# Subject: Re: IDLgrLegend broken
Posted by Mark Hadfield on Thu, 07 Dec 2000 20:21:16 GMT

"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.14996ac0b9d231b2989cb0@news.frii.com...

Responding to David's post, and his quote from Pavel's post, which I have
not yet seen:

Pavel, quoted by David:
>> I think the only really generic solution is *saving each method in a
>> separate file*.

I think that this is not a good idea, because of this rule:

   IDL searches--all the way up the inheritance tree--in memory before
   searching on the disk. (For performance reasons, obviously.)

So if we have a class MyClass with a method SomeMethod stored in a file
myclass__somemethod.pro then the first time IDL wants to call SomeMethod on
a MyClass object it may find and compile myclass__somemethod.pro, but *only*
if the search through the already-compiled functions in memory fails to find
a SomeMethod associated with one of MyClass's superclasses.

The reason for storing all object methods in myclass__define.pro is that
myclass__define is always called (and so myclass__define.pro is always
compiled) when the first instance of MyClass is created. (Unless you get
sneaky and try to restore MyClass from disk.)

David:
> But before I did this, I'd have a closer read of this
> article, where JD and I (and probably Mark) discussed
> this restore object problem and came up with a
> "sorta" solution:
>
>    http://www.dfanning.com/tips/saved_objects.html

Hey nice one David. I don't know that I can claim any of the credit or blame
for this article. I have read it before and I should have remembered its
existence before posting very similar material.

A comment/question on the RESOLVE_OBJ routine that's shown at the above
link:

The following code snippet ensures that each object's __define procedure is
called only if it has not already been compiled. (The array ri holds a list
of currently compiled routines, generated by a call to ROUTINE_INFO.)

```
if (where(ri eq defpro))[0] eq -1 then begin
  ;; Compile and define the class.
  call_procedure,defpro
endif
```

My comment is: why bother? Once a __define method has been called once,
further calls have no effect.


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