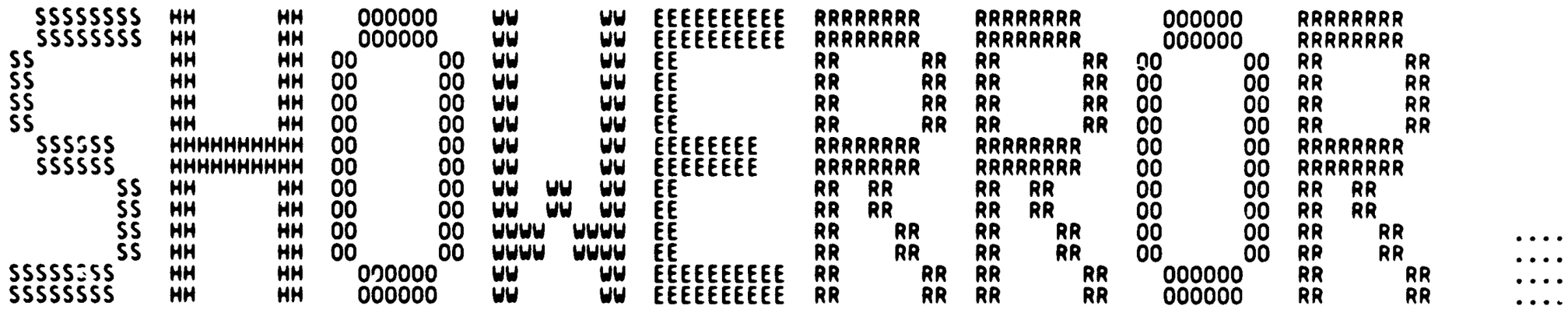
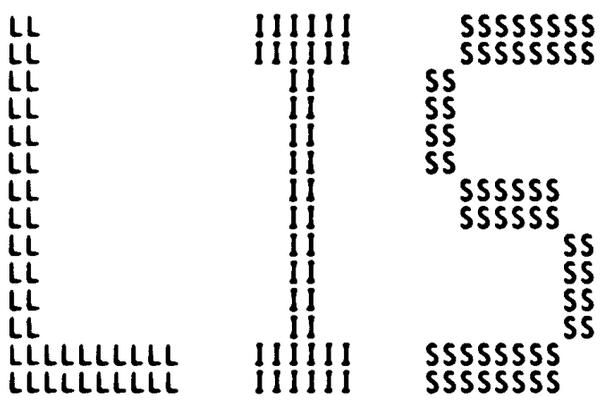
```
   CCCCCCCCCCCC   LLL                   IIIIIIIII      UUU         UUU   TTTTTTTTTTTTTTT   LLL
   CCCCCCCCCCCC   LLL                   IIIIIIIII      UUU         UUU   TTTTTTTTTTTTTTT   LLL
   CCCCCCCCCCCC   LLL                   IIIIIIIII      UUU         UUU   TTTTTTTTTTTTTTT   LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
CCC               LLL                      III         UUU         UUU         TTT         LLL
   CCCCCCCCCCCC   LLLLLLLLLLLLLLL       IIIIIIIII      UUUUUUUUUUUUUUU         TTT         LLLLLLLLLLLLLLL
   CCCCCCCCCCCC   LLLLLLLLLLLLLLL       IIIIIIIII      UUUUUUUUUUUUUUU         TTT         LLLLLLLLLLLLLLL
   CCCCCCCCCCCC   LLLLLLLLLLLLLLL       IIIIIIIII      UUUUUUUUUUUUUUU         TTT         LLLLLLLLLLLLLLL
```

FILEID**SHOWERROR





```
;     1          0001  0 MODULE showerror (IDENT = 'V04-000',
;     2          0002  0                    ADDRESSING_MODE (EXTERNAL = GENERAL)) =
;     3          0003  0
;     4          0004  1 BEGIN
;     5          0005  1 !
;     6          0006  1 !
;     7          0007  1 !*****************************************************************************
;     8          0008  1 !*                                                                           *
;     9          0009  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                                  *
;    10          0010  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.                    *
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;    14          0014  1 !*  ONLY IN  ACCORDANCE WITH  THE  TERMS  OF  SUCH  LICENSE  AND WITH THE  *
;    15          0015  1 !*  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR  ANY  OTHER   *
;    16          0016  1 !*  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY   *
;    17          0017  1 !*  OTHER PERSON.  NO TITLE TO AND OWNERSHIP OF  THE  SOFTWARE IS  HEREBY   *
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;    19          0019  1 !*                                                                           *
;    20          0020  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE   *
;    21          0021  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT   *
;    22          0022  1 !*  CORPORATION.                                                              *
;    23          0023  1 !*                                                                           *
;    24          0024  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS   *
;    25          0025  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.                   *
;    26          0026  1 !*                                                                           *
;    27          0027  1 !*                                                                           *
;    28          0028  1 !*****************************************************************************
;    29          0029  1 !
;    30          0030  1 !
;    31          0031  1 !++
;    32          0032  1 !
;    33          0033  1 ! FACILITY:  SHOW utility
;    34          0034  1 !
;    35          0035  1 ! ABSTRACT:
;    36          0036  1 !       This module contains the routines for the SHOW ERROR command.
;    37          0037  1 !
;    38          0038  1 ! ENVIRONMENT:
;    39          0039  1 !       VAX native, user and kernel mode
;    40          0040  1 !
;    41          0041  1 ! AUTHOR:  Gerry Smith           CREATION DATE:  28-Jul-1982
;    42          0042  1 !
;    43          0043  1 ! MODIFIED BY:
;    44          0044  1 !
;    45          0045  1 !       V03-002 GAS0149         Gerry Smith             29-Jun-1983
;    46          0046  1 !               Use IOC$CVT_DEVNAM to get the device name.
;    47          0047  1 !
;    48          0048  1 !       V03-001 GAS0117         Gerry Smith             12-Apr-1983
;    49          0049  1 !               Change display to work with long device names.
;    50          0050  1 !
;    51          0051  1 !--
```

```
;    53          0052  1
;    54          0053  1 !
;    55          0054  1 ! Include files
;    56          0055  1 !
;    57          0056  1
;    58          0057  1 LIBRARY 'SYS$LIBRARY:LIB';                  ! VAX/VMS system definitions
;    59          0058  1 REQUIRE 'SRC$:SHOWDEF';                     ! SHOW common definitions
;    60          0157  1
;    61          0158  1 !
;    62          0159  1 ! Define the linkage for the routines to lock and unlock the I/O database,
;    63          0160  1 ! scan the databse, and fabricate the device name.
;    64          0161  1 !
;    65          0162  1 LINKAGE
;    66          0163  1     IOLOCK = JSB (REGISTER = 4),
;    67          0164  1     IOSCAN = JSB (REGISTER = 11,                ! Call with DDB,
;    68          0165  1                   REGISTER = 10;                ! UCB,
;    69          0166  1                   REGISTER = 11,                ! Return with DDB,
;    70          0167  1                   REGISTER = 10),               ! UCB
;    71          0168  1     CVTDEV = JSB (REGISTER = 0,                 ! Length of output buffer,
;    72          0169  1                   REGISTER = 1,                 ! Address of output buffer
;    73          0170  1                   REGISTER = 4,                 ! Format of device name
;    74          0171  1                   REGISTER = 5;                 ! Address of UCB
;    75          0172  1                   REGISTER = 1);                ! Length of final name
;    76          0173  1
;    77          0174  1
;    78          0175  1
;    79          0176  1 !
;    80          0177  1 ! Define the flags longword bits.
;    81          0178  1 !
;    82          0179  1 MACRO
;    83          0180  1     SHOW$V_BRIEF        =       0, 0, 1, 0%,        ! /BRIEF
;    84          0181  1     SHOW$V_FULL         =       0, 1, 1, 0%;        ! /ALL
;    85          0182  1
;    86          0183  1
;    87          0184  1 !
;    88          0185  1 ! Define macros to describe the fields in the scratch area.
;    89          0186  1 !
;    90          0187  1 MACRO
;    91          0188  1     d_l_devlen  =  0, 0, 32, 0%,                ! Device name length
;    92          0189  1     d_a_ptr     =  4, 0, 32, 0%,                ! Pointer to device name
;    93          0190  1     d_l_errcnt  =  8, 0, 32, 0%,                ! Error count
;    94          0191  1     d_t_name    = 12, 0,  8, 0%;                ! Device name
;    95          0192  1 LITERAL d_k_length = $BYTEOFFSET(d_t_name) + 21;
;    96          0193  1
;    97          0194  1 EXTERNAL LITERAL
;    98          0195  1     show$_noerrors;                             ! No device errors found
;    99          0196  1
```

```
;  101          0197  1 !
;  102          0198  1 ! Table of contents
;  103          0199  1 !
;  104          0200  1
;  105          0201  1 FORWARD ROUTINE
;  106          0202  1     show$errors : NOVALUE,
;  107          0203  1     get_data,
;  108          0204  1     print_data : NOVALUE;
;  109          0205  1
;  110          0206  1 EXTERNAL
;  111          0207  1     scs$ga_localsb,
;  112          0208  1     exe$gl_mchkerrs,
;  113          0209  1     exe$gl_memerrs,
;  114          0210  1     ioc$gl_devlist,
;  115          0211  1     sch$gl_curpcb;
;  116          0212  1
;  117          0213  1 EXTERNAL ROUTINE
;  118          0214  1     cli$present,
;  119          0215  1     lib$get_vm,
;  120          0216  1     show$write_line : NOVALUE,
;  121          0217  1     ioc$scan_iodb : IOSCAN,
;  122          0218  1     ioc$cvt_devnam : CVTDEV,
;  123          0219  1     sch$iolockr : IOLOCK,
;  124          0220  1     sch$iounlock : IOLOCK;
```

```
;  126          0221  1 GLOBAL ROUTINE show$errors : NOVALUE =
;  127          0222  2 BEGIN
;  128          0223  2
;  129          0224  2 LOCAL
;  130          0225  2     status,                             ! General status return
;  131          0226  2     flags : $BBLOCK[4],                 ! Flags longword
;  132          0227  2     arglst : VECTOR[3],                 ! Argument list for $CMKRNL call
;  133          0228  2     data : VECTOR[2];                   ! Address limits of scratch area
;  134          0229  2
;  135          0230  2 !
;  136          0231  2 ! Obtain any qualifiers, if present.
;  137          0232  2 !
;  138          0233  2 flags[show$v_brief] = cli$present(%ASCID 'BRIEF');
;  139          0234  2 flags[show$v_full]  = cli$present(%ASCID 'FULL');
;  140          0235  2
;  141          0236  2 !
;  142          0237  2 ! Allocate a scratch area in which to put data about the errors.
;  143          0238  2 ! The beginning and ending addresses of the area will be returned in DATA.
;  144          0239  2 !
;  145          0240  3 IF NOT (status = lib$get_vm(%REF(64*512),        ! Request 64 pages
;  146          0241  3                           data))               ! Put address limits here
;  147          0242  2 THEN SIGNAL_STOP(show$_insvirmem, 0, .status);  ! Stop if error.
;  148          0243  2 data[1] = .data[0] + 64*512 - 1;                ! Compute end of area
;  149          0244  2 !
;  150          0245  2 ! Call the data-gathering routine in kernel mode, passing the address of the
;  151          0246  2 ! address limits as an argument.  Save the status.
;  152          0247  2 !
;  153          0248  2 arglst[0] = 2;
;  154          0249  2 arglst[1] = data;
;  155          0250  2 arglst[2] = flags;
;  156        P 0251  3 IF NOT (status = $CMKRNL(ROUTIN = get_data,
;  157          0252  3                          ARGLST = arglst))
;  158          0253  2 THEN
;  159          0254  3     BEGIN
;  160          0255  3     IF .status NEQU ss$_vasfull
;  161          0256  3     THEN
;  162          0257  4         BEGIN
;  163          0258  4         SIGNAL(.status);
;  164          0259  4         RETURN;
;  165          0260  3         END;
;  166          0261  2     END;
;  167          0262  2
;  168          0263  2 !
;  169          0264  2 ! Format and print the data.
;  170          0265  2 !
;  171          0266  2 print_data(data, flags);
;  172          0267  2
;  173          0268  2 !
;  174          0269  2 ! If the status return from $CMKRNL is not 1, then signal that error at this
;  175          0270  2 ! time.  Otherwise, simply return.
;  176          0271  2 !
;  177          0272  2 IF .status NEQ 1
;  178          0273  2 THEN SIGNAL(.status);
;  179          0274  2
;  180          0275  2 RETURN;
;  181          0276  1 END;                                        ! End of show$error
```

```
                                                        .TITLE  SHOWERROR
                                                        .IDENT  \V04-000\

                                                        .PSECT  $PLIT$,NOWRT,NOEXE,2

                    00  00  00  46  45  49  52  42  00000 P.AAB:  .ASCII  \BRIEF\<0><0><0>                                ;
                                        010E0005  00008 P.AAA:  .LONG   17694725                                          ;
                                        00000000' 0000C         .ADDRESS P.AAB                                            ;
                                    4C  4C  55  46  00010 P.AAD:  .ASCII  \FULL\                                          ;
                                        010E0004  00014 P.AAC:  .LONG   17694724                                          ;
                                        00000000' 00018         .ADDRESS P.AAD                                            ;

                                                        .EXTRN  SHOW$_NOERRORS, SCS$GA_LOCALSB
                                                        .EXTRN  EXE$GL_MCHKERRS
                                                        .EXTRN  EXE$GL_MEMERRS, IOC$GL_DEVLIST
                                                        .EXTRN  SCH$GL_CURPCB, CLI$PRESENT
                                                        .EXTRN  LIB$GET_VM, SHOW$WRITE_LINE
                                                        .EXTRN  IOC$SCAN_IODB, IOC$CVT_DEVNAM
                                                        .EXTRN  SCH$IOLOCKR, SCH$IOUNLOCK
                                                        .EXTRN  SYS$CMKRNL

                                                        .PSECT  $CODE$,NOWRT,2

                                            000C 00000          .ENTRY  SHOWSERRORS, Save R2,R3                           ; 0221
                                53 00000000G  00  9E 00002      MOVAB   CLI$PRESENT, R3                                  ;
                                5E            1C  C2 00009      SUBL2   #28, SP                                           ;
                                        0000' CF  9F 0000C      PUSHAB  P.AAA                                             ; 0233
                                63            01  FB 00010      CALLS   #1, CLI$PRESENT                                   ;
                    04  AE          01       00  50  F0 00013  INSV    R0, #0, #1, FLAGS                                 ;
                                        0000' CF  9F 00019      PUSHAB  P.AAC                                             ; 0234
                                63            01  FB 0001D      CALLS   #1, CLI$PRESENT                                   ;
                    04  AE          01       01  50  F0 00020  INSV    R0, #1, #1, FLAGS                                 ;
                                          08  AE  9F 00026      PUSHAB  DATA                                              ; 0240
                                    04  AE    8000  8F 3C 00029  MOVZWL  #32768, 4(SP)                                    ;
                                          04  AE  9F 0002F      PUSHAB  4(SP)                                             ;
                                00000000G     00  02  FB 00032  CALLS   #2, LIB$GET_VM                                   ;
                                              52  50  D0 00039  MOVL    R0, STATUS                                        ;
                                              11  52  E8 0003C  BLBS    STATUS, 1$                                        ;
                                                  52  DD 0003F  PUSHL   STATUS                                           ; 0242
                                                  7E  D4 00041  CLRL    -(SP)                                             ;
                                        007812F2  8F  DD 00043  PUSHL   #7869170                                          ;
                                00000000G     00  03  FB 00049  CALLS   #3, LIB$STOP                                     ;
                0C  AE          08  AE 00007FFF   8F  C1 00050 1$:    ADDL3   #32767, DATA, DATA+4                      ; 0243
                                10  AE            02  D0 0005A      MOVL    #2, ARGLST                                    ; 0248
                                14  AE      08  AE  9E 0005E      MOVAB   DATA, ARGLST+4                                ; 0249
                                18  AE      04  AE  9E 00063      MOVAB   FLAGS, ARGLST+8                               ; 0250
                                          10  AE  9F 00068      PUSHAB  ARGLST                                            ; 0252
                                    0000V     CF  9F 0006B      PUSHAB  GET_DATA                                          ;
                                00000000G     00  02  FB 0006F  CALLS   #2, SYS$CMKRNL                                  ;
                                              52  50  D0 00076  MOVL    R0, STATUS                                        ;
                                              09  52  E8 00079  BLBS    STATUS, 2$                                        ;
                                00000244      8F  52  D1 0007C  CMPL    STATUS, #580                                      ; 0255
                                                  10  12 00083  BNEQ    3$                                                ;
                                          04  AE  9F 00085 2$:    PUS AB  FLAGS                                             ; 0266
                                          0C  AE  9F 00088      PUSHAB  DATA                                              ;
                                    0000V     CF  02  FB 0008B  CALLS   #2, PRINT_DATA                                    ;
```

```
                                 01        52  D1 00090          CMPL    STATUS, #1                              ; 0272
                                           09  13 00093          BEQL    4$                                      ;
                                           52  DD 00095 3$:      PUSHL   STATUS                                  ; 0273
                          00000000G  00    01  FB 00097          CALLS   #1, LIB$SIGNAL                          ;
                                           04 0009E 4$:         RET                                             ; 0276

; Routine Size:  159 bytes,    Routine Base:  $CODE$ + 0000
```

```
;  183     0277  1 ROUTINE get_data (data, flags) =
;  184     0278  2 BEGIN
;  185     0279  2
;  186     0280  2 LOCAL
;  187     0281  2     status,                                 ! Status return
;  188     0282  2     limit,                                  ! End-of-address limit
;  189     0283  2     scratch : REF $BBLOCK,                  ! Pointer to scratch area
;  190     0284  2     ucb : REF $BBLOCK,                      ! UCB pointer
;  191     0285  2     ddb : REF $BBLOCK;                      ! DDB pointer
;  192     0286  2
;  193     0287  2 MAP
;  194     0288  2     data : REF VECTOR,                      ! The passed argument is two longwords
;  195     0289  2     flags : REF $BBLOCK;                    ! Flags longword
;  196     0290  2 !
;  197     0291  2 ! Set up the scratch area so that is can be addressed easily.  Also, calculate
;  198     0292  2 ! a limit toward the end of the scratch area, so that we don't write beyond the
;  199     0293  2 ! area.  Finally, set up STATUS as 1, to show that we still have room in the
;  200     0294  2 ! scratch area to store more data.
;  201     0295  2 !
;  202     0296  2 scratch = .data[0];                         ! Point to beginning of scratch area
;  203     0297  2 limit = .data[1] - 256;                     ! Set the limit to be halfway in to
;  204     0298  2                                             ! the last page of the scratch area.
;  205     0299  2
;  206     0300  2 !
;  207     0301  2 ! Lock the I/O data base.  Upon return from the call to SCH$IOLOCKR, the
;  208     0302  2 ! IPL will be 2, so that pagefaults are still allowed.
;  209     0303  2 !
;  210     0304  2 SCH$IOLOCKR(.sch$gl_curpcb);                ! Lock the I/O database
;  211     0305  2
;  212     0306  2 !
;  213     0307  2 ! For each DDB, examine each UCB associated with it, and see if the error
;  214     0308  2 ! count is non-zero.  If so, or if all devices were requested, then store
;  215     0309  2 ! the pertinent data into the scratch area.  If the scratch area is exhausted,
;  216     0310  2 ! then indicate this by setting STATUS = SS$_VASFULL.
;  217     0311  2 !
;  218     0312  2 status = IOC$SCAN_IODB(0, 0; ddb, ucb);     ! Get to first UCB
;  219     0313  2 WHILE .status DO                            ! Loop thru all UCB's
;  220     0314  3     BEGIN
;  221     0315  3     IF NOT .$BBLOCK[ucb[ucb$l_devchar], dev$v_mbx]      ! Ignore mailboxes
;  222     0316  3     AND NOT .ucb[ucb$v_template]                        ! and template devices
;  223     0317  4     AND (.flags[show$v_full] OR                 ! If all desired, or
;  224     0318  4          .ucb[ucb$w_errcnt] NEQ 0)              ! this one has errors
;  225     0319  3     THEN                                        ! then get information
;  226     0320  4         BEGIN
;  227     0321  4         IF .scratch GEQA .limit
;  228     0322  4         THEN
;  229     0323  5             BEGIN
;  230     0324  5             status = ss$_vasfull;
;  231     0325  5             EXITLOOP
;  232     0326  4             END;
;  233     0327  4         ioc$cvt_devnam(20,                      ! Get device name, max this long
;  234     0328  4                        scratch[d_t_name],       ! put it here,
;  235     0329  4                        -1,                      ! in standard display format
;  236     0330  4                        .ucb;                    ! UCB is here
;  237     0331  4                        scratch[d_l_devlen]);    ! final length here
;  238     0332  4
;  239     0333  4         scratch[d_l_errcnt] = .ucb[ucb$w_errcnt];
```

```
;  240          0334  4          scratch = .scratch + d_k_length;        ! Get to next data block
;  241          0335  3          END;
;  242          0336  3      status = IOC$SCAN_IODB(.ddb, .ucb; ddb, ucb);
;  243          0337  2      END;
;  244          0338  2
;  245          0339  2 !
;  246          0340  2 ! Now to clean up.  Unlock the I/O database, then lower the IPL
;  247          0341  2 ! to zero.
;  248          0342  2 !
;  249          0343  2 SCH$IOUNLOCK(.sch$gl_curpcb);                    ! Unlock I/O database
;  250          0344  2 SET_IPL(0);                                       ! Lower IPL
;  251          0345  2
;  252          0346  2 !
;  253          0347  2 ! If status = 0, then the entire database has been scanned.
;  254          0348  2 !
;  255          0349  2 IF .status EQL 0
;  256          0350  2 THEN status = 1;
;  257          0351  2
;  258          0352  2 RETURN .status;                                  ! Return with status
;  259          0353  1 END;                                            ! End of GET_DATA

                                OFFC 00000 GET_DATA:
                                           .WORD   Save R2,R3,R4,R5,R6,R7,R8,R9,R10,R11        ; 0277
                     57 00000000G   00  9E 00002   MOVAB   SCH$GL_CURPCB, R7                  ;
                     50       04    AC  D0 00009   MOVL    DATA, R0                           ; 0296
                     52             60  D0 0000D   MOVL    (R0), SCRATCH                      ;
              56     04    A0 00000100   8F  C3 00010   SUBL3   #256, 4(R0), LIMIT            ; 0297
                     54             67  D0 00019   MOVL    SCH$GL_CURPCB, R4                  ; 0304
                        00000000G   00  16 0001C   JSB     SCH$IOLOCKR                        ;
                                    5A  7C 00022   CLRQ    R10                                ; 0312
                        00000000G   00  16 00024 1$:  JSB     IOC$SCAN_IODB                   ;
                     53             50  D0 0002A   MOVL    R0, STATUS                         ;
                     42             53  E9 0002D   BLBC    STATUS, 4$                         ; 0313
              EF     3A    AA       04  E0 00030   BBS     #4, 58(UCB), 1$                    ; 0315
              EA     65    AA       05  E0 00035   BBS     #5, 101(UCB), 1$                   ; 0316
              06     08    BC       01  E0 0003A   BBS     #1, @FLAGS, 2$                     ; 0317
                        0082    CA  B5 0003F   TSTW    130(UCB)                           ; 0318
                                DF  13 00043   BEQL    1$                                 ;
                     56             52  D1 00045 2$:  CMPL    SCRATCH, LIMIT                 ; 0321
                                    07  1F 00048   BLSSU   3$                                ;
                     53       0244  8F  3C 0004A   MOVZWL  #580, STATUS                     ; 0324
                                    21  11 0004F   BRB     4$                                 ; 0323
                     51         0C  A2  9E 00051 3$:  MOVAB   12(SCRATCH), R1                ; 0328
                     55             5A  D0 00055   MOVL    UCB, R5                            ; 0331
                     54             01  CE 00058   MNEGL   #1, R4                            ;
                     50             14  D0 0005B   MOVL    #20, R0                            ;
                        00000000G   00  16 0005E   JSB     IOC$CVT_DEVNAM                     ;
                     82             51  D0 00064   MOVL    R1, (SCRATCH)+                     ;
              04     A2       0082    CA  3C 00067   MOVZWL  130(UCB), 4(SCRATCH)             ; 0333
                     52             1D  C0 0006D   ADDL2   #29, SCRATCH                      ; 0334
                                    B2  11 00070   BRB     1$                                 ; 0336
                     54             67  D0 00072 4$:  MOVL    SCH$GL_CURPCB, R4              ; 0343
                        00000000G   00  16 00075   JSB     SCH$IOUNLOCK                       ;
```

```
                12        00  DA 0007B        MTPR    #0, #18                 ; 0344
                          53  D5 0007E        TSTL    STATUS                  ; 0349
                          03  12 00080        BNEQ    5$                      ;
                53        01  D0 00082        MOVL    #1, STATUS              ; 0350
                50        53  D0 00085 5$:    MOVL    STATUS, R0              ; 0352
                              04 00088        RET                             ; 0353

; Routine Size:  137 bytes,    Routine Base:  $CODE$ + 009F
```

```
;  261          0354  1 ROUTINE print_data (data, flags) : NOVALUE =
;  262          0355  2 BEGIN
;  263          0356  2
;  264          0357  2 MAP
;  265          0358  2     data : REF VECTOR,
;  266          0359  2     flags : REF $BBLOCK;
;  267          0360  2
;  268          0361  2 LOCAL
;  269          0362  2     scratch : REF $BBLOCK;                      ! Pointer to scratch area
;  270          0363  2
;  271          0364  2 !
;  272          0365  2 ! Set up the scratch area.
;  273          0366  2 !
;  274          0367  2 scratch = .data[0];                             ! Scratch area begins here.
;  275          0368  2
;  276          0369  2 !
;  277          0370  2 ! Check to see if there are any errors.  If not, go away.  Otherwise,
;  278          0371  2 ! print a nice little heading.
;  279          0372  2 !
;  280          0373  2 IF NOT .flags[show$v_full]                      ! If not a /FULL request
;  281          0374  2 AND .scratch[d_t_name] EQL 0                    ! and no device errors
;  282          0375  2 AND .exe$gl_mchkerrs EQL 0                     ! and no CPU errors
;  283          0376  2 AND .exe$gl_memerrs EQL 0                       ! and no memory errors
;  284          0377  2 THEN
;  285          0378  3     BEGIN
;  286          0379  3     SIGNAL(show$_noerrors);
;  287          0380  3     RETURN;
;  288          0381  2     END;
;  289          0382  2
;  290          0383  2
;  291          0384  2 show$write_line(%ASCID 'Device              Error Count', 0);
;  292          0385  2
;  293          0386  2 !
;  294          0387  2 ! Print CPU or memory errors, if there are any.
;  295          0388  2 !
;  296          0389  2 IF .exe$gl_mchkerrs NEQ 0
;  297          0390  2 OR .flags[show$v_full]
;  298          0391  2 THEN show$write_line(%ASCID '!21<CPU!>   !6UW', %REF(.exe$gl_mchkerrs));
;  299          0392  2
;  300          0393  2 IF .exe$gl_memerrs NEQ 0
;  301          0394  2 OR .flags[show$v_full]
;  302          0395  2 THEN show$write_line(%ASCID '!21<MEMORY!>   !6UW', %REF(.exe$gl_memerrs));
;  303          0396  2
;  304          0397  2 !
;  305          0398  2 ! Loop thru the scratch area, taking the data off in the same way it was
;  306          0399  2 ! stored.  This will continue until a segment is found which contains a
;  307          0400  2 ! device name length of 0.
;  308          0401  2 !
;  309          0402  2 WHILE .scratch[d_l_devlen] NEQ 0
;  310          0403  2 DO
;  311          0404  3     BEGIN
;  312          0405  3     scratch[d_l_devlen] = .scratch[d_l_devlen] - 1;
;  313          0406  3     scratch[d_a_ptr] = scratch[d_t_name] + 1;
;  314          0407  3     show$write_line(%ASCID '!21<!AF!>   !6UW',
;  315          0408  3                     .scratch);
;  316          0409  3     scratch = .scratch + d_k_length;
;  317          0410  2     END;
```

```
;  318          0411  2
;  319          0412  2 RETURN;
;  320          0413  1 END;                                   ! End of PRINT_DATA


                                                               .PSECT  $PLIT$,NOWRT,NOEXE,2

20 20 20 20 20 20 20 20 20 65 63 69 76 65 44  0001C P.AAF:   .ASCII  \Device                Error Count\
75 6F 43 20 72 6F 72 72 45 20 20 20 20 20 20  0002B
                                        74 6E 0003A
                                  010E0020    0003C P.AAE:   .LONG   17694752
                                  00000000'   00040          .ADDRESS P.AAF
55 36 21 20 20 20 3E 21 55 50 43 3C 31 32 21  00044 P.AAH:   .ASCII  \!21<CPU!>   !6UW\
                                              57  00053
                                  010E0010    00054 P.AAG:   .LONG   17694736
                                  00000000'   00058          .ADDRESS P.AAH
20 20 20 3E 21 59 52 4F 4D 45 4D 3C 31 32 21  0005C P.AAJ:   .ASCII  \!21<MEMORY!>   !6UW\<0>
                                        00 57 55 36 21  0006B
                                  010E0013    00070 P.AAI:   .LONG   17694739
                                  00000000'   00074          .ADDRESS P.AAJ
55 36 21 20 20 20 3E 21 46 41 21 3C 31 32 21  00078 P.AAL:   .ASCII  \!21<!AF!>   !6UW\
                                              57  00087
                                  010E0010    00088 P.AAK:   .LONG   17694736
                                  00000000'   0008C          .ADDRESS P.AAL


                                                               .PSECT  $CODE$,NOWRT,2

                                        003C 00000 PRINT_DATA:
                                                               .WORD   Save R2,R3,R4,R5                ;0354
                    55 00000000G   00   9E 00002               MOVAB   EXE$GL_MCHKERRS, R5
                    54 00000000G   00   9E 00009               MOVAB   EXE$GL_MEMERRS, R4
                    53 00000000G   00   9E 00010               MOVAB   SHOW$WRITE_LINE, R3
                    5E                  04   C2 00017          SUBL2   #4, SP
                    52         04       BC   D0 0001A          MOVL    @DATA, SCRATCH                 ;0367
1B        08        BC                  01   E0 0001E          BBS     #1, @FLAGS, 1$                 ;0373
                                  0C    A2   95 00023          TSTB    12(SCRATCH)                    ;0374
                                        16   12 00026          BNEQ    1$
                                        65   D5 00028          TSTL    EXE$GL_MCHKERRS                ;0375
                                        12   12 0002A          BNEQ    1$
                                        64   D5 0002C          TSTL    EXE$GL_MEMERRS                 ;0376
                                        0E   12 0002E          BNEQ    1$
                    00000000G      8F   DD 00030              PUSHL   #SHOW$_NOERRORS                ;0379
    00000000G   00                  01   FB 00036              CALLS   #1, LIB$SIGNAL
                                        04   0003D             RET                                    ;0378
                                  7E    D4 0003E 1$:          CLRL    -(SP)                          ;0384
                         0000'    CF   9F 00040              PUSHAB  P.AAE
                    63            02   FB 00044              CALLS   #2, SHOW$WRITE_LINE
                    50            65   D0 00047              MOVL    EXE$GL_MCHKERRS, R0            ;0389
                                  05   12 0004A              BNEQ    2$
0C        08        BC            01   E1 0004C              BBC     #1, @FLAGS, 3$                 ;0390
                    6E            50   D0 00051 2$:          MOVL    R0, (SP)                       ;0391
                                  5E   DD 00054              PUSHL   SP
                         0000'    CF   9F 00056              PUSHAB  P.AAG
                    63            02   FB 0005A              CALLS   #2, SHOW$WRITE_LINE
```

```
                        50              64  D0 0005D 3$:    MOVL    EXE$GL_MEMERRS, R0                      ; 0393
                                        05  12 00060          BNEQ    4$                                      ;
                    0C      08      BC  01  E1 00062          BBC     #1, @FLAGS, 5$                          ; 0394
                            6E          50  D0 00067 4$:     MOVL    R0, (SP)                                ; 0395
                                        5E  DD 0006A          PUSHL   SP                                      ;
                                0000'   CF  9F 0006C          PUSHAB  P.AAI                                   ;
                            63          02  FB 00070          CALLS   #2, SHOW$WRITE_LINE                     ;
                                        62  D5 00073 5$:     TSTL    (SCRATCH)                               ; 0402
                                        15  13 00075          BEQL    6$                                      ;
                                        62  D7 00077          DECL    (SCRATCH)                               ; 0405
                        04      A2      0D  A2 9E 00079          MOVAB   13(R2), 4(SCRATCH)                      ; 0406
                                        52  DD 0007E          PUSHL   SCRATCH                                 ; 0408
                                0000'   CF  9F 00080          PUSHAB  P.AAK                                   ; 0407
                            63          02  FB 00084          CALLS   #2, SHOW$WRITE_LINE                     ;
                            52          21  C0 00087          ADDL2   #33, SCRATCH                            ; 0409
                                        E7  11 0008A          BRB     5$                                      ; 0402
                                            04 0008C 6$:      RET                                             ; 0413

; Routine Size:  141 bytes,    Routine Base:  $CODE$ + 0128
```

```
;  322          0414  1 END
;  323          0415  0 ELUDOM


                                                    .EXTRN  LIB$SIGNAL, LIB$STOP

;                               PSECT SUMMARY
;
;       Name                    Bytes                           Attributes
;
;  $PLIT$                        144  NOVEC,NOWRT,  RD ,NOEXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)
;  $CODE$                        437  NOVEC,NOWRT,  RD ,  EXE,NOSHR,  LCL,  REL,  CON,NOPIC,ALIGN(2)


;                             Library Statistics
;                                        -------- Symbols --------      Pages       Processing
;       File                             Total    Loaded   Percent      Mapped      Time
;
;  _$255$DUA28:[SYSLIB]LIB.L32;1          18619        20         0        1000        00:01.8


;                                       COMMAND QUALIFIERS
;
;       BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS$:SHOWERROR/OBJ=OBJ$:SHOWERROR MSRC$:SHOWERROR/UPDATE=(ENH$:SHOWERROR)

; Size:          437 code + 144 data bytes
; Run Time:          00:10.5
; Elapsed Time:      00:29.9
; Lines/CPU Min:      2366
; Lexemes/CPU-Min: 16106
; Memory Used:  95 pages
; Compilation Complete
```

SHOMSGUTL LIS

SHONET LIS

SHOWAUDIT LIS

SHOWID LIS

SHOWLOG LIS

SHOWERROR LIS

SHOWFILES LIS

SHOMEMORY LIS