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

Posted by [pgrigis](#) on Tue, 21 Oct 2008 19:16:50 GMT

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lito...@gmail.com wrote:

> 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.

While it is possible you are having a memory fragmentation issue,
it seems more likely you are just running out of memory. Can you tell
us how much memory you use at the time of the failure?

Use: help,/mem

Cheers,
Paolo

> 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 [litongmu](#) on Tue, 21 Oct 2008 22:52:02 GMT

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On Oct 21, 12:16 pm, pgri...@gmail.com wrote:

> lito...@gmail.com wrote:
>> 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
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>> similar counterpart in IDL. It took me really a long time to find in
>> the manuals. But no luck.
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>> tongmu
>
>

It is different. If I run my code in my desktop, the memory usage is about 300m, which, as you mentioned, is likely to be out of memory. But if I use my laptop, the memory usage is about 30m or less. However, I called a subroutine to open and read a cdf file every time, and in one file, there are only like 5000 records. So I think there should be enough memory to each file. Another reason why I believe it is caused by memory fragmentation is that in my code, I need to resize some arrays several times. It could generate lots of memory pieces.

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

Posted by [russell.grew](#) on Wed, 22 Oct 2008 01:27:41 GMT

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Do you really need all the CDF's open at once?

Do you require all 5000 records from a given CDF or can you be more selective?

Can you not open a CDF, get the data you need, process it, close the cdf, open the next one [using the same variables as before]... etc?

Cheers.

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

Posted by [litongmu](#) on Wed, 22 Oct 2008 05:58:13 GMT

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On Oct 21, 6:27 pm, RussellGrew <russell.g...@gmail.com> wrote:

- > Do you really need all the CDF's open at once?
- >
- > Do you require all 5000 records from a given CDF or can you be more
- > selective?
- >
- > Can you not open a CDF, get the data you need, process it, close the
- > cdf, open the next one [using the same variables as before]... etc?
- >
- > Cheers.

That is how I did it. Sorry I did not express myself clearly. I deal with the files one by one. And in every file, there are about 5000 records. However, when it came to certain amount, the code stopped. Sorry for the confusion.

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

Posted by [Andrew Cool](#) on Thu, 23 Oct 2008 03:32:21 GMT

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On Oct 22, 3:58 pm, liton...@gmail.com wrote:

- > On Oct 21, 6:27 pm, RussellGrew <russell.g...@gmail.com> wrote:
- >
- >> Do you really need all the CDF's open at once?
- >
- >> Do you require all 5000 records from a given CDF or can you be more
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- >> Can you not open a CDF, get the data you need, process it, close the
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- > with the files one by one. And in every file, there are about 5000
- > records. However, when it came to certain amount, the code stopped.
- > Sorry for the confusion.

Sounds like a memory leak due to poor coding. Define "certain amount". Does it fail after a certain number of files every time?

Define "code stopped" too - is there actually an error message - can you tell us what it is?

You could try inserting `Help,/MEMORY` in various strategic palces in your code to watch the memory use.

You could try <http://www.dfanning.com/programs/undefine.pro> to make unnecessary variables "vanish" to free up memory.

Andrew
