
Subject: Re: IDL_IDLBridge and the virtual machine
Posted by [Russell Ryan](#) on Thu, 14 Mar 2013 14:30:04 GMT
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On Wednesday, March 13, 2013 7:58:07 AM UTC-4, Helder wrote:

> Hi,
>
> I would like to use the IDL_IDLBridge, but I just read in the documentation that it is not possible
to use execute, getvar and setvar methods in VM mode.
>
> This is quite annoying, but is there another functional way to parallelize computations in IDL?
>
>
>
> I basically have a list of n images (n~100, maybe more) and I perform computations on images
k with k-1 for the whole list. I wanted to start computations separately:
>
>
>
> Res1 = ComputationFunction(RefImg=0, Img=1)
>
> Res2 = ComputationFunction(RefImg=1, Img=2)
>
> Res3 = ComputationFunction(RefImg=2, Img=3)
>
> ...
>
> and put all the results in an array.
>
>
>
> Any suggestions?
>
>
>
> I could try writing a batch process and producing a .sav that puts the result in a file and so on...
but this seems a bit "dirty".
>
>
>
> Thanks,
>
> Helder

Hi Helder,

Two things.

(1) Look at the shmmap and shmvar routines for passing data. You essentially create a shared memory space and load the data there. Then all the nodes use a single string variable to initialize that memory space within their scope. Fanning has a good tutorial on this:
http://www.idlcoyote.com/code_tips/bridge.html

(2) I'm not sure how you're planning on using the IDL_IDLBridge. But if you use the /nowait feature (which, frankly is the main reason for using the Bridge in the first place), then there is a major memory leak which affects (it affects Linux and Mac as far as I can tell). If you only call the bridges a few times (say <100), it'll probably be fine --- the leaked memory will be smaller than your RAM so you'll never notice. But, if you call it many times >1000 --- then the run time *PER NODE* will increase very rapidly. I've emailed Exelis about this and I pinged them about it yesterday (I have some simulation code that would really benefit from the Bridges). I'll post more if I hear anything.

Good luck,
Russell
