
Subject: Re: Problems compiling shared libraries
Posted by johnpeterkelly@gmail.com on Thu, 02 Mar 2006 16:26:47 GMT
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Just as a note, I just did the exact same thing with the same code on an older machine in IDL5.3 and it worked perfectly.

--John

Subject: Re: Problems compiling shared libraries
Posted by [Haje Korth](#) on Thu, 02 Mar 2006 18:20:50 GMT
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John,
try specifying the full path to the .so library. If you still get the error, there might be another .so library referenced in your code that cannot be found.

Haje

<johnpeterkelly@gmail.com> wrote in message
news:1141314955.878153.85280@e56g2000cwe.googlegroups.com...
> I'm having a consistent problem compiling shared libraries for use with
> the call_external() command. I've tried using the make_dll function as
> well as compiling the code manually with cc or gcc. Here's what I do:
>
> in idl:
> make_dll, 'tester', 'simple_return'
>
> Where tester.c is the name of my file, and simple_return is the name of
> a function that just returns a number.
>
> or at the command prompt:
> cc -c -fPIC tester.c
> cc -shared tester.o -o tester.so
>
> When I try in IDL:
> x = call_external('tester.so', 'simple_return')
>
> I get:
> % CALL_EXTERNAL: Error loading sharable executable.
> Symbol: simple_return, File = tester.so
> tester.so: cannot open shared object file: No such
> file or directory
>
> It would seem IDL can't find the .so file. What really confuses me is

> that I have another library file that I downloaded to run some LAPACK
> routines on older version of IDL (note: not compiled on my computer)
> which is sitting the same directory as tester.so. When I run:
>
> x = call_external('libidl.so', 'c_eigen_all', matrix, 3l, e_vec, e_val)
>
> It works fine. This leads me to the conclusion that it's not that it
> can't find the file, but rather it doesn't recognize it as a library.
> If it helps, I'm running IDL 6.2 and my machine has a 64 bit processor
> (this has led to some completely different problems, but it might be
> relevant).
>
> Thanks in advance for your help.
>
> --John
>

Subject: Re: Problems compiling shared libraries
Posted by johnpeterkelly@gmail.com on Thu, 02 Mar 2006 18:40:02 GMT
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I've pretty much figured out that path issues are not the problem. I wrote the code and compiled it with the cc commands above on an older machine. Then I copied the tester.so file over to my current machine and put it in the library directory. The command in IDL 6.2 worked and it printed out the correct value.

It seems the problem has been narrowed down to performing the compile step on this computer.

Does anyone have any ideas?

--John

Also, here is the contents of tester.c:

```
int simple_return(){  
  
    return 5;  
  
}
```
