Subject: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by litongmu on Tue, 21 Oct 2008 19:03:41 GMT
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Hi all,

I am wondering if there is a command in IDL which could clean up all the memory pieces to generate a whole big piece which could be used by IDL.
Because, recently I am running a code to read and deal with cdf files. And there are lots of files (more than 1000). The code cannot finish them once, because of memory problem.
And I know that in Matlab there is a command called 'pack', which could clean up all the memory pieces. So I am wondering if there is a similar counterpart in IDL. It took me really a long time to find in the manuals. But no luck.
I appreciate your help and your try.

tongmu

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by Tatcher on Thu, 23 Oct 2008 08:09:30 GMT
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Hej!

I have a similar problem.

I am analyzing shots measured in a tokamak. The problem in my case is, that the program opens up to 10 iplot windows per shot. Each window contains 420000 data points. After approx. 15 shots, the Computer runs out of memory (2 GB).
I have the same problem when I suppress the visualisation of the iplot windows (user_interface='n') and dump the picture of the plot directly to the harddisk instead.
Although my program runs in a loop and all the variables are defined only once and are rewritten for each shot.In my case iPlot seems to be the problem.Is it possible that every iPlot window reserve a certain amount of memory? How do you plot your data?

My solution: I will ty to use float instead of double numbers and I will upgraded my PC to 8 GB RAM.

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by pgrigis on Thu, 23 Oct 2008 13:48:59 GMT
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Tatcher wrote:
> Hej!
>
> I have a similar problem.
>
> I am analyzing shots measured in a tokamak. The problem in my case is,
> that the program opens up to 10 iplot windows per shot. Each window
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> only once and are rewritten for each shot.In my case iPlot seems to be
> the problem.Is it possible that every iPlot window reserve a certain
> amount of memory? How do you plot your data?
Why don't you close the iplot window after each plot?

Paolo

>
> My solution: I will ty to use float instead of double numbers and I
> will upgraded my PC to 8 GB RAM.

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by Tatcher on Thu, 23 Oct 2008 15:59:40 GMT
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On Oct 23, 3:48 pm, pgri...@gmail.com wrote:
> Tatcher wrote:
>> Hej!
>
>> I have a similar problem.
>
>> I am analyzing shots measured in a tokamak. The problem in my case is,
>> that the program opens up to 10 iplot windows per shot. Each window
>> contains 420000 data points. After approx. 15 shots, the Computer runs
>> out of memory (2 GB).
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>> to the harddisk instead.
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>> only once and are rewritten for each shot.In my case iPlot seems to be
>> the problem.Is it possible that every iPlot window reserve a certain
>> amount of memory? How do you plot your data?
>
> Why don't you close the iplot window after each plot?
>
> Paolo
>
>
>
>> My solution: I will ty to use float instead of double numbers and I
>> will upgraded my PC to 8 GB RAm

Unfortunately that is not possible. iPlot window are "locked" as long
the program is executed. e.g. It's not possible to use the build in
Zoom function, annotate the plot or simply close it.

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by pgrigis on Thu, 23 Oct 2008 17:49:25 GMT
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Tatcher wrote:

>> Tatcher wrote:
>>> Hej!
>>
>>> I have a similar problem.
>>
>>> I am analyzing shots measured in a tokamak. The problem in my case is,
>>> that the program opens up to 10 iplot windows per shot. Each window
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>>> I have the same problem when I suppress the visualisation of the iplot
>>> windows (user_interface='n') and dump the picture of the plot directly
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>> Paolo
>>

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>>
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>>> will upgraded my PC to 8 GB RAm
>
> Unfortunately that is not possible. iPlot window are "locked" as long
> the program is executed. e.g. It's not possible to use the build in
> Zoom function, annotate the plot or simply close it.

Then you should make the program close it when it's done with it.

Paolo

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?
Posted by MC on Fri, 24 Oct 2008 01:02:47 GMT
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Why not use plot and p.multi to reduce the number of windows and allow
closure at will? How do you wade through so many plots at once anyway?

Cheers

On Oct 23, 9:09 pm, Tatcher <christian_ma...@gmx.at> wrote:
> Hej!
>
> I have a similar problem.
>
> I am analyzing shots measured in a tokamak. The problem in my case is,
> that the program opens up to 10 iplot windows per shot. Each window
> contains 420000 data points. After approx. 15 shots, the Computer runs
> out of memory (2 GB).
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> My solution: I will ty to use float instead of double numbers and I
> will upgraded my PC to 8 GB RAM.

Subject: Re: QUESTION: is there a command in idl which could clean up memory pieces?

Posted by Tatcher on Fri, 24 Oct 2008 06:56:19 GMT
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On Oct 24, 3:02 am, MC <Morefl...@gmail.com> wrote:
> Why not use plot and p.multi to reduce the number of windows and allow
> closure at will? How do you wade through so many plots at once anyway?
>
> Cheers
>
> On Oct 23, 9:09 pm, Tatcher <christian_ma...@gmx.at> wrote:
>
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>> Hej!
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>> I have a similar problem.
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>> I am analyzing shots measured in a tokamak. The problem in my case is,
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>> only once and are rewritten for each shot.In my case iPlot seems to be
>> the problem.Is it possible that every iPlot window reserve a certain
>> amount of memory? How do you plot your data?
>
>> My solution: I will ty to use float instead of double numbers and I
>> will upgraded my PC to 8 GB RAM.
>
>
Only small parts of a shot are of interest. My idea is to sight the
complete raw data in a first run and to choose the shots and time
intervals that look interesting. The advantage of iPlot is that I can
zoom in, annotate the plot and finally save it to the harddisk without
further coding. I think that is not possible with plot and p.multi in
an simple way.
In a second step I put promissing looking shotnumbers together with
the time ranges of interest, informations about the probes,
distances, ... in a spreadsheet and use this as a control file for my
program.
Another thing is that if I like to plot radial plasma potential
profiles for example that each shot gives just one point in the graph.
But in this case I can skip all other plots and have no memory
problem.

Maybe someone has another idea for a better and not so much memory consuming concept.