Subject: Re: Call_External and the C Math Library
Posted by Peter Mason on Fri, 07 Jun 1996 07:00:00 GMT
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On 6 Jun 1996, Charles Cavanaugh wrote:
> Has anyone experienced problems getting IDL's call_external to behave
> when called on C code that uses the standard C math library? I have
> some C routines that use pow and sqrt, and when call_external was
> dumping core, I tracked the problem down to the lines that contained C
> math library calls. Math.h is included in the C code, and -lm is on
> the link line. I tried using an explicit interface in the C code
> (ie. double sqrt (double);), but that didn't help. Has anyone seen
> this before and found a fix?

What platform are you using?

I have "external" routines which use C maths library routines.
The platform I use most of the time is DEC ALPHA/OSF, and on it I link:
ld -shared -no_archive -o mylib.so *.o -lc -lm
(I use the regular DEC C compiler.)

I've ported the code to some other platforms. I haven't much experience
with these, and I had to experiment a little to get it all to work.
In particular, I originally specified -lc (and maybe -lm) in the SUNOS 4.1.3
link, and the compiled code worked on "my" machine, but crashed when ported
to another. Linking without any -l? switches seemed to allow porting.

I've found the following to work (well, for me, anyway):
SGI - IRIX 5.2 (SGI's c):
ld -shared -no_archive -o mylib.so *.o -lc
SUN - Solaris (SUNOS 5.4?) (gcc):
ld -dy -G -o mylib.so *.o -lc
SUN - SUNOS 4.1.3U1 (gcc):
ld -o mylib.so -assert pure-text *.o

Hope this helps

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