
Subject: Re: call_external: ld.so.1 relocation error
Posted by [Nigel Wade](#) on Tue, 13 Feb 2001 10:00:46 GMT
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Martin Rother wrote:

```
>
> 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
```

That's telling you it can find the libraries you have requested, it
isn't
telling you which externals remain unresolved.

```
>
> 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'!)
```

It is actually undefined in libM77.so :

```
$ nm libM77.so | grep atan
```

```
[428] |      0|      0|FUNC |GLOB |0  |UNDEF |__atan  
[379] |      0|      0|FUNC |GLOB |0  |UNDEF |__atan2  
[491] |      0|      0|FUNC |GLOB |0  |UNDEF |__atan2f  
[493] |      0|      0|FUNC |GLOB |0  |UNDEF |__atan2l  
[353] |      0|      0|FUNC |GLOB |0  |UNDEF |__atanf  
[354] |      0|      0|FUNC |GLOB |0  |UNDEF |__atanl
```

On my system the function which is undefined in your DSO (__atanf) is defined in libsunmath.so. Try adding -lsunmath to the end of your list of libraries.

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