Subject: Re: Returning A Variable Length struct to IDL from C
Posted by Craig Markwardt on Tue, 06 Nov 2001 16:28:16 GMT
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Nigel Wade <nmw@ion.le.ac.uk> writes:

> Craig Markwardt wrote:
>
>>
>> Greetings--
>>
>> K Banerjee <kbanerje2@home.com> writes:
>>
>>> The next two lines are used to create the return value to IDL:
>>>
>>> void *psDef = IDL_MakeStruct(NULL, vbHeaderTags);
>>> IDL_VPTR ivReturn = IDL_ImportArray(1, ilDims, IDL_TYP_STRUCT,
>>> (UCHAR *) theHeaderActual, releaseMemory, psDef);
>>
>> Here is your first problem. IDL_ImportArray only works when you
>> import static data, not dynamically allocated. Basically ImportArray
>> only works once per piece of memory per IDL session.
>
> Really?. I run code which calls IDL_ImportArray many 1000s of times within
> a session, all with malloc'd data and have not had any problems.
>
> Why do you think it can only be used once per session, with static data?

I spoke too soon. I didn't remember ImportArray having a "release"
argument. I stand corrected.

>> Here (in my opinion) is your second problem: trying to do something
>> too complicated within a DLM function. I personally think that while
>> it's not impossible, trying to manipulate complex data structures
>> within a DLM are very *close* to impossible and are really
>> unnecessary.
>
> No, no, no! You're missing the entire purpose of DLMs.
> It's the realm of DLMs to do those things which are too complicated to do
> in IDL. ;-)

Humor noted :-). That may be true, but data manipulation is one thing
that is easy to do in IDL itself. From experience I know that
populating IDL structures within a DLM can be very tricky indeed,
especially, as you mentioned, when there are complex data (i.e.,
strings) encapsulated within the structure.

Craig

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