
Subject: Re: DLM's and C code
Posted by [Richard Tyc](#) on Fri, 11 Jan 2002 19:18:36 GMT
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Thanks Craig,

I am now using IDL_MSG_LONGJMP since in many cases IDL_MSG_RET does not get me back to the C function called by the IDL interpreter (ie. the function found in the *.dlm file which can be called from within IDL). Typically , the error is deeply nested in another c function inside a linked in DLL or simply another C function not "visible" to IDL but in the same overall *.c program compiled with MAKE_DLL.

I am a bit surprised LONGJMP works since the docs say :
"... It is an error to use this action code in code not called by the IDL interpreter since the resulting call to longjmp() will be invalid. "

But, a seemingly safe return to the IDL command line occurs with the message:

```
% Execution halted at: $MAIN$
```

Go figure....

Rich

Craig Markwardt <craigmnet@cow.physics.wisc.edu> wrote in message news:onsn9fuls0.fsf@cow.physics.wisc.edu...

```
>  
> "Richard Tyc" <richt@sbrc.umanitoba.ca> writes:  
>  
>> I was thinking of IDL_Message too, but the descriptions of the 'actions'  
>> possible puzzled me :  
>> From Docs:  
>>  
>> IDL_MSG_EXIT - Use this argument to cause the IDL process to exit after  
>> the  
>> message is issued. This code should never be used in a system function  
>> or  
>> procedure - it is intended for use in other sections of the system.  
>>  
>> Is my C stub in the DLM/DLM a system function or procedure. Would this  
>> work  
>> or would it crash IDL? I will try it  
>>  
>> IDL_MSG_LONGJMP - It is an error to use this action code in code not  
>> called  
>> by the IDL interpreter since the resulting call to longjmp() will be
```

>> invalid.
>> I assume this would be my case since I am deeply nested in the DLL and not
>> in the C function directly called by the interpreter.
>
> Hi Rich--
>
> You haven't really said what you want to do. In the first place you
> said something about "cleanly returning to IDL." Well that has
> several meanings.
>
> I believe that
>
> IDL_MSG_RET
> Use this argument to make IDL_Message() return to the caller after
> issuing the error message. In this case, the calling routine can
> either continue or return to the interpreter as it sees fit.
>
> is actually your best bet, because that forces a return to the calling
> procedure in IDL. Then, presumably, you can have that procedure
> handle the error appropriately. I think that IDL_MSG_EXIT is exactly
> what you *don't* want, since there's nothing orderly about it at all.
> It just shuts down IDL! Also, IDL_MSG_LONGJMP may work for you. My
> interpretation of that message is that it returns to the command line
> interpreter to await further commands.
>
> Good luck,
> Craig
>
> --
> -----
> Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
> -----
