protection code.  
.: 889      1311 1  
.: 890      1312 1 Implicit Inputs:  
.: 891      1313 1 global data  
.: 892      1314 1  
.: 893      1315 1 Implicit Outputs:  
.: 894      1316 1 global data  
.: 895      1317 1  
.: 896      1318 1 Returned Value:  
.: 897      1319 1 none  
.: 898      1320 1  
.: 899      1321 1 Side Effects:  
.: 900      1322 1  
.: 901      1323 1 --  
.: 902      1324 1  
.: 903      1325 1  
.: 904      2 global routine anl$format_protection(indent_level,prot_code): novalue = begin  
.: 905      1326 2  
.: 906      1327 2  
.: 907      1328 2 own  
.: 908      1329 2     prot_code_table: vector[16,long] initial(  
.: 909      1330 2         uplit byte (%ascic 'NA'),  
.: 910      1331 2         uplit byte (%ascic '???'),  
.: 911      1332 2         uplit byte (%ascic 'KW'),  
.: 912      1333 2         uplit byte (%ascic 'KR'),  
.: 913      1334 2         uplit byte (%ascic 'UW'),  
.: 914      1335 2         uplit byte (%ascic 'EW'),  
.: 915      1336 2         uplit byte (%ascic 'ERKW'),  
.: 916      1337 2         uplit byte (%ascic 'ER'),  
.: 917      1338 2         uplit byte (%ascic 'SW'),  
.: 918      1339 2         uplit byte (%ascic 'SREW'),  
.: 919      1340 2         uplit byte (%ascic 'SRKW'),  
.: 920      1341 2         uplit byte (%ascic 'SR'),  
.: 921      1342 2         uplit byte (%ascic 'URSW'),  
.: 922      1343 2         uplit byte (%ascic 'UREW'),  
.: 923      1344 2         uplit byte (%ascic 'URKW'),  
.: 924      1345 2         uplit byte (%ascic 'UR'));  
.: 925      1346 2  
.: 926      1347 2 ! Simply print a line with the protection code.  
.: 927      1348 2  
.: 928      1349 2  
.: 929      1350 2     anl$format_line(0..indent_level,anlobj$protection..prot_code_table[.prot_code]);  
.: 930      1351 2  
.: 931      1352 2 return;  
.: 932      1353 2  
.: 933      1354 1 end;
```

	3F	41	4E	02	000A2	P.ABQ:	.ASCII	<2>\NA\			
		3F	3F	03	000A5	P.ABR:	.ASCII	<3>\???\			
		57	48	02	000A9	P.ABS:	.ASCII	<2>\KW\			
			52	48	02	000AC	P.ABT:	.ASCII	<2>\KR\		
			57	55	02	000AF	P.ABU:	.ASCII	<2>\UW\		
	57	48	52	45	02	000B2	P.ABV:	.ASCII	<2>\EW\		
			52	45	04	000B5	P.ABW:	.ASCII	<4>\ERKW\		
			57	53	02	000BA	P.ABX:	.ASCII	<2>\ER\		
			57	45	52	53	04	000C0	P.ABY:	.ASCII	<2>\SW\
			57	48	52	53	04	000C5	P.ACA:	.ASCII	<4>\SRK\
				52	53	02	000CA	P.ACZ:	.ASCII	<4>\SREW\	
			57	53	52	55	04	000CD	P.ACC:	.ASCII	<2>\SR\
			57	45	52	55	04	000D2	P.ACD:	.ASCII	<4>\URSW\
			57	48	52	55	04	000D7	P.ACE:	.ASCII	<4>\UREW\
					52	55	02	000DC	P.ACF:	.ASCII	<2>\URK\
											<2>\UR\

.PSECT \$OWNS,NOEXE,2

00000000' 00000000' 00000000' 00000000' 00000000' 0037C PROT\_CODE\_TABLE:

00000000' 00000000' 00000000' 00000000' 00000000' 00394  
00000000' 00000000' 00000000' 00000000' 00000000' 003AC

.ADDRESS P.ABQ, P.ABR, P.ABS, P.ABT, P.ABU, -  
P.ABV, P.ABW, P.ABX, P.ABY, P.ABZ, P.ACA, -  
P.ACZ, P.ACC, P.ACD, P.ACE, P.ACF

.PSECT \$CODE\$,NOWRT,2

50	08	0000	00000
	AC	DD	00002
	0000	CF40	DD 00006
	00000000G	8F	DD 00008
	04	AC	DD 00011
		7E	D4 00014
FCD4	CF	04	FB 00016
		04	0001B

.ENTRY	ANL\$FORMAT_PROTECTION, Save nothing	: 1326
MOVL	PROT_CODE,-R0	: 1350
PUSHL	PROT_CODE_TABLE[R0]	
PUSHL	#ANLOBJS PROTECTION	
PUSHL	INDENT_LEVEL	
CLRL	-(SP)	
CALLS	#4, ANL\$FORMAT_LINE	
RET		

; Routine Size: 28 bytes, Routine Base: \$CODE\$ + 046F

: 1326  
: 1350  
:  
:  
:  
:  
:  
1354

```
: 934      1355 1 %sbtll 'ANL$FORMAT_SEVERITY - Format Error Severity Code'  
: 935      1356 1 '+'  
: 936      1357 1 Functional Description:  
: 937      1358 1 This routine is called to format a standard VMS error severity  
: 938      1359 1 code. It also checks to make sure the code is valid.  
: 939      1360 1  
: 940      1361 1 Formal Parameters:  
: 941      1362 1 indent_level Level of indentation for report.  
: 942      1363 1 severity The severity code.  
: 943      1364 1  
: 944      1365 1 Implicit Inputs:  
: 945      1366 1 global data  
: 946      1367 1  
: 947      1368 1 Implicit Outputs:  
: 948      1369 1 global data  
: 949      1370 1  
: 950      1371 1 Returned Value:  
: 951      1372 1 none  
: 952      1373 1  
: 953      1374 1 Side Effects:  
: 954      1375 1  
: 955      1376 1 --  
: 956      1377 1  
: 957      1378 1  
: 958      1379 2 global routine anl$format_severity(indent_level,severity): novalue = begin  
: 959      1380 2  
: 960      1381 2 own  
: 961      1382 2     severity_code_table: vector[8,long] initial(  
: 962      1383 2         uplit byte(%ascic 'WARNING'),  
: 963      1384 2         uplit byte(%ascic 'SUCCESS'),  
: 964      1385 2         uplit byte(%ascic 'ERROR'),  
: 965      1386 2         uplit byte(%ascic 'INFO')  
: 966      1387 2         uplit byte(%ascic 'SEVERE'),  
: 967      1388 2         uplit byte(%ascic 'reserved'),  
: 968      1389 2         uplit byte(%ascic 'reserved'),  
: 969      1390 2         uplit byte(%ascic 'reserved'));  
: 970      1391 2  
: 971      1392 2  
: 972      1393 2 ! Format a line with the severity code on it.  
: 973      1394 2  
: 974      1395 2 anl$format_line(0..indent_level,anlobj$severity,.severity_code_table[.severity]);  
: 975      1396 2  
: 976      1397 2 ! Check for a reserved severity.  
: 977      1398 2  
: 978      1399 2 if .severity gequ 5 then  
: 979      1400 2     anl$format_error(anlobj$badseverity,.severity);  
: 980      1401 2  
: 981      1402 2 return;  
: 982      1403 2  
: 983      1404 1 end;
```

.PSECT SPLITS,NOWRT,NOEXE,2

47 4E 49 4E 52 41 57 07 000DF P.ACG: .ASCII <7>\WARNING\  
53 53 45 43 43 55 53 07 000E7 P.ACH: .ASCII <7>\SUCESS\

:

	52	4F	52	52	45	05	000EF	P.AC1:	.ASCII <5>\ERROR\		
	64	65	45	52	46	4E	49	04	000F5 P.ACJ:	.ASCII <4>\INFO\	
	64	65	76	72	65	73	65	53	06	000FA P.ACK:	.ASCII <6>\SEVERE\
	64	65	76	72	65	73	65	72	08	00101 P.AC1:	.ASCII <8>\reserved\
	64	65	76	72	65	73	65	72	08	0010A P.AC0M:	.ASCII <8>\reserved\
	64	65	76	72	65	73	65	72	08	00113 P.ACN:	.ASCII <8>\reserved\

.PSECT \$OWNS,NOEXE,2

00000000' 00000000' 00000000' 00000000' 00000000' 003BC SEVERITY\_CODE\_TABLE:  
 :ADDRESS P.AC0G, P.AC0H, P.AC1, P.ACJ, P.ACK, -  
 00000000' 00000000' 003D4 P.AC1, P.AC0M, P.ACN

.PSECT \$CODE\$,NOWRT,2

	52	08	AC	0004	00000		.ENTRY	ANL\$FORMAT_SEVERITY, Save R2	: 1379
				0000	'CF42	DD 00006	MOVL	SEVERITY, R2	: 1395
				00000000G	8F	DD 0000B	PUSHL	SEVERITY_CODE_TABLE[R2]	
				04	AC	DD 00011	PUSHL	#ANLOBJS_SEVERITY	
					7E	D4 00014	PUSHL	INDENT_LEVEL	
	F0B8	CF		04	FB	00016	CLRL	- (SP)	
		05			52	D1 0001B	CALLS	#4, ANL\$FORMAT_LINE	: 1399
				0D	1F	0001E	CMPL	R2, #5	
					52	DD 00020	BLSSU	1\$	
	FD2B	CF	00000000G	8F	DD 00022		PUSHL	R2	: 1400
				02	FB	00028	CALLS	#2, ANL\$FORMAT_ERROR	
				04	0002D	1\$:	RET		: 1404

; Routine Size: 46 bytes. Routine Base: \$CODE\$ + 048B

```

985    1405 1 Isbttl 'ANL$INTERACT - See If User Wants to Continue'
986    1406 1 ++
987    1407 1 Functional Description:
988    1408 1 This routine is called as part of the processing of the /INTERACTIVE
989    1409 1 qualifier. We see if the user wants to continue with this file,
990    1410 1 or quit.
991    1411 1
992    1412 1 Formal Parameters:
993    1413 1     none
994    1414 1
995    1415 1 Implicit Inputs:
996    1416 1     global data
997    1417 1
998    1418 1 Implicit Outputs:
999    1419 1     global data
1000   1420 1
1001   1421 1 Returned Value:
1002   1422 1     True if user wants to continue; false otherwise.
1003   1423 1
1004   1424 1 Side Effects:
1005   1425 1
1006   1426 1 --+
1007   1427 1
1008   1428 1
1009   1429 2 global routine anl$interact = begin
1010   1430 2
1011   1431 2 local
1012   1432 2     status: long,
1013   1433 2     local_described_buffer(answer_buf,1);
1014   1434 2
1015   1435 2
1016   1436 2 ! First we display a message telling the user what to do.
1017   1437 2
1018   1438 2 anl$format_line(-1,0,anlobj$_interact);
1019   1439 2
1020   1440 2 ! Now we get the user's answer. If it is a period (.), then we return
1021   1441 2 : false. If it's blank, we return true. If CTRL/Z, we just bag it.
1022   1442 2
1023   1443 2 status = lib$get_input(answer_buf);
1024   1444 2 if .status equ rms$ eof then
1025   1445 2     anl$exit_with_status();
1026   1446 2 return ch$rchar(.answer_buf[ptr]) nequ '.';
1027   1447 2
1028   1448 1 end;

```

SE 0000 00000 04 AE 08 AE 9E 00007 00000000G 8F DD 0000C 7E 01 CE 00014 F089 CF 03 FB 00017	08 C2 00002 01 DD 00005 7E D4 00012 03 FB 00017	.ENTRY ANL\$INTERACT, Save nothing SUBL2 #8, SP PUSHL #1 MOVAB ANSWER_BUF+8, ANSWER_BUF+4 PUSHL #ANLOBJS_INTERACT CLRL -(SP) MNEGL #1, -(SP) CALLS #3, ANL\$FORMAT_LINE	: 1429 : 1433 : 1438
---	--	--	----------------------------

OBJEXECUT  
V04-000

OBJEXECUT - Handle Report Output  
ANL\$INTERACT - See If User Wants to Continue

J 11  
15-Sep-1984 23:36:57  
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[ANALYZ.SRC]OBJEXECOUT.B32;1

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00000000G	00	SE	DD	0001C	PUSHL	SP		: 1443
0001827A	8F	01	FB	0001E	CALLS	#1, LIB\$GET_INPUT		: 1444
		50	D1	00025	CMPL	STATUS, #98938		
		05	12	0002C	BNEQ	1\$		
FEO0	CF	00	FB	0002E	CALLS	#0, ANL\$EXIT_WITH_STATUS		: 1445
		50	D4	00033 1\$:	CLRL	R0		: 1446
		02	13	00039	CMPB	ANSWER_BUF+4, #46		
		50	D6	0003B	BEQL	2\$		
		04	0003D 2\$:	INCL	RO			
				RET				: 1448

; Routine Size: 62 bytes, Routine Base: \$CODE\$ + 04B9

; 1029 1449 1  
; 1030 1450 0 end eludom

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
SGLOBALS	4	NOVEC, WRT, RD, NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
SOWNS	988	NOVEC, WRT, RD, NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
SPLITS	284	NOVEC,NOWRT, RD, NOEXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)
\$CODE\$	1271	NOVEC,NOWRT, RD, EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
_8255\$DUA28:[SYSLIB]STARLET.L32;1	9776	50	0	581	00:01.0

COMMAND QUALIFIERS

BLISS/[CHECK=(FIELD,INITIAL,OPTIMIZE)]/LIS=LISS:OBJEXECOUT/OBJ=OBJ\$:OBJEXECOUT MSRC\$:OBJEXECOUT/UPDATE=(ENH\$:OBJEXECOUT)

Size: 1271 code + 1276 data bytes  
Run Time: 00:28.7  
Elapsed Time: 00:54.1  
Lines/(CPU Min: 3028  
Lexemes/(CPU-Min: 20190  
Memory Used: 187 pages

0  
OBJEXECUT  
V04-000

OBJEXECUT - Handle Report Output  
ANL\$INTERACT - See If User Wants to Continue

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: Compilation Complete

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

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