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Subject: Re: CALL\_EXTERNAL - Fortran Troubles  
Posted by [rivers](#) on Wed, 08 Nov 1995 08:00:00 GMT  
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In article <309FE62C.F46@cdc.noaa.gov>, Jim Brown <jtb@cdc.noaa.gov> writes:

> Hello all:

>

> Please forgive me if somebody else has posed a similar question, but  
> I am stumped! I have obtained some code from a colleague that makes  
> use of the CALL\_EXTERNAL function to execute Fortran code. I have  
> been able to understand his example and make certain routines work, but  
> I have hit a dead end.

>

> Now I can get the above code (and other code for that matter) to work if I  
> am only passing back arrays containing REALS. What I would like to do is  
> to have a routine pass back both reals and a string such as the following  
> shows:

> Note, the only change was the addition of the string variable, units.  
> Everything compiles great, but I cannot get the value of the variable  
> named units passed back into my IDL routine.

You need to provide some more information:

- What product are you using (IDL or PV-WAVE). They pass parameters differently to CALL\_EXTERNAL
- What operating system are you using, VMS, UNIX, Windows, etc.  
IDL's CALL\_EXTERNAL passes parameters differently with Unix and VMS.

IDL passes STRINGS by descriptor, i.e. the address of a structure containing the length and address of the string. You are not allowed to change the length of the string in your routine. You can get around this by converting to BYTE before calling your FORTRAN routine.

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