Subject: Re: Clear everything in IDL?
Posted by Peter Mason on Wed, 24 Sep 1997 07:00:00 GMT
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On Tue, 23 Sep 1997, Alex Schuster wrote:
> Matthew J. Sheats wrote:
>> I've tried this.. unfortunately (In windows NT anyway.. I haven't
>> tried else where) It does not seem to actually release the memory as
>> such.
>> Internal to IDL, it may mark that region of memory as freed, but
>> Windows never receives that memory back until IDL is closed. It would
>> also appear that any additional memory allocated doesn't utilize this
>> memory which idl has already allocated, but instead pulls more off of
>> NT's heap.
>
> You're right! The IDL FAQ has a topic covering this. Have a look at
> http://ww2.sd.cybernex.net/~mgs/idl_faq.html#T27

This is a problem that Unix IDL users know and hate - the IDL session's "data space" never gets reduced in size. (It's an operating-system issue, not an IDL issue.)
Now try not to laugh, but if this is a major issue for you then you might be better off using Windows 95 instead of NT. Win95 appears to release memory back to the system as soon as it is "freed" in IDL. (I must say that I'm disappointed to hear that NT seems to have the same dog-with-a-bone problem as Unix.)

If you are swinging huge arrays around in IDL then it'll probably be worth your while to explore the way IDL uses memory "on the sly". This is easy under Win95. Start the System Monitor and get a "Memory Manager: Allocated Memory" display going, and start an IDL session. Get yourself a chunky array, e.g., N=1024L*1024L*32L & B=BYTARR(N). Try out some stuff. e.g., Watch your computer go to lunch when you type B(*)=1B. Enjoy the German engineering of B=TEMPORARY(B)+1B. Look on in horror at B=TEMPORARY(B)+1. See if your computer is even capable of B(*)=1L. And try out some of the operations your program does on large arrays.

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