Subject: Re: Pros & cons of methods 1) DLM and 2) Call_External of calling C from IDL

Posted by Michael Galloy on Mon, 01 Aug 2016 13:32:59 GMT View Forum Message <> Reply to Message

On 7/31/16 3:09 PM, neil.a.salmon@gmail.com wrote:

- > Could anyone please summarize the pros and cons of using the two
- > different methods 1) DLM and 2) Call_External of calling C routines
- > from IDL. I'm using IDL Version 6.0. Many thanks, neil

If you go with CALL_EXTERNAL, I would recommend an IDL wrapper routine that checks the arguments. The wrapper routine can accept keywords and hide the C/Fortran style API of the external call.

CALL EXTERNAL

Pros:

- fairly easy
- doesn't require an C coding or knowing the IDL C API

Cons:

- ugly, brittle call
- no keywords
- C/Fortran style API, not a typical IDL calling style

DLM

Pros:

- can make a native style routine (this is how IDL is extended by Harris engineers)
- access to IDL C API: keywords, data checking macros, variable number of parameters, etc.

Cons:

- requires knowledge of C and the IDL C API (significant learning curve)
- requires a fair amount of C boilerplate code

Mike

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Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)