
Subject: Re: caling f90

Posted by [Haje Korth](#) on Tue, 04 Sep 2007 17:29:47 GMT

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Hi,

The missing functions are contained in the Intel Fortran libraries. I usually link the static these libraries to avoid these issues.

Haje

<woopik@interia.pl> wrote in message
news:1188919137.972574.312690@g4g2000hsf.googlegroups.com...

```
> hi
>
> i try run fortran 90 function via call_external an C wrapper
> but i have errors ONLY when i try tu use standard functions like open
> or write(*,*)
> S = CALL_EXTERNAL('biblio.so','dlhipo', ra,ile)
>
> when i use open
> [*****@****] [test] >/usr/local/rsi/idl/bin/bin.linux.x86_64/idlde:
> symbol lookup error: ./biblio.so:
> undefined symbol: for_open
>
> when i use write
> [*****@****] [test] >/usr/local/rsi/idl/bin/bin.linux.x86_64/idlde:
> symbo
> I lookup error: ./biblio.so: undefined symbol: for_write_seq_lis
>
> when i make call_external to a function without open or write
> all works !!!
> when i make SPAWN a program with open / write
> all works good !
>
> there are examples
> my function DLH.f90
> SUBROUTINE DLH(Ra,counter)
> ! If is defined in module types as integer, parameter ::
> lf=kind(1.d0)
> use types
> implicit none
> real(lf), intent(in) :: Ra
> integer, intent(out) :: counter
> write(*,*)
> write(*,*) "-> Utilisation de l'application dlhip."
> counter=2
> END SUBROUTINE DLH
```

```
>
> my wrapper xtemp.c
> #include <stdio.h>
> void dlhipo(int argc, void *argv[])
> {
>   extern void dlh_(); /* FORTRAN routine */
>   int *n;
>   float *f;
>   f = (float *) argv[0]; /*Ra*/
>   n = (int *) argv[1]; /*counter*/
>   dlh_(f, n);
> }
>
> my compile options
> gcc -c -fPIC -shared xtemp.c for C wrapper
> ifort -check bounds -c -mp1 -O3 -fPIC DLH.f90
> ld -shared xtemp.o DLH.o -o biblio.so
>
> my program when i use SPAWN
> spawn,['../test/a.out'],/NOSHELL
>
> program example
> use types
> implicit none
> real(lf):: Ra
> integer :: counter
> write(*,*)
> write(*,*) "-> Utilisation de l'application dlh."
> open(22,file='../local.txt')
> close(22)
> Ra=2
> counter=2
> end
>
>
> someone know why i have theses errors ?
> thx
>
```

Subject: Re: caling f90
Posted by [woopik](#) on Tue, 04 Sep 2007 18:07:47 GMT
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but when i spawn a program there is no problem with these
libraries

Subject: Re: caling f90
Posted by [Haje Korth](#) on Tue, 04 Sep 2007 18:40:39 GMT
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The path environment may be different for spawn. my guess is that if you use spawn, your code accesses the intel sharable (.so) libraries, which it cannot find otherwise. Try linking with libifcore.a, libimf.a, and libirc.a. Also for whatever reasons I don't remember anymore, I use the switches -static -static-libcxa with the intel compiler.

Haje

<woopik@interia.pl> wrote in message
news:1188929267.027643.53410@d55g2000hsg.googlegroups.com...
> but when i spawn a program there is no problem with these
> libraries
>

Subject: Re: caling f90
Posted by [woopik](#) on Tue, 04 Sep 2007 20:58:32 GMT
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ok thanks i will try this tomorrow

Subject: Re: caling f90
Posted by [woopik](#) on Wed, 05 Sep 2007 13:13:30 GMT
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so ...

i have copy all libraries from intel lib catalogue to my project catalogue
because i was unable specify the directory with ld -L..... -
llibcore (doesn't matter now)

i make an .so with ld -shared libifcore.so.5 libifcoremt.so and my objects
and now it works :)

thanks

Subject: Re: caling f90
Posted by [woopik](#) on Wed, 05 Sep 2007 13:22:36 GMT
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i forgot

when i verify `nm biblio.so | grep "for"`
these function `for_open` and `for_write_seq_lis`
stil have the U status mean undefined

but it works :)
