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```
1 0001 0 MODULE STR$PREFIX (! Prefix a string to the beginning of the destination
2 0002 0
3 0003 0 IDENT = '1-007' ! File: STRPREFIX.B32 Edit: DG1007
4 0004 0
5 0005 0 ) =
6 0006 1 BEGIN
7 0007 1
8 0008 1
9 0009 1 *****
10 0010 1 *
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28 0028 1 *
29 0029 1 *
30 0030 1 *****
31 0031 1
32 0032 1
33 0033 1 ++
34 0034 1 FACILITY: String support library
35 0035 1
36 0036 1 ABSTRACT:
37 0037 1 This routine prefixes the input string onto the beginning of the
38 0038 1 the destination string. It will handle strings of any supported
39 0039 1 dtype or class.
40 0040 1
41 0041 1 ENVIRONMENT: User mode, AST level or not or mixed
42 0042 1
43 0043 1 AUTHOR: R. Will, CREATION DATE: 1-Dec-79
44 0044 1
45 0045 1 MODIFIED BY:
46 0046 1
47 0047 1 R. Will, 1-Dec-79 : VERSION 01
48 0048 1 1-001 - Original
49 0049 1 1-002 - String speedup, status from macros. RW 11-Jan-1980
50 0050 1 1-003 - Enhance to recognize additional classes of descriptors by
51 0051 1 using $STR$GET_LEN_ADDR to extract length and address
52 0052 1 of 1st byte of data of source string. Remove string
53 0053 1 interlocking code. RKR 22-APR-81.
54 0054 1 1-004 - Fix bug in code where class_vs destination must be truncated.
55 0055 1 (non-overlap case).
56 0056 1 RKR 25-AUG-1981
57 0057 1 1-005 - Speed up code. RKR 7-OCT-1981.
```


STR\$PREFIX
1-007

B 3
16-Sep-1984 01:46:15 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:40:13 [LIBRTL.SRC]STR\$PREFIX.B32;1

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(1)

: 58
: 59
: 60
: 61
0058 1 ! 1-006 - Add support for class SO string descriptors. DG 3-Oct-1983.
0059 1 ! 1-007 - Change class SO string descriptors to SB. DG 27-Feb-1984.
0060 1 ! --
0061 1 ! <BLF/PAGE>


```

: 63      0062 1 |
: 64      0063 1 | SWITCHES:
: 65      0064 1 |
: 66      0065 1 |
: 67      0066 1 | SWITCHES ADDRESSING MODE
: 68      0067 1 | (EXTERNAL = GENERAL, NONEXTERNAL = WORD_RELATIVE);
: 69      0068 1 |
: 70      0069 1 |
: 71      0070 1 | LINKAGES:
: 72      0071 1 |
: 73      0072 1 |
: 74      0073 1 | REQUIRE 'RTLIN:STRLNK';           ! Use require file with string linkages
: 75      0258 1 |
: 76      0259 1 |
: 77      0260 1 | TABLE OF CONTENTS:
: 78      0261 1 |
: 79      0262 1 |
: 80      0263 1 | FORWARD ROUTINE
: 81      0264 1 | STR$PREFIX;
: 82      0265 1 | ! prefix the input string to the
: 83      0266 1 | ! beginning of the destination string
: 84      0267 1 |
: 85      0268 1 | INCLUDE FILES:
: 86      0269 1 |
: 87      0270 1 |
: 88      0271 1 | REQUIRE 'RTLIN:RTLPSECT';         ! Declare PSECTS code
: 89      0366 1 | REQUIRE 'RTLIN:STRMACROS';       ! use string macros to write code
: 90      1282 1 | LIBRARY 'RTLSTARLE';             ! STARLET library for macros and symbols
: 91      1283 1 |
: 92      1284 1 |
: 93      1285 1 | MACROS : NONE
: 94      1286 1 |
: 95      1287 1 |
: 96      1288 1 |
: 97      1289 1 | EQUATED SYMBOLS: NONE
: 98      1290 1 |
: 99      1291 1 |
: 100     1292 1 |
: 101     1293 1 | PSECT DECLARATIONS
: 102     1294 1 |
: 103     1295 1 |
: 104     1296 1 | DECLARE_PSECTS (STR);
: 105     1297 1 |
: 106     1298 1 |
: 107     1299 1 | OWN STORAGE: NONE
: 108     1300 1 |
: 109     1301 1 |
: 110     1302 1 |
: 111     1303 1 | EXTERNAL REFERENCES:
: 112     1304 1 |
: 113     1305 1 | EXTERNAL LITERAL
: 114     1306 1 | STR$_ILLSTRCLA,                  ! signal illegal class error
: 115     1307 1 | STR$_TRU,                       ! warning, truncation
: 116     1308 1 | STR$_NORMAL;                    ! successful append
: 117     1309 1 |
: 118     1310 1 | EXTERNAL ROUTINE
: 119     1311 1 | LIB$STOP;                       ! signal errors
```



```
121 1312 1 GLOBAL ROUTINE STR$PREFIX ( ! Prefix a string to the start of another
122 1313 1
123 1314 1     DEST_DESC, ! pointer to destination descriptor
124 1315 1     SRC_DESC ! pointer to source descriptor
125 1316 1
126 1317 1     ) =
127 1318 1
128 1319 1 ++
129 1320 1 FUNCTIONAL DESCRIPTION:
130 1321 1
131 1322 1     This routine takes a source string of any supported dtype and
132 1323 1     class, and prefixes that string to the beginning of the
133 1324 1     destination string, which may be of any supported class or
134 1325 1     dtype, except that it is impossible to add something to the
135 1326 1     beginning of a string having fixed length semantics so an error
136 1327 1     will always be signalled in that case
137 1328 1
138 1329 1 FORMAL PARAMETERS:
139 1330 1
140 1331 1     DEST_DESC.wt.dx pointer to destination descriptor
141 1332 1     SRC_DESC.rt.dx  pointer to source descriptor
142 1333 1
143 1334 1 IMPLICIT INPUTS:
144 1335 1
145 1336 1     NONE
146 1337 1
147 1338 1 IMPLICIT OUTPUTS:
148 1339 1
149 1340 1     NONE
150 1341 1
151 1342 1 COMPLETION CODES:
152 1343 1
153 1344 1     STR$_NORMAL Success
154 1345 1     STR$_TRU      Truncation occurred. Warning.
155 1346 1
156 1347 1 SIDE EFFECTS:
157 1348 1
158 1349 1     STR$_ILLSTRCLA may be signalled if the destination string has
159 1350 1     fixed length semantics or undefined class.
160 1351 1     Dynamic string space may be allocated or deallocated
161 1352 1
162 1353 1 --
163 1354 1
164 1355 2 BEGIN
165 1356 2
166 1357 2 LOCAL
167 1358 2     IN_LEN, ! length of source string
168 1359 2     IN_ADDR, ! address of 1st byte of source string
169 1360 2     RETURN_STATUS; ! statuses from macros
170 1361 2
171 1362 2 MAP
172 1363 2     SRC_DESC : REF $STR$DESCRIPTOR,
173 1364 2     DEST_DESC : REF $STR$DESCRIPTOR;
174 1365 2
175 1366 2 RETURN_STATUS = 1 ; ! Assume success to follow
176 1367 2
177 1368 2 !+
```



```
178 1369 2 ! Extract length and address of 1st data byte of source string.
179 1370 2 ! Signal if a fatal error results.
180 1371 2 !-
181 1372 2 $STR$GET_LEN_ADDR ( SRC_DESC, IN_LEN, IN_ADDR ) ;
182 1373 2 !-
183 1374 2 !+
184 1375 2 ! algorithm differs based on the class of the destination descriptor
185 1376 2 !-
186 1377 2
187 1378 2 CASE .DEST_DESC [DSC$B_CLASS]
188 1379 2 FROM DSC$K_CLASS_2 TO DSC$K_CLASS_SB OF
189 1380 2 SET
190 1381 2
191 1382 2 !+
192 1383 2 ! dynamic destination strings
193 1384 2 ! *****
194 1385 2 !-
195 1386 2
196 1387 2 [DSC$K_CLASS_D]:
197 1388 2 BEGIN
198 1389 2 IF
199 1390 2 %IF %BLISS (BLISS16) OR %BLISS (BLISS36)
200 1391 2 %THEN
201 1392 2 $STR$OVERLAP (
202 1393 2 .DEST_DESC [DSC$A_POINTER],
203 1394 2 .DEST_DESC [DSC$W_LENGTH],
204 1395 2 CH$PLUS (.DEST_DESC [DSC$A_POINTER],
205 1396 2 .DEST_DESC [DSC$W_LENGTH]),
206 1397 2 .DEST_DESC [DSC$W_LENGTH])
207 1398 2 OR
208 1399 2 %FI
209 1400 2 $STR$OVERLAP (
210 1401 2 .IN_ADDR,
211 1402 2 .IN_LEN,
212 1403 2 CH$PLUS (.DEST_DESC [DSC$A_POINTER], .IN_ADDR),
213 1404 2 .DEST_DESC [DSC$W_LENGTH])
214 1405 2 OR
215 1406 2 ($STR$NEED_ALLOC (
216 1407 2 .IN_ADDR + .DEST_DESC [DSC$W_LENGTH],
217 1408 2 ($STR$DYN_AL_LEN (DEST_DESC) ) ) )
218 1409 2 THEN
219 1410 2 BEGIN
220 1411 2 LOCAL TEMP_DESC : $STR$DESCRIPTOR;
221 1412 2
222 1413 2 !+
223 1414 2 ! If allocate is successful, continue the operation,
224 1415 2 ! otherwise remember a fatal error
225 1416 2 !-
226 1417 2 IF (RETURN STATUS = $STR$ALLOCATE (
227 1418 2 .IN_LEN + .DEST_DESC [DSC$W_LENGTH],
228 1419 2 TEMP_DESC))
229 1420 2 THEN
230 1421 2 BEGIN
231 1422 2 !+
232 1423 2 ! move source to temp
233 1424 2
234 1425 2
```



```
: 235      1426 5
: 236      1427 5
: 237      1428 5
: 238      1429 5
: 239      1430 5
: 240      1431 5
: 241      1432 5
: 242      1433 5
: 243      1434 5
: 244      1435 5
: 245      1436 5
: 246      1437 5
: 247      1438 5
: 248      1439 5
: 249      1440 5
: 250      1441 5
: 251      1442 5
: 252      1443 5
: 253      1444 5
: 254      1445 5
: 255      1446 5
: 256      1447 4
: 257      1448 4
: 258      1449 4
: 259      1450 3
: 260      1451 3
: 261      1452 4
: 262      1453 4
: 263      1454 4
: 264      1455 4
: 265      1456 4
: 266      1457 4
: 267      1458 4
: 268      1459 4
: 269      1460 4
: 270      1461 4
: 271      1462 4
: 272      1463 4
: 273      1464 4
: 274      1465 4
: 275      1466 4
: 276      1467 4
: 277      1468 4
: 278      1469 4
: 279      1470 4
: 280      1471 3
: 281      1472 2
: 282      1473 2

      !-
      CH$MOVE (.IN_LEN, .IN_ADDR,
               .TEMP_DESC [DSC$A_POINTER]);

      !+
      !- move destination to end of temp
      CH$MOVE (.DEST_DESC [DSC$W_LENGTH],
               .DEST_DESC [DSC$A_POINTER],
               CH$PLUS (.TEMP_DESC [DSC$A_POINTER],
                       .IN_LEN));

      !+
      !- switch temp and destination descriptors
      $STR$EXCH_DESCS (TEMP_DESC, DEST_DESC);

      !+
      !- deallocate temp
      RETURN_STATUS = $STR$DEALLOCATE (TEMP_DESC);
      END;
END

ELSE
  BEGIN
    !+
    !- move destination down
    CH$MOVE (.DEST_DESC [DSC$W_LENGTH],
             .DEST_DESC [DSC$A_POINTER],
             CH$PLUS (.DEST_DESC [DSC$A_POINTER],
                     .IN_LEN));

    !+
    !- move source in front of it
    CH$MOVE (.IN_LEN, .IN_ADDR, .DEST_DESC [DSC$A_POINTER]);

    !+
    !- readjust length of output
    DEST_DESC [DSC$W_LENGTH] = .DEST_DESC [DSC$W_LENGTH] +
                               .IN_ADDR;
  END;
END;
```



```
284 1474 2 !+
285 1475 2 ! Varying string destination
286 1476 2 ! *****
287 1477 2 ! -
288 1478 2
289 1479 2
290 1480 2
291 1481 2
292 1482 2
293 1483 2
294 1484 2
295 1485 2
296 1486 2
297 1487 2
298 1488 2
299 1489 2
300 1490 2
301 1491 2
302 1492 2
303 1493 2
304 1494 2
305 1495 2
306 1496 2
307 1497 2
308 1498 2
309 1499 2
310 1500 2
311 1501 2
312 1502 2
313 1503 2
314 1504 2
315 1505 2
316 1506 2
317 1507 2
318 1508 2
319 1509 2
320 1510 2
321 1511 2
322 1512 2
323 1513 2
324 1514 2
325 1515 2
326 1516 2
327 1517 2
328 1518 2
329 1519 2
330 1520 2
331 1521 2
332 1522 2
333 1523 2
334 1524 2
335 1525 2
336 1526 2
337 1527 2
338 1528 2
339 1529 2
340 1530 2

!+
! Varying string destination
! *****
! -

[DSC$K_CLASS_VS]:
BEGIN
LOCAL
OUT_LEN,      ! current destination length
OUT_ADDR,     ! current pointer to destination
TOT_LEN;      ! MIN of sum of IN_LEN + OUT_LEN
               ! and MAXSTRLEN

!+
! set up current length and address of 1st byte of data for
! a varying string destination.
! -
OUT_LEN = .(DEST_DESC [DSC$A_POINTER])<0,16> ;
OUT_ADDR = DEST_DESC [DSC$A_POINTER] + 2 ;
TOT_LEN = MIN ( .IN_LEN + .OUT_LEN,
               .DEST_DESC [DSC$W_MAXSTRLEN] ) ;

IF
%IF %BLISS (BLISS16) OR %BLISS (BLISS36)
%THEN
$STR$OVERLAP (
    .OUT_ADDR,
    .OUT_LEN,
    CH$PLUS (.OUT_ADDR,
             .OUT_LEN)
OR
%FI
$STR$OVERLAP (
    .IN_ADDR,
    .IN_LEN,
    CH$PLUS (.OUT_ADDR, .IN_ADDR),
    .OUT_LEN)
THEN
    ! then allocate a temp
    ! and use it for
    ! building output string

BEGIN      ! Overlap case
LOCAL TEMP_DESC : $STR$DESCRIPTOR;
!+
! If allocate is successful, continue the operation,
! otherwise remember a fatal error
! -
IF (RETURN STATUS = $STR$ALLOCATE (
    .IN_LEN + .OUT_LEN,
    TEMP_DESC))
THEN
BEGIN      ! copy via temp descr after succ alloc
!+
! move source to temp
! -
CH$MOVE (.IN_LEN, .IN_ADDR,
```



```

      .TEMP_DESC [DSC$A_POINTER]);
      !+
      !- move destination to end of temp
      CH$MOVE (.OUT_LEN,
              .OUT_ADDR,
              CH$PCUS (.TEMP_DESC [DSC$A_POINTER],
                      .IN_LEN));
      !+
      !- copy temp to varying string destination
      CH$MOVE ( .TOT_LEN,
              .TEMP_DESC [DSC$A_POINTER],
              .OUT_ADDR);
      !+
      !- deallocate temp
      RETURN_STATUS = $STR$DEALLOCATE (TEMP_DESC);
      END;          ! copy via temp descr after succ alloc
      ! Overlap case
ELSE
      BEGIN          ! non-overlap case
      !+
      !- move destination down within destination string
      CH$MOVE (MIN (.OUT_LEN,
                  MAX (
                      .DEST_DESC [DSC$W_MAXSTRLEN] - .IN_LEN,
                      0)),
              .OUT_ADDR,
              CH$PCUS (.OUT_ADDR,
                      .IN_LEN));
      !+
      !- move source in front of it
      CH$MOVE (MIN (.IN_LEN,
                  .DEST_DESC [DSC$W_MAXSTRLEN]),
              .IN_ADDR,
              .OUT_ADDR);
      END;          ! non-overlap case
      !+
      !- readjust length of output -- the CURLEN field
      (.DEST_DESC [DSC$A_POINTER])<0,16> = .TOT_LEN;
      !+
      !- if truncation occurred in copying, make a note of it
      IF .IN_LEN + .OUT_LEN GTRU .DEST_DESC [DSC$W_MAXSTRLEN]
```


STR\$PREFIX
1-007

¹₃
16-Sep-1984 01:46:15
14-Sep-1984 12:40:13

VAX-11 Bliss-32 V4.0-742
[LIBRTL.SRC]STR\$PREFIX.B32;1

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: 398 1588 3
: 399 1589 3
: 400 1590 2

THEN RETURN_STATUS = STR\$_TRU ;
END; ! of DSC\$K_CLASS_VS

	OF	00	03	A8	8F	00024	29:
0020	002A	0020		0020		00028	
0020	002A	0020		0020		0002D	3\$:
01F5	0020	0020		0020		00035	
0020	0020	0020		0020		0003D	
				0020		00045	

	5B	00000000G	8F	D0	0004D	4\$:	MOVL	#STR\$_ILLSTRCLA, RETURN_STATUS	1596	
			033B	31	00054		BRW	57\$		
50	56		04	A8	D0	00057	5\$:	MOVL	4(R8), R6	1405
	56			5A	C1	0005B		ADDL3	IN_ADDR, R6, R0	
	50			5A	D1	0005F		CMPL	IN_ADDR, R0	
				0B	1E	00062		BGEQU	6\$	
51	5A			59	C1	00064		ADDL3	IN_LEN, IN_ADDR, R1	
	51			50	D1	00068		CMPL	R0, R1	
				0D	18	0006B		BGEQ	7\$	
				58	11	0006D		BRB	14\$	
	51			68	3C	0006F	6\$:	MOVZWL	(R8), R1	
	50			51	C0	00072		ADDL2	R1, R0	
	50			5A	D1	00075		CMPL	IN_ADDR, R0	
				77	19	00078		BLSS	20\$	
				52	D4	0007A	7\$:	CLRL	R2	1410
				56	D5	0007C		TSTL	R6	
				06	12	0007E		BNEQ	8\$	
				52	D6	00080		INCL	R2	
				50	D4	00082		CLRL	R0	
				13	11	00084		BRB	10\$	
00F0	8F			68	B1	00086	8\$:	CMPW	(R8), #240	
				05	1B	0008B		BLEQU	9\$	
	50			68	3C	0008D		MOVZWL	(R8), R0	
				07	11	00090		BRB	10\$	
	50			56	D0	00092	9\$:	MOVL	R6, STRING_BLOCK	
	50			A0	3C	00095		MOVZWL	-2(STRING_BLOCK), R0	
000000F0	8F	FE		50	D1	00099	10\$:	CMPL	R0, #240	
				27	1F	000A0		BLSSU	15\$	
	51			68	3C	000A2		MOVZWL	(R8), R1	
	51			5A	C0	000A5		ADDL2	IN_ADDR, R1	
	04			52	E9	000A8		BLBC	R2, 11\$	
				50	D4	000AB		CLRL	R0	
				13	11	000AD		BRB	13\$	
00F0	8F			68	B1	000AF	11\$:	CMPW	(R8), #240	
				05	1B	000B4		BLEQU	12\$	
	50			68	3C	000B6		MOVZWL	(R8), R0	
				07	11	000B9		BRB	13\$	
	50			56	D0	000BB	12\$:	MOVL	R6, STRING_BLOCK	
	50	FE		A0	3C	000BE		MOVZWL	-2(STRING_BLOCK), R0	
	50			51	D1	000C2	13\$:	CMPL	R1, R0	
				27	13	000C5		BEQL	19\$	
				28	11	000C7	14\$:	BRB	20\$	
	51			68	3C	000C9	15\$:	MOVZWL	(R8), R1	
	51			5A	C0	000CC		ADDL2	IN_ADDR, R1	
	04			52	E9	000CF		BLBC	R2, 16\$	
				50	D4	000D2		CLRL	R0	
				13	11	000D4		BRB	18\$	
00F0	8F			68	B1	000D6	16\$:	CMPW	(R8), #240	
				05	1B	000DB		BLEQU	17\$	
	50			68	3C	000DD		MOVZWL	(R8), R0	
				07	11	000E0		BRB	18\$	
	50			56	D0	000E2	17\$:	MOVL	R6, STRING_BLOCK	
	50	FE		A0	3C	000E5		MOVZWL	-2(STRING_BLOCK), R0	
	50			51	D1	000E9	18\$:	CMPL	R1, R0	
				03	1A	000EC		BGTRU	20\$	
				0122	31	000EE	19\$:	BRW	33\$	
				00	E8	000F1	20\$:	BLBS	STR\$\$V_INIT, 21\$	1421
	07	00000000G								

00000000G	00	00	FB	000FB	CALLS	#0, STR\$INIT	
	51	00000000G	8F	D0 000FF	21\$:	MOVL	#STR\$NORMAL, RETURN_STATUS
	52		68	3C 00106		MOVZWL	(R8), R2
	52		59	C0 00109		ADDL2	IN_LEN, R2
000000F0	8F		52	D1 0010C		CMPL	R2, #240
			4C	1A 00113		BGTRU	27\$
			52	D5 00115		TSTL	R2
			04	12 00117		BNEQ	22\$
			53	D4 00119		CLRL	TEMP
			35	11 0011B		BRB	26\$
	50	FF	A2	9E 0011D	22\$:	MOVAB	-1(R2), R0
	50		07	8A 00121		BICB2	#7, R0
	54	00000000G	00	9E 00124		MOVAB	STR\$Q SHORT Q[R0], REMQUE_ADDR
	53	00	B4	0F 0012C	23\$:	REMQUE	@0(REMQUE_ADDR), TEMP
			05	1D 00130		BVS	24\$
	52		01	D0 00132		MOVL	#1, ALLOC_DONE
			13	11 00135		BRB	25\$
			52	D4 00137	24\$:	CLRL	ALLOC_DONE
	50	04	BC	3C 00139		MOVZWL	@DEST_DESC, R0
			60	9F 0013D		PUSHAB	(R0)[IN_LEN]
00000000G	00		01	FB 00140		CALLS	#1, STR\$SALOC SHORT
	51		50	D0 00147		MOVL	R0, RETURN_STATUS
	05		52	E8 0014A	25\$:	BLBS	ALLOC_DONE, 26\$
	35		51	E9 0014D		BLBC	RETURN_STATUS, 29\$
			DA	11 00150		BRB	23\$
	30		51	E9 00152	26\$:	BLBC	RETURN_STATUS, 29\$
10	AE	14	AE	53	D0 00155	MOVL	TEMP, TEMP_DESC+4
			59	04	BC	A1 00159	ADDW3
				24	11 0015F	BRB	29\$
				AE	9F 00161	27\$:	PUSHAB
	08	AE		52	D0 00164	MOVL	R2, 8(SP)
			08	AE	9F 00168	PUSHAB	8(SP)
00000000G	00		02	FB 0016B		CALLS	#2, LIB\$GET VM
	51		50	D0 00172		MOVL	R0, RETURN_STATUS
	09		51	E8 00175		BLBS	RETURN_STATUS, 28\$
	51	00000000G	8F	D0 00178		MOVL	#STR\$INSVIRMEM, RETURN_STATUS
			04	11 0017F		BRB	29\$
	10	AE	52	B0 00181	28\$:	MOVW	R2, TEMP_DESC
		5B	51	D0 00185	29\$:	MOVL	RETURN_STATUS, RETURN_STATUS
		03	51	E8 00188		BLBS	RETURN_STATUS, 30\$
			02	04	31 0018B	BRW	57\$
14	BE		59	28 0018E	30\$:	MOVW3	IN_LEN, (IN_ADDR), @TEMP_DESC+4
			56	04	AC	D0 00193	MOVL
14	BE49		B6	66	28 00197	MOVW3	DEST_DESC, R6
	08	AE	66	B0 0019E		MOVW	(R6), @4(R6), @TEMP_DESC+4[IN_LEN]
	0C	AE	A6	D0 001A2		MOVL	(R6), \$STR\$TEMP_DESC
	12	AE	A6	B0 001A7		MOVW	4(R6), \$STR\$TEMP_DESC+4
		50	AE	9E 001AC		MOVAB	2(R6), TEMP_DESC+2
		51	56	D0 001B0		MOVL	TEMP_DESC, R0
			00	16 001B3		JSB	R6, R1
	10	AE	08	AE	B0 001B9		STR\$MOVQ_R1
		AE	0C	AE	D0 001BE	MOVW	\$STR\$TEMP_DESC, TEMP_DESC
		50	8F	D0 001C3		MOVL	\$STR\$TEMP_DESC+4, TEMP_DESC+4
		52	AE	D0 001CA		MOVL	#STR\$NORMAL, RETURN_STATUS
			3E	13 001CE		MOVL	TEMP_DESC+4, R2
00F0	8F	10	AE	B1 001D0		BEQL	32\$
			1A	1A 001D6		CMPW	TEMP_DESC, #240
					BGTRU	31\$	

	51		52	DO	001DB	MOVL	R2, STRING_BLOCK		
	51	FE	A1	3C	001DB	MOVZWL	-2(STRING_BLOCK), ALLOC_LENGTH		
			51	D7	001DF	DECL	R1		
	51		07	8A	001E1	BICB2	#7, R1		
	51	00000000G	00	41	9E	001E4	MOVAB	STR\$\$Q SHORT Q[R1], INSQUE_ADDR	
	00	B1		62	0E	001EC	INSQUE	(R2), #0(INSQUE_ADDR)	
				1C	11	001FO	BRB	32\$	
			14	AE	9F	001F2	PUSHAB	TEMP_DESC+4	
	08	AE		14	AE	001F5	MOVZWL	TEMP_DESC, 8(SP)	
			08	AE	9F	001FA	PUSHAB	8(SP)	
	00000000G	00		02	FB	001FD	CALLS	#2, LIB\$FREE VM	
		07		50	E8	00204	BLBS	RETURN_STATUS, 32\$	
		50	00000000G	8F	DO	00207	MOVL	#STR\$ FATINTERR, RETURN_STATUS	
		5B		50	DO	0020E	MOVL	RETURN_STATUS, RETURN_STATUS	
				0C	11	00211	BRB	34\$	1389
6946		66		68	28	00213	MOVC3	(R8), (R6), (IN_LEN)[R6]	1459
66		6A		59	28	00218	MOVC3	IN_LEN, (IN_ADDR), (R6)	1464
		68		5A	A0	0021C	ADDW2	IN_ADDR, (R8)	1470
			0170	31	0021F	BRW	57\$		1378
			04	B8	3C	00222	MOVZWL	@4(R8), OUT_LEN	1491
		57		02	C1	00226	ADDL3	#2, 4(R8), OUT_ADDR	1492
56	04	A8		57	C1	0022B	ADDL3	OUT_LEN, IN_LEN, R2	1493
52		59		52	DO	0022F	MOVL	R2, R0	1494
		50		00	ED	00232	CMPZV	#0, #16, (R8), R0	
50		68		03	18	00237	BGEQ	36\$	
				68	3C	00239	MOVZWL	(R8), R0	
		50	04	50	DO	0023C	MOVL	R0, TOT_LEN	1493
		56		5A	C1	00240	ADDL3	IN_ADDR, OUT_ADDR, R0	1512
		50		5A	D1	00244	CMPL	IN_ADDR, R0	
				09	1E	00247	BGEQU	37\$	
51		5A		59	C1	00249	ADDL3	IN_LEN, IN_ADDR, R1	
		51		50	D1	0024D	CMPL	R0, R1	
				06	11	00250	BRB	38\$	
		50		57	C0	00252	ADDL2	OUT_LEN, R0	
		50		5A	D1	00255	CMPL	IN_ADDR, R0	
				03	19	00258	BLSS	39\$	
			00EF	31	0025A	BRW	52\$		
		07	00000000G	00	E8	0025D	BLBS	STR\$\$V INIT, 40\$	1524
		00		00	FB	00264	CALLS	#0, STR\$\$INIT	
		51	00000000G	8F	DO	0026B	MOVL	#STR\$ NORMAL, RETURN_STATUS	
		000000F0		52	D1	00272	CMPL	R2, #240	
				47	1A	00279	BGTRU	46\$	
				52	D5	0027B	TSTL	R2	
				04	12	0027D	BNEQ	41\$	
				53	D4	0027F	CLRL	TEMP	
				31	11	00281	BRB	45\$	
		50	FF	A2	9E	00283	MOVAB	-1(R2), R0	
		50		07	8A	00287	BICB2	#7, R0	
		54	00000000G	00	40	9E	0028A	MOVAB	STR\$\$Q SHORT Q[R0], REMQUE_ADDR
		53		B4	0F	00292	REMQUE	#0(REMQUE_ADDR), TEMP	
				05	1D	00296	BVS	43\$	
		52		01	DO	00298	MOVL	#1, ALLOC_DONE	
				0F	11	0029B	BRB	44\$	
				52	D4	0029D	CLRL	ALLOC_DONE	
			6749	9F	0029F	PUSHAB	(OUT_LEN)[IN_LEN]		
		00000000G	00	01	FB	002A2	CALLS	#1, STR\$\$ALOC SHORT	
			51	50	DO	002A9	MOVL	R0, RETURN_STATUS	

		05		52	E8	002AC	44\$:	BLBS	ALLOC DONE, 45\$		
		34		51	E9	002AF		BLBC	RETURN_STATUS, 48\$		
		2F		DE	11	002B2		BRB	42\$		
		AE	14	51	E9	002B4	45\$:	BLBC	RETURN STATUS, 48\$		
10	AE	59		53	D0	002B7		MOVL	TEMP, TEMP_DESC+4		
				57	A1	002BB		ADDW3	OUT_LEN, IN_LEN, TEMP_DESC		
				24	11	002C0		BRB	48\$		
			14	AE	9F	002C2	46\$:	PUSHAB	TEMP_DESC+4		
	04	AE		52	D0	002C5		MOVL	R2, 4(SP)		
			04	AE	9F	002C9		PUSHAB	4(SP)		
	00000000G	00		02	FB	002CC		CALLS	#2, LIB\$GET_VM		
		51		50	D0	002D3		MOVL	R0, RETURN STATUS		
		09		51	E8	002D6		BLBS	RETURN STATUS, 47\$		
		51	00000000G	8F	D0	002D9		MOVL	#STR\$INSVIRMEM, RETURN_STATUS		
				04	11	002E0		BRB	48\$		
			10	AE	52	B0	002E2	47\$:	MOVW	R2, TEMP_DESC	
		5B		51	D0	002E6	48\$:	MOVL	RETURN_STATUS, RETURN_STATUS		
		5E		51	E9	002E9		BLBC	RETURN_STATUS, 51\$		
		58		AE	D0	002EC		MOVL	TEMP_DESC+4, R8		1531
68		6A		59	28	002F0		MOVC3	IN_LEN, (IN_ADDR), (R8)		
6948		66		57	28	002F4		MOVC3	OUT_LEN, (OUT_ADDR), (IN_LEN)[R8]		1539
66		68		AE	28	002F9		MOVC3	TOT_LEN, (R8), (OUT_ADDR)		1546
		50	00000000G	8F	D0	002FE		MOVL	#STR\$NORMAL, RETURN_STATUS		1551
				58	D5	00305		TSTL	R8		
				3E	13	00307		BEQL	50\$		
	00F0	8F		AE	B1	00309		CMPW	TEMP_DESC, #240		
				1A	1A	0030F		BGTRU	49\$		
		51		58	D0	00311		MOVL	R8, STRING_BLOCK		
		51		A1	3C	00314		MOVZWL	-2(STRING_BLOCK), ALLOC_LENGTH		
				51	D7	00318		DECL	R1		
		51		07	8A	0031A		BICB2	#7, R1		
		51	00000000G	41	9E	0031D		MOVAB	STR\$\$Q SHORT Q[R1], INSQUE_ADDR		
	00	B1		68	0E	00325		INSQUE	(R8), 80(INSQUE_ADDR)		
				1C	11	00329		BRB	50\$		
			14	AE	9F	0032B	49\$:	PUSHAB	TEMP_DESC+4		
	04	AE		AE	3C	0032E		MOVZWL	TEMP_DESC, 4(SP)		
			04	AE	9F	00333		PUSHAB	4(SP)		
	00000000G	00		02	FB	00336		CALLS	#2, LIB\$FREE_VM		
		07		50	E8	0033D		BLBS	RETURN STATUS, 50\$		
		50	00000000G	8F	D0	00340		MOVL	#STR\$FATINTERR, RETURN STATUS		
		5B		50	D0	00347	50\$:	MOVL	RETURN_STATUS, RETURN_STATUS		
				2B	11	0034A	51\$:	BRB	56\$		1496
		50		68	3C	0034C	52\$:	MOVZWL	(R8), R0		1563
		50		59	C2	0034F		SUBL2	IN_LEN, R0		
				02	18	00352		BGEQ	53\$		1562
				50	D4	00354		CLRL	R0		
		51		57	D0	00356	53\$:	MOVL	OUT_LEN, R1		
		50		51	D1	00359		CMP	R1, R0		
				03	15	0035C		BLEQ	54\$		
		51		50	D0	0035E		MOVL	R0, R1		
6946		66		51	28	00361	54\$:	MOVC3	R1, (OUT_ADDR), (IN_LEN)[OUT_ADDR]		1567
		50		59	D0	00366		MOVL	IN_LEN, R0		1573
50		10		00	ED	00369		CMPZV	#0, #16, (R8), R0		
				03	18	0036E		BGEQ	55\$		
		50		68	3C	00370		MOVZWL	(R8), R0		
		6A		50	28	00373	55\$:	MOVC3	R0, (IN_ADDR), (OUT_ADDR)		1575
		51	04	AC	D0	00377	56\$:	MOVL	DEST_DESC, R1		1582

STR\$PREFIX
1-007

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16-Sep-1984 01:46:15
14-Sep-1984 12:40:13

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[LIBRTL.SRC]STR\$PREFIX.B32;1

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(5)

50	04	B1	04	AE	B0	0037B	MOVW	TOT_LEN, @4(R1)	
	50	59		57	C1	00380	ADDL3	OUT_LEN, IN_LEN, R0	1587
	61	10		00	ED	00384	CMPZV	#0, #16, (RT), R0	
				07	1E	00389	BGEQU	57\$	
		5B	00000000G	8F	D0	0038B	MOVL	#STR\$ TRU, RETURN STATUS	1588
		10		5B	E8	00392	BLBS	RETURN STATUS, 58\$	1599
04	5B	03		00	ED	00395	CMPZV	#0, #3, RETURN STATUS, #4	
				09	12	0039A	BNEQ	58\$	
				5B	DD	0039C	PUSHL	RETURN STATUS	
	00000000G	00		01	FB	0039E	CALLS	#1, LIB\$STOP	
		50		5B	D0	003A5	MOVL	RETURN STATUS, R0	1600
				04	003AB		RET		1601

; Routine Size: 937 bytes, Routine Base: _STR\$CODE + 0000

; 413 1602 1 END !End of module
; 414 1603 0 ELUDOM

PSECT SUMMARY

Name	Bytes	Attributes
_STR\$CODE	937	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	11	0	581	00:00.8

COMMAND QUALIFIERS

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

; Size: 937 code + 0 data bytes
; Run Time: 00:14.2
; Elapsed Time: 00:54.9
; Lines/CPU Min: 6782
; Lexemes/CPU-Min: 37117
; Memory Used: 294 pages

STR\$PREFIX
1-007

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16-Sep-1984 01:46:15

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; Compilation Complete

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VAX/VMS V4.0

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