

DDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDD	DDD	CCC	LLL
DDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL

```

DDDDDDDD      CCCCCCCC  XX      XX      SSSSSSSS  TTTTTTTTTT  AAAAAA  RRRRRRRR  TTTTTTTTTT
DDDDDDDD      CCCCCCCC  XX      XX      SSSSSSSS  TTTTTTTTTT  AAAAAA  RRRRRRRR  TTTTTTTTTT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RRRRRRRR  TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RRRRRRRR  TT
DD      DD      CC      XX      XX      SS      TT      AAAAAAAAAA  RR  RR      TT
DD      DD      CC      XX      XX      SS      TT      AAAAAAAAAA  RR  RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DD      DD      CC      XX      XX      SS      TT      AA      AA      RR      RR      TT
DDDDDDDD      CCCCCCCC  XX      XX      SSSSSSSS  TTTTTTTTTT  AA      AA      RR      RR      TT
DDDDDDDD      CCCCCCCC  XX      XX      SSSSSSSS  TTTTTTTTTT  AA      AA      RR      RR      TT

```

```

LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
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
LLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLL  IIIIII  SSSSSSSS

```

DCXSTART
Table of contents

- DCL DEBUG VERSION START MODULE K 12

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DEBUGGER START UP

```
0000 1 .TITLE DCXSTART - DCL DEBUG VERSION START MODULE
0000 2 .IDENT 'V04-000'
0000 3
0000 4
0000 5 :*****
0000 6 :*
0000 7 :* COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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0000 23 :* SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :
0000 28 : COMMAND LANGUAGE INTERPRETER DEBUGGER INITIALIZATION
0000 29 :
0000 30 : TIM HALVORSEN, 24-JAN-1980
0000 31 :
0000 32 : MODIFIED BY:
0000 33 :
0000 34 : V005 TMH0005 Tim Halvorsen 09-Aug-1981
0000 35 : Exit from process if any debugger initialization problems.
0000 36 :
0000 37 : V004 TMH0004 Tim Halvorsen 04-Apr-1981
0000 38 : Use new LOGIN-CLI protocol.
0000 39 :
0000 40 : V003 TMH0003 Tim Halvorsen 28-Mar-1981
0000 41 : Skip the debugger entry point if not interactive.
0000 42 :
0000 43 : V002 TMH0002 Tim Halvorsen 23-Feb-1981
0000 44 : Remove STEP-OVER DELTA string
0000 45 :
0000 46 : 001 TMH0001 T. Halvorsen 09-Jul-1980
0000 47 : Call normal initialization AFTER it resets SP/FP.
0000 48 : ---
0000 49 :
0000 50 :
0000 51 : MACRO LIBRARY CALLS
0000 52 :
0000 53 :
0000 54 : $PPDEF ;PROCESS PERMANENT DATA AREA
0000 55 : $PSLDEF ;DEFINE PROCESSOR STATUS FIELDS
```

```

0000 57      .SBTTL  DEBUGGER START UP
0000 58      :+
0000 59      : START-UP WITH DEBUGGER
0000 60      :
0000 61      : THIS ENTRY POINT IS JUMPED TO AT THE CONCLUSION OF LOGGING A USER ONTO
0000 62      : THE SYSTEM. ALL INPUT AND OUTPUT FILES ARE OPEN AND THE PROCESS PERMANENT
0000 63      : DATA AREA (PPD) HAS BEEN INITIALIZED.
0000 64      :-
0000 65
00000000 66      .PSECT  DCL$$BASE, BYTE, RD, NOWRT
0000 67
0000 68  BASE_OF_CLI:
03 00000002'GF 01 E1 0000 69      BBC      #PPDSV MODE, G^CTLS$AG_CLIDATA+PPDSW_FLAGS, 10$ ;BR IF NOT BATCH
      FFF7' 31 0008 70      BRW      DCL$STARTUP+2 ; IF BATCH, SKIP DEBUGGER ENTRY POINT
5E 00000008'GF 00 DD 0008 71 10$:  MOVL     G^CTLS$AL_STACK+8, SP ; RESET SUPERVISOR MODE STACK POINTER
      18'AF 01 FB 0012 72      PUSHL   #0 ; ALLOCATE SPACE FOR XFER VECTOR ADDR
      0000 0014 73      CALLS   #1, B^20$ ; MAKE DUMMY CALL FRAME (HANDLER=0)
50 00000000'EF 0000 0018 74 20$:  .WORD   0
04 A0 0000'CF 9E 001A 75      MOVAB   XFER_ARRAY, R0 ; GET ADDRESS OF TRANSFER VECTOR
      04 AC 50 D0 0021 76      MOVAB   W^DC[$STARTUP, 4(R0) ; SET SECOND TRNFER ADDR TO HERE
      5B D2 AF 9E 0027 77      MOVL   R0, 4(AP) ; SET TRANSFER ARRAY FOR DEBUGGER
00000000'GF 6C FA 002B 78      MOVAB   BASE_OF_CLI, R11 ; R11 = BASE OF CLI FOR DEBUGGING
      0036 80      CALLG   (AP), G^XDT$START ; CALL DEBUGGER INITIALIZATION
      003F 81      $EXIT_S ; EXIT IF ANY DEBUG INIT PROBLEMS
00000000 82      .PSECT  DCL$DEBUG, WRT
00000000 83  XFER_ARRAY:
00000000 84      .LONG   0 ; PRIMARY TRANSFER (NOT USED)
00000000 85      .LONG   0 ; SECONDARY = DCL INITIALIZATION
      0008 86
      0008 87      .END

```

DCXSTART
Symbol table

- DCL DEBUG VERSION START MODULE N 12

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4-SEP-1984 23:40:12 [DCL.SRC]DCXSTART.MAR;1

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```

BASE OF CLI          00000000 R    02
CTLSAG_CLIDATA      ***** X    02
CTLSAL_STACK        ***** X    02
DCL$STARTUP         ***** X    02
PPDSB_NPROCS        0000001C
PPDSC_LENGTH        00000168
PPDSK_LENGTH        00000168
PPDSL_INPDEV        00000044
PPDSL_LGI           00000014
PPDSL_LSTSTATUS     00000018
PPDSL_OUTDEV        00000064
PPDSL_PRC           00000008
PPDSQ_CLIREG        00000004
PPDSQ_CLISYMTBL     0000000C
PPDST_FILENAME      00000068
PPDST_INPDVI        00000028
PPDST_OUTDVI        00000048
PPDSV_MODE          = 00000001
PPDSW_FLAGS         00000002
PPDSW_INPCHAN       0000001E
PPDSW_INPDID        0000003E
PPDSW_INPFID        00000038
PPDSW_INPIFI        00000020
PPDSW_INPISI        00000022
PPDSW_OUTDID        0000005E
PPDSW_OUTFID        00000058
PPDSW_OUTIFI        00000024
PPDSW_OUTISI        00000026
PPDSW_SIZE          00000000
SYS$EXIT            ***** GX   02
XDT$START           ***** X    02
XFER_ARRAY          00000000 R    03
  
```

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes
. ABS .	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$AB\$\$	00000168 (360.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD WRT NOVEC BYTE
DCL\$\$BASE	0000003F (63.)	02 (2.)	NOPIC USR CON REL LCL NOSHR EXE RD NOWRT NOVEC BYTE
DCL\$DEBUG	00000008 (8.)	03 (3.)	NOPIC USR CON REL LCL NOSHR EXE RD WRT NOVEC BYTE

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	9	00:00:00.03	00:00:01.56
Command processing	90	00:00:00.66	00:00:06.27
Pass 1	105	00:00:01.55	00:00:08.87
Symbol table sort	0	00:00:00.08	00:00:00.25
Pass 2	23	00:00:00.33	00:00:02.31
Symbol table output	3	00:00:00.03	00:00:00.03
Psect synopsis output	1	00:00:00.03	00:00:00.04

Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	231	00:00:02.72	00:00:19.33

The working set limit was 900 pages.
5976 bytes (12 pages) of virtual memory were used to buffer the intermediate code.
There were 10 pages of symbol table space allocated to hold 94 non-local and 2 local symbols.
87 source lines were read in Pass 1, producing 15 object records in Pass 2.
10 pages of virtual memory were used to define 9 macros.

! Macro library statistics !

Macro library name	Macros defined
-----	-----
-\$255\$DUA28:[SYSLIB]SYSBLDMLB.MLB;1	0
-\$255\$DUA28:[DCL.OBJ]DCL.MLB;1	1
-\$255\$DUA28:[SYS.OBJ]LIB.MLB;1	0
-\$255\$DUA28:[SYSLIB]STARLET.MLB;2	5
TOTALS (all libraries)	6

161 GETS were required to define 6 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:DCXSTART/OBJ=OBJ\$.DCXSTART MSRC\$:DCXSTART/UPDATE=(ENH\$:DCXSTART)+EXECMLS/LIB+LIB\$:DCL/LIB+SYSS\$LIBRARY:SYSBLDMLB/LIB

