
Subject: Fragile IDL 8 Object Programs

Posted by [David Fanning](#) on Mon, 25 Oct 2010 15:06:00 GMT

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Folks,

Is anyone else having this problem? I write a LOT of IDL object programs. But I pretty much have to work in IDL 7 to debug them. IDL 8 is so incredibly fragile when an object crashes. I don't know if this is because of the new memory management of objects or what. But it's just really hard to work this way. Is it because my widgets are objects and there is some bad interaction between these two systems? Is it because I recompile after an object has crashed and I fix the problem, so the cleanup is confused? I don't know. Still looking for patterns and solutions. :-(

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: Fragile IDL 8 Object Programs

Posted by [David Fanning](#) on Mon, 25 Oct 2010 17:31:29 GMT

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Paul van Delst writes:

> Does this only happen when you use the idlde? Or also in command line usage?
>
> cheers,
>
> paulv
>
> p.s. Full disclosure: I have **never** used the idlde. I just started it up for the very first time and my simple hello
> world program produced several pages of errors. Goodness.

Oh, dear. Do you see why "changing the way you work" is NEVER a good idea! :-)

I work in Windows. I have NO idea what an IDL command line is. :-)

Cheers,

David

--

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Subject: Re: Fragile IDL 8 Object Programs

Posted by [David Fanning](#) on Mon, 25 Oct 2010 17:45:38 GMT

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David Fanning writes:

> I work in Windows. I have NO idea what an IDL command
> line is. :-)

Although, it occurs to me that if I returned to this 1975ish way of running IDL I might actually be able to find my graphics windows! :-)

Cheers,

David

--

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Subject: Re: Fragile IDL 8 Object Programs

Posted by [R.G.Stockwell](#) on Mon, 25 Oct 2010 21:33:25 GMT

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"David Fanning" <news@dfanning.com> wrote in message
news:MPG.272f4ac536998cd89897f6@news.giganews.com...

> Folks,
>
> Is anyone else having this problem? I write a LOT of
> IDL object programs. But I pretty much have to work
> in IDL 7 to debug them. IDL 8 is so incredibly fragile
> when an object crashes. I don't know if this is because
> of the new memory management of objects or what. But
> it's just really hard to work this way. Is it because
> my widgets are objects and there is some bad interaction
> between these two systems? Is it because I recompile after
> an object has crashed and I fix the problem, so the cleanup
> is confused? I don't know. Still looking for patterns and
> solutions. :-(

There is definitely something weird going on in IDL's cleanup. I am much more of a number cruncher than a widget maker, but when I debug some code and try to keep going, it almost always is messed up.

In fact, I now automatically type `ctrl S ctrl I .f ctrl F8 F8` when I save the current file, without even thinking about it, because of the need to reset the session.

(though sometimes, an old `ctrl w` will find it's way into that sequence, which causes me to stare at the screen for a few moments wondering what happened. lol.

cheers,
bob

PS for you newcomers, `ctrl w` used to be the command to switch to the command line from the edit window. now, it closes the current editor window, which means I have to go and search my disks for the mysterious location of the file I was working on so I can reopen it again.

Subject: Re: Fragile IDL 8 Object Programs
Posted by [David Fanning](#) on Mon, 25 Oct 2010 22:13:18 GMT
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R.G. Stockwell writes:

- > PS for you newcomers, ctrl w used to be the command to switch to the command
- > line from
- > the edit window. now, it closes the current editor window, which means I
- > have to go and search
- > my disks for the mysterious location of the file I was working on so I can
- > reopen it again.

You would think these would be in the "recently opened files list" under the File menu to the Workbench, but the only files that are ever on this list (when I look, which isn't often anymore) are files I was editing last week! :-)

Cheers,

David

--

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Subject: Re: Fragile IDL 8 Object Programs

Posted by [Doug Edmundson](#) on Mon, 25 Oct 2010 23:04:37 GMT

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On 10/25/10 4:13 PM, David Fanning wrote:

- > You would think these would be in the "recently opened files list"
- > under the File menu to the Workbench, but the only files that
- > are ever on this list (when I look, which isn't often anymore)
- > are files I was editing last week! :-)

This is a bit of an aside, but I'll throw it out here for whomever it may help...

If you press ctrl+shift+r then the workbench will open up the "Open Resource" dialog. You can then type in the partial name of a .pro file and all matches should show up in a list. Wildcards are accepted. The location of the file is shown at the bottom. This makes it pretty handy to quickly open a file when you don't quite remember its name or location. Note that it searches open projects, not !path.

Hope this makes someone happy. :)

Cheers,

Doug

Subject: Re: Fragile IDL 8 Object Programs
Posted by [penteado](#) on Mon, 25 Oct 2010 23:13:18 GMT
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On Oct 25, 9:04 pm, Doug Edmundson <do...@ittvis.com> wrote:
> If you press ctrl+shift+r then the workbench will open up the "Open
> Resource" dialog. You can then type in the partial name of a .pro file
> and all matches should show up in a list. Wildcards are accepted. The
> location of the file is shown at the bottom. This makes it pretty handy
> to quickly open a file when you don't quite remember its name or
> location. Note that it searches open projects, not !path.
>
> Hope this makes someone happy. :)

This feature has been making me happy since IDL 7 came out. I similarly like the option of auto opening files on compilation. One of these ways is how I always open a file. I never go to the file->open menu.

My favorite (now hidden) shortcut on the editor is ctrl+q, to go to the last edit location. There used to be a button for it, but it disappeared on IDL 8. When I forget it, I have to resort to ctrl+shift+l, for the list of shortcuts.

Subject: Re: Fragile IDL 8 Object Programs
Posted by [David Fanning](#) on Mon, 25 Oct 2010 23:39:16 GMT
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Doug Edmundson writes:

> If you press ctrl+shift+r then the workbench will open up the "Open
> Resource" dialog. You can then type in the partial name of a .pro file
> and all matches should show up in a list. Wildcards are accepted. The
> location of the file is shown at the bottom. This makes it pretty handy
> to quickly open a file when you don't quite remember its name or
> location. Note that it searches open projects, not !path.
>
> Hope this makes someone happy. :)

Whoa! That's pretty good. Thanks, Doug. :-)

Cheers,

David

--

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Subject: Re: Fragile IDL 8 Object Programs
Posted by [R.G.Stockwell](#) on Tue, 26 Oct 2010 19:34:19 GMT
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"Paulo Penteado" <pp.penteado@gmail.com> wrote in message
news:4e60de53-465a-44af-bedd-b87a88cde79d@j2g2000yqf.googlegroup.com...
> On Oct 25, 9:04 pm, Doug Edmundson <do...@ittvis.com> wrote:
>> If you press ctrl+shift+r then the workbench will open up the "Open
>> Resource" dialog. You can then type in the partial name of a .pro file
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>> location of the file is shown at the bottom. This makes it pretty handy
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> these ways is how I always open a file. I never go to the file->open
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> My favorite (now hidden) shortcut on the editor is ctrl+q, to go to
> the last edit location. There used to be a button for it, but it
> disappeared on IDL 8. When I forget it, I have to resort to ctrl+shift
> +l, for the list of shortcuts.

good tips. thanks.

btw, another thing I do on occasion: anyone remember when ctrl-D used to
open the file containing the selected routine? That is ctrl-F3 now.

In a hilarious twist, ctrl-D no longer opens the file of the routine, rather
it erases the whole line. lol.

cheers,
bob

PS the fingers are like elephants. they never forget.

Subject: Re: Fragile IDL 8 Object Programs
Posted by [Mark\[1\]](#) on Tue, 26 Oct 2010 23:08:26 GMT
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Since installing IDL 8 (Windows, 32-bit) a couple of weeks ago I've had the IDLDE "softly and suddenly vanish away and never be met with again"(*) a few times while cleaning up a complicated heap of objects. I guess it came across a boojum somewhere in the heap. There's an update planned, isn't there?

* http://en.wikipedia.org/wiki/The_Hunting_of_the_Snark

Subject: Re: Fragile IDL 8 Object Programs
Posted by [Mark Piper](#) on Wed, 27 Oct 2010 13:34:50 GMT
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On Oct 26, 1:34 pm, "R.G. Stockwell" <noem...@please.com> wrote:
> good tips. thanks.
>
> btw, another thing I do on occasion: anyone remember when ctrl-D used to
> open the file containing the selected routine? That is ctrl-F3 now.
>
> In a hilarious twist, ctrl-D no longer opens the file of the routine, rather
> it erases the whole line. lol.
>
> cheers,
> bob
>
> PS the fingers are like elephants. they never forget.

You can configure your own keybindings in the workbench preferences (through the preferences menu, or better, as Paolo suggests above, use Ctrl-Shift-L, twice). What's handy is that you can save your keybindings to a file. I've been saving/restoring the same file (and modifying it as I find new keybindings I'd like to map) since IDL 7.0.

mp

Subject: Re: Fragile IDL 8 Object Programs

Posted by [R.G.Stockwell](#) on Wed, 27 Oct 2010 17:08:22 GMT

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"Mark Piper" <mpiper@ittvis.com> wrote in message
news:90a9363e-a685-44f9-8c8f-5517c4351f1d@30g2000yql.googlegroups.com...

> On Oct 26, 1:34 pm, "R.G. Stockwell" <noem...@please.com> wrote:

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>>

>> btw, another thing I do on occasion: anyone remember when ctrl-D used to

>> open the file containing the selected routine? That is ctrl-F3 now.

>>

>> In a hilarious twist, ctrl-D no longer opens the file of the routine,

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>> it erases the whole line. lol.

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>> cheers,

>> bob

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> (through the preferences menu, or better, as Paolo suggests above, use

> Ctrl-Shift-L, twice). What's handy is that you can save your

> keybindings to a file. I've been saving/restoring the same file (and

> modifying it as I find new keybindings I'd like to map) since IDL 7.0.

>

> mp

Yeah, and I have considered this. I ended up choosing for mobility so I could actually work on a different machine, or someone else's, without quickly deleting all their lines of code and then closing the windows. lol.

I just think it is funny that the key commands change (first of all, WHY??) and it is even funnier that the "old" commands become so completely destructive. Presumably the current key shortcuts are something of a standard across all development environments.

The only piece of me-specific stuff I carry around with me is windows commander. I tend to install that everywhere I go, cause it is just such a nice file manager.

cheers,
bob

Subject: Re: Fragile IDL 8 Object Programs

Posted by [David Fanning](#) on Wed, 27 Oct 2010 17:24:45 GMT

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R.G. Stockwell writes:

- > I just think it is funny that the key commands change (first of all, WHY??)
- > and it is even funnier that the "old" commands become so completely
- > destructive

It would be even funnier if the new graphics commands moved any IDL program that used the old graphics commands out of the IDL path entirely!

That would get people moving in the right direction. :-)

Cheers,

David

--

David Fanning, Ph.D.

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

Subject: Re: Fragile IDL 8 Object Programs

Posted by [rdh](#) on Wed, 27 Oct 2010 22:39:18 GMT

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- > IDL object programs. But I pretty much have to work
- > in IDL 7 to debug them. IDL 8 is so incredibly fragile
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- > between these two systems? Is it because I recompile after
- > an object has crashed and I fix the problem, so the cleanup
- > is confused? I don't know. Still looking for patterns and
- > solutions. :-(

FYI, there is a known bug using heap variables with object graphics as a result of IDL 8's new automatic garbage collection. Perhaps this is related to what you are seeing?

Basically, IDL "cleans up" any heap variables that are created within object graphics routines at random points, for our programs it happens with IDLgrWindow->Draw(). I'm not sure if this is the only method affected. The bug # is CR59955 and it is supposedly going to be fixed in the next IDL 8 patch.

You can currently get around this problem by disabling garbage collection with !null = heap_refcount(/DISABLE), or by using IDL 7.

Romy
