
Subject: Locking graphics in GUI / disable resize, rotate or translate

Posted by [PMan](#) on Thu, 05 Mar 2015 16:43:16 GMT

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Hello,

I created a fancy GUI for a project and showed my 10 year old son it. He is interesting in programming and I wanted show off the sorts of things you can make.

Anyway, within about three seconds he can screwed up all the graphics with in the Gui. My question is, is there a way to lock graphics in a GUI? I am using window_widgets with either a map() graphic or image () graphics. I still need the user to be able to click on the map so I can get points from the user clicks, but I don't want the user to be able to zoom, rotate or translate the graphic.

Any idea how to do this?

Best Regards,
Paul

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [David Fanning](#) on Thu, 05 Mar 2015 16:47:07 GMT

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Paul Mallas writes:

> I created a fancy GUI for a project and showed my 10 year old son it. He is interesting in programming and I wanted show off the sorts of things you can make.
>
> Anyway, within about three seconds he can screwed up all the graphics with in the Gui.

Have you mentioned this to Helder? He might have a job for your son! ;-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [chris_torrence@NOSPAM](#) on Thu, 05 Mar 2015 16:56:11 GMT

On Thursday, March 5, 2015 at 9:43:18 AM UTC-7, Paul Mallas wrote:

> Hello,
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> Any idea how to do this?
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> Best Regards,
> Paul

Hi Paul,

You can use the EVENT_HANDLER keyword on the Window object, then override a bunch of the methods, and return "0" to skip the default event handling.

Look in the docs under the Widget_Window.

Cheers,
Chris

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [PMan](#) on Thu, 05 Mar 2015 17:01:35 GMT

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On Thursday, March 5, 2015 at 11:47:10 AM UTC-5, David Fanning wrote:

> Paul Mallas writes:
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> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Funnel his destructive powers for profit? I like it. :)

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [PMan](#) on Thu, 05 Mar 2015 17:03:49 GMT

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On Thursday, March 5, 2015 at 11:56:13 AM UTC-5, Chris Torrence wrote:

> On Thursday, March 5, 2015 at 9:43:18 AM UTC-7, Paul Mallas wrote:

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> Look in the docs under the Widget_Window.

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> Cheers,

> Chris

Thanks Chris, I will look into it.

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [PMan](#) on Thu, 05 Mar 2015 18:21:03 GMT

On Thursday, March 5, 2015 at 11:56:13 AM UTC-5, Chris Torrence wrote:

> On Thursday, March 5, 2015 at 9:43:18 AM UTC-7, Paul Mallas wrote:

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> Cheers,

> Chris

Great - it works just fine. Thanks for pointing it out.

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [Helder Marchetto](#) on Thu, 05 Mar 2015 20:53:54 GMT

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On Thursday, March 5, 2015 at 7:21:05 PM UTC+1, Paul Mallas wrote:

> On Thursday, March 5, 2015 at 11:56:13 AM UTC-5, Chris Torrence wrote:

>> On Thursday, March 5, 2015 at 9:43:18 AM UTC-7, Paul Mallas wrote:

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>> Cheers,

>> Chris

>

> Great - it works just fine. Thanks for pointing it out.

I'll just add this link where I posted a similar question (although my heir where not the cause for this inquiry).

https://groups.google.com/d/msg/comp.lang.idl-pvwave/JaoG-Ra_9Cms/REMp4vvrn2UJ

Cheers,

Helder

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [PMan](#) on Mon, 09 Mar 2015 19:09:05 GMT

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On Thursday, March 5, 2015 at 11:56:13 AM UTC-5, Chris Torrence wrote:

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Hi Chris,

I have been working creating a class for handling events. Things are moving along slowly but I think I can do all the stuff I need with this. But I have one question - I am trying to override the selectChange method. How do I change the selection of the graphic directly? I can't do graphic.select (or graphic.select, /clear) since this calls the method I am trying to override and I end up with an infinite loop. Does this make any sense?

Thanks,
Paul

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [chris_torrence@NOSPAM](#) on Mon, 09 Mar 2015 21:40:26 GMT
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On Monday, March 9, 2015 at 1:09:07 PM UTC-6, Paul Mallas wrote:

> Hi Chris,
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> I have been working creating a class for handling events. Things are moving along slowly but I think I can do all the stuff I need with this. But I have one question - I am trying to override the selectChange method. How do I change the selection of the graphic directly? I can't do graphic.select (or graphic.select, /clear) since this calls the method I am trying to override and I end up with an infinite loop. Does this make any sense?
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Would it be possible to have some sort of state variable in your class, like "self.selecting=1"? Then call graphic.Select, and check for this variable within your handler, and then return,1 if that were true (after turning the variable back off).

-Chris

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [PMan](#) on Tue, 10 Mar 2015 13:42:46 GMT

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On Monday, March 9, 2015 at 5:40:31 PM UTC-4, Chris Torrence wrote:

> On Monday, March 9, 2015 at 1:09:07 PM UTC-6, Paul Mallas wrote:

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> -Chris

I tried something similar to this - managing the selection at a higher level (sort of above where IDL considers a graphic selected). But I had no luck. But let me take another look. Thanks.

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [PMan](#) on Tue, 10 Mar 2015 14:03:11 GMT

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On Tuesday, March 10, 2015 at 9:42:52 AM UTC-4, Paul Mallas wrote:

> On Monday, March 9, 2015 at 5:40:31 PM UTC-4, Chris Torrence wrote:

>> On Monday, March 9, 2015 at 1:09:07 PM UTC-6, Paul Mallas wrote:

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Part of problem here is that for one 'select' event, my selectChange method gets called twice. Seems to be a bug (I reported this to the support folks) or perhaps some shortfall in my understanding.

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [PMan](#) on Tue, 10 Mar 2015 15:00:41 GMT

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On Tuesday, March 10, 2015 at 10:03:13 AM UTC-4, Paul Mallas wrote:

> On Tuesday, March 10, 2015 at 9:42:52 AM UTC-4, Paul Mallas wrote:

>> On Monday, March 9, 2015 at 5:40:31 PM UTC-4, Chris Torrence wrote:

>>> On Monday, March 9, 2015 at 1:09:07 PM UTC-6, Paul Mallas wrote:

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>

> Part of problem here is that for one 'select' event, my selectChange method gets called twice. Seems to be a bug (I reported this to the support folks) or perhaps some shortfall in my understanding.

Here is my barest bones example. Run the code below, the graphics name gets printed twice per one click:

```
FUNCTION ExWid2Win::Init
```

```
    self.select = 0
```

```
    return, 1
```


END

FUNCTION ExWid2Win::SelectChange, oWin, graphic, mode, wasSelected

print, graphic.name

return, 0

END

PRO ExWid2Win__define

void = {ExWid2Win, \$
inherits GraphicsEventAdapter, \$
select: 0L}

END

PRO ExWidget2WindowEvents_event, event

w = WIDGET_EVENT(/NOWAIT)

print, 'do nothing'

END

PRO ExWidget2WindowEvents

wBase = WIDGET_BASE(/COLUMN, /TLB_RESIZE_NODRAW, MAP=0)

wDraw = WIDGET_WINDOW(wBase)

WIDGET_CONTROL, wBase, /REALIZE

WIDGET_CONTROL, wDraw, GET_VALUE=win

win.Select

p = PLOT(/TEST, /CURRENT)

handler = OBJ_NEW('ExWid2Win')

win.EVENT_HANDLER = handler

WIDGET_CONTROL, wBase, /MAP

XMANAGER, 'ExWidget2WindowEvents', wBase, /NO_BLOCK

END

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [chris_torrence@NOSPAM](#) on Tue, 10 Mar 2015 16:17:28 GMT
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Hi Paul,

You are getting what looks like two select events because the first time it is trying to directly select the plot while the second time it is trying to use a "select box" to select anything within the box. If you change your handler to return "1", then it only goes in there once, because the selection was successful.

So the short answer is that you need to take that into account when you're designing your handler.

Hope this helps.

-Chris

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate
Posted by [PMan](#) on Tue, 10 Mar 2015 18:23:19 GMT
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On Tuesday, March 10, 2015 at 12:17:31 PM UTC-4, Chris Torrence wrote:

> Hi Paul,

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> So the short answer is that you need to take that into account when you're designing your handler.

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> Hope this helps.

>

> -Chris

If I change the SelectChange to return '1', I still get two events in for 'data space' plus one more for the 'plot.' But the plot is easy to id and ignore. But I see what you're saying, about the call from `idlitmanipselectbox__define.pro` when return is '0'. When return is '1' there is second call from `graphicsmanip__define.pro` instead.

Anyway, it seems either way there are at least two calls to `selectChange`. The only way I can differentiate is using `scope_traceback()` and just look for the calls from

`_idlitmanipulator__define.pro` and only consider those valid.

Subject: Re: Locking graphics in GUI / disable resize, rotate or translate

Posted by [PMan](#) on Tue, 10 Mar 2015 18:40:35 GMT

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On Tuesday, March 10, 2015 at 2:23:22 PM UTC-4, Paul Mallas wrote:

> On Tuesday, March 10, 2015 at 12:17:31 PM UTC-4, Chris Torrence wrote:

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> Anyway, it seems either way there are at least two calls to `selectChange`. The only way I can differentiate is using `scope_traceback()` and just look for the calls from `_idlitmanipulator__define.pro` and only consider those valid.

But if change `plot(/test)` to `image(/test)`, it works just as you described.
