


```

BBBBBBBB      AAAAAA      SSSSSSSS      RRRRRRRR      UU      UU      NN      NN      IIIIII      NN      NN      IIIIII
BBBBBBBB      AAAAAA      SSSSSSSS      RRRRRRRR      UU      UU      NN      NN      IIIIII      NN      NN      IIIIII
BB      BB      AA      AA      SS      RR      RR      UU      UU      NN      NN      II      NN      NN      II
BB      BB      AA      AA      SS      RR      RR      UU      UU      NN      NN      II      NN      NN      II
BB      BB      AA      AA      SS      RR      RR      UU      UU      NNNN      NN      II      NNNN      NN      II
BBBBBBBB      AA      AA      SSSSSS      RRRRRRRR      UU      UU      NN      NN      II      NN      NN      II
BBBBBBBB      AA      AA      SSSSSS      RRRRRRRR      UU      UU      NN      NN      II      NN      NN      II
BB      BB      AAAAAAAAAA      SS      RR      RR      UU      UU      NN      NNNN      II      NN      NNNN      II
BB      BB      AAAAAAAAAA      SS      RR      RR      UU      UU      NN      NNNN      II      NN      NNNN      II
BB      BB      AA      AA      SS      RR      RR      UU      UU      NN      NN      II      NN      NN      II
BB      BB      AA      AA      SS      RR      RR      UU      UU      NN      NN      II      NN      NN      II
BBBBBBBB      AA      AA      SSSSSSSS      RR      RR      UUUUUUUUU      NN      NN      IIIIII      NN      NN      IIIIII
BBBBBBBB      AA      AA      SSSSSSSS      RR      RR      UUUUUUUUU      NN      NN      IIIIII      NN      NN      IIIIII

```

```

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 BASSRUN_INIT (           ! Initialize for RUN
2 0002 0     IDENT = '1-010'           ! File: BASRUNINI.B32 Edit: JBS1010
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 *  COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
9 0009 1 *  DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS.
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24 0024 1 *  SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 **
31 0031 1 FACILITY: BASIC-PLUS-2 Miscellaneous
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1     This module is used by the BASIC compiler's RUN command to
36 0036 1     initialize the user environment.
37 0037 1
38 0038 1 ENVIRONMENT: VAX-11 User Mode
39 0039 1
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 04-JUN-1979
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original.
45 0045 1 1-002 - Unstack all recursive I/O before closing files.
46 0046 1         JBS 07-JUN-1979
47 0047 1 1-003 - Add call to BASS$CTRLC_INIT. JBS 22-JUN-1979
48 0048 1 1-004 - Change BASS$DET_INIT to BASS$DET_STORE. JBS 16-JUL-1979
49 0049 1 1-005 - Change BASS$DET_STORE to BASS$STORE_DET. JBS 25-JUL-1979
50 0050 1 1-006 - Change OTS$CLOSE_ALL to BASS$CLOSE_ALL. JBS 21-AUG-1979
51 0051 1 1-007 - Call BASS$CB_GET so this module need not be in the sharable
52 0052 1     library. JBS 22-AUG-1979
53 0053 1 1-008 - Call BASS$STOP_INIT. JBS 14-SEP-1979
54 0054 1 1-009 - Do an RMS $WAIT on each RAB popped, in case we are at AST
55 0055 1     level. JBS 27-SEP-1979
56 0056 1 1-010 - Call BASS$STORE_DET correctly. JBS 12-DEC-1979
57 0057 1 --
    
```

BASRUN_INIT
1-010

M 6
~~16-Sep-1984~~ 01:09:53
14-Sep-1984 11:56:38

VAX-11 Bliss-32 V4.0-742
[BASRTL.SRC]BASRUNINI.B32;1

Page 2
(1)

: 58
: 59

0058 1
0059 1 !<BLF/PAGE>

```

61 0060 1 |
62 0061 1 | SWITCHES:
63 0062 1 |
64 0063 1 |
65 0064 1 | SWITCHES ADDRESSING_MODE (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
66 0065 1 |
67 0066 1 |
68 0067 1 | LINKAGES:
69 0068 1 |
70 0069 1 |
71 0070 1 | REQUIRE 'RTLIN:OTSLNK'; ! Define all OTS linkages
72 0499 1 |
73 0500 1 |
74 0501 1 | TABLE OF CONTENTS:
75 0502 1 |
76 0503 1 |
77 0504 1 | FORWARD ROUTINE
78 0505 1 | BASSRUN_INIT : NOVALUE; ! Initialize environment
79 0506 1 |
80 0507 1 |
81 0508 1 | INCLUDE FILES:
82 0509 1 |
83 0510 1 |
84 0511 1 | REQUIRE 'RTLML:OTSLUB'; ! Logical unit block definitions
85 0651 1 |
86 0652 1 | REQUIRE 'RTLIN:RTLPSECT'; ! Macros for defining psects
87 0747 1 |
88 0748 1 | LIBRARY 'RTLSTARLE'; ! System symbols
89 0749 1 |
90 0750 1 |
91 0751 1 | MACROS:
92 0752 1 |
93 0753 1 | NONE
94 0754 1 |
95 0755 1 | EQUATED SYMBOLS:
96 0756 1 |
97 0757 1 | NONE
98 0758 1 |
99 0759 1 | PSECTS:
100 0760 1 |
101 0761 1 | DECLARE_PSECTS (BAS); ! Declare psects for BASS facility
102 0762 1 |
103 0763 1 | OWN STORAGE:
104 0764 1 |
105 0765 1 | NONE
106 0766 1 |
107 0767 1 | EXTERNAL REFERENCES:
108 0768 1 |
109 0769 1 |
110 0770 1 | EXTERNAL ROUTINE
111 0771 1 | BASS$STOP : NOVALUE, ! Signal fatal BASIC error
112 0772 1 | BASS$CB_POP : JSB_CB_POP NOVALUE, ! Done with register CCB
113 0773 1 | BASS$CB_GET : JSB_CB_GET NOVALUE, ! Fetch current CCB
114 0774 1 |
115 0775 1 | Note: some of the following initialization entry points are marked weak
116 0776 1 | so they will not be loaded if they are not needed.
117 0777 1 |

```

```
: 118      0778 1      BAS$CTRLC_INIT : NOVALUE,          ! Set up control C for RUN
: 119      0779 1      BAS$STORE_DET : NOVALUE WEAK,      ! Initialize DET
: 120      0780 1      BAS$NUM_INIT : NOVALUE WEAK,      ! Initialize NUM
: 121      0781 1      BAS$NUM2_INIT : NOVALUE WEAK,      ! Initialize NUM2
: 122      0782 1      BAS$RAND_INIT : NOVALUE WEAK,      ! Initialize random number
: 123      0783 1      BAS$RECOU_INIT : NOVALUE WEAK,      ! Initialize RECOUNT
: 124      0784 1      BAS$STATU_INIT : NOVALUE WEAK,      ! Initialize STATUS
: 125      0785 1      BAS$ERR_INIT : NOVALUE WEAK,        ! Initialize error flag
: 126      0786 1      BAS$FIELD_INIT : NOVALUE WEAK,      ! Initialize FIELD variables
: 127      0787 1      BAS$STOP_INIT : NOVALUE WEAK,       ! Initialize STOP statement
: 128      0788 1      BAS$CLOSE_ALL : NOVALUE;           ! Close all files
: 129      0789 1
: 130      0790 1
: 131      0791 1      !+ The following are the error codes used in this module.
: 132      0792 1      !-
: 133      0793 1
: 134      0794 1      EXTERNAL LITERAL
: 135      0795 1      BAS$k_PROLOSSOR : UNSIGNED (8);      ! Program lost, sorry
: 136      0796 1
```

```

138 0797 1 GLOBAL ROUTINE BASSRUN_INIT : NOVALUE =           ! Initialize for RUN command
139 0798 1
140 0799 1 !++
141 0800 1 FUNCTIONAL DESCRIPTION:
142 0801 1
143 0802 1     Initialize the environment for the RUN command. All of the OWN
144 0803 1     storage must be set to its initial state, in case this is not
145 0804 1     the first RUN command.
146 0805 1
147 0806 1 FORMAL PARAMETERS:
148 0807 1
149 0808 1     NONE
150 0809 1
151 0810 1 IMPLICIT INPUTS:
152 0811 1
153 0812 1     NONE
154 0813 1
155 0814 1 IMPLICIT OUTPUTS:
156 0815 1
157 0816 1     NONE
158 0817 1
159 0818 1 ROUTINE VALUE:
160 0819 1 COMPLETION CODES:
161 0820 1
162 0821 1     NONE
163 0822 1
164 0823 1 SIDE EFFECTS:
165 0824 1
166 0825 1     A lot of OWN storage is initialized, by calling subroutines.
167 0826 1     If any of the initialization routines are not present, an error
168 0827 1     is signaled. I/O system problems can also be signaled.
169 0828 1
170 0829 1 --
171 0830 1
172 0831 2 BEGIN
173 0832 2
174 0833 2 GLOBAL REGISTER
175 0834 2 CCB = K_CCB_REG : REF BLOCK [, BYTE];
176 0835 2
177 0836 2 !+
178 0837 2 Undo all recursive I/O. This will fail if there is any non-BASIC I/O
179 0838 2 in progress, but this routine is only supposed to be used in a BASIC-only
180 0839 2 environment.
181 0840 2 -
182 0841 2
183 0842 2 WHILE (BASS$CB_GET (); .CCB NEQA 0) DO
184 0843 2 BEGIN
185 0844 2 !+
186 0845 2 Issue a $WAIT to be sure that RMS is not using the RAB.
187 0846 2 -
188 0847 2 $WAIT (RAB = .CCB);
189 0848 2 BASS$CB_POP ();
190 0849 2 END;
191 0850 2
192 0851 2 !+
193 0852 2 Close all files. The compiler guarantees not to need
194 0853 2 any files open when calling this routine.

```

```

195 0854 :- BASS$CLOSE_ALL ();
196 0855
197 0856
198 0857 :- Now, call each initialization routine.
199 0858
200 0859
201 0860 IF (BASS$STORE_DET NEQA 0) THEN BASS$STORE_DET (UPLIT (0, 0)) ELSE BASS$STOP (BASSK_PROLOSSOR);
202 0861
203 0862 IF (BASS$NUM_INIT NEQA 0) THEN BASS$NUM_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
204 0863
205 0864 IF (BASS$NUM2_INIT NEQA 0) THEN BASS$NUM2_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
206 0865
207 0866 IF (BASS$RAND_INIT NEQA 0) THEN BASS$RAND_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
208 0867
209 0868 IF (BASS$RECOU_INIT NEQA 0) THEN BASS$RECOU_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
210 0869
211 0870 IF (BASS$STATU_INIT NEQA 0) THEN BASS$STATU_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
212 0871
213 0872 IF (BASS$ERR_INIT NEQA 0) THEN BASS$ERR_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
214 0873
215 0874 IF (BASS$FIELD_INIT NEQA 0) THEN BASS$FIELD_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
216 0875
217 0876 IF (BASS$STOP_INIT NEQA 0) THEN BASS$STOP_INIT () ELSE BASS$STOP (BASSK_PROLOSSOR);
218 0877
219 0878 :- Initialize control C handling for the RUN environment.
220 0879
221 0880 BASS$CTRLC_INIT ();
222 0881
223 0882 END;

```

! of routine BASSRUN_INIT

```

.TITLE BASSRUN_INIT
.IDENT \1-010\
.PSECT _BASS$CODE, NOWRT, SHR, PIC, 2
00000000 00000000 00000 P.AAA: .LONG 0, 0
.EXTRN BASS$STOP, BASS$CB_POP
.EXTRN BASS$CB_GET, BASS$CTRLC_INIT
.EXTRN BASS$CLOSE_ALL, BASSK_PROLOSSOR
.EXTRN SYSSWAIT
.WEAK BASS$STORE_DET, BASS$NUM_INIT
.WEAK BASS$NUM2_INIT, BASS$RAND_INIT
.WEAK BASS$RECOU_INIT
.WEAK BASS$STATU_INIT
.WEAK BASS$ERR_INIT, BASS$FIELD_INIT
.WEAK BASS$STOP_INIT
.OFFC 00000
.ENTRY BASSRUN_INIT, Save R2, R3, R4, R5, R6, R7, R8, R9, -, 0797
MOVAB BASS$ERR_INIT, R10
MOVAB BASS$STATU_INIT, R9
MOVAB BASS$RECOU_INIT, R8
MOVAB BASS$RAND_INIT, R7
MOVAB BASS$NUM2_INIT, R6
MOVAB BASS$NUM_INIT, R5

```

54	00000000G	00	9E	0002C	MOVAB	BAS\$\$STORE_DET, R4		
53	00G	8F	9A	00033	MOVZBL	#BAS\$\$K_PROCESSOR, R3		
52	00000000G	00	9E	00037	MOVAB	BAS\$\$STOP, R2		
	00000000G	00	16	0003E	JSB	BAS\$\$CB_GET	0842	
		5B	D5	00044	TSTL	CCB		
		11	13	00046	BEQL	2\$		
		5B	DD	00048	PUSHL	CCB	0847	
00000000G	00	01	FB	0004A	CALLS	#1, SYSS\$WAIT		
	00000000G	00	16	00051	JSB	BAS\$\$CB_POP	0848	
		E5	11	00057	BRB	1\$	0842	
00000000G	00	00	FB	00059	CALLS	#0, BAS\$\$CLOSE_ALL	0855	
		50	64	9E	00060	MOVAB	BAS\$\$STORE_DET, R0	0860
			08	13	00063	BEQL	3\$	
		90	AF	9F	00065	PUSHAB	P.AAA	
		64	01	FB	00068	CALLS	#1, BAS\$\$STORE_DET	
			06	11	0006B	BRB	4\$	
7E		53	9A	0006D	MOVZBL	R3, -(SP)		
62		01	FB	00070	CALLS	#1, BAS\$\$STOP		
50		65	9E	00073	MOVAB	BAS\$\$NUM_INIT, R0	0862	
			05	13	00076	BEQL	5\$	
65		00	FB	00078	CALLS	#0, BAS\$\$NUM_INIT		
			06	11	0007B	BRB	6\$	
7E		53	9A	0007D	MOVZBL	R3, -(SP)		
62		01	FB	00080	CALLS	#1, BAS\$\$STOP		
50		66	9E	00083	MOVAB	BAS\$\$NUM2_INIT, R0	0864	
			05	13	00086	BEQL	7\$	
66		00	FB	00088	CALLS	#0, BAS\$\$NUM2_INIT		
			06	11	0008B	BRB	8\$	
7E		53	9A	0008D	MOVZBL	R3, -(SP)		
62		01	FB	00090	CALLS	#1, BAS\$\$STOP		
50		67	9E	00093	MOVAB	BAS\$\$RAND_INIT, R0	0866	
			05	13	00096	BEQL	9\$	
67		00	FB	00098	CALLS	#0, BAS\$\$RAND_INIT		
			06	11	0009B	BRB	10\$	
7E		53	9A	0009D	MOVZBL	R3, -(SP)		
62		01	FB	000A0	CALLS	#1, BAS\$\$STOP		
50		68	9E	000A3	MOVAB	BAS\$\$RECOU_INIT, R0	0868	
			05	13	000A6	BEQL	11\$	
68		00	FB	000A8	CALLS	#0, BAS\$\$RECOU_INIT		
			06	11	000AB	BRB	12\$	
7E		53	9A	000AD	MOVZBL	R3, -(SP)		
62		01	FB	000B0	CALLS	#1, BAS\$\$STOP		
50		69	9E	000B3	MOVAB	BAS\$\$STATU_INIT, R0	0870	
			05	13	000B6	BEQL	13\$	
69		00	FB	000B8	CALLS	#0, BAS\$\$STATU_INIT		
			06	11	000BB	BRB	14\$	
7E		53	9A	000BD	MOVZBL	R3, -(SP)		
62		01	FB	000C0	CALLS	#1, BAS\$\$STOP		
50		6A	9E	000C3	MOVAB	BAS\$\$ERR_INIT, R0	0872	
			05	13	000C6	BEQL	15\$	
6A		00	FB	000C8	CALLS	#0, BAS\$\$ERR_INIT		
			06	11	000CB	BRB	16\$	
7E		53	9A	000CD	MOVZBL	R3, -(SP)		
62		01	FB	000D0	CALLS	#1, BAS\$\$STOP		
50	00000000G	00	9E	000D3	MOVAB	BAS\$\$FIELD_INIT, R0	0874	
			09	13	000DA	BEQL	17\$	
00000000G	00	00	FB	000DC	CALLS	#0, BAS\$\$FIELD_INIT		

```

      7E      06 11 000E3      BRB      18$
      62      53 9A 000E5 17$:  MOVZBL  R3, -(SP)
      50 0000000G 01 FB 000E8      CALLS  #1, BASS$STOP
      0000000G 00 9E 000EB 18$:  MOVAB   BASS$STOP_INIT, R0
      0000000G 00 13 000F2      BEQL   19$
      0000000G 00 06 11 000FB      CALLS  #0, BASS$STOP_INIT
      0000000G 00 7E      53 9A 000FD 19$:  MOVZBL  R3, -(SP)
      0000000G 00 62      01 FB 00100      CALLS  #1, BASS$STOP
      0000000G 00 00      00 FB 00103 20$:  CALLS  #0, BASS$CTRLC_INIT
      04 0010A      RET
  
```

0876
0881
0882

: Routine Size: 267 bytes, Routine Base: _BAS\$CODE + 0008

```

: 224      0883 1
: 225      0884 1 END
: 226      0885 1
: 227      0886 0 ELUDOM
  
```

! of module BASSRUN_INIT

PSECT SUMMARY

Name	Bytes	Attributes
_BAS\$CODE	275	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	3	0	581	00:01.1

COMMAND QUALIFIERS

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

```

: Size:      267 code + 8 data bytes
: Run Time:  00:08.3
: Elapsed Time: 00:18.1
: Lines/CPU Min: 6397
: Lexemes/CPU-Min: 32657
  
```

BASSRUN_INIT
1-010

B 7
16-Sep-1984 01:09:53

VAX-11 Bliss-32 V4.0-742

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: Memory Used: 115 pages
: Compilation Complete

