Subject: Re: fortran feasability
Posted by Haje Korth on Mon, 16 Jul 2007 14:54:14 GMT
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Conor,
what you want can be done among others with a DLM (RTFM for description). I strongly suggest to call fortran from idl rather than the other way around. You cannot share COMMON block between the fortran and idl side. However, once setup on the fortran side the common block will live between idl calls until the session is reset (e.g., .f). You will have to write a wrapper to change fortran common block variables from idl. Last recommendation, get a good book, e.g., Calling C from IDL by Ronn Kling; lots of examples save lots of grief.

Haje

"Conor" <cmancone@gmail.com> wrote in message
news:1184589778.527491.114030@q75g2000hsh.googlegroups.com.. .
> For a project I'm working on, I'm trying to implement in one of my
> programs the pikaia minimization algorithm (http://www.hao.ucar.edu/
> Public/models/pikaia/pikaia.html). It has a non-optimized IDL port
> which I've used so far. My problem is that when I run it with any
> reasonable number of generations, the result is REALLY slow. What
> used to take half a day with other algorithims would take roughly 20
> days using pikaia in IDL. Unfortunately, this algorith is simply
> computationaly expensive, and I really don't think that optimizing the
> IDL code is going to facilitate a 40x speed up.
>
> The solution, I think, is to run the original fortran code and call it
> from IDL. However, I've never tried such a thing and so I have a few
> questions. I'll also take other suggestions, if anyone has any. My
> first question is about common blocks. Implementing pikaia requires a
> couple common blocks. Currently I have common blocks in IDL that
> store all the necessary data. Is there a way to share common blocks
> in IDL with fortran code called by IDL? Or would I have to pass all
> the necessary data to fortran and then have it load it's own common
> blocks?
>
> Also, does anyone know any good tips sites or tutorials on running IDL
> from fortran? I found this of course:
> http://www.dfanning.com/tips/fortran_linking.html
> It would be nice to have some background though - I can probably
> follow the steps but it would be ince to know what is going on (and
> what is a DLM?). Also, any ideas if this still works? It's listed
> for IDL version 5.2-5.4.
>
> Thanks,

> Conor
>