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```

0001 0 XTITLE 'EDT$PRPARDRV - parse driver'
0002 0 MODULE EDT$PRPARDRV (                               ! Parse driver
0003 0                               IDENT = 'V04-000'       ! File: PRPARDRV.BLI Edit: JBS1004
0004 0                               ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0026 1 *
0027 1 *****
0028 1
0029 1
0030 1
0031 1 ++
0032 1 FACILITY:      EDT -- The DEC Standard Editor
0033 1
0034 1 ABSTRACT:
0035 1
0036 1     Parse driver.
0037 1
0038 1 ENVIRONMENT:  Runs at any access mode - AST reentrant
0039 1
0040 1 AUTHOR: Bob Kushlis, CREATION DATE: December 12, 1978
0041 1
0042 1 MODIFIED BY:
0043 1
0044 1 1-001 - Original.  DJS 25-Feb-1981.  This module was created by
0045 1     extracting routine EDT$SPA_DRIV from module PARSER.
0046 1 1-002 - Regularize headers.  JBS 12-Mar-1981
0047 1 1-003 - Use the ASSERT macro.  JBS 01-Jun-1981
0048 1 1-004 - Improve the appearance of the listing.  JBS 17-Jun-1983
0049 1 --
0050 1

```



```

: 91      1380  1 %SBTTL 'EDT$$PA_DRIV - parse driver'
: 92      1381  1
: 93      1382  1 GLOBAL ROUTINE EDT$$PA_DRIV (           ! Parse driver
: 94      1383  1     TAB_INDEX                               ! Start parse here
: 95      1384  1     ) =
: 96      1385  1
: 97      1386  1
: 98      1387  1 ++
: 99      1388  1     FUNCTIONAL DESCRIPTION:
100      1389  1         This is the parse table driver routine. TAB_INDEX indexes a byte in
101      1390  1         the parse table at which the parse starts.
102      1391  1
103      1392  1         This routine loops, fetching the next operator and executing until
104      1393  1         either a RETURN or ABORT command is executed, or a semantic routine
105      1394  1         returns failure.
106      1395  1
107      1396  1     FORMAL PARAMETERS:
108      1397  1
109      1398  1     TAB_INDEX             Index into the parse table at which to start the parse
110      1399  1
111      1400  1     IMPLICIT INPUTS:
112      1401  1
113      1402  1         NONE
114      1403  1
115      1404  1     IMPLICIT OUTPUTS:
116      1405  1
117      1406  1         EDT$$PA_TBLPTR
118      1407  1
119      1408  1     ROUTINE VALUE:
120      1409  1
121      1410  1         The value of the routine is 1 for success and zero for failure.
122      1411  1
123      1412  1     SIDE EFFECTS:
124      1413  1
125      1414  1         Calls semantic routines
126      1415  1
127      1416  1     --
128      1417  1
129      1418  1     BEGIN
130      1419  1
131      1420  1     EXTERNAL ROUTINE
132      1421  1         EDT$$PA_SCANTOK : NOVALUE,           ! Get the next token
133      1422  1         EDT$$PA_TSTTOK,           ! Try to match the current token
134      1423  1         EDT$$PA_SEMRUT;           ! Semantic routines referenced in the parser tables
135      1424  1
136      1425  1     EXTERNAL
137      1426  1         EDT$$PA_TBLPTR;           ! pointer into the parse table
138      1427  1
139      1428  1     LOCAL
140      1429  1         OP_CODE,           ! The parse table op-code
141      1430  1         OPERAND,           ! The parse table operand
142      1431  1         SEM_ROUT,         ! Number of semantic routine for select
143      1432  1         RETURN_ADDR;       ! The address to return to after a call
144      1433  1
145      1434  1     EDT$$PA_TBLPTR = PARSE_TABLE [.TAB_INDEX];
146      1435  1
147      1436  1     DO

```

```
148 1437 BEGIN
149 1438
150 1439 + Fetch the op_code and the operand from the table and bump
151 1440 - past them.
152 1441
153 1442 OP CODE = (.EDT$$PA_TBLPTR)<5, 3>;
154 1443 OPERAND = (.EDT$$PA_TBLPTR)<0, 5>;
155 1444 EDT$$PA_TBLPTR = .EDT$$PA_TBLPTR + 1;
156 1445
157 1446 IF (.OPERAND EQL 0)
158 1447 THEN
159 1448 +
160 1449 - Here if operand is 0. This means it is a long-form operand.
161 1450
162 1451 BEGIN
163 1452 OPERAND = (.EDT$$PA_TBLPTR)<0, 8>;
164 1453 EDT$$PA_TBLPTR = .EDT$$PA_TBLPTR + 1;
165 1454 END;
166 1455
167 1456 +
168 1457 - And now, let's case on the operand.
169 1458
170 1459
171 1460 CASE .OP_CODE FROM OPC_ABORT TO OPC_SELECT OF
172 1461 SET
173 1462
174 1463 [OPC_ABORT] : ! This one is easy enough
175 1464 BEGIN
176 1465 RETURN (0);
177 1466 END;
178 1467
179 1468 [OPC_ACTION] : ! Perform the specified action routine.
180 1469 BEGIN
181 1470
182 1471 IF ( NOT EDT$$PA_SEMRUT (.OPERAND, EDT$$PA_TBLPTR)) THEN RETURN (0);
183 1472
184 1473 END;
185 1474
186 1475 [OPC_CALL] : ! Call; save current pointer and call yourself.
187 1476 BEGIN
188 1477 RETURN_ADDR = .EDT$$PA_TBLPTR;
189 1478
190 1479 IF EDT$$PA_DRIV (.LAB_TAB [.OPERAND - 1]) !
191 1480 THEN
192 1481 EDT$$PA_TBLPTR = .RETURN_ADDR
193 1482 ELSE
194 1483 RETURN (0);
195 1484
196 1485 END;
197 1486
198 1487 [OPC_GOTO] : ! Just get the new table address and continue.
199 1488 BEGIN
200 1489 EDT$$PA_TBLPTR = PARSE_TABLE [.LAB_TAB [.OPERAND - 1]];
201 1490 END;
202 1491
203 1492 [OPC_OPTION] : ! Skip if the current token is not the optional one.
204 1493 BEGIN
```

```
205 1494 4
206 1495 4
207 1496 4
208 1497 5
209 1498 5
210 1499 5
211 1500 5
212 1501 4
213 1502 4
214 1503 4
215 1504 3
216 1505 3
217 1506 3
218 1507 4
219 1508 4
220 1509 4
221 1510 4
222 1511 3
223 1512 3
224 1513 3
225 1514 4
226 1515 4
227 1516 4
228 1517 4
229 1518 4
230 1519 4
231 1520 4
232 1521 4
233 1522 4
234 1523 4
235 1524 5
236 1525 5
237 1526 5
238 1527 5
239 1528 6
240 1529 6
241 1530 6
242 1531 6
243 1532 5
244 1533 5
245 1534 5
246 1535 4
247 1536 4
248 1537 4
249 1538 4
250 1539 4
251 1540 4
252 1541 3
253 1542 3
254 1543 3
255 1544 4
256 1545 4
257 1546 3
258 1547 3
259 1548 3
260 1549 3
261 1550 3

IF EDT$$PA_TSTTOK (.OPERAND)
THEN
  BEGIN
    EDT$$PA_SCANTOK ();
    EDT$$PA_TBLPTR = .EDT$$PA_TBLPTR + 1;
  END
ELSE
  EDT$$PA_TBLPTR = PARSE_TABLE [.LAB_TAB [.(.EDT$$PA_TBLPTR)<0, 8> - 1]];
END;

[OPC_REQUIRE] : ! Abort if the current token is not the required one.
  BEGIN
    IF EDT$$PA_TSTTOK (.OPERAND) THEN EDT$$PA_SCANTOK () ELSE RETURN (0);
  END;

[OPC_SELECT] : ! Loop through the possible tokens, looking for it.
  BEGIN
    LOCAL
      SELECTED;

    SEM_ROUT = .(.EDT$$PA_TBLPTR)<0, 8>;
    EDT$$PA_TBLPTR = .EDT$$PA_TBLPTR + 1;
    SELECTED = 0;

    INCR I FROM 1 TO .OPERAND DO
      BEGIN
        IF EDT$$PA_TSTTOK (.(.EDT$$PA_TBLPTR)<0, 8>)
        THEN
          BEGIN
            EDT$$PA_TBLPTR = PARSE_TABLE [.LAB_TAB [.(.EDT$$PA_TBLPTR + 1)<0, 8> - 1]];
            SELECTED = .I;
            EXITLOOP;
          END;

          EDT$$PA_TBLPTR = .EDT$$PA_TBLPTR + 2;
        END;
      END;

    IF ( NOT EDT$$PA_SEMRUT (.SEM_ROUT, .SELECTED)) THEN RETURN (0);
    IF (.SELECTED NEQ 0) THEN EDT$$PA_SCANTOK ();
  END;

[OPC_RETURN] : ! And another easy one.
  BEGIN
    RETURN (1);
  END;

[OUTRANGE] :
  ASSERT (0);
TES;
```


	00000000G	00	00	FB	0004C		CALLS	9\$-3\$ -		
			C8	11	00053		BRB	11\$-3\$ -		
			0204	8F	BB 00055	4\$:	PUSHR	12\$-3\$		
	00000000G	00	02	FB	00059		CALLS	#0, EDT\$\$INTER_ERR		1549
		BA	50	E8	00060		BLBS	1\$		1460
			00AE	31	00063	5\$:	BRW	#*M<R2,R9>		1471
		55	69	DO	00066	6\$:	MOVL	#2, EDT\$\$PA_SEMRUT		
		7E	026A	CA42	3C 00069		MOVZWL	RO, 1\$		
	8D	AF	01	FB	0006F		CALLS	EDT\$\$PA_TBLPTR, RETURN ADDR		1477
		ED	50	E9	00073		BLBC	LAB_TAB-2[OPERAND], -(SPT)		1479
		69	55	DO	00076		MOVL	#1, -EDT\$\$PA_DRIV		
			A2	11	00079		BRB	RO, 5\$		1481
		50	026A	CA42	9E 0007B	7\$:	MOVAB	RETURN_ADDR, EDT\$\$PA_TBLPTR		
		51	6A	9E	0007E		MOVZWL	1\$		1489
	69	50	51	C1	00084		ADDL3	PARSE TABLE, RO		
			93	11	00088	8\$:	BRB	LAB_TAB-2[OPERAND], R1		
			52	DD	0008A	9\$:	PUSHL	R1, RO, EDT\$\$PA_TBLPTR		
		6B	01	FB	0008C		CALLS	1\$		1460
		0B	50	E9	0008F		BLBC	OPERAND		1495
	00000000G	00	00	FB	00092		CALLS	#1, EDT\$\$PA_TSTTOK		
			69	D6	00099		INCL	RO, 10\$		
			70	11	0009B		BRB	#0, EDT\$\$PA_SCANTOK		1498
		50	69	DO	0009D	10\$:	MOVL	EDT\$\$PA_TBLPTR		1499
		50	60	9A	000A0		MOVZBL	EDT\$\$PA_TBLPTR, RO		1502
		51	6A	9E	000A3		MOVAB	(RO), RO		
		53	026A	CA40	3C 000A6		MOVZWL	PARSE TABLE, R1		
	69	51	53	C1	000AC		ADDL3	LAB_TAB-2[RO], R3		
			5B	11	000B0		BRB	R3, R1, EDT\$\$PA_TBLPTR		
			52	DD	000B2	11\$:	PUSHL	18\$		1460
		6B	01	FB	000B4		CALLS	OPERAND		1509
		5A	50	E9	000B7		BLBC	#1, EDT\$\$PA_TSTTOK		
			4A	11	000BA		BRB	RO, 20\$		
		50	69	DO	000BC	12\$:	MOVL	17\$		
		56	60	9A	000BF		MOVZBL	EDT\$\$PA_TBLPTR, RO		1519
			69	D6	000C2		INCL	(RO) SEM_ROUT		
			53	7C	000C4		CLRQ	EDT\$\$PA_TBLPTR		1520
			28	11	000C6		BRB	I		1523
		50	69	DO	000C8	13\$:	MOVL	15\$		
		7E	60	9A	000CB		MOVZBL	EDT\$\$PA_TBLPTR, RO		1526
		6B	01	FB	000CE		CALLS	(RO), -(SP)		
		19	50	E9	000D1		BLBC	#1, EDT\$\$PA_TSTTOK		
		50	69	DO	000D4		MOVL	RO, 14\$		
		50	01	A0	9A 000D7		MOVZBL	EDT\$\$PA_TBLPTR, RO		1529
		51	6A	9E	000DB		MOVAB	1(RO), RO		
		58	026A	CA40	3C 000DE		MOVZWL	PARSE TABLE, R1		
	69	51	58	C1	000E4		ADDL3	LAB_TAB-2[RO], R8		
		54	53	DO	000E8		MOVL	R8, R1, EDT\$\$PA_TBLPTR		
			07	11	000EB		BRB	I, SELECTED		1530
		69	02	CO	000ED	14\$:	ADDL2	16\$		1528
	04	53	52	F3	000FO	15\$:	AOBLEQ	#2, EDT\$\$PA_TBLPTR		1534
			54	DD	000F4	16\$:	PUSHL	OPERAND, I, 13\$		1523
			56	DD	000F6		PUSHL	SELECTED		1537
			02	FB	000F8		CALLS	SEM_ROUT		
	00000000G	00	50	E9	000FF		BLBC	#2, -EDT\$\$PA_SEMRUT		
		12						RO, 20\$		

EDT\$PRPARDRV
V04-000

EDT\$PRPARDRV - parse driver
EDT\$SPA_DRIV - parse driver

G 4
16-Sep-1984 01:21:43
14-Sep-1984 12:24:13

VAX-11 Bliss-32 V4.0-742
DISK\$VMSMASTER:[EDT.SRC]PRPARDRV.BLI;1 (4) Page 10

EDT\$
V04-

: 272 1560 1 END
: 273 1561 1
: 274 1562 0 ELUDOM

! of module EDT\$PRPARDRV

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	1031	NOVEC, NOWRT, RD, EXE, SHR, LCL, REL, CON, PIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	17	4	40	00:00.2
_\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

COMMAND QUALIFIERS

BLISS/CHECK=(FIELD, INITIAL, OPTIMIZE)/NOTRACEBACK/LIS=LIS\$:PRPARDRV/OBJ=OBJ\$:PRPARDRV MSRC\$:PRPARDRV.BLI/UPDATE=(ENH\$:PRPARDRV)

: Size: 279 code + 752 data bytes
: Run Time: 00:28.8
: Elapsed Time: 00:35.5
: Lines/CPU Min: 3254
: Lexemes/CPU-Min: 11385
: Memory Used: 181 pages
: Compilation Complete

