Subject: call C routine on a Linux computer
Posted by Shunrong Zhang on Tue, 08 Feb 2000 08:00:00 GMT
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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
```

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.

Subject: Re: call C routine on a Linux computer
Posted by Steve[2] on Wed, 09 Feb 2000 08:00:00 GMT
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Shunrong Zhang wrote:

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> compiled and linked in the following way,
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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?

>
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>
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