Subject: VMRL humble pie Posted by Struan Gray on Fri, 04 Dec 1998 08:00:00 GMT View Forum Message <> Reply to Message

A short while ago I rashly promised to investigate using VRML files and external programs to work around the fact that IDL prints object graphics as screen-resolution bitmaps.

First the good news: IDL's VRML files seem to be nicely compatible with other software.

And the bad: So what?

I do most of my work, and all of my publication-oriented stuff, on Macs, and found that despite a lot of hype about VRML as the wave of the web future, there are not many programs that actually support it beyond making pious commitments to do so Real Soon Now (tm).

Programs like Bryce and Infiniti3D which are widely used in the world of multimedia (most notably to generate the scenery for stab-em-up games called things like KomBat Karzel) are both currently lacking VRML support.

CorelDraw 8 (tested on PCs) does import VRML files, and can print them fairly nicely, but is astonishingly slow (and I speak as one who shared Unix on a 680000 processor) and, more importantly, doesn't render at anything like the quality that IDL does.

I looked at the CosmoPlayer plugin for Netscape, but couldn't get it to print anything but blank pages. That said, it worked nicely and was surprisingly fast at displaying 3D models with user interaction, so if you can persuade your users to install a several-megabyte plugin that only works with Netscape browsers, VRML *is* a nice way to distribute 3D models on the web.

A friend of a friend told me that some hardcore CAD and/or rendering programs support VRML, with good renderers and high-quality printing, but since you need to be called Gates or Spielberg before you can afford them they're not really a cheap workaround solution to an IDL problem.

So my current solution for high-quality output from object graphics is to generate a large screen image or off-screen pixmap, use the Mac printer drivers to create an EPS file when printing from IDL and then add annotations and the like with Adobe Illustrator. Since this is roughly what I tend to do anyway with my conventional images it doesn't seem too bad to do it with 3D stuff too.

For the future, the easiest thing would be to wait for RSI to write a better printer driver. In the meantime, 5.2 adds support for DXF files, which are fairly widely supported in the 3D graphics community, but the documentation is, how shall I put it, "a business opportunity for D. Fanning". From the perspective of someone looking to share files with existing programs, 3DMF seems to be the obvious choice, but after my VRML fiasco I'm not making any predictions.

Gaze on my works oh ye mighty....

Struan