

DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLL
DDDDDDDDDDDDDD		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
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL
DDDDDDDDDDDDDD		CCCCCCCCCCCC	LLLLLLLLLLLLLLLL

(3) 72
(4) 139

SET COMPLETION STATUS
SAVE COMPLETION STATUS

```
0000 1 .TITLE STATUS - SET COMPLETION STATUS
0000 2 .IDENT 'V04-001'
0000 3
0000 4
0000 5 *****
0000 6
0000 7 *
0000 8 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
0000 9 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
0000 10 * ALL RIGHTS RESERVED.
0000 11 *
0000 12 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED
0000 13 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE
0000 14 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER
0000 15 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY
0000 16 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY
0000 17 * TRANSFERRED.
0000 18 *
0000 19 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE
0000 20 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT
0000 21 * CORPORATION.
0000 22 *
0000 23 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS
0000 24 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0000 25 *
0000 26 *****
0000 27
0000 28 SET COMPLETION STATUS
0000 29
0000 30 D. N. CUTLER 18-MAY-77
0000 31
0000 32 MODIFIED BY:
0000 33
0000 34 V04-001 HWS0108 Harold Schultz 14-Sep-1984
0000 35 In the case of SSS_EXCPUTIM, SSS_FORCEDEXIT, and
0000 36 JBC$_JOBABORT errors, execute an implicit EXIT command
0000 37 with error status in order to unwind all command procedures.
0000 38 If interactive, it will cause return to the command prompt.
0000 39 If batch, it will cause the batch job to exit.
0000 40
0000 41 V03-004 PCG0005 Peter George 03-Jan-1984
0000 42 Fix broken BSBW.
0000 43
0000 44 V03-003 PCG0004 Peter George 27-May-1983
0000 45 Fix broken BRW.
0000 46
0000 47 V03-002 PCG0003 Peter George 28-Jan-1983
0000 48 Remove references to the ONEXIT bit.
0000 49
0000 50 V03-001 PCG0002 Peter George 30-Dec-1982
0000 51 Break DCL$SET_STATUS up into two routines.
0000 52 :---
```



```

0000 54 :
0000 55 : MACRO LIBRARY CALLS
0000 56 :
0000 57 :
0000 58 PRCDEF ;DEFINE PROCESS WORK AREA
0000 59 WRKDEF ;DEFINE COMMAND WORK AREA
0000 60 $PSLDEF ;DEFINE PROCESSOR STATUS REGISTER FIELDS
0000 61 $JBCMSGDEF ;DEFINE JOB CONTROLLER ERROR MESSAGES
0000 62 $STSDEF ;DEFINE STATUS LONG WORD VALUES
0000 63 :
0000 64 : LOCAL DATA
0000 65 :
0000 66 :
00000000 67 .PSECT DCL$ZCODE,BYTE,RD,NOWRT
0000 68 :
0000 69 DCL$T_DEFONTXT:: ; DEFAULT ON TEXT
00 54 49 58 45 05 0000 70 EXIT:-.ASCII <5>/EXIT/<0> ;

```

```
0006 72 .SBTTL SET COMPLETION STATUS
0006 73 :+
0006 74 :DCL$SET_STATUS - SET COMPLETION STATUS
0006 75 :
0006 76 :THIS ROUTINE IS CALLED TO SET THE COMPLETION STATUS OF A COMMAND. IT IS
0006 77 :CALLED FROM A POINT AT WHICH INDIRECT FILES AND ALL OTHER CONTEXT CAN BE
0006 78 :DESTROYED IF APPROPRIATE.
0006 79 :
0006 80 :INPUTS:
0006 81 :
0006 82 :RO = COMPLETION STATUS VALUE.
0006 83 :
0006 84 :IT IS ASSUMED THAT 'ON ERROR' CONDITIONS HAVE BEEN ESTABLISHED.
0006 85 :
0006 86 :OUTPUTS:
0006 87 :
0006 88 :THE THREE COMPONENTS OF THE COMPLETION STATUS ARE CONVERTED TO ASCII
0006 89 :AND EQUATED TO THEIR RESPECTIVE SYMBOL NAMES.
0006 90 :-
0006 91 :
0006 92 DCL$SET_STATUS::
0006 93 :SET COMPLETION STATUS
0006 94 :BLBC RO,5$ ;BR IF ERROR STATUS OF SOME KIND
0006 95 :BBC #WRK_V_NOSTAT,WRK_W_FLAGS(R10),5$ ; BR IF STATUS COMMAND
0006 96 :BRW 40$ ;OTHERWISE, DONE
0006 97 5$: DISABLE ;DISABLE CONTROL Y/C AST'S
0006 98 :CLRQ (SP)+ ;REMOVE RETURN INFORMATION FROM STACK
0006 99 :BSBB DCL$SAVE_STATUS ;SET $STATUS AND $SEVERITY
0006 100 :
0006 101 :SPECIAL CASE $$$ EXCPUITIM, $$$ FORCEDEXIT, AND JBC$_JOBABORT ERRORS.
0006 102 :SET THE LAST STATUS VALUE, FLUSH THE COMMAND BUFFER, AND SETUP TO EXECUTE
0006 103 :THE EXIT COMMAND.
0006 104 :
0006 105 :BBS #PRC_V_MODE,- ;BRANCH IF NOT INTERACTIVE
0006 106 :PRC_W_FLAGS(R11),7$
0006 107 :TSTL PRC_L_INDEPTH(R11) ;ARE WE AT COMMAND LEVEL 0?
0006 108 :BEQL 20$ ;YES, PROCESS NORMALLY
0006 109 7$: BICL #STSSM_CONTROL,RO ;INIT. CONTROL PORTION OF ERROR CODE
0006 110 :CML #$$$_EXCPUITIM,RO ;EXCEEDED CPU TIME ERROR?
0006 111 :BEQL 10$ ;YES, SPECIAL CASE IT
0006 112 :CML #JBC$_JOBABORT!STSSK_ERROR,RO ;JOB ABORT FROM JOB CONTROLLER?
0006 113 :BEQL 10$ ;YES, SPECIAL CASE IT
0006 114 :CML #$$$_FORCEDEXIT,RO ;FORCED EXIT ERROR?
0006 115 :BNEQ 20$ ;NO, PROCESS NORMALLY
0006 116 :
0006 117 10$: MOVL RO,PRC_L_LSTSTATUS(R11) ;SAVE LAST STATUS VALUE FOR PROCESS
0006 118 :JSB DCL$FLUSH ;FLUSH THE COMMAND BUFFER
0006 119 :BRB 25$ ;SETUP TO EXECUTE 'EXIT' COMMAND.
0006 120 :
0006 121 20$: BBS #PRC_V_YLEVEL,PRC_W_FLAGS(R11),40$ ;IF SET, CONTROL Y/C LEVEL
0006 122 :MOVL RO,PRC_L_LSTSTATUS(R11) ;SAVE LAST STATUS VALUE FOR PROCESS
0006 123 :BLBS RO,40$ ;IF LBS SUCCESSFUL COMPLETION
0006 124 :EXTZV #0,#3,RO,RO ;EXTRACT SEVERITY LEVEL
0006 125 :CMPB RO,PRC_W_ONLEVEL(R11) ;FATAL ERROR?
0006 126 :BLSS 40$ ;IF LSS NO
0006 127 :JSB DCL$FLUSH ;FLUSH COMMAND BUFFER
0006 128 :MOVL PRC_L_ONERROR(R11),RO ;GET ADDRESS OF ON COMMAND TEXT
```


50	85	AF	04	12	0076	129	BNEQ	30\$		: IF NEQ COMMAND SPECIFIED
	51	80		9E	0078	130	MOVAB	EXIT,RO		: GET ADDRESS OF EXIT COMMAND TEXT
F896	CA	60	51	9A	007C	131	MOVZBL	(R0)+,R1		: GET LENGTH OF ON COMMAND TEXT
F48E	CA	F895	CA	28	007F	132	MOVC	R1,(R0),WRK_G_INPBUF(R10)		: MOVE COMMAND TO INPUT BUFFER
		FF71		9E	0085	133	MOVAB	WRK_G_INPBUF-T(R10),WRK_L_CHARPTR(R10)		: SET INPUT BUFFER POINTER
00000000		'EF		30	008C	134	BSBW	DCL\$ONRESET		: RESET ON ERROR PARAMETERS
				17	008F	135	JMP	DCL\$CMDSTART		: EXECUTE ON COMMAND
				05	0095	136	RSB			:
					0096	137				:

```
0096 139 .SBTTL SAVE COMPLETION STATUS
0096 140 :+
0096 141 :DCL$SAVE_STATUS - SET COMPLETION STATUS
0096 142 :
0096 143 :THIS ROUTINE IS CALLED TO SET $STATUS AND $SEVERITY.
0096 144 :
0096 145 :INPUTS:
0096 146 :
0096 147 :    R0 = COMPLETION STATUS VALUE.
0096 148 :
0096 149 :OUTPUTS:
0096 150 :
0096 151 :    THE TWO COMPONENTS OF THE COMPLETION STATUS ARE CONVERTED TO ASCII
0096 152 :    AND EQUATED TO THEIR RESPECTIVE SYMBOL NAMES.
0096 153 :-
0096 154
0096 155 DCL$SAVE_STATUS::                                ;SET $STATUS AND $SEVERITY
0096 156 :
0096 157 :
0096 158 :IF ABBREVIATED CLI STATUS (REPRESENTED BY NEGATIVE NUMBER), THEN TRANSLATE
0096 159 :TO A NORMAL STATUS.
0096 160 :
0096 161 :    PUSHL    R0                                ;SAVE COMPLETION STATUS VALUE
0096 162 :    BGEQ     10$                                ;IF GEQ NOT COMMAND INTERPRETER STATUS
0096 163 :    MNEGL    R0,R0                                ;NEGATE COMPLETION STATUS
0096 164 :    BISW     #^XOE000,R0                        ;ADD CLI SUBSYSTEM SPECIFY DIVIDED BY 4
0096 165 :    MULL3    #4,R0,(SP)                        ;CONVERT TO SCALED ERROR NUMBER
0096 166 :
0096 167 :
0096 168 :SET UP $SEVERITY.
0096 169 :
0096 170 10$: EXTZV    #0,#3,(SP),R0                ;EXTRACT SEVERITY LEVEL
0096 171 :    ADDL     #^A/O/,R0                        ;CONVERT SEVERITY LEVEL TO ASCII
0096 172 :    MOVL     PRC_L_SEVERITY(R11),R1            ;GET ADDRESS OF SEVERITY LEVEL VALUE
0096 173 :    MOVW     R0,(RT)                            ;SET SEVERITY LEVEL VALUE
0096 174 :    MOVW     #1,-2(R1)                        ;SET LENGTH OF SEVERITY LEVEL VALUE
0096 175 :
0096 176 :
0096 177 :SET UP $STATUS.
0096 178 :
0096 179 :    MOVL     PRC_L_STATUS(R11),R2              ;GET ADDRESS OF STATUS VALUE VALUE
0096 180 :    MOVL     (SP),R0                            ;GET STATUS VALUE
0096 181 :    MOVW     #10,-2(R2)                        ;SET LENGTH OF STRING
0096 182 :    MOVW     #^A/%X/,(R2)+                    ;SET RADIX CONTROL CHARACTERS
0096 183 :    BSBW     DCL$CNVHXL                        ;CONVERT TO HEX LONGWORD
0096 184 :
0096 185 :
0096 186 :RESTORE STATUS AND RETURN.
0096 187 :
0096 188 :    POPL     R0                                ;RESTORE THE STATUS
0096 189 :    RSB
0096 190 :
0096 191 .END
```

50 6E 03 00 EF 00A6 170 10\$: EXTZV #0,#3,(SP),R0 ;EXTRACT SEVERITY LEVEL
50 50 30 CO 00AB 171 : ADDL #^A/O/,R0 ;CONVERT SEVERITY LEVEL TO ASCII
51 50 AB DO 00AE 172 : MOVL PRC_L_SEVERITY(R11),R1 ;GET ADDRESS OF SEVERITY LEVEL VALUE
61 50 90 00B2 173 : MOVW R0,(RT) ;SET SEVERITY LEVEL VALUE
FE A1 01 B0 00B5 174 : MOVW #1,-2(R1) ;SET LENGTH OF SEVERITY LEVEL VALUE
52 54 AB DO 00B9 179 : MOVL PRC_L_STATUS(R11),R2 ;GET ADDRESS OF STATUS VALUE VALUE
50 6E DO 00BD 180 : MOVL (SP),R0 ;GET STATUS VALUE
FE A2 0A B0 00C0 181 : MOVW #10,-2(R2) ;SET LENGTH OF STRING
82 5825 8F B0 00C4 182 : MOVW #^A/%X/,(R2)+ ;SET RADIX CONTROL CHARACTERS
FF34' 30 00C9 183 : BSBW DCL\$CNVHXL ;CONVERT TO HEX LONGWORD
50 8ED0 00CC 184 :
05 00CC 185 :
00CC 186 :RESTORE STATUS AND RETURN.
00CC 187 :
00CF 188 : POPL R0 ;RESTORE THE STATUS
00D0 189 : RSB
00D0 190 :
00D0 191 .END

STATUS
Symbol table

- SET COMPLETION STATUS

J 4

16-SEP-1984 00:21:49 VAX/VMS Macro V04-00
15-SEP-1984 09:17:38 [DCL.SRC]STATUS.MAR;2

Page 6
(4)

DCL\$CMDSTART	*****	X	02
DCL\$CNVHXL	*****	X	02
DCL\$DISABLE	*****	X	02
DCL\$FLUSH	*****	X	02
DCL\$ONRESET	*****	X	02
DCL\$SAVE STATUS	00000096	RG	02
DCL\$SET STATUS	00000006	RG	02
DCL\$T_DEFONTXT	00000000	RG	02
EXIT	00000000	R	02
JBC\$ JOBABORT	= 00048080		
PRC_B_CONTINUE	000000F3		
PRC_B_DEFRADIX	000000AE		
PRC_B_EXMDEPMOD	000000AD		
PRC_B_EXMDEPWID	000000AC		
PRC_B_EXONLYL	0000012D		
PRC_B_FLAGS2	000000AF		
PRC_B_IMGFLAG	00000078		
PRC_B_OUTFLAGS	0000012C		
PRC_B_PROMPTLEN	000000F0		
PRC_C_LENGTH	00000534		
PRC_G_COMMANDS	00000133		
PRC_G_PROMPT	000000F4		
PRC_K_LENGTH	00000534		
PRC_L_CURRKEY	00000048		
PRC_L_EXMDEPADR	000000A8		
PRC_L_EXTARG	00000094		
PRC_L_EXTBLK	0000008C		
PRC_L_EXTCOD	0000009C		
PRC_L_EXTHND	00000090		
PRC_L_EXTPRM	00000098		
PRC_L_IDFLNK	000000BC		
PRC_L_IMGACTSTS	00000080		
PRC_L_INDCLOCK	0000007C		
PRC_L_INDEPTH	0000005C		
PRC_L_INDFAB	0000001C		
PRC_L_INDINPRAB	00000014		
PRC_L_INDOUTRAB	00000018		
PRC_L_INPRAB	00000008		
PRC_L_LASTKEY	0000004C		
PRC_L_LSTSTATUS	000000B0		
PRC_L_ONCTLY	000000B8		
PRC_L_ONERROR	0000006C		
PRC_L_OUTOFBAND	000000B4		
PRC_L_OUTRAB	0000000C		
PRC_L_OUTRABCTX	00000118		
PRC_L_PPFLIST	00000070		
PRC_L_RECALLPTR	0000012F		
PRC_L_RESTART	00000058		
PRC_L_SAVAP	00000000		
PRC_L_SAVFP	00000004		
PRC_L_SEVERITY	00000050		
PRC_L_SPWN	000000C0		
PRC_L_STACKLM	000000A4		
PRC_L_STACKPT	000000A0		
PRC_L_STATUS	00000054		
PRC_L_STS	00000084		
PRC_L_STV	00000088		

PRC_L_SYMBOL	00000060
PRC_L_TMBX	00000074
PRC_L_TRMLIST	00000010
PRC_Q_ALLOCREG	00000020
PRC_Q_COMMAND	000000E0
PRC_Q_FLUSHTIME	000000D0
PRC_Q_GLOBAL	00000028
PRC_Q_IMAGENAME	000000D8
PRC_Q_KEYPAD	00000040
PRC_Q_LABEL	00000030
PRC_Q_LOCAL	00000038
PRC_Q_SAVEPRIV	000000E8
PRC_T_OUTDVI	0000011C
PRC_V_MODE	= 00000006
PRC_V_YLEVEL	= 0000000B
PRC_W_ASTIOSB	000000C6
PRC_W_ASTRETN	000000C8
PRC_W_ASTSTATUS	000000C4
PRC_W_ATTMBX	0000007A
PRC_W_FLAGS	00000068
PRC_W_INPCHAN	00000064
PRC_W_ONLEVEL	0000006A
PRC_W_OUTIFI	00000114
PRC_W_OUTISI	00000116
PRC_W_OUTMBXCHN	000000CA
PRC_W_OUTMBXREF	000000CE
PRC_W_OUTMBXSIZ	000000CC
PRC_W_PMPCTCTL	000000F1
PRC_W_WAITIOSB	00000066
SS\$EXCPUTIM	*****
SS\$FORCEDEXIT	*****
ST\$K_ERROR	= 00000002
ST\$M_CONTROL	= F0000000
WRK_B_CMDOPT	FFFFFFFFC3
WRK_B_MAXPARM	FFFFFFFFD0
WRK_B_MINPARM	FFFFFFFFD1
WRK_B_PARMCNT	FFFFFFFFCE
WRK_B_PARMSUM	FFFFFFFFCF
WRK_B_RECALLCNT	FFFFFFFFC5
WRK_B_VALLEV	FFFFFFFFC4
WRK_B_VERBTYP	FFFFFFFFC2
WRK_C_LENGTH	FFFFFFF486
WRK_G_BUFFER	FFFFFFF492
WRK_G_INPBUF	FFFFFFF896
WRK_G_RESULT	FFFFFFF9B6
WRK_K_LENGTH	FFFFFFF486
WRK_L_CHARPTR	FFFFFFF48E
WRK_L_DISALLOW	FFFFFFFE6
WRK_L_ERRORRTN	FFFFFFF9AE
WRK_L_EXPANDPTR	FFFFFFF486
WRK_L_IMAGE	FFFFFFFE2
WRK_L_MARKPTR	FFFFFFF48A
WRK_L_PAROUT	FFFFFFFD2
WRK_L_PMPTADDR	FFFFFFF9A2
WRK_L_PROMPTRTN	FFFFFFF9A6
WRK_L_PROPTR	FFFFFFFC6
WRK_L_QUABLK	FFFFFFFCA

X	02
X	02

STATUS
Symbol table

- SET COMPLETION STATUS

K 4

16-SEP-1984 00:21:49 VAX/VMS Macro V04-00
15-SEP-1984 09:17:38 [DCL.SRC]STATUS.MAR;2

Page 7
(4)

WRK_L_READRTN	FFFFFF9AA
WRK_L_RECALLPTR	FFFFFFFEA
WRK_L_RSLEND	FFFFFFFB6
WRK_L_RSLNXT	FFFFFFFBA
WRK_L_SAVAP	FFFFFFF8
WRK_L_SAVFP	FFFFFFFC
WRK_L_SAVSP	FFFFFFF4
WRK_L_SIGNALRTN	FFFFFFD6
WRK_L_SPECRTN	FFFFFF9B2
WRK_L_TAB_VEC	FFFFFFDE
WRK_L_VERB	FFFFFFBE
WRK_V_NOSTAT	= 00000008
WRK_W_FLAGS	FFFFFFF0
WRK_W_FLAGS2	FFFFFFF2
WRK_W_IMGCHAN	FFFFFFEE
WRK_W_PMPTLEN	FFFFFF99E

+-----+
! 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\$\$	FFFFFFFC (0.)	01 (1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE					
DCL\$ZCODE	000000D0 (208.)	02 (2.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	NOWRT	NOVEC	BYTE					

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

Phase	Page faults	CPU Time	Elapsed Time
Initialization	15	00:00:00.02	00:00:01.79
Command processing	96	00:00:00.67	00:00:06.71
Pass 1	166	00:00:05.03	00:00:16.02
Symbol table sort	0	00:00:00.57	00:00:01.47
Pass 2	38	00:00:00.89	00:00:03.45
Symbol table output	15	00:00:00.09	00:00:00.29
Psect synopsis output	1	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	331	00:00:07.30	00:00:29.75

The working set limit was 1050 pages.

22576 bytes (45 pages) of virtual memory were used to buffer the intermediate code.

There were 30 pages of symbol table space allocated to hold 394 non-local and 8 local symbols.

191 source lines were read in Pass 1, producing 13 object records in Pass 2.

27 pages of virtual memory were used to define 14 macros.

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

Macro library name

Macros defined

\$255\$DUA28:[SYSLIB]SYSBLDMLB.MLB;1
\$255\$DUA28:[DCL.OBJ]DCL.MLB;1
\$255\$DUA28:[SYS.OBJ]LIB.MLB;1
\$255\$DUA28:[SYSLIB]STARLET.MLB;2
TOTALS (all libraries)

0
3
0
6
9

490 GETS were required to define 9 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS\$:STATUS/OBJ=OBJ\$:STATUS MSRC\$:STATUS/UPDATE=(ENH\$:STATUS)+EXECML\$/LIB+LIB\$:DCL/LIB+SYSS\$LIBRARY:SYSBLDMLB/LIB

0074 AH-BT13A-SE
VAX/VMS V4.0

DIGITAL EQUIPMENT CORPORATION
CONFIDENTIAL AND PROPRIETARY