Subject: Re: PostScript and IDL,
Posted by steinhh on Wed, 27 May 1998 07:00:00 GMT
View Forum Message <> Reply to Message

In my opinion, the PostScript output from object graphics is so lame (both in quality and file size) that it is endangering the whole idea of using object graphics for anything that you may at some point in time want to publish on paper.

This is a bit of ranting over some details that irritate me enormously. For some reason, it seems that the OG printer output interface was written by someone with experience exclusively from PC's, with a very cheap (low-resolution) printer hanging on the side, hardwired into the motherboard for instantaneous input of whatever is on the screen in a WYSIWYG manner :-). Never any *real* reason to create *real* encapsulated postscript files with any controllable size or anything!

With the normal 'PS' device you can control the sizes etc. of the EPS output, but no, this object graphics stuff is so great it always deserves a full page by itself..? With a showpage command thrown into the file for good measure, so the whole thing will print if you send it straight to the printer in stead of encapsulating it in a real document (just points out the mindset of whoever wrote the stuff). This may cause problems for some programs that try to manipulate/overplot stuff on the EPS file.

Even the simplest line plot (Generic, EPSF format) comes out to about half a MB. Imagine writing a thesis with a hundred of those - since you need to have the original file as well as one copy included in your PS file, you spend 100MB on plots!

If you throw the thing at the printer, the lines are clearly more jagged than direct graphics output. The lines are thinner, apparently just one "pixel" wide, and if you try to shrink the full page to fit into a document, the subsampling of the pixelized image seems to throw out pixel rows/lines, making everything in your plot look like it's produced with a dash-dash linestyle.

And if I ever write a *program* that produces postscript output from object graphics, I would like to have the ability to have some control over where the files end up,

without having to interrogate the user (myself or whoever) every bloody time I want to send stuff to a new file! Please, a printer->setproperty,filename=<string>!

I do like IDL's object graphics, conceptually it's very neat and *extremely* powerful - though you *really* need to have good graphics acceleration harware! (I don't have it yet).

But unless someone provides a method to produce sensible postscript output, I for one will be very reluctant about using object graphics at all.

Although the internal bitmap rendering process of OG PS files ensures "consistent" looks between screen/postscript output, it is simply *no* good for producing quality output for publication! We need better resolution for lines *and* smaller files!

Given an OG hierarchy, most of the objects contents can be rendered quite faithfully in direct graphics without using pixelization (shaded surfaces/texture mapped surfaces/lighted surfaces etc excluded). Maybe someone could write a direct graphics "renderer" of OG hierarchies? Please..?

Or maybe what we should hope for is an OpenGL printer standard...?

Regards,

Stein Vidar
