Subject: Re: syntax for calling parent class _overloadPlus method
Posted by Markus Schmassmann on Fri, 29 Apr 2016 09:45:09 GMT

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On 04/28/2016 10:35 PM, Michael Galloy wrote:
> On 4/28/16 7:01 AM, Markus Schmassmann wrote:
>> i'm trying to overload operators for my subclass of idl_variable, but
>> don't find the correct syntax for calling the parent classes' operator
>> function.
>>
>> How do i have to correct the line below marked ';problem' without using
>> 'left+right'?
>> i guess i have to put something like    XXX.idl_variable::_overload...
>> but what would then be XXX?
>>
>> ---
>> pro sandbox__define
>>     struct={sandbox, $
>>         inherits idl_variable, $
>>         reps:    ptr_new() $
>>         }
>> end
>>
>> function sandbox::Init, array, reps
>>     ; a bit of code
>>     void=self.idl_variable::init()
>>     void=self.idl_variable::set_value(array)
>>     *self.reps=reps
>>     return, 1
>> end
>>
>> function sandbox::_overloadPlus, left, right
>>     ; some code
>>     out=idl_variable::_overloadPlus(left,right)       ;problem
>>     ; some more code
>>     return, out
>> end
>> ---
>>
>> PS: Sorry, stupid question of a beginner, but i failed to find the
>> solution elsewhere.
>> PPS: There may be more errors, but the rest at least compiles.
>
> In general, you would use something like the following to call a
> parent's implementation:
>
>    out = self->IDL_Variable::overloadPlus(left, right)
>
```

> You can use the . notation you used in ::init as well:
>
>   out = self.IDL_Variable::overloadPlus(left, right)
>
> But, in your case, you are calling some methods that don't exist. As
> far as I can tell, there are no IDL_Variable::init,
> IDL_Variable::set_value, and IDL_Variable::_overloadPlus methods.
>
> Mike

when searching for the definition of the variable class i found a file
idl_variable__define.pro in the following path:
/opt/idl/idl_local/pub_domain/ssw/gen/idl/clients/rpc/
(i don't maintain that file tree)
it does have an ::init & ::setvalue function.

As for the _overloadPlus, i may apparently erred in assuming
http://www.harrisgeospatial.com/docs/Overloadable_Operators. html
applies also to variables, i assumed them not beeing mentioned in the
__define file meant they were implemented in C but still could be
accessed as i wanted.

Then let me rephrase the question:

What class(es) should i use as parent class, if i want to create a
class, that during initialisation or initial set_value accepts an array
and a repetition pattern, and afterwards should behave as if the
sandboxMember has been expanded from the array & pattern using a
combination of rebin,reform,transpose...
sandbox(indgen(1,10),[40, 1,60]) should behave the same as
rebin(indgen(1,10),[40,10,60]), but only use the memory of indgen(10)
and an array ulong[8] and run faster. The operators themselves when not
operating on trivial cases will have to be implemented in C.

i want to be able to pass my sandboxMembers to foreign code that should
not realize it has not been passed an ordinary array. It will not be a
small thing to do, but if done right should increase idl performance
quite a bit.

PS: sorry for the double-post before