Subject: Simplest way to spawn multiple IDL processes from within IDL?
Posted by rjp23 on Fri, 06 Jun 2014 12:27:02 GMT

I have a piece of code that I want to run on multiple data files with the only difference in the input being the date within each filename.

Previously for a small number of files I've just done it in a loop something like this:

dates=['200901', '200902', '200903']

FOR i=0, n_elements(dates)-1 do begin
this_date=dates[i]
processing_code, this_date
ENDFOR

The processing_code routine itself can take a while to run and now that the number of dates I'm processing is getting larger I wondered if there was a straightforward wait to spawn multiple instances of IDL from within the main IDL procedure. I don't need any input back into the main procedure from the subroutine that does the processing so I was hoping that there was a straightforward way.

I've looked at http://slugidl.pbworks.com/w/page/37642590/split_for%20tutor ial and while it does what I want to some extent, it'd be nicer if I could explicitly control the number of splits (so as not to swamp our server).

I wondered whether a simple spawn command that echoed the commands back into an IDL process would work but I can't seem to get it to.

Any other thoughts?

Cheers

Rob

Subject: Re: Simplest way to spawn multiple IDL processes from within IDL?
Posted by chris_torrence@NOSPAM on Fri, 06 Jun 2014 16:10:21 GMT

Could you just use the IDL_IDLBridge? Here's the code for a single process:

obj = IDL_IDLBridge()
obj.Execute,"processing_code," + this_date, /NOWAIT
while (obj.Status() ne 0) do void=1

You could easily extend this by doing multiple bridge objects. I would keep it under about 8-10 at a time - otherwise you start to run into OS limits.

-Chris

Subject: Re: Simplest way to spawn multiple IDL processes from within IDL?
Posted by Phillip Bitzer on Fri, 06 Jun 2014 16:43:07 GMT
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On Friday, June 6, 2014 7:27:02 AM UTC-5, rj...@le.ac.uk wrote:
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> Cheers
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> Rob

You may want to check out the discussion in this thread:
https://groups.google.com/forum/#!searchin/comp.lang.idl-pvw
ave/parallel$20idl%7Csort:date/comp.lang.idl-pvwave/LynFzO-7 rbU/4u8fGTTf9qMJ

I mentioned then I've had some success with the Parallel IDL routines. It uses the IDLBridges Chris mentions.

I haven't checked out Mike's TaskDL (yet), but it might be just what you need.