Subject: Why is the content of my object graphics window being wiped?
Posted by dplatten on Wed, 12 Jun 2013 12:24:17 GMT

Hi there. I've been looking into using object windows to display object graphics. I have successfully written a routine that draws the Mandelbrot set on the screen. The problem I have is that if I minimize the window and then restore it, the contents of the object window are gone. Equally, if I move the window so that some of it is off the side of my screen, and then move it back, the content that was off the screen is also wiped. I can issue another "draw" command to the object so that it comes back, but this is a bit clumsy. I suspect there is a command that I don't know about that will automatically redraw the object for me - does anyone know what it is?

This simple example illustrates my point:

```
; Create a destination object, in this case a window:
oWindow = OBJ_NEW('IDLgrWindow')
; Create a viewport that fills the entire window:
oView = OBJ_NEW('IDLgrView')

; Set the color property of the view:
oView->SetProperty, COLOR=[255,0,0]
; Redraw:
oWindow->Draw, oView
```

If you minimize the window, and then restore it the red has been replaced with black. Equally, if you were to drag the window off the edge of the screen the red is replaced with black.

Thanks for your help,

David

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by dplatten on Wed, 12 Jun 2013 12:31:20 GMT

I should have said that I'm using IDL 6.4, on Windows XP Professional 32-bit.

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by dplatten on Wed, 12 Jun 2013 12:35:16 GMT

OK - I've solved it. I have had to change the backing store setting in the IDL graphics preferences. Setting this to "Bitmap buffered, RETAIN=2" has fixed the problem.

Thanks,

David

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by David Fanning on Wed, 12 Jun 2013 12:57:40 GMT
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David Platten writes:

> OK - I've solved it. I have had to change the backing store setting in the IDL graphics
preferences. Setting this to "Bitmap buffered, RETAIN=2" has fixed the problem.

If you want this program to work on machines (e.g., running LINUX) that
treat RETAIN=2 as an onerous command from one of their parents that is
safe to ignore, then the other, probably preferred, alternative is to
set expose events on your draw widget and then to simply redraw the
graphics hierarchy in this case. I've always thought of this one-line
command as "elegant" rather than "clumsy", but I guess beauty is in the
eye of the beholder. :-)

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: Why is the content of my object graphics window being wiped?
Posted by Paul Van Delst[1] on Wed, 12 Jun 2013 19:55:16 GMT
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I'm having a similar problem, but with Function graphics.

I've gotten an nVidia driver installed (which apparently doesn't play
nice with RHEL6). Could that be the cause of the problem?

How does one set the FG equivalent of RETAIN=2?

cheers,

paulv

On 06/12/13 08:24, David Platten wrote:
> Hi there. I've been looking into using object windows to display
> object graphics. I have successfully written a routine that draws the
> Mandelbrot set on the screen. The problem I have is that if I
> minimize the window and then restore it, the contents of the object
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> replaced with black. Equally, if you were to drag the window off the
> edge of the screen the red is replaced with black.
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> Thanks for your help,
>
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>

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by David Fanning on Wed, 12 Jun 2013 20:13:04 GMT
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Paul van Delst writes:

> I'm having a similar problem, but with Function graphics.
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> I've gotten an nVidia driver installed (which apparently doesn't play
> nice with RHEL6). Could that be the cause of the problem?
>
> How does one set the FG equivalent of RETAIN=2?

Really!? Can you show me an example of what you mean? I wouldn't have though FG needed any retaining. I would have thought this was all being handled via expose events. RETAIN is just going to get you into all kinds of trouble.

I'd be very curious to see what the problem looks like and what commands produce it.

Cheers,

David

--
David Fanning, Ph.D.
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Subject: Re: Why is the content of my object graphics window being wiped?
Posted by Paul Van Delst[1] on Wed, 12 Jun 2013 22:35:01 GMT
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On 06/12/13 16:13, David Fanning wrote:
> Paul van Delst writes:
>
>> I'm having a similar problem, but with Function graphics.
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>> I've gotten an nVidia driver installed (which apparently doesn't play
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> Really!? Can you show me an example of what you mean? I wouldn't have
> though FG needed any retaining. I would have thought this was all being
> handled via expose events. RETAIN is just going to get you into all
> kinds of trouble.

Sure. Take a look at:
 http://ftp.emc.ncep.noaa.gov/jcsda/CRTM/.plots/Screenshot.pn g

> I'd be very curious to see what the problem looks like and what commands
> produce it.

I think the offender is
  q = get_kbrd(1)
but that's not an issue for DG window refresh/retain and I can't recall

it being an issue for FG in the past either. I pause to peruse and
compare FG plots all the time.

As far as I can remember (it did take an entire month to get IDL
reinstalled on my "upgraded" computer) this is new behaviour. Whether
it's caused by IDL v8.2.2 or by the use of the nVidia driver in RHEL6 --
or some unholy combination of the two -- I'm trying to figure out.

cheers,

paulv

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by David Fanning on Wed, 12 Jun 2013 22:46:06 GMT
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Paul van Delst writes:

> Sure. Take a look at:
> http://ftp.emc.ncep.noaa.gov/jcsda/CRTM/.plots/Screenshot.pn g

Yikes!

> I think the offender is
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> it being an issue for FG in the past either. I pause to peruse and
> compare FG plots all the time.

Ah, this I can believe. :-)

If I interrupt widget programs, I can get this same sort of odd
behavior. I don't think FG windows are IDL widgets (am I mistaken?), but
I can imagine them going bonkers when they get interrupted. Maybe they
can't recover to handle the window expose event.

Very strange. Maybe Coyote Graphics will stick around longer than I
expected it to. :-)

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: Why is the content of my object graphics window being wiped?
Posted by dplatten on Thu, 13 Jun 2013 08:01:32 GMT

Hi David,

Many thanks for your reply - I didn't know about the EXPOSE_EVENTS or RETAIN options for my draw widget. I was setting RETAIN=2 in the IDE preferences, not in my draw widget.

I have now switched on EXPOSE_EVENTS and have set RETAIN=0 in my draw widget, and changed the event handler to deal with the expose events that are generated. Everything is working well.

Regards,

David

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by Mark Piper on Fri, 14 Jun 2013 18:13:08 GMT

On Wednesday, June 12, 2013 4:35:01 PM UTC-6, Paul van Delst wrote:
> On 06/12/13 16:13, David Fanning wrote:
>
>> Paul van Delst writes:
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> paulv

Hi Paul,

When called from the command line, NG are widget programs. So, on UNIX-based systems, if you're stopped inside a routine, the NG window won't get the expose event until you .continue the interpreter. There's a related issue when using NG in the Workbench which we're looking at repairing in IDL 8.3. We may also look at this for NG called from the command line.

I would like to get this fixed because it's key to be able to visually explore data with IDL.

mp

Subject: Re: Why is the content of my object graphics window being wiped?
Posted by Haje Korth on Sat, 15 Jun 2013 10:29:39 GMT
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+1 for a fix from me. It's not a show-stopper but an annoyance in debugging programs. Haje

On Friday, June 14, 2013 2:13:08 PM UTC-4, Mark Piper wrote:
> On Wednesday, June 12, 2013 4:35:01 PM UTC-6, Paul van Delst wrote:
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>> On 06/12/13 16:13, David Fanning wrote:
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