
Subject: Re: IDL calling a Fortran routines
Posted by ismxray@yahoo.com on Sun, 29 May 2005 03:36:21 GMT
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I can use intel fortran v8.1 compile the testing program but not g77.
However, when I try to call the subroutine in IDL, I got the following

error messages:

```
IDL>x=findgen(10)
IDL>sum=0.0
IDL>aa=call_external('example1.so', $
 'SUM_ARRAY',x,n_elements(x),sum)
```

```
% CALL_EXTERNAL: Error loading sharable executable.
Symbol: SUM_ARRAY, File = example1.so
```

```
/home/tangsk/software/idl61/idl_6.1/bin/bin.linux.x86/libidl .so.6.1:
undefined symbol:
    SUM_ARRAY
```

the command to compile is

```
f90 -c example1.f
f90 -shared -o example1.so example1.o
```

Did I missed some parameters while compiling? Thanks!

The fortran code is:

```
C-----
      SUBROUTINE SUM_ARRAY(argc, argv) !Called by IDL
      INTEGER*4 argc, argv(*)      !Argc and Argv are integers

      j = LOC(argc)      !Obtains the number of arguments (argc)
      !Because argc is passed by VALUE.
```

C Call subroutine SUM_ARRAY1, converting the IDL parameters
c to standard FORTRAN, passed by reference arguments:

```
      CALL SUM_ARRAY1(%VAL(argv(1)), %VAL(argv(2)), %VAL(argv(3)))
      RETURN
      END
```

c This subroutine is called by SUM_ARRAY and has no
c IDL specific code.

```
c
      SUBROUTINE SUM_ARRAY1(array, n, sum)
      INTEGER*4 n
      REAL*4 array(n), sum
```

```
sum=0.0
DO i=1,n
sum = sum + array(i)
ENDDO
RETURN
END
```
