Subject: Re: IDL 8.0; difficulties with "New Graphics"
Posted by penteado on Thu, 16 Sep 2010 23:59:08 GMT

On Sep 16, 8:38 pm, Paul <paulsta...@gmail.com> wrote:
> I'm trying to convert procedures from Direct Graphics (DG) to "New
> Graphics" (NG). I'd really like to get it working well. Can any body
> help with these hang ups?
> -on a linux node (strictly software rendering), NG is so slow that I
> opted to take the time to install IDL on the windows machine here
> -on this PC (Dual core, 2.7 GhZ, 3 GB Ram, Intel onboard
> graphics...ick), things work alright until I put more than a couple
> dozen objects (four plots, eight curve per plot) in a window, at which
> time subsequent objects are rendered progressively slower.
> -rendering in a buffer doesn't seem to speed things up at all
> -saving to .pdf or .eps after rendering is sketchy in windows. I get a
> little note from Mesa about a buffer and not having enough memory.
> Sometimes it saves just fine. (~100 kb file from a 325 px by 500 px
> window)
> -windows in NG can only be specified in pixels, and positions cannot
> be determined in 'inches', except perhaps indirectly using normal
> coordinates and choosing your width and height upon saving. However
> the save method so far seems to disregard width and height information
> when saving to eps, and if it didn't, you'd still lose your quasi-
> WYSIWYG benefit to NG.
> The new features entice me to use it, but the slowness and lack of
> layout control steer me away. Suggestions?
> Cheers.

Do your plots have many vertices (typically, more than some hundred
thousand)? Any flavor of object graphics is going to be slow with
complicated object (or with many objects), since they have to keep all
of those objects around (which is what allows for editing). Currently,
the only use I still make of direct graphics is for those situations
where I can have hundreds of thousands of elements being plotted.

Subject: Re: IDL 8.0; difficulties with "New Graphics"
Posted by joseandres on Fri, 17 Sep 2010 20:12:51 GMT

You should try to use the REFRESH method: "The Refresh method enables
and disables the refresh (drawing) of the graphics window. This method
is useful if you are doing a large number of graphics updates and you
do not want to see the intermediate steps."

Compare these two versions:

```
;;; Slow version
b = barplot(/test)
for i=0, 20 do begin
  color = [randomu(seed,1)*255, randomu(seed,1)*255, randomu(seed,
1)*255]
  !null = barplot(/test, /overplot, transparency=50, color=color,
fill_color=color)
endfor


;;; Faster version
b = barplot(/test)
b.refresh, /DISABLE  ; Disable re-draws.
for i=0, 20 do begin
  color = [randomu(seed,1)*255, randomu(seed,1)*255, randomu(seed,
1)*255]
  !null = barplot(/test, /overplot, transparency=50, color=color,
fill_color=color)
endfor
b.refresh  ; Re-enable drawing and show the results.
```

-joseandres

Subject: Re: IDL 8.0; difficulties with "New Graphics"
Posted by Paul[3] on Mon, 20 Sep 2010 16:35:06 GMT
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Pauolo Penteado - fortunately, the image is not too complicated that
way (~6000 vertices). It does have a fair amount of objects though
(100 plot objects).

joseandres - the refresh method worked beautifully. Thanks for
pointing me to that! I also like how you used the new !null variable
type in your code, too. If you're not interested in interactivity,
that's a bit simpler than making a list of objects to contain all the
plot objects you plan to draw. Thanks for taking the time to send that
code snippet.