
Subject: Re: .compile_opt strictarr is persistent?

Posted by [David Fanning](#) on Mon, 09 Oct 2006 18:00:37 GMT

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Craig Markwardt writes:

> Should I put the .compile_opt statement *within* each individual
> function in the module?

Absolutely. I'm not sure where you are using the compile_opt statement (no period in front of it, by the way), but if you use it at the IDL main level, it is defined at the main level. If you want it in effect inside procedures and functions, it will have to be declared inside each and every procedure or function you want to use it in.

Done this way to ensure backward compatibility, not to make your life easier. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: .compile_opt strictarr is persistent?

Posted by [Michael Galloy](#) on Mon, 09 Oct 2006 18:32:00 GMT

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David Fanning wrote:

> Craig Markwardt writes:

>

>> Should I put the .compile_opt statement *within* each individual
>> function in the module?

>

> Absolutely. I'm not sure where you are using the
> compile_opt statement (no period in front of it,
> by the way), but if you use it at the IDL main
> level, it is defined at the main level. If you
> want it in effect inside procedures and functions,
> it will have to be declared inside each and every
> procedure or function you want to use it in.

>

- > Done this way to ensure backward compatibility, not
- > to make your life easier. :-)

Follow David's advice as above. I did try this because it seemed odd behavior you were describing. IDL does not complain if you have a `compile_opt` statement outside of any routine in a file. It will change the behavior of the main-level (but not the routines in the file). I think I will make a list sometime of the most dangerous things IDL will let you do.

Mike

--

www.michaelgalloy.com

Subject: Re: `.compile_opt` strictarr is persistent?

Posted by [David Fanning](#) on Mon, 09 Oct 2006 18:40:26 GMT

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mgalloy@gmail.com writes:

- > Follow David's advice as above. I did try this because it seemed odd
- > behavior you were describing. IDL does not complain if you have a
- > `compile_opt` statement outside of any routine in a file. It will change
- > the behavior of the main-level (but not the routines in the file). I
- > think I will make a list sometime of the most dangerous things IDL will
- > let you do.

Indeed, I stumbled onto this in an IDL programming class I was teaching. But `COMPILE_OPT STRICTARR` in an IDL startup file does wonders for re-programming the finger/brain connections. :-)

Cheers,

David

P.S. Of course, the same thing is true of `COMPILE_OPT DEFINT32`.
VERY nice!

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: .compile_opt strictarr is persistent?
Posted by [K. Bowman](#) on Mon, 09 Oct 2006 18:46:05 GMT
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In article <1160418720.740991.36680@m7g2000cwm.googlegroups.com>,
"mgalloy@gmail.com" <mgalloy@gmail.com> wrote:

> Follow David's advice as above. I did try this because it seemed odd
> behavior you were describing. IDL does not complain if you have a
> compile_opt statement outside of any routine in a file. It will change
> the behavior of the main-level (but not the routines in the file). I
> think I will make a list sometime of the most dangerous things IDL will
> let you do.
>
> Mike
> --
> www.michaelgalloy.com

I have

COMPILE_OPT IDL2

in my startup.pro.

I thought this was a feature. :-)

(At least the short/long integer part of IDL2).

Ken

Subject: Re: .compile_opt strictarr is persistent?
Posted by [Craig Markwardt](#) on Mon, 09 Oct 2006 19:32:06 GMT
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David Fanning <davidf@dfanning.com> writes:

> Craig Markwardt writes:
>
>> Should I put the .compile_opt statement *within* each individual
>> function in the module?
>
> Absolutely. I'm not sure where you are using the
> compile_opt statement (no period in front of it,
> by the way), but if you use it at the IDL main
> level, it is defined at the main level. If you
> want it in effect inside procedures and functions,
> it will have to be declared inside each and every

> procedure or function you want to use it in.

OK, thanks! I made the changes in my local copy and it seems to work fine.

I'm sort of afraid to convert all of my stuff wholesale to array[] notation... it's hard to test everything.

Thanks to all the replies!
Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: .compile_opt strictarr is persistent?
Posted by [Michael Galloy](#) on Mon, 09 Oct 2006 19:46:19 GMT
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Kenneth Bowman wrote:

> In article <1160418720.740991.36680@m7g2000cwm.googlegroups.com>,
> "mgalloy@gmail.com" <mgalloy@gmail.com> wrote:
>

>> Follow David's advice as above. I did try this because it seemed odd
>> behavior you were describing. IDL does not complain if you have a
>> compile_opt statement outside of any routine in a file. It will change
>> the behavior of the main-level (but not the routines in the file). I
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>> Mike

>> --

>> www.michaelgalloy.com

>

> I have

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> COMPILE_OPT IDL2

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> in my startup.pro.

>

> I thought this was a feature. :-)

>

> (At least the short/long integer part of IDL2).

>

> Ken

I agree -- I have it in my startup file, too. But that's a batch file that I know gets called on startup. Something like this just sitting between routines in a file would be a tough thing to find.

Mike

--

www.michaelgalloy.com

Subject: Re: .compile_opt strictarr is persistent?

Posted by [Kenneth P. Bowman](#) on Tue, 10 Oct 2006 00:15:57 GMT

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In article <1160423178.927770.163510@b28g2000cwb.googlegroups.com>, "mgalloy@gmail.com" <mgalloy@gmail.com> wrote:

> I agree -- I have it in my startup file, too. But that's a batch file
> that I know gets called on startup. Something like this just sitting
> between routines in a file would be a tough thing to find.
>
> Mike
> --
> www.michaelgalloy.com

Ah, now I understand. That is ... scary.

Ken

Subject: Re: .compile_opt strictarr is persistent?

Posted by [Craig Markwardt](#) on Tue, 10 Oct 2006 03:26:33 GMT

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"Kenneth P. Bowman" <k-bowman@removethis.tamu.edu> writes:

> In article <1160423178.927770.163510@b28g2000cwb.googlegroups.com>,
> "mgalloy@gmail.com" <mgalloy@gmail.com> wrote:
>
>> I agree -- I have it in my startup file, too. But that's a batch file
>> that I know gets called on startup. Something like this just sitting
>> between routines in a file would be a tough thing to find.
>>
>> Mike
>> --
>> www.michaelgalloy.com
>

> Ah, now I understand. That is ... scary.

To me, it's kind of dangerous that one module can so drastically change the behavior of the system at a global level.

Good thing there isn't a "compile_opt delete_all_files_upon_exit" option! :-)

Craig

--

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: .compile_opt strictarr is persistent?
Posted by [Maarten\[1\]](#) on Tue, 10 Oct 2006 07:22:53 GMT
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David Fanning wrote:

> mgalloy@gmail.com writes:

>

> Indeed, I stumbled onto this in an IDL programming class
> I was teaching. But COMPILE_OPT STRICTARR in an IDL startup
> file does wonders for re-programming the finger/brain
> connections. :-)

>

> Cheers,

>

> David

>

> P.S. Of course, the same thing is true of COMPILE_OPT DEFINT32.
> VERY nice!

I have

compile_opt defint32, strictarr, strictarrsubs, obsolete
!WARN.OBS_ROUTINES

in my idl startup file. Works really well in cleaning up code. Now, if only there was a command-line switch to make all float constants typed at the command line default to double, I'd be really happy.

Maarten

Subject: Re: .compile_opt strictarr is persistent?
Posted by [badjelly.witch](#) on Tue, 10 Oct 2006 20:38:55 GMT
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Craig Markwardt wrote:

>

> To me, it's kind of dangerous that one module can so drastically
> change the behavior of the system at a global level.

Module? Better clear that concept from the IDL compartment in your brain.

You haven't been programming in Python, have you?
