
Subject: Re: Multidimensional arrays and CALL_EXTERNAL

Posted by [Foldy Lajos](#) on Fri, 20 Jun 2008 18:24:59 GMT

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On Fri, 20 Jun 2008, Dan wrote:

> Hi everyone,
>
> Now that I have gotten CALL_EXTERNAL to work correctly, I am trying to
> figure out how IDL stores multidimensional arrays in memory. Since
> CALL_EXTERNAL passes an arrays by reference (pointer to the first
> element of the array), the multidimensional arrays in C act like a 1-D
> array. I have figured out how to access elements of a 2D array
> (array(i, j) ---> array[i + i_size * j]), but haven't been able to
> figure out how to access elements from a 4D array.
>
> For example, how would I access element:
> array(i, j, k, m) from the pointer in C?
>

I have never used CALL_EXTERNAL, but my guess is:

```
array(i, j, k, m) ---> array[i  
    + i_size * j  
    + i_size * j_size * k  
    + i_size * j_size * k_size * m]
```

regards,
lajos
