

Justin writes:

- > I'm getting a strange bug with eps output from David's xplot -- and I
- > was wondering if anyone else has found/fixed this issue?
- >
- > Here's the deal, so when I have the size of the window is, for
- > example, 368x264 pixels --> then I choose output->EPS (300 DPI) --
- > then I import it into ImageReady --> and the image size is now
- > 84x48... Err?
- >
- > Now, when I make the window size -> 1058x915, at 300 DPI it comes out
- > as 250x205
- >
- > What is going on here? I've added additional options to go even
- > higher DPI, and the problem seems to get worse.
- >
- > Do I need to increase the dimensions that get passed in or something?

Like pretty much everyone else who tries to get PostScript output from object graphics programs, I generally throw my hands up in the air in disgust. There is no rhyme or reason to it. It just flat out sucks.

I've checked all the inputs to the IDLgrClipboard object that is outputting this XPLOT information to the file. It all conforms to the IDL documentation. I can't account for the sizes you see when you input this file. Even Photoshop is totally flummoxed by it.

I've even fooled around this morning trying to write this output directly to a PostScript file using the method outlined in this article:

http://www.dfanning.com/ographics_tips/object_eps.html

This results in a PostScript file that cannot be opened with either Photoshop or GhostView. (IDL 7.0.1 on Windows.)

I can send the output directly to a printer, but I cannot control the size of the output, etc. It takes up the whole page and, of course, has the wrong aspect ratio.

So, I'm as confused as you are. It is one of the eternal mysteries, I guess. :-(

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: eps output with xplot or fsc_surface

Posted by [humanumbrella](#) on Mon, 28 Jul 2008 16:10:18 GMT

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On Jul 28, 11:23 am, David Fanning <n...@dfanning.com> wrote:

> Justin writes:

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>> was wondering if anyone else has found/fixed this issue?

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> David Fanning, Ph.D.
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I have figured it out and fixed the problem, in a few minutes I will make a post about it.

Subject: Re: eps output with xplot or fsc_surface
Posted by [David Fanning](#) on Mon, 28 Jul 2008 16:34:10 GMT
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David Fanning writes:

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Whoops! Pilot error. If I select a PostScript printer, it helps a lot.

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But at least the output is starting to resemble what I see in IDL when I import it into ImageReady.

I'm waiting to see what Justin has come up with.

Cheers,

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Subject: Re: eps output with xplot or fsc_surface

Posted by [humanumbrella](#) on Mon, 28 Jul 2008 16:55:33 GMT

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On Jul 28, 12:34 pm, David Fanning <n...@dfanning.com> wrote:

> David Fanning writes:

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Hello,

I'm still working on my portion of the solution, as far as getting what I want out of it, but the problem goes something like this:

Let's say you want to save something to the file at 72 DPI. This is the default resolution of looking at an image on the screen, so if you create a plot, save it at 72 DPI, then import it back into photoshop/ghostview/imageready, it will be the proper proportion, because it's mapping the screen dimensions which are in 72 DPI straight back to 72 DPI, so the aspect ratio is preserved.

However, when you go up in resolution, herein lies the problem. In the XPLOT/FSC_SURFACE code, David is trying to perform the same operation with the same amount of real estate. IE, trying to cram 300 DPI into 640x480 results in a much, much smaller image. However, if before we initialize the clipboard object, we redefine the dimensions of the window to what they SHOULD be, where the screen displaying X DPI where $X > 72$, all of a sudden magic happens.

I am still refining this fix, but I didn't want you to have to wait forever. (:

So, here's what I've come up with for now:

```
res = 72
IF filename NE " THEN BEGIN
CASE whichFileType OF
'EPS-72':begin
  resolution = [2.54/72, 2.54/72] & res=72
end
'EPS-150':begin
  resolution = [2.54/150, 2.54/150] & res=150
end
'EPS-300':begin
  resolution = [2.54/300, 2.54/300] & res=300
end
'EPS-1200':begin
  resolution = [2.54/1200, 2.54/1200] & res=1200
end
'EPS-2400':begin
  resolution = [2.54/2400, 2.54/2400] & res=2400
end
ENDCASE
info.thisWindow->GetProperty, Dimensions=viewDimensions,
Units=viewUnits

viewDimensions*=res/72

clipboard = Obj_New('IDLgrClipboard', Dimensions=viewDimensions,$
```

Resolution=resolution,Quality=2, units=viewUnits)
clipboard->Draw, info.plotView, /Postscript, /vector,
Filename=filename

Subject: Re: eps output with xplot or fsc_surface
Posted by [humanumbrella](#) on Mon, 28 Jul 2008 17:14:47 GMT
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On Jul 28, 12:55 pm, humanumbre...@gmail.com wrote:
> On Jul 28, 12:34 pm, David Fanning <n...@dfanning.com> wrote:
>
>
>
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> operation with the same amount of real estate. IE, trying to cram 300
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>   end
>   'EPS-150':begin
>     resolution = [2.54/150, 2.54/150] & res=150
>   end
>   'EPS-300':begin
>     resolution = [2.54/300, 2.54/300] & res=300
>   end
>   'EPS-1200':begin
>     resolution = [2.54/1200, 2.54/1200] & res=1200
>   end
>   'EPS-2400':begin
>     resolution = [2.54/2400, 2.54/2400] & res=2400
>   end
> ENDCASE
> info.thisWindow->GetProperty, Dimensions=viewDimensions,
> Units=viewUnits
>
> viewDimensions*=res/72
>
> clipboard = Obj_New('IDLgrClipboard', Dimensions=viewDimensions,$
>   Resolution=resolution,Quality=2, units=viewUnits)
>   clipboard->Draw, info.plotView, /Postscript, /vector,
>   Filename=filename

```

The above code creates a bigger image, and it comes back as the same size as what you initially saved it as, but it is not necessarily more detailed. I am continuing work on this and will report some more findings (:

Subject: Re: eps output with xplot or fsc_surface
Posted by [David Fanning](#) on Mon, 28 Jul 2008 17:45:30 GMT
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humanumbrella@gmail.com writes:

> The above code creates a bigger image, and it comes back as the same
> size as what you initially saved it as, but it is not necessarily more
> detailed. I am continuing work on this and will report some more
> findings (:

Actually, I think this is correct, if you have one more step.
I try something like this:

```
'EPS-600': BEGIN
  resolution = [2.54/600, 2.54/600]
  viewDimensions = 600/72.
END
```

Then,

```
info.thisWindow->GetProperty, $
  Dimensions=theDimensions, Units=theUnits
clipboard = Obj_New('IDLgrClipboard', $
  Dimensions=viewDimensions*theDimensions, $
  Resolution=resolution, Units=theUnits, Quality=2)
```

That produces a (gigantic!) PostScript file, but I think it is of the correct dimensions, at least.

Cheers,

David

--

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Subject: Re: eps output with xplot or fsc_surface

Posted by [humanumbrella](#) on Mon, 28 Jul 2008 18:44:06 GMT

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On Jul 28, 1:45 pm, David Fanning <n...@dfanning.com> wrote:

> humanumbre...@gmail.com writes:

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It appears that if you pass the /vector keyword as well, it will
drastically reduce the filesizes.

Cheers,

--Justin

Subject: Re: eps output with xplot or fsc_surface

Posted by [humanumbrella](#) on Mon, 28 Jul 2008 19:03:48 GMT

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On Jul 28, 2:44 pm, humanumbre...@gmail.com wrote:

> On Jul 28, 1:45 pm, David Fanning <n...@dfanning.com> wrote:

>

>

>

>> humanumbre...@gmail.com writes:

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> It appears that if you pass the /vector keyword as well, it will

> drastically reduce the filesizes.

>

> Cheers,

> --Justin

Finally, for my application I believe I will use the /vector keyword with the /postscript, so the filesize will be smaller. This will allow for the postscript reader to rasterize its own vectors instead

of saving all of that information in the file.

Hope that helps some people =P

Cheers,
--Justin
