Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by David Fanning on Wed, 03 Nov 2010 17:29:34 GMT
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Doug Martin writes:

> Is anyone aware of a way to get IDL 8.0 to use a secondary routine
> like the idl_opserver.exe of 7.0? My problem is this:
>
> On a Windows XP SP2 machine, 2GB memory, in IDL 7.0 I could make and
> use reasonably large arrays - say,
> a=fltarr(512,512,1200). This used about 1 GB worth of memory.
>
> In IDL 8.0, I'm stuck with arrays with a max of about 500 MB memory
> before the good old "unable to allocate memory" message pops up. And
> this is after following the suggestion in Tech Tip 4603. Before that,
> I couldn't even get 200 MB reliably.
>
> In any case, does anyone know of a workaround here?

There was a problem in this version of IDL. There is
a workaround in the article:

http://www.dfanning.com/misc_tips/idl8mem.html

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by Doug Martin on Wed, 03 Nov 2010 18:09:02 GMT
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On Nov 3, 12:29 pm, David Fanning <n...@dfanning.com> wrote:
> Doug Martin writes:
>> Is anyone aware of a way to get IDL 8.0 to use a secondary routine
>> like the idl_opserver.exe of 7.0? My problem is this:
>
>> On a Windows XP SP2 machine, 2GB memory, in IDL 7.0 I could make and
>> use reasonably large arrays - say,
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> a workaround in the article:
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> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Dear David -

Thanks for the suggestion! It turns out that your workaround is the
same as the Tech Tip 4603

http://www.ittvis.com/services/techtip.asp?ttid=4603

I still end up being hit with the memory cap with arrays in 8.0 about
half the size of 7.0. Shoot.

-Doug

Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by David Fanning on Wed, 03 Nov 2010 18:17:15 GMT
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Doug Martin writes:

> Thanks for the suggestion! It turns out that your workaround is the
> same as the Tech Tip 4603
>
> http://www.ittvis.com/services/techtip.asp?ttid=4603
>
> I still end up being hit with the memory cap with arrays in 8.0 about

> half the size of 7.0. Shoot.

I was just on the phone with ITTVIS about another, related
problem. In IDL 7 the workbench was separated from the IDL
process. They decided to combine the workbench and the IDL
process in version 8, primarily because they had to do this
to get the Mac version running properly. But, unfortunately,
this has caused additional problems for Windows computers,
and, in particular, for 64-bit Windows computers, which is
what I am trying to run IDL 8 on. One of the problems
is extreme fragility, another is this memory issue.

They are trying to sort out the problem now, but there
is some thought to going back to a separated workbench/process
arrangement for Windows computers. All of this is still
to be determined, but the folks at ITTVIS understand that
the current arrangement is not ideal.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
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Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by penteado on Thu, 04 Nov 2010 00:31:57 GMT
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On Nov 3, 4:17 pm, David Fanning <n...@dfanning.com> wrote:
> They are trying to sort out the problem now, but there
> is some thought to going back to a separated workbench/process
> arrangement for Windows computers. All of this is still
> to be determined, but the folks at ITTVIS understand that
> the current arrangement is not ideal.

Is this not the bug that was fixed in 8.0.1:

"58077 59612 IDL cannot allocate sufficient memory for large arrays."

?

Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by David Fanning on Thu, 04 Nov 2010 00:49:08 GMT
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Paulo Penteado writes:

> Is this not the bug that was fixed in 8.0.1:
>
> "58077 59612 IDL cannot allocate sufficient memory for large arrays."

As I understand my conversation this morning, the problem
is bigger than this.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: an idl_opserver-like option for IDL 8.0?
Posted by Mark[1] on Thu, 04 Nov 2010 05:46:19 GMT
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I hadn't noticed the reduction in maximum array size, but it's a bit
of a worry.

Below are reports from memtest under IDL 8.0.1 on my Win32 machine. It
looks like I'll be using the command-line application or a Linux
server for any heavy lifting.

IDLDE:

IDL> memtest
Memory block # 1: 512 Mb (total: 512 Mb)
Memory block # 2: 244 Mb (total: 756 Mb)
Memory block # 3: 159 Mb (total: 915 Mb)
Memory block # 4: 116 Mb (total: 1031 Mb)
Memory block # 5:   65 Mb (total: 1096 Mb)
Memory block # 6:   63 Mb (total: 1159 Mb)
Memory block # 7:   36 Mb (total: 1195 Mb)
Memory block # 8:   30 Mb (total: 1225 Mb)
Memory block # 9:   29 Mb (total: 1254 Mb)

Memory block #10:   28 Mb (total: 1282 Mb)

Command-line:

IDL> memtest
Memory block # 1: 1197 Mb (total: 1197 Mb)
Memory block # 2: 157 Mb (total: 1354 Mb)
Memory block # 3: 107 Mb (total: 1461 Mb)
Memory block # 4:   75 Mb (total: 1536 Mb)
Memory block # 5:   66 Mb (total: 1602 Mb)
Memory block # 6:   52 Mb (total: 1654 Mb)
Memory block # 7:   29 Mb (total: 1683 Mb)
Memory block # 8:   19 Mb (total: 1702 Mb)
Memory block # 9:   18 Mb (total: 1720 Mb)
Memory block #10:   18 Mb (total: 1738 Mb)