



```

PPPPPPPP      AAAAAA      SSSSSSSS      TTTTTTTTTT      RRRRRRRR      UU      UU      NN      NN      CCCCCCCC      AAAAAA
PPPPPPPP      AAAAAA      SSSSSSSS      TTTTTTTTTT      RRRRRRRR      UU      UU      NN      NN      CCCCCCCC      AAAAAA
PP      PP      AA      AA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AA      AA
PP      PP      AA      AA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AA      AA
PP      PP      AA      AA      SS      TT      RR      RR      UU      UU      NNNN      NN      CC      AA      AA
PP      PP      AA      AA      SS      TT      RR      RR      UU      UU      NNNN      NN      CC      AA      AA
PPPPPPPP      AA      AA      SSSSSS      TT      RRRRRRRR      UU      UU      NN      NN      CC      AA      AA
PPPPPPPP      AA      AA      SSSSSS      TT      RRRRRRRR      UU      UU      NN      NN      CC      AA      AA
PP      AAAAAAAAAA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AAAAAAAAAA
PP      AAAAAAAAAA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AAAAAAAAAA
PP      AA      AA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AA      AA
PP      AA      AA      SS      TT      RR      RR      UU      UU      NN      NN      CC      AA      AA
PP      AA      AA      SSSSSSSS      TT      RR      RR      UU      UU      NN      NN      CC      AA      AA
PP      AA      AA      SSSSSSSS      TT      RR      RR      UU      UU      NN      NN      CCCCCCCC      AA      AA

```

```

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 PAS$TRUNCATE ( %TITLE 'TRUNCATE procedure'
2 0002 0 IDENT = '1-003' ! File: PASTRUNCA.B32 Edit: SBL1003
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: Pascal Language Support
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 This module contains PAS$TRUNCATE, which implements the
36 0036 1 VAX-11 Pascal TRUNCATE procedure.
37 0037 1
38 0038 1 ENVIRONMENT: User mode - AST reentrant
39 0039 1
40 0040 1 AUTHOR: Steven B. Lionel, CREATION DATE: 29-January-1982
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. SBL 29-January-1982
45 0045 1 1-002 - Set FAB$V TEF after truncate. SBL 12-Jul-1982
46 0046 1 1-003 - Don't do $TRUNCATE if not a file oriented device. SBL 29-July-1982
47 0047 1 --
48 0048 1

```

```
.. 50 0049 1 %SBTTL 'Declarations'  
.. 51 0050 1  
.. 52 0051 1 : PROLOGUE DEFINITIONS:  
.. 53 0052 1 :  
.. 54 0053 1  
.. 55 0054 1 REQUIRE 'RTLIN:PASPROLOG';  
.. 56 0118 1  
.. 57 0119 1 :  
.. 58 0120 1 : TABLE OF CONTENTS:  
.. 59 0121 1 :  
.. 60 0122 1  
.. 61 0123 1 FORWARD ROUTINE  
.. 62 0124 1 PAS$TRUNCATE: NOVALUE;  
.. 63 0125 1  
.. 64 0126 1 :  
.. 65 0127 1 : MACROS:  
.. 66 0128 1  
.. 67 0129 1 : NONE  
.. 68 0130 1  
.. 69 0131 1 : EQUATED SYMBOLS:  
.. 70 0132 1  
.. 71 0133 1 : NONE  
.. 72 0134 1  
.. 73 0135 1 : FIELDS:  
.. 74 0136 1  
.. 75 0137 1 : NONE  
.. 76 0138 1  
.. 77 0139 1 : OWN STORAGE:  
.. 78 0140 1  
.. 79 0141 1 : NONE
```

: Externals, linkages, PSECTs, structures

: Do a TRUNCATE

: F  
:  
:

```

81 0142 1 %SBTTL 'PASSTRUNCATE - TRUNCATE procedure'
82 0143 1 GLOBAL ROUTINE PASSTRUNCATE (
83 0144 1   PFV: REF $PASSPFV_FILE_VARIABLE,           ! File variable
84 0145 1   ERROR                                     ! Unwind address if error
85 0146 1   ): NOVALUE =
86 0147 1
87 0148 1 ++
88 0149 1 FUNCTIONAL DESCRIPTION:
89 0150 1
90 0151 1   PASSTRUNCATE implements the VAX-11 Pascal TRUNCATE procedure. It
91 0152 1   deletes the current component and all following components from the
92 0153 1   file and enters Generation mode.
93 0154 1
94 0155 1 CALLING SEQUENCE:
95 0156 1
96 0157 1   CALL PASSTRUNCATE (PFV.mr.r [, ERROR.j.r])
97 0158 1
98 0159 1 FORMAL PARAMETERS:
99 0160 1
100 0161 1   PFV           - The Pascal File Variable (PFV) passed by reference.
101 0162 1   The structure of the PFV is defined in PASPFV.REQ.
102 0163 1
103 0164 1   ERROR          - Optional. If specified, the address to unwind to
104 0165 1   if an error occurs.
105 0166 1
106 0167 1 IMPLICIT INPUTS:
107 0168 1
108 0169 1   NONE
109 0170 1
110 0171 1 IMPLICIT OUTPUTS:
111 0172 1
112 0173 1   FAB$V_TEF = 1
113 0174 1
114 0175 1 ROUTINE VALUE:
115 0176 1
116 0177 1   NONE
117 0178 1
118 0179 1 SIDE EFFECTS:
119 0180 1
120 0181 1   Places file in Generation mode
121 0182 1
122 0183 1 SIGNALLED ERRORS:
123 0184 1
124 0185 1   FILNOTOPE - File not open
125 0186 1   FILNOTSEQ - File is not sequential organization
126 0187 1   FILNOTINS - File is not in Inspection mode
127 0188 1   GENNOTALL - Generation mode is not allowed for READONLY file
128 0189 1   TRUNOTALL - TRUNCATE is not allowed on a shared file
129 0190 1   ERRDURTRU - Error during TRUNCATE
130 0191 1
131 0192 1 --
132 0193 1
133 0194 2 BEGIN
134 0195 2
135 0196 2 LOCAL
136 0197 2   FCB: REF $PASSFCB_CONTROL_BLOCK,           ! File control block
137 0198 2   PFV_ADDR: VOLATILE,                       ! Enable argument

```

```

: 138 0199 2 UNWIND_ACT: VOLATILE, ! Enable argument
: 139 0200 2 ERROR_ADDR: VOLATILE; ! Enable argument
: 140 0201 2
: 141 0202 2
: 142 0203 2 BIND
: 143 0204 2 RAB = FCB: REF BLOCK [, BYTE], ! RMS RAB
: 144 0205 2 FAB = FCB: REF $PASS$FAB_FCB_STRUCT; ! RMS FAB
: 145 0206 2
: 146 0207 2 BUILTIN
: 147 0208 2 ACTUALCOUNT;
: 148 0209 2
: 149 0210 2 ENABLE
: 150 0211 2 PASS$IO_HANDLER (PFV_ADDR, UNWIND_ACT, ERROR_ADDR);
: 151 0212 2
: 152 0213 2 IF ACTUALCOUNT () GEQU 2
: 153 0214 2 THEN
: 154 0215 2 ERROR_ADDR = .ERROR; ! Set unwind address
: 155 0216 2
: 156 0217 2 !+
: 157 0218 2 ! Set PFV address enable argument.
: 158 0219 2 !-
: 159 0220 2 PFV_ADDR = PFV [PFV$R_PFV];
: 160 0221 2
: 161 0222 2 !+
: 162 0223 2 ! Validate and lock PFV
: 163 0224 2 !-
: 164 0225 2
: 165 0226 2 PASS$VALIDATE_PFV (PFV [PFV$R_PFV]; FCB);
: 166 0227 2
: 167 0228 2 !+
: 168 0229 2 ! Set unwind action to unlock file.
: 169 0230 2 !-
: 170 0231 2
: 171 0232 2 UNWIND_ACT = PASS$UNWIND_UNLOCK;
: 172 0233 2
: 173 0234 2 !+
: 174 0235 2 ! Resolve lazy lookahead, if any.
: 175 0236 2 !-
: 176 0237 2
: 177 0238 2 IF NOT .PFV [PFV$V_VALID]
: 178 0239 2 THEN
: 179 0240 2 PASS$LOOK_AHEAD (PFV [PFV$R_PFV], FCB [FCB$R_FCB]; FCB);
: 180 0241 2
: 181 0242 2 !+
: 182 0243 2 ! Verify that the file is open.
: 183 0244 2 !-
: 184 0245 2
: 185 0246 2 IF NOT .PFV [PFV$V_OPEN]
: 186 0247 2 THEN
: 187 0248 2 $PASS$IO_ERROR (PASS_FILNOTOPE,0);
: 188 0249 2
: 189 0250 2 !+
: 190 0251 2 ! Verify that the file is in Inspection mode.
: 191 0252 2 !-
: 192 0253 2
: 193 0254 2 IF NOT .FCB [FCB$V_INSPECTION]
: 194 0255 2 THEN

```

```
195 0256 2          $PASSIO_ERROR (PASS_FILNOTINS,0);
196 0257 2
197 0258 2
198 0259 2      !+
199 0260 2      ! Verify that Generation mode is allowed for this file.
200 0261 2      !-
201 0262 2      IF .FCB [FCB$V_NOWRITE]
202 0263 2      THEN
203 0264 2          $PASSIO_ERROR (PASS_GENNOTALL,0);
204 0265 2
205 0266 2      !+
206 0267 2      ! Verify that the file is sequential organization
207 0268 2      !-
208 0269 2
209 0270 2      IF .FAB [FAB$B_ORG] NEQ FAB$C_SEQ
210 0271 2      THEN
211 0272 2          $PASSIO_ERROR (PASS_FILNOTSEQ,0);
212 0273 2
213 0274 2      !+
214 0275 2      ! Verify that the file is opened for exclusive access
215 0276 2      !-
216 0277 2
217 0278 2      IF NOT .FAB [FAB$V_NIL]
218 0279 2      THEN
219 0280 2          $PASSIO_ERROR (PASS_TRUNCOTALL,0);
220 0281 2
221 0282 2
222 0283 2      !+
223 0284 2      ! If the file is not already at EOF and is file oriented, do the truncate.
224 0285 2      !+
225 0286 2
226 0287 2      IF (NOT .FCB [FCB$V_EOF]) AND .FCB [FCB$V_FOD]
227 0288 2      THEN
228 0289 2          IF NOT $PASSRMS_OP ($TRUNCATE (RAB=.RAB))
229 0290 2          THEN
230 0291 2              $PASSIO_ERROR (PASS_ERRDURTRU);      ! Error during TRUNCATE
231 0292 2
232 0293 2      !+
233 0294 2      ! Set FAB$V_TEF so that unused space is deallocated when the file
234 0295 2      ! is closed.
235 0296 2      !-
236 0297 2
237 0298 2      FAB [FAB$V_TEF] = 1;
238 0299 2
239 0300 2      !+
240 0301 2      ! Reset record buffer pointers
241 0302 2      !-
242 0303 2
243 0304 2      FCB [FCB$A_RECORD_BEG] = .RAB [RAB$L_UBF];
244 0305 2      FCB [FCB$A_RECORD_CUR] = .FCB [FCB$A_RECORD_BEG];
245 0306 2      FCB [FCB$L_RECORD_LEN] = .RAB [RAB$W_USZ];
246 0307 2      FCB [FCB$A_RECORD_END] = .FCB [FCB$A_RECORD_BEG] + .FCB [FCB$L_RECORD_LEN];
247 0308 2
248 0309 2      !+
249 0310 2      ! Set "truncate on put" bit so that first $PUT will truncate the file.
250 0311 2      ! This is required for magtapes since RMS won't $PUT to an empty
251 0312 2      ! magtape file without it.
```

```

: 252 0313 2 :-
: 253 0314 2
: 254 0315 2 RAB [RAB$V_TPT] = 1;
: 255 0316 2
: 256 0317 2
: 257 0318 2
: 258 0319 2
: 259 0320 2
: 260 0321 2
: 261 0322 2
: 262 0323 2
: 263 0324 2
: 264 0325 2
: 265 0326 2
: 266 0327 2
: 267 0328 2
: 268 0329 2
: 269 0330 2
: 270 0331 2
: 271 0332 2
: 272 0333 2
: 273 0334 2
: 274 0335 2
: 275 0336 2
: 276 0337 1

```

!-  
RAB [RAB\$V\_TPT] = 1;  
↑  
Set Generation mode  
Indicate at EOF  
Cancel previous LOCATE  
Indicate successful operation  
Undefine file buffer  
Unlock the file  
-  
FCB [FCB\$V\_INSPECTION] = 0;  
FCB [FCB\$V\_GENERATION] = 1;  
FCB [FCB\$V\_EOF] = 1;  
FCB [FCB\$V\_LOCATE] = 0;  
FCB [FCB\$V\_STATUS] = 0;  
PFV [PFV\$V\_DFB] = 0;  
PFV [PFV\$V\_EOF\_DEFINED] = 1;  
PFV [PFV\$V\_LOCK] = 0;  
RETURN;  
END;

! End of routine PAS\$TRUNCATE

.TITLE PAS\$TRUNCATE TRUNCATE procedure  
.IDENT \1-003\

.EXTRN PAS\$TRUNCATE, PAS\$\$IO\_HANDLER  
.EXTRN PAS\$\$VALIDATE, PFV  
.EXTRN PAS\$\$LOOK\_AHEAD  
.EXTRN PAS\$\$SIGNAL, PAS\$K\_FILNOTOPE  
.EXTRN PAS\$K\_FILNOTINS  
.EXTRN PAS\$K\_GENNOTALL  
.EXTRN PAS\$K\_FILNOTSEQ  
.EXTRN PAS\$K\_TRUNOTALL  
.EXTRN SYS\$TRUNCATE, PAS\$K\_ERRDURTRU

.PSECT \_PAS\$CODE, NOWRT, SHR, PIC, 2

```

                                00FC 0000
55 00000000G 00 9E 00002
5E          08 C2 00009
          04 7E D4 0000C
6D          04 AE 7C 0000E
02          00D6 CF DE 00011
          6C 91 00016
          04 1F 00019
6E          08 AC D0 0001B
56          04 AC D0 0001F 1$:
08 AE          56 D0 00023
          00000000G 00 16 00027
04 AE          01 D0 0002D
          04 A6 9E 00031
          02 A4 E8 00035

```

```

.ENTRY PAS$TRUNCATE, Save R2,R3,R4,R5,R6,R7 ; 0143
MOVAB PAS$$SIGNAL, R5
SUBL2 #8, SP
CLRL ERROR_ADDR ; 0194
CLRQ UNWIND_ACT
MOVAL 12$, (FP)
CMPB (AP), #2 ; 0212
BLSSU 1$
MOVL ERROR, ERROR_ADDR ; 0214
MOVL PFV, R6 ; 0220
MOVL R6, PFV_ADDR
JSB PAS$$VALIDATE, PFV ; 0226
MOVL #1, UNWIND_ACT ; 0232
MOVAB 4(R6), R4 ; 0238
BLBS 2(R4), 2$

```



08		64	00000000G	00	16	00039	JSB	PASS\$LOOK_AHEAD	0240
				1D	E0	0003F	BBS	#29, (R4), 3\$	0246
				7E	D4	00043	CLRL	-(SP)	0248
		7E	00G	8F	9A	00045	MOVZBL	#PASSK_FILNOTOPE, -(SP)	
				35	11	00049	BRB	7\$	
08		52	FC	A7	9E	0004B	MOVAB	-4(FCB), R2	0254
		62		0B	E0	0004F	BBS	#11, (R2), 4\$	
				7E	D4	00053	CLRL	-(SP)	0256
		7E	00G	8F	9A	00055	MOVZBL	#PASSK_FILNOTINS, -(SP)	
				25	11	00059	BRB	7\$	
08	F8	A7		04	E1	0005B	BBC	#4, -8(FCB), 5\$	0262
				7E	D4	00060	CLRL	-(SP)	0264
		7E	00G	8F	9A	00062	MOVZBL	#PASSK_GENNOTALL, -(SP)	
				18	11	00066	BRB	7\$	
			61	A7	95	00068	TSTB	97(FCB)	0270
				08	13	0006B	BEQL	6\$	
				7E	D4	0006D	CLRL	-(SP)	0272
		7E	00G	8F	9A	0006F	MOVZBL	#PASSK_FILNOTSEQ, -(SP)	
				0B	11	00073	BRB	7\$	
0A	5B	A7		05	E0	00075	BBS	#5, 91(FCB), 8\$	0278
				7E	D4	0007A	CLRL	-(SP)	0280
		7E	00G	8F	9A	0007C	MOVZBL	#PASSK_TRUNOTALL, -(SP)	
		65		02	FB	00080	CALLS	#2, PASS\$SIGNAL	
					04	00083	RET		
28		62		0D	E0	00084	BBS	#13, (R2), 11\$	0287
		24	03	A2	E9	00088	BLBC	3(R2), 11\$	
				57	DD	0008C	PUSHL	FCB	0289
	00000000G	00		01	FB	0008E	CALLS	#1, SYS\$TRUNCATE	
		18		50	E8	00095	BLBS	\$\$STATUS, 11\$	
	0001825A	8F		50	D1	00098	CMPL	\$\$STATUS, #98906	
				04	12	0009F	B Q	10\$	
		E7	03	A2	E8	000A1	BLBS	3(R2), 9\$	
		08		50	E8	000A5	BLBS	\$\$STATUS, 11\$	
		7E	00G	8F	9A	000A8	MOVZBL	#PASSK_ERRDURTRU, -(SP)	0291
		65		01	FB	000AC	CALLS	#1, PASS\$SIGNAL	
					04	000AF	RET		
		4B	A7	10	88	000B0	BISB2	#16, 75(FCB)	0298
		E8	A7	24	A7	000B4	MOVL	36(FCB), -24(FCB)	0304
		EC	A7	E8	A7	000B9	MOVL	-24(FCB), -20(FCB)	0305
		F4	A7	20	A7	3C 000BE	MOVZWL	32(FCB), -12(FCB)	0306
F0	A7	E8	A7	F4	A7	C1 000C3	ADDL3	-12(FCB), -24(FCB), -16(FCB)	0307
		04	A7	02	88	000CA	BISB2	#2, 4(FCB)	0315
		01	A2	08	8A	000CE	BICB2	#8, 1(R2)	0326
		01	A2	30	88	000D2	BISB2	#48, 1(R2)	0328
		02	A2	01	8A	000D6	BICB2	#1, 2(R2)	0329
			D4	A7	D4	000DA	CLRL	-44(FCB)	0330
		02	A4	02	8A	000DD	BICB2	#2, 2(R4)	0331
		02	A4	04	88	000E1	BISB2	#4, 2(R4)	0332
		03	A4	80	8F	8A 000E5	BICB2	#128, 3(R4)	0333
					04	000EA	RET		0337
					0000	000EB	.WORD	Save nothing	0194
		50	08	AC	DO	000ED	MOVL	8(AP), R0	
		50	04	A0	DO	000F1	MOVL	4(R0), R0	
			F4	A0	9F	000F5	PUSHAB	ERROR_ADDR	
			F8	A0	9F	000F8	PUSHAB	UNWIND_ACT	
			FC	A0	9F	000FB	PUSHAB	PFV_ADDR	
				03	DD	000FE	PUSHL	#3	

PAS\$TRUNCATE  
1-003

TRUNCATE procedure  
PAS\$TRUNCATE - TRUNCATE procedure

L 5  
16-Sep-1984 02:09:54  
14-Sep-1984 12:51:57

VAX-11 Bliss-32 V4.0-742  
[PASRTL.SRC]PASTRUNCA.B32;1

Page 8  
(3)

00000000G 7E 04 SE DD 00100  
AC 7D 00102  
03 FB 00106  
04 0010D

PUSHL SP  
MOVQ 4(AP), -(SP)  
CALLS #3, PAS\$\$IO\_HANDLER  
RET

:  
:  
:  
:

: Routine Size: 270 bytes, Routine Base: \_PAS\$CODEF + 0000

: 277 0338 1  
: 278 0339 1 !<BLF/PAGE>

00

PAS\$TRUNCATE  
1-003

TRUNCATE procedure  
PAS\$TRUNCATE - TRUNCATE procedure

M 5  
16-Sep-1984 02:09:54 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 12:51:57 [PASRTL.SRC]PASTRUNCA.B32;1

Page 9  
(4)

: 280 0340 1 END  
: 281 0341 1  
: 282 0342 0 ELUDOM

! End of module PAS\$TRUNCATE

PSECT SUMMARY

Name	Bytes	Attributes
_PASS\$CODE	270	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	12	0	581	00:01.0
\$_\$255\$DUA28:[PASRTL.OBJ]PASLIB.L32;1	427	97	22	33	00:00.4

COMMAND QUALIFIERS

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

: Size: 270 code + 0 data bytes  
: Run Time: 00:08.1  
: Elapsed Time: 00:23.5  
: Lines/CPU Min: 2527  
: Lexemes/CPU-Min: 17963  
: Memory Used: 122 pages  
: Compilation Complete

