```
LLL              IIIIIIIII    BBBBBBBBBBBB    RRRRRRRRRRR    TTTTTTTTTTTTTT    LLL
LLL              IIIIIIIII    BBBBBBBBBBBB    RRRRRRRRRRR    TTTTTTTTTTTTTT    LLL
LLL              IIIIIIIII    BBBBBBBBBBBB    RRRRRRRRRRR    TTTTTTTTTTTTTT    LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBBBBBBBBBBB    RRRRRRRRRRR        TTT         LLL
LLL                 III       BBBBBBBBBBBB    RRRRRRRRRRR        TTT         LLL
LLL                 III       BBB      BBB    RRR   RRR          TTT         LLL
LLL                 III       BBB      BBB    RRR   RRR          TTT         LLL
LLL                 III       BBB      BBB    RRR   RRR          TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLL                 III       BBB      BBB    RRR      RRR        TTT         LLL
LLLLLLLLLLLLLLL    IIIIIIIII  BBBBBBBBBBBB    RRR         RRR     TTT     LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL    IIIIIIIII  BBBBBBBBBBBB    RRR         RRR     TTT     LLLLLLLLLLLLLL
LLLLLLLLLLLLLLL    IIIIIIIII  BBBBBBBBBBBB    RRR         RRR     TTT     LLLLLLLLLLLLLL
```

LIBDATETI

LIS

```
   1    0001  0 MODULE LIBSDATE_TIME (                    ! Date and time routine
   2    0002  0
   3    0003  0           IDENT = '1-008'          ! File: LIBDATETI.B32 Edit: RKR1008
   4    0004  0
   5    0005  0                    ) =
   6    0006  1 BEGIN
   7    0007  1
   8    0008  1 !*****************************************************************
   9    0009  1 !*
  10    0010  1 !* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                      *
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  26    0026  1 !* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.      *
  27    0027  1 !*                                                             *
  28    0028  1 !*                                                             *
  29    0029  1 !*****************************************************************
  30    0030  1 !
  31    0031  1 !
  32    0032  1 !++
  33    0033  1 ! FACILITY:  General Library Support
  34    0034  1 !
  35    0035  1 ! ABSTRACT:
  36    0036  1 !
  37    0037  1 !      This module contains a routine that returns the date and time
  38    0038  1 !      in VAX/VMS format in a user-provided string.
  39    0039  1 !
  40    0040  1 ! ENVIRONMENT:  VAX-11 User Mode
  41    0041  1 !
  42    0042  1 ! AUTHOR: John Sauter, CREATION DATE: 16-FEB-1979
  43    0043  1 !
  44    0044  1 ! MODIFIED BY:
  45    0045  1 !
  46    0046  1 ! 1-001 - Original.  JBS 16-FEB-1979
  47    0047  1 ! 1-002 - Change LIBSS and OTSSS to STRS.  JBS 21-MAY-1979
  48    0048  1 ! 1-003 - Change call to STRSCOPY.  JBS 16-JUL-1979
  49    0049  1 ! 1-004 - Correct an error in a comment.  JBS 30-JUL-1979
  50    0050  1 ! 1-005 - Change STRS return codes to LIBS return codes.
  51    0051  1 !         JBS 22-JAN-1980
  52    0052  1 ! 1-006 - Change call from STRSCOPY_DX  to LIBSSCOPY_DXDX6.
  53    0053  1 !         This eliminates the need for a handler and the need to
  54    0054  1 !         change STRS statuses to LIBS statuses.
  55    0055  1 !         RKR 27-MAY-1981.
  56    0056  1 ! 1-007 - Change name of required file from 'STRLNK.REQ' to
  57    0057  1 !         'RTLIN:STRLNK' as it should be.  RKR 31-AUG-1981
```

```
:   58          0058  1 ! 1-008 - Change to do copying with LIB$COPY_R_DX6. RKR 18-NOV-1981
:   59          0059  1 !--
:   60          0060  1
:   61          0061  1 !<BLF/PAGE>
```

```
  63     0062   1 !
  64     0063   1 ! SWITCHES:
  65     0064   1 !
  66     0065   1
  67     0066   1 SWITCHES ADDRESSING_MODE
  68     0067   1                 (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
  69     0068   1
  70     0069   1 !
  71     0070   1 ! LINKAGES:
  72     0071   1 !
  73     0072   1       REQUIRE 'RTLIN:STRLNK';
  74     0257   1 !
  75     0258   1 ! TABLE OF CONTENTS:
  76     0259   1 !
  77     0260   1
  78     0261   1 FORWARD ROUTINE
  79     0262   1     LIB$DATE_TIME;                                ! Return date and time
  80     0263   1 !
  81     0264   1 !
  82     0265   1 ! INCLUDE FILES:
  83     0266   1 !
  84     0267   1
  85     0268   1 REQUIRE 'RTLIN:RTLPSECT';             ! Macros for defining psects
  86     0363   1
  87     0364   1 LIBRARY 'RTLSTARLE';                  ! System symbols and macros
  88     0365   1
  89     0366   1 !
  90     0367   1 ! MACROS:
  91     0368   1 !
  92     0369   1 !     NONE
  93     0370   1 !
  94     0371   1 ! EQUATED SYMBOLS:
  95     0372   1 !
  96     0373   1 !     NONE
  97     0374   1 !
  98     0375   1 ! PSECTS:
  99     0376   1 !
 100     0377   1 DECLARE_PSECTS (LIB);                 ! Declare psects for LIB$ facility
 101     0378   1 !
 102     0379   1 ! OWN STORAGE:
 103     0380   1 !
 104     0381   1 !     NONE
 105     0382   1 !
 106     0383   1 ! EXTERNAL REFERENCES:
 107     0384   1 !
 108     0385   1
 109     0386   1 EXTERNAL ROUTINE
 110     0387   1     LIB$SCOPY_R_DX6 : STRING_JSB;              ! Copy string
 111     0388   1
 112     0389   1 !+
 113     0390   1 ! The following error codes are used by this module
 114     0391   1 !-
 115     0392   1
 116     0393   1 EXTERNAL LITERAL
 117     0394   1     LIB$_STRTRU;                               ! string truncated
 118     0395   1
```

```
 120    0396   1  GLOBAL ROUTINE LIBSDATE_TIME (              ! Return date and time
 121    0397   1
 122    0398   1          RESULT_ADDR                         ! Descriptor of user's string
 123    0399   1
 124    0400   1                                  ) : =
 125    0401   1
 126    0402   1  !++
 127    0403   1  ! FUNCTIONAL DESCRIPTION:
 128    0404   1  !
 129    0405   1  !       Return the system date and time, using the caller's semantics
 130    0406   1  !       for his string.
 131    0407   1  !
 132    0408   1  ! FORMAL PARAMETERS:
 133    0409   1  !
 134    0410   1  !       RESULT_ADDR.wt.dx         Address of the descriptor into which
 135    0411   1  !                                 the system date and time is written.
 136    0412   1  !
 137    0413   1  ! IMPLICIT INPUTS:
 138    0414   1  !
 139    0415   1  !       NONE
 140    0416   1  !
 141    0417   1  ! IMPLICIT OUTPUTS:
 142    0418   1  !
 143    0419   1  !       NONE
 144    0420   1  !
 145    0421   1  ! COMPLETION CODES:
 146    0422   1  !
 147    0423   1  !       SSS_NORMAL      Procedure successfully completed
 148    0424   1  !       LIBS_STRTRU     Success, but source string truncated
 149    0425   1  !
 150    0426   1  ! SIDE EFFECTS:
 151    0427   1  !
 152    0428   1  !       Requests the current date and time from VAX/VMS.
 153    0429   1  !
 154    0430   1  !--
 155    0431   1
 156    0432   2      BEGIN
 157    0433   2
 158    0434   2      LOCAL
 159    0435   2          DATE_TIME_BUF : VECTOR [42, BYTE],
 160    0436   2          BUFFER_DESC : BLOCK [8, BYTE];
 161    0437   2
 162    0438   2  !+
 163    0439   2  ! Construct a static descriptor to receive the date and time from
 164    0440   2  ! VAX/VMS.
 165    0441   2  !-
 166    0442   2      BUFFER_DESC [DSCSW_LENGTH] = 24;
 167    0443   2      BUFFER_DESC [DSCSB_DTYPE] = DSCSK_DTYPE_T;
 168    0444   2      BUFFER_DESC [DSCSB_CLASS] = DSCSK_CLASS_S;
 169    0445   2      BUFFER_DESC [DSCSA_POINTER] = DATE_TIME_BUF;
 170    0446   2
 171    0447   2  !+
 172    0448   2  ! Invoke the system service to fill the local buffer.
 173    0449   2  !-
 174    0450   2      SASCTIM (TIMLEN = BUFFER_DESC, TIMBUF = BUFFER_DESC);
 175    0451   2
 176    0452   2  !+
```

```
;  177      0453  2 ! Copy the returned string to the user's string, observing
;  178      0454  2 ! the semantics of his string class.
;  179      0455  2 !-
;  180      0456  3      RETURN ( LIB$SCOPY_R_DX6 ( .BUFFER_DESC [DSC$W_LENGTH],
;  181      0457  2                                 DATE_TIME_BUF, .RESULT_ADDR) ) ;
;  182      0458  2
;  183      0459  1  END;                                   ! end of LIB$DATE_TIME
```

```
                                                             .TITLE  LIB$DATE_TIME
                                                             .IDENT  \1-008\

                                                             .EXTRN  LIB$SCOPY_R_DX6
                                                             .EXTRN  LIB$_STRTRU, SYS$ASCTIM

                                                             .PSECT  _LIB$CODE,NOWRT,  SHR,  PIC,2

                                      007C 00000             .ENTRY  LIB$DATE_TIME, Save R2,R3,R4,R5,R6   ; 0396
                                5E  30  C2 00002             SUBL2   #48, SP
                        010E0018  8F  DD 00005               PUSHL   #17694744                            ; 0442
                  04   AE   08  AE  9E 0000B                 MOVAB   DATE_TIME_BUF, BUFFER_DESC+4          ; 0445
                                7E  7C 00010                 CLRQ    -(SP)                                ; 0450
                            08  AE  9F 00012                 PUSHAB  BUFFER_DESC
                            0C  AE  9F 00015                 PUSHAB  BUFFER_DESC
                  00000000G 00  04  FB 00018                 CALLS   #4, SYS$ASCTIM
                        51  08  AE  9E 0001F                 MOVAB   DATE_TIME_BUF, R1                     ; 0456
                        52  04  AC  D0 00023                 MOVL    RESULT_ADDR, R2
                        50  6E  3C 00027                     MOVZWL  BUFFER_DESC, R0
                  00000000G 00  16 0002A                     JSB     LIB$SCOPY_R_DX6
                                    04 00030                 RET                                          ; 0459
```

; Routine Size: 49 bytes,   Routine Base: _LIB$CODE + 0000

```
;  184      0460  1
;  185      0461  1 END                                     ! end of module LIB$DATE_TIME
;  186      0462  1
;  187      0463  0 ELUDOM
```

```
;                        PSECT SUMMARY
;
;
;        Name                    Bytes                    Attributes
;
;  _LIB$CODE                        49 NOVEC,NOWRT,  RD , EXE,  SHR,  LCL,  REL,  CON,  PIC,ALIGN(2)



;                        Library Statistics


;                             -------- Symbols --------     Pages      Processing
;        File                 Total   Loaded   Percent      Mapped     Time
```

```
:
:    _$255$DUA28:[SYSLIB]STARLET.L32;1        9776        9        0        581        00:00.7
:
```

```
:                              COMMAND QUALIFIERS
:
:        BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:LIBDATETI/OBJ=OBJ$:LIBDATETI MSRC$:LIBDATETI/UPDATE=(ENH$:LIBDATETI
:        )

: Size:          49 code + 0 data bytes
: Run Time:        00:03.1
: Elapsed Time:    00:18.4
: Lines/CPU Min:    9019
: Lexemes/CPU-Min: 33136
: Memory Used:  46 pages
: Compilation Complete
```

LIBCVTTPU
LIS

LIBCVTUO
LIS

LIBDAY
LIS

LIBDECOVE
LIS

LIBCVTOU
LIS

LIBCVTPTU
LIS

LIBCVTTPO
LIS

LIBDECODF
LIS

LIBDOCOM
LIS

LIBCVTTPZ
LIS

LIBDATETI
LIS

LIBDELETE
LIS

LIBCVTPTO
LIS

LIBDAYWK
LIS

LIBCVTPTZ
LIS