



```

LL      NN      NN  KK      KK  NN      NN  XX      XX  TTTTTTTTTT  000000  88888888  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TTTTTTTTTT  000000  88888888  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NNNN     NN  KK      KK  NNNN     NN  XX      XX  TT          00      00  88      88  JJ
LL      NNNN     NN  KK      KK  NNNN     NN  XX      XX  TT          00      00  88      88  JJ
LL      NN  NN  NN  KKKKKK  NN  NN  NN  XX      XX  TT          00      00  88888888  JJ
LL      NN  NN  NN  KKKKKK  NN  NN  NN  XX      XX  TT          00      00  88888888  JJ
LL      NN      NNNN  KK      KK  NN      NNNN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NNNN  KK      KK  NN      NNNN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LL      NN      NN  KK      KK  NN      NN  XX      XX  TT          00      00  88      88  JJ
LLLLLLLLLLLL  NN      NN  KK      KK  NN      NN  XX      XX  TT          000000  88888888  JJJJJJ  ....
LLLLLLLLLLLL  NN      NN  KK      KK  NN      NN  XX      XX  TT          000000  88888888  JJJJJJ  ....

```

```

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
LLLLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLLLL  IIIIII  SSSSSSSS

```

```
1 0001 0 MODULE LNK_NXTOBJ
2 0002 0 (IDENT = 'V04-000'
3 0003 0 ADDRESSING_MODE(EXTERNAL=GENERAL,
4 0004 0 NONEXTERNAL=LONG_RELATIVE)
5 0005 0 ) =
6 0006 0
7 0007 1 BEGIN
8 0008 1
9 0009 1
10 0010 1 *****
11 0011 1 *
12 0012 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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28 0028 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
29 0029 1 *
30 0030 1 *
31 0031 1 *****
32 0032 1
33 0033 1
34 0034 1
35 0035 1
36 0036 1
37 0037 1 ++
38 0038 1
39 0039 1 MODULE: LNK_NXTOBJ
40 0040 1
41 0041 1 FACILITY: LINKER
42 0042 1
43 0043 1 ABSTRACT: FIND NEXT OBJECT MODULE (AND OPEN FILE) FOR PASS 2.
44 0044 1
45 0045 1 HISTORY:
46 0046 1
47 0047 1 VERSION: X01.00
48 0048 1
49 0049 1 AUTHOR: T.J. PORTER 11-APR-77
50 0050 1
51 0051 1 MODIFIED BY:
52 0052 1
53 0053 1 V03-003 BLS0074 Benn Schreiber 29-Aug-1981
54 0054 1 Remove argument for call to lnk$nxtoobjmod
55 0055 1
56 0056 1 V03-002 BLS0017 Benn Schreiber 1-Sep-1980
57 0057 1 Set lnk$gl_curomd when going to new object module.
```

LNK\_NXTOBJ  
V04=000

J 8  
16-Sep-1984 00:10:25  
14-Sep-1984 12:40:31

VAX-11 Bliss-32 V4.0-742  
[LINKER.SRC]LNKNXTOBJ.B32;1

Page 2  
(1)

LN  
VO

: 58  
: 59  
: 60  
: 61

0058 1 :  
0059 1 :  
0060 1 :  
0061 1 :--

V03-001 BLS0007 Benn Schreiber,  
Convert to MDL data structures.

3-Jun-1980

.....

```

63 0062 1 |
64 0063 1 | ++
65 0064 1 |
66 0065 1 | FUNCTIONAL DESCRIPTION:
67 0066 1 |
68 0067 1 |
69 0068 1 | THIS MODULE CONTAINS THE ROUTINE TO ACQUIRE THE NEXT
70 0069 1 | OBJECT MODULE DESCRIPTOR AND ENSURE THAT THE FILE IS OPEN
71 0070 1 | (AT CORRECT PLACE) READY FOR PASS 2 TO READ RECORDS
72 0071 1 | SEQUENTIALLY FROM IT.
73 0072 1 | THIS IS DONE BY FOLLOWING DOWN THE SINGLY LINKED
74 0073 1 | LIST OF OBJECT MODULE DESCRIPTORS TO THE END, THEN PROCEEDING
75 0074 1 | TO THE NEXT FILE IN SEQUENCE, OPENING IT AND FOLLOWING
76 0075 1 | DOWN THE LIST.
77 0076 1 | CALLING SEQUENCE:-
78 0077 1 | LNK$NXTOBJMOD ( )
79 0078 1 |
80 0079 1 | THE ADDRESS OF THE DESCRIPTOR OF THE NEXT OBJECT MODULE
81 0080 1 | IS STORED IN LNK$GL_CUROMD
82 0081 1 | ROUTINE HAS VALUE FALSE WHEN NO MORE
83 0082 1 | MODULES ARE AVAILABLE IN THE LAST FILE.
84 0083 1 |
85 0084 1 | --
86 0085 1 |
87 0086 1 | LIBRARY
88 0087 1 | 'STARLETL32'; ! SYSTEM USER DATA STRUCTURES
89 0088 1 | REQUIRE
90 0089 1 | 'PREFIX'; ! MACROS ETC.
91 0204 1 | LIBRARY
92 0205 1 | 'DATBAS'; ! INTERNAL DATA BASE DEFINITION
93 0206 1 |
94 0207 1 | EXTERNAL LITERAL
95 0208 1 | LINS_EMPTYFILE; ! FILE CONTAINS NO MODULES
96 0209 1 |
97 0210 1 | EXTERNAL ROUTINE
98 0211 1 | LNK$NXTFIL, ! OPEN NEXT FILE
99 0212 1 | LNK$POINTOBJ; ! POINT TO A MODULE IN LIBRARY
100 0213 1 |
101 0214 1 | EXTERNAL
102 0215 1 | LNK$GL_CUROMD : REF BLOCK[,BYTE], ! POINTER TO CURRENT OBJECT MODULE DESCRIPTOR
103 0216 1 | LNK$GL_CURFIL : REF BLOCK[,BYTE]; ! POINTER TO CURRENT FILE.
104 0217 1 |
105 0218 1 | GLOBAL ROUTINE LNK$NXTOBJMOD =
106 0219 2 | BEGIN
107 0220 2 |
108 0221 2 | IF THE END OF A LIST OF OBJECT MODULE DESCRIPTORS (OR
109 0222 2 | FIRST CALL) OPEN NEXT FILE. ON SUBSEQUENT CALLS FOLLOW DOWN
110 0223 2 | CURRENT LIST. FINALLY RETURN VALUE FALSE
111 0224 2 |
112 0225 2 | LOCAL
113 0226 2 | LSTOBMODESC : REF BLOCK[,BYTE]; ! POINTER TO PREVIOUS OBJ MOD. DESCRIPTOR
114 0227 2 |
115 0228 2 | IF (LSTOBMODESC = .LNK$GL_CUROMD) NEQ 0 ! IF THERE WAS ONE
116 0229 2 | THEN LNK$GL_CUROMD = .LNK$GL_CUROMD[OMD$NXTOMD]; ! BEFORE, GET THE ONE
117 0230 2 | WHILE (.LNK$GL_CUROMD EQL 0) DO ! IT POINTS TO IF THERE
118 0231 3 | BEGIN ! IS NO LONGER A DESCRIPTOR
119 0232 3 | LSTOBMODESC = 0; ! RESET THE LAST OBJECT DESCRIPTOR

```

```

120 0233 3      IF NOT LNK$NXTFIL()          ! OPEN NEXT FILE
121 0234 4      THEN BEGIN                ! AND ALL DONE IF NO MORE
122 0235 4          LNK$GL_CURFIL = 0;
123 0236 4          RETURN FALSE
124 0237 3      END;
125 0238 3      IF (LNK$GL_CUROMD = .LNK$GL_CURFIL[FDB$$_OMDLST]) EQL 0 ! OTHERWISE GET THE FIRST MODULE
126 0239 3      THEN                      ! BUT IF THERE IS NONE
127 0240 3          SIGNAL(LIN$$_EMPTYFILE,1,LNK$GL_CURFIL[FDB$$_FILENAME]); ! REPORT THE ERROR
128 0241 2      END;
129 0242 2      IF .LNK$GL_CURFIL[FDB$$_LIBR]          ! IF A LIBRARY FILE
130 0243 2      OR .LNK$GL_CUROMD[OMD$$_SHRIMG]      ! AND/OR A SHAREABLE IMAGE
131 0244 4      OR ((.LSTOBMODE$$_NEQ 0)           ! OR THIS IS NOT THE FIRST IN A CONCATENATED
132 0245 3      AND .LSTOBMODE$$_NOBIN])           ! OBJ BUT IS PRECEDED BY A MODULE WITH NO BI
133 0246 2      THEN LNK$POINTOBJ(LNK$GL_CUROMD[OMD$$_MODVBN]); ! POINT TO THE MODULE
134 0247 2
135 0248 2      RETURN TRUE                    ! AND SUCCESS
136 0249 1      END;

```

```

.TITLE LNK_NXTOBJ
.IDENT \V04-000\

.EXTRN LIN$$_EMPTYFILE, LNK$NXTFIL
.EXTRN LNK$POINTOBJ, LNK$GL_CUROMD
.EXTRN LNK$GL_CURFIL

.PSECT $CODE$,NOWRT,2

.ENTRY LNK$NXTOBJMOD, Save R2,R3,R4 ; 0218
MOVAB LNK$GL_CURFIL, R4
MOVAB LNK$GL_CUROMD, R3 ; 0228
MOVL LNK$GL_CUROMD, R0
R0, LSTOBMODE$$_
BEQL 1$
MOVL (R0), LNK$GL_CUROMD ; 0229
TSTL LNK$GL_CUROMD ; 0230
BNEQ 3$
CLRL LSTOBMODE$$_ ; 0232
CALLS #0, LNK$NXTFIL ; 0233
BLBS R0, 2$
CLRL LNK$GL_CURFIL ; 0235
BRB 6$ ; 0236
MOVL LNK$GL_CURFIL, R0 ; 0238
MOVL 4(R0), LNK$GL_CUROMD
BNEQ 1$
PUSHAB 20(R0) ; 0240
PUSHL #1
PUSHL #LIN$$_EMPTYFILE
CALLS #3, LIB$$_SIGNAL
BRB 1$ ; 0230
MOVL LNK$GL_CURFIL, R0 ; 0242
BBS #1, 10(R0), 4$
MOVL LNK$GL_CUROMD, R0 ; 0243
BBS #2, 20(R0), 4$
TSTL LSTOBMODE$$_ ; 0244
BEQL 5$
BBC #1, 20(LSTOBMODE$$_), 5$ ; 0245

```

```

001C 00000
54 00000000G 00 9E 00002
53 00000000G 00 9E 00009
50 63 D0 00010
52 50 D0 00013
63 03 13 00016
60 D0 00018
63 D5 0001B 1$:
20 12 0001D
52 D4 0001F
00000000G 00 00 FB 00021
04 50 EB 00028
64 D4 0002B
45 11 0002D
50 64 D0 0002F 2$:
63 04 A0 D0 00032
E3 12 00036
14 A0 9F 00038
01 DD 0003B
00000000G 00 8F DD 0003D
03 FB 00043
CF 11 0004A
50 64 D0 0004C 3$:
11 0A A0 01 E0 0004F
50 63 D0 00054
09 14 A0 02 E0 00057
52 D5 0005C
10 13 0005E
08 14 A2 01 E1 00060

```

LNK\_NXTOBJ  
V04=000

M 8  
16-Sep-1984 00:10:25  
14-Sep-1984 12:40:31

VAX-11 Bliss-32 V4.0-742  
[LINKER.SRC]LNKNXTOBJ.B32;1

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(2)

7E	00000000G	63 00 50	0C	C1	00065	4\$:	ADDL3	#12,	LNK\$GL	CUROMD,	-(SP)
			01	FB	00069		CALLS	#1,	LNK\$POINTOBJ		
			01	D0	00070	5\$:	MOVL	#1,	RO		
				04	00073		RET				
			50	D4	00074	6\$:	CLRL	RO			
				04	00076		RET				

: 0246  
: 0248  
: 0249  
:

: Routine Size: 119 bytes, Routine Base: \$CODE\$ + 0000

: 137 0250 0 END ELUDOM

.EXTRN LIB\$SIGNAL

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	119	NOVEC,NOWRT, RD, EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----		Pages Mapped	Processing Time
	Total	Loaded Percent		
\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	6 0	581	00:01.0
\$255\$DUA28:[LINKER.OBJ]DATBAS.L32;1	538	7 1	28	00:00.5

COMMAND QUALIFIERS

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

: Size: 119 code + 0 data bytes  
: Run Time: 00:04.8  
: Elapsed Time: 00:18.7  
: Lines/CPU Min: 3112  
: Lexemes/CPU-Min: 9970  
: Memory Used: 57 pages  
: Compilation Complete

Terminal window 1	Terminal window 2	Terminal window 3	Terminal window 4	Terminal window 5	Terminal window 6	Terminal window 7	Terminal window 8	Terminal window 9	Terminal window 10	Terminal window 11	Terminal window 12
Terminal window 13	Terminal window 14	Terminal window 15	Terminal window 16	Terminal window 17	Terminal window 18	Terminal window 19	Terminal window 20	Terminal window 21	Terminal window 22	Terminal window 23	Terminal window 24
Terminal window 25	Terminal window 26	Terminal window 27	Terminal window 28	Terminal window 29	Terminal window 30	Terminal window 31	Terminal window 32	Terminal window 33	Terminal window 34	Terminal window 35	Terminal window 36
Terminal window 37	Terminal window 38	Terminal window 39	Terminal window 40	Terminal window 41	Terminal window 42	Terminal window 43	Terminal window 44	Terminal window 45	Terminal window 46	Terminal window 47	Terminal window 48
Terminal window 49	Terminal window 50	Terminal window 51	Terminal window 52	Terminal window 53	Terminal window 54	Terminal window 55	Terminal window 56	Terminal window 57	Terminal window 58	Terminal window 59	Terminal window 60
Terminal window 61	Terminal window 62	Terminal window 63	Terminal window 64	Terminal window 65	Terminal window 66	Terminal window 67	Terminal window 68	Terminal window 69	Terminal window 70	Terminal window 71	Terminal window 72
Terminal window 73	Terminal window 74	Terminal window 75	Terminal window 76	Terminal window 77	Terminal window 78	Terminal window 79	Terminal window 80	Terminal window 81	Terminal window 82	Terminal window 83	Terminal window 84
Terminal window 85	Terminal window 86	Terminal window 87	Terminal window 88	Terminal window 89	Terminal window 90	Terminal window 91	Terminal window 92	Terminal window 93	Terminal window 94	Terminal window 95	Terminal window 96
Terminal window 97	Terminal window 98	Terminal window 99	Terminal window 100	Terminal window 101	Terminal window 102	Terminal window 103	Terminal window 104	Terminal window 105	Terminal window 106	Terminal window 107	Terminal window 108
Terminal window 109	Terminal window 110	Terminal window 111	Terminal window 112	Terminal window 113	Terminal window 114	Terminal window 115	Terminal window 116	Terminal window 117	Terminal window 118	Terminal window 119	Terminal window 120
Terminal window 121	Terminal window 122	Terminal window 123	Terminal window 124	Terminal window 125	Terminal window 126	Terminal window 127	Terminal window 128	Terminal window 129	Terminal window 130	Terminal window 131	Terminal window 132
Terminal window 133	Terminal window 134	Terminal window 135	Terminal window 136	Terminal window 137	Terminal window 138	Terminal window 139	Terminal window 140	Terminal window 141	Terminal window 142	Terminal window 143	Terminal window 144