```
EEEEEEEEEEEEEEEE   DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD      TTTTTTTTTTTTTTTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
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EEEEEEEEEEE        DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEE                DDD       DDD          TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD             TTT
EEEEEEEEEEEEEEEE   DDDDDDDDDD             TTT
```

EXE

Mod

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FILEID**WORKIO

```
WW      WW   000000    RRRRRRR  KK     KK  IIIIII     000000
WW      WW   000000    RRRRRRR  KK     KK  IIIIII     000000
WW      WW  00    00   RR    RR KK    KK     II      00    00
WW      WW  00    00   RR    RR KK   KK      II      00    00
WW      WW  00    00   RR    RR KK  KK       II      00    00
WW      WW  00    00   RR    RR KKKK         II      00    00
WW      WW  00    00   RRRRRRR  KKKKK        II      00    00
WW  WW  WW  00    00   RR RR    KK  KK       II      00    00
WW  WW  WW  00    00   RR  RR   KK   KK      II      00    00
WWWW  WWWW  00    00   RR   RR  KK    KK     II      00    00
WWWW  WWWW  00    00   RR   RR  KK    KK     II      00    00
WW      WW   000000    RR    RR KK     KK  IIIIII     000000   ....
WW      WW   000000    RR    RR KK     KK  IIIIII     000000   ....
                                                              ....
                                                              ....

LL            IIIIII    SSSSSSSS
LL            IIIIII    SSSSSSSS
LL              II    SS
LL              II    SS
LL              II    SS
LL              II      SSSSSS
LL              II      SSSSSS
LL              II            SS
LL              II            SS
LL              II            SS
LL              II            SS
LLLLLLLLLL    IIIIII    SSSSSSSS
LLLLLLLLLL    IIIIII    SSSSSSSS
```

WORKIO - module for all i/o to workfile   F 2
16-Sep-1984 02:17:46   VAX-11 Bliss-32 V4.0-742   Page 1
14-Sep-1984 12:25:50   DISK$VMSMASTER:[EDT.SRC]WORKIO.BLI;1   (1)

```
   1    0001  0 %TITLE 'WORKIO - module for all i/o to workfile'.
   2    0002  0 MODULE EDT$WORKIO (                              ! Basic work i/o routine for EDT
   3    0003  0              IDENT = 'V04-000'                   ! File: WORKIO.BLI Edit: JBS1009
   4    0004  0              ) =
   5    0005  1 BEGIN
   6    0006  1
   7    0007  1 !*********************************************************************
   8    0008  1 !*                                                                  *
   9    0009  1 !*  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY                         *
  10    0010  1 !*  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.          *
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  19    0019  1 !*                                                                  *
  20    0020  1 !*  THE INFORMATION IN THIS SOFTWARE IS  SUBJECT TO CHANGE WITHOUT NOTICE  *
  21    0021  1 !*  AND  SHOULD  NOT  BE  CONSTRUED AS  A COMMITMENT BY DIGITAL EQUIPMENT  *
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  24    0024  1 !*  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE  OR  RELIABILITY OF ITS  *
  25    0025  1 !*  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.          *
  26    0026  1 !*                                                                  *
  27    0027  1 !*                                                                  *
  28    0028  1 !*********************************************************************
  29    0029  1
  30    0030  1
  31    0031  1 !++
  32    0032  1 ! FACILITY:     EDT -- The DEC Standard Editor
  33    0033  1 !
  34    0034  1 ! ABSTRACT:
  35    0035  1 !
  36    0036  1 !      This is the basic file i/o routine used by EDT.
  37    0037  1 !
  38    0038  1 ! ENVIRONMENT:  Runs on Vax/Vms
  39    0039  1 !
  40    0040  1 ! AUTHOR: Shelly T. Solomon, CREATION DATE: 29-JAN-1982
  41    0041  1 !
  42    0042  1 ! MODIFIED BY:
  43    0043  1 !
  44    0044  1 ! 1-001 - Original.  STS 29-Jan-1982
  45    0045  1 ! 1-002 - Change parameter passed to edt$wf_rd on 11's STS 16-Feb-1982
  46    0046  1 ! 1-003 - Pass address of record desc to edt$$wf_rd. STS 26-Feb-1982
  47    0047  1 ! 1-004 - Add literals for callable EDT.  STS 08-Mar-1982
  48    0048  1 ! 1-005 - Return correct status to caller. STS 10-Mar-1982
  49    0049  1 ! 1-006 - Fix module name and standardize appearance.  JBS 07-Apr-1982
  50    0050  1 ! 1-007 - Return status from closing work file.  JBS 12-Apr-1982
  51    0051  1 ! 1-008 - Don't use special linkage on 11's. STS 03-Jun-1982
  52    0052  1 ! 1-009 - Don't need special linkage on VAX-11 either.  JBS 22-Mar-1983
  53    0053  1 !--
  54    0054  1
```

```
 56    0055  1 %SBTTL 'Declarations'
 57    0056  1 !
 58    0057  1 ! TABLE OF CONTENTS:
 59    0058  1 !
 60    0059  1
 61    0060  1 REQUIRE 'EDTSRC:TRAROUNAM';
 62    0499  1
 63    0500  1 FORWARD ROUTINE
 64    0501  1     EDT$WORKIO;
 65    0502
 66    0503  1 !
 67    0504  1 ! INCLUDE FILES:
 68    0505  1 !
 69    0506  1
 70    0507  1 REQUIRE 'EDTSRC:EDTREQ';
 71    0642  1
 72  L 0643  1 %IF %BLISS (BLISS32)
 73    0644  1 %THEN
 74    0645  1
 75    0646  1 REQUIRE 'EDTSRC:SYSSYM';
 76    0676  1
 77    0677  1 %FI
 78    0678  1
 79    0679  1 !
 80    0680  1 ! MACROS:
 81    0681  1 !
 82    0682  1 !        NONE
 83    0683  1 !
 84    0684  1 ! EQUATED SYMBOLS:
 85    0685  1 !
 86    0686  1
 87  L 0687  1 %IF %BLISS (BLISS32)
 88    0688  1 %THEN
 89    0689  1
 90    0690  1 LITERAL
 91    0691  1     EDT$K_FAC_NO = 133;
 92    0692  1
 93    0693  1 %FI
 94    0694  1
 95    0695  1 LITERAL
 96    0696  1     EDT$K_OPEN_IN_OUT = 4.
 97    0697  1     EDT$K_GET = 5,
 98    0698  1     EDT$K_PUT = 6,
 99    0699  1     EDT$K_CLOSE_DEL = 7;
100    0700  1
101    0701  1 !
102    0702  1 !
103    0703  1 ! FIELDS:
104    0704  1 !
105    0705  1 !        NONE
106    0706  1 !
107    0707  1 ! PSECTS:
108    0708  1 !
109    0709  1 !        none
110    0710  1 !
111    0711  1 ! OWN STORAGE:
112    0712  1 !
```

```
   113    0713  1 !    in the routine
   114    0714  1 !
   115    0715  1 !  EXTERNAL REFERENCES:
   116    0716  1 !
   117    0717  1 !    in the routine
   118    0718  1 !
```

```
 120    0719  1   %SBTTL 'EDT$WORKIO - Basic EDT workfile routine'
 121    0720  1
 122    0721  1   GLOBAL ROUTINE EDT$WORKIO (                          ! Basic EDT workfile routine
 123    0722  1       CODE,                                           ! Operation to perform
 124    0723  1       RECORD_NO,                                      ! record number to perform it on
 125    0724  1       RECORD_DESC                                     ! Descriptor for the record
 126    0725  1       ) =
 127    0726  1
 128    0727  1   !++
 129    0728  1   !  FUNCTIONAL DESCRIPTION:
 130    0729  1   !
 131    0730  1   !  This is the basic work file i/o routine for EDT.  Callable EDT calls this
 132    0731  1   !  routine to do any i/o to or from the workfile if this is the routine passed to it by the calling
 133    0732  1   !  program.  This is the routine passed to callable EDT by the "real" EDT.
 134    0733  1   !
 135    0734  1   !  CALLING SEQUENCE:
 136    0735  1   !
 137    0736  1   !       ret_status.wlc.v = EDT$WORKIO (code.rl.r, record_no.rl.r, record_desc.rbu.dx)
 138    0737  1   !
 139    0738  1   !  FORMAL PARAMETERS:
 140    0739  1   !
 141    0740  1   !  code = a code specifying what kind of i/o operation on the workfile
 142    0741  1   !         is desired
 143    0742  1   !
 144    0743  1   !  record_no = for gets and puts this is the bucket number
 145    0744  1   !
 146    0745  1   !  record_desc = for gets and puts a descriptor pointing to the contents
 147    0746  1   !                   of the bucket
 148    0747  1   !
 149    0748  1   !  IMPLICIT INPUTS:
 150    0749  1   !
 151    0750  1   !      NONE
 152    0751  1   !
 153    0752  1   !  IMPLICIT OUTPUTS:
 154    0753  1   !
 155    0754  1   !      NONE
 156    0755  1   !
 157    0756  1   !  COMPLETION STATUS:
 158    0757  1   !
 159    0758  1   !      Normally SS$_NORMAL
 160    0759  1   !
 161    0760  1   !  SIDE EFFECTS:
 162    0761  1   !
 163    0762  1   !      NONE
 164    0763  1   !
 165    0764  1   !--
 166    0765  1
 167    0766  2       BEGIN
 168    0767  2
 169    0768  2       MAP
 170    0769  2           RECORD_DESC : REF BLOCK [8, BYTE];
 171    0770  2
 172    0771  2       EXTERNAL ROUTINE
 173    0772  2           EDT$$WF_OPN,                                ! open the workfile
 174    0773  2           EDT$$WF_CLS,                                ! close the workfile
 175    0774  2           EDT$$WF_WR,                                 ! write a record to the work file
 176    0775  2           EDT$$WF_RD;                                 ! read a record from the workfile
```

EDT$
V04-

```
177     0776    2                   MESSAGES ((WRKFILOVF, INTERERR, IOERRWRK));
178     0777    2
179     0778    2
180     0779    2           LOCAL
181     0780    2               STATUS,
182     0781    2               IO_STS,
183     0782    2               IO_STV;
184     0783    2
185     0784    2           CASE ..CODE FROM EDT$K_OPEN_IN_OUT TO EDT$K_CLOSE_DEL OF
186     0785    2               SET                                          ! over all the code optons
187     0786    2
188     0787    2               [EDT$K_OPEN_IN_OUT] :                         ! open for input and output.
189     0788    2                   BEGIN
190     0789    3                   STATUS = EDT$$WF_OPN ();
191     0790    3                   RETURN (.STATUS);
192     0791    2                   END;
193     0792    2
194     0793    2               [EDT$K_GET] :                                ! we wish to get a record from a file
195     0794    2                   BEGIN
196     0795    3
197  L  0796    3 %IF %BLISS (BLISS32)
198     0797    3 %THEN
199     0798    3                   EDT$$WF_RD (.RECORD_NO, .RECORD_DESC);
200  U  0799    3 %ELSE
201  U  0800    3                   EDT$$WF_RD (.RECORD_NO, RECORD_DESC [DSC$A_POINTER]);
202     0801    3 %FI
203     0802    3
204     0803    3                   RETURN (1);
205     0804    3                   END;
206     0805    3
207     0806    3               [EDT$K_PUT] :                                ! we wish to put a record to a file
208     0807    3                   BEGIN
209     0808    3
210  L  0809    3 %IF %BLISS (BLISS32)
211     0810    3 %THEN
212     0811    3                   EDT$$WF_WR (.RECORD_NO, .RECORD_DESC);
213  U  0812    3 %ELSE
214  U  0813    3                   EDT$$WF_WR (.RECORD_NO);
215     0814    3 %FI
216     0815    3
217     0816    3                   RETURN (1);
218     0817    2                   END;
219     0818    2
220     0819    2               [EDT$K_CLOSE_DEL] :
221     0820    3                   BEGIN
222     0821    3                   STATUS = EDT$$WF_CLS ();
223     0822    3                   RETURN (.STATUS);
224     0823    2                   END;
225     0824    2
226     0825    2               [INRANGE, OUTRANGE] :
227     0826    2                   ASSERT (0);
228     0827    2               TES;
229     0828    2
230     0829    2           RETURN (1);
231     0830    1           END;                                             ! End of routine EDT$WORKIO
```

```
                                            K 2
EDT$WORKIO     WORKIO - module for all i/o to workfile      16-Sep-1984 02:17:46   VAX-11 Bliss-32 V4.0-742        Page  6
V04-000        EDT$WORKIO - Basic EDT workfile routine       14-Sep-1984 12:25:50   DISK$VMSMASTER:[EDT.SRC]WORKIO.BLI;1    (3)
```

```
;                                                           .TITLE  EDT$WORKIO WORKIO - module for all i/o to workf
                                                                    ile
                                                           .IDENT  \V04-000\

                                                           .EXTRN  EDT$$WF_OPN, EDT$$WF_CLS
                                                           .EXTRN  EDT$$WF_WR, EDT$$WF_RD
                                                           .EXTRN  EDT$_WRRFILOVF, EDT$_INTERERR
                                                           .EXTRN  EDT$_IOERRWRK, EDT$$INTER_ERR

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

                                       0004 00000          .ENTRY  EDT$WORKIO, Save R2                              : 0721
                03            04    04  BC  CF 00002        CASEL   @CODE, #4, #3                                   : 0784
        0034         0027         001A    0011   00007 1$:  .WORD   2$-1$,-
                                                                    3$-1$,-
                                                                    4$-1$,-
                                                                    5$-1$
              00000000G  00          00  FB 0000F          CALLS   #0, EDT$$INTER_ERR                              : 0826
                                     2E  11 00016          BRB     7$                                              : 0784
              00000000G  00          00  FB 00018 2$:      CALLS   #0, EDT$$WF_OPN                                 : 0789
                                     21  11 0001F          BRB     6$
                       7E     08 AC  7D 00021 3$:          MOVQ    RECORD_NO, -(SP)                                : 0798
              00000000G  00          02  FB 00025          CALLS   #2, EDT$$WF_RD
                                     18  11 0002C          BRB     7$                                              : 0803
                       7E     08 AC  7D 0002E 4$:          MOVQ    RECORD_NO, -(SP)                                : 0811
              00000000G  00          02  FB 00032          CALLS   #2, EDT$$WF_WR
                                     0B  11 00039          BRB     7$                                              : 0816
              00000000G  00          00  FB 0003B 5$:      CALLS   #0, EDT$$WF_CLS                                 : 0821
                       52           50  D0 00042 6$:       MOVL    R0, STATUS
                                     04 00045             RET                                                      : 0822
                       50           01  D0 00046 7$:       MOVL    #1, R0                                          : 0829
                                     04 00049             RET                                                      : 0830
```

```
; Routine Size:  74 bytes,    Routine Base:  _EDT$CODE + 0000

:   232          0831  1
:   233          0832  1 !<BLF/PAGE>
```

EDT$WORKIO   WORKIO - module for all i/o to workfile   L 2   Page 7
V04-000   EDT$WORKIO - Basic EDT workfile routine   16-Sep-1984 02:17:46   VAX-11 Bliss-32 V4.0-742   (4)
                                                           14-Sep-1984 12:25:50   DISK$VMSMASTER:[EDT.SRC]WORKIO.BLI;1

```
; 235        0833  1 END                                          ' End of module EDT$WORKIO
; 236        0834  1
; 237        0835  0 ELUDOM
```

```
;                              PSECT SUMMARY

;        Name                      Bytes                   Attributes

;   _EDT$CODE                       74  NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

```
;                   Library Statistics

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

;  _$255$DUA28:[EDT.SRC]EDT.L32;1         377       2        0           40       00:00.2
;  _$255$DUA28:[EDT.SRC]PSECTS.L32;1        2       1       50            7       00:00.1
;  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776       0        0          581      00:04.1
```

```
;                         COMMAND QUALIFIERS

;      BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LIS$:WORKIO/OBJ=OBJ$:WORKIO MSRC$:WORKIO.BLI/UPDATE=(ENH$:WORKIO)

; Size:          74 code + 0 data bytes
; Run Time:         00:16.6
; Elapsed Time:     00:23.3
; Lines/CPU Min:    3023
; Lexemes/CPU-Min:  8353
; Memory Used:  82 pages
; Compilation Complete
```

XLATE
LIS

VAXEMUL
MAP

WIOHNDLR
LIS

WORKIO
LIS

BOOSTRING
LIS

EMULAT

FPEMUL
MAP

BOOEMULAT
LIS

WORDWRAP
LIS

VAXMACROS
MAR

WRIEDTMSG
LIS

FPEMULATE
LIS

VAXREGDEF
SDL