Subject: IDL and DLL under windows
Posted by StefanoM on Tue, 10 Apr 2001 08:43:42 GMT
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sorry for this long post.

well, I would like to use my Fortran subroutine with IDL. To do this I have created a DLL whit MS Develop. Studio and then called the subroutines from IDL with CALL\_EXTERNAL. The problem is that ... it doesn't work!!! This could be related to the way the parameters are passed to the soubroutines, by value or by reference. If I simply compile and link the subroutines 'as they are' into a DLL, then it is impossible to call them from IDL, otherwise, if I follow the example given with IDL (5.2):

```
SUBROUTINE SUM_ARRAY(argc, argv) !Called by IDL
                                           !Argc and Argv
   INTEGER*4 argc, 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.
С
   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 get errors during the linking of the DLL, in particular: 'undefined symbol' related to the subroutine (SUM\_ARRAY1) called from the 'interface'

subroutine (i.e. SUM\_ARAY that manages the passage of the parameters from IDL to DLL).

Does anyone have experience about this? Any suggestion?

Stefano

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