
Subject: Re: IDL calling a Fortran routines

Posted by ismxray@yahoo.com on Sun, 29 May 2005 03:36:21 GMT

[View Forum Message](#) <> [Reply to Message](#)

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
```
