



LL	NN	NN	KK	KK	IIIIII	NN	NN	IIIIII	
LL	NN	NN	KK	KK	IIIIII	NN	NN	IIIIII	
LL	NN	NN	KK	KK	II	NN	NN	II	
LL	NN	NN	KK	KK	II	NN	NN	II	
LL	NNNN	NN	KK	KK	II	NNNN	NN	II	
LL	NNNN	NN	KK	KK	II	NNNN	NN	II	
LL	NN	NN	KKKKKK		II	NN	NN	II	
LL	NN	NN	KKKKKK		II	NN	NN	II	
LL	NN	NNNN	KK	KK	II	NN	NNNN	II	
LL	NN	NNNN	KK	KK	II	NN	NNNN	II	
LL	NN	NN	KK	KK	II	NN	NN	II	
LL	NN	NN	KK	KK	II	NN	NN	II	
LLLLLLLLLLLL	NN	NN	KK	KK	IIIIII	NN	NN	IIIIII	.....
LLLLLLLLLLLL	NN	NN	KK	KK	IIIIII	NN	NN	IIIIII	.....

LL	IIIIII	SSSSSSSS
LL	IIIIII	SSSSSSSS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	
LL	II	SSSSSS
LL	II	SSSSSS
LL	II	
LL	II	SS
LL	II	SS
LL	II	SS
LL	II	SS
LLLLLLLLLLLL	IIIIII	SSSSSSSS
LLLLLLLLLLLL	IIIIII	SSSSSSSS

LN  
VC  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

```
1 0001 0 MODULE LNK_INIT (IDENT='V04-000',
2 0002 0 ADDRESSING_MODE(EXTERNAL=GENERAL,
3 0003 0 NONEXTERNAL=LONG_RELATIVE)
4 0004 0 ) =
5 0005 0
6 0006 1 BEGIN
7 0007 1
8 0008 1
9 0009 1 *****
10 0010 1 *
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28 0028 1 *
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 MODULE: LNK_INIT
39 0039 1
40 0040 1 FACILITY: LINKER
41 0041 1
42 0042 1 ABSTRACT: INITIALIZATION ROUTINE
43 0043 1
44 0044 1 HISTORY:
45 0045 1
46 0046 1     VERSION: X01.00
47 0047 1
48 0048 1     AUTHOR: T.J. PORTER 03-JAN-77
49 0049 1
50 0050 1 MODIFIED BY:
51 0051 1
52 0052 1     V03-001 BLS0007     Benn Schreiber,     3-Jun-1980
53 0053 1     Convert to MDL datqa structures.
54 0054 1 --
```

```

56 0055 1 |
57 0056 1 |++
58 0057 1 |
59 0058 1 | FUNCTIONAL DESCRIPTION:
60 0059 1 |
61 0060 1 | ROUTINE WHICH INITIALIZES THE LINKER. IT TAKES NO EXPLICIT
62 0061 1 | INPUT. THE FOLLOWING INITIALIZATION IS DONE, IN ORDER:
63 0062 1 |     1. HASH TABLE ALLOCATED FOR THE SYMBOL TABLE
64 0063 1 |     2. DEFAULT VALUES ESTABLISHED FOR STACK, BASE ADDRESS
65 0064 1 |        AND LINK CONTROL MASK.
66 0065 1 |
67 0066 1 |--
68 0067 1 |
69 0068 1 | LIBRARY
70 0069 1 |     'STARLETL32';
71 0070 1 | REQUIRE
72 0071 1 |     'PREFIX';
73 0186 1 | LIBRARY
74 0187 1 |     'DATBAS';
75 0188 1 | !
76 0189 1 | EXTERNAL ROUTINE
77 0190 1 |     LNK$ALLOBLK : NOVALUE; ! ALLOCATE DYNAMIC MEMORY
78 0191 1 | !
79 0192 1 | EXTERNAL LITERAL
80 0193 1 |     DEF$C_STACK : SHORT,      ! DEFAULT STACK SIZE
81 0194 1 |     DEF$C_LNKCTL;             ! DEFAULT CONTROL MASK
82 0195 1 | !
83 0196 1 | EXTERNAL
84 0197 1 |     LNK$GL_FVMLST : REF BLOCK[BYTE],           ! HEAD OF FREE VIRTUAL MEMORY LIST
85 0198 1 |     LNK$GL_CTLMSK : BLOCK[BYTE],             ! LINK CONTROL MASK
86 0199 1 |     LNK$GW_STACK : WORD,                     ! STACK SIZE
87 0200 1 |     SYM$GL_HASHTBL;
88 0201 1 | !
89 0202 1 | GLOBAL ROUTINE LNK$INIT : NOVALUE =
90 0203 2 | BEGIN
91 0204 2 | !
92 0205 2 | LOCAL SYMENTALLO;                          ! ALLOCATED SIZE FOR SYMBOL TABLE ENTRIES
93 0206 2 | !
94 0207 2 | LNK$ALLOBLK(SYM$C_TBLSIZ*4,SYM$GL_HASHTBL);  ! ALLOCATE A HASH TABLE
95 0208 2 | CH$FILL(0,SYM$C_TBLSIZ*4,SYM$GL_HASHTBL);  ! CLEAR THE TABLE
96 0209 2 | LNK$GW_STACK = DEF$C_STACK;                 ! SET DEFAULT STACK SIZE
97 0210 2 | LNK$GL_CTLMSK = DEF$C_LNKCTL;               ! DEFAULT CONTROL FLAGS
98 0211 2 | LNK$ALLOBLK(FVM$C_SIZE, LNK$GL_FVMLST);     ! ALLOCATE FIRST FREE MEMORY DESCRIPTOR
99 0212 2 | LNK$GL_FVMLST[FVM$N_NXTFVM] = 0;            ! POINTS NOWHERE
100 0213 2 | LNK$GL_FVMLST[FVM$N_ADDRESS] = 0;           ! ASSUME BASE OF PROGRAM REGION
101 0214 2 | LNK$GL_FVMLST[FVM$N_BYTES] = CONTROL_REGION; ! AND ALL OF REGION
102 0215 2 | RETURN;
103 0216 1 | END;

```

```

.TITLE LNK_INIT
.IDENT \V04-000\

.EXTRN LNK$ALLOBLK, DEF$C_STACK
.EXTRN DEF$C_LNKCTL, LNK$GL_FVMLST
.EXTRN LNK$GL_CTLMSK, LNK$GW_STACK
.EXTRN SYM$GL_HASHTBL

```

.PSECT \$CODE\$,NOWRT,2

```
.ENTRY LNK$INIT, Save R2,R3,R4,R5,R6,R7,R8
MOVAB SYM$GL_HASHTBL, R8
MOVAB LNK$GL_FVMLST, R7
MOVAB LNK$ALCOBLK, R6
PUSHL R8
MOVZWL #1108, -(SP)
CALLS #2, LNK$ALLOBLK
MOVL SYM$GL_HASHTBL, R0
MOVCS #0, (SP), #0, #1108, (R0)

MOVZBW S^DEF$C_STACK, LNK$GW_STACK
MOVL #DEF$C_CNKCTL, LNK$GL_CTLMSK
PUSHL R7
PUSHL #12
CALLS #2, LNK$ALLOBLK
MOVL LNK$GL_FVMLST, R0
CLRQ (R0)
MOVL #1073741824, 8(R0)
RET
```

```
01FC 00000
58 00000000G 00 9E 00002
57 00000000G 00 9E 00009
56 00000000G 00 9E 00010
      58 DD 00017
7E      0454 8F 3C 00019
66      02 FB 0001E
50      68 D0 00021
0454 8F      00 2C 00024
      6E      00 2C 00024
      60      00 2B 0002B
      00000000G 00 00G 9B 0002C
      00000000G 00 00000000G 8F D0 00033
      57 DD 0003E
      0C DD 00040
      66      02 FB 00042
      50      67 D0 00045
      60 7C 00048
      08 A0 4000000 8F D0 0004A
      04 00052
```

```
: 0202
:
: 0207
:
: 0208
:
: 0209
: 0210
: 0211
:
: 0212
:
: 0214
: 0216
```

; Routine Size: 83 bytes, Routine Base: \$CODE\$ + 0000

; 104 0217 0 END ELUDOM

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	83	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	6	0	581	00:01.0
-\$255\$DUA28:[LINKER.OBJ]DATBAS.L32;1	538	5	0	28	00:00.5

COMMAND QUALIFIERS

B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P  
Q  
R  
S  
T  
U  
V  
W  
X  
Y  
Z

LNK\_INIT  
V04=000

B 16  
16-Sep-1984 00:05:15  
14-Sep-1984 12:40:30

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

Page 4  
(2)

; BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:LNKINI/OBJ=OBJ\$:LNKINI MSRCS:LNKINI/UPDATE=(ENHS:LNKINI)

; Size: 83 code + 0 data bytes  
; Run Time: 00:03.8  
; Elapsed Time: 00:14.1  
; Lines/CPU Min: 3435  
; Lexemes/CPU-Min: 9562  
; Memory Used: 44 pages  
; Compilation Complete

0216 AH-BT13A-SE  
VAX/VMS V4.0

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