Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by David Fanning on Tue, 01 May 2012 14:27:01 GMT View Forum Message <> Reply to Message

## Paul van Delst writes:

- > I've started replacing the DG draw widgets in my widget apps with NG window widgets. The way I use a particular app was
- > to plot different things based on a selection from a button group. In DG there's no worries you just call plot and the
- > erase happens automagically and the new plot appears. But in NG the plots just pile on top of each other. I've searched
- > the IDL documentation for the PLOT() and WINDOW() functions but there doesn't appear to be an "Erase" method.
- > However, when I look at the IDLgrWindow window documentation there is the Erase method listed.
- > Which does work with the window created using Window(),e.g.
- > IDL> w=window()
- > % Loaded DLM: XML.
- > IDL> p=plot(indgen(100),current=w)
- > IDL> w.erase

>

- > So, does this mean ALL IDLgrXXXX methods work with the associated NG functions (e.g. IDLgrPlot for PLOT(), IDLgrSurface
- > for SURFACE() etc)?

>

> And what about vice-versa?

You must be living in a perfect world!

I would say the connection between IDLgrXXXX methods and function graphics routines is "casual" at best.

Maybe "haphazard" or "accidental" is a better description.

Most things work right up until you are too committed to turn back. :-)

Cheers,

David

David Fanning, Ph.D. Fanning Software Consulting, Inc.

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by Paul Van Delst[1] on Tue, 01 May 2012 14:32:04 GMT View Forum Message <> Reply to Message

Crikey, even the erase method doesn't work. And by "work" I mean according to:

- > Verb:
- > Rub out or remove (writing or marks).
- > Remove all traces of.

If I do this:

IDL> w=window()
% Loaded DLM: XML.
IDL> p=plot(lindgen(100),/current)
IDL> w.erase
IDL> p=plot((findgen(100)^2)/1000.0,/current)

The first plot, which I erased, reappears! ARGHHHH!

Is this a known bug or a "feature"?

```
IDL> print, !version { x86 linux unix linux 8.1 Mar 9 2011 32 64}
```

Does anyone know what is the sequence of commands to do what I would like to do? That is:

- 1) plot some data in the current window
- 2) erase the plot in the current window (data, axes, titles, everything)
- 3) plot some different data in that same, current window.
- 3a) And not have the original plot reappear.

not-so-cheerily yours,

pauly

p.s. Let me double check something:

```
IDL> help, !PI 
<Expression> FLOAT = 3.14159
```

phewph.

On 05/01/12 10:06, Paul van Delst wrote:

```
> Hello.
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>
> paulv
>
```

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by Paul Van Delst[1] on Tue, 01 May 2012 14:48:33 GMT View Forum Message <> Reply to Message

On 05/01/12 10:27, David Fanning wrote:

- > Paul van Delst writes:
- >> I've started replacing the DG draw widgets in my widget apps with NG window widgets. The way I use a particular app was
- >> to plot different things based on a selection from a button group. In DG there's no worries -

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- > Maybe "haphazard" or "accidental" is a better description.
- > Most things work right up until you are too committed to
- > turn back. :-)

Well, you know, this is probably about the sixth or seventh time where, after a period of weeks/months of doing actual

work, I come back to some IDL apps thinking "you know, it sure would be neat to use NG in this application". And then,

after a day of mucking about trying to figure out the cognitive pathways that led to the NG system, I realise why I

stopped doing this the last time.

It is quite frustrating.

paulv

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by <a href="mailto:chris\_torrence@NOSPAM">chris\_torrence@NOSPAM</a> on Tue, 01 May 2012 18:33:48 GMT View Forum Message <> Reply to Message

On Tuesday, May 1, 2012 8:48:33 AM UTC-6, Paul van Delst wrote: > On 05/01/12 10:27, David Fanning wrote: >> Paul van Delst writes: >> >>> I've started replacing the DG draw widgets in my widget apps with NG window widgets. The way I use a particular app was >>> to plot different things based on a selection from a button group. In DG there's no worries you just call plot and the >>> erase happens automagically and the new plot appears. But in NG the plots just pile on top of each other. I've searched >>> the IDL documentation for the PLOT() and WINDOW() functions but there doesn't appear to be an "Erase" method. >>> >>> However, when I look at the IDLgrWindow window documentation there is the Erase method listed. >>> >>> Which does work with the window created using Window(),e.g. >>> >>> IDL> w=window() >>> % Loaded DLM: XML. >>> IDL> p=plot(indgen(100),current=w) >>> IDL> w.erase >>> >>> So, does this mean ALL IDLgrXXXX methods work with the associated NG functions (e.g. IDLgrPlot for PLOT(), IDLgrSurface >>> for SURFACE() etc)? >>> >>> And what about vice-versa? >> >> You must be living in a perfect world! >> I would say the connection between IDLgrXXXX methods >> and function graphics routines is "casual" at best. >> Maybe "haphazard" or "accidental" is a better description. >> Most things work right up until you are too committed to >> turn back. :-) > Well, you know, this is probably about the sixth or seventh time where, after a period of weeks/months of doing actual > work, I come back to some IDL apps thinking "you know, it sure would be neat to use NG in this application". And then, > after a day of mucking about trying to figure out the cognitive pathways that led to the NG system, I realise why I > stopped doing this the last time. > It is quite frustrating. > paulv

Hi Paul.

The Erase method was officially added to the Window function in IDL 8.2, which will be available in just a few weeks. In the meantime, you could instead try using the "SetData" method to simply replace the plot data. That should actually be much faster than completely destroying the plot and recreating it.

Cheers, Chris ExelisVIS

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by Michael Galloy on Tue, 01 May 2012 18:51:06 GMT

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```
On 5/1/12 8:32 AM, Paul van Delst wrote:
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                                                64}
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   1) plot some data in the current window
   2) erase the plot in the current window (data, axes, titles, everything)
   3) plot some different data in that same, current window.
```

Do you really need to erase everything?

3a) And not have the original plot reappear.

IDL> p = plot(findgen(100)) IDL> p->setData,  $(findgen(100)^2)/1000.0$ 

Or if you want to change a bunch of stuff at once:

IDL> p = plot(findgen(100))
IDL> p->refresh, /disable
IDL> p->setData, (findgen(100)^2)/1000.0
IDL> p.title = 'New title'
; ... set more properties ...
IDL> p->refresh

Mike

--

Michael Galloy www.michaelgalloy.com Modern IDL, A Guide to Learning IDL: http://modernidl.idldev.com Research Mathematician Tech-X Corporation

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by Paul Van Delst[1] on Tue, 01 May 2012 19:57:44 GMT

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Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by Paul Van Delst[1] on Tue, 01 May 2012 20:07:56 GMT View Forum Message <> Reply to Message

Hello,

On 05/01/12 14:33, Chris Torrence wrote:

- > On Tuesday, May 1, 2012 8:48:33 AM UTC-6, Paul van Delst wrote:
- >> On 05/01/12 10:27, David Fanning wrote:
- >>> Paul van Delst writes:

>>>

- >>> I've started replacing the DG draw widgets in my widget apps with NG window widgets. The way I use a particular
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- > In the meantime, you could instead try using the "SetData" method to simply replace the plot data. That should
- > actually be much faster than completely destroying the plot and recreating it.

Thanks for the info. I will alert of our IT folks to keep an eye out for the release.

And, yes, I realise that the setdata method is better/faster but, as I pointed out in my reply to MikeG. this was a

drop-in replacement of an NG window into a DG widget app. I would have to add the NG graphics reference to the widget

state vector. As I also said, that's not a very big deal, but a working erase method would have been immediately successful.

I know, I know, I'm a crotchety bugger... but I miss those "Will this work? Yes it does!" moments. Especially after I

had one when I replaced the WIDGET\_DRAW function with WIDGET\_WINDOW simply by changing the name and, voila, there was my

newly created NG window in my widget app waiting for me to fill it data plots.

cheers.

paulv

Subject: Re: Relationship between IDLgrXXXX and associated NG functions. Was: IDL documentation gripe - How to erase a new graphics window? Posted by <a href="mailto:chris\_torrence@NOSPAM">chris\_torrence@NOSPAM</a> on Wed, 02 May 2012 15:03:18 GMT View Forum Message <> Reply to Message

On Tuesday, May 1, 2012 2:07:56 PM UTC-6, Paul van Delst wrote:

>

> Thanks for the info. I will alert of our IT folks to keep an eye out for the release.

>

- > And, yes, I realise that the setdata method is better/faster but, as I pointed out in my reply to MikeG, this was a
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- > newly created NG window in my widget app waiting for me to fill it data plots.

>

> cheers.

>

> paulv

Hi paulv,

I totally understand your frustration. With IDL 8.2, I think we've made some great strides in making things "just work" in new graphics. Examples would include: allowing array inputs for Arrow and

Symbol, custom Axis ranges, the Erase method, a new Clip property, a new symbol font with planetary symbols, a much better Colorbar, legends for vector plots, etc.

Nevertheless, I'm sure there are a lot more enhancements (and bug fixes) that need to be done before we truly surpass everything that direct graphics can do.

Please keep giving feedback as to where you think we can improve new graphics. At this point, we've done most of the "low-hanging" fruit, and from now on, we really need to rely on user input as to where you think we should go.

Thanks!

-Chris ExelisVIS