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Subject: Calling IDL from Fortran called by IDL

Posted by [Kevin A. Park](#) on Mon, 26 Nov 2001 22:28:37 GMT

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Hi,

I have an IDL GUI which sits on top of a calculation engine which is written in Fortran 90. Currently IDL accesses the calculation engine by calling C wrapper functions via `CALL_EXTERNAL`. These C wrappers then call Fortran routines. The system runs both on Solaris and Windows platforms. I am currently using IDL 5.4, but will upgrade to IDL 5.5 soon.

Some of the calculations in the Fortran take a long time, so what I would like to do is have IDL create a progress bar which can be updated from the Fortran. Having waded through the IDL External Development Guide, I have a few questions.

1. The only way of calling IDL common to both UNIX and Windows platforms is callable IDL, yes?
2. According to the External Development Guide, callable IDL can not be used from code that is called from IDL via `CALL_EXTERNAL` or `LINKIMAGE`. But can callable IDL be used in a dynamically loaded module (DLM)?
3. Does callable IDL always start a new IDL process (i.e. a new "virtual machine" to borrow Java terminology) or can it be used to access data and functions in an existing IDL process?
4. Is there any way of passing function pointers to IDL methods to a native compiled language such as C so that these routines could be called from the compiled language (e.g. C)? (In Java there is a way to use the Java-Native Interface (JNI) to accomplish just this sort of thing.)

Thanks for any help you can provide.

Kevin Park

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