
Subject: IDL code with fortran subroutine and C linker on OSX

Posted by [laurel](#) on Tue, 28 Jun 2005 20:20:10 GMT

[View Forum Message](#) <> [Reply to Message](#)

In nutshell, my problem is with linking all of my different language codes together. One of the languages seem to thing there should be a leading underscore on a subroutine name, and I just don't know why. Here's a more detailed explanation of what is going on.

I have an IDL code, and a fortran subroutine called mainsub. I have a C linker as a go-between from IDL and fortran called field_c. They both compile fine on their own, but don't seem to want to be linked. Here is my set of compiling commands so far:

```
f90 -c mainsub.f
gcc -c field_c.c
(these both work fine)
gcc -bundle -flat_namespace -fno-leading-underscore -o field_c.so
field_c.o mainsub.o KT_2003_sub.o
(KT is another fortran subroutine called in mainsub)
```

My problem is that when I enter the last line I get:

"ld: Undefined symbols:

```
__mainsub_
__A_FWF
__CLOSE...."
```

and several more.

In field_c.c, I call "mainsub_" because I think that fortran adds the extra "_" as a suffix. I have tried with and without the suffix, and with and without a prefix. I can't call the subroutine "_mainsub" in the fortran code because subroutines can't start with underscores. I really don't know where these extra underscores are coming from, and what the subroutines are called in the .o files.

So, does anyone know where I could find the symbol tables for my .o files (both C and fortran?). Or, even better, has anyone done this on a Mac OSX, ran into this problem, and been able to fix it. Any help would be appreciated as I think I might be nearing the end of my creativity on the matter.

Thanks so much,
Laurel
