Subject: CGM files into PC Word for Windows
Posted by f055 on Fri, 27 Oct 1995 07:00:00 GMT
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Hi,

I'm having problems importing IDL created CGM files into Word for Windows
on a PC.

Using IDL 4.0 under DEC OSF, I've created a CGM file as follows:

```
IDL> set_plot,'cgm'
IDL> device,filename='idl.cgm'
IDL> !p.color=0
IDL> loadct,39
IDL> tvscl,findgen(200,200)
IDL> device,/close
```

Then why I try to import it as a picture into Word, I get:

This graphics file may be damaged and cannot be converted

Why? And how do I get around it?

Two extra points:
1) If I output graphics other than an image - i.e. plot or contour instead
of tvscl - then it works fine
2) I have similar problems importing CGM files containing images onto a
Power Mac, via Graphicconverter and ClarisDraw.

Hope someone can help.

Cheers, Tim

t.osborn@uea.ac.uk
Climatic Research Unit, University of East Anglia, Norwich, UK

Subject: Object Graphic Output, was Re: CGM files
Posted by davidf on Wed, 03 Nov 1999 08:00:00 GMT
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William Thompson (thompson@orpheus.nascom.nasa.gov) writes:

> Isn't it true that object graphics produces only bitmapped output?

No. In fact nothing could be further from the truth.
Object graphics strives to produce printer "independent"

output by using the object version of the PRINTER device.
Output sent to the PRINTER is written in the default
printer-specified language, either PCL or PostScript.

And I will admit that it is truly WYSIWYG ooutput.
Unfortunately, this is not always WYHIM (What You
Had in Mind). And it almost always takes a hell of
a lot longer to print than you were expecting. :-(

It is these problems that are being addressed now
and we will see some relief in IDL 5.3. I think the
Windows Metafile output is one way to approach
some of these problems, at least for Windows users.

Cheers,

David

P.S. And, of course, it is still possible to
get JPEG, GIF, and TIFF output from object graphics
as well.

--
David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: CGM files
Posted by thompson on Wed, 03 Nov 1999 08:00:00 GMT
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"Mark Hadfield" <m.hadfield@niwa.cri.nz> writes:

> Rumour has it that IDL 5.3 will be able to generate Windows Metafile output,
> but only for Object Graphics and only on win32.

I should have included this in my previous message. Isn't it true that object
graphics produces only bitmapped output?

Bill Thompson

Subject: Re: CGM files
Posted by thompson on Wed, 03 Nov 1999 08:00:00 GMT

"Mark Hadfield" <m.hadfield@niwa.cri.nz> writes:

> Ideally you want WMF (Windows Metafile) format but IDL does not have a WMF
> driver. (Surely it wouldn't be that hard for them to write one!)

I'm not familiar with that format. Does it support both line and bitmapped graphics (and hardware fonts) the way that PostScript does? Does it have scalable pixels? IMHO, those are the good features of PostScript.

Luckily, all our printers are PostScript, so the question doesn't arise here.

Bill Thompson

Subject: Re: CGM files
Posted by davidf on Wed, 03 Nov 1999 08:00:00 GMT

Liam Gumley (Liam.Gumley@ssec.wisc.edu) writes:

> For a nice tutorial, check out 'Making viewgraphs' at
> http://fermi.jhuapl.edu/s1r/idl/s1rlib/local_idl.html

By the way, speaking of Johns Hopkins Applied Physics Lab, were those Ray Sterner's IDL maps I saw in William Least Heat-Moon's latest book, River Horse? Sure enough!

Great work, Ray!

Cheers,

David

P.S. And who said IDL couldn't produce publication-quality maps. :-)

--
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: CGM files

Posted by Liam Gumley on Wed, 03 Nov 1999 08:00:00 GMT
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Justin <Justin_Ashmall@hotmail.com> wrote in message
news:7vp9bo$ml8$1@jura.cc.ic.ac.uk...
> I'm attempting to produce a CGM file of a plot, however the resulting file
> gives a square image rather than the landscape shaped plot I'm after and
> also has some over-lapping text. Producing an encapuslated postscript file
> with the same plot commands works fine (i.e. the correct aspect ratio, no
> overlapping text).
>
> Ultimately I want to get the plot into Word (I don't want to use .eps
since
> I'm not using a PS printer). If I resize the CGM file the text becomes
> distorted. Outside of IDL I've tried using Ghostview to convert the .eps
> file to a windows meta-file which works except the resolution is very
poor,
> leading to my curves becomes badly jagged.

One trick that can work fairly well is to create your plot as a bitmap in a graphics window at 2 or 3 times normal size, save the contents of the graphics window to a BMP, TIFF, or other format thay you can import into Word, and then resize the image once it's in Word.

For a nice tutorial, check out 'Making viewgraphs' at
http://fermi.jhuapl.edu/s1r/idl/s1rlib/local_idl.html

You may need the JHU/APL library, which is available from the same location.

Cheers,
Liam.
http://cimss.ssec.wisc.edu/~gumley

Subject: Re: CGM files
Posted by Jack Saba on Thu, 04 Nov 1999 08:00:00 GMT
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> Justin <Justin_Ashmall@hotmail.com> wrote in message
> news:7vp9bo$ml8$1@jura.cc.ic.ac.uk...
>> IDLers,
>>
>> I'm attempting to produce a CGM file of a plot, however the resulting file
>> gives a square image rather than the landscape shaped plot I'm after and
>> also has some over-lapping text. Producing an encapuslated postscript file
>> with the same plot commands works fine (i.e. the correct aspect ratio, no
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>> file to a windows meta-file which works except the resolution is very
> poor,
>> leading to my curves becomes badly jagged.
>>
>> Any suggestions?
>

I had to do something similar recently. I opened the .ps file in GSView, then copied it to the clipboard and pasted it into Word. The resolution did not seem degraded using this procedure.

Subject: Re: CGM files
Posted by Justin Ashmall on Thu, 04 Nov 1999 08:00:00 GMT
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Thanks to all for the suggestions. For any interested parties the final solution was to convert the .eps file to an Adobe Illustrator (.ai) file (I think this just adds a header to the .eps file) using Ghostscript with the ps2ai.ps file. The .ai file (but not the .eps?) could then be loaded by Visio (amongst others) where I was able to cut and paste the image or save it off as a .wmf. As I pointed out before using pstoedit (under Ghostview) produced .wmf's with very poor resolution.

Although most agree the way to go is .eps files I much prefer the WYSIWYG approach afforded with .wmf's (even against and .eps with a preview TIFF). This aside, if the CGM driver worked as expected (keeping the correct aspect ratio) the .cgm files would have loaded into Word fine.

Thanks again for the suggestions,

Justin

Subject: Re: CGM files
Posted by Mark Hadfield on Thu, 04 Nov 1999 08:00:00 GMT
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Justin <Justin_Ashmall@hotmail.com> wrote in message news:7vp9bo$ml8$1@jura.cc.ic.ac.uk...
> IDLers,
>
> I'm attempting to produce a CGM file of a plot, however the resulting file

> gives a square image rather than the landscape shaped plot I'm after and
> also has some over-lapping text. Producing an encapuslated postscript file
> with the same plot commands works fine (i.e. the correct aspect ratio, no
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> I'm not using a PS printer). If I resize the CGM file the text becomes
> distorted. Outside of IDL I've tried using Ghostview to convert the .eps
> file to a windows meta-file which works except the resolution is very
poor,
> leading to my curves becomes badly jagged.
>
> Any suggestions?

If you DID have a Postscript printer, then by far the best way would be to use the IDL PS device to generate EPS output. You can add a TIFF preview, if you want, in IDL or with GSview (on Windows) or maybe Ghostview (which I haven't used).

Without a PS printer you don't have too many satisfactory options.

The CGM device is pretty much useless for importing into Word, as you have noted.

Ideally you want WMF (Windows Metafile) format but IDL does not have a WMF driver. (Surely it wouldn't be that hard for them to write one!)

You could import EPS files into Word and then try to solve the problem at the output end. You could print from Word to a file using a Postscript driver, then print that to your non-PS printer using Ghostscript or GSview. I don't know how well that works. If you had Adobe Acrobat Distiller, you could print from Word through the Distiller driver to generate a PDF file, which can then be printed to a non-PS printer. I don't know how well that works either, and Distiller is not free.

Otherwise you could try to convert the EPS files before importing them. There is a program called pstoedit (http://www.geocities.com/SiliconValley/Network/1958/pstoedit /) which can take EPS files and convert them to other vector forms. The win32 version can now generate WMF format, which can be imported into Word. Pstoedit does have some limitations, however, in particular it can't handle images.

Rumour has it that IDL 5.3 will be able to generate Windows Metafile output, but only for Object Graphics and only on win32.

Mark Hadfield

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