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Subject: Re: Calling Fortran program  
Posted by [crdmi](#) on Fri, 03 Jun 1994 15:38:47 GMT  
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In article <2sl3sr\$2o1q@itsa.ucsf.edu>, aki@itsa.ucsf.edu (Andreas Kiefer) writes:

> Hi  
>  
> I have to call a Fortran program that returns a vector. The IDL function CALL\_EXTERNAL  
> allows to return a scalar value only. So it seems I have to use LINKIMAGE.

I recommend that you use CALL\_EXTERNAL. Pass the return value vector as an argument to the fortran subroutine.

--

"Brother, you can't go to jail for what you're        Daniel M. Israel  
thinking, or for that "oooo!" look in your        <crdmi@vulcan.giss.nasa.gov>  
eyes. You're only standing on the corner    Goddard Institute of Space Studies  
watching all the girls go by." -Most Happy Fella   2880 Broadway, New York, NY

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Subject: Re: Calling Fortran program  
Posted by [thompson](#) on Sat, 04 Jun 1994 15:27:45 GMT  
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aki@itsa.ucsf.edu (Andreas Kiefer) writes:

> Hi  
  
> I have to call a Fortran program that returns a vector. The IDL function CALL\_EXTERNAL  
> allows to return a scalar value only. So it seems I have to use LINKIMAGE.

That's not true. I've used CALL\_EXTERNAL with vectors as both input and output.

Bill Thompson

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Subject: Re: Calling Fortran program  
Posted by [dors](#) on Sun, 05 Jun 1994 15:01:10 GMT  
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In article <2sl3sr\$2o1q@itsa.ucsf.edu> aki@itsa.ucsf.edu (Andreas Kiefer) writes:

[snip]

>  
> Hi  
>  
> I have to call a Fortran program that returns a vector. The IDL function CALL\_EXTERNAL

> allows to return a scalar value only. So it seems I have to use LINKIMAGE.  
 >  
 > Is there anybody who knows how to use LINKIMAGE in particular who has any idea how to  
 > pass a vector to IDL using LINKIMAGE ? ( I am using a SUN and I studied the manual for  
 > dlopen() already. This was not very helpful.)  
 >  
 > Thanks in advance ....  
 >  
 > aki

From this groups FAQ:

T03. How do I get IDL to call routines in language X, running under system Y?

Jeff Valenti has written a sizable document about calling external FORTRAN routines from IDL. You can find it at [esrg.ucsb.edu/pub/idl/idl-fortran](http://esrg.ucsb.edu/pub/idl/idl-fortran).

Hope this helps,

Eric

--

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=====
=====
| Eric E. Dors          | Internet: eedors@unh.edu      |
| University of New Hampshire | Span: 6866:DORS      |
=====
=====
| "if free particles were truly free..."          |
|                                                    |
| "they wouldn't be represented by bras, <k| "      |
| ---oh no, how did a physics joke make it in here? :^)|
=====
=====

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Subject: Re: Calling Fortran program  
 Posted by [rivers](#) on Mon, 06 Jun 1994 03:00:31 GMT  
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In article <2sl3sr\$2o1q@itsa.ucsf.edu> aki@itsa.ucsf.edu (Andreas Kiefer) writes:  
 > Hi  
 >  
 > I have to call a Fortran program that returns a vector. The IDL function CALL\_EXTERNAL

> allows to return a scalar value only. So it seems I have to use LINKIMAGE.  
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> Is there anybody who knows how to use LINKIMAGE in particular who has any idea how to  
> pass a vector to IDL using LINKIMAGE ? ( I am using a SUN and I studied the manual for  
> dlopen() already. This was not very helpful.)

It is NOT true that CALL\_EXTERNAL can only return a scalar, it can return vectors as well. The vector needs to be allocated in IDL before calling CALL\_EXTERNAL, so it does require that you know a (maximum) size for the vector in advance. IDL will just pass the address of the beginning of the vector to your external FORTRAN or C code. I do this all the time.

--

Mark Rivers (312) 702-2279 (office)  
CARS (312) 702-9951 (secretary)  
Univ. of Chicago (312) 702-5454 (FAX)  
5640 S. Ellis Ave.

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Subject: Re: Calling Fortran program  
Posted by [8015](#) on Tue, 07 Jun 1994 16:31:21 GMT  
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In article <DORS.94Jun5110110@unhggs1.unh.edu>,  
Eric E. Dors <dors@unhggs1.unh.edu> wrote:

>  
> From this groups FAQ:  
>

...

> FORTRAN routines from IDL. You can find it at  
> esrg.ucsb.edu:/pub/idl/idl-fortran.  
>

This site name has changed to eos.crseo.ucsb.edu. It will be mentioned in the next FAQ, as well.

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