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

Posted by [rtk](#) on Tue, 09 Mar 2010 19:50:06 GMT

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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

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:

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> On Mar 9, 8:59 am, franzpx125 <franzpx...@gmail.com> wrote:
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>
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>> 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;
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> to something since you gave it the name "STATS".
>
> Ron

```

It works! Thanks a lot.

F. Brun