

[illegible]


```

0000 1      .title pli$getlistitem
0000 2      .ident /1-002/
0000 3      ; Edit WHM1002
0000 4      *****
0000 5      *
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0000 23     *
0000 24     *
0000 25     *****
0000 26     :
0000 27     :
0000 28     :
0000 29     :++
0000 30     : facility:
0000 31     :
0000 32     :     VAX/VMS PL1 runtime library
0000 33     :
0000 34     : abstract:
0000 35     :
0000 36     :     This module contains the pl1 runtime routines to get items from
0000 37     :     pl1 stream file under list directed i/o.
0000 38     :
0000 39     :
0000 40     : author: c. spitz 28-nov-79
0000 41     :
0000 42     : modified:
0000 43     :
0000 44     :
0000 45     :     1-002  Bill Matthews  29-September-1982
0000 46     :
0000 47     :     Invoke macros $defdat and rtshare instead of $defopr and share.
0000 48     :
0000 49     :--
0000 50     :
0000 51     :
0000 52     : external definitions
0000 53     :
0000 54     :     $deffcb      ;define file control block
0000 55     :     $defstk     ;define stack frame offsets
0000 56     :     $defstr     ;define stream block offsets
0000 57     :     $defdat     ;define operand node data types

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0000 58      $defgetopt      ;define get options block
0000 59      $defcvtind      ;define convert indices
0000 60      $rabdef         ;define rms rab offsets
0000 61      $rmsdef         ;define rms error codes
0000 62
0000 63      ;
0000 64      ; local data
0000 65      ;
0000 66
0000 67      rtshare           ;sharable
0000 68
0000 69
0000 70      ;++
0000 71      ; pli$getl****
0000 72      ;
0000 73      ; the pli$getl**** routines are called by the compiled code to get items
0000 74      ; from a stream input file under list directed transmission. each routine
0000 75      ; saves the target item descriptor, calls pli$$getnlis_r6 to get the
0000 76      ; next field, and then calls pli$cvrt_cg_r3 to store the item in the target.
0000 77      ;--
0000 78
0000 79
0000 80      ;pli$getlchar_r6
0000 81      ; inputs:
0000 82      ;      r0 - address of element to get
0000 83      ;      r1 - size/precision
0000 84      pli$getlchar_r6::
0000 85      bisl      #atr_m_recur,fcbl_attr(ap) ;set recursive flag
0000 86      movq      r0,-(sp) ;save destination
0000 87      jsb      g^pli$$getnlis_r6 ;get input field
0000 88      movq      (sp)+,r2 ;get destination back
0000 89      tstl      r0 ;skip field?
0000 90      beql      20$ ;if egl, then yes
0000 91      addl      #cvt_k_dst_char,r4 ;set for char dest
0000 92      calls     #0,g^pli$cvrt_cg_r3 ;convert field to dest
0000 93      bicl      #atr_m_recur,fcbl_attr(ap) ;clr recursive flag
0000 94      rsb      20$:
0000 95      ;return
0000 96
0000 97      ;pli$getlvcha_r6
0000 98      ; inputs:
0000 99      ;      r0 - address of element to get
0000 100     ;      r1 - size/precision
0000 101     pli$getlvcha_r6::
0000 102     bisl      #atr_m_recur,fcbl_attr(ap) ;set recursive flag
0000 103     clrw      (r0) ;clear length
0000 104     movq      r0,-(sp) ;save destination
0000 105     jsb      g^pli$$getnlis_r6 ;get input field
0000 106     movq      (sp)+,r2 ;get destination back
0000 107     tstl      r0 ;skip field?
0000 108     beql      20$ ;if egl, then yes
0000 109     addl      #cvt_k_dst_vcha,r4 ;set for vcha dest
0000 110     calls     #0,g^pli$cvrt_cg_r3 ;convert field to dest
0000 111     bicl      #atr_m_recur,fcbl_attr(ap) ;clr recursive flag
0000 112     rsb      20$:
0000 113     ;return
0000 114
0000 115     ;pli$getlfixb_r6
0000 116     ; inputs:
```

OC AC 08 C8 0000 85
7E 50 7D 0004 86
00000000'GF 16 0007 87
52 8E 7D 000D 88
50 D5 0010 89
0A 13 0012 90
54 05 C0 0014 91
00000000'GF 00 FB 0017 92
OC AC 08 CA 001E 93
05 0022 94
0023 95
0023 96
0023 97
0023 98
0023 99
OC AC 08 C8 0023 101
60 B4 0027 102
7E 50 7D 0029 103
00000000'GF 16 002C 104
52 8E 7D 0032 105
50 D5 0035 106
0A 13 0037 107
54 06 C0 0039 108
00000000'GF 00 FB 003C 109
OC AC 08 CA 0043 110
05 0047 111
0048 112
0048 113
0048 114


```
0048 115 : r0 - address of element to get
0048 116 : r1 - size/precision
0048 117 pli$getlfixb_r6::
      0C AC 08 C8 0048 118 bisl #atr_m_recur,fcbl_attr(ap) ;set recursive flag
      7E 50 7D 004C 119 movq r0,-(sp) ;save destination
00000000'GF 16 004F 120 jsb g^pli$$getnlis_r6 ;get input field
      52 8E 7D 0055 121 movq (sp)+,r2 ;get destination back
      50 D5 0058 122 tstl r0 ;skip field?
      0A 13 005A 123 beql 20$ ;if egl, then yes
      54 01 C0 005C 124 addl #cvt_k_dst_fixb,r4 ;set for fixb dest
00000000'GF 00 FB 005F 125 calls #0,g^pli$cvrt_cg_r3 ;convert field to dest
      0C AC 08 CA 0066 126 20$: bicl #atr_m_recur,fcbl_attr(ap) ;clr recursive flag
      05 006A 127 rsb ;return
      006B 128
      006B 129 :pli$getlfixd_r6
      006B 130 : inputs:
      006B 131 : r0 - address of element to get
      006B 132 : r1 - size/precision
      006B 133 pli$getlfixd_r6::
      0C AC 08 C8 006B 134 bisl #atr_m_recur,fcbl_attr(ap) ;set recursive flag
      7E 50 7D 006F 135 movq r0,-(sp) ;save destination
00000000'GF 16 0072 136 jsb g^pli$$getnlis_r6 ;get input field
      52 8E 7D 0078 137 movq (sp)+,r2 ;get destination back
      50 D5 007B 138 tstl r0 ;skip field?
      0A 13 007D 139 beql 20$ ;if egl, then yes
      54 03 C0 007F 140 addl #cvt_k_dst_fixd,r4 ;set for fixd dest
00000000'GF 00 FB 0082 141 calls #0,g^pli$cvrt_cg_r3 ;convert field to dest
      0C AC 08 CA 0089 142 20$: bicl #atr_m_recur,fcbl_attr(ap) ;clr recursive flag
      05 008D 143 rsb ;return
      008E 144
      008E 145 :pli$getlbit_r6
      008E 146 : inputs:
      008E 147 : r0 - address of element to get
      008E 148 : r1 - size/precision
      008E 149 : r2 - offset of target
      008E 150 pli$getlbit_r6::
      0C AC 08 C8 008E 151 bisl #atr_m_recur,fcbl_attr(ap) ;set recursive flag
      7E 50 7D 0092 152 movq r0,-(sp) ;save destination
      52 DD 0095 153 pushl r2 ;save offset
00000000'GF 16 0097 154 jsb g^pli$$getnlis_r6 ;get input field
      56 8E D0 009D 155 popl r6 ;set offset of dest
      50 7D 00A0 156 movq (sp)+,r2 ;get destination back
      0A 13 00A3 157 tstl r0 ;skip field?
      54 07 C0 00A5 158 beql 20$ ;if egl, then yes
00000000'GF 00 FB 00A7 159 addl #cvt_k_dst_bit,r4 ;set for bit dest
      0C AC 08 CA 00AA 160 calls #0,g^pli$cvrt_cg_r3 ;convert field to dest
      05 00B1 161 20$: bicl #atr_m_recur,fcbl_attr(ap) ;clr recursive flag
      00B5 162 rsb ;return
      00B6 163
      00B6 164 :pli$getlabit_r6
      00B6 165 : inputs:
      00B6 166 : - address of element to get
      00B6 167 : - size/precision
      00B6 168 pli$getlabit_r6::
      0C AC 08 C8 00B6 169 bisl #atr_m_recur,fcbl_attr(ap) ;set recursive flag
      7E 50 7D 00BA 170 movq r0,-(sp) ;save destination
00000000'GF 16 00BD 171 jsb g^pli$$getnlis_r6 ;get input field
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      52      8E      7D      00C3      172      movq      (sp)+,r2      ;get destination back
      50      D5      00C6      173      tstl      r0      ;skip field?
      0A      13      00C8      174      beql      20$      ;if egl, then yes
      54      08      C0      00CA      175      addl      #cvt_k_dst_abt,r4      ;set for abt dest
00000000'GF  00      FB      00CD      176      calls     #0,g^pli$cvrt_cg_r3      ;convert field to dest
      OC      AC      08      CA      00D4      177      bicl      #atr_m_recur,fcb_l_attr(ap) ;clr recursive flag
      05      00D8      178      rsb      ;return
      00D9      179
      00D9      180      ;pli$getlflt_b_r6
      00D9      181      ; inputs:
      00D9      182      ; - address of element to get
      00D9      183      ; - size/precision
      00D9      184      pli$getlflt_b_r6::
      OC      AC      08      C8      00D9      185      bisl      #atr_m_recur,fcb_l_attr(ap) ;set recursive flag
      7E      50      7D      00DD      186      movq      r0,-(sp)      ;save destination
00000000'GF  16      00E0      187      jsb      g^pli$getnlis_r6      ;get input field
      52      8E      7D      00E6      188      movq      (sp)+,r2      ;get destination back
      50      D5      00E9      189      tstl      r0      ;skip field?
      0A      13      00EB      190      beql      20$      ;if egl, then yes
      54      02      C0      00ED      191      addl      #cvt_k_dst_fltb,r4      ;set for fltb dest
00000000'GF  00      FB      00F0      192      calls     #0,g^pli$cvrt_cg_r3      ;convert field to dest
      OC      AC      08      CA      00F7      193      bicl      #atr_m_recur,fcb_l_attr(ap) ;clr recursive flag
      05      00FB      194      rsb      ;return
      00FC      195
      00FC      196      ;pli$getlflt_d_r6
      00FC      197      ; inputs:
      00FC      198      ; - address of element to get
      00FC      199      ; - size/precision
      00FC      200      pli$getlflt_d_r6::
      OC      AC      08      C8      00FC      201      bisl      #atr_m_recur,fcb_l_attr(ap) ;set recursive flag
      7E      50      7D      0100      202      movq      r0,-(sp)      ;save destination
00000000'GF  16      0103      203      jsb      g^pli$getnlis_r6      ;get input field
      52      8E      7D      0109      204      movq      (sp)+,r2      ;get destination back
      50      D5      010C      205      tstl      r0      ;skip field?
      0A      13      010E      206      beql      20$      ;if egl, then yes
      54      04      C0      0110      207      addl      #cvt_k_dst_flt_d,r4      ;set for fltd dest
00000000'GF  00      FB      0113      208      calls     #0,g^pli$cvrt_cg_r3      ;convert field to dest
      OC      AC      08      CA      011A      209      bicl      #atr_m_recur,fcb_l_attr(ap) ;clr recursive flag
      05      011E      210      rsb      ;return
      011F      211
      011F      212
      011F      213      ;pli$getlpic_r6
      011F      214      ; inputs:
      011F      215      ; - address of element to get
      011F      216      ; - size/precision
      011F      217      pli$getlpic_r6::
      OC      AC      08      C8      011F      218      bisl      #atr_m_recur,fcb_l_attr(ap) ;set recursive flag
      7E      50      7D      0123      219      movq      r0,-(sp)      ;save destination
00000000'GF  16      0126      220      jsb      g^pli$getnlis_r6      ;get input field
      52      8E      7D      012C      221      movq      (sp)+,r2      ;get destination back
      50      D5      012F      222      tstl      r0      ;skip field?
      0A      13      0131      223      beql      20$      ;if egl, then yes
      54      00      C0      0133      224      addl      #cvt_k_dst_pic,r4      ;set for pic dest
00000000'GF  00      FB      0136      225      calls     #0,g^pli$cvrt_cg_r3      ;convert field to dest
      OC      AC      08      CA      013D      226      bicl      #atr_m_recur,fcb_l_attr(ap) ;clr recursive flag
      05      0141      227      rsb      ;return
      0142      228
```


PLISGETLISTITEM
1-002

B 6

16-SEP-1984 02:20:46 VAX/VMS Macro V04-00 Page 5
6-SEP-1984 11:38:31 [PLIRTL.SRC]PLIGETLIS.MAR;1 (1)

0142 229 .end

PLISGETLISTITEM
Symbol table

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6-SEP-1984 11:38:31 [PLIRTL.SRC]PLIGETLIS.MAR;1 (1)

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_STRLEN		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		
PLISGETNLIS_R6	*****		X	02
PLISCVRT CG_R3	*****		X	02
PLISGETLABIT_R6	000000B6	RG		02
PLISGETLBIT_R6	0000008E	RG		02
PLISGETLCHAR_R6	00000000	RG		02
PLISGETLFXB_R6	00000048	RG		02
PLISGETLFXD_R6	0000006B	RG		02
PLISGETLFLTB_R6	000000D9	RG		02
PLISGETLFLTD_R6	000000FC	RG		02
PLISGETLPIC_R6	0000011F	RG		02
PLISGETLVCHA_R6	00000023	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		000000C8
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		000000C4
STR_L_STACK_END		000000408

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+-----+
! Psect synopsis !
+-----+

PSECT name	Allocation	PSECT No.	Attributes														
. ABS .	00000000 (0.)	00 (0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE				
\$AB\$\$	FFFFFFFFC (0.)	01 (1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE				
_PLI\$CODE	00000142 (322.)	02 (2.)	PIC	USR	CON	REL	LCL	SHR	EXE	RD	NOWRT	NOVEC	LONG				

+-----+
! Performance indicators !
+-----+

Phase	Page faults	CPU Time	Elapsed Time
Initialization	10	00:00:00.05	00:00:00.64
Command processing	73	00:00:00.55	00:00:03.51
Pass 1	188	00:00:06.81	00:00:17.31
Symbol table sort	0	00:00:00.66	00:00:01.48
Pass 2	46	00:00:01.25	00:00:03.66
Symbol table output	8	00:00:00.07	00:00:00.07
Psect synopsis output	2	00:00:00.03	00:00:00.24
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	327	00:00:09.42	00:00:26.96

The working set limit was 900 pages.
35233 bytes (69 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 9 local symbols.
229 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]STARLET.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=LIS\$:PLIGETLIS/OBJ=OBJ\$:PLIGETLIS MSRC\$:PLIGETLIS/UPDATE=(ENH\$:PLIGETLIS)+LIB\$:PLIRTM

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

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LIS

PLIREWRT
LIS

PLIGETLIS
LIS

PLIPUTDI
LIS

PLIPKDIU
LIS

PLIPUTLIS
LIS

PLMSGPTR
LIS

PLIPKDIU
LIS

PLIPUTBUF
LIS

PLIGETFIL
LIS