
Subject: Re: linking with call_external

Posted by [Jon Twichell](#) on Mon, 19 Jun 1995 07:00:00 GMT

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theil@bogart.Colorado.EDU ("Dynamo" Dave Theil) wrote:

> I am using call_external with c routines. There is one minor glitch
> that MUST be conquerable. If a change is made to the external routine
> and it is recompiled, but the image file has been called before in the
> current IDL session by call_external, the new file does not appear to
> be relinked into idl:
> deleted
> Any suggestions?

The call_external only loads the image on the initial call. Thereafter, the image is locked into memory (for non-memory-mapped systems e.g., the mac) and the name cached in a table. This reduces the amount of time needed to invoke the routine from 10's of milliseconds (dominated by the file lookup) to about one microsecond (on a Mac PowerPC). The fast response is necessary for many applications.

My (unheaded) suggestion was to make call_external more like linkimage. Have a load_external, and then just refer to the code by name instead of the clumsy call_external(...). The easy interface and calling mechanism could be retained.

Lacking that, your only option would seem to be to use linkimage (unless you are running on a 68K Mac which does not support this option). Generally linkimage provides a more powerful set of tools and capabilities (variable creation, memory allocation and deallocation, and access to internal routines). IMHO is the preferable interface to external code.

Hope this helps!
