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Subject: Re: what is the upper limit for IDL array?  
Posted by [Jean H.](#) on Thu, 21 May 2009 15:52:04 GMT  
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Hu wrote:

> Hi,there  
>  
> I want to know the upper limit number of a 1-D/2-D array (say, Array),  
> Is there anybody knows the answer?  
>  
> I mean, how many elements that I can write into this 1-D/2-D array?  
>  
> Thanks

here is an answer from Paolo he sent on this topic a few years ago.  
Jean

Jean H. wrote:

> Hi all,  
>  
> I can't remember this... what is the type of the variable used to  
index an array? ... in other words, what is the max number of elements  
an array can hold, provided the memory is available? Is there a way to  
change that, so I can use, let's say, an unsigned long 64?

In the 32-bits version, signed longs are used.  
Thus the max number of elements of a byte array is  $(2^{31}-\text{offset})$ ,  
where offset is a small number (around 10).

IDL 64 bit uses signed double precision longs, and the max number  
of elements in a byte array is  $(2^{63}-\text{offset})$  [here the offset seems  
to be around 512].

For other numeric types, divide the above numbers by the size in  
bytes of one element.

Ciao,  
Paolo

>  
> Thanks,  
>  
> Jean

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