Subject: old problem--the limitation on largest array in IDL, new
Posted by renjie on Tue, 13 Nov 2001 17:01:42 GMT
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I tried PCs with RAM from 256MB to 1,5GB, it seems
the largest array you can get is less than 779MB, usually
it's less than 720MB, 710MB can be built in any cases,
all tests were carried out in win2000 pro, what's the idea?

Subject: Re: old problem--the limitation on largest array in IDL, new
Posted by Mark Rivers on Mon, 19 Nov 2001 04:23:24 GMT
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renjie <renjie.he@uth.tmc.edu> wrote in message
news:9srjlk$3a6$1@oac2.hsc.uth.tmc.edu...
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> the largest array you can get is less than 779MB, usually
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> all tests were carried out in win2000 pro, what's the idea?

As I understand it, a single Windows process is limited to 1 GB of addressable memory, no matter how much or how little RAM you have. I am able to allocate very close to 1GB arrays if it is the first thing I do in a new IDL session. This is not an IDL problem, a C program you write will have the same limitation.

Basically technology has caught up with 32-bit processors (e.g. Pentium) and operating systems. We can now almost all afford systems with 1GB of RAM, which is the most a single Windows process (e.g. IDL) can use.

The new Itanium processors are 64 bit machines, and there is a beta version of Windows XP which is 64 bits. However, there are very few applications which are 64 bits yet. Hopefully IDL will be one of the first 64 bit Windows applications, since my tomography datasets are all close to 1 GB, and will soon exceed it.

Mark Rivers

Subject: Re: old problem--the limitation on largest array in IDL, new
Posted by Pavel A. Romashkin on Mon, 19 Nov 2001 16:30:27 GMT
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Mark Rivers wrote:
> We can now almost all afford systems with 1GB of RAM,
> which is the most a single Windows process (e.g. IDL) can use.

Yes, I'd say so. Especially now that RAM costs $1 per 10 Mb...

Subject: Re: old problem--the limitation on largest array in IDL, new
Posted by renjie on Mon, 19 Nov 2001 19:26:08 GMT
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Would you please try the following, and see if you can do something in
windows
http://albert.ssl.berkeley.edu/~korpela/mmap/

"Mark Rivers" <rivers@cars.uchicago.edu> wrote in message
news:wQ%J7.24$P4.983@news.uchicago.edu...
>
> renjie <renjie.he@uth.tmc.edu> wrote in message
> news:9srjlk$3a6$1@oac2.hsc.uth.tmc.edu...
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>
> Mark Rivers
>
>
