
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> wrote:

> On Mar 9, 8:59 am, franzpx125 <franzpx...@gmail.com> wrote:

>

>

>

>> 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
