





```

1 0001 0 *TITLE 'EDT$PRPUSH - new parse node'
2 0002 0 MODULE EDT$PRPUSH ( ! New parse node
3 0003 0 IDENT = 'V04-000' ! File: PRPUSH.BLI Edit: JBS1004
4 0004 0 ) =
5 0005 1 BEGIN
6 0006 1
7 0007 1 *****
8 0008 1 *
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26 0026 1 *
27 0027 1 *
28 0028 1 *****
29 0029 1
30 0030 1
31 0031 1 ++
32 0032 1 FACILITY: EDT -- The DEC Standard Editor
33 0033 1
34 0034 1 ABSTRACT:
35 0035 1
36 0036 1 Create a new parse node.
37 0037 1
38 0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
39 0039 1
40 0040 1 AUTHOR: Bob Kushlis, CREATION DATE: December 12, 1978
41 0041 1
42 0042 1 MODIFIED BY:
43 0043 1
44 0044 1 1-001 - Original. DJS 25-Feb-1981. This module was created by
45 0045 1 extracting routine PUSH from module PARSER.
46 0046 1 1-002 - Regularize headers. JBS 12-Mar-1981
47 0047 1 1-003 - Use new message codes. JBS 04-Aug-1981
48 0048 1 1-004 - Improve the appearance of the listing. JBS 17-Jun-1983
49 0049 1 --
50 0050 1

```



```

87 0940 1 %SBTTL 'EDT$$PA_NEW_NOD - new parse node'
88 0941 1
89 0942 1 GLOBAL ROUTINE EDT$$PA_NEW_NOD (
90 0943 1     NT,                                ! New parse node
91 0944 1     TYP,                            ! Stored in [NODE_TYPE]
92 0945 1     ) =                             ! Stored in [COM_NUM]
93 0946 1
94 0947 1 --
95 0948 1 FUNCTIONAL DESCRIPTION:
96 0949 1
97 0950 1     Create a semantic node of the specified type and subtype. If the
98 0951 1     stack overflows, return a 0 otherwise, return the address of the new
99 0952 1     node.
100 0953 1
101 0954 1 FORMAL PARAMETERS:
102 0955 1
103 0956 1     NT                               Stored in [NODE_TYPE]
104 0957 1
105 0958 1     TYP                               Stored in [COM_NUM]
106 0959 1
107 0960 1 IMPLICIT INPUTS:
108 0961 1
109 0962 1     EDT$$Z_PA_STK
110 0963 1     EDT$$G_PA_SP
111 0964 1
112 0965 1 IMPLICIT OUTPUTS:
113 0966 1
114 0967 1     EDT$$G_PA_ERRNO
115 0968 1     EDT$$Z_PA_STK
116 0969 1     EDT$$G_PA_SP
117 0970 1
118 0971 1 ROUTINE VALUE:
119 0972 1
120 0973 1     0 = parse stack overflow
121 0974 1     non-zero = address of new parse semantic node
122 0975 1
123 0976 1 SIDE EFFECTS:
124 0977 1
125 0978 1     NONE
126 0979 1
127 0980 1 --
128 0981 1
129 0982 2 BEGIN
130 0983 2
131 0984 2 EXTERNAL
132 0985 2     EDT$$G_PA_ERRNO,                    ! Error number of parsing error.
133 0986 2     EDT$$Z_PA_STK : BLOCKVECTOR [NUM_NODES, NODE_SIZE, BYTE] FIELD (NODE_FIELDS),
134 0987 2     EDT$$G_PA_SP;
135 0988 2
136 0989 2 MESSAGES ((PARSTKOVF));
137 0990 2
138 0991 2 LOCAL
139 0992 2     NODE : REF NODE_BLOCK;
140 0993 2
141 0994 2 EDT$$G_PA_SP = .EDT$$G_PA_SP + 1;
142 0995 2
143 0996 3 IF (.EDT$$G_PA_SP GEQU NUM_NODES)

```

```

: 144      0997 2      THEN
: 145      0998      BEGIN
: 146      0999      EDT$$G_PA_ERRNO = EDT$_PARSTKOVF;
: 147      1000      RETURN(0);
: 148      1001      END;
: 149      1002
: 150      1003      NODE = EDT$$Z_PA_STK [.EDT$$G_PA_SP, NODE_TYPE];
: 151      1004      CH$FILL (0, NODE_SIZE, .NODE);
: 152      1005      NODE [NODE_TYPE] = .NT;
: 153      1006      NODE [COM_NUM] = .TYP;
: 154      1007      RETURN (.NODE);
: 155      1008 1      END;

```

! of routine EDT\$\$PA\_NEW\_NOD

```

.TITLE EDT$PRPUSH EDT$PRPUSH - new parse node
.IDENT \V04-000\

```

```

.EXTRN EDT$$G_PA_ERRNO
.EXTRN EDT$$Z_PA_STK, EDT$$G_PA_SP
.EXTRN EDT$_PARSTKOVF

```

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

```

.ENTRY EDT$$PA_NEW_NOD, Save R2,R3,R4,R5,R6,R7

```

```

          00FC 00000
57 00000000G 00 9E 00002
          67 06 00009
50          67 00 0000B
14          50 01 0000E
          0D 1F 00011
00000000G 00 00000000G 8F 00 00013
          1E 11 0001E
50          20 C4 00020 1$:
56 00000000G0040 9E 00023
20          6E 00 2C 0002B
          65 00030
          66 04 AC 90 00031
01          A6 08 AC 90 00035
          50 56 D0 0003A
          04 0003D
          50 D4 0003E 2$:
          04 00040

```

```

MOVAB EDT$$G_PA_SP, R7      : 0942
INCL  EDT$$G_PA_SP          : 0994
MOVL  EDT$$G_PA_SP, R0      : 0996
CML   R0, #20
BLSSU 1$
MOVL  #EDT$_PARSTKOVF, EDT$$G_PA_ERRNO : 0999
BRB   2$
MULL2 #32, R0              : 1000
MOVAB EDT$$Z_PA_STK[R0], NODE : 1003
MOVCS #0, (SP), #0, #32, (NODE) : 1004
MOV   NT, (NODE)           : 1005
MOV   TYP, 1(NODE)         : 1006
MOVL  NODE, R0             : 1007
RET
CLRL  R0                   : 1008
RET

```

: Routine Size: 65 bytes. Routine Base: \_EDT\$CODE + 0000

```

: 156      1009 1
: 157      1010 1 !<BLF/PAGE>

```

EDT\$PRPUSH  
V04-000

EDT\$PRPUSH - new parse node  
EDT\$SPA\_NEW\_NOD - new parse node

M 4  
16-Sep-1984 01:22:33  
14-Sep-1984 12:24:14

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]PRPUSH.BLI;1

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EDT\$  
V04-

: 159 1011 1 END  
: 160 1012 1  
: 161 1013 0 ELUDOM

! of module EDT\$PRPUSH

PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	65	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	51	13	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\$:PRPUSH/OBJ=OBJ\$:PRPUSH MSRC\$:PRPUSH.BLI/UPDATE=(ENH\$:PRPUSH)

: Size: 65 code + 0 data bytes  
: Run Time: 00:13.4  
: Elapsed Time: 00:17.0  
: Lines/CPU Min: 4539  
: Lexemes/CPU-Min: 14477  
: Memory Used: 99 pages  
: Compilation Complete

