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Subject: Re: Dynamic arrays in structs: re-allocation problem

Posted by [franzpx125](#) on Tue, 09 Mar 2010 22:09:33 GMT

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On 9 Mar, 20:50, Ron <[oneelkr...@hotmail.com](mailto:oneelkr...@hotmail.com)> wrote:

> On Mar 9, 8:59 am, franzpx125 <[franzpx...@gmail.com](mailto:franzpx...@gmail.com)> wrote:

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>
>
>
>> Hi!,  

>
>> I have troubles with dynamic arrays in structs. The method I use  

>> (following N. Wade suggestion) is to define the struct tags in this  

>> way:  

>
>> static IDL_MEMINT stats_width_dims[IDL_MAX_ARRAY_DIM];  

>
>> IDL_STRUCT_TAG_DEF stats_tags[] = {  

>>   { "WIDTH", stats_width_dims, (void *) IDL_TYP_DOUBLE },  

>>   { 0 }  

>
>> };  

>
>> Next I populate the dims arrays which define the size of the dynamic  

>> arrays and make a structure with IDL_MakeStruct:  

>
>> stats_width_dims[0] = 1;  

>> stats_width_dims[1] = stats->counter;  

>> s = IDL_MakeStruct("STATS", stats_tags);  

>
>> Finally I create a temp structure using IDL_MakeTempStruct:  

>
>> tmp_dims[0] = 1;  

>> s_data = (char *)IDL_MakeTempStruct(s, 1, tmp_dims, &idl_out_struct,  

>> TRUE);  

>
>> This temporary structure is returned to IDL after populating it:  

>
>> offset = IDL_StructTagInfoByName(s, "WIDTH", IDL_MSG_LONGJMP, NULL);  

>> d_tmp_ptr = (double *)(s_data + offset);  

>> for ( i = 0; i < stats->Node_Counter; i++)  

>>   *(d_tmp_ptr++) = stats->width[i];  

>
>> return idl_out_struct;  

>
>> First time the code is executed, everything works properly. In the  

>> second call I'm not able to set the dynamic array with the new  

>> dimension and, obviously, if the new dimension is greater than the
```

```
>> previous one IDL crashes. I think that the code:  
>  
>> stats_width_dims[0] = 1;  
>> stats_width_dims[1] = stats->counter;  
>> s = IDL_MakeStruct("STATS", stats_tags);  
>  
>> may not be used for updating an existing struct but just for creating  
>> a new one. I'm not able to find a valid solution... any suggestion?  
>  
>> Thanks,  
>> F. Brun  
>  
> What happens if you replace the IDL_MakeStruct() call with,  
>  
> s = IDL_MakeStruct(NULL, stats_tags);  
>  
> to create an anonymous structure? It might be that IDL is holding on  
> to something since you gave it the name "STATS".  
>  
> Ron
```

It works! Thanks a lot.

F. Brun

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