

---

Subject: Re: IDL vs Direct3D, OpenGL

Posted by [Rick Towler](#) on Wed, 14 Jan 2004 18:40:01 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

"IDLUser" wrote in message ...

- > I am just learning IDL and I am considering to write 3D visualization
- > code with IDL. Before I start to do that, I want to know how IDL is
- > good for my purpose. Does IDL have enough functionality as Direct3D or
- > OpenGL has? What is the bottom line of IDL for object graphics? If it
- > does, what is the good way to learn about object graphics in IDL?
- > Thanks.

I second Michael's comments.

Further, consider the time you can justify investing in your viz application. IDL allows you to rapidly build applications by handling the more mundane aspects of application programming. IDL object graphics uses OpenGL as it's 3d API so given the appropriate hardware it performs quite well. But, RSI does limit what is exposed to the IDL programmer (for x-platform compatibility and to limit IDL's reliance on a single 3d API) so many of the better/cooler/would be nice to have features of OpenGL are not available in IDL. (Karl, you really need to consider exposing *\*at least\** the surface properties. The reasons to withhold them don't stand anymore.)

With C++ and OpenGL or DirectX you can be sure that you will spend much more time developing your application. In return for your investment in time, you will most likely see increased application performance and full access to the 3d API. Depending on your approach, your application may not be very portable which is in contrast to IDL.

It would be safe to say that you will be able to at least prototype your visualization application in IDL. If you find IDL too restrictive you can take what you have learned and continue development in another, more suited language.

FWIW, I have pushed a lot of polys thru IDL's object graphics system and I am still using it. A few tips to get the most out of IDL object graphics:

Use the Win32 version of IDL.

Buy the best "consumer grade" video adapter you can afford. nVidia historically has had the best openGL drivers. ATI is working hard to change this but I can't tell you how far they have come.

Buy the fastest x86 processor you can afford running on the fastest bus that processor architecture supports.

Consider Ronn Kling's "Power Graphics with IDL" a beginner's guide to object graphics. It is available from his website [www.kilvarock.com](http://www.kilvarock.com). AFAIK it is the only IDL object graphics book that is currently available.

"Advanced animation and rendering techniques" by Watt and Watt is another general resource. It is a little old now but the basics still apply. There are many more. Search your library.

-Rick

---