Subject: Object Graphics and VRML? Posted by aa056 on Sat, 06 Jun 1998 07:00:00 GMT

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We just installed the update to IDL 5.1 on our SGI system, and I found that Object Graphics can now write .wrl VRML (version 2) files. Finding a way to view VRML has been a bit of a struggle, but does overcome some of the drawbacks of the PostScript output from Object Graphics. Unless you need hardcopy, VRML should give smaller files that can be viewed in Netscape and Internet Explorer.

In searching the WWW for information on tools for VRML I ran across a long editorial by one of the authors of VRML in which he dispaired over the lack of support for VRML in current systems. This did not adequately prepare me for what I found.

When I looked on SGI's web site, I found information that suggested that the cosmoplayer plugin version 2 was needed to view VRML, but only version 1 was shown as available for SGI. Version 2 was available for Win32. In fact, our Irix 6.2 system has cosmoplayer 1.02 as a netscape 3.04 plugin. This will display IDL VRML files on screens with the GLX extension (at our site, this means SGI consoles and some NCD HMX X-terminals -- other HMX-terminals give a message "unable to obtain GLX license", so we may just have a configuration problem).

<A HREF"http://www.vrml.org">The source of all wisdom for VRML has losts of documentation and pointers to software. I found a Cosmoplayer plugin for Netscape on Win 3.1. I could not get it to work on my system until I reduced screen resolution to 800x600 from 1024x768. The example .wrl files work, but a very simple IDL file (just a single black on white curve) that does work on the SGI consoles displays a gray box with no visible curve.

VRML is supposed to be included in version 4 netscape and IE on Win95 and WinNT (for Win95, OSR2 may be needed to get OpenGL), but our site only permits use of IE 3. A couple Win95 users tried to view the example file, but Microsoft's server told them there was no plugin for x-world/x-vrml mimetypes.

In summary, VRML may often be a much better way to save IDL Object Graphics for viewing by others (and potentially for printing, but so far my attempts have yielded blank pages). VRML is designed for interactive viewing of 3D scenes, but can also be used for simple 2-D plots. I can think of many instances in the past where I had great difficulty finding a series of 2-D views that would properly illustrate a point that was readily seen using interactive 3-D tools like AVS. Thus I'm excited by the potential of Object Graphics and VRML. In the real world, however, support for viewing VRML will need a lot of work.

I suspect the restructuring at SGI and the luke-warm response to OpenGL from Microsoft may have hurt VRML, particularly as the VRML97 standard only became official late last year. Win32 developers seem to be picking up on OpenGL now, so perhaps VRML will get more attention in the future.

It would be helpful if people who can view VRML from IDL could post some details to help the rest of us get our software working. For me:

SGI Irix 6.2 with netscape 3.04 using cosmoplayer 1.02 plugin and a GLX enabled X-server (e.g, console or NCD HMX). Viewing works, but printing produces blank pages.

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