


```

LL      IIIIII  BBBB8888  LL      PPPPPPPP  LL      IIIIII  NN      NN  EEEEEEEEEE
LL      IIIIII  BBBB8888  LL      PPPPPPPP  LL      IIIIII  NN      NN  EEEEEEEEEE
LL      II      BB      BB  LL      PP      PP  LL      II      NN      NN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NN      NN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NNNN   NN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NNNN   NN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NN   NN  NN  EEEEEEEE
LL      II      BB      BB  LL      PP      PP  LL      II      NN   NN  NN  EEEEEEEE
LL      II      BB      BB  LL      PP      PP  LL      II      NN      NNNN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NN      NNNN  EE
LL      II      BB      BB  LL      PP      PP  LL      II      NN      NN  EE
LLLLLLLLLLLL IIIIII  BBBB8888  LLLLLLLLLL PPPPPPPP  LLLLLLLLLL IIIIII  NN      NN  EEEEEEEEEE
LLLLLLLLLLLL IIIIII  BBBB8888  LLLLLLLLLL PP      PP      LLLLLLLLLL IIIIII  NN      NN  EEEEEEEEEE

```

```

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 LIB$LP_LINES (%TITLE'Fetch number of lines per page'
2 0002 0 IDENT = '1-003' ! File: LIBLPLINE.B32 Edit: SBL1003
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 *****
7 0007 1 *
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
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25 0025 1 *
26 0026 1 *
27 0027 1 *****
28 0028 1
29 0029 1
30 0030 1 ++
31 0031 1 FACILITY: General Purpose Library
32 0032 1
33 0033 1 ABSTRACT:
34 0034 1
35 0035 1 Contains a routine to return the system-wide default Line Printer length,
36 0036 1 as determined by the logical name SYS$LP_LINES.
37 0037 1
38 0038 1 ENVIRONMENT: User mode - AST reentrant
39 0039 1
40 0040 1 AUTHOR: Richard Grove and Steven Lionel, CREATION DATE: 10-Sep-1979
41 0041 1
42 0042 1 EDIT HISTORY:
43 0043 1
44 0044 1 1-001 - Original.
45 0045 1 1-002 - Improve comments and remove OTSMAC. JBS 31-OCT-1979
46 0046 1 1-003 - Use LIBPROLOG. Change high limit from 99 to 255. SBL 18-Jan-1983
47 0047 1 !<BLF/PAGE>

```

LIB\$LP_LINES
1-003

Fetch number of lines per page
Declarations

L 7
16-Sep-1984 01:07:12
14-Sep-1984 12:39:08

VAX-11 Bliss-32 V4.0-742
[LIBRTL.SRC]LIBLPLINE.B32;1

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```

: 49      0048 1 %SBTTL'Declarations'
: 50      0049 1
: 51      0050 1 : PROLOGUE FILE:
: 52      0051 1 :
: 53      0052 1
: 54      0053 1 REQUIRE 'RTLIN:LIBPROLOG';           ! LIB$ declarations
: 55      0124 1
: 56      0125 1 :
: 57      0126 1 : TABLE OF CONTENTS:
: 58      0127 1 :
: 59      0128 1
: 60      0129 1 FORWARD ROUTINE
: 61      0130 1     LIB$LP_LINES;                   ! Get default Line Printer length
: 62      0131 1
: 63      0132 1 :
: 64      0133 1 : MACROS:
: 65      0134 1
: 66      0135 1     NONE
: 67      0136 1
: 68      0137 1 : EQUATED SYMBOLS:
: 69      0138 1
: 70      0139 1     NONE
: 71      0140 1
: 72      0141 1 : OWN STORAGE:
: 73      0142 1
: 74      0143 1     NONE
: 75      0144 1
: 76      0145 1 : EXTERNAL REFERENCES:
: 77      0146 1
: 78      0147 1
: 79      0148 1 EXTERNAL ROUTINE
: 80      0149 1     OTSS$CVT_TI_L;                   ! Convert ASCII text string to longword integer
: 81      0150 1

```

LIB

Syn

ALI

ALI

FOU

HIC

LIB

LIB

LIB

LIB

LOW

LUP

LUP

OK

RES

SC

PSI

.

```
83 0151 1 %SBTTL'LIB$LP_LINES - Fetch number of lines per page'
84 0152 1 GLOBAL ROUTINE LIB$LP_LINES =
85 0153 1
86 0154 1 !++
87 0155 1 ! FUNCTIONAL DESCRIPTION:
88 0156 1
89 0157 1 LIB$LP_LINES computes the default number of lines on a
90 0158 1 line-printer page. This procedure (or an equivalent computation)
91 0159 1 should be used by all native-mode VAX/VMS utilities that produce
92 0160 1 "listing" files and do pagination.
93 0161 1
94 0162 1 U.S. standard paper stock permits 66 lines of printing on a
95 0163 1 physical page. From this value, the utility should deduct:
96 0164 1
97 0165 1 1. 3 lines for top margin
98 0166 1
99 0167 1 2. 3 lines for bottom margin
100 0168 1
101 0169 1 3. 3 lines for listing heading information, consisting of:
102 0170 1
103 0171 1 1. Language-processor identification line
104 0172 1
105 0173 1 2. Source-program identification line
106 0174 1
107 0175 1 3. One blank line
108 0176 1
109 0177 1 The algorithm used by LIB$LP_LINES is:
110 0178 1
111 0179 1 1. Translate the logical name SYSS$LP_LINES
112 0180 1
113 0181 1 2. Convert the ASCII value obtained to a binary integer
114 0182 1
115 0183 1 3. Verify that the resulting value is in the range [30:255].
116 0184 1
117 0185 1 4. If any of the steps above fail, return the default U.S.
118 0186 1 paper size of 66 lines.
119 0187 1
120 0188 1 CALLING SEQUENCE:
121 0189 1
122 0190 1 LP_length.wl.v = LIB$LP_LINES ( )
123 0191 1
124 0192 1 FORMAL PARAMETERS:
125 0193 1
126 0194 1 NONE
127 0195 1
128 0196 1 IMPLICIT INPUTS:
129 0197 1
130 0198 1
131 0199 1 System-wide (or user-defined) logical name SYSS$LP_LINES
132 0200 1
133 0201 1 IMPLICIT OUTPUTS:
134 0202 1
135 0203 1 NONE
136 0204 1
137 0205 1 ROUTINE VALUE:
138 0206 1
139 0207 1 Default number of lines on a Physical Line Printer page.
```

```

140 0208 1 | If the logical name translation or conversion to binary
141 0209 1 | fails, a default value of 66 is returned.
142 0210 1 |
143 0211 1 | SIDE EFFECTS:
144 0212 1 |
145 0213 1 | NONE
146 0214 1 |
147 0215 1 | --
148 0216 1 |
149 0217 2 | BEGIN
150 0218 2 |
151 0219 2 | LOCAL
152 0220 2 | LOGDES : BLOCK [8, BYTE], ! String descriptor for logical name
153 0221 2 | NUMBER, ! Accumulator for integer conversion
154 0222 2 | NUMDES : BLOCK [8, BYTE], ! String descriptor for translated string
155 0223 2 | NUMSTR : VECTOR [LNMSC_NAMLENGTH, BYTE]; ! Buffer for translated string
156 0224 2 |
157 0225 2 | +
158 0226 2 | Initialize descriptors for logical name and translated string
159 0227 2 | -
160 0228 2 | LOGDES [DSC$B_CLASS] = DSC$K_CLASS_S;
161 0229 2 | LOGDES [DSC$B_DTYPE] = DSC$K_DTYPE_T;
162 0230 2 | LOGDES [DSC$W_LENGTH] = %CHARCOUNT('SYS$LP_LINES');
163 0231 2 | LOGDES [DSC$A_POINTER] = UPLIT BYTE('SYS$LP_LINES');
164 0232 2 | NUMDES [DSC$B_CLASS] = DSC$K_CLASS_S;
165 0233 2 | NUMDES [DSC$B_DTYPE] = DSC$K_DTYPE_T;
166 0234 2 | NUMDES [DSC$W_LENGTH] = LNMSC_NAMLENGTH;
167 0235 2 | NUMDES [DSC$A_POINTER] = NUMSTR [0];
168 0236 2 | +
169 0237 2 | Translate and convert the logical name SYS$LP_LINES to determine
170 0238 2 | default number of lines on LP listing page.
171 0239 2 | -
172 0240 2 |
173 0241 2 | IF $TRNLOG (LOGNAM = LOGDES, RSLBUF = NUMDES, RSLLEN = NUMDES [DSC$W_LENGTH])
174 0242 2 | THEN
175 0243 2 |
176 0244 2 | IF OTSSCVT_TI_L (NUMDES, NUMBER, 4, 1)
177 0245 2 | THEN
178 0246 2 |
179 0247 2 | IF .NUMBER GEQ 30 AND .NUMBER LEQ 255 THEN RETURN .NUMBER;
180 0248 2 |
181 0249 2 | +
182 0250 2 | The default value for U.S. standard paper stock is 66.
183 0251 2 | -
184 0252 2 | RETURN 66;
185 0253 1 | END;

```

! of routine LIB\$LP_LINES

```

.TITLE LIB$LP_LINES Fetch number of lines per page
.IDENT \1-003\

```

```

.PSECT _LIB$CODE,NOWRT, SHR, PIC,2

```

53 45 4E 49 4C 5F 50 4C 24 53 59 53 0000 P.AAA:

```

.ASCII \SYS$LP_LINES\

```

```

.EXTRN OTSSCVT_TI_L, SYS$TRNLOG

```

			0000	00000	.ENTRY	LIB\$LP_LINES, Save nothing	:	0152
			CE	9E 00002	MOVAB	-276(SP), SP	:	
F8	AD	010E000C	8F	D0 00007	MOVL	#17694732, LOGDES	:	0230
FC	AD		AF	9E 0000F	MOVAB	P.AAA, LOGDES+4	:	0231
FO	AD	010E00FF	8F	D0 00014	MOVL	#17694975, NUMDES	:	0234
F4	AD		AE	9E 0001C	MOVAB	NUMSTR, NUMDES+4	:	0235
			7E	7C 00021	CLRQ	-(SP)	:	0241
			7E	D4 00023	CLRL	-(SP)	:	
			FO	AD 9F 00025	PUSHAB	NUMDES	:	
			FO	AD 9F 00028	PUSHAB	NUMDES	:	
00000000G	00		F8	AD 9F 0002B	PUSHAB	LOGDES	:	
	26		06	FB 0002E	CALLS	#6, SYS\$TRNLOG	:	
			50	E9 00035	BLBC	R0, 1\$:	
			01	DD 00038	PUSHL	#1	:	0244
			04	DD 0003A	PUSHL	#4	:	
			08	AE 9F 0003C	PUSHAB	NUMBER	:	
00000000G	00		FO	AD 9F 0003F	PUSHAB	NUMDES	:	
	12		04	FB 00042	CALLS	#4, OTS\$CVT_TI_L	:	
	1E		50	E9 00049	BLBC	R0, 1\$:	
			6E	D1 0004C	CMPL	NUMBER, #30	:	0247
000000FF	8F		0D	19 0004F	BLSS	1\$:	
			6E	D1 00051	CMPL	NUMBER, #255	:	
			04	14 00058	BGTR	1\$:	
	50		6E	D0 0005A	MOVL	NUMBER, R0	:	
			04	0005D	RET		:	
	50	42	8F	9A 0005E 1\$:	MOVZBL	#66, R0	:	0252
			04	00062	RET		:	0253

: Routine Size: 99 bytes, Routine Base: _LIB\$CODE + 000C

```

: 186      0254 1
: 187      0255 1 END
: 188      0256 1
: 189      0257 0 ELUDOM

```

!End of module LIB\$LP_LINES

PSECT SUMMARY

Name	Bytes	Attributes
_LIB\$CODE	111	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	10	0	581	00:00.8
_\$255\$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1	36	0	0	8	00:00.1

LIB\$LP_LINES
1-003

Fetch number of lines per page
LIB\$LP_LINES - Fetch number of lines per page

C 8
16-Sep-1984 01:07:12
14-Sep-1984 12:39:08

VAX-11 Bliss-32 V4.0-742
[LIBRTL.SRC]LIBLPLINE.B32;1

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COMMAND QUALIFIERS

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

: Size: 99 code + 12 data bytes
: Run Time: 00:03.0
: Elapsed Time: 00:13.5
: Lines/CPU Min: 5122
: Lexemes/CPU-Min: 18877
: Memory Used: 51 pages
: Compilation Complete

