Subject: Re: call C routine on a Linux computer
Posted by Steve[2] on Wed, 09 Feb 2000 08:00:00 GMT
View Forum Message <> Reply to Message

Shunrong Zhang wrote:

> Hi,
>
> I was trying to call a simple C routine using call_external, but failed.
>
> The C code file is sample.c (IDL 5.1 External Development Guide, p 108)
>
> #include <stdio.h>
> float sum_array(argc, argv)
> int argc;
> void *argv[];
> {
> float *fp, s = 0.0; int n;
> for(n = *(int *) argv[1], fp = (float *) argv[0]; n--; )
> s += *fp++;
> return(s);}
>
> I worked with a Linux computer, and the C compiler is gcc (v2.7). So I
> compiled and linked in the following way,
>
> cc -fPIC -c sample.c
> ld -shared -o sample.so sample.o
>

It looks like the problem is in your C compilation: when you use cc,
use: cc -fPIC sample.c -o sample.o . gcc will output executable as 'a.out'
unless you use the -o option. Is your compilation giving you a sample.o
file?

>
> Then from IDL,
>
> X = FINDGEN(10)
> S = CALL_EXTERNAL('sample.so', '_sum_array' X, N_ELEMENTS(X),
> /F_VALUE)
>
> There came out a message of syntax error.
> I changed the entry point name from '_sum_array' to 'sum_array', the
> same error message came out.
>
> What was my entry point name ? Anything wrong in my above procedure ?

>
> Thank you in advance !
>
> S.-R.