
Subject: Re: IDL calling a Fortran routines

Posted by [jianguang.guo](#) on Tue, 24 May 2005 07:14:49 GMT

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Thank you for your help. I just do by this way, but get the result as follow:

```
IDL> shlib='F:\RS\IDL60\DEV\projects\test\new.dll'
```

```
IDL> s=call_external(shlib,'sum_array',x,n_elements(x),sum)
```

```
% CALL_EXTERNAL: Error loading sharable executable.
```

```
Symbol: sum_array, File =
```

```
F:\RS\IDL60\DEV\projects\test\new.dll
```

```
ERROR_PROC_NOT_FOUND
```

```
% Execution halted at: $MAIN$
```

The fortran code like this:

```
SUBROUTINE SUM_ARRAY(ARGC, ARGV)
```

```
!DEC$ ATTRIBUTES DLLEXPORT :: SUM_ARRAY
```

```
INTEGER*4 ARGC, ARGV(*)
```

```
J=LOC(ARGC)
```

```
CALL SUM_ARRAY1(%VAL(ARGV(1)),%VAL(ARGV(2)),%VAL(ARGV(3)))
```

```
RETURN
```

```
END
```

```
! This subroutine is called by SUM_ARRAY and has no
```

```
! IDL specific code.
```

```
    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
```

I use IDL6.0 under win2000 with Compaq Visual Fortran 6. There is no problem when I compile the fortran code. And I get the new.dll by this

way:

In the visual development environment, after you open a workspace:
> From the Project menu, click Settings to display the project settings dialog box Click the Fortran tab Select the Library category In the Use Fortran Run-Time Libraries box, select DLL.

I do not what happen to my code ,the dll or the fortran code?

Best regards

Jianguang Guo

Haje Korth wrote:

> I don't think you even need the c wrapper. I have done this in the past using
> wrappers in fortran similar to the one below, which works on Lahey Fortran.
> This work on IVF and CVF too, only the DLL_EXPORT statement varies between
> the compilers. Don't forget to tell youe fortran compiler to create a dll
> insted of lib.
>
> Cheers, Haje.
>
>
>
> REAL*4 FUNCTION SUM_ARRAY(ARGC, ARGV)
>
> DLL_EXPORT SUM_ARRAY
>
> INTEGER*4 ARGC, ARGV(*)
>
>
> J=LOC(ARGC)
>
>
> CALL SUM_ARRAY1(%VAL(ARGV(1)),%VAL(ARGV(2)),%VAL(ARGV(3)))
>
>
> SUM_ARRAY=9.9
>
>
> RETURN
>
> END
