
Subject: Re: DLM's and C code

Posted by [Dominik\[1\]](#) on Mon, 14 Jan 2002 10:07:17 GMT

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Ok, now I see what you mean.

"Richard Tyc" <Richard_Tyc@sbrc.umanitoba.ca> schrieb im Newsbeitrag
news:a1ne9h\$ock\$1@canopus.cc.umanitoba.ca...

> My problem was that the error did NOT occur in the C routine called by
> call_external but in other deeply nested routines with no simple means of
> getting back to the routine called by CALL_EXTERNAL. Essentially, I
adapted
> some existing ANSI C code to be called by IDL and added "IDL" specific
> features (like the testmodule example in docs for MAKE_DLL) so I could
call
> various functions I needed. Unfortunately, major errors in this code were
> handled by simple calls to exit() which is not helpful to IDL and it would
> also have been a real pain to add returns throughout the many C functions
to
> return the error back to IDL. Now I can use IDL_MESSAGE with the
> IDL_MSG_LONGJMP action.

>
> Rich

>
> Dominik Paul <dpaul@ukl.uni-freiburg.de> wrote in message
> news:a1jk1e\$f8t\$1@n.ruf.uni-freiburg.de...

>> Hi Richard,

>>
>> I do it a little bit easier way. If an error occurs in my C routine (in
a

>> DLL) I return with an error code, lets say:
>> #define ERROR_DIVISION_BY_ZERO -128
>> return ERROR_DIVISION_BY_ZERO;

>>
>> In IDL I can check the return value

>>
>> status = call_external()
>> if status EQ -128 then...

>>
>> This works really good for me. The calculations which the C routine is
> doing

>> for me, is written into a piece of memory and can then be seen by IDL.
>> Therefor I create a variable in IDL, pass it to my DLL by reference (I
> think

>> it is the normal way to pass it by referenze), can manipulate the value
> and

>> on returning to IDL, the variable will hold the new value.

>>

```
>> Hope it helps you
>> Dom
>>
>>
>> "Richard Tyc" <Richard_Tyc@sbrc.umanitoba.ca> schrieb im Newsbeitrag
>> news:a1fsur$78a$1@canopus.cc.umanitoba.ca...
>>> A somewhat IDL related question.
>>> I am trying to link in some C code via a DLM. I use a wrapper routine
to
>>> handle the call from IDL and manipulate the args and return data.
Within
>> the
>>> wrapper, I call C functions linked in through another DLL.
>>>
>>> What is the best way to handle errors while deeply nested within
layers
> of
>> C
>>> functions.? The ANSI C code I am using essentially had exit(1) calls
> for
>>> major errors. Is there an IDL_ function (like say an exit handler) I
> can
>>> call to cleanly return to IDL rather than a trying to modify the call
>> stack
>>> and get back to the IDL wrapper function to perform something like a
>> return
>>> IDL_StrToSTRING("ERROR") ;
>>>
>>> Thanks
>>>
>>> --
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