
Subject: intel fortran compiler question on windows.
Posted by [Dae-Kyu Shin](#) on Mon, 07 Dec 2015 08:36:25 GMT
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Hi

These days i'm working using IDL with Fortran.

Here is the example code

```
---- fortran 77 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  
  
END
```

```
--- C wrapper code -----  
#include <stdio.h>
```

```
void sum_array(int argc, void *argv[])  
  
{  
  extern void sum_array1_(); /* Fortran routine */  
  int *n;  
  float *s, *f;  
  
  f = (float *) argv[0]; /* Array pntr */  
  n = (int *) argv[1]; /* Get # of elements */  
  s = (float *) argv[2]; /* Pass back result a parameter */  
  
  sum_array1_(f, n, s); /* Compute sum */  
}
```

On linux system i've compile like this using intel compiler

```
icc -fPIC -c c_code.c
```

```
ifort -fPIC -c f_code.f
ifort -shared *.o -o test.so
```

Next run idl.

```
x = findgen(10)
sum = 0.0
S = call_external('test.so', $
    'sum_array', X, n_elements(X), sum)
```

it is working

But on windows system.

```
icl -c c_code.c
ifort -c f_code.f
ifort -dll *.obj -o test.dll
```

then compile error arise.

```
"c_code.obj : error LNK2019: sum_array1_~~~~"
"test.dll : fatal error LNK1120:~~~~"
```

So... what compile options i using for without compile error??

Thanks.

Subject: Re: intel fortran compiler question on windows.
Posted by [Dae-Kyu Shin](#) on Tue, 08 Dec 2015 15:33:09 GMT
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I found solution.
Corrected c_code
__declspec(dllexport) void sum_array(int argc, void *argv[])

```
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>   INTEGER*4 n
>   REAL*4 array(n), sum
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>   ENDDO
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>   END
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> --- C wrapper code -----
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> void sum_array(int argc, void *argv[])
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> extern void sum_array1_();/* Fortran routine */
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> f = (float *) argv[0]; /* Array ptrn */
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```

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> Thanks.
