Subject: Re: IDL, arrays, and memory
Posted by James Kuyper on Tue, 04 Feb 2003 17:29:27 GMT
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David Fanning wrote:
>
> Sean Raffuse (sean@me.wustl.edu) writes:
>
>> I would like to create a jagged array. My array is something like:
>>
>> array = intarr(3600, 1600, 240 or less)
>>
>> Do I save space by creating a jagged array where the 3rd dimension is of
>> variable size? Is that even possible? Should I just stick with
>> 3600x1600x240?
>
> What language are you thinking of doing this in, Sean? :-)
>
> As a general rule, it is better to get all the memory you
> need at once, then trim. This avoids memory fragmentation
> problems, etc.
>
> But "jagged arrays". I'd like to see this when you are
> finished. :-)

In C, you can implement jagged arrays by defining a two-dimensional array of pointers to allocated arrays, where each of the allocated arrays can have a different length. You can write custom functions that know that the length can vary, and they can be very efficient.

In IDL, while you do have pointers, there's such a big speed difference between the native array processing facilities and user-written loops that this is probably not worth the trouble. You're probably better off sticking with 3600x1600x240.