Subject: Hide functions from other procedures
Posted by fugu on Fri, 27 Feb 2009 19:37:25 GMT
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I have two procedures, and in both .pro files, I define slightly different functions with the same name. I would like to make sure, that only the procedure in the same .pro file can see 'it's own' function, but no other procedure. The reason is, that I often define a plot function first (which I call my_plot), which gets than called by the actual procedure several times, to plot on screen and to ps etc.

I can off course, give the functions different names, but there are good reasons for calling it the same (mainly because I later know the function call my_plot without having to look it up etc.)

As an example:

I have two files, called test1.pro and test2.pro, which hold the procedures (not surprisingly) test1 and test2.

test1.pro looks like this

HEADER
FUNCTION my_plot
...
END

PRO TEST1
...
calls my_plot
END

and test2 looks exactly the same, but the function my_plot in test2 is different from the function my_plot in test1. Now I hoped, that compiling and running test2 would know nothing about the my_plot function in test1 which I compiled before. But that does not seem to be the case.

Any help much appreciated.

Daniel

Subject: Re: Hide functions from other procedures
Posted by Michael Galloy on Fri, 27 Feb 2009 20:47:21 GMT
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fugu wrote:
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> plot function first (which I call my_plot), which gets than called by
> the actual procedure several times, to plot on screen and to ps etc.

IDL has a global namespace for routines. There is no way to ensure that
only the procedure in the same .pro file can see 'it's own' function
except by carefully managing manual re-compiles of the routines (as
successive compiles bump old routines of the same name out of memory).

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> different from the function my_plot in test1. Now I hoped, that
> compiling and running test2 would know nothing about the my_plot
> function in test1 which I compiled before. But that does not seem to
> be the case.

So starting from a fresh IDL session, compiling TEST1, then compiling
TEST2, and then calling MY_PLOT results in TEST1's MY_PLOT being called?
I don't see how that's possible. Be careful with compile order: it
happens only the first time you use a function. So calling TEST2, then
TEST1, and then TEST2 again would cause a problem (TEST2 would be
calling TEST1's MY_PLOT). Of course, using RESOLVE_ROUTINE, manually
compiling, doing a .reset, etc. changes everything.

My suggestion: name them TEST1_MY_PLOT and TEST2_MY_PLOT.

Mike
--
www.michaelgalloy.com
Associate Research Scientist
Tech-X Corporation

Subject: Re: Hide functions from other procedures
Posted by R.Bauer on Sat, 28 Feb 2009 10:56:57 GMT
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mgalloy schrieb:
> fugu wrote:
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> My suggestion: name them TEST1_MY_PLOT and TEST2_MY_PLOT.
>
> Mike

Or do refactor this code into objects.

Then you can inherite from one object and overwrite the methods you want
to have different.

If you want keep your plot function add cases and keywords to it. So
that you have only one function as separate routine where you add every
different part from the others.

cheers
Reimar

Subject: Re: Hide functions from other procedures
Posted by fugu on Tue, 03 Mar 2009 17:03:33 GMT
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On Feb 28, 10:56 am, Reimar Bauer <R.Ba...@fz-juelich.de> wrote:
> mgalloy schrieb:
>
>
>
>> fugu wrote:
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> Reimar

Thanks everyone for helpful comments! Much appreciated.

Daniel
