


```
PPPPPPP LL IIIIII GGGGGGG EEEEEEEEE TTTTTTTTT EEEEEEEEE DDDDDDD IIIIII
PPPPPPP LL IIIIII GGGGGGG EEEEEEEEE TTTTTTTTT EEEEEEEEE DDDDDDD IIIIII
PP PP LL II GG GG EE EE TT EE DD DD II
PP PP LL II GG GG EE EE TT EE DD DD II
PP PP LL II GG GG EE EE TT EE DD DD II
PP PP LL II GG GG EE EE TT EE DD DD II
PPPPPPP LL II GGGGG EEEEEEE TT EEEEEEE DD DD II
PPPPPPP LL II GGGGG EEEEEEE TT EEEEEEE DD DD II
PP LL II GG GGGGG EE TT EE DD DD II
PP LL II GG GGGGG EE TT EE DD DD II
PP LL II GG GG EE TT EE DD DD II
PP LL II GG GG EE TT EE DD DD II
PP LLLLLLLLL IIIIII GGGGG EEEEEEEEE TT EEEEEEEEE DDDDDDD IIIIII
PP LLLLLLLLL IIIIII GGGGG EEEEEEEEE TT EEEEEEEEE DDDDDDD IIIIII
```

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LL IIIIII SSSSSSS
LL IIIIII SSSSSSS
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
LL LLLLLLLLL IIIIII SSSSSSS
LL LLLLLLLLL IIIIII SSSSSSS
```

```
0000 1 .title plisgeteitem
0000 2 .ident /1-002/ ; Edit WHM1002
0000 3
0000 4
0000 5 :*****
0000 6 :*
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0000 24 :*
0000 25 :*
0000 26 :*****
0000 27 :
0000 28 :
0000 29 :
0000 30 :++
0000 31 : facility:
0000 32 :
0000 33 : VAX/VMS PL1 runtime library
0000 34 :
0000 35 : abstract:
0000 36 :
0000 37 : This module contains the pl1 runtime routines to get items from
0000 38 : pl1 stream file under edit controlled format.
0000 39 :
0000 40 :
0000 41 : author: c. spitz 28-nov-79
0000 42 :
0000 43 : modified:
0000 44 :
0000 45 :
0000 46 : 1-002 Bill Matthews 29-September-1982
0000 47 :
0000 48 : Invoke macros $defdat and rtshare instead of $defopr and share.
0000 49 :
0000 50 :--
0000 51 :
0000 52 :
0000 53 : external definitions
0000 54 :
0000 55 : $deffcb ;define file control block
0000 56 : $defstk ;define stack frame offsets
0000 57 : $defstr ;define stream block offsets
```

```

0000 58          $defdat          ;define operand node data types
0000 59          $defgetopt       ;define get options block
0000 60          $defcvtind       ;define convert indices
0000 61          $rabdef          ;define rms rab offsets
0000 62          $rmsdef          ;define rms error codes
0000 63
0000 64          :
0000 65          : local data
0000 66          :
0000 67          :
0000 68          rtshare          ;sharable
0000 69
0000 70
0000 71          :++
0000 72          : pli$gete****
0000 73          :
0000 74          : the pli$gete**** routines are called by the compiled code to get items
0000 75          : from a stream input file under edit directed transmission. each routine
0000 76          : saves the target item descriptor, calls pli$$getfmt_r6 to get the
0000 77          : next field based on the format, and then calls to pli$rt_cvrt_r3 to store
0000 78          : the item in the target.
0000 79          :--
0000 80
0000 81          :pli$getechar_r6
0000 82          : inputs:
0000 83          :     r0 - address of element to get
0000 84          :     r1 - size/prec of element to get
0000 85          :     r11 - address of stream block
0000 86          :     ap - address of file control block
0000 87          : outputs:
0000 88          :     none
0000 89          : side effects:
0000 90          :     r0-r6 are destroyed
0000 91
0000 92          pli$getechar_r6::
0000 93          bisl    #atr_m_recur,fcbl_attr(ap) ;set recursion flag
OC AC 04000000 8F CA 0004 94          bicl    #atr_m_flgtrg,fcbl_attr(ap) ;clr floating target flag
          7E 50 7D 000C 95          movq    r0,-(sp) ;save destination
          00000000 GF 16 000F 96          jsb    g^pli$$getfmt_r6 ;get format
          52 8E 7D 0C 5 97          movq    (sp)+,r2 ;restore destination
          54 05 C0 0018 98          addl   #cvt_k_dst_char,r4 ;update case index for char dest
          00000000 GF 00 FB 001B 99          calls  #0,g^pli$cvrt_cg_r3 ;convert it
          OC AC 08 CA 0022 100         bicl    #atr_m_recur,fcbl_attr(ap) ;clr recursion flag
          05 0026 101          rsb
          0027 102
0027 103          :pli$getevcha_r6
0027 104          : inputs:
0027 105          :     r0 - address of element to get
0027 106          :     r1 - size/prec of element to get
0027 107          :     r11 - address of stream block
0027 108          :     ap - address of file control block
0027 109          : outputs:
0027 110          :     none
0027 111          : side effects:
0027 112          :     r0-r6 are destroyed
0027 113          :
0027 114          :

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```
00000000'GF 00 FB 0097 172      calls #0,g^pli$cvrt_cg_r3      ;convert it
          OC AC 08 CA 009E 173      bicl #atr_m_recur,fcbl_attr(ap) ;clr recursion flag
          OS 00A2 174      rsb                                ;return
          00A3 175
          00A3 176 ;pli$getefixb_r6
          00A3 177 :   inputs:
          00A3 178 :       r0 - address of element to get
          00A3 179 :       r1 - size/prec of element to get
          00A3 180 :       r11 - address of stream block
          00A3 181 :       ap - address of file control block
          00A3 182 :   outputs:
          00A3 183 :       none
          00A3 184 :   side effects:
          00A3 185 :       r0-r6 are destroyed
          00A3 186 :
          00A3 187
          00A3 188 pli$getefixb_r6::
          OC AC 08 C8 00A3 189      bicl #atr_m_recur,fcbl_attr(ap) ;set recursion flag
          OC AC 04000000 8F CA 00A7 190      bicl #atr_m_fltrg,fcbl_attr(ap) ;clr floating target flag
          7E 50 7D 00AF 191      movq r0,-(sp) ;save destination
          00000000'GF 16 00B2 192      jsb g^pli$$getfmt_r6 ;get format
          52 8E 7D 00B8 193      movq (sp)+,r2 ;restore destination
          54 01 CO 00BB 194      addl #cvt_k_dst_fixb,r4 ;update case index for fixb dest
          00000000'GF 00 FB 00BE 195      calls #0,g^pli$cvrt_cg_r3 ;convert it
          OC AC 08 CA 00C5 196      bicl #atr_m_recur,fcbl_attr(ap) ;clr recursion flag
          OS 00C9 197      rsb                                ;return
          00CA 198
          00CA 199 ;pli$getefixd_r6
          00CA 200 :   inputs:
          00CA 201 :       r0 - address of element to get
          00CA 202 :       r1 - size/prec of element to get
          00CA 203 :       r11 - address of stream block
          00CA 204 :       ap - address of file control block
          00CA 205 :   outputs:
          00CA 206 :       none
          00CA 207 :   side effects:
          00CA 208 :       r0-r6 are destroyed
          00CA 209 :
          00CA 210
          00CA 211 pli$getefixd_r6::
          OC AC 08 C8 00CA 212      bicl #atr_m_recur,fcbl_attr(ap) ;set recursion flag
          OC AC 04000000 8F CA 00CE 213      bicl #atr_m_fltrg,fcbl_attr(ap) ;clr floating target flag
          7E 50 7D 00D6 214      movq r0,-(sp) ;save destination
          00000000'GF 16 00D9 215      jsb g^pli$$getfmt_r6 ;get format
          52 8E 7D 00DF 216      movq (sp)+,r2 ;restore destination
          54 03 CO 00E2 217      addl #cvt_k_dst_fixd,r4 ;update case index for fixd dest
          00000000'GF 00 FB 00E5 218      calls #0,g^pli$cvrt_cg_r3 ;convert it
          OC AC 08 CA 00EC 219      bicl #atr_m_recur,fcbl_attr(ap) ;clr recursion flag
          OS 00F0 220      rsb                                ;return
          00F1 221
          00F1 222 ;pli$getefltb_r6
          00F1 223 :   inputs:
          00F1 224 :       r0 - address of element to get
          00F1 225 :       r1 - size/prec of element to get
          00F1 226 :       r11 - address of stream block
          00F1 227 :       ap - address of file control block
          00F1 228 :   outputs:
```

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00F1 229 : none
00F1 230 : side effects:
00F1 231 : r0-r6 are destroyed
00F1 232 :
00F1 233 :
00F1 234 pli$getefltb_r6::
04000008 8F C8 00F1 235 bisl #<atr_m_recur!atr_m_fltrg>,- :set recursion
OC AC 00F7 236 fcb_l_a!tr(ap) :and floating target
08 51 07 E1 00F9 237 bbc #7,r1-10$ :if g float
0000008F 8F DD 00FD 238 pushl #<15+128> :set max g float dec prec
OB 11 0103 239 brb 30$ :cont
35 51 D1 0105 240 10$: cmpl r1,#53 :is it huge?
04 15 0108 241 bleq 20$ :if leq, no, cont
22 DD 010A 242 pushl #34 :set max huge dec prec
02 11 010C 243 brb 30$ :cont
OF DD 010E 244 20$: pushl #15 :set max d float dec prec
0110 245 :no need to bother w/ f/d since
0110 246 :convert routines go to d)
7E 50 7D 0110 247 30$: movq r0,-(sp) :save destination
00000000'GF 16 0113 248 jsb g^pli$getfmt_r6 :get format
52 8E 7D 0119 249 movq (sp)+,r2 :restore destination
5E 04 AE 9E 011C 250 movab 4(sp),sp :clean dec prec from stack
00000000'GF 00 FB 0120 251 addl #cvt_k_dst_fltb,r4 :update case index for fltb dest
04000008 8F CA 0123 252 calls #0,g^pli$cvrt_cg_r3 :convert it
OC AC 012A 253 bicl #<atr_m_recur!atr_m_fltrg>,- :clr recursion flag
0130 254 fcb_l_a!tr(ap) :and floating source
05 0132 255 rsb :return
0133 256
0133 257 ;pli$getefltd_r6
0133 258 inputs:
0133 259 r0 - address of element to get
0133 260 r1 - size/prec of element to get
0133 261 r11 - address of stream block
0133 262 ap - address of file control block
0133 263 outputs:
0133 264 none
0133 265 side effects:
0133 266 r0-r6 are destroyed
0133 267
0133 268
0133 269 pli$getefltd_r6::
04000008 8F C8 0133 270 bisl #<atr_m_recur!atr_m_fltrg>,- :set recursion
OC AC 0139 271 fcb_l_a!tr(ap) :and floating target
7E 50 DD 013B 272 pushl r1 :set float dec prec
00000000'GF 16 013D 273 movq r0,-(sp) :save destination
52 8E 7D 0146 274 jsb g^pli$getfmt_r6 :get format
5E 04 AE 9E 0149 275 movq (sp)+,r2 :restore destination
00000000'GF 00 FB 014D 276 movab 4(sp),sp :clean dec prec from stack
04000008 8F CA 0150 277 addl #cvt_k_dst_fltd,r4 :update case index for fltd dest
OC AC 0157 278 calls #0,g^pli$cvrt_cg_r3 :convert it
05 015D 279 bicl #<atr_m_recur!atr_m_fltrg>,- :clr recursion flag
0160 280 fcb_l_a!tr(ap) :and floating source
0160 281 rsb :return
0160 282
0160 283 ;pli$getepic_r6
0160 284 inputs:
0160 285 r0 - address of element to get

```

```
0160 286 : r1 - size/prec of element to get
0160 287 : r11 - address of stream block
0160 288 : ap - address of file control block
0160 289 : outputs:
0160 290 : none
0160 291 : side effects:
0160 292 : r0-r6 are destroyed
0160 293 :
0160 294 plisgetepic_r6::
OC AC 0C AC 08 C8 0160 295 bisl #atr_m_recur, fcb_l_attr(ap) ;set recursion flag
0160 296 bicl #atr_m_fltrg, fcb_l_attr(ap) ;clr floating target flag
0160 297 movq r0, -(sp) ;save destination
0160 298 jsb g^plis$getfmt_r6 ;get format
0160 299 movq (sp)+, r2 ;restore destination
0178 300 addl #cvt_k_dst_pic, r4 ;update case index for pic dest
0178 301 calls #0, g^plis$cvt_cg_r3 ;convert it
0182 302 bicl #atr_m_recur, fcb_l_attr(ap) ;clr recursion flag
0186 303 rsb ;return
0187 304
0187 305 .end
```


PLISGETEITEM
Symbol table

L 4

16-SEP-1984 02:19:30 VAX/VMS Macro V04-00
6-SEP-1984 11:38:17 [PLIRTL.SRC]PLIGETEDI.MAR;1

Page 7
(1)

PL
1-

ATR_M_FLTRG	=	04000000		
ATR_M_RECUR	=	00000008		
CVT_K_DST_ABIT	=	00000008		
CVT_K_DST_BIT	=	00000007		
CVT_K_DST_CHAR	=	00000005		
CVT_K_DST_FIXB	=	00000001		
CVT_K_DST_FIXD	=	00000003		
CVT_K_DST_FLTB	=	00000002		
CVT_K_DST_FLTD	=	00000004		
CVT_K_DST_PIC	=	00000000		
CVT_K_DST_VCHA	=	00000006		
FCB_B_ENVIR		000001C2		
FCB_B_ESA		0000012E		
FCB_B_EXTRA		0000003D		
FCB_B_FAB		000000A6		
FCB_B_IDENT		00000040		
FCB_B_IDENT_NAM		00000042		
FCB_B_NAM		000000F6		
FCB_B_NUMKCBS		0000003C		
FCB_B_RAB		00000062		
FCB_C_LEN		000001C2		
FCB_C_STRLN		00000034		
FCB_L_ATTR		0000000C		
FCB_L_BUF		00000014		
FCB_L_BUF_END		00000018		
FCB_L_BUF_PT		0000001C		
FCB_L_CNDADDR		000001B2		
FCB_L_CONDIT		000001AE		
FCB_L_DTTR		00000010		
FCB_L_ERROR		00000008		
FCB_L_KCB		00000038		
FCB_L_NEXT		00000000		
FCB_L_PREVIOUS		00000004		
FCB_L_PRN		00000034		
FCB_Q_RFA		00000020		
FCB_W_COLUMN		0000002E		
FCB_W_IDENT_LEN		00000040		
FCB_W_LINE		00000030		
FCB_W_LINESIZE		0000002A		
FCB_W_PAGE		00000032		
FCB_W_PAGESIZE		0000002C		
FCB_W_REVISION		00000028		
GETOPT_B_BITS		00000009		
GETOPT_B_TMO		00000008		
GETOPT_C_LEN		0000000A		
GETOPT_L_FXDCTL		00000000		
GETOPT_L_PROMPT		00000004		
PLISSGETFMT_R6	*****		X	02
PLISCVRT CG_R3	*****		X	02
PLISGETEABIT_R6		0000007C	RG	02
PLISGETEBIT_R6		00000050	RG	02
PLISGETECHAR_R6		00000000	RG	02
PLISGETEFIXB_R6		000000A3	RG	02
PLISGETEFIXD_R6		000000CA	RG	02
PLISGETEFLTB_R6		000000F1	RG	02
PLISGETEFLTD_R6		00000133	RG	02
PLISGETEPIC_R6		00000160	RG	02

PLISGETEVCHA_R6		00000027	RG	02
SIZ...	=	00000001		
STK_L_AP		00000008		
STK_L_ARG_LIST		FFFFFFFF8		
STK_L_CND_HND		00000000		
STK_L_CND_LST		FFFFFFFF4		
STK_L_DISPLAY		FFFFFFFFC		
STK_L_FP		0000000C		
STK_L_PC		00000010		
STK_L_PSL		00000004		
STK_L_REGS		00000014		
STR_B_FIELD		00000018		
STR_C_LEN		00000C08		
STR_L_FLD_END		00000014		
STR_L_FLD_PT		00000010		
STR_L_FP		00000004		
STR_L_FS		0000000C		
STR_L_PARENT		00000008		
STR_L_SP		00000000		
STR_L_STACK		00000C04		
STR_L_STACK_END		00000408		

! Psect synopsis !

PSECT name	Allocation	PSECT No.	Attributes
.ABS	00000000 (0.)	00 (0.)	NOPIC USR CON ABS LCL NOSHR NOEXE NORD NOWRT NOVEC BYTE
\$ABSS	FFFFFFFFC (0.)	01 (1.)	NOPIC USR CON ABS LCL NOSHR EXE RD W NOVEC BYTE
_PLISCODE	00000187 (391.)	02 (2.)	PIC USR CON REL LCL SHR EXE RD NOWRT NOVEC LONG

! Performance indicators !

Phase	Page faults	CPU Time	Elapsed Time
Initialization	9	00:00:00.05	00:00:00.35
Command processing	73	00:00:00.57	00:00:01.75
Pass 1	188	00:00:06.92	00:00:16.09
Symbol table sort	0	00:00:00.66	00:00:01.63
Pass 2	56	00:00:01.30	00:00:02.91
Symbol table output	10	00:00:00.07	00:00:00.29
Psect synopsis output	1	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	337	00:00:09.60	00:00:23.06

The working set limit was 900 pages.
35926 bytes (71 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 574 non-local and 3 local symbols.
305 source lines were read in Pass 1, producing 11 object records in Pass 2.
20 pages of virtual memory were used to define 18 macros.

! Macro library statistics !

Macro library name	Macros defined
_\$255\$DUA28:[PLIRTL.OBJ]PLIRTMAC.MLB;1	7
-\$255\$DUA28:[SYSLIB]STARLE1.MLB;2	7
TOTALS (all libraries)	14

623 GETS were required to define 14 macros.

There were no errors, warnings or information messages.

MACRO/ENABLE=SUPPRESSION/DISABLE=TRACEBACK/LIS=LISS:PLIGETEDI/OBJ=OBJ\$:PLIGETEDI MSRCS:PLIGETEDI/UPDATE=(ENHS:PLIGETEDI)+LIBS:PLIRTM

0308 AH-BT13A-SE
VAX/VMS V4.0

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This block contains a grid of approximately 150 small, illegible terminal window screenshots. Each screenshot typically displays a command prompt, a file path, and some system output. Several screenshots are clearly labeled with the following names:

- PLIFORMAT LIS
- PLIGETBUF LIS
- PLMSGTXT LIS
- PLIGETEDI LIS
- PLIHEEP LIS
- PLIPUTFIL LIS
- PLIRMSBIS LIS
- PLIRECOPT LIS
- PLIOPEN LIS
- PLIREAD LIS
- PLIPROTEC LIS
- PLIREWRIT LIS
- PLIGETLIS LIS
- PLIPUTEDI LIS
- PLIPKDIU LIS
- PLIPUTLIS LIS
- PLMSGPTR LIS
- PLIPKDIUS LIS
- PLIPUTBUF LIS
- PLIGETFIL LIS

The remaining screenshots are too small and faded to read accurately.