



```

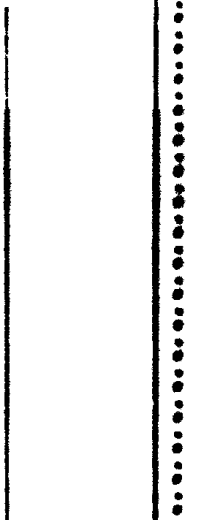
PPPPPPPP      AAAAAA      GGGGGGGG      EEEEEEEEEEE
PPPPPPPP      AAAAAA      GGGGGGGG      EEEEEEEEEEE
PP      PP     AA      AA     GG      GG      EEEEEEEEEEE
PP      PP     AA      AA     GG      GG      EEEEEEEEEEE
PP      PP     AA      AA     GG      GG      EEEEEEEEEEE
PP      PP     AA      AA     GG      GG      EEEEEEEEEEE
PPPPPPPP      AA      AA     GG      GG      EEEEEEEEEEE
PPPPPPPP      AA      AA     GG      GG      EEEEEEEEEEE
PP      AAAAAAAAAA     GG      GGGGGG      EEEEEEEEEEE
PP      AAAAAAAAAA     GG      GGGGGG      EEEEEEEEEEE
PP      AA      AA     GG      GG      EEEEEEEEEEE
PP      AA      AA     GG      GG      EEEEEEEEEEE
PP      AA      AA     GGGGGG      EEEEEEEEEEE
PP      AA      AA     GGGGGG      EEEEEEEEEEE

```

```

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  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41

```

0001 0 %TITLE 'Processes .PS, .LM, and .RM directives'
0002 0 MODULE PAGE ( IDENT = 'V04-000'
P 0003 0 %BLISS32[, ADDRESSING_MODE (EXTERNAL = long_relative,
0004 0 NONEXTERNAL = long_relative)]
0005 0 ) =
0006 1 BEGIN
0007 1
0008 1 *****
0009 1 *
0010 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY *
0011 1 * DIGITAL EQUIPMENT CORPORATION, MAYNARD, MASSACHUSETTS. *
0012 1 * ALL RIGHTS RESERVED. *
0013 1 *
0014 1 * THIS SOFTWARE IS FURNISHED UNDER A LICENSE AND MAY BE USED AND COPIED *
0015 1 * ONLY IN ACCORDANCE WITH THE TERMS OF SUCH LICENSE AND WITH THE *
0016 1 * INCLUSION OF THE ABOVE COPYRIGHT NOTICE. THIS SOFTWARE OR ANY OTHER *
0017 1 * COPIES THEREOF MAY NOT BE PROVIDED OR OTHERWISE MADE AVAILABLE TO ANY *
0018 1 * OTHER PERSON. NO TITLE TO AND OWNERSHIP OF THE SOFTWARE IS HEREBY *
0019 1 * TRANSFERRED. *
0020 1 *
0021 1 * THE INFORMATION IN THIS SOFTWARE IS SUBJECT TO CHANGE WITHOUT NOTICE *
0022 1 * AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY DIGITAL EQUIPMENT *
0023 1 * CORPORATION. *
0024 1 *
0025 1 * DIGITAL ASSUMES NO RESPONSIBILITY FOR THE USE OR RELIABILITY OF ITS *
0026 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL. *
0027 1 *
0028 1 *
0029 1 *****
0030 1
0031 1 **
0032 1 FACILITY: DSR (Digital Standard RUNOFF) / DSRPLUS
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 Processes .PAGE SIZE, .LEFT MARGIN, and .RIGHT MARGIN commands.
0037 1
0038 1 ENVIRONMENT: Transportable
0039 1
0040 1 AUTHOR: R.W.Friday CREATION DATE: June, 1978
0041 1

```

```
.. 43 0042 1 %SBTTL 'Revision History'
.. 44 0043 1
.. 45 0044 1 MODIFIED BY:
.. 46 0045 1
.. 47 0046 1 008 KFA00008 Ken Aiden 06-Jul-1983
.. 48 0047 1 When GETNUM does not receive a value for .RM, the
.. 49 0048 1 right margin will now get set to 70 (default).
.. 50 0049 1
.. 51 0050 1 007 REM00007 Ray Marshall 20-April-1983
.. 52 0051 1 Retrofit decoupling of page size and right margin that was
.. 53 0052 1 done for DSRPLUS to now be in affect for DSR.
.. 54 0053 1
.. 55 0054 1 006 KAD00006 Keith Dawson 07-Mar-1983
.. 56 0055 1 Global edit of all modules. Updated module names, idents,
.. 57 0056 1 copyright dates. Changed require files to BLISS library.
.. 58 0057 1
.. 59 0058 1 --
```

```
61 0059 1 %SBTTL 'Module Level Declarations'  
62 0060 1  
63 0061 1 : TABLE OF CONTENTS:  
64 0062 1  
65 0063 1 : INCLUDE FILES:  
66 0064 1  
67 0065 1  
68 0066 1 LIBRARY 'NXPORT:XPORT'; : XPORT Library  
69 0067 1 REQUIRE 'REQ:RNODEF'; : RUNOFF variant definitions  
70 0198 1  
71 U 0199 1 %IF DSRPLUS %THEN  
72 U 0200 1 LIBRARY 'REQ:DPLLIB'; : DSRPLUS BLISS Library  
73 0201 1 %ELSE  
74 0202 1 LIBRARY 'REQ:DSRLIB'; : DSR BLISS Library  
75 0203 1 %FI  
76 0204 1  
77 0205 1  
78 0206 1 : EXTERNAL REFERENCES:  
79 0207 1  
80 0208 1 EXTERNAL  
81 0209 1 gca : gca_definition,  
82 0210 1 tra : fixed_string,  
83 0211 1 nmlst : number_list,  
84 0212 1 numprm : numprm_define,  
85 0213 1 phan : phan_definition,  
86 0214 1 sca : sca_definition;  
87 0215 1  
88 0216 1 EXTERNAL LITERAL  
89 0217 1 rnfbs,  
90 0218 1 rnfim;  
91 0219 1  
92 0220 1 EXTERNAL ROUTINE  
93 0221 1 erra,  
94 0222 1 glnm;  
95 0223 1  
96 0224 1  
97 0225 1 : OWN STORAGE:  
98 0226 1  
99 0227 1 OWN  
100 0228 1 rm_temp : INITIAL (0);  
101 0229 1
```

```

103 0230 1 GLOBAL ROUTINE page (handler_code) : NOVALUE =
104 0231 1
105 0232 1 |++
106 0233 1 | FUNCTIONAL DESCRIPTION:
107 0234 1 |
108 0235 1 |     See the ABSTRACT, above.
109 0236 1 |
110 0237 1 | FORMAL PARAMETERS:
111 0238 1 |
112 0239 1 |     handler_code - indicates which command is to be processed.
113 0240 1 |
114 0241 1 | IMPLICIT INPLIS:
115 0242 1 |
116 0243 1 |     numprm - contains a number as processed by getnum.
117 0244 1 |
118 0245 1 | IMPLICIT OUTPUTS:     None
119 0246 1 |
120 0247 1 | ROUTINE VALUE:
121 0248 1 | COMPLETION CODES:     None
122 0249 1 |
123 0250 1 | SIDE EFFECTS:         None
124 0251 1 | --
125 0252 1 |
126 0253 2 | BEGIN
127 0254 2 |
128 0255 2 | SELECT .handler_code OF
129 0256 2 | SET
130 0257 2 |
131 0258 2 | [h_right_margin, h_left_margin] :
132 0259 2 | IF NOT .num_result
133 0260 2 | THEN
134 0261 2 | |
135 0262 2 | |     Ignore command if number is in error.
136 0263 2 | |
137 0264 2 | | RETURN;
138 0265 2 |
139 0266 2 | [h_right_margin] :
140 0267 3 | BEGIN
141 0268 3 |
142 0269 3 | IF .num_sign NEQ 0
143 0270 3 | THEN
144 0271 3 | |
145 0272 3 | | Adjust existing margin, + or -.
146 0273 3 | |
147 0274 4 | | BEGIN
148 0275 4 | |
149 0276 4 | | Save adjustment value if it is positive.
150 0277 4 | | Otherwise, reset it to 0.
151 0278 4 | |
152 0279 4 | | IF .num_value GTR 0
153 0280 4 | | THEN
154 0281 4 | |     rm_temp = .num_value
155 0282 4 | | ELSE
156 0283 4 | |     rm_temp = 0;
157 0284 4 | |
158 0285 4 | | num_value = .num_value + .sca_rm;
159 0286 3 | | END;

```

```

160 0287 3
161 0288 3
162 0289 3
163 0290 4
164 0291 4
165 0292 4
166 0293 4
167 0294 3
168 0295 3
169 0296 3
170 0297 3
171 0298 4
172 0299 3
173 0300 4
174 0301 4
175 0302 4
176 0303 4
177 0304 4
178 0305 4
179 0306 4
180 0307 3
181 0308 3
182 0309 3
183 0310 2
184 0311 2
185 0312 2
186 0313 3
187 0314 3
188 0315 3
189 0316 3
190 0317 3
191 0318 3
192 0319 3
193 0320 3
194 0321 3
195 0322 3
196 0323 3
197 0324 3
198 0325 3
199 0326 3
200 0327 4
201 0328 4
202 0329 4
203 0330 4
204 0331 4
205 0332 4
206 0333 3
207 0334 2
208 0335 2
209 0336 2
210 0337 2
211 0338 3
212 0339 3
213 0340 3
214 0341 3
215 0342 3
216 0343 3

IF .num_length EQL 0
THEN
BEGIN
sca_rm = 70; !Current default 6-Jul-1983 [KFA]
RETURN;
END;

: Right margin is not unlimited.
IF (.num_value LEQ .sca_lm) OR (.num_value GTR 150)
THEN
BEGIN
: Bad margin.
erma (rnfbs, false);
RETURN;
END
ELSE
sca_rm = .num_value;

END;

[h_left_margin] :
BEGIN
IF .num_sign NEQ 0
THEN
: Adjust existing margin, + or -.
num_value = .num_value + .sca_lm;

IF .num_value GEQ .sca_rm
THEN
: Bad margin.
BEGIN
erma (rnfbs, false);
RETURN;
END
ELSE
sca_lm = .num_value;

END;

[h_page_size] :
BEGIN
: Turn on paging unless /NOPAGING.
phan_paging = .phan_cmd_paging;

: Get parameters.

```

```

217 0344 3      !
218 0345 3      glnm (2);
219 0346 3
220 0347 3      IF .nmlst_count GEQ 1
221 0348 3      THEN
222 0349 4      BEGIN
223 0350 4      |
224 0351 4      | First parameter defines lines per page.
225 0352 4      |
226 0353 4      | CASE .nmlst_descr (1) FROM 0 TO 4 OF
227 0354 4      | SET
228 0355 4      |
229 0356 4      | [nm_bad, nm_null] :
230 0357 4      | |
231 0358 4      | | Use current value if input was bad or not supplied.
232 0359 4      | |
233 0360 4      | | nmlst_value (1) = .phan_llines;
234 0361 4      | |
235 0362 4      | | [nm_plus, nm_minus] :
236 0363 4      | | |
237 0364 4      | | | Adjust value if adjustment was specified, + or -.
238 0365 4      | | |
239 0366 4      | | | nmlst_value (1) = .nmlst_value (1) + .phan_llines;
240 0367 4      | |
241 0368 4      | | [nm_unsigned] :
242 0369 4      | | |
243 0370 4      | | | Nothing to do if an unsigned number.
244 0371 4      | |
245 0372 4      | | 0;
246 0373 4      |
247 0374 4      | TES;
248 0375 4
249 0376 4      IF .nmlst_value (1) LSS phan_min_page_length
250 0377 4      THEN
251 0378 4      |
252 0379 4      | Page is too short.
253 0380 4      |
254 0381 4      | erma (rnfinm, false)
255 0382 4      |
256 0383 4      | ELSE
257 0384 4      | |
258 0385 4      | | Set new page length.
259 0386 4      | |
260 0387 4      | | phan_llines = .nmlst_value (1);
261 0388 3      |
262 0389 3      | END;
263 0390 3      | Process page width, if supplied.
264 0391 3
265 0392 3      IF .nmlst_count GEQ 2
266 0393 3      THEN
267 0394 4      BEGIN
268 0395 4      |
269 0396 4      | Second parameter defines page width.
270 0397 4      |
271 0398 4      | CASE .nmlst_descr (2) FROM 0 TO 4 OF
272 0399 4      | SET
273 0400 4

```



```

: 274 0401 4 [nm_lad, nm_null] :
: 275 0402 4 |
: 276 0403 4 | Use current value if input was bad or not supplied.
: 277 0404 4 |
: 278 0405 4 | nmlst_value (2) = .gca_lwidth;
: 279 0406 4 |
: 280 0407 4 [nm_plus] :
: 281 0408 4 |
: 282 0409 4 | Increase page width.
: 283 0410 4 |
: 284 0411 4 | nmlst_value (2) = .nmlst_value (2) + .gca_lwidth;
: 285 0412 4 |
: 286 0413 4 [nm_minus] :
: 287 0414 4 |
: 288 0415 4 | Decrease page width or right margin.
: 289 0416 4 |
: 290 0417 5 BEGIN
: 291 0418 5 |
: 292 0419 5 | See if adjustment value is same as saved value.
: 293 0420 5 |
: 294 0421 5 IF .rm_temp + .nmlst_value (2) EQL 0
: 295 0422 5 THEN
: 296 0423 5 |
: 297 0424 5 | If so, use it to pull in the right margin only.
: 298 0425 5 |
: 299 0426 6 BEGIN
: 300 0427 6 sca_rm = .sca_rm + .nmlst_value (2);
: 301 0428 6 |
: 302 0429 6 | Do not change setting of page width.
: 303 0430 6 |
: 304 0431 6 | nmlst_value (2) = .gca_lwidth;
: 305 0432 6 |
: 306 0433 6 | Reset saved value to zero.
: 307 0434 6 |
: 308 0435 6 | rm_temp = 0;
: 309 0436 6 END
: 310 0437 5 ELSE
: 311 0438 5 |
: 312 0439 5 | Decrease page width.
: 313 0440 5 |
: 314 0441 5 | nmlst_value (2) = .nmlst_value (2) + .gca_lwidth;
: 315 0442 5 |
: 316 0443 4 END;
: 317 0444 4 |
: 318 0445 4 [nm_unsigned] :
: 319 0446 4 |
: 320 0447 4 | Nothing to do if just a number.
: 321 0448 4 |
: 322 0449 4 | 0;
: 323 0450 4 |
: 324 0451 4 TES;
: 325 0452 4 |
: 326 0453 4 IF .nmlst_value (2) GTR 150
: 327 0454 4 THEN
: 328 0455 4 |
: 329 0456 4 | Bad margin specification.
: 330 0457 4 |

```



						00000096	8F		50	D1	00083	8\$:	CMP	R0, #150			
									F4	14	0008A		BGTR	7\$			
						00	B5		50	D0	0008C		MOVL	R0, @SCA+120		0308	
						0000006D	8F		52	D1	00090	9\$:	CMP	R2, #109		0312	
									13	12	00097		BNEQ	11\$			
								04	A4	D5	00099		TSTL	NUMPRM+8		0315	
									04	13	0009C		BEQL	10\$			
							64	FC	B5	C0	0009E		ADDL2	@SCA+116, NUMPRM+4		0320	
						00	B5		64	D1	000A2	10\$:	CMP	NUMPRM+4, @SCA+120		0322	
									D8	18	000A6		BGEQ	7\$			
						FC	B5		64	D0	000A8		MOVL	NUMPRM+4, @SCA+116		0332	
						000000A8	8F		52	D1	000AC	11\$:	CMP	R2, #168		0336	
									01	13	000B3		BEQL	12\$			
										04	000B5		RET				
							24	B6	28	A6	000B6	12\$:	MOVL	PHAN+44, @PHAN+40		0341	
									02	DD	000BB		PUSHL	#2		0345	
						00000000G	EF		01	FB	000BD		CALLS	#1, GLNM			
									F8	A3	D5	000C4		TSTL	NMLST		0347
									34	15	000C7		BLEQ	18\$			
									04	000C9			CASEL	NMLST+164, #0, #4		0353	
0011	04					0011	00	0016	009C	C3	CF	000C9		.WORD	14\$-13\$,-		
									000A		000CF	13\$:			16\$-13\$,-		
									000A		000D7				15\$-13\$,-		
															15\$-13\$,-		
															14\$-13\$		
							FC	A3	00	B6	D0	000D9	14\$:	MOVL	@PHAN+4, NMLST+4		0360
									05	11	000DE		BRB	16\$			
							FC	A3	00	B6	C0	000E0	15\$:	ADDL2	@PHAN+4, NMLST+4		0366
									0D	A3	D1	000E5	16\$:	CMP	NMLST+4, #13		0376
									0D	18	000E9		BGEQ	17\$			
									7E	D4	000EB		CLRL	-(SP)		0381	
									8F	DD	000ED		PUSHL	#RNFIM			
									02	FB	000F3		CALLS	#2, ERMA			
									05	11	000F6		BRB	18\$			
							00	B6	FC	A3	D0	000F8	17\$:	MOVL	NMLST+4, @PHAN+4		0386
									02	A3	D1	000FD	18\$:	CMP	NMLST, #2		0392
									45	19	00101		BLSS	26\$			
									04	00103			CASEL	NMLST+168, #0, #4		0398	
0010	04					0022	00	0026	00A0	C3	CF	00103		.WORD	20\$-19\$,-		
									000A		00109	19\$:			23\$-19\$,-		
									000A		00111				22\$-19\$,-		
															21\$-19\$,-		
															20\$-19\$		
															@GCA+140, NMLST+8		0405
															23\$		
							50			63	C1	00119	21\$:	ADDL3	NMLST+8, RM_TEMP, R0		0421
										0C	12	0011D		BNEQ	22\$		
										63	C0	0011F		ADDL2	NMLST+8, @SCA+120		0427
										B8	D0	00123		MOVL	@GCA+140, NMLST+8		0431
										67	D4	00127		CLRL	RM_TEMP		0435
										04	11	00129		BRB	23\$		0421
										B8	C0	0012B	22\$:	ADDL2	@GCA+140, NMLST+8		0441
										63	D1	0012F	23\$:	CMP	NMLST+8, #150		0453
										0C	15	00136		BLEQ	25\$		
										7E	D4	00138	24\$:	CLRL	-(SP)		0458
										8F	DD	0013A		PUSHL	#RNFIM		
									69	00140			CALLS	#2, ERMA			

```

      00  B8          63  04 00143      RET
                        00 00144 25$:  MOVL   NMLST+8, @GCA+140
                        04 00148 26$:  RET
                                                    : 0460
                                                    : 0465

```

; Routine Size: 329 bytes, Routine Base: \$CODE\$ + 0000

```

: 339          0466 1
: 340          0467 1 END
: 341          0468 0 ELUDOM
:
: End of module

```

PSECT SUMMARY

Name	Bytes	Attributes
\$OWNS	4	NOVEC, WRT, RD, NOEXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)
\$CODE\$	329	NOVEC, NOWRT, RD, EXE, NOSHR, LCL, REL, CON, NOPIC, ALIGN(2)

Library Statistics

File	Total	Symbols Loaded	Percent	Pages Mapped	Processing Time
\$255\$DUA28:[SYSLIB]XPORT.L32;1	590	0	0	252	00:00.1
\$255\$DUA28:[RUNOFF.SRC]DSRLIB.L32;1	1248	34	2	86	00:00.3

COMMAND QUALIFIERS

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

```

: Size:          329 code + 4 data bytes
: Run Time:      00:08.4
: Elapsed Time: 00:23.9
: Lines/CPU Min: 3362
: Lexemes/CPU-Min: 23216
: Memory Used: 85 pages
: Compilation Complete

```

This page contains a grid of 144 small tables (12 rows by 12 columns). Each small table represents a different utility or function. The titles for several of these tables are as follows:

Row	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8	Col 9	Col 10	Col 11	Col 12
1	PAGE LIS		PERMITE LIS									
2	PAGCMP LIS											
3												
4		PANPA LIS								RCS LIS		
5					POOL LIS							RINIT LIS
6			PERIOD LIS			PUS LIS						
7							PUTNDX LIS					
8		PARSE LIS					PUTTOC LIS			REQUIR LIS		
9												
10	PAGMRC LIS											
11		PARAG LIS								REPEAT LIS		

Each small table contains a list of parameters and their values for that specific utility. The text within these tables is small and difficult to read due to the image quality, but they generally follow a standard format for listing system variables.