


```
LL      IIIIII  BBBB BBBB  RRRRRRRR  AAAAAA  RRRRRRRR  IIIIII  AAAAAA  NN  NN
LL      IIIIII  BBBB BBBB  RRRRRRRR  AAAAAA  RRRRRRRR  IIIIII  AAAAAA  NN  NN
LL      II      BB      BB  RR      RR  AA      AA  RR      RR  II      II  AA      AA  NN  NN
LL      II      BB      BB  RR      RR  AA      AA  RR      RR  II      II  AA      AA  NN  NN
LL      II      BB      BB  RR      RR  AA      AA  RR      RR  II      II  AA      AA  NNNN  NN
LL      II      BBBB BBBB  RRRRRRRR  AA      AA  RRRRRRRR  II      II  AA      AA  NNNN  NN
LL      II      BBBB BBBB  RRRRRRRR  AA      AA  RRRRRRRR  II      II  AA      AA  NN  NN
LL      II      BB      BB  RR      RR  AAAAAAAAAA  RR      RR  II      II  AAAAAAAAAA  NN  NNNN
LL      II      BB      BB  RR      RR  AAAAAAAAAA  RR      RR  II      II  AAAAAAAAAA  NN  NNNN
LL      II      BB      BB  RR      RR  AA      AA  RR      RR  II      II  AA      AA  NN  NN
LL      II      BB      BB  RR      RR  AA      AA  RR      RR  II      II  AA      AA  NN  NN
LLLLLLLLLL  IIIIII  BBBB BBBB  RR      RR  AA      AA  RR      RR  IIIIII  AA      AA  NN  NN
LLLLLLLLLL  IIIIII  BBBB BBBB  RR      RR  AA      AA  RR      RR  IIIIII  AA      AA  NN  NN
                                           ....
                                           ....
                                           ....
                                           ....

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
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```



```

1      0001 0 MODULE LIB_MAIN ( ! Librarian command processor main routine
2      0002 0      LANGUAGE (BLISS32),
3      0003 0      IDENT = 'V04-000',
4      0004 0      MAIN = LIBRARIAN_START
5      0005 0      ) =
6      0006 1 BEGIN
7      0007 1
8      0008 1
9      0009 1 *****
10     0010 1 *
11     0011 1 *   COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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27     0027 1 *   SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
28     0028 1 *
29     0029 1 *
30     0030 1 *****
31     0031 1
32     0032 1 ++
33     0033 1
34     0034 1 FACILITY: Library command processor
35     0035 1
36     0036 1 ABSTRACT:
37     0037 1
38     0038 1 The VAX/VMS librarian is invoked by DCL to process the LIBRARY
39     0039 1 command. It utilizes the librarian procedure set to perform
40     0040 1 the actual modifications to the library.
41     0041 1
42     0042 1 ENVIRONMENT:
43     0043 1
44     0044 1 VAX native, user mode.
45     0045 1
46     0046 1 --
47     0047 1
48     0048 1
49     0049 1 AUTHOR: Benn Schreiber,      CREATION DATE: 11-June-1979
50     0050 1
51     0051 1 MODIFIED BY:
52     0052 1
53     0053 1 V03-001 CWH0001      CW Hobbs      19-Aug-1982
54     0054 1 Insert a gross kludge to allow RMSDEF.MDL to be converted to
55     0055 1 RMSDEF.MSG. MSG .LITERAL directives don't make very good
56     0056 1 BLISS field extraction macros.
57     0057 1

```

LIB MAIN
V04=000

H 16
16-Sep-1984 02:00:57 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:38:06 [LIBRAR.SRC]LIBRARIAN.B32;1

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(1)

..	58	0058	1	!
..	59	0059	1	!
..	60	0060	1	!
..	61	0061	1	!--
..	62	0062	1	!
..	63	0063	1	!

V02-003 BLS0029 Benn Schreiber 23-Dec-1980
Convert to message compiler. Add library of shareable image
symbol tables.

LIB MAIN
V04=000

I 16
16-Sep-1984 02:00:57 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:38:06 [LIBRAR.SRC]LIBRARIAN.B32;1

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(2)

```
: 65      0064 1 LIBRARY
: 66      0065 1 'SYSS$LIBRARY:STARLET.L32';      !System data structure definitions
: 67      0066 1 REQUIRE
: 68      0067 1 'PREFIX';                        !Macro defs, etc.
: 69      0251 1 REQUIRE
: 70      0252 1 'LIBDEF';                        !Librarian command interface definitions
: 71      0540 1
: 72      0541 1 EXTERNAL ROUTINE
: 73      0542 1     lib_get_command,             !Get a command line
: 74      0543 1     lib_process_cmd;             !Process command line
: 75      0544 1
: 76      0545 1 FORWARD ROUTINE
: 77      0546 1     lib_handler;                 !Handler to pick up highest severity
: 78      0547 1
: 79      0548 1 OWN
: 80      0549 1     exitvalue : BLOCK [1] INITIAL !Value to exit with
: 81      0550 1     (ss$_normal);
```

```

83 0551 1 GLOBAL ROUTINE LIBRARIAN_START (arglist) : NOVALUE =
84 0552 2 BEGIN
85 0553 2
86 0554 2 !++
87 0555 2
88 0556 2 FUNCTIONAL DESCRIPTION:
89 0557 2
90 0558 2     This is the entry point to the librarian command processor.  It calls
91 0559 2     lib_get_command to get the command line and then processes it.
92 0560 2
93 0561 2
94 0562 2 CALLING SEQUENCE:
95 0563 2
96 0564 2     librarian_start(arglist)
97 0565 2
98 0566 2 INPUT PARAMETERS:
99 0567 2
100 0568 2     arglist           is the argument list passed from CLI
101 0569 2
102 0570 2 IMPLICIT INPUTS:
103 0571 2     NONE
104 0572 2
105 0573 2 OUTPUT PARAMETERS:
106 0574 2     NONE
107 0575 2
108 0576 2 IMPLICIT OUTPUTS:
109 0577 2     NONE
110 0578 2
111 0579 2 ROUTINE VALUE:
112 0580 2     NONE
113 0581 2
114 0582 2 SIDE EFFECTS:
115 0583 2     NONE
116 0584 2
117 0585 2 --
118 0586 2 LOCAL
119 0587 2     status;
120 0588 2
121 0589 2 BUILTIN
122 0590 2     FP;
123 0591 2
124 0592 2 .FP = lib_handler;           !Set handler
125 0593 2 IF lib_get_command (arglist-4) !Parse the command
126 0594 2     THEN lib_process_cmd ();  !And process it
127 0595 2
128 0596 2 RETURN (status = .exitvalue OR sts$m_inhib_msg); !Exit with no message
129 0597 1 END;                    !Of librarian_start
```

```

.TITLE LIB MAIN
.IDENT \V04-000\

.PSECT $OWNS$,NOEXE,2

00000001 00000 EXITVALUE:
.LONG 1
```


K 16
16-Sep-1984 02:00:57 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:38:06 [LIBRAR.SRC]LIBRARIAN.B32;1

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					.EXTRN	LIB_GET_COMMAND		
					.EXTRN	LIB_PROCESS_CMD		
					.PSECT	\$CODE\$,NOWRT,2		
			0000	00000	.ENTRY	LIBRARIAN START, Save nothing	:	0551
	6D	0000V	CF	9E 00002	MOVAB	LIB_HANDLER, (FP)	:	0592
			5C	DD 00007	PUSHL	AP	:	0593
	0000G		01	FB 00009	CALLS	#1, LIB_GET_COMMAND	:	
	05		50	E9 0000E	BLBC	R0, 1\$	:	
	0000G		00	FB 00011	CALLS	#0, LIB_PROCESS_CMD	:	0594
50	0000'	CF	10000000	8F C9 00016	BISL3	#268435456, EXITVALUE, STATUS	:	0596
				04 00020	RET		:	0597

```
; Routine Size: 33 bytes,    Routine Base: $CODE$ + 0000
```



```
: 188      0655 6      ELSE ptr = .ptr + 1;      !Otherwise just skip one
: 189      0656 6      END
: 190      0657 5      ELSE ptr = .ptr + .sigargvec[.ptr+1] + 2;      !Not RMS, skip msg + count + lw of count
: 191      0658 4      END;
: 192      0659 3      END;
: 193      0660 3      sigargs[chf$l_sig_args] = .sigargs[chf$l_sig_args] + 2;      !Of hack to set inhib_msg
: 194      0661 3      IF .signame [sts$severity] EQL sts$sk_error
: 195      0662 4      THEN BEGIN
: 196      0663 4          SETUNWIND(%REF(1));      !Unwind to caller
: 197      0664 4          RETURN ss$_continue
: 198      0665 4      END
: 199      0666 3      ELSE RETURN ss$_resignal
: 200      0667 3      END
: 201      0668 3
: 202      0669 2      ELSE RETURN ss$_resignal;      !Resignal to get the error printed
: 203      0670 1      END;      !Of lib_handler
```

.EXTRN SY\$_PUTMSG

003C 00000 LIB_HANDLER:

		55	0000'	CF	9E	00002	.WORD	Save R2,R3,R4,R5	: 0598
		5E		04	C2	00007	MOVAB	EXITVALUE, R5	
		53	04	AC	D0	0000A	SUBL2	#4, SP	: 0610
		52	04	A3	9E	0000E	MOVL	SIGARGS, R3	
		12		62	E8	00012	MOVAB	4(R3), R2	: 0612
50	65	03		00	EF	00015	BLBS	(R2), 2\$	: 0614
50	62	03		00	ED	0001A	EXTZV	#0, #3, EXITVALUE, R0	
		03		03	1E	0001F	CMPZV	#0, #3, (R2), R0	
		03		65	E9	00021	BGEQU	1\$	
		65		62	D0	00024	BLBC	EXITVALUE, 2\$	: 0615
				54	D4	00027	MOVL	(R2), EXITVALUE	: 0616
02	62	03		00	ED	00029	CLRL	R4	: 0618
				04	12	0002E	CMPZV	#0, #3, (R2), #2	
				54	D6	00030	BNEQ	3\$	
				07	11	00032	INCL	R4	
04	62	03		00	ED	00034	BRB	4\$	
		63		6F	12	00039	CMPZV	#0, #3, (R2), #4	: 0619
				02	C2	0003B	BNEQ	9\$	
				7E	7C	0003E	SUBL2	#2, (R3)	: 0621
				7E	D4	00040	CLRL	-(SP)	: 0622
				53	DD	00042	CLRL	-(SP)	
	00000000G	00		04	FB	00044	PUSHL	R3	
		50	08	AC	D0	0004B	CALLS	#4, SY\$_PUTMSG	
OC	A0	62	10000000	8F	C9	0004F	MOVL	MECHARGS, R0	: 0623
		63		50	D4	00058	BISL3	#268435456, (R2), 12(R0)	
				50	D1	0005A	CLRL	PTR	: 0634
				31	1E	0005D	CPL	PTR, (R3)	: 0635
		03	A240	10	C8	0005F	BGEQU	8\$	
				02	A240	DF	BISL2	#16, 3(R2)[PTR]	: 0640
01	9E	0C		00	ED	00068	PUSHL	2(R2)[PTR]	: 0641
				15	14	0006D	CMPZV	#0, #12, a(SP)+, #1	
				6240	DF	0006F	BGTR	7\$	
	0A	9E		0E	E1	00072	PUSHL	(R2)[PTR]	: 0650
		07	A240	10	C8	00076	BBC	#14, a(SP)+, 6\$	
							BISL2	#16, 7(R2)[PTR]	: 0652

LIB MAIN
V04=000

B 1
16-Sep-1984 02:00:57
14-Sep-1984 12:38:06

VAX-11 Bliss-32 V4.0-742
[LIBRAR.SRC]LIBRARIAN.B32;1

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50		02	C0	0007B	ADDL2	#2, PTR	: 0653
		DA	11	0007E	BRB	5\$	: 0650
		50	D6	00080	INCL	PTR	: 0655
		D6	11	00082	BRB	5\$	: 0641
51	04	A240	D0	00084	MOVL	4(R2)[PTR], R1	: 0657
50	02	A140	9E	00089	MOVAB	2(R1)[PTR], PTR	: 0635
		CA	11	0008E	BRB	5\$	: 0660
63		02	C0	00090	ADDL2	#2, (R3)	: 0661
14		54	E9	00093	BLBC	R4, 9\$	: 0663
		7E	D4	00096	CLRL	-(SP)	: 0666
04	AE	01	D0	00098	MOVL	#1, 4(SP)	: 0669
	04	AE	9F	0009C	PUSHAB	4(SP)	: 0670
00000000G	00	02	FB	0009F	CALLS	#2, SYSSUNWIND	: 0666
50		01	D0	000A6	MOVL	#1, R0	: 0669
		04	000A9	RET			: 0670
50	0918	8F	3C	000AA	MOVZWL	#2328, R0	: 0669
		04	000AF	RET			: 0670

; Routine Size: 176 bytes, Routine Base: \$CODE\$ + 0021

: 204	0671	1		
: 205	0672	1	END	: Of module
: 206	0673	0	ELUDOM	

.EXTRN SYSSUNWIND

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	4	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	209	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_S2\$5\$DUA28:[SYSLIB]STARLET.L32;1	9776	36	0	581	00:01.0

COMMAND QUALIFIERS

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:LIBRARIAN/OBJ=OBJ\$:LIBRARIAN MSRC\$:LIBRARIAN/UPDATE=(ENH\$:LIBRARIAN)

LIB MAIN
V04=000

C 1
16-Sep-1984 02:00:57

VAX-11 Bliss-32 V4.0-742

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: Size: 209 code + 4 data bytes
: Run Time: 00:11.5
: Elapsed Time: 00:23.8
: Lines/CPU Min: 3523
: Lexemes/CPU-Min: 43659
: Memory Used: 117 pages
: Compilation Complete

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