Subject: Re: gcc and idl
Posted by David Fenyes on Wed, 06 Nov 1996 08:00:00 GMT
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Karl Young <karl@gojira.berkeley.edu> writes:

```
>
> I am trying to call a C++ routine that I want to compile with
> gcc on a Sparc running SunOS 4.1.3 and call from IDL with
> CALL_EXTERNAL. The flags used for the compile and link calls given in
> the IDL manual examples for the SunOS cc compiler are very different
> from the ones I need to use with gcc so I'm apparently not building the
> right kind of shared object file (i.e. I'm getting messages like:
> ld.so: Undefined symbol: ___11spin_systemi)
>
> Has anyone done this sucessfully (i.e. used IDL with gcc) and if
> so any suggestions, e.g. what flags to use for the compile and
> link steps ? Thanks for any tips,
>
> -- KY
```

I interface to the LAPACK library via a C wrapper.

Compiling with GCC, you should use:

CFLAGS=-fpic
LDFLAGS=-G

for Sun CC:
CFLAGS=-Kpic
LDFLAGS=-G

That's using GCC 2.7.2 and Sparcworks C 4.0

Good luck,

David.
--
David Fenyes   University of Texas Medical School
dave@msrad71.med.uth.tmc.edu   Dept. of Radiology

Subject: Re: gcc and idl
Posted by jlaw on Thu, 07 Nov 1996 08:00:00 GMT
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In article 446B9B3D@gojira.berkeley.edu, Karl Young <karl@gojira.berkeley.edu> writes:

> Has anyone done this sucessfully (i.e. used IDL with gcc) and if
> so any suggestions, e.g. what flags to use for the compile and
> link steps ? Thanks for any tips,


```
18 sparc10> cat > quick.c
#include <stdio.h>
int quick(void){
   printf("Quick here") ;
   return 4 ;
}
^C
19 sparc10> gcc -shared -o quick.so quick.c
20 sparc10> idl
IDL. Version 4.0 (sunos sparc).
Copyright 1989-1995, Research Systems, Inc.
All rights reserved.  Unauthorized reproduction prohibited.

IDL> print,call_external("quick.so","quick")
Quick here      4
IDL> exit
21 sparc10>
```

you mention c++. Have you remembered extern "C"{}.

- ;-} --- :-{ --- ;-} --- :-{ --- ;-} -
Warning! Your Operating System is out of date!
It can be replaced by a more memory intensive Operating System.
Please contact your System Vendor for details.
--- ;-} --- :-{ --- ;-} --- :-{ --- ;-}

Subject: Re: gcc and idl
Posted by jbob on Thu, 07 Nov 1996 08:00:00 GMT
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In article <327FFE1A.446B9B3D@gojira.berkeley.edu> Karl Young <karl@gojira.berkeley.edu>
writes:

>   I am trying to call a C++ routine that I want to compile with
>   gcc on a Sparc running SunOS 4.1.3 and call from IDL with
>   CALL_EXTERNAL. The flags used for the compile and link calls given in
>   the IDL manual examples for the SunOS cc compiler are very different
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>   right kind of shared object file (i.e. I'm getting messages like:
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>
>   Has anyone done this sucessfully (i.e. used IDL with gcc) and if
>   so any suggestions, e.g. what flags to use for the compile and
>   link steps ? Thanks for any tips,

I had a similar problem with a slightly more difficult example -- using
a C++ routine with CALL_EXTERNAL from IDL where the C++ routine was a
wrapper for a FORTRAN routine. I found that I could only get it to work
by using the Sun linker.

The following Makefile section worked successfully on SunOS 4.1.2 with
its bundled "ld", gcc 2.6.3 and Sun SPARCompiler Fortran 2.0.1:

NOTE: No "LD" define -- the default Sun linker is "/bin/ld".
CXX   = g++
CXXFLAGS = -fpic
FFLAGS   = -pic
LDFLAGS = -L/usr/lang/SC2.0.1
LDLIBS   = -lF77 -lM77 -lpfc -lm

xxx.so: xxx.o ....
 $(LD) -o xxx xxx.o ....

      J. Bob Brown   jbob@snap.med.ge.com
         Consulting for GE Medical Systems
         For ID only -- standard disclaimers apply.

      "Of course that's just my opinion. I could be wrong."
                                -Dennis Miller

Subject: Re: gcc and idl
Posted by David Foster on Fri, 08 Nov 1996 08:00:00 GMT
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Karl Young wrote:
>
> I am trying to call a C++ routine that I want to compile with
> gcc on a Sparc running SunOS 4.1.3 and call from IDL with
> CALL_EXTERNAL.
 <snip>
>
> Has anyone done this sucessfully (i.e. used IDL with gcc) and if
> so any suggestions, e.g. what flags to use for the compile and
> link steps ? Thanks for any tips,

>
> -- KY

A typical compile line for me is:

gcc -fPIC -G -O3 -DSOLARIS -o bial_compr.so bial_compr.c

--

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