Subject: Re: Memory management by 5.4 on Sunblade
Posted by Craig Markwardt on Thu, 20 Dec 2001 05:50:14 GMT
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JD Smith <jdsmith@astro.cornell.edu> writes:
> Timm Weitkamp wrote:
>>
>> Hi,
>>
>> I'm mostly using IDL 5.4 on my laboratory's Linux86 cluster, and
>> running memory-critical simulation code on it which uses lots of large
>> temporary arrays.
>>
...
>> However, I noticed that memory management by IDL 5.4 on the Sunblade
>> is extremely poor in that variable space "freed" by TEMPORARY, DELVAR,
>> or simply by dynamic resizing of a variable is not actually freed but
>> kept allocated (so tells me "top").
...
>
> It's not a *bug*, it's a *feature*. IDL allocates memory as necessary
> from the OS, and then, even if it doesn't need it any more, hangs onto
> it just in case. This is true I think on all platforms, and all recent
> versions of IDL. You still have the memory available, just not to the
> system as a whole.

Hi JD--

I do not think this is always true. I find that I regularly create
300 MB arrays in memory, and then free them. While the procedure is
running, the memory usage is indeed around 300 MB, but afterwards the
memory use, as reported by the external program "top", drops down
again to the quiescent level.

If I recall correctly, there was a bally-hoo in one of the What's News
from ages ago about IDL using an allocator that is able to release
memory back to the system. *However*, this is surely (a) extremely
system dependent; and (b) not always possible depending on the
fragmentation of the memory at the time. Perhaps this is what Timm is
running in to.

Good luck Timm!
Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

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