

```

LLL      IIIIIIII  BBBB BBBB RRRRRRRRRR TTTTTTTTTT LLL
LLL      IIIIIIII  BBBB BBBB RRRRRRRRRR TTTTTTTTTT LLL
LLL      IIIIIIII  BBBB BBBB RRRRRRRRRR TTTTTTTTTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLL      III     BBB      BBB RRR      RRR TTT      TTT LLL
LLLLLLLLLLLLLLLLLLLL IIIIIIII  BBBB BBBB RRRRRRRRRR TTT      TTT LLL
LLLLLLLLLLLLLLLLLLLL IIIIIIII  BBBB BBBB RRRRRRRRRR TTT      TTT LLL
LLLLLLLLLLLLLLLLLLLL IIIIIIII  BBBB BBBB RRRRRRRRRR TTT      TTT LLL

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LL      IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGGGG  SSSSSSSS  TTTTTTTTTT  000000
LL      IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGGGG  SSSSSSSS  TTTTTTTTTT  000000
LL      II      BB      SS      II      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      SS      TT      00      00
LL      II      BBBB BBBB  SSSSSS  II      GG      SSSSSS  TT      00      00
LL      II      BBBB BBBB  SSSSSS  II      GG      SSSSSS  TT      00      00
LL      II      BB      SS      II      GG      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      GG      SS      TT      00      00
LL      II      BB      SS      II      GG      GG      SS      TT      00      00
LLLLLLLL  IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGG  SSSSSSSS  TT      000000
LLLLLLLL  IIIIII  BBBB BBBB  SSSSSSSS  IIIIII  GGGGGG  SSSSSSSS  TT      000000

LL      IIIIII  SSSSSSSS
LL      IIIIII  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      IIIIII  SSSSSSSS
LLLLLLLL  IIIIII  SSSSSSSS
```


(2)

59

Change a signal to a stop


```
0000 1      .TITLE  LIB$SIGSTOP      Convert a signal to a stop
0000 2      .IDENT  /1-001/          ; File: LIB$SIGSTOP.MAR  EDIT: FM1001
0000 3
0000 4
0000 5 *****
0000 6
0000 7      *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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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      FACILITY: Common Run-time Library.
0000 30
0000 31      AUTHOR:
0000 32      FAROKH MORSHED 22-APR-83 VMS V3B
0000 33
0000 34      MODIFIED BY:
0000 35
0000 36      --
0000 37
0000 38
0000 39      PSECT DEFINITION
0000 40
0000 41      .PSECT _LIB$CODE PIC, SHR, LONG, NOWRT
0000 42
0000 43
0000 44      MACRO LIBRARY CALLS
0000 45
0000 46      $CHFDEF                      ; Condition Handling arglst offsets
0000 47      $STSDEF                      ; Status code fields
0000 48
0000 49
0000 50      EXTERNAL REFERENCES
0000 51
0000 52      .DSABL      GBL
0000 53      .EXTERNAL  LIB$_INVARG      ; We return this error condition
0000 54                                      ; when SIGARGS condition code is
0000 55                                      ; SS$ UNWIND.
0000 56      .EXTERNAL  SS$_UNWIND      ; Unwind condition code
0000 57      .EXTERNAL  SS$_NORMAL      ; Successful completion status
```



```
0000 59      .SBTTL  Change a signal to a stop
0000 60
0000 61      :++
0000 62      : FUNCTIONAL DESCRIPTION:
0000 63      : This routine sets the stop bit associated with the exception whose
0000 64      : mechanism argument is passed.  The mechanism argument address is used
0000 65      : in a "dead reckon" fashion to find the flag longword.  The signal
0000 66      : argument address is used to set the severity of the condition to
0000 67      : severe.  This routine is used to convert a particular signal to
0000 68      : appear as if it was signalled by a LIB$STOP.  If the condition value
0000 69      : in SIGARGS is SS$ UNWIND, then this routine returns an error condition.
0000 70      : The SS$ UNWIND condition code is compared with the SIGARGS condition
0000 71      : code in a fashion that is only "correct" when a non-facility specific
0000 72      : condition code (which SS$ UNWIND indeed is one) is being compared
0000 73      : against any other condition code (this is to avoid the overhead of
0000 74      : calling LIB$MATCH_COND).
0000 75
0000 76      : CALLING SEQUENCE:
0000 77      : LIB$SIG_TO_STOP (SIGARGS.mr.r, MCHARGS.rr.r)
0000 78
0000 79      : FORMAL PARAMETERS:
0000 80      : SIGARGS      The signal's signal argument
0000 81      : MCHARGS      The signal's mechanism argument
0000 82
0000 83      : IMPLICIT INPUTS:
0000 84      : NONE
0000 85
0000 86      : IMPLICIT OUTPUTS:
0000 87      : NONE
0000 88
0000 89      : COMPLETION CODES:
0000 90      : SS$ NORMAL      ; Success
0000 91      : LIB$ INVARG     ; The condition code is SS$ UNWIND
0000 92
0000 93      : SIDE EFFECTS:
0000 94
0000 95      :--
0000 96
00000014 0000 97      MCHARGS TO_FLAGS_OFFSET = 20      ; Dead reckon offset to flag
00000001 0000 98      V_STOP_BIT = 1      ; Position of stop bit
00000002 0000 99      M_STOP_BIT = 1&V_STOP_BIT      ; Mask for stop bit
00000000 0000 100     V_SIGNAL_BIT = 0      ; Pos of signal bit
00000001 0000 101     M_SIGNAL_BIT = 1&V_SIGNAL_BIT      ; Mask for signal bit
0000 102
0000 103     UNWIND_MSG:
00000000 0000 104     .LONG SS$ UNWINDa-STSS$ SEVERITY; The message portion of SS$ UNWIND
0000 105
0000 106     .ENTRY LIB$SIG_TO_STOP, ^M<>
0000 107
50 04 AC D0 0006 108     MOVL     CHF$L_SIGARGLST(AP), R0      ; R0 <- SIGARGS
000A 109
000A 110     CMPZV   #STSS$V MSG NO, #STSS$ MSG NO, -
EF AF 04 A0 000D 111     CHF$L_SIG_NAME(R0), UNWIND_MSG      ; SS$ UNWIND?
1B 13 0011 112     BEQL     10$      ; Yes.
0013 113
00 04 F0 0013 114     INSV     #STSS$K SEVERE, #STSS$V SEVERITY, -
04 A0 03 0016 115     #STSS$ SEVERITY, CHF$L_SIG_NAME(R0); Set severity to severe
```


LIB\$SIGSTOP
1-001

Convert a signal to a stop
Change a signal to a stop

G 16

16-SEP-1984 00:21:37 VAX/VMS Macro V04-00
6-SEP-1984 11:10:52 [LIBRTL.SRC]LIBSIGSTO.MAR;1

Page 3
(2)

50	08	AC	D0	0019	116				
14	A0	02	88	0019	117	MOVL	CHFSL MCHARGLST(AP), R0	:	R0 <- MCHARGS
				001D	118	BISB2	#M_STOP_BIT, MCHARG\$ TO_FLAGS_OFFSET(R0)	:	SET(R0)
				0021	119			:	Set the stop bit
14	A0	01	8A	0021	120	BICB2	#M_SIGNAL_BIT, MCHARG\$ TO_FLAGS_OFFSET(R0)	:	Clear signal bit
				0025	121			:	Success
50	00000000	'8F	D0	0025	122	MOVL	#SS\$_NORMAL, R0	:	and return
		07	11	002C	123	BRB	20\$	:	
				002E	124			:	
50	00000000	'8F	D0	002E	125	MOVL	#LIB\$_INVARG, R0	:	Condition code is SS\$_UNWIND
				0035	126			:	
			04	0035	127	RET		:	
				0036	128			:	
				0036	129	.END		:	

LIBSSIGSTOP
Symbol table

Convert a signal to a stop

H 16

16-SEP-1984 00:21:37
6-SEP-1984 11:10:52

VAX/VMS Macro V04-00
[LIBRTL.SRC]LIBSIGSTO.MAR;1

Page 4
(2)

CHFSL_MCHARGLST	=	00000008		
CHFSL_SIGARGLST	=	00000004		
CHFSL_SIG_NAME	=	00000004		
LIBSIG TO STOP	=	00000004	RG	01
LIBS INVARG	*****		X	01
MCHARGS TO FLAGS_OFFSET	=	00000014		
M_SIGNAL_BIT	=	00000001		
M_STOP_BIT	=	00000002		
SSS_NORMAL	*****		X	01
SSS_UNWIND	*****		X	01
STSSK_SEVERE	=	00000004		
STSSS_MSG_NO	=	00000000		
STSSS_SEVERITY	=	00000003		
STSSV_MSG_NO	=	00000003		
STSSV_SEVERITY	=	00000000		
UNWIND_MSG	=	00000000	R	01
V_SIGNAL_BIT	=	00000000		
V_STOP_BIT	=	00000001		

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes															
ABS	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE					
LIBSCODE	00000036 (54.)	01 (1.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG					
SABSS	00000000 (0.)	02 (2.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE					

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	29	00:00:00.03	00:00:01.46
Command processing	112	00:00:00.34	00:00:04.08
Pass 1	122	00:00:00.77	00:00:06.69
Symbol table sort	0	00:00:00.02	00:00:00.02
Pass 2	39	00:00:00.22	00:00:01.47
Symbol table output	3	00:00:00.01	00:00:00.01
Psect synopsis output	3	00:00:00.02	00:00:00.02
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	310	00:00:01.41	00:00:13.75

The working set limit was 900 pages.

4250 bytes (9 pages) of virtual memory were used to buffer the intermediate code.

There were 10 pages of symbol table space allocated to hold 55 non-local and 2 local symbols.

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

9 pages of virtual memory were used to define 8 macros.

! Macro library statistics !

Macro library name

Macros defined

_ \$255\$DUA28:[SYSLIB]STARLET.MLB;2

5

108 GETS were required to define 5 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=(GLOBAL,TRACEBACK)/LIS=LIS\$:LIBSIGSTO/OBJ=OBJ\$:LIBSIGSTO MSRC\$:LIBSIGSTO/UPDATE=(ENH\$:LIBSIGSTO)

0209

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