

AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZZZ
AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZZZ
AAAAAAA	NNN	NNN	AAAAAAA	LLL	YYY	YYY	ZZZZZZZZZZZZZZZ
AAA	AAA	NNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNNNNN	AAA	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	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	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	YYY	YYY	ZZZ
AAA	AAA	NNN	NNN	AAA	LLL	ZZZ	ZZZZZZZZZZZZZZZ
AAA	AAA	NNN	NNN	AAA	LLL	ZZZ	ZZZZZZZZZZZZZZZ
AAA	AAA	NNN	NNN	AAA	LLL	ZZZ	ZZZZZZZZZZZZZZZ

RRRRRRRR	MM	MM	SSSSSSSS
RRRRRRRR	MM	MM	SSSSSSSS
RR RR	MMMM	MMMM	SS
RR RR	MMMM	MMMM	SS
RR RR	MM MM	MM MM	SS
RR RR	MM MM	MM MM	SS
RRRRRRRR	MM	MM	SSSSSS
RRRRRRRR	MM	MM	SSSSSS
RR RR	MM	MM	SS
RR RR	MM	MM	SS
RR RR	MM	MM	SS
RR RR	MM	MM	SS
RR RR	MM	MM	SSSSSSSS
RR RR	MM	MM	SSSSSSSS

....
....
....
....

LL		SSSSSSSS
LL		SSSSSSSS
LL		SS
LL		SSSSSS
LL		SSSSSS
LL		SS
LLLLLLLL		SSSSSSSS
LLLLLLLL		SSSSSSSS

```
1 0001 0 Ztitle 'RMS - Main Module for ANALYZE/RMS_FILE'
2 0002 0     module rms      (main=anl$rms
3 0003 1           ident='V04-000') = begin
4
5 0005 1
6 0006 1 ****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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24 0024 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25 0025 1 *
26 0026 1 *
27 0027 1 ****
28 0028 1 *
29 0029 1 *
30 0030 1 ++
31 0031 1 Facility: VAX/VMS Analyze Facility, Main Module for ANALYZE/RMS_FILE
32 0032 1
33 0033 1 Abstract: This is the main module for the ANALYZE/RMS_FILE command.
34 0034 1 It contains the routine that determines which mode we are
35 0035 1 to operate in. It also contains routines that don't fit
36 0036 1 anywhere else.
37 0037 1
38 0038 1
39 0039 1 Environment:
40 0040 1
41 0041 1 Author: Paul C. Anagnostopoulos, Creation Date: 18 February 1981
42 0042 1
43 0043 1 Modified By:
44 0044 1
45 0045 1 V03-003 DGB0046 Donald G. Blair 08-May-1984
46 0046 1 Fix condition handling for ANALYZRMS so that it
47 0047 1 returns status correctly upon image exit. Rather
48 0048 1 than always return anlrms$ notok, return the first
49 0049 1 error that occurs of the highest severity.
50 0050 1
51 0051 1 V03-002 PCA1011 Paul C. Anagnostopoulos 1-Apr-1983
52 0052 1 Change the message prefix to ANLRMSS$ 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 V03-001 PCA1002 Paul C. Anagnostopoulos 25-Oct-1982
57 0057 1 Add the ANL$PREPARE_QUOTED_STRING routine to format a
```

RMS
V04-000

RMS - Main Module for ANALYZE/RMS_FILE

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: 58
: 59
: 60

0058 1 :
0059 1 :
0060 1 .--

quoted string for inclusion in an FDL specification.
Add code for /SUMMARY mode.

RMS
VO4-000RMS - Main Module for ANALYZE/RMS_FILE
Module Declarations15-Sep-1984 23:52:21
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```

: 62      0061 1 !$bttl 'Module Declarations'
: 63      0062 1 !
: 64      0063 1 ! Libraries and Requires:
: 65      0064 1 !
: 66      0065 1
: 67      0066 1 library 'lib';
: 68      0067 1 require 'rmsreq';
: 69      0576 1
: 70      0577 1
: 71      0578 1 ! Table of Contents:
: 72      0579 1 !
: 73      0580 1
: 74      0581 1 forward routine
: 75      0582 1     anl$rms: novalue,
: 76      0583 1     anl$unwind_handler,
: 77      0584 1     anl$worst_error_handler,
: 78      0585 1     anl$internalize_number,
: 79      0586 1     anl$check_flags: novalue,
: 80      0587 1     anl$prepare_quoted_string: novalue;
: 81      0588 1
: 82      0589 1 !
: 83      0590 1 ! External References:
: 84      0591 1 !
: 85      0592 1
: 86      0593 1 external routine
: 87      0594 1     anl$check_mode,
: 88      0595 1     anl$fdl_mode,
: 89      0596 1     anl$format_error,
: 90      0597 1     anl$interactive_mode,
: 91      0598 1     cli$present: addressing_mode(general),
: 92      0599 1     lib$establish: addressing_mode(general),
: 93      0600 1     ots$cvt_til: addressing_mode(general),
: 94      0601 1     ots$cvt_tz_l: addressing_mode(general);
: 95      0602 1
: 96      0603 1 !
: 97      0604 1 ! Global Variables:
: 98      0605 1 !
: 99      0606 1
:100     0607 1 global
:101     0608 1     anl$gb_mode: byte,           ! current mode of operation
:102     0609 1     anl$worst_error:          ! this contains either success status or if
:103     0610 1     initial(anlrms$ok);       ! errors occurred, it contains the first error
:104     0611 1                           ! of the worst severity that occurred.
:105     0612 1
:106     0613 1 !
:107     0614 1 ! Own Variables:
:108     0615 1 !
:109     0616 1

```

73
76
04
05
06
1
07

06
2
9
0
1

```
: 111 0617 1 %sbttl 'ANL$RMS - Main Routine for ANALYZE/RMS FILE'
: 112 0618 1 /*+
: 113 0619 1 Functional Description:
: 114 0620 1 This is the main routine, entered when the user performs an
: 115 0621 1 ANALYZE/RMS FILE command. We decide which mode of operation
: 116 0622 1 has been requested and do it.
: 117 0623 1
: 118 0624 1 Formal Parameters:
: 119 0625 1 none
: 120 0626 1
: 121 0627 1 Implicit Inputs:
: 122 0628 1 global data
: 123 0629 1
: 124 0630 1 Implicit Outputs:
: 125 0631 1 global data
: 126 0632 1
: 127 0633 1 Returned Value:
: 128 0634 1 none
: 129 0635 1
: 130 0636 1 Side Effects:
: 131 0637 1 --
: 132 0638 1
: 133 0639 1
: 134 0640 2 global routine anl$rms: novalue = begin
: 135 0641 2
: 136 0642 2 lib$establish(anl$worst_error_handler);
: 137 0643 2
: 138 0644 2 : See which mode the user has requested. The default is /CHECK.
: 139 0645 2
: 140 0646 2 if cli$present(describe('FDL')) then (
: 141 0647 3
: 142 0648 3 anl$gb_mode = anl$k_fdl;
: 143 0649 3 anl$fdl_mode();
: 144 0650 3
: 145 0651 3 else if cli$present(describe('INTERACTIVE')) then (
: 146 0652 3
: 147 0653 3 anl$gb_mode = anl$k_interactive;
: 148 0654 3 anl$interactive_mode();
: 149 0655 3 else if cli$present(describe('STATISTICS')) then (
: 150 0656 3
: 151 0657 3 anl$gb_mode = anl$k_statistics;
: 152 0658 3 anl$check_mode();
: 153 0659 3 else if cli$present(describe('SUMMARY')) then (
: 154 0660 3
: 155 0661 3 anl$gb_mode = anl$k_summary;
: 156 0662 3 anl$check_mode();
: 157 0663 3 else (
: 158 0664 3
: 159 0665 3 anl$gb_mode = anl$k_check;
: 160 0666 2 anl$check_mode();
: 161 0667 2
: 162 0668 2 : if it was an interactive session, always return success. otherwise
: 163 0669 2 : return worst error
: 164 0670 2
: 165 0671 2 if .anl$gb_mode eq1 anl$k_interactive then
: 166 0672 3 $exit(code=anlrms$ok)
: 167 0673 2 else
```

RMS
V04-000

RMS - Main Module for ANALYZE/RMS_FILE
ANL\$RMS - Main Routine for ANALYZE/RMS_FILE

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: 168 0674 2 \$exit(code=.anl\$worst_error or sts\$inhib_msg);
: 169 0675 2
: 170 0676 1 end;

.TITLE RMS RMS - Main Module for ANALYZE/RMS_FILE
.IDENT \V04-000\
.PSECT SPLITS,NOWRT,NOEXE,2

4C 44 46 00000 P.AAB: .ASCII \FDL\
00000003 00004 P.AAA: .BLKB 1
00000000 00008 P.AAD: .LONG 3
45 56 49 54 43 41 52 45 54 4E 49 0000C P.AAD: .ADDRESS P.AAB
00017 .ASCII \INTERACTIVE\
0000000B 00018 P.AAC: .BLKB 1
00000000 0001C P.AAF: .LONG 11
53 43 49 54 53 49 54 41 54 53 00020 P.AAF: .ADDRESS P.AAD
0002A .ASCII \STATISTICS\
0000000A 0002C P.AAE: .BLKB 2
00000000 00030 P.AAH: .LONG 10
59 52 41 4D 4D 55 53 00034 P.AAH: .ADDRESS P.AAF
0003B .ASCII \SUMMARY\
00000007 0003C P.AAG: .BLKB 1
00000000 00040 P.AAG: .LONG 7
00000000 00040 P.AAG: .ADDRESS P.AAH

.PSECT \$GLOBALS,NOEXE,2

00000 ANL\$GB_MODE::
00001 .BLKB 1
0000000G 00004 ANL\$WORST_ERROR::
00001 .BLKB 3
00000004 .LONG ANLRMSS_OK

.EXTRN ANLRMSS_OK, ANLRMSS_ALLOC
.EXTRN ANLRMSS_ANYTHING
.EXTRN ANLRMSS_BACKUP, ANLRMSS_BKT
.EXTRN ANLRMSS_BKTAREA
.EXTRN ANLRMSS_BKTCHECK
.EXTRN ANLRMSS_BKTFLAGS
.EXTRN ANLRMSS_BKTFREE
.EXTRN ANLRMSS_BKTKEY, ANLRMSS_BKITLEVEL
.EXTRN ANLRMSS_BKTNEXT
.EXTRN ANLRMSS_BKTPTRSIZ
.EXTRN ANLRMSS_BKTRECID
.EXTRN ANLRMSS_BKTRECID3
.EXTRN ANLRMSS_BKTSAMPLE
.EXTRN ANLRMSS_BKTVBNFREE
.EXTRN ANLRMSS_BUCKETSIZE
.EXTRN ANLRMSS_CELL, ANLRMSS_CELLDATA
.EXTRN ANLRMSS_CELLFLAGS
.EXTRN ANLRMSS_CHECKHDG
.EXTRN ANLRMSS_CONFIG, ANLRMSS_CREATION
.EXTRN ANLRMSS_CTLSIZE
.EXTRN ANLRMSS_DATAREC
.EXTRN ANLRMSS_DATABKTVBN

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RMS
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RMS - Main Module for ANALYZE/RMS_FILE
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.EXTRN ANLRMSS_DUMPHEADER
.EXTRN ANLRMSS_EOF, ANLRMSS_ERRORCOUNT
.EXTRN ANLRMSS_ERRNONE
.EXTRN ANLRMSS_ERRORS, ANLRMSS_EXPIRATION
.EXTRN ANLRMSS_FILEATTR
.EXTRN ANLRMSS_FILEHDR
.EXTRN ANLRMSS_FILEID, ANLRMSS_FILEORG
.EXTRN ANLRMSS_FILESPEC
.EXTRN ANLRMSS_FLAG, ANLRMSS_GLOBALBUFS
.EXTRN ANLRMSS_HEXDATA
.EXTRN ANLRMSS_HEXHEADER1
.EXTRN ANLRMSS_HEXHEADER2
.EXTRN ANLRMSS_IDXAREA
.EXTRN ANLRMSS_IDXAREAALLOC
.EXTRN ANLRMSS_IDXAREABKTSZ
.EXTRN ANLRMSS_IDXAREANEXT
.EXTRN ANLRMSS_IDXAREANOALLOC
.EXTRN ANLRMSS_IDXAREAQTY
.EXTRN ANLRMSS_IDXAREARECL
.EXTRN ANLRMSS_IDXAREUSED
.EXTRN ANLRMSS_IDXKEY, ANLRMSS_IDXKEYAREAS
.EXTRN ANLRMSS_IDXKEYBKTSZ
.EXTRN ANLRMSS_IDXKEYBYTES
.EXTRN ANLRMSS_IDXKEY1TYPE
.EXTRN ANLRMSS_IDXKEYDATAVBN
.EXTRN ANLRMSS_IDXKEYFILL
.EXTRN ANLRMSS_IDXKEYFLAGS
.EXTRN ANLRMSS_IDXKEYKEYSZ
.EXTRN ANLRMSS_IDXKEYNAME
.EXTRN ANLRMSS_IDXKEYNEXT
.EXTRN ANLRMSS_IDXKEYMINREC
.EXTRN ANLRMSS_IDXKEYNULL
.EXTRN ANLRMSS_IDXKEYPOSS
.EXTRN ANLRMSS_IDXKEYROOTLVL
.EXTRN ANLRMSS_IDXKEYROOTVBN
.EXTRN ANLRMSS_IDXKEYSEGS
.EXTRN ANLRMSS_IDXKEYSIZES
.EXTRN ANLRMSS_IDXPRIMREC
.EXTRN ANLRMSS_IDXPRIMRECFLAGS
.EXTRN ANLRMSS_IDXPRIMRECID
.EXTRN ANLRMSS_IDXPRIMRECLEN
.EXTRN ANLRMSS_IDXPRIMRECRRV
.EXTRN ANLRMSS_IDXPROAREAS
.EXTRN ANLRMSS_IDXPROLOG
.EXTRN ANLRMSS_IDXREC, ANLRMSS_IDXRECPTR
.EXTRN ANLRMSS_IDXSIDR
.EXTRN ANLRMSS_IDXSIDRDUPCNT
.EXTRN ANLRMSS_IDXSIDRFLAGS
.EXTRN ANLRMSS_IDXSIDRRECID
.EXTRN ANLRMSS_IDXSIDRPTRFLAGS
.EXTRN ANLRMSS_IDXSIDRPTRREF
.EXTRN ANLRMSS_INTERCOMMAND
.EXTRN ANLRMSS_INTERHDG
.EXTRN ANLRMSS_LONGREC
.EXTRN ANLRMSS_MAXRECSIZE
.EXTRN ANLRMSS_NOBACKUP
.EXTRN ANLRMSS_NOEXPIRATION

RMS
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RMS - Main Module for ANALYZE/RMS_FILE
ANL\$RMS - Main Routine for ANALYZE/RMS_FILE

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.EXTRN ANLRMSS_NOSPANFILLER
.EXTRN ANLRMSS_PERFORM
.EXTRN ANLRMSS_PROLOGFLAGS
.EXTRN ANLRMSS_PROLOGVER
.EXTRN ANLRMSS_PROT, ANLRMSS_RECATTR
.EXTRN ANLRMSS_RECFCMT, ANLRMSS_RECLAIMBKT
.EXTRN ANLRMSS_RELBUCKET
.EXTRN ANLRMSS_RELEOFVBN
.EXTRN ANLRMSS_RELMAXREC
.EXTRN ANLRMSS_RELPROLOG
.EXTRN ANLRMSS_RELIAB, ANLRMSS_REVISION
.EXTRN ANLRMSS_STATHDG
.EXTRN ANLRMSS_SUMMARYHDG
.EXTRN ANLRMSS_OWNERUIC
.EXTRN ANLRMSS_JNL, ANLRMSS_AIJNL
.EXTRN ANLRMSS_BIJNL, ANLRMSS_ATJNL
.EXTRN ANLRMSS_ATTOP, ANLRMSS_BADCMD
.EXTRN ANLRMSS_BADPATH
.EXTRN ANLRMSS_BADVBN, ANLRMSS_DOWNSHELP
.EXTRN ANLRMSS_DOWNPATH
.EXTRN ANLRMSS_EMPTYBKT
.EXTRN ANLRMSS_NODATA, ANLRMSS_NODOWN
.EXTRN ANLRMSS_NONEXT, ANLRMSS_NORECLAIMED
.EXTRN ANLRMSS_NORECS, ANLRMSS_NORRV
.EXTRN ANLRMSS_RESTDONE
.EXTRN ANLRMSS_STACKFULL
.EXTRN ANLRMSS_UNINITINDEX
.EXTRN ANLRMSS_FDLIDENT
.EXTRN ANLRMSS_FDLSYSTEM
.EXTRN ANLRMSS_FDLSOURCE
.EXTRN ANLRMSS_FDLFILE
.EXTRN ANLRMSS_FDLALLOC
.EXTRN ANLRMSS_FDLNOALLOC
.EXTRN ANLRMSS_FDLBESTTRY
.EXTRN ANLRMSS_FDLBUCKETSIZE
.EXTRN ANLRMSS_FDLCLUSTERSIZE
.EXTRN ANLRMSS_FDLCONTIG
.EXTRN ANLRMSS_FDLEXTRACTION
.EXTRN ANLRMSS_FDLGLOBALBUFS
.EXTRN ANLRMSS_FDLMAXRECORD
.EXTRN ANLRMSS_FDLFILENAME
.EXTRN ANLRMSS_FDLORG, ANLRMSS_FDLOWNER
.EXTRN ANLRMSS_FDLPROTECTION
.EXTRN ANLRMSS_FDLRECORD
.EXTRN ANLRMSS_FDLSPAN
.EXTRN ANLRMSS_FDLCC, ANLRMSS_FDLVFCSIZE
.EXTRN ANLRMSS_FDLFORMAT
.EXTRN ANLRMSS_FDLSIZE
.EXTRN ANLRMSS_FDLAREA
.EXTRN ANLRMSS_FDLKEY, ANLRMSS_FDLCHANGES
.EXTRN ANLRMSS_FDLDATAAREA
.EXTRN ANLRMSS_FDLDATAFILL
.EXTRN ANLRMSS_FDLDATAKEYCOMPB
.EXTRN ANLRMSS_FDLDATARECCOMPB
.EXTRN ANLRMSS_FDLDUPS
.EXTRN ANLRMSS_FDLINDEXAREA
.EXTRN ANLRMSS_FDLINDEXCOMPB

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RMS
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RMS - Main Module for ANALYZE/RMS FILE
ANL\$RMS - Main Routine for ANALYZE/RMS_FILE

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.EXTRN ANLRMSS_FDLINDEXFILL
.EXTRN ANLRMSS_FDLL1INDEXAREA
.EXTRN ANLRMSS_FDLKEYNAME
.EXTRN ANLRMSS_FDLNORECS
.EXTRN ANLRMSS_FDLNULLKEY
.EXTRN ANLRMSS_FDLNULLVALUE
.EXTRN ANLRMSS_FDLPROLOG
.EXTRN ANLRMSS_FDLSEGLENGTH
.EXTRN ANLRMSS_FDLSEGPOS
.EXTRN ANLRMSS_FDLSEGTYPE
.EXTRN ANLRMSS_FDLANALAREA
.EXTRN ANLRMSS_FDLRECL
.EXTRN ANLRMSS_FDLANALKEY
.EXTRN ANLRMSS_FDLDATAKEYCOMP
.EXTRN ANLRMSS_FDLDATAARECCOMP
.EXTRN ANLRMSS_FDLDATARECS
.EXTRN ANLRMSS_FLDATASPACE
.EXTRN ANLRMSS_FDLDEPTH
.EXTRN ANLRMSS_FLDUPS PER
.EXTRN ANLRMSS_FDLIDXCOMP
.EXTRN ANLRMSS_FDLIDXFILL
.EXTRN ANLRMSS_FDLIDXSPACE
.EXTRN ANLRMSS_FDLIDX1RECS
.EXTRN ANLRMSS_FDLLENMEAN
.EXTRN ANLRMSS_FDLXLENMEAN
.EXTRN ANLRMSS_STATAREA
.EXTRN ANLRMSS_STATRECL
.EXTRN ANLRMSS_STATKEY
.EXTRN ANLRMSS_STATDEPTH
.EXTRN ANLRMSS_STATIDX1RECS
.EXTRN ANLRMSS_STATIDXLENMEAN
.EXTRN ANLRMSS_STATIDXSPACE
.EXTRN ANLRMSS_STATIDXFILL
.EXTRN ANLRMSS_STATIDXCOMP
.EXTRN ANLRMSS_STATDATARECS
.EXTRN ANLRMSS_STATDUPS PER
.EXTRN ANLRMSS_STATDATALENMEAN
.EXTRN ANLRMSS_STATDATASPACE
.EXTRN ANLRMSS_STATDATAFILL
.EXTRN ANLRMSS_STATDATAKEYCOMP
.EXTRN ANLRMSS_STATDATAARECCOMP
.EXT... ANLRMSS_STATEFFICIENCY
.EXTRN ANLRMSS_BADAREA1ST2
.EXTRN ANLRMSS_BADAREABKTSIZE
.EXTRN ANLRMSS_BADAREAFIT
.EXTRN ANLRMSS_BADAREAID
.EXTRN ANLRMSS_BADAREANEEXT
.EXTRN ANLRMSS_BADAREAROOT
.EXTRN ANLRMSS_BADAREAUSED
.EXTRN ANLRMSS_BADBKTAREAID
.EXTRN ANLRMSS_BADBKTCHECK
.EXTRN ANLRMSS_BADBKTFREE
.EXTRN ANLRMSS_BADBKTKEYID
.EXTRN ANLRMSS_BADBKTLEVEL
.EXTRN ANLRMSS_BADBKTROOTBIT
.EXTRN ANLRMSS_BADBKTSAMPLE
.EXTRN ANLRMSS_BADCELLFIT

RMS
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RMS - Main Module for ANALYZE/RMS FILE
ANL\$RMS - Main Routine for ANALYZE/RMS_FILE

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.EXTRN ANLRMSS\$_BADCHECKSUM
.EXTRN ANLRMSS\$_BADDATARECBITS
.EXTRN ANLRMSS\$_BADDATARECFIT
.EXTRN ANLRMSS\$_BADDATARECPS
.EXTRN ANLRMSS\$_BAD3IDXKEYFIT
.EXTRN ANLRMSS\$_BADIDXLASTKEY
.EXTRN ANLRMSS\$_BADIDXORDER
.EXTRN ANLRMSS\$_BADIDXRECBITS
.EXTRN ANLRMSS\$_BADIDXRECFIT
.EXTRN ANLRMSS\$_BADIDXRECPSP
.EXTRN ANLRMSS\$_BADKEYAREAID
.EXTRN ANLRMSS\$_BADKEYDATABKT
.EXTRN ANLRMSS\$_BADKEYDATAFIT
.EXTRN ANLRMSS\$_BADKEYDATATYPE
.EXTRN ANLRMSS\$_BADKEYIDXBXKT
.EXTRN ANLRMSS\$_BADKEYFILL
.EXTRN ANLRMSS\$_BADKEYFIT
.EXTRN ANLRMSS\$_BADKEYREFID
.EXTRN ANLRMSS\$_BADKEYROITLEVEL
.EXTRN ANLRMSS\$_BADKEYSEGCOUNT
.EXTRN ANLRMSS\$_BADKEYSEGVEC
.EXTRN ANLRMSS\$_BADKEYSUMMARY
.EXTRN ANLRMSS\$_BADREADNOPAR
.EXTRN ANLRMSS\$_BADREADPAR
.EXTRN ANLRMSS\$_BADSIDRDUPT
.EXTRN ANLRMSS\$_BADSIDRPTRFIT
.EXTRN ANLRMSS\$_BADSIDRPTRSZ
.EXTRN ANLRMSS\$_BADSIDRSIZE
.EXTRN ANLRMSS\$_BADSTREAMEOF
.EXTRN ANLRMSS\$_BADVBNFREE
.EXTRN ANLRMSS\$_BKTLLOOP
.EXTRN ANLRMSS\$_EXTENDERERR
.EXTRN ANLRMSS\$_FLAGERROR
.EXTRN ANLRMSS\$_MISSINGBKT
.EXTRN ANLRMSS\$_NOTOK, ANLRMSS\$_SPANERROR
.EXTRN ANLRMSS\$_TOOMANYRECS
.EXTRN ANLRMSS\$_UNWIND, ANLRMSS\$_VFCTOOSHORT
.EXTRN ANLRMSS\$_CACHEFULL
.EXTRN ANLRMSS\$_CACHERELFAIL
.EXTRN ANLS\$CHECK_MODE, ANLSFDL_MODE
.EXTRN ANLS\$FORMAT_ERROR
.EXTRN ANLS\$INTERACTIVE_MODE
.EXTRN CLISPRESNT, LIB\$ESTABLISH
.EXTRN OTSSCVT TI_L, OTSSCVT TZ_L
.EXTRN SYS\$EXIT

.PSECT \$CODE\$, NOWRT, 2

53	0000'	CF	9E	00002	.ENTRY	ANL\$RMS, Save R2,R3	: 0641
52	00000000G	00	9E	00007	MOVAB	ANL\$GB MODE, R3	
	0000V	CF	9F	0000E	MOVAB	CLISPRESNT, R2	
00000000G	00	0000'	01	FB	PUSHAB	ANL\$WORST_ERROR_HANDLER	: 0643
		0000	FB	00012	CALLS	#1, LIB\$ESTABLISH	
		0000'	CF	9F	PUSHAB	P.AAA	
62		01	FB	00019	CALLS	#1, CLISPRESNT	: 0647
0A		50	E9	00020	BLBC	R0, 1\$	

RMS
V04-000RMS - Main Module for ANALYZE/RMS_FILE
ANL\$RMS - Main Routine for ANALYZE/RMS_FILEC 7
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3		0000G	63	02	90 00023	MOV B	#2, ANL\$GB_MODE	: 0648
			CF	00	FB 00026	CALLS	#0, ANL\$FDC_MODE	: 0649
				3A	11 0002B	BRB	6\$: 0647
			0000'	CF	9F 0002D	1\$: PUSHAB	P.AAC	: 0651
			62	01	FB 00031	CALLS	#1, C_ISPRESENT	
			0A	50	E9 00034	BLBC	R0, 2\$	
			0000G	63	03 90 00037	MOV B	#3, ANL\$GB_MODE	: 0652
			CF	00	FB 0003A	CALLS	#0, ANL\$INTERACTIVE_MODE	: 0653
				26	11 0003F	BRB	6\$: 0651
			0000'	CF	9F 00041	2\$: PUSHAB	P.AAE	: 0655
			62	01	FB 00045	CALLS	#1, CL_ISPRESENT	
			05	50	E9 00048	BLBC	R0, 3\$	
			63	04	90 0004B	MOV B	#4, ANL\$GB_MODE	: 0656
				12	11 0004E	BRB	5\$: 0657
			0000'	CF	9F 00050	3\$: PUSHAB	P.AAG	: 0659
			62	01	FB 00054	CALLS	#1, CL_ISPRESENT	
			05	50	E9 00057	BLBC	R0, 4\$	
			63	05	90 0005A	MOV B	#5, ANL\$GB_MODE	: 0660
				03	11 0005D	BRB	5\$: 0661
			0000G	63	01 90 0005F	4\$: MOV B	#1, ANL\$GB_MODE	: 0664
			CF	00	FB 00062	5\$: CALLS	#0, ANL\$CHECK_MODE	: 0665
			03	63	91 00067	6\$: CMPB	ANL\$GB_MODE, 73	: 0671
				08	12 0006A	BNEQ	7\$	
			00000000G	8F	DD 0006C	PUSHL	#ANLRMSS_OK	: 0672
				09	11 00072	BRB	8\$	
			7E	04	A3 10000000	7\$: BISL3	#268435456, ANL\$WORST_ERROR, -(SP)	: 0674
			00000000G	00	01 FB 0007D	8\$: CALLS	#1, SYS\$EXIT	
				04	00084	RET		: 0676

: Routine Size: 133 bytes, Routine Base: \$CODE\$ + 0000

```
: 172 0677 1 %sbtll 'ANL$UNWIND_HANDLER - Unwind to Caller'  
: 173 0678 1 +++  
: 174 0679 1 Functional Description:  
: 175 0680 1 This condition handler is established at various points  
: 176 0681 1 in analyzrms and allows the stack to be unwound  
: 177 0682 1 and execution continued after any of an assortment  
: 178 0683 1 of serious errors occurs.  
: 179 0684 1  
: 180 0685 1 Formal Parameters:  
: 181 0686 1 signal_args = Address of signal argument list  
: 182 0687 1 mechanism_args = Address of mechanism argument list  
: 183 0688 1  
: 184 0689 1 Implicit Inputs:  
: 185 0690 1 none  
: 186 0691 1  
: 187 0692 1 Returned Value:  
: 188 0693 1 ss$_resignal This was not an anlrms$_unwind condition.  
: 189 0694 1 ss$_continue  
: 190 0695 1  
: 191 0696 1 Side Effects:  
: 192 0697 1 anl$worst_error is updated with highest severity error.  
: 193 0698 1  
: 194 0699 1  
: 195 0700 1 ---  
: 196 0701 1  
: 197 0702 2 global routine anl$unwind_handler (signal_args, mechanism_args) = begin  
: 198 0703 2  
: 199 0704 2 map  
: 200 0705 2 signal_args: ref bblock, ! Address of signal argument list  
: 201 0706 2 mechanism_args: ref bblock; ! Address of mechanism argument list  
: 202 0707 2  
: 203 0708 2 local  
: 204 0709 2 code: bblock [long]. ! Condition code (longword)  
: 205 0710 2 status:  
: 206 0711 2  
: 207 0712 2 code = .signal_args [chf$1_sig_name]; ! Get condition code  
: 208 0713 2  
: 209 0714 2 ! If the condition is not anlrms$unwind, then we resignal it.  
: 210 0715 2  
: 211 0716 2 if .code nequ anlrms$unwind then  
: 212 0717 2 return ss$_resignal  
: 213 0718 2  
: 214 0719 2 ! It's a drastic structure error. We can no longer continue what we  
: 215 0720 2 were doing. In interactive mode, we want to return to user command  
: 216 0721 2 level. In check mode, we want to quit analyzing this file and  
: 217 0722 2 go on to the next file. In FDL mode, since there can only be 1  
: 218 0723 2 file spec, we just quit. In all cases, we put out an error message  
: 219 0724 2 and back out by unwinding to the frame of the caller of the routine  
: 220 0725 2 that called lib$establish. Note that since we do not resignal  
: 221 0726 2 the error to allow anl$worst_error_handler to save the anl$worst_error,  
: 222 0727 2 ! we must save it here.  
: 223 0728 2  
: 224 0729 3 else  
: 225 0730 3 if severity_level (.code) gtr  
: 226 0731 4 severity_level (.anl$worst_error) ! If higher than watermark  
: 227 0732 3 then anl$worst_error = .code; ! -then set new worst error  
: 228 0733 3
```

```

: 229      0734 3    anl$format_error(anlrms$_unwind);
: 230      0735 3    status=$unwind();
: 231      0736 3    check (.status..status);
: 232      0737 3
: 233      0738 3    return ss$_continue;
: 234      0739 2 );
: 235      0740 2
: 236      0741 1 end;

```

				.EXTRN SYSSUNWIND	
				.ENTRY ANL\$UNWIND_HANDLER, Save R2,R3,R4	: 0702
		54 00000000G	001C 00000	MOVL #ANLRMSS_UNWIND, R4	: 0712
		50 04	D0 00002	MOVL SIGNAL_ARGS, R0	: 0716
		53 04	A0 00009	MOVL 4(R0), CODE	: 0729
		54	53 D1 00011	CMPL CODE, R4	: 0730
		50 0918	06 13 00014	BEQL 1\$: 0731
			3C 00016	MOVZWL #2328, R0	: 0732
			04 0001B	RET	: 0734
51	50	50 03	53 D0 0001C	1\$: MOVL CODE, TMP_CODE	: 0735
		01 00	EF 0001F	EXTZV #0, #3, TMP_CODE, R1	: 0736
		50 04	C4 00024	EXTZV #0, #1, TMP_CODE, R0	: 0738
		51 50	C2 00029	MULL2 #4, R0	: 0741
		51 03	C0 0002C	SUBL2 R0, R1	
		50 0000'	C0 0002F	ADDL2 #3, R1	
52	50	50 03	CF D0 00032	MOVL ANL\$WORST_ERROR, TMP_CODE	: 0731
		01 00	EF 00037	EXTZV #0, #3, TMP_CODE, R2	: 0732
		50 04	C4 0003C	EXTZV #0, #1, TMP_CODE, R0	: 0734
		52 50	C2 00041	MULL2 #4, R0	: 0735
		50 03	A2 9E 00044	SUBL2 R0, R2	: 0736
		50 05	D1 0004B	MOVAB 3(R2), R0	: 0738
		0000' CF	15 0004E	CMPL R1, R0	: 0741
			53 D0 00050	BLEQ 2\$	
		0000G CF	54 DD 00055	MOVL CODE, ANL\$WORST_ERROR	
			01 FB 00057	PUSHL R4	
		00000000G 00	7E 7C 0005C	CALLS #1, ANL\$FORMAT_ERROR	
		09	02 FB 0005E	CLRL -(SP)	
		00000000G 00	50 E8 00065	CALLS #2, SYSSUNWIND	
			50 DD 00068	BLBS STATUS, 3\$	
			01 FB 0006A	PUSHL STATUS	
		50	01 D0 00071	CALLS #1, LIB\$SIGNAL	
			04 00074	MOVL #1, R0	
				RET	

; Routine Size: 117 bytes, Routine Base: \$CODE\$ + 0085

```

: 238 0742 1 %sbtll 'ANL$WORST_ERROR_HANDLER - Baddest error handler in the West'
: 239 0743 1 ++
: 240 0744 1 Functional Description:
: 241 0745 1 This condition handler is established by the main routine in
: 242 0746 1 analyzrms. It gains control when any error is signaled except
: 243 0747 1 for ANL$RMSS_UNWIND, which is handled specially by the
: 244 0748 1 ANL$UNWIND_HANDLER. If the error signaled is more severe than any
: 245 0749 1 which has preceded it, save the error status as the
: 246 0750 1 anl$worst_error. The resignal the error so the last-chance
: 247 0751 1 condition handler can get a crack at the error.
: 248 0752 1
: 249 0753 1 Formal Parameters:
: 250 0754 1 signal_args = Address of signal argument list
: 251 0755 1 mechanism_args = Address of mechanism array
: 252 0756 1
: 253 0757 1 Implicit Inputs:
: 254 0758 1 none
: 255 0759 1
: 256 0760 1 Returned Value:
: 257 0761 1 ss$_resignal Continue to search call frames.
: 258 0762 1
: 259 0763 1 Side Effects:
: 260 0764 1 anl$worst_error is updated with highest severity error.
: 261 0765 1
: 262 0766 1 !---
: 263 0767 1
: 264 0768 2 global routine anl$worst_error_handler (signal_args, mechanism_args) = begin
: 265 0769 2
: 266 0770 2 map
: 267 0771 2   signal_args: ref bblock,      ! Address of signal argument list
: 268 0772 2   mechanism_args: ref bblock; ! Address of mechanism argument list
: 269 0773 2
: 270 0774 2 local
: 271 0775 2   code:          bblock [long]; ! Condition code (longword)
: 272 0776 2
: 273 0777 2   code = .signal_args [chf$1_sig_name];           ! Get condition code
: 274 0778 2   if severity_level (.code) gtr
: 275 0779 3     severity_level (.anl$worst_error)           ! If higher than watermark
: 276 0780 2   then anl$worst_error = .code;                  ! -then set new worst error
: 277 0781 2
: 278 0782 2 return ss$_resignal;
: 279 0783 2
: 280 0784 1 end;

```

					.ENTRY	ANL\$WORST_ERROR_HANDLER, Save R2,R3	: 0768
		50	04	000C 00000	MOVL	SIGNAL_ARGS, R0	: 0777
		53	04	A0 00002	MOVL	4(R0), CODE	
		50	53	D0 00006	MOVL	CODE, TMP_CODE	: 0778
51	50	03	00	EF 0000D	EXTZV	#0, #3, TMP_CODE, R1	
50	01	00	EF	00012	EXTZV	#0, #1, TMP_CODE, R0	
		50	04	C4 00017	MULL2	#4, R0	
		51	50	C2 0001A	SUBL2	R0, R1	
		51	03	C0 0001D	ADDL2	#3, R1	

RMS
V04-000

RMS - Main Module for ANALYZE/RMS_FILE
ANL\$WORST_ERROR_HANDLER - Baddest error handler

G 7

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52	50	50	0000'	CF	D0 00020	MOVL	ANL\$WORST_ERROR, TMP_CODE	: 0779
		03	00	EF	00025	EXTZV	#0, #3, TMP_CODE, R2	:
		01	00	EF	0002A	EXTZV	#0, #1, TMP_CODE, R0	:
		50	04	C4	0002F	MULL2	#4, R0	:
		52	50	C2	00032	SUBL2	R0, R2	:
		50	03	A2	9E 00035	MOVAB	3(R2) R0	:
		50	51	D1	00039	CMPL	R1, R0	:
			05	15	0003C	BLEQ	1\$:
		0000'	CF	53	D0 0003E	MOVL	CODE, ANL\$WORST_ERROR	: 0780
		50	0918	8F	3C 00043 1\$:	MOVZWL	#2328, R0	: 0782
				04	00048	RET		: 0784

; Routine Size: 73 bytes. Routine Base: \$CODES + 00FA

```
282 0785 1 Isbttl 'ANL$INTERNALIZE_NUMBER - Convert String to Longword'
283 0786 1 !+*
284 0787 1 Functional Description:
285 0788 1 This routine will convert the ASCII representation of a decimal
286 0789 1 or hexadecimal number to a longword. It is here for lack of a
287 0790 1 better place.
288 0791 1
289 0792 1 Formal Parameters:
290 0793 1     string      Address of descriptor of ASCII number. Decimal
291 0794 1             numbers are just digits, while hexadecimal numbers
292 0795 1             begin with %x or are enclosed in %X'...'.
293 0796 1     longword    Address of longword in which to return value.
294 0797 1
295 0798 1 Implicit Inputs:
296 0799 1     global data
297 0800 1
298 0801 1 Implicit Outputs:
299 0802 1     global data
300 0803 1
301 0804 1 Returned Value:
302 0805 1     True if number was valid, false if invalid.
303 0806 1
304 0807 1 Side Effects:
305 0808 1
306 0809 1 --+
307 0810 1
308 0811 1
309 0812 2 global routine anl$internalize_number(string,longword) = begin
310 0813 2
311 0814 2 bind
312 0815 2     string_dsc = .string: descriptor;
313 0816 2
314 0817 2 local
315 0818 2     status: long,
316 0819 2     sp: ref block[,byte],
317 0820 2     hex_dsc: descriptor;
318 0821 2
319 0822 2 ! If the string is null, then it's invalid.
320 0823 2
321 0824 2 if .string_dsc[len] equ 0 then
322 0825 2     return false;
323 0826 2
324 0827 2 ! Split up depending upon whether it's a decimal or hex number.
325 0828 2
326 0829 2
327 0830 3 if ch$eqal(minu(.string_dsc[len],2),.string_dsc[ptr], 2,uplit byte('%X'), ' ') then (
328 0831 3
329 0832 3     ! We have a hex number. Build a descriptor of the actual digits.
330 0833 3     ! If the third character is an apostrophe, then we must find the
331 0834 3     ! matching apostrophe.
332 0835 3
333 0836 4     if ch$rcchar(.string_dsc[ptr]+2) equ "" then (
334 0837 4         sp = ch$find ch(.string_dsc[len]-3,.string_dsc[ptr]+3, """);
335 0838 4         if .sp equ 0 then
336 0839 4             return false;
337 0840 4             build_descriptor(hex_dsc,.sp-.string_dsc[ptr]-3,.string_dsc[ptr]+3);
338 0841 3 ) else
```

```

339 0842 3      build_descriptor(hex_dsc,,string_dsc[len]-2..string_dsc[ptr]+2);
340 0843 3      status = OTSSCVT_TZ_L(hex_dsc,,longword,4,%b'1');
341 0844
342 0845 2 ) else
343 0846 2
344 0847 2      ! We have a decimal number. Convert it and return the status.
345 0848 2
346 0849 2      status = OTSSCVT_TI_L(string_dsc,,longword,4,%b'11');
347 0850 2
348 0851 2      return .status;
349 0852 2
350 0853 1 end;

```

.PSECT SPLITS,NOWRT,NOEXE,2

58 25 00044 P.AAI: .ASCII \x\

.PSECT \$CODES,NOWRT,2

			003C 00000	.ENTRY	ANL\$INTERNALIZE_NUMBER, Save R2,R3,R4,R5	: 0812
		55	04 08 C2 00002	SUBL2	#8, SP	: 0815
			AC D0 00005	MOVL	STRING, R5	: 0825
			65 B5 00009	TSTW	(R5)	: 0830
		50	6E 13 00008	BEQL	6\$:
		02	65 3C 0000D	MOVZWL	(R5), R0	:
			50 B1 00010	CMPW	R0, #2	:
			03 1B 00013	BLEQU	1\$:
		50	02 D0 00015	MOVL	#2, R0	:
		54	A5 D0 00018 1\$: 50 2D 0001C	MOVL	4(R5), R4	:
			CF 00021	CMPCS	R0, (R4), #32, #2, P.AAI	:
02	20	64	00000 44 12 00024	BNEQ	5\$: 0836
			27 02 A4 91 00026	CMPB	2(R4), #39	:
			21 12 0002A	BNEQ	3\$: 0837
		50	65 3C 0002C	MOVZWL	(R5), R0	:
		50	03 C2 0002F	SUBL2	#3 R0	:
03	A4	50	27 3A 00032	LOCC	#39, R0, 3(R4)	:
			02 12 00037	BNEQ	2\$:
			51 D4 00039	CLRL	R1	:
			51 D5 0003B 2\$: 3C 13 0003D	TSTL	SP	: 0838
			54 C2 0003F	BEQL	6\$:
		51	6E AE FD A1 9E 00042	SUBL2	R4, R1	: 0840
		04	AE 03 A4 9E 00046	MOVAB	-3(R1), HEX_DSC	:
			0B 11 00048	MOVAB	3(R4), HEX_DSC+4	:
		6E	65 3C 0004D 3\$: 02 C2 00050	BRB	4\$: 0836
		6E	02 A4 9E 00053	MOVZWL	(R5), HEX_DSC	: 0842
		04	AE 01 DD 00058 4\$: 04 DD 0005A	SUBL2	#2, HEX_DSC	:
			08 AC DD 0005C	MOVAB	2(R4), HEX_DSC+4	: 0843
		00	0C AE 9F 0005F	PUSHL	#1	:
		0000000G	04 FB 00062	PUSHL	#4	:
			08 AC DD 0005C	PUSHL	LONGWORD	:
			0C AE 9F 0005F	PUSHAB	HEX_DSC	:
			04 FB 00062	CALLS	#4, OTSSCVT_TZ_L	:

RMS
V04-000

RMS - Main Module for ANALYZE/RMS FILE
ANL\$INTERNALIZE_NUMBER - Convert String to Long

15-Sep-1984 23:52:21
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	04 00069	RET	: 0830
	03 DD 0006A 5\$:	PUSHL #3	: 0849
	04 DD 0006C	PUSHL #4	:
08	AC DD 0006E	PUSHL LONGWORD	:
	55 DD 00071	PUSHL R5	:
00000000G 00	04 FB 00073	CALLS #4, OTSS\$CVT_TI_L	:
	04 0007A	RET	: 0851
	50 D4 0007B 6\$:	CLRL R0	: 0853
	04 0007D	RET	:

; Routine Size: 126 bytes, Routine Base: \$CODE\$ + 0143

```
352 0854 1 %sbttl 'ANL$CHECK_FLAGS - Check Flag Usage'
353 0855 1 ++
354 0856 1 Functional Description:
355 0857 1 This routine is called to check the usage of flags in a flag
356 0858 1 byte/word/longword. This routine is here for no better place.
357 0859 1
358 0860 1 Formal Parameters:
359 0861 1     vbn          VBN of the bucket containing the flags.
360 0862 1     flags        A longword containing the flags to be checked.
361 0863 1     flag_def    A longword vector defining the valid flags. The
362 0864 1               zeroth longword contains the bit number of the
363 0865 1               last valid flag. The remaining longwords contain
364 0866 1               zero if the flag is unused, non-zero otherwise.
365 0867 1
366 0868 1 Implicit Inputs:
367 0869 1     global data
368 0870 1
369 0871 1 Implicit Outputs:
370 0872 1     global data
371 0873 1
372 0874 1 Returned Value:
373 0875 1     none
374 0876 1
375 0877 1 Side Effects:
376 0878 1
377 0879 1 --
378 0880 1
379 0881 1
380 0882 2 global routine anl$check_flags(vbn,flags,flag_def): novalue = begin
381 0883 2
382 0884 2 bind
383 0885 2     flags_vector = flags: bitvector[],
384 0886 2     flag_def_vector = .flag_def: vector[.long];
385 0887 2
386 0888 2 local
387 0889 2     i: long;
388 0890 2
389 0891 2
390 0892 2 ! We will simply sit in a loop scanning the flag bits. If any flag is
391 0893 2 ! set but undefined, we will issue an error message.
392 0894 2
393 0895 3 incr i from 0 to 31 do (
394 0896 3     if .flags_vector[.i] then
395 0897 4         if .i legu .flag_def_vector[0] then (
396 0898 4             if .flag_def_vector[.i+1] eglu 0 then
397 0899 4                 anl$format_error(anlrms$_flagerror,.vbn,.i)
398 0900 3             ) else
399 0901 3                 anl$format_error(anlrms$_flagerror,.vbn,.i);
400 0902 2 );
401 0903 2
402 0904 2 return;
403 0905 2
404 0906 1 end;
```

			0004 00000	.ENTRY ANL\$CHECK_FLAGS, Save R2	: 0882
20	08 AC	52 D4 00002	CLRL I		: 0895
	0C BC	52 E1 00004	BBC I, FLAGS_VECTOR, 3\$: 0896
		52 D1 00009	CMPL I, @FLAG_DEF		: 0897
	50 0C BC	0A 1A 0000D	BGTRU 2\$: 0898
	04 42	DE 0000F	MOVAL @FLAG_DEF[I], R0		
		A0 D5 00014	TSTL 4(R0)		
		10 12 00017	BNEQ 3\$		
		52 DD 00019	PUSHL I		: 0901
	04 AC	DD 0001B	PUSHL VBN		
	0000G CF	00000000G	PUSHL #ANLRMSS\$ FLAGERROR		
		8F DD 0001E	CALLS #3, ANL\$FORMAT_ERROR		
		03 FB 00024	INCL I		: 0895
	1F	52 D6 00029	CMPL I, #31		
		D1 0002B	BLEQU 1\$		
		D4 1B 0002E	RET		: 0906
		04 00030			

; Routine Size: 49 bytes. Routine Base: \$CODE\$ + 01C1

```
406 0907 1 %sbttl 'ANL$PREPARE_QUOTED_STRING - Prepare a Quoted String'
407 0908 1 ++
408 0909 1 Functional Description:
409 0910 1 This routine is called to prepare a quoted string for inclusion in
410 0911 1 an FDL specification, or perhaps in a formatted message. Preparing
411 0912 1 the string includes stripping trailing whitespace, doubling any
412 0913 1 quotation marks, and enclosing it in quotation marks.
413 0914 1
414 0915 1 Formal Parameters:
415 0916 1      input_dsc   Descriptor of buffer with input string.
416 0917 1      output_dsc  Descriptor of buffer to receive output string.
417 0918 1                  The length is set correctly.
418 0919 1
419 0920 1 Implicit Inputs:
420 0921 1      global data
421 0922 1
422 0923 1 Implicit Outputs:
423 0924 1      global data
424 0925 1
425 0926 1 Returned Value:
426 0927 1      none
427 0928 1
428 0929 1 Side Effects:
429 0930 1
430 0931 1 --+
431 0932 1
432 0933 1
433 0934 1 global routine anl$prepare_quoted_string(input_dsc: ref descriptor,
434 0935 1                                output_dsc: ref descriptor):
435 0936 2          novalue = begin
436 0937 2
437 0938 2 bind
438 0939 2      input_vector = .input_dsc[ptr]: vector[,byte].
439 0940 2      output_vector = .output_dsc[ptr]: vector[,byte];
440 0941 2
441 0942 2 local
442 0943 2      i: signed long,
443 0944 2      trimmed_length: long;
444 0945 2
445 0946 2
446 0947 2 ! Begin by scanning the input string from the end in order to eliminate
447 0948 2 any trailing whitespace. We actually eliminate all control characters
448 0949 2 so that we'll catch NULs too.
449 0950 2
450 0951 3 i = (decr u i from .input_dsc[len]-1 to 0 do
451 0952 2      if .input_vector[i] gtru '' then exitloop .i);
452 0953 2      trimmed_length = .i + 1;
453 0954 2
454 0955 2 ! Put the opening quotation mark in the output buffer.
455 0956 2
456 0957 2      output_vector[0] = '"';
457 0958 2      output_dsc[len] = 1;
458 0959 2
459 0960 2 ! Scan the input string from the beginning, moving each character into the
460 0961 2 ! output buffer. Quotation marks must be doubled.
461 0962 2
462 0963 3 incr i from 0 to .trimmed_length-1 do (
```

```

463      0964 4      if .input_vector[.i] equu "" then (
464      0965 4          output_vector[.output_dsc[len]] = "";
465      0966 4              increment(output_dsc[len]);
466      0967 3      );
467      0968 3      output_vector[.output_dsc[len]] = .input_vector[.i];
468      0969 3              increment(output_dsc[len]);
469      0970 2      );
470      0971 2
471      0972 2      ! Add the closing quotation mark to the output buffer.
472      0973 2
473      0974 2      output_vector[.output_dsc[len]] = "";
474      0975 2      increment(output_dsc[len]);
475      0976 2
476      0977 2      return;
477      0978 2
478      0979 1 end;

```

			.ENTRY	ANL\$PREPARE_QUOTED_STRING, Save R2,R3,R4,R5	: 0934
52	04	AC 7D 00002	MOVQ	INPUT_DSC, R2	: 0939
54	04	A3 D0 00006	MOVL	4(R3), R4	: 0940
50	62	3C 0000A	MOVZWL	(R2), I	: 0951
	07	11 0000D	BRB	2\$	
20	04 B240	91 0000F	CMPB	@4(R2)[I], #32	: 0952
		04 1A 00014	BGTRU	3\$	
		50 D7 00016	DECL	I	
		F5 11 00018	BRB	1\$	
		50 D6 0001A	INCL	TRIMMED_LENGTH	: 0953
64	22	90 0001C	MOVBL	#34, (R4)	: 0957
63	01	B0 0001F	MOVW	#1, (R3)	: 0958
51	01	CE 00022	MNEGL	#1, I	: 0963
	1B	11 00025	BRB	6\$	
22	04 B241	91 00027	CMPB	@4(R2)[I], #34	: 0964
		09 12 0002C	BNEQ	5\$	
55	63	3C 0002E	MOVZWL	(R3), R5	: 0965
6544	22	90 00031	MOVBL	#34, (R5)[R4]	
	63	B6 00035	INCW	(R3)	: 0966
55	63	3C 00037	MOVZWL	(R3), R5	: 0968
6544	04 B241	90 0003A	MOVBL	@4(R2)[I], (R5)[R4]	
		63 B6 00040	INCW	(R3)	: 0969
E1	51	F2 00042	A0BLSS	TRIMMED_LENGTH, I, 4\$: 0963
	50	63 3C 00046	MOVZWL	(R3), R0	: 0974
6044	22	90 00049	MOVBL	#34, (R0)[R4]	
	63	B6 0004D	INCW	(R3)	: 0975
		04 0004F	RET		: 0979

; Routine Size: 80 bytes. Routine Base: \$CODE\$ + 01F2

: 479 0980 1
: 480 0981 0 end eludom

RMS
V04-000

RMS - Main Module for ANALYZE/RMS_FILE
ANL\$PREPARE_QUOTED_STRING - Prepare a Quoted St

B 8
15-Sep-1984 23:52:21
14-Sep-1984 11:52:58

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[ANALYZ.SRC]RMS.B32;1

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(8)

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name

Bytes

Attributes

\$GLOBALS	8	NOVEC, WRT, RD	.NOEXE,NOSHR,	LCL, REL,	CON,NOPIC,ALIGN(2)
\$SPLITS	70	NOVEC,NOWRT, RD	.NOEXE,NOSHR,	LCL, REL,	CON,NOPIC,ALIGN(2)
\$CODES	578	NOVEC,NOWRT, RD	, EXE,NOSHR,	LCL, REL,	CON,NOPIC,ALIGN(2)

Library Statistics

File

File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
_S255\$DUA28:[SYSLIB]LIB.L32;1	18619	17	0	1000	00:01.8

COMMAND QUALIFIERS

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

: Size: 578 code + 78 data bytes
: Run Time: 00:16.8
: Elapsed Time: 00:54.3
: Lines/CPU Min: 3497
: Lexemes/CPU-Min: 16260
: Memory Used: 170 pages
: Compilation Complete

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

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