
Subject: Re: dynamic linking on Mac

Posted by brodzik@nsidc.org on Wed, 15 Jun 2011 16:04:08 GMT

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David, thanks for the !MAKE_DLL tip--I would have ignored that myself, because I always think of DLLs as a windows-only thing. It got my compilation working, and I'm (partially) off and running. Now I can access the state data and the init method from the C level of things, but IDL seg faults when I call the method that is the meat of the C code--the forward/reverse transform.

I found information about Ronn Kling's book "Calling C and C++ from IDL"--I'm thinking of buying it. Can anyone give a short review?

Mary Jo

On Jun 10, 6:08 pm, David Grier <david.gr...@nyu.edu> wrote:

> Hi Mary Jo,

>

> Try

>

> print, !MAKE_DLL

>

> which prints the CCFLAGS and LDFLAGS needed to build a DLL on the
> present architecture.

>

> All the best,

>

> David

>

> On 06/10/2011 07:01 PM, brod...@nsidc.org wrote:

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>

>> Hi, all,

>

>> Has anyone running IDL on a Mac successfully linked to a shared C
>> library?

>

>> I've got some code that lets me call the routines in a C library from

>> IDL. It's name is call_grids.c and everything works fine on my linux
>> system. I'm trying to port the whole thing from Suse linux to a Mac,
>> and I'm having trouble on the linker step for call_grids.so. I've
>> already compiled and tested the original C library (which is
>> libmapx.a), it has some command-line programs that call it, and they
>> are working fine.
>
>> But for call_grids.c, in my Linux options, my makefile sets CFLAGS to -
>> fPIC and C_LD_FLAGS to -shared, but I found out pretty quickly that
>> Darwin's ld doesn't support "-shared". I found one helpful site on-
>> line that suggested that the Darwin equivalent of '-shared' is '-
>> bundle -flat_namespace -undefined suppress', but that returns this
>> problem:
>
>> ld -bundle -flat_namespace -undefined suppress -o call_grids.so
>> call_grids.o -L/Users/mj/lib -lmapx -lm
>> ld: symbol dyld_stub_binding_helper not defined (usually in crt1.o/
>> dylib1.o/bundle1.o) for inferred architecture x86_64
>> make[1]: *** [call_grids.so] Error 1
>
>> Then I started researching these ld switches and found several
>> alternatives to -bundle, including -dynamic, -dylib, -dylinker. My
>> trouble is that I'm not sure what it is I should be *trying* build,
>> here. Going back to the suse ld man page, it just says -shared
>> "builds a shared library". Well, I guess I knew that. What I don't
>> know is what that's supposed to look like on a Mac.
>
>> Can anyone offer me some tips on what I should be trying to create?
>
>> Thanks,
>> Mary Jo
