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Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external  
Posted by [Craig Markwardt](#) on Tue, 09 Dec 2003 09:33:23 GMT  
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"Brian" <brian.huether@NOdlrSPAM.de> writes:

- > I got the fftw binary from www.fftw.org and am trying to call it from IDL. I
- > have searched the forum and have found little info about this error.
- ...
- >
- > Any ideas?

I guess one question I have is, are you really saving that much of your time, considering that you have already spent a day or more playing around with external libraries?

And, if you really are compute bound, why not add some more CPUs? Why add the fragility of an external library?

Craig

--

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Craig B. Markwardt, Ph.D.   EMAIL: craigmnet@REMOVEcow.physics.wisc.edu  
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response  
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Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external  
Posted by [Brian](#) on Tue, 09 Dec 2003 12:23:47 GMT  
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If I can have IDL use fftw at a time savings of 2-5 times for very large arrays, then the day I have spent looking into it is utterly insignificant. That and the fact that I can spend \$0 to implement fftw in IDL for all my colleagues, compared with new motherboard, new CPU (and my purchasing dept would not go for that anyway), makes it a no-brainer for me to expend some effort.

Matlab6 already uses the library, so I doubt it is that fragile. Matlab is my program of choice, but I am a visiting engineer at my institute and am trying to get their FFTs in IDL sped up.

later,

brian

"Craig Markwardt" <craigmnet@REMOVEcow.physics.wisc.edu> schrieb im

Newsbeitrag news:onsmju9vz0.fsf@cow.physics.wisc.edu...

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Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external

Posted by [Karl Schultz](#) on Tue, 09 Dec 2003 16:44:54 GMT

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"Brian" <brian.huether@NOdlrSPAM.de> wrote in message  
news:e648955426f3d43b5606a3f898bc6d98@news.teranews.com...  
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I downloaded the binary DLL file, put it in my bin/bin.x86 directory and the call\_external invocation you listed above works - array gets set to a LONG value (a pointer, I guess).

So, I'm thinking that the problem lies in telling IDL where the dll is. If you tell us how you are trying to specify the location of the DLL, maybe we can help further. Or just drop the DLL into your distribution bin/bin.x86 directory and get on with it if that isn't too distasteful to you

Karl

---

Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external  
Posted by [Brian](#) on Wed, 10 Dec 2003 06:44:53 GMT  
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Wow. That is interesting! All I did was go to preferences and add the path. I know the path is ok, because I also have a procedure file there and IDL finds that procedure ok. Well, I feel like I am a step closer. Can you give me more info about your system? What version of IDL, etc?

thanks!

-brian

"Karl Schultz" <[kschultz\\_no\\_spam@rsinc.com](mailto:kschultz_no_spam@rsinc.com)> schrieb im Newsbeitrag [news:vtbusmdr32aled@corp.supernews.com](mailto:news:vtbusmdr32aled@corp.supernews.com)...

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> Karl  
>  
>

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Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external  
Posted by [Brian](#) on Wed, 10 Dec 2003 09:17:31 GMT  
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Ok, I did what you did and it worked. But now the question is, do I need to write a DLM wrapper to truly use this? In the manual it says

The basic usage of FFTW to compute a one-dimensional DFT of size N is simple, and it

typically looks something like this code:

```
#include <fftw3.h>
```

```
...
```

```
{
```

```
fftw_complex *in, *out;
```

```
fftw_plan p;
```

```
...
```

```
in = fftw_malloc(sizeof(fftw_complex) * N);
```

```
out = fftw_malloc(sizeof(fftw_complex) * N);
```

```
p = fftw_plan_dft_1d(N, in, out, FFTW_FORWARD, FFTW_ESTIMATE);
```

```
...
```

```
fftw_execute(p); /* repeat as needed */
```

```
...
```

```
fftw_destroy_plan(p);
```

```
fftw_free(in); fftw_free(out);
```

```
}
```

(When you compile, you must also link with the fftw3 library,  
e.g. -lfftw3 -lm on  
Unix systems.)

First you allocate the input and output arrays. You can allocate them in any  
way that  
you like, but we recommend using `fftw_malloc`, which behaves like `malloc`  
except that it  
properly aligns the array when SIMD instructions (such as SSE and AltiVec)  
are available  
(see Section 3.1.1 [SIMD alignment and  
`tw_malloc`], page 15).

I am just confused how I pass an array in IDL to this dll.

-brian

"Brian" <brian.huether@NOdlrSPAM.de> schrieb im Newsbeitrag  
news:33269b572f090788e59fd6a07c85fc8d@news.teranews.com...

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> thanks!

>

> -brian

>

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>> Karl  
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>  
>

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Subject: Re: ERROR\_MOD\_NOT\_FOUND when using call\_external  
Posted by [Karl Schultz](#) on Wed, 10 Dec 2003 16:30:07 GMT  
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news:33269b572f090788e59fd6a07c85fc8d@news.teranews.com...  
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It depends on which path you are talking about. The path I think you are  
changing is the IDL !PATH, which controls where .pro, .sav, and include  
files are found.

I moved the fftw DLL from my bin.x86 into C:/bin, which is in my Windows  
path, and it still worked. So, you could put the fftw DLL into any dir in  
your Windows path. Windows executables also look in the same dir as the

executable, which explains why it also works when the DLL is placed there.

```
>
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>>
```

>> Karl

>>

>>

>

>