
Subject: Re: How to send a CHARACTER to a C/C++/FORTRAN function via CALL_EXTERNAL?

Posted by [Brian Daniel](#) on Wed, 13 Feb 2013 18:44:34 GMT

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A character is one byte. You could try the byte data type defined with the appropriate ASCII value.

On Tuesday, February 12, 2013 8:36:16 PM UTC-5, Bogdanovist wrote:

> I'm having trouble getting a CALL_EXTERNAL call to work. I think the issue is the requirement to send a CHARACTER*1. To be specific, I'm trying to call dgels from LAPACK, see here

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> http://www.netlib.org/lapack/explore-html/d7/d3b/group__double_g_solve.html#ga225c8efde208eaf246882df48e590eac

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> I know from previous experience that you have to be careful to get all arguments to CALL_EXTERNAL exactly right, making IDL INTs into LONGs, making sure to get single/double precision etc correct. However this one I can't seem to crack. It doesn't surprise me that the IDL STRING is not equivalent to CHARACTER, but how can I send this correctly?

Subject: Re: How to send a CHARACTER to a C/C++/FORTRAN function via CALL_EXTERNAL?

Posted by [Matt Francis](#) on Thu, 14 Feb 2013 05:08:24 GMT

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On Thursday, 14 February 2013 05:44:34 UTC+11, Brian J. Daniel wrote:

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> On Tuesday, February 12, 2013 8:36:16 PM UTC-5, Bogdanovist wrote:

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Thanks! I've tried using:

```
trans='N'  
c_trans=BYTE(N[0])
```

but my IDL session still dies when I send this to the routine. There may be other problems with the other arguments though. Do you know if BYTE() will assign the correct ASCII Byte code or do I need to look that up and assign it directly (numerically)?

Subject: Re: How to send a CHARACTER to a C/C++/FORTRAN function via CALL_EXTERNAL?

Posted by [Lajos Foldy](#) on Thu, 14 Feb 2013 09:25:10 GMT

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On Thursday, February 14, 2013 6:08:24 AM UTC+1, Bogdanovist wrote:

> On Thursday, 14 February 2013 05:44:34 UTC+11, Brian J. Daniel wrote:

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>
> Thanks! I've tried using:
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>
>
> trans='N'
>
> c_trans=BYTE(N[0])
>
>
>

```

> but my IDL session still dies when I send this to the routine. There may be other problems with the other arguments though. Do you know if BYTE() will assign the correct ASCII Byte code or do I need to look that up and assign it directly (numerically)?

Fortran arguments are passed by reference, try an IDL byte array: BYTE('N').

regards,
Lajos
