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LL      IIIIII  BBBB BBBB  CCCCCCCC  UU      UU  SSSSSSSS  TTTTTTTTTT  000000  MM      MM
LL      IIIIII  BBBB BBBB  CCCCCCCC  UU      UU  SSSSSSSS  TTTTTTTTTT  000000  MM      MM
LL      II      BB      BB  CC      CC  SS      SS  TTTT      TT  00      00  MMMM  MMMM
LL      II      BB      BB  CC      CC  SS      SS  TT      TT  00      00  MMMM  MMMM
LL      II      BB      BB  CC      CC  SS      SS  TT      TT  00      00  MM  MM  MM
LL      II      BBBB BBBB  CC      CC  SSSSSS  TT      TT  00      00  MM      MM
LL      II      BBBB BBBB  CC      CC  SSSSSS  TT      TT  00      00  MM      MM
LL      II      BB      BB  CC      CC  SS      SS  TT      TT  00      00  MM      MM
LL      II      BB      BB  CC      CC  SS      SS  TT      TT  00      00  MM      MM
LL      II      BB      BB  CC      CC  SS      SS  TT      TT  00      00  MM      MM
LL      II      BBBB BBBB  CC      CC  SSSSSS  TT      TT  00      00  MM      MM
LLLLLLLLLLLL  IIIIII  BBBB BBBB  CCCCCCCC  UUUUUUUUUU  SSSSSSSS  TT      TT  000000  MM      MM
LLLLLLLLLLLL  IIIIII  BBBB BBBB  CCCCCCCC  UUUUUUUUUU  SSSSSSSS  TT      TT  000000  MM      MM

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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$CUSTOMIZE OUTPUT (%TITLE 'Customize printed output'  
2 0002 0 IDENT = '2-002' ! File: LIBCURREN.B32 Edit: DG2002  
3 0003 0 ) =  
4 0004 1 BEGIN  
5 0005 1  
6 0006 1 *****  
7 0007 1 *  
8 0008 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY  
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25 0025 1 *  
26 0026 1 *  
27 0027 1 *****  
28 0028 1  
29 0029 1  
30 0030 1 ++  
31 0031 1 FACILITY: General Purpose Library  
32 0032 1  
33 0033 1 ABSTRACT:  
34 0034 1  
35 0035 1 This module contains the procedures LIB$CURRENCY, LIB$DIGIT_SEP  
36 0036 1 and LIB$RADIX_POINT.  
37 0037 1  
38 0038 1 ENVIRONMENT: User mode - AST reentrant  
39 0039 1  
40 0040 1 AUTHOR: John Sauter, CREATION DATE: 18-OCT-1979  
41 0041 1  
42 0042 1 EDIT HISTORY:  
43 0043 1  
44 0044 1 1-001 - Original.  
45 0045 1 1-002 - Return signals as status. JBS 08-JAN-1980  
46 0046 1 1-003 - Change STR$ codes to LIB$. JBS 22-JAN-1980  
47 0047 1 1-004 - Enhance to recognize additional classes of string descriptors  
48 0048 1 by invoking LIB$ANALYZE_SDESC R3 to extract length and address  
49 0049 1 of 1st data byte from descriptor.  
50 0050 1 Change calls from STR$COPY_DX to LIB$SCOPY_DXDX6.  
51 0051 1 STR$COPY_R to LIB$SCOPY_R_DX.  
52 0052 1 STR$FREE1_DX to LIB$SFREE1-DD.  
53 0053 1 Eliminate need for handler and to convert STR$ statuses to  
54 0054 1 LIB$ statuses.  
55 0055 1 RKR 27-MAY-1981  
56 0056 1 1-005 - Add special-case code to process strings that "read" like  
57 0057 1 fixed strings. RKR 7-OCT-1981.
```

```
: 58      0058 1 | 1-006 - Redirect all jsb's from LIB$ANALYZE_SDESC_R3 to
: 59      0059 1 | LIB$ANALYZE_SDESC_R2. Do all copying with LIB$SCOPY_R_DX6.
: 60      0060 1 | RKR 18-NOV-1981.
: 61      0061 1 | 1-007 - Use $TRNLOG instead of LIB$SYS_TRNLOG. Other minor improvements.
: 62      0062 1 | SBL 8-Oct-1982
: 63      0063 1 | 2-001 - Rewrite using common inner routine. SBL 8-Feb-1983
: 64      0064 1 | 2-002 - Use LNM$C_NAMLENGTH for maximum size of equivalence string.
: 65      0065 1 | DG 31-Oct-1983
```



```
: 67      0066 1 |
: 68      0067 1 | PROLOGUE FILE:
: 69      0068 1 |
: 70      0069 1 |
: 71      0070 1 REQUIRE 'RTLIN:LIBPROLOG';          ! LIB$ definitions
: 72      0141 1 |
: 73      0142 1 |
: 74      0143 1 | TABLE OF CONTENTS:
: 75      0144 1 |
: 76      0145 1 |
: 77      0146 1 FORWARD ROUTINE
: 78      0147 1     LIB$CURRENCY,                ! Get currency symbol
: 79      0148 1     LIB$DIGIT_SEP,                ! Get digit separator
: 80      0149 1     LIB$RADIX_POINT,              ! Get radix point
: 81      0150 1     GET_CUSTOM_SYMBOL;            ! Inner routine
: 82      0151 1 |
: 83      0152 1 |
: 84      0153 1 | MACROS:
: 85      0154 1 |
: 86      0155 1 |     NONE
: 87      0156 1 |
: 88      0157 1 | EQUATED SYMBOLS:
: 89      0158 1 |
: 90      0159 1 |     NONE
: 91      0160 1 |
: 92      0161 1 | OWN STORAGE:
: 93      0162 1 |
: 94      0163 1 |     NONE
: 95      0164 1 |
: 96      0165 1 | EXTERNAL REFERENCES:
: 97      0166 1 |
: 98      0167 1 |
: 99      0168 1 EXTERNAL ROUTINE
: 100     0169 1     LIB$ANALYZE_SDESC_R2 : LIB$ANALYZE_SDESC_R2$LINKAGE,
: 101     0170 1                                     ! Get length and address
: 102     0171 1     LIB$SCOPY_R_DX6 : LIB$SCOPY_R_DX6$LINKAGE; ! Copy a string by reference
: 103     0172 1
```

```

: 105 0173 1 GLOBAL ROUTINE LIB$CURRENCY (%SBTTL 'Get currency symbol'
: 106 0174 1 CURRENCY_STR: REF BLOCK [, BYTE], ! Where to put symbol
: 107 0175 1 OUT_LEN: REF VECTOR [, WORD] ! Optional length of symbol
: 108 0176 1 ) =
: 109 0177 1
: 110 0178 1 ++
: 111 0179 1 FUNCTIONAL DESCRIPTION:
: 112 0180 1
: 113 0181 1 This routine returns the system's currency symbol. It should be
: 114 0182 1 used before a number to indicate that the number represents
: 115 0183 1 money in the country the system is running in. This routine
: 116 0184 1 works by translating the logical name SYSS$CURRENCY. If the
: 117 0185 1 translation fails, this routine returns '$', the US money
: 118 0186 1 symbol.
: 119 0187 1 If the translation succeeds the text produced is returned.
: 120 0188 1 Thus a system manager can define SYSS$CURRENCY as a system-wide
: 121 0189 1 logical name to provide a default for all users, and an
: 122 0190 1 individual user with a special need can define SYSS$CURRENCY as
: 123 0191 1 a user logical name to override the default.
: 124 0192 1
: 125 0193 1 CALLING SEQUENCE:
: 126 0194 1
: 127 0195 1 ret_status.wlc.v = LIB$CURRENCY (currency_str.wt.dx
: 128 0196 1 [,out_len.ww.r])
: 129 0197 1
: 130 0198 1
: 131 0199 1 FORMAL PARAMETERS:
: 132 0200 1
: 133 0201 1 currency_str String to receive the currency string
: 134 0202 1 out_len Optional length of the currency string.
: 135 0203 1 This is valuable if currency_str
: 136 0204 1 is a fixed-length string, since it does not
: 137 0205 1 include the padding.
: 138 0206 1
: 139 0207 1 IMPLICIT INPUTS:
: 140 0208 1
: 141 0209 1 System-wide (or user-defined) logical name SYSS$CURRENCY
: 142 0210 1
: 143 0211 1 IMPLICIT OUTPUTS:
: 144 0212 1
: 145 0213 1 NONE
: 146 0214 1
: 147 0215 1 CONDITION CODES:
: 148 0216 1
: 149 0217 1 LIB$_INVSTRDES Invalid string descriptor
: 150 0218 1 LIB$_STRTRU String truncated to fit into output
: 151 0219 1
: 152 0220 1 SIDE EFFECTS:
: 153 0221 1
: 154 0222 1 NONE
: 155 0223 1
: 156 0224 1 --
: 157 0225 1
: 158 0226 2 BEGIN
: 159 0227 2
: 160 0228 2 BUILTIN
: 161 0229 2 ACTUALCOUNT;
```



```
: 162      0230  2
: 163      0231  2
: 164      0232  2
: 165      0233  2
: 166      0234  2
: 167      0235  3
: 168      0236  3
: 169      0237  3
: 170      0238  3
: 171      0239  2
: 172      0240  2
: 173      0241  1

!+ Call GET_CUSTOM_SYMBOL to do the work.
!-

RETURN ( GET_CUSTOM_SYMBOL (
    CURRENCY_STR [0,0,0,0],
    (IF ACTUALCOUNT () GEQU 2 THEN OUT_LEN [0] ELSE 0),
    UPLIT BYTE (%ASCIC'SYS$CURRENCY'),
    %C'$'));

END;                                ! End of routine LIB$CURRENCY
```

```
.TITLE  LIB$CUSTOMIZE_OUTPUT Customize printed output
.IDENT  \2-002\

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

59 43 4E 45 52 52 55 43 24 53 59 53 0C 00000 P.AAA: .ASCII <12>\SYS$CURRENCY\ ;

.EXTRN  LIB$ANALYZE_SDESC_R2
.EXTRN  LIB$SCOPY_R_DX6

.ENTRY  LIB$CURRENCY, Save nothing ; 0173
PUSHL   #36 ; 0236
PUSHAB  P.AAA ; 0238
CMPB    (AP), #2 ; 0237
BLSSU   1$
PUSHL   OUT_LEN
BRB     2$
CLRL    -(SP)
PUSHL   CURRENCY_STR ; 0236
CALLS   #4, GET_CUSTOM_SYMBOL ; 0241
RET

0000 00000
24 DD 00002
EC AF 9F 00004
02 6C 91 00007
05 1F 0000A
08 AC DD 0000C
02 11 0000F
7E D4 00011 1$:
04 AC DD 00013 2$:
0000V CF 04 FB 00016
04 0001B

; Routine Size: 28 bytes, Routine Base: _LIB$CODE + 0000
```

```
175 0242 1 GLOBAL ROUTINE LIB$DIGIT_SEP (%SBTTL 'Get digit separator'
176 0243 1     DIGIT_SEP_STR: REF BLOCK [, BYTE],           ! Where to put symbol
177 0244 1     OUT_LEN: REF VECTOR [, WORD]                ! Optional length of symbol
178 0245 1     ) =
179 0246 1
180 0247 1 ++
181 0248 1 FUNCTIONAL DESCRIPTION:
182 0249 1
183 0250 1     This routine returns the system's digit separator symbol. It
184 0251 1     should be used to separate groups of three digits in the
185 0252 1     integer part of a number, for readability, using the customary
186 0253 1     symbol. This routine works by translating the logical name
187 0254 1     SYSS$DIGIT_SEP. If the translation fails, this routine returns
188 0255 1     ".", the OS digit separator. If the translation succeeds the
189 0256 1     text produced is returned. Thus a system manager can define
190 0257 1     SYSS$DIGIT_SEP as a system-wide logical name to provide a
191 0258 1     default for all users, and an individual user with a special
192 0259 1     need can define SYSS$DIGIT_SEP as a user logical name to
193 0260 1     override the default.
194 0261 1
195 0262 1 CALLING SEQUENCE:
196 0263 1
197 0264 1     ret_status.wlc.v = LIB$DIGIT_SEP (digit_sep_str.wt.dx
198 0265 1     [,out_len.ww.r])
199 0266 1
200 0267 1 FORMAL PARAMETERS:
201 0268 1
202 0269 1     digit_sep_str  String to receive the digit_sep string
203 0270 1     out_len        Optional length of the digit separator string.
204 0271 1                   This is valuable if digit_sep_str is a
205 0272 1                   fixed-length string, since it does not include
206 0273 1                   the padding.
207 0274 1
208 0275 1 IMPLICIT INPUTS:
209 0276 1
210 0277 1     System-wide (or user-defined) logical name SYSS$DIGIT_SEP
211 0278 1
212 0279 1 IMPLICIT OUTPUTS:
213 0280 1
214 0281 1     NONE
215 0282 1
216 0283 1 CONDITION CODES:
217 0284 1
218 0285 1     $$$ NORMAL      Normal successful completion
219 0286 1     LIB$_INVSTRDES  Invalid string descriptor
220 0287 1     LIB$_STRTRU     Result did not fit in caller's string;
221 0288 1                     truncated on right
222 0289 1
223 0290 1 SIDE EFFECTS:
224 0291 1
225 0292 1     NONE
226 0293 1
227 0294 1 --
228 0295 1
229 0296 2 BEGIN
230 0297 2
231 0298 2 BUILTIN
```



```

: 232      0299 2      ACTUALCOUNT;
: 233      0300
: 234      0301
: 235      0302
: 236      0303
: 237      0304
: 238      0305
: 239      0306
: 240      0307
: 241      0308
: 242      0309
: 243      0310
: 244      0311 1      END;

      ! Call GET_CUSTOM_SYMBOL to do the work.

      RETURN ( GET_CUSTOM_SYMBOL (
        DIGIT_SEP_STR [0,0,0,0],
        (IF ACTUALCOUNT () GEQU 2 THEN OUT_LEN [0] ELSE 0),
        UPLIT BYTE (%ASCIC'SYS$DIGIT_SEP'),
        %C', '));

      ! End of routine LIB$DIGIT_SEP
```

50 45 53 5F 54 49 47 49 44 24 53 59 53 0D 00029 P.AAB: .ASCII <13>\SYS\$DIGIT_SEP\ ;

			0000 00000	.ENTRY	LIB\$DIGIT_SEP, Save nothing	: 0242
		2C	DD 00002	PUSHL	#44	: 0306
		AF	9F 00004	PUSHAB	P.AAB	: 0308
	02	6C	91 00007	CMPB	(AP), #2	: 0307
		05	1F 0000A	BLSSU	1\$	:
		08	AC DD 0000C	PUSHL	OUT_LEN	:
		02	11 0000F	BRB	2\$	:
		7E	D4 00011 1\$:	CLRL	-(SP)	:
		04	AC DD 00013 2\$:	PUSHL	DIGIT_SEP_STR	: 0306
	0000V CF	04	FB 00016	CALLS	#4, GET_CUSTOM_SYMBOL	:
		04	0001B	RET		: 0311

; Routine Size: 28 bytes, Routine Base: _LIB\$CODE + 0037

```
246 0312 1 GLOBAL ROUTINE LIB$RADIX_POINT (%SBTTL 'Get radix point symbol'
247 0313 1 RADIX_POINT_STR: REF BLOCK [, BYTE], ! Where to put symbol
248 0314 1 OUT_LEN: REF VECTOR [, WORD] ! Optional length of symbol
249 0315 1 ) =
250 0316 1
251 0317 1 ++
252 0318 1 FUNCTIONAL DESCRIPTION:
253 0319 1
254 0320 1 This routine returns the system's radix point symbol. It
255 0321 1 should be used inside a digit string to divide the integer
256 0322 1 part from the fraction part, using the customary symbol.
257 0323 1 This routine works by translating the logical name
258 0324 1 SYSS$RADIX_POINT. If the translation fails, this routine
259 0325 1 returns ".", the US radix point symbol. If the translation
260 0326 1 succeeds the text produced is returned. Thus a system manager
261 0327 1 can define SYSS$RADIX_POINT as a system-wide logical name to
262 0328 1 provide a default for all users, and an individual user with a
263 0329 1 special need can define SYSS$RADIX_POINT as a user logical name
264 0330 1 to override the default.
265 0331 1
266 0332 1 CALLING SEQUENCE:
267 0333 1
268 0334 1 ret_status.wlc.v = LIB$RADIX_POINT (radix_point_str.wt.dx
269 0335 1 [,out_len.ww.r])
270 0336 1
271 0337 1 FORMAL PARAMETERS:
272 0338 1
273 0339 1 radix_point_str String to receive the radix point string
274 0340 1 out_len Optional length of the radix_point string.
275 0341 1 This is valuable if radix_point_str
276 0342 1 is a fixed-length string, since it does not
277 0343 1 include the padding.
278 0344 1
279 0345 1 IMPLICIT INPUTS:
280 0346 1
281 0347 1 System-wide (or user-defined) logical name SYSS$RADIX_POINT
282 0348 1
283 0349 1 IMPLICIT OUTPUTS:
284 0350 1
285 0351 1 NONE
286 0352 1
287 0353 1 CONDITION CODES:
288 0354 1
289 0355 1 SSS$ NORMAL Normal successful completion
290 0356 1 LIB$ INVSTRDES Invalid string descriptor
291 0357 1 LIB$ STRTRU String Truncated
292 0358 1
293 0359 1 SIDE EFFECTS:
294 0360 1
295 0361 1 NONE
296 0362 1
297 0363 1 --
298 0364 1
299 0365 2 BEGIN
300 0366 2
301 0367 2 BUILTIN
302 0368 2 ACTUALCOUNT;
```


LIB\$CUSTOMIZE_0 Customize printed output
2-002 Get radix point symbol

H 7
16-Sep-1984 00:42:22
14-Sep-1984 12:38:29

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

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```

: 303      0369 2
: 304      0370 2
: 305      0371 2
: 306      0372 2
: 307      0373 2
: 308      0374 3
: 309      0375 3
: 310      0376 3
: 311      0377 3
: 312      0378 2
: 313      0379 2
: 314      0380 1

!+ Call GET_CUSTOM_SYMBOL to do the work.
!-

RETURN ( GET_CUSTOM_SYMBOL (
    RADIX_POINT_STR-[0,0,0,0],
    (IF ACTUALCOUNT () GEQU 2 THEN OUT_LEN [0] ELSE 0),
    UPLIT BYTE (%ASCIC'SYSS$RADIX_POINT'),
    %C'.');

END;                                     ! End of routine LIB$RADIX_POINT
```

4E 49 4F 50 5F 58 49 44 41 52 24 53 59 53 0F 00053 P.AAC: .ASCII <15>\SYSS\$RADIX_POINT\
54 00052

			0000 00000	.ENTRY	LIB\$RADIX_POINT, Save nothing	:	0312
		2E	DD 00002	PUSHL	#46	:	0375
		AF	9F 00004	PUSHAB	P.AAC	:	0377
	02	6C	91 00007	CMPB	(AP), #2	:	0376
		05	1F 0000A	BLSSU	1\$	:	
		08	AC DD 0000C	PUSHL	OUT_LEN	:	
		02	11 0000F	BRB	2\$	:	
		7E	D4 00011 1\$:	CLRL	-(SP)	:	
		04	AC DD 00013 2\$:	PUSHL	RADIX_POINT_STR	:	0375
	0000V CF	04	FB 00016	CALLS	#4, GET_CUSTOM_SYMBOL	:	
		04	0001B	RET		:	0380

; Routine Size: 28 bytes, Routine Base: _LIB\$CODE + 0063

```
316 0381 1 ROUTINE GET_CUSTOM_SYMBOL (%SBTTL 'Inner routine'
317 0382 1 OUT_STR: REF BLOCK [, BYTE],           ! Where to put symbol
318 0383 1 OUT_LEN: REF VECTOR [, WORD],          ! Optional length of symbol
319 0384 1 LOGNAM: REF VECTOR [, BYTE],           ! ASCII logical name
320 0385 1 DEFAULT_CHAR: BYTE                     ! Default translation character
321 0386 1 ) =
322 0387 1
323 0388 1 ++
324 0389 1 FUNCTIONAL DESCRIPTION:
325 0390 1
326 0391 1 This routine is called by LIB$CURRENCY, LIB$DIGIT_SEP and
327 0392 1 LIB$RADIX_POINT to do the actual translation and string copying.
328 0393 1
329 0394 1 CALLING SEQUENCE:
330 0395 1
331 0396 1 ret_status.wlc.v = GET_CUSTOM_SYMBOL (out_str.wt.dx,
332 0397 1 [out_len.wv.r],
333 0398 1 lognam.rt.r,
334 0399 1 default_char.rbu.v)
335 0400 1
336 0401 1
337 0402 1 FORMAL PARAMETERS:
338 0403 1
339 0404 1 out_str String to receive the currency string
340 0405 1 out_len Optional length of the currency string.
341 0406 1 This is valuable if currency_str
342 0407 1 is a fixed-length string, since it does not
343 0408 1 include the padding.
344 0409 1 lognam The ASCII string containing the logical name to
345 0410 1 translate.
346 0411 1 default_char The default character to use if lognam doesn't translate.
347 0412 1
348 0413 1 IMPLICIT INPUTS:
349 0414 1
350 0415 1 NONE
351 0416 1
352 0417 1 IMPLICIT OUTPUTS:
353 0418 1
354 0419 1 NONE
355 0420 1
356 0421 1 CONDITION CODES:
357 0422 1
358 0423 1 LIB$_INVSTRDES Invalid string descriptor
359 0424 1 LIB$_STRTRU String truncated to fit into output
360 0425 1
361 0426 1 SIDE EFFECTS:
362 0427 1
363 0428 1 NONE
364 0429 1
365 0430 1 --
366 0431 1
367 0432 2 BEGIN
368 0433 2
369 0434 2 LOCAL
370 0435 2 TRNLOG STATUS, ! Status from $TRNLOG
371 0436 2 RET_STATUS, ! Return status
372 0437 2 EQUIV_LENGTH: WORD, ! Length of equivalence string
```



```

373      0438 2      LOGDES : BLOCK [8, BYTE],      ! String descriptor for logical
374      0439 2      name
375      0440 2      NUMDES : BLOCK [8, BYTE],      ! String descriptor for
376      0441 2      translated string
377      0442 2      EQUIV_STRING: VECTOR [LNM$C_NAMLENGTH, BYTE];! Equivalence string
378      0443 2
379      0444 2      !+
380      0445 2      !- Initialize descriptors for logical name and translated string
381      0446 2
382      0447 2      LOGDES [DSC$B_CLASS] = DSC$K_CLASS_S;
383      0448 2      LOGDES [DSC$B_DTYPE] = DSC$K_DTYPE_T;
384      0449 2      LOGDES [DSC$W_LENGTH] = .LOGNAM [0];
385      0450 2      LOGDES [DSC$A_POINTER] = LOGNAM [1];
386      0451 2
387      0452 2      NUMDES [DSC$B_CLASS] = DSC$K_CLASS_S;
388      0453 2      NUMDES [DSC$B_DTYPE] = DSC$K_DTYPE_T;
389      0454 2      NUMDES [DSC$W_LENGTH] = LNM$C_NAMLENGTH;
390      0455 2      NUMDES [DSC$A_POINTER] = EQUIV_STRING;
391      0456 2
392      0457 2      !+
393      0458 2      !- Translate and convert the logical name to determine
394      0459 2      the symbol.
395      0460 2      !-
396      0461 2      TRNLOG_STATUS = $TRNLOG (
397      0462 2      LOGNAM = LOGDES,
398      0463 2      RSLLEN = EQUIV_LENGTH,
399      0464 2      RSLBUF = NUMDES);
400      0465 2
401      0466 2      IF (( NOT .TRNLOG_STATUS) OR (.TRNLOG_STATUS EQL SS$_NOTRAN))
402      0467 2      THEN
403      0468 2      BEGIN
404      0469 2      EQUIV_STRING [0] = .DEFAULT_CHAR;      ! Use default
405      0470 2      EQUIV_LENGTH = 1;
406      0471 2      END;
407      0472 2
408      0473 2      !+
409      0474 2      !- EQUIV_STRING is now the string to return to the caller.
410      0475 2
411      0476 2      RET_STATUS = LIB$SCOPY_R_DX6 ( .EQUIV_LENGTH,
412      0477 2      EQUIV_STRING,
413      0478 2      .OUT_STR);
414      0479 2
415      0480 2      !+
416      0481 2      !- If caller supplied optional 2nd parameter (OUT_LEN), fill it in.
417      0482 2      No need to check status from LIB$ANALYZE_SDESC_R2. If OUT_STR
418      0483 2      was bad, call to LIB$SCOPY_R_DX6 will have caught it.
419      0484 2
420      0485 2      IF ( OUT_LEN [0] NEQA 0)
421      0486 2      THEN
422      0487 2      BEGIN
423      0488 2      LOCAL
424      0489 2      WRITTEN_LEN: WORD;
425      0490 2      LIB$ANALYZE_SDESC_R2 (.OUT_STR;
426      0491 2      WRITTEN_LEN);
427      0492 2      IF .WRITTEN_LEN LSSU .EQUIV_LENGTH
428      0493 2      THEN
429      0494 2      EQUIV_LENGTH = .WRITTEN_LEN;
```

```
: 430      0495 3      OUT_LEN [0] = .EQUIV_LENGTH;  
: 431      0496 2      END;  
: 432      0497 2  
: 433      0498 2      RETURN (.RET_STATUS);  
: 434      0499 1      END;
```

! End of routine GET_CUSTOM_SYMBOL

.EXTRN SYS\$TRNLOG

007C 00000 GET_CUSTOM_SYMBOL:

		5E	FEEC	CE	9E	00002	WORD	Save R2,R3,R4,R5,R6	: C381	
		AD	010E	8F	B0	00007	MOVAB	-276(SP), SP		
		F8	AD	BC	9B	0000D	MOVW	#270, LOGDES+2	: 0448	
		OC	AD	01	C1	00012	MOVZBW	@LOGNAM, LOGDES	: 0449	
FC	AD	FO	AD	8F	D0	00018	ADDL3	#1, LOGNAM, LOGDES+4	: 0450	
		F4	AD	AE	9E	00020	MOVL	#17694975, NUMDES	: 0454	
				7E	7C	00025	MOVAB	EQUIV_STRING, NUMDES+4	: 0455	
				7E	D4	00027	CLRQ	-(SP)	: 0464	
				AD	9F	00029	CLRL	-(SP)		
			FO	AD	9F	00029	PUSHAB	NUMDES		
			10	AE	9F	0002C	PUSHAB	EQUIV_LENGTH		
			F8	AD	9F	0002F	PUSHAB	LOGDES		
		00000000G	00	06	FB	00032	CALLS	#6, SYS\$TRNLOG		
			09	50	E9	00039	BLBC	TRNLOG_STATUS, 1\$	: 0466	
		00000629	8F	50	D1	0003C	CMPL	TRNLOG_STATUS, #1577		
				08	12	00043	BNEQ	2\$		
		04	AE	AC	90	00045	1\$:	MOVW	DEFAULT_CHAR, EQUIV_STRING	: 0469
			6E	01	B0	0004A	MOVW	#1, EQUIV_LENGTH	: 0470	
			51	AE	9E	0004D	2\$:	MOVAB	EQUIV_STRING, R1	: 0476
			52	AC	D0	00051	MOVL	OUT_STR, R2		
			50	6E	3C	00055	MOVZWL	EQUIV_LENGTH, R0		
			53	00	16	00058	JSB	LIB\$COPY_R_DX6		
				50	D0	0005E	MOVL	R0, RET_STATUS		
				AC	D5	00061	TSTL	OUT_LEN	: 0485	
				19	13	00064	BEQ	4\$		
			50	AC	D0	00066	MOVL	OUT_STR, R0	: 0490	
				00	16	0006A	JSB	LIB\$ANALYZE_SDESC_R2		
			50	51	D0	00070	MOVL	R1, WRITTEN_LEN		
			6E	50	B1	00073	CMPL	WRITTEN_LEN, EQUIV_LENGTH	: 0492	
				03	1E	00076	BGEQU	3\$		
			6E	50	B0	00078	MOVW	WRITTEN_LEN, EQUIV_LENGTH	: 0494	
		08	BC	6E	B0	0007B	3\$:	MOVW	EQUIV_LENGTH, @OUT_LEN	: 0495
			50	53	D0	0007F	4\$:	MOVL	RET_STATUS, R0	: 0498
				04	00082		RET		: 0499	

: Routine Size: 131 bytes, Routine Base: _LIB\$CODE + 007F

```
: 435      0500 1  
: 436      0501 1 END  
: 437      0502 1  
: 438      0503 0 ELUDOM
```

! End of module LIB\$CUSTOMIZE_OUTPUT

PSECT SUMMARY

```
:
:      Name                Bytes                Attributes
:  _LIB$CODE              258 NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)
```

Library Statistics

```
:
:      File                ----- Symbols ----- Pages Processing
:                        Total   Loaded   Percent   Mapped   Time
:  _$255$DUA28:[SYSLIB]STARLET.L32;1      9776      11      0      581      00:00.7
:  _$255$DUA28:[LIBRTL.OBJ]RTLLIB.L32;1    36        2      5        8      00:00.1
```

COMMAND QUALIFIERS

```
:
:  BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACE/LIS=LIS$:LIBCUSTOM/OBJ=OBJ$:LIBCUSTOM MSRC$:LIBCUSTOM/UPDATE=(ENH$:LIBCUSTOM
:  )
```

```
: Size:      215 code + 43 data bytes
: Run Time:   00:05.1
: Elapsed Time: 00:21.2
: Lines/CPU Min: 5940
: Lexemes/CPU-Min: 19877
: Memory Used: 68 pages
: Compilation Complete
```


0204 AH-BT13A-SE
VAX/VMS V4.0

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