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Subject: Re: memory issues redux

Posted by [R.G.Stockwell](#) on Tue, 16 Nov 2004 18:08:08 GMT

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"Paolo Grigis" <pgrigis@astro.phys.ethz.ch> wrote in message  
news:419a3d56\$1@news1.ethz.ch...

> Actually, you can put a smaller number of, say, floats in  
> an array than bytes  
>  
> IDL> a=fltarr(1024L\*1024\*511) ;this is ok  
> IDL> a=fltarr(1024L\*1024\*512)  
> % Array has too many elements.  
> % Execution halted at: \$MAIN\$  
>  
> So it looks like IDL internally addresses the memory in byte sized  
> units, independently from the type of data stored, and therefore  
> you can get up to 2 gigaelements for a byte array, but just 512  
> megaelements for a float array, 256 megaelements for a double  
> array etc.  
>  
> Therefore the real limit for a single array is at 2GB, no matter  
> the array type.  
>  
> Cheers,  
> Paolo

I'm a bit surprised to see that with floats. I was suspecting that  
complex variables were just 2 floats internally, not that everything was  
bytes. huh!

cheers,  
bob

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