## Subject: Re: how do I create an image file from an object graphics window?
Posted by Haje Korth on Wed, 28 Jul 2004 12:46:08 GMT

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Karl,
oops, for some reason I did not see your post until now. I do not expect the
clipboard object to produce miracles. All I expect it to do is to produce
the same quality as set_plot,'ps', which produces nice vector output. Is
this asking for too much? I do not use any projections, shadings, etc. All I
do is overlaying images with alpha blending. The bitmapped mode of the
clipboard object is extremely lousy, as all fonts are bitmapped too. The
vector mode still has problems with alpha blending. I am not sure whether
RSI is aware of this problem. I tested this for IDL 6.1 but never reported
the problem because my example is longer than 10 lines. My past experience
shows that they reject examples that are too long. Too bad, now they have to
wait until I find the time to boil this down. And since I do not get paid
for debugging IDL, this might just take some time.

Cheers,
Haje

"Karl Schultz" <kschultz_no_spam@rsinc.com> wrote in message
news:10g2f4f7ra0roed@corp.supernews.com...
>
> "Haje Korth" <haje.korth@jhuapl.edu> wrote in message
> news:cdqth5$qro$1@aplcore.jhuapl.edu...
>> Holger,
>> I have used 'idlgrclipboard' object in the past, which can create
> Postscript
>> file. However, the implementation in 6.0 is still buggy. 6.1 will be
> better,
>> there may still be some issues with alpha blending. Any way, if your
>> view/scene is not too complicated it may work for you. A note on the
side:
>> It amazes me that RSI worked out so many details on making object
graphics
>> look pretty and totoally forgot to spend the time working on creating
>> descent quality output of the graphics. In order to get what I want, I
> have
>> to write every code twice, once in object graphics for the screen and
then
>> use direct graphics techniques to create the PS file. Not very
>> efficient.....
>
> Remember that the clipboard has both bitmap and vector modes.  The bitmap
> mode captures the contents of the scene exactly as you would see it on the
> screen.  You can also do pretty much the same thing by getting the data
out

> of the grBuffer and grWindow objects.
>
> Yes, vector output in 6.1 is quite a bit better, but we still need to
> understand that vector output cannot possibly recreate all the graphical
> features that you might use on the display.  Vector output systems (e.g.,
> PostScript, Windows metafiles) are not really "3D" in any way, while
Object
> Gaphics obviously is a 3D system.  It's difficult to map a system with
high
> capabilities onto ones with lesser capabilities.  For example, vector
> systems do not have depth buffers.   IDL does a crude depth sort in vector
> output to approximate the effect of a depth buffer, but it won't sort
things
> out completely.  Similar restrictions apply for things like alpha
blending.
>
> One of the main motivations for Object Graphics vector output was to
reduce
> the size of the graphics output.  In bitmap mode, even a simple plot with
a
> few dozen lines and some text would require several MB of space, depending
> on the dimensions of the drawable, which seems silly when there is so
little
> data actually in the plot.  With vector output, the same data can be
> represented with a few dozen line plot commands and some text strings,
which
> adds up to a PostScript file of 1K or so in length  So vector output can
be
> a big win when working with plots, charts, and other visualizations that
are
> more "2D" than "3D" and don't use a lot of advanced rendering features.
> Bitmap output is better when you need to preserve all those "3D"
qualities.
>
> Karl
>
>