Subject: call_external: ld.so.1 relocation error
Posted by rother on Mon, 12 Feb 2001 22:12:01 GMT
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hi wizards!

I used 'call_external' very exceptionally yet. now I run into a 'relocation error' while executing 'call_external' -- with a very simple test-application too. the IDL 'call_external' demo is still running, but as my fortran-code is calling 'atan' (or other trig.-functions.), the 'ld.so.1' fails to resolve the symbol.
'make' is designed to call:

```
/opt/zrt_opt/SUNWspro/bin/f77 -pic -G test.f -o test.so -lF77 -lm -lc -lM77
  test.f:
      test:
      test_slave:
```

and 'ldd' on 'test.so' seems to be fine:

```
      libF77.so.4 =>   /opt/zrt_opt/SUNWspro/lib/libF77.so.4
      libm.so.1 =>     /opt/zrt_opt/SUNWspro/lib/libm.so.1
      libc.so.1 =>     /usr/lib/libc.so.1
      libM77.so.2 =>   /opt/zrt_opt/SUNWspro/lib/libM77.so.2
      libdl.so.1 =>    /usr/lib/libdl.so.1
      /usr/platform/SUNW,Ultra-60/lib/libc_psr.so.1
```

but my 'test.pro' crashes IDL with:

```
IDL >>  test
  ld.so.1: /opt/rsi/idl_5.4/bin/bin.solaris2.sparc/idl: \
fatal: relocation error: \
file /home/mt/rother/prj/champ/Lib/ME/6/test.so: \
symbol __atanf: referenced symbol not found

        Killed
```

(but 'atan' seems to be in 'libM77.so.2'!)

I'm running IDL 5.4 on a sparc box (solaris 2.7).
I apologize, if this is a FAQ (but I failed searching 'dejanews' -- which seems to be gone).

many thanks for hints.
martin.
--
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here the simple code:

```
----------------------------------------cut here--------------------
      SUBROUTINE test(argc, argv)

      IMPLICIT NONE
 !============================================================ ==========
      INTEGER*4       argc
      INTEGER*4       argv(*)
      INTEGER*4       j

       !============================================================ ====

      j=LOC(argc)

      CALL test_slave
     .     (
     .     %VAL(argv(1))
     .     )

      return
      end

 !============================================================ ==========
!     SLAVE
 !============================================================ ==========

      SUBROUTINE test_slave
     .     (
     .     result
     .     )
      IMPLICIT NONE
       !============================================================ ====

      REAL*8            result

      result = atan(0.5)

      return
      end
 !============================================================ ==========
!     EOF test.f
 !============================================================ ==========

-----------------------------------------------cut here---------------
```

pro test

```
 ;============================================================ ==========
;
 ;============================================================ ==========

   result = 0.0D00

   s = CALL_EXTERNAL(                                    $
                  "/home/mt/rother/prj/champ/Lib/ME/6/test.so", $
                  "test_",                               $
                  result                                 $
                 )

   print, 'result = ', result

   return
END
 ;============================================================ ==========
;  EOF test
 ;============================================================ ==========
```