

[illegible]

(2)	44	DECLARATIONS
(3)	67	TST\$CONN_DTS - CONNECT TEST
(4)	199	TST\$DATA_DTS - DATA TEST
(5)	384	TST\$DISC_DTS - DISCONNECT TEST
(6)	518	TST\$INTE_DTS - INTERRUPT TEST
(7)	693	TST\$MISC_DTS - MISCELLANEOUS TEST
(8)	778	TST\$STARTUP_DTR - DTS/DTR INITIALIZATION

```
0000 1      .TITLE  TST$DTSTEST - DTS TEST ROUTINES
0000 2      .IDENT  'V04-000'
0000 3
0000 4
0000 5      *****
0000 6      *
0000 7      *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 8      *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 9      *  ALL RIGHTS RESERVED.
0000 10     *
0000 11     *  THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 12     *  ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 13     *  INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 14     *  COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 15     *  OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 16     *  TRANSFERRED.
0000 17     *
0000 18     *  THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 19     *  AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 20     *  CORPORATION.
0000 21     *
0000 22     *  DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 23     *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24     *
0000 25     *
0000 26     *****
0000 27     .
0000 28
0000 29     ++
0000 30     . FACILITY: DTS/DTR DECNET TEST PACKAGE
0000 31     .
0000 32     . ABSTRACT:
0000 33     .   THIS MODULE IMPLEMENTS THE CONNECT, DATA, DISCONNECT,
0000 34     .   INTERRUPT, AND MISCELLANEOUS TEST SEQUENCES FOR DTS.
0000 35     .
0000 36     . ENVIRONMENT: DTS RUNS IN USER MODE AND REQUIRES NETWORK PRIVILEGE.
0000 37     .
0000 38     . AUTHOR: JAMES A. KRYCKA,      CREATION DATE: 11-AUG-77
0000 39     .
0000 40     . MODIFICATIONS:
0000 41     .
0000 42     .--
```



```

0000 44      .SBTTL  DECLARATIONS
0000 45
0000 46 :
0000 47 : INCLUDE FILES:
0000 48 :
0000 49      $DTSDEF      ;DTS ERROR MESSAGE MACROS
0000 50      CMDDEF      ; DEFINE COMMAND LANGUAGE SYMBOLS
0000 51      EFNDEF      ; DEFINE EFN'S AND FUNCTION CODES
0000 52      $MSGDEF     ; DEFINE MAILBOX MESSAGE ID CODES
0000 53      .IIF NE K_LIST_MEB, .LIST MEB ; DEFINED IN DTPREFIX.MAR
0000 54 :
0000 55 : MACROS:
0000 56 :
0000 57 :     NONE
0000 58 :
0000 59 : EQUATED SYMBOLS:
0000 60 :
0000 61 :     NONE
0000 62 :
0000 63 : OWN STORAGE:
0000 64 :
0000 65 :     NONE

```

```
0000 67 .SBTTL TST$CONN_DTS - CONNECT TEST
0000 68 .PSECT TST$CODE- NOWRT
0000 69 ST:: ; SYMBOL FOR DEBUGGING PURPOSES
0000 70
0000 71 :++
0000 72 : FUNCTIONAL DESCRIPTION:
0000 73 :
0000 74 : NONE
0000 75 :
0000 76 : CALLING SEQUENCE:
0000 77 :
0000 78 : BSB/JSB TST$CONN_DTS
0000 79 :
0000 80 : INPUT PARAMETERS:
0000 81 :
0000 82 : R10 TEST TYPE
0000 83 : R11 ADDRESS OF USERDATA COUNTED ASCII STRING
0000 84 :
0000 85 : IMPLICIT INPUTS:
0000 86 :
0000 87 : TST$GT_USERDATA
0000 88 :
0000 89 : OUTPUT PARAMETERS:
0000 90 :
0000 91 : R0 COMPLETION CODE
0000 92 : R1 ADDRESS OF TEST ID STRING
0000 93 : R2-R9 DESTROYED
0000 94 :
0000 95 : IMPLICIT OUTPUTS:
0000 96 :
0000 97 : TST$GT_USERDATA UPDATED
0000 98 :
0000 99 : COMPLETION CODES:
0000 100 :
0000 101 : R0 1 = SUCCESS; 0 = FAILURE
0000 102 :
0000 103 : SIDE EFFECTS:
0000 104 :
0000 105 : NONE
0000 106 :
0000 107 : --
0000 108 :
0000 109 TST$CONN_DTS:: ; CONTROL POINT
0000 110 :
0000 111 :
0000 112 : FINISH BUILDING THE CONNECT TEST REQUEST IN THE USERDATA STRING.
0000 113 :
0000 114 : THE DTS/R CONTYPE FIELD VALUE IS DERIVED FROM BOTH THE /TYPE AND THE
0000 115 : /[NO]USERDATA QUALIFIER VALUES.
0000 116 :
0000 117 :
02 58 0000'CF 9A 0000 118 MOVZBL W^TST$GB_TYPE,R8 ; GET TYPE QUALIFIER VALUE
59 0000'CF 9A 0005 119 MOVZBL W^TST$GB_RETURN,R9 ; GET RETURN QUALIFIER VALUE
50 59 01 9C 000A 120 ROTL #1,R9,R0 ; CONTYPE = RETURN * 2 + TYPE
02 AB 58 50 81 000E 121 ADDB3 R0,R8,2(R11) ; UPDATE CONTYPE FIELD
68 02 90 0013 122 MOVB #2,(R11) ; UPDATE USERDATA STRING LENGTH
0016 123 $CASEB SELECTOR=R9,DISPL=<- ; CHECK RETURN OPTION:
```



```
03 AB 0001'CF 50 28 0016 124 CONN_TEST- : /NORETURN
      0016 125 CONN_TEST- : /RETURN=STANDARD
      0016 126 > MOVZBL W^TST$GT_CONN,R0 : /RETURN=RECEIVED
      001E 127 ADDB2 R0,(R11) : ADD TEXT TO USERDATA STRING
      0023 128 MOVCL R0,W^TST$GT_CONN+1,3(R11) : UPDATE USERDATA STRING LENGTH
      0026 129 : APPEND THE STRING
      002D 130
      002D 131 : ENTER INTO NSP CONNECT SEQUENCE WITH DTR.
      002D 132
      002D 133
      002D 134
      002D 135 CONN_TEST: : START THE CONNECT TEST
      040E 30 002D 136 BSBW TST$STARTUP_DTR : INITIATE NSP CONNECT SEQUENCE
      12 50 E9 0030 137 BLBC R0,CONN_EXPECTED : WAS LINK ESTABLISHED?
      52 04 D0 0033 138 MOVL #EFN_K_DISC_ABORT,R2 : YES, GET FUNCTION/INDEX CODE
      54 D4 0036 139 CLRL R4 : P2 = 0
      FFC5' 30 0038 140 BSBW TST$QIOW : DISCONNECT ABORT THE LINK
      003B 141 CHECK_IOSB TST$GQ_LINKIOSB : MAKE SURE ABORT COMPLETES
      0045 142
      0045 143 : STORE THE EXPECTED CONNECT ACCEPT/REJECT CODE ON THE STACK AND BUILD
      0045 144 : THE EXPECTED RESPONSE COUNTED ASCII STRING IN TST$GT_USERDATA TO COMPARE
      0045 145 : AGAINST THE ACTUAL RESPONSE RECEIVED FROM DTR.
      0045 146
      0045 147
      0045 148
      0045 149 CONN_EXPECTED:
      0045 150 5$: SCASEB SELECTOR=R9,DISPL=<- : CHECK USERDATA OPTION:
      0045 151 10$: : /NOUSERDATA
      0045 152 20$: : /USERDATA=STANDARD
      0045 153 : CONN_RESPONSE- : /USERDATA=RECEIVED
      0045 154 >
      004F 155 10$: CLRB (R11) : ZERO USERDATA STRING LENGTH
      0051 156 BRB CONN_RESPONSE : CONTINUE
      0053 157 20$: MOVB #16,(R11) : UPDATE USERDATA STRING LENGTH
      0056 158 MOVCL #16,W^TST$GT_STANDARD+1,1(R11) : COPY STANDARD DATA PATTERN
      005D 159
      005D 160 : CHECK ACTUAL RESPONSE FROM DTR AGAINST EXPECTED RESPONSE.
      005D 161
      005D 162
      005D 163
      005D 164 CONN_RESPONSE: : INTERROGATE RESPONSE
      005D 165 BLBS R8,3$ : BR IF CONN ACCEPT EXPECTED
      0060 166 CMPW R6,#MSG$_REJECT : WAS IT REJECTED?
      0063 167 BEQLU 1$ : BR IF YES
      0065 168 MOVL #DTSS_CINBAD,R0 : NOTE UNEXPECTED ACCEPT
      006C 169 BRB CONN_FAILURE : FAIL TEST
      006E 170 1$:
      006E 171 TSTL W^TST$GQ_LINKIOSB+4 : CHECK FOR DTR REJECT
      0072 172 BEQLU 10$ : YES,CHECK USER LENGTH
      0074 173 CMPL #9,W^TST$GQ_LINKIOSB+4 : ALSO DTR REJECT
      0079 174 BEQLU 10$ : CHECK USER DATA
      007B 175 2$:
      007B 176 MOVL #DTSS_CINREJ,R0 : SYSTEM REJECTED CONNECT
      0082 177 MOVL W^TST$GQ_LINKIOSB+4,- : SAVE NCP REASON
      0086 178 W^TST$GQ_LINKIOSB+4,- : FAIL TEST
      0089 179 BRB CONN_FAILURE
      008B 180 3$:
```

```

      31 56 D1 008B 181      CMPL R6,#MSG$ _CONFIRM      :CHECK IF CONN ACCEPTED
      EB 12 008E 182      BNEQU 2$                      :UNEXPECT REJECT
      67 6B 91 0090 183 10$: CMPB (R11),(R7)              :COMPARE EXPECTED VS ACTUAL
      09 13 0093 184      BEQLU 20$                     :USERDATA STRING LENGTH
50 01F5800B 8F D0 0095 186      MOVL #DTSS _BADUSRLN,R0    :IS IS OK?
      17 11 009C 187      BRB CONN_FAILURE              :NOTE BAD LEN USER DATA
      50 6B 9A 009E 188 20$: MOVZBL (R11),R0             :COMPARE EXPECTED VS ACTUAL
01 A7 01 AB 50 29 00A1 189      CMPC3 R0,1(R11),1(R7)    :USERDATA STRING VALUE
      09 13 00A7 190      BEQLU CONN_SUCCESS            :IS IT OK?
50 01F58013 8F D0 00A9 191      MOVL #DTSS _BADUSRDAT,R0 :NOTE BAD DATA
      03 11 00B0 192      BRB CONN_FAILURE              :
      00B2 193 CONN_SUCCESS:                             :TEST WAS SUCCESSFUL
      50 01 D0 00B2 194      MOVL #1,R0                  :SET COMPLETION CODE TO SUCCESS
      00B5 195 CONN_FAILURE:                             :ENTER HERE IF TEST FAILED
51 0000'CF 9E 00B5 196      MOVAB W^TST$GT_CONN,R1      :RETURN ADDRESS OF TEST ID STRING
      05 00BA 197      RSB                               :EXIT
```



```

0000 00BB 199      .SBTTL  TST$DATA_DTS - DATA TEST
0000 00BB 200      .PSECT  TST$CODE-      NOWRT
0000 00BB 201
0000 00BB 202      ++
0000 00BB 203      : FUNCTIONAL DESCRIPTION:
0000 00BB 204      :
0000 00BB 205      :     NONE
0000 00BB 206      :
0000 00BB 207      : CALLING SEQUENCE:
0000 00BB 208      :
0000 00BB 209      :     BSB/JSB TST$DATA_DTS
0000 00BB 210      :
0000 00BB 211      : INPUT PARAMETERS:
0000 00BB 212      :
0000 00BB 213      :     R10     TEST TYPE
0000 00BB 214      :     R11     ADDRESS OF USERDATA COUNTED ASCII STRING
0000 00BB 215      :
0000 00BB 216      : IMPLICIT INPUTS:
0000 00BB 217      :
0000 00BB 218      :     TST$GT_USERDATA
0000 00BB 219      :
0000 00BB 220      : OUTPUT PARAMETERS:
0000 00BB 221      :
0000 00BB 222      :     R0      COMPLETION CODE
0000 00BB 223      :     R1      ADDRESS OF TEST ID STRING
0000 00BB 224      :     R2-R9   DESTROYED
0000 00BB 225      :
0000 00BB 226      : IMPLICIT OUTPUTS:
0000 00BB 227      :
0000 00BB 228      :     TST$GT_USERDATA UPDATED
0000 00BB 229      :
0000 00BB 230      : COMPLETION CODES:
0000 00BB 231      :
0000 00BB 232      :     R0      1 = SUCCESS; 0 = FAILURE
0000 00BB 233      :
0000 00BB 234      : SIDE EFFECTS:
0000 00BB 235      :
0000 00BB 236      :     NONE
0000 00BB 237      :
0000 00BB 238      : --
0000 00BB 239
0000 00BB 240 TST$DATA_DTS::      ; CONTROL POINT
0000 00BB 241
0000 00BB 242 :
0000 00BB 243 : VERIFY MESSAGE SIZE FIELD
0000 00BB 244 :
0000 00BB 245 :
54 0000'CF 3C 00BB 246      MOVZWL  W*TST$GW_SIZE,R4      ;[TGD]VALUE OF SIZE FIELD
00C0 00BB 247      $CASEB  SELECTOR=TST$GB_TYPE,DISPL=<-
00C0 00BB 248      40$-      ;SINK TEST
00C0 00BB 249      10$-      ;SEQUENCE TEST
00C0 00BB 250      20$-      ;PATTERN TEST
00C0 00BB 251      40$-      ;ECHO TEST
00C0 00BB 252      >
00D0 00BB 253 10$:      ;MIN SIZE OF SEQUENCE TEST IS 4
00D0 00BB 254
50 04 D0 00D0 255      MOVL      #4,R0

```

```
03 11 00D3 256 BRB 30$ ;GO TO COMMON CODE
00D5 257
00D5 258 20$: ;MIN SIZE OF PATT CHECK IS 5
50 05 D0 00D5 259 MOVL #5,R0
00D8 260 30$: ;IF SIZE TOO SMALL THEN ERROR
54 50 B1 00D8 261 CMPW R0,R4
06 15 00DB 262 BLEQ 40$ ;IF /SIZE EXCEEDS MIN THEN OKAY
50 02 D0 00DD 263 MOVL #2,R0 ;ERROR CODE
011D 31 00E0 264 BRW DATA_FAILURE ;GO TO COMMON ERROR CODE
00E3 265 40$:
00E3 266
00E3 267 ; FINISH BUILDING THE DATA TEST REQUEST IN THE USERDATA STRING.
00E3 268
00E3 269
59 02 AB DE 00E3 270 MOVAL 2(R11),R9 ; GET ADDRESS OF DTS/R DATATYPE FIELD
89 0000'CF 90 00E7 271 MOVW W^TST$GB_TYPE,(R9)+ ; UPDATE DATATYPE FIELD
89 0000'CF 90 00EC 272 MOVW W^TST$GB_FLOW,(R9)+ ; UPDATE FCOPT FIELD
89 0000'CF 90 00F1 273 MOVW W^TST$GB_QUEUE,(R9)+ ; UPDATE DTS/R FCVAL FIELD
89 0000'CF 90 00F6 274 MOVW W^TST$GB_NAK,(R9)+ ; UPDATE NAKVAL FIELD
89 0000'CF 90 00FB 275 MOVW W^TST$GB_BACK,(R9)+ ; UPDATE BPVAL FIELD
89 0000'CF B0 0100 276 MOVW W^TST$GW_SIZE,(R9)+ ; UPDATE MSGLEN FIELD
6B 08 90 0105 277 MOVW #8,(R11) ; UPDATE USERDATA STRING LENGTH
0108 278
0108 279 ; ENTER INTO NSP CONNECT SEQUENCE WITH DTR.
0108 280
0108 281
0108 282
0108 283 DATA_TEST: ; START THE DATA TEST
0108 284 BSBW TST$STARTUP_DTR ; INITIATE NSP CONNECT SEQUENCE
0108 285 BLBS R0,DATA_INIT ; WAS LINK ESTABLISHED?
50 01F5801B 8F D0 010E 286 MOVL #DTS$CTNREJ,R0
0004'CF D0 0115 287 MOVL W^TST$GQ_LINKIOSB+4,-
0000'CF 0119 288 W^TST$GL_FAOARG
00E1 31 011C 289 BRW DATA_FAILURE ;
011F 290
011F 291 ; DATA TEST INITIALIZATION
011F 292
011F 293
011F 294
011F 295 DATA_INIT: ; CONTINUE
011F 296 CLRQ W^TST$GL_XMITDATA ; ZERO TRANSMIT AND RECEIVE
0123 297 ; MESSAGE COUNTERS
0123 298 CLRQ W^TST$GL_XMITINTE ; ZERO TRANSMIT AND RECEIVE
0127 299 ; INTERRUPT MESSAGE COUNTERS
0000'CF 01 D0 0127 300 MOVL #1,W^TST$GL_STATUS ; SET AST STATUS CODE TO SUCCESS
0000'CF 94 012C 301 CLRQ W^TST$GB_ASTFLAGS ; NOTE TIMER RUNNING
00000000'EF 00000000'EF DE 0130 302 MOVAL TST$QB_QHEAD,TST$QB_QHEAD; INIT QUEUE HEAD
00000004'EF 00000000'EF DE 013B 303 MOVAL TST$QB_QHEAD,TST$QB_QHEAD+4
0146 304
0146 305 ; PUT REPETITIONS OF THE STANDARD DATA PATTERN IN THE MESSAGE BUFFER
0146 306 ; BEGINNING AT BUFFER+4.
0146 307
0146 308
0146 309
53 0000'CF 9E 0146 310 MOVAB W^TST$GB_XMITBUF,R3 ; GET ADDRESS OF MESSAGE
83 01 D0 014B 311 MOVL #1,(R3)+ ; INITIALIZE MESSAGE SEQUENCE NUMBER
54 0000'CF 3C 014E 312 MOVZWL W^TST$GW_SIZE,R4 ; GET MESSAGE SIZE
```



```
04 54 B1 0153 313      CMPW  R4,#4      ;ANY DATA IN MESSAGE?
      06 15 0156 314      BLEQ  5$      ;NO, JUST SEQUENCE
54 04 C2 0158 315      SUBL2  #4,R4      ;REDUCE SIZE ACCORDINGLY
      FEA2' 30 015B 316      BSBW  TST$STANDARD ; PUT STD DATA PATTERN IN BUFFER
      015E 317
      015E 318 5$:
      015E 319
      015E 320
      015E 321
      015E 322
0000'CF 0000'CF D0 015E 323      MOVL  W^TST$GL_SECONDS,W^TST$GL_CLOCK ;SETUP COUNTDOWN LOCATION
      0165 324      $SETIMR S EFN=#EFN_K_TIMER-
      0165 325      DAYTIM=W^TST$GQ_NANOSEC-
      0165 326      ASTADR=W^TST$TIMER_DTS
      0178 327      CHECK_SS      ; CHECK STATUS CODE
      017B 328
      017B 329
      017B 330
      017B 331
      017B 332
03 02 AB 91 017B 333      CMPB  2(R11),#VAL_K_TYPE_ECHO ; SHOULD DTR ECHO MESSAGE?
      10 12 017F 334      BNEQU  10$      ; NO, CONTINUE
      52 07 D0 0181 335      MOVL  #EFN_K_RECV_DATA,R2 ; GET FUNCTION/INDEX CODE
54 0000'CF 3C 0184 336      MOVZWL W^TST$GW_SIZE,R4 ; SIZE OF DATA BUFFER
55 0000'CF 9E 0189 337      MOVAB  W^TST$RECVAST_DTS,R5 ; GET ADDRESS OF AST ROUTINE
      FE6F' 30 018E 338      BSBW  TST$QIOAST ; START UP RECEIVE MESSAGE STREAM
      52 00 D0 0191 339 10$:      MOVL  #EFN_K_READ_MAIL,R2 ; GET FUNCTION/INDEX CODE
54 00'8F 9A 0194 340      MOVZBL #TST$K_MAILBUF,R4 ; GET MAILBOX BUFFER SIZE
55 0000'CF 9E 0198 341      MOVAB  W^TST$MAILAST_DTS,R5 ; GET ADDRESS OF AST ROUTINE
      FE60' 30 019D 342      BSBW  TST$QIOAST ; ISSUE READ TO MAILBOX
      52 05 D0 01A0 343      MOVL  #EFN_K_XMIT_DATA,R2 ; GET FUNCTION/INDEX CODE
54 0000'CF 3C 01A3 344      MOVZWL W^TST$GW_SIZE,R4 ; GET MESSAGE SIZE
55 0000'CF 9E 01A8 345      MOVAB  W^TST$XMITAST_DTS,R5 ; GET ADDRESS OF AST ROUTINE
      FE50' 30 01AD 346      BSBW  TST$QIOAST ; START UP TRANSMIT MESSAGE STREAM
      01B0 347
      01B0 348
      01B0 349
      01B0 350
      01B0 351
07 11 01B0 352      BRB  30$      ;CHECK FOR ASTS
      01B2 353 20$:
      01B2 354      $HIBER_S      ;GO TO SLEEP TILL AN AST
      01B9 355 30$:
      01B9 356      BLBS  W^TST$GB_ASTFLAGS,40$ ;JUMP IF TIMER EXPIRED
50 00000000'FF 0F 01BE 357      REMQUE @TST$QB_QHEAD,R0 ;DEQUEUE AN AST
      EB 1D 01C5 358      BVS  20$      ;NOTHING THERE,SLEEP
      52 0000'C0 D0 01C7 359      MOVL  TST$QB_CODE(R0),R2 ;QIO FUNCTION/CODE
54 00000000'EF 3C 01CC 360      MOVZWL TST$GW_SIZE,R4 ;SIZE FOR DATA MSG
      52 00 D1 01D3 361      CMPL  #EFN_K_READ_MAIL,R2 ;HAS A MAIL READ EXPIRED?
      04 12 01D6 362      BNEQU  35$      ;NOPE A DATA AST
      54 00'8F 9A 01D8 363      MOVZBL #TST$K_MAILBUF,R4 ;USE MAIL BUFFER SIZE
      01DC 364 35$:
      01DC 365      MOVL  TST$QB_ASTADR(R0),R5 ;AST ADDRESS FOR QIO
55 0000'C0 D0 01DC 365      BSBW  TST$QIOAST ;DO QIO WITH AST
      FE1C' 30 01E1 366      CHECK_SS ;MAKE SERVICE OKAY
      D0 11 01E7 367      BRB  30$      ;DEQUEUE ANOTHER
      01E9 368
      01E9 369 40$:
```

TST\$DTSTEST
V04-000

- DTS TEST ROUTINES
TST\$DATA_DTS - DATA TEST

K 7

16-SEP-1984 01:26:09 VAX/VMS Macro V04-00
5-SEP-1984 00:22:40 [DTS\$DTR.SRC]DTSTEST.MAR;1

Page 9
(4)

```
52 03 D0 01E9 370      MOVL   #EFN_K_DISC_SYNC,R2      ; GET FUNCTION/INDEX CODE
    54 D4 01EC 371      CLRL   R4                      ; P2 = 0
    FEOF' 30 01EE 372      BSBW   TST$QIOW              ; DESTROY LINK WITH SYNC DISCONNECT
    01F1 373      CHECK_IOSB TST$GQ_LINKIOSB          ; MAKE SURE DISCONNECT COMPLETES
    01FB 374
    01FB 375      ; DATA TEST IS FINISHED
    01FB 376      ;
    01FB 377      ;
    01FB 378
50 0000'CF D0 01FB 379      MOVL   W^TST$GL_STATUS,R0      ; POST STATUS
    0200 380 DATA_FAILURE:
51 0000'CF 9E 0200 381      MOVAB  W^TST$GT_DATA,R1        ; ENTER HERE IF TEST FAILED
    05 0205 382      RSB                      ; RETURN ADDRESS OF TEST ID STRING
    ; EXIT
```



```
00000206 384      .SBTTL  TST$DISC_DTS - DISCONNECT TEST
0206 385      .PSECT  TST$CODE-      NOWRT
0206 386
0206 387      :++
0206 388      : FUNCTIONAL DESCRIPTION:
0206 389      :
0206 390      :     NONE
0206 391      :
0206 392      : CALLING SEQUENCE:
0206 393      :
0206 394      :     BSB/JSB TST$DISC_DTS
0206 395      :
0206 396      : INPUT PARAMETERS:
0206 397      :
0206 398      :     R10     TEST TYPE
0206 399      :     R11     ADDRESS OF USERDATA COUNTED ASCII STRING
0206 400      :
0206 401      : IMPLICIT INPUTS:
0206 402      :
0206 403      :     TST$GT_USERDATA
0206 404      :
0206 405      : OUTPUT PARAMETERS:
0206 406      :
0206 407      :     R0      COMPLETION CODE
0206 408      :     R1      ADDRESS OF TEST ID STRING
0206 409      :     R2-R9   DESTROYED
0206 410      :
0206 411      : IMPLICIT OUTPUTS:
0206 412      :
0206 413      :     TST$GT_USERDATA UPDATED
0206 414      :
0206 415      : COMPLETION CODES:
0206 416      :
0206 417      :     R0      1 = SUCCESS; 0 = FAILURE
0206 418      :
0206 419      : SIDE EFFECTS:
0206 420      :
0206 421      :     NONE
0206 422      :
0206 423      :--
0206 424
0206 425 TST$DISC_DTS::                                : CONTROL POINT
0206 426
0206 427 :
0206 428 : FINISH BUILDING THE DISCONNECT TEST REQUEST IN THE USERDATA STRING.
0206 429 :
0206 430 : THE DTS/R DISTYPE FIELD VALUE IS DERIVED FROM BOTH THE /TYPE AND THE
0206 431 : /[NO]USERDATA QUALIFIER VALUES.
0206 432 :
0206 433
0206 434      MOVZBL  W^TST$GB_TYPE,R8                      : GET TYPE QUALIFIER VALUE
0206 435      MOVZBL  W^TST$GB_RETURN,R9                    : GET RETURN QUALIFIER VALUE
0206 436      ROTL    #1,R9,R0                              : CONTYPE = RETURN * 2 + TYPE
0206 437      ADDB3   R0,R8,2(R11)                          : UPDATE DISTYPE FIELD
0206 438      MOVB    #2,(R11)                              : UPDATE USERDATA STRING LENGTH
0206 439      $CASEB  SELECTOR=R9,DISPL=<-                  : CHECK RETURN OPTION:
0206 440      DISC_TEST-                                     : /NORETURN
```

58 0000'CF 9A 0206 434
59 0000'CF 9A 020B 435
50 59 01 9C 0210 436
02 AB 58 50 81 0214 437
6B 02 90 0219 438
021C 439
021C 440

```
03 AB 0001'CF 50 28 021C 441 DISC_TEST- : /RETURN=STANDARD
03 AB 0001'CF 50 28 021C 442 : /RETURN=RECEIVED
03 AB 0001'CF 50 28 0224 443 > MOVZBL W^TST$GT_DISC,R0 : ADD TEXT TO USERDATA STRING
03 AB 0001'CF 50 28 0229 444 ADDB2 R0,(R11) : UPDATE USERDATA STRING LENGTH
03 AB 0001'CF 50 28 022C 445 MOV C3 R0,W^TST$GT_DISC+1,3(R11) : APPEND THE STRING
03 AB 0001'CF 50 28 0233 446 :
03 AB 0001'CF 50 28 0233 447 :
03 AB 0001'CF 50 28 0233 448 : ENTER INTO NSP CONNECT SEQUENCE WITH DTR.
03 AB 0001'CF 50 28 0233 449 :
03 AB 0001'CF 50 28 0233 450 :
03 AB 0001'CF 50 28 0233 451 DISC_TEST: : START THE DISCONNECT TEST
03 AB 0001'CF 50 28 0233 452 BSBW TST$STARTUP_DTR : INITIATE NSP CONNECT SEQUENCE
03 AB 0001'CF 50 28 0236 453 BLBS R0,10$ : WAS LINK ESTABLISHED?
03 AB 0001'CF 50 28 0239 454 MOVL #DTS$ CINREJ,R0 : NOTE REJECTION
03 AB 0001'CF 50 28 0240 455 MOVL W^TST$GQ_LINKIOSB+4,- :
03 AB 0001'CF 50 28 0244 456 W^TST$GL_FAOARG : NOTE ABORT REASON
03 AB 0001'CF 50 28 0247 457 BRB DISC_FAILURE : NO, SOMETHING WENT WRONG
03 AB 0001'CF 50 28 0249 458 :
03 AB 0001'CF 50 28 0249 459 :
03 AB 0001'CF 50 28 0249 460 : WAIT FOR DTR TO DISCONNECT THE LINK
03 AB 0001'CF 50 28 0249 461 :
03 AB 0001'CF 50 28 0249 462 :
03 AB 0001'CF 50 28 0249 463 10$: MOVL #EFN_K_READ_MAIL,R2 : GET FUNCTION/INDEX CODE
03 AB 0001'CF 50 28 024C 464 MOVZBL #TST$K_MAILBUF,R4 : GET MAILBOX BUFFER SIZE
03 AB 0001'CF 50 28 0250 465 BSBW TST$QIOW : WAIT FOR RESPONSE
03 AB 0001'CF 50 28 0253 466 BSBW TST$EXAM_MAIL : PARSE MAILBOX MESSAGE
03 AB 0001'CF 50 28 0256 467 MOVL #EFN_K_DISC_ABRT,R2 : GET FUNCTION/INDEX CODE
03 AB 0001'CF 50 28 0259 468 CLRL R4 : P2 = 0
03 AB 0001'CF 50 28 025B 469 BSBW TST$QIOW : DISCONNECT ABORT THE LINK
03 AB 0001'CF 50 28 025E 470 CHECK_IOSB TST$GQ_LINKIOSB : MAKE SURE ABORT COMPLETES
03 AB 0001'CF 50 28 0268 471 :
03 AB 0001'CF 50 28 0268 472 :
03 AB 0001'CF 50 28 0268 473 : STORE THE EXPECTED DISCONNECT SYNCHRONOUS/ABORT CODE ON THE STACK AND BUILD
03 AB 0001'CF 50 28 0268 474 : THE EXPECTED RESPONSE COUNTED ASCII STRING IN TST$GT_USERDATA TO COMPARE
03 AB 0001'CF 50 28 0268 475 : AGAINST THE ACTUAL RESPONSE RECEIVED FROM DTR.
03 AB 0001'CF 50 28 0268 476 :
03 AB 0001'CF 50 28 0268 477 :
03 AB 0001'CF 50 28 0268 478 DISC_EXPECTED: :
03 AB 0001'CF 50 28 0268 479 MOVW #MSG$_DISCON,-(SP) : ASSUME SYNCHRONOUS DISCONNECT
03 AB 0001'CF 50 28 026B 480 BLBC R8,5$ : BRANCH IF SYNC DISC SPECIFIED
03 AB 0001'CF 50 28 026E 481 MOVW #MSG$_ABORT,(SP) : NO, DISC ABORT IS SPECIFIED
03 AB 0001'CF 50 28 0271 482 5$: $CASEB SELECTOR=R9,DISPL=<- : CHECK USERDATA OPTION:
03 AB 0001'CF 50 28 0271 483 10$- : /NOUSERDATA
03 AB 0001'CF 50 28 0271 484 20$- : /USERDATA=STANDARD
03 AB 0001'CF 50 28 0271 485 DISC_RESPONSE- : /USERDATA=RECEIVED
03 AB 0001'CF 50 28 0271 486 :
03 AB 0001'CF 50 28 0271 487 > :
03 AB 0001'CF 50 28 027B 487 10$: CLRB (R11) : ZERO USERDATA STRING LENGTH
03 AB 0001'CF 50 28 027D 488 BRB DISC_RESPONSE : CONTINUE
03 AB 0001'CF 50 28 027F 489 20$: MOVB #16,(R11) : UPDATE USERDATA STRING LENGTH
03 AB 0001'CF 50 28 0282 490 MOVC3 #16,W^TST$GT_STANDARD+1,1(R11) : COPY STANDARD DATA PATTERN
03 AB 0001'CF 50 28 0289 491 :
03 AB 0001'CF 50 28 0289 492 :
03 AB 0001'CF 50 28 0289 493 : CHECK ACTUAL RESPONSE FROM DTR AGAINST EXPECTED RESPONSE
03 AB 0001'CF 50 28 0289 494 :
03 AB 0001'CF 50 28 0289 495 :
03 AB 0001'CF 50 28 0289 496 DISC_RESPONSE: : INTERROGATE RESPONSE
03 AB 0001'CF 50 28 0289 497 CMPW (SP)+,R6 : COMPARE EXPECTED VS ACTUAL
```



```

      028C 498
      028C 499
50 01F5802B 09 13 028C 500      BEQLU 10$
      25 11 028E 501      MOVL #DTS$ DISBAD,R0
      67 6B 91 0295 501      BRB DISC_FAILURE
      0297 502 10$:      CMPB (R11),(R7)
      029A 503
      029A 504      BEQLU 20$
50 01F5800B 09 13 029C 505      MOVL #DTS$ BADUSRLN,R0
      17 11 02A3 506      BRB DISC_FAILURE
      50 6B 9A 02A5 507 20$:      MOVZBL (R11),R0
01 A7 01 AB 50 29 02A8 508      CMPC3 R0,1(R11),1(R7)
      09 13 02AE 509      BEQLU DISC_SUCCESS
50 01F58013 8F D0 02B0 510      MOVL #DTS$ BADUSRDAT,R0
      03 11 02B7 511      BRB DISC_FAILURE
      02B9 512 DISC_SUCCESS:
      50 01 D0 02B9 513      MOVL #1,R0
      02BC 514 DISC_FAILURE:
51 0000'CF 9E 02BC 515      MOVAB W^TST$GT_DISC,R1
      05 02C1 516      RSB
```

```

: RESPONSE FROM DTR
: IS IT OK?
: NOTE WRONG KIND OF DISCONNECT
: COMPARE EXPECTED VS ACTUAL
:   USERDATA STRING LENGTH
: IS IS OK?
: INVALID USERDATA LENGTH
: COMPARE EXPECTED VS ACTUAL
:   USERDATA STRING VALUE
: IS IT OK?
: INVALID USER DATA
: TEST WAS SUCCESSFUL
: SET COMPLETION CODE TO SUCCESS
: ENTER HERE IF TEST FAILED
: RETURN ADDRESS OF TEST ID STRING
: EXIT
```

```
000002C2 518      .SBTTL  TST$INTE_DTS - INTERRUPT TEST
02C2 519      .PSECT  TST$CODE-      NOWRT
02C2 520
02C2 521      :++
02C2 522      : FUNCTIONAL DESCRIPTION:
02C2 523      :
02C2 524      :     NONE
02C2 525      :
02C2 526      : CALLING SEQUENCE:
02C2 527      :
02C2 528      :     BSB/JSB TST$INTE_DTS
02C2 529      :
02C2 530      : INPUT PARAMETERS:
02C2 531      :
02C2 532      :     R10    TEST TYPE
02C2 533      :     R11    ADDRESS OF USERDATA COUNTED ASCII STRING
02C2 534      :
02C2 535      : IMPLICIT INPUTS:
02C2 536      :
02C2 537      :     TST$GT_USERDATA
02C2 538      :
02C2 539      : OUTPUT PARAMETERS:
02C2 540      :
02C2 541      :     R0     COMPLETION CODE
02C2 542      :     R1     ADDRESS OF TEST ID STRING
02C2 543      :     R2-R9   DESTROYED
02C2 544      :
02C2 545      : IMPLICIT OUTPUTS:
02C2 546      :
02C2 547      :     TST$GT_USERDATA UPDATED
02C2 548      :
02C2 549      : COMPLETION CODES:
02C2 550      :
02C2 551      :     R0     1 = SUCCESS; 0 = FAILURE
02C2 552      :
02C2 553      : SIDE EFFECTS:
02C2 554      :
02C2 555      :     NONE
02C2 556      :
02C2 557      : --
02C2 558
02C2 559      TST$INTE_DTS::      : CONTROL POINT
02C2 560
02C2 561      :
02C2 562      : VERIFY MESSAGE SIZE FIELD
02C2 563      :
02C2 564
02C2 565      MOVZWL  W^TST$GW_SIZE,R4      ;[TGD]VALUE OF SIZE FIELD
02C7 566      $CASEB  SELECTOR=TST$GB_TYPE,DISPL=<-
02C7 567      40%-      :SINK TEST
02C7 568      10%-      :SEQUENCE TEST
02C7 569      20%-      :PATTERN TEST
02C7 570      40%-      :ECHO TEST
02C7 571      >
02D7 572      10$:      :MIN SIZE OF SEQUENCE TEST IS 1
02D7 573
02D7 574      MOVL   #4,R0

54  0000'CF  3C
50  04  00  02D7
```



```
03 11 02DA 575 BRB 30$ ;GO TO COMMON CODE
      02DC 576
      02DC 577 20$: ;MIN SIZE OF PATT CHECK IS 5
50 05 D0 02DC 578 MOVL #5,R0
      02DF 579 30$: ;IF SIZE TOO SMALL THEN ERROR
54 50 B1 02DF 580 CMPW R0,R4
      06 15 02E2 581 BLEQ 40$ ;IF /SIZE EXCEEDS MIN THEN OKAY
50 02 D0 02E4 582 MOVL #2,R0 ;ERROR CODE
      00F1 31 02E7 583 BRW INTE_FAILURE ;GO TO COMMON ERROR CODE
      02EA 584 40$:
      02EA 585
      02EA 586 : FINISH BUILDING THE INTERRUPT TEST REQUEST IN THE USERDATA STRING.
      02EA 587
      02EA 588
02 AB 0000'CF 90 02EA 589 MOVW W^TST$GB_TYPE,2(R11) ; UPDATE INTTYPE FIELD
03 AB 0000'CF 90 02F0 590 MOVW W^TST$GB_RQUEUE,3(R11) ; UPDATE INTFC FIELD
      6B 03 90 02F6 591 MOVW #3,(R11) ; UPDATE USERDATA STRING LENGTH
      02F9 592
      02F9 593
      02F9 594 : ENTER INTO NSP CONNECT SEQUENCE WITH DTR.
      02F9 595
      02F9 596
      02F9 597 INTE_TEST: ; START THE INTE TEST
      02F9 598 BSBW TST$STARTUP_DTR ; INITIATE NSP CONNECT SEQUENCE
      02FC 599 BLBS RO,INTE_INIT ; WAS LINK ESTABLISHED?
50 01F5801B 8F D0 02FF 600 MOVL #DTS$CINREJ,R0 ;NOTE ABORTED CONNECT
      0004'CF D0 0306 601 MOVL W^TST$GL_LINKIOSB+4,-
      0000'CF 030A 602 W^TST$GL_FAQARG ;NOTE REASON
      00CB 31 030D 603 BRW INTE_FAILURE
      0310 604
      0310 605 : INTERRUPT TEST INITIALIZATION
      0310 606
      0310 607
      0310 608
      0310 609 INTE_INIT: ; CONTINUE
      0310 610 CLRQ W^TST$GL_XMITDATA ; ZERO TRANSMIT AND RECEIVE
      0314 611 ; MESSAGE COUNTERS
      0314 612 CLRQ W^TST$GL_XMITINTE ; ZERO TRANSMIT AND RECEIVE
      0318 613 ; INTERRUPT MESSAGE COUNTERS
      0318 614 MOVL #1,W^TST$GL_STATUS ; SET AST STATUS CODE TO SUCCESS
      031D 615 CLRQ W^TST$GB_ASTFLAGS ;NOTE TIMER RUNNING
      0321 616 MOVAL TST$QB_QHEAD,TST$QB_QHEAD;INIT QUEUE HEAD
      032C 617 MOVAL TST$QB_QHEAD,TST$QB_QHEAD+4
      0337 618
      0337 619 :
      0337 620 : PUT REPETITIONS OF THE STANDARD DATA PATTERN IN THE MESSAGE BUFFER
      0337 621 : BEGINNING AT BUFFER+4.
      0337 622
      0337 623
      0337 624
53 0000'CF 9E 0337 624 MOVAB W^TST$GB_INTEBUF,R3 ; GET ADDRESS OF MESSAGE
      83 01 D0 033C 625 MOVL #1,(R3)+ ; INITIALIZE MESSAGE SEQUENCE NUMBER
54 0000'CF 3C 033F 626 MOVZWL W^TST$GW_SIZE,R4 ; GET MESSAGE SIZE
      04 54 B1 0344 627 CMPW R4,#4 ;[TGD]ANY DAT IN MESSAGE
      06 15 0347 628 BLEQ 10$ ;NOPE DONT FILL BUFFER
      54 04 C2 0349 629 SUBL2 #4,R4 ; REDUCE SIZE ACCORDINGLY
      FCB1' 30 034C 630 BSBW TST$STANDARD ; PUT STD DATA PATTERN IN BUFFER
      034F 631
```


TST\$DTSTEST
V04-000

- DTS TEST ROUTINES
TST\$INTE_DTS - INTERRUPT TEST

E 8

16-SEP-1984 01:26:09 VAX/VMS Macro V04-00
5-SEP-1984 00:22:40 [DTS\$DTR.SRC]DTSTEST.MAR;1

Page 16
(6)

51 0000'CF 9E 03DB 689 INTE_FAILURE:
05 03DB 690 MOVAB
03E0 691 RSB

W^TST\$GT_INTE,R1

; ENTER HERE IF TEST FAILED
; RETURN ADDRESS OF TEST ID STRING
; EXIT

```
000003E1 693      .SBTTL TST$MISC_DTS - MISCELLANEOUS TEST
03E1 694      .PSECT TST$CODE- NOWRT
03E1 695
03E1 696      :++
03E1 697      : FUNCTIONAL DESCRIPTION:
03E1 698      :
03E1 699      :     NONE
03E1 700      :
03E1 701      : CALLING SEQUENCE:
03E1 702      :
03E1 703      :     BSB/JSB TST$MISC_DTS
03E1 704      :
03E1 705      : INPUT PARAMETERS:
03E1 706      :
03E1 707      :     R10     TEST TYPE
03E1 708      :     R11     ADDRESS OF USERDATA COUNTED ASCII STRING
03E1 709      :
03E1 710      : IMPLICIT INPUTS:
03E1 711      :
03E1 712      :     TST$GT_USERDATA
03E1 713      :
03E1 714      : OUTPUT PARAMETERS:
03E1 715      :
03E1 716      :     R0      COMPLETION CODE
03E1 717      :     R1      ADDRESS OF TEST ID STRING
03E1 718      :     R2-R9   DESTROYED
03E1 719      :
03E1 720      : IMPLICIT OUTPUTS:
03E1 721      :
03E1 722      :     TST$GT_USERDATA UPDATED
03E1 723      :
03E1 724      : COMPLETION CODES:
03E1 725      :
03E1 726      : SIDE EFFECTS:
03E1 727      :
03E1 728      : SIDE EFFECTS:
03E1 729      :
03E1 730      :     NONE
03E1 731      :
03E1 732      : --
03E1 733
0051 31 03E1 734 TST$MISC_DTS::          : CONTROL POINT
03E1 735      BRW      MISC_SUCCESS      :
03E4 736
03E4 737      :
03E4 738      : FINISH BUILDING THE MISCELLANEOUS TEST REQUEST IN THE USERDATA STRING.
03E4 739      :
03E4 740
02 AB 0000'CF 90 03E4 741      MOVW      W^TST$GB_TYPE,2(R11)      : UPDATE MISCTYPE FIELD
6B 02 D0 03EA 742      MOVL      #2,(R11)      : UPDATE USERDATA STRING LENGTH
03ED 743
03ED 744      :
03ED 745      : ENTER INTO NSP CONNECT SEQUENCE WITH DTR.
03ED 746      :
03ED 747
004E 30 03ED 748 MISC_TEST:          : START THE DATA TEST
03ED 749      BSBW      TST$STARTUP_DTR      : INITIATE NSP CONNECT SEQUENCE
```



```
0000'CF 3A4C4147 7E 0000'CF 7D 0400 750 10$: MOVQ W^TST$GT_NODENAME, -(SP) ; SAVE NODENAME
0000'CF 3A4C4147 454C4C49 8F 7D 0405 751 10$: MOVQ #^A/ILLEGAL:/, W^TST$GT_NODENAME ; ONLY ONE COLON
0000'CF 0000'CF 20 10 0412 760 BSBB MISC_COMMON ; COMMON CODE
0000'CF 0000'CF 8E 7D 0414 761 MOVQ (SP)+, W^TST$GT_NODENAME ; RESTORE NODENAME
0000'CF 0000'CF 1A 11 0419 762 BRB MISC_SUCCESS ; FINISHED
0000'CF 0000'CF 3935 8F B0 041B 763 20$: MOVW W^TST$GT_OBJTYPE, -(SP) ; SAVE OBJECTTYPE
0000'CF 0000'CF 0B 10 0420 764 MOVW #^A/59/, W^TST$GT_OBJTYPE ; UNKNOWN OBJECTTYPE
0000'CF 0000'CF 8E B0 0427 765 BSBB MISC_COMMON ; COMMON CODE
0000'CF 0000'CF 05 11 0429 766 MOVW (SP)+, W^TST$GT_OBJTYPE ; RESTORE OBJECTTYPE
0000'CF 0000'CF 02 10 042E 767 BRB MISC_SUCCESS ; FINISHED
0000'CF 0000'CF 01 11 0430 768 30$: BSBB MISC_COMMON ; COMMON CODE
0000'CF 0000'CF 01 11 0432 769 BRB MISC_SUCCESS ; FINISHED
0000'CF 0000'CF 05 05 0434 770 MISC_COMMON: RSB ; EXIT
0000'CF 0000'CF 50 01 D0 0435 771 MISC_SUCCESS: MOVL #1, R0 ; TEST WAS SUCCESSFUL
0000'CF 0000'CF 51 0000'CF 9E 0435 772 MISC_FAILURE: MOVAB W^TST$GT_MISC, R1 ; SET COMPLETION CODE TO SUCCESS
0000'CF 0000'CF 05 05 0438 773 MISC_FAILURE: RSB ; ENTER HERE IF TEST FAILED
0000'CF 0000'CF 05 05 0438 774 MISC_FAILURE: RSB ; RETURN ADDRESS OF TEST ID STRING
0000'CF 0000'CF 05 05 043D 775 MISC_FAILURE: RSB ; EXIT
0000'CF 0000'CF 05 05 043D 776 MISC_FAILURE: RSB ; EXIT
```

```
0000043E 778      .SBTTL  TST$STARTUP_DTR - DTS/DTR INITIALIZATION
043E      779      .PSECT  TST$CODE      NOWRT
043E      780
043E      781      :++
043E      782      : FUNCTIONAL DESCRIPTION:
043E      783      :
043E      784      :     NONE
043E      785      :
043E      786      : CALLING SEQUENCE:
043E      787      :
043E      788      :     BSB/JSB TST$STARTUP_DTR
043E      789      :
043E      790      : INPUT PARAMETERS:
043E      791      :
043E      792      :     NONE
043E      793      :
043E      794      : IMPLICIT INPUTS:
043E      795      :
043E      796      :     TST$GT_NODENAME - COUNTED ASCII STRING OF NODENAME
043E      797      :     TST$GT_OBJTYPE  - COUNTED ASCII STRING OF NSP OBJECT TYPE
043E      798      :     TST$GT_USERDATA - COUNTED ASCII STRING OF NSP USERDATA
043E      799      :                      CONTAINING TEST REQUEST PARAMETERS FOR DTR
043E      800      :
043E      801      : OUTPUT PARAMETERS:
043E      802      :
043E      803      :     R0      COMPLETION CODE
043E      804      :     R6      MAILBOX MESSAGE CODE
043E      805      :     R7      ADDRESS OF RECEIVED MAILBOX DATA LESS HEADER STORED AS A
043E      806      :                      COUNTED ASCII STRING
043E      807      :
043E      808      : IMPLICIT OUTPUTS:
043E      809      :
043E      810      :     TST$GQ_ACCESS - QIO ACCESS DESCRIPTOR BLOCK
043E      811      :     TST$GB_NCB    - CONSTRUCTED NETWORK CONNECT BLOCK
043E      812      :     TST$GW_MAILCODE - MAILBOX MESSAGE CODE
043E      813      :     TST$GW_DEV_UNIT - DEVICE UNIT NUMBER
043E      814      :     TST$GT_DEV_NAME - DEVICE NAME STORED AS A COUNTED STRING
043E      815      :     TST$GT_MAILDATA - DATA FIELD OF MAILBOX MESSAGE STORED AS A
043E      816      :                      COUNTED STRING
043E      817      :
043E      818      : COMPLETION CODES:
043E      819      :
043E      820      :     R0      1 = LINK WAS ESTABLISHED; 0 = LINK WAS NOT ESTABLISHED
043E      821      :
043E      822      : SIDE EFFECTS:
043E      823      :
043E      824      :     NONE
043E      825      :
043E      826      : --
043E      827      :
043E      828      : TST$STARTUP_DTR::
043E      829      :     CONTROL POINT
043E      830      :     PUSHR   #*M<R2,R3,R4,R5>      : SAVE REGISTERS
043E      831      :     MOVAL   W^TST$GQ_ACCESS,R6     : GET ADDRESS OF QIO ACCESS
043E      832      :     MOVAL   W^TST$GB_NCB,R3        : DESCRIPTOR BLOCK
043E      833      :     MOVL    R3,4(R6)               : GET ADDRESS OF NCB BUFFER
043E      834      :     MOVZBL  W^TST$GT_NODENAME,R0   : UPDATE ACCESS DESCRIPTOR BLOCK
043E      835      :                                     : COPY NODENAME INTO NCB
```

56 0000'CF BB 043E 829
04 0000'CF DE 0440 830
A6 53 DO 044A 833
50 0000'CF 9A 044E 834

PC	Instruction	Op	Reg	Value	Comment
63	0001'CF	50	28	0453	835
	83	3A3A	8F	80	0459
		83	22	90	045E
	50	0000'CF	50	9A	0461
63	0001'CF	50	28	0466	838
	83	2F	90	046C	839
		83	B4	046F	840
	50	0000'CF	50	9A	0471
		50	D6	0476	841
63	0000'CF	50	28	0478	842
	83	22	90	047E	843
		04	C3	0481	844
66	53	04	A6	0486	845
				0486	846
				0486	847
				0486	848
				0486	849
				0486	850
				0486	851
				0486	852
				0492	853
	FB68'	30	0495	854	
52	01	D0	0498	855	
54	56	D0	049B	856	
	FB5F'	30	049E	857	
			04A1	858	
			04AB	859	
			04AB	860	
			04AB	861	
			04AB	862	
			04AB	863	
			04AB	864	
52	00	D0	04AB	865	
54	00'8F	9A	04AE	866	
	FB4B'	30	04B2	867	
	FB4B'	30	04B5	868	
	50	D4	04B8	869	
31	56	B1	04BA	870	
	02	12	04BD	871	
	50	D6	04BF	872	
	3C	BA	04C1	873	
		05	04C3	874	
			04C4	875	
				876	
				877	
				878	
				879	
				880	
				881	
				882	
				883	
				884	
				885	
				886	
				887	
				888	
				889	
				890	
				891	
				892	
				893	
				894	
				895	
				896	
				897	
				898	
				899	
				900	
				901	
				902	
				903	
				904	
				905	
				906	
				907	
				908	
				909	
				910	
				911	
				912	
				913	
				914	
				915	
				916	
				917	
				918	
				919	
				920	
				921	
				922	
				923	
				924	
				925	
				926	
				927	
				928	
				929	
				930	
				931	
				932	
				933	
				934	
				935	
				936	
				937	
				938	

TST\$DTSTEST
Symbol table

- DTS TEST ROUTINES

J 8

16-SEP-1984 01:26:09 VAX/VMS Macro V04-00
5-SEP-1984 00:22:40 [DTS\$DTR.SRC]DTSTEST.MAR;1Page 21
(8)

```
$$COUNT      = 00000003
$$T1           = 00000000
CONN_EXPECTED  = 00000045 R    02
CONN_FAILURE   = 000000B5 R    02
CONN_RESPONSE  = 0000005D R    02
CONN_SUCCESS   = 000000B2 R    02
CONN_TEST      = 0000002D R    02
DATA_FAILURE   = 00000200 R    02
DATA_INIT      = 0000011F R    02
DATA_TEST      = 00000108 R    02
DISC_EXPECTED  = 00000268 R    02
DISC_FAILURE   = 000002BC R    02
DISC_RESPONSE  = 00000289 R    02
DISC_SUCCESS   = 000002B9 R    02
DISC_TEST      = 00000233 R    02
DTSS_BADUSRDAT = 01F58013
DTSS_BADUSRLN  = 01F5800B
DTSS_CINBAD    = 01F58003
DTSS_CINREJ    = 01F5801B
DTSS_DISBAD    = 01F5802B
EFN_R_CONN_INIT = 00000001
EFN_K_DISC_ABRT = 00000004
EFN_K_DISC_SYNC = 00000003
EFN_K_READ_MAIL = 00000000
EFN_K_RECV_DATA = 00000007
EFN_K_TIMER     = 00000008
EFN_K_XMIT_DATA = 00000005
EFN_K_XMIT_INTE = 00000006
INTE_FAILURE    = 000003DB R    02
INTE_INIT       = 00000310 R    02
INTE_TEST       = 000002F9 R    02
K_LIST_MEB      = 00000000
MISC_COMMON     = 00000434 R    02
MISC_FAILURE    = 00000438 R    02
MISC_SUCCESS    = 00000435 R    02
MISC_TEST       = 000003ED R    02
MSG$ABORT       = 00000030
MSG$CONFIRM     = 00000031
MSG$DISCON      = 00000033
MSG$REJECT      = 00000038
ST              = 00000000 RG   02
SYSS$CANCEL     = ***** GX  02
SYSS$HIBER      = ***** GX  02
SYSS$SETIMR     = ***** GX  02
TST$CHECK_IOSB  = ***** X   02
TST$CHECK_SS    = ***** X   02
TST$CONN_DTS    = 00000000 RG   02
TST$DATA_DTS    = 000000BB RG   02
TST$DISC_DTS    = 00000206 RG   02
TST$EXAM_MAIL   = ***** X   02
TST$FLUSH_MAIL  = ***** X   02
TST$GB_ASTFLAGS = ***** X   02
TST$GB_BACK     = ***** X   02
TST$GB_FLOW     = ***** X   02
TST$GB_INTEBUF  = ***** X   02
TST$GB_NAK      = ***** X   02
TST$GB_NCB      = ***** X   02
```

```
TST$GB_RETURN ***** X   02
TST$GB_QUEUE ***** X   02
TST$GB_TYPE ***** X   02
TST$GB_XMITBUF ***** X   02
TST$GL_CLOCK ***** X   02
TST$GL_FAQARG ***** X   02
TST$GL_SECONDS ***** X   02
TST$GL_STATUS ***** X   02
TST$GL_XMITDATA ***** X   02
TST$GL_XMITINTE ***** X   02
TST$GQ_ACCESS ***** X   02
TST$GQ_LINKIOSB ***** X   02
TST$GQ_NANOSEC ***** X   02
TST$GT_CONN ***** X   02
TST$GT_DATA ***** X   02
TST$GT_DISC ***** X   02
TST$GT_INTE ***** X   02
TST$GT_MISC ***** X   02
TST$GT_NODENAME ***** X   02
TST$GT_OBJTYPE ***** X   02
TST$GT_STANDARD ***** X   02
TST$GT_USERDATA ***** X   02
TST$GW_MAILCHAN ***** X   02
TST$GW_SIZE ***** X   02
TST$INTEAST_DTS ***** X   02
TST$INTE_DTS ***** X   02
TST$K_MAILBUF ***** X   02
TST$MAILAST_DTS ***** X   02
TST$MISC_DTS ***** X   02
TST$QB_ASTADR ***** X   02
TST$QB_CODE ***** X   02
TST$QB_QHEAD ***** X   02
TST$QIOAST ***** X   02
TST$QIOW ***** X   02
TST$RECVAST_DTS ***** X   02
TST$STANDARD ***** X   02
TST$STARTUP_DTR ***** X   02
TST$TIMER_DTS ***** X   02
TST$XMITAST_DTS ***** X   02
VAL_K_BACK_NO = 00000000
VAL_K_DISP_NO = 00000000
VAL_K_FLOW_MESS = 00000002
VAL_K_NAK_NO = 00000000
VAL_K_PRIN_NO = 00000000
VAL_K_RETU_NO = 00000000
VAL_K_STAT_YES = 00000001
VAL_K_TYPE_ABRT = 00000001
VAL_K_TYPE_ACCE = 00000001
VAL_K_TYPE_ECHO = 00000003
VAL_K_TYPE_NAME = 00000000
VAL_K_TYPE_SINK = 00000000
```


+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes
ABS	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	00000000 (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
TST\$CODE	000004C4 (1220.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	34	00:00:00.09	00:00:00.67
Command processing	108	00:00:00.56	00:00:02.95
Pass 1	234	00:00:06.49	00:00:16.35
Symbol table sort	0	00:00:00.28	00:00:00.35
Pass 2	161	00:00:02.37	00:00:05.25
Symbol table output	9	00:00:00.08	00:00:00.35
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	550	00:00:09.91	00:00:25.96

The working set limit was 1200 pages.

32578 bytes (64 pages) of virtual memory were used to buffer the intermediate code.

There were 20 pages of symbol table space allocated to hold 234 non-local and 45 local symbols.

936 source lines were read in Pass 1, producing 22 object records in Pass 2.

28 pages of virtual memory were used to define 24 macros.

+-----+
! Macro library statistics !
+-----+

Macro library name	Macros defined
\$255\$DUA28:[DTS DTR.OBJ]DTS DTR.MLB;1	7
\$255\$DUA28:[SYSLIB]STARLET.MLB;2	11
TOTALS (all libraries)	18

339 GETS were required to define 18 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:DTSTEST/OBJ=OBJ\$:DTSTEST MSRC\$:DTPREFIX/UPDATE=(ENH\$:DTPREFIX)+MSRC\$:DTSTEST/UPDATE=(ENH\$:DTSTEST)

0123 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY

