Subject: Re: IDL vs Direct3D, OpenGL
Posted by Mark Hadfield on Wed, 14 Jan 2004 20:38:26 GMT
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Matt Feinstein wrote:
> On 13 Jan 2004 10:44:51 -0800, bbhyun2001@yahoo.com (IDLUser) wrote:
>
>
>> Hello,
>> 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.
>
> It depends on what you mean by 'visualization code'. If visualization
> code means comparing and combining visualization of different kinds of
> image, mapping, and 3D data with a not-too-complicated GUI, then IDL
> is an excellent tool.
>
> On the other hand, if the visualization code just takes in a specific
> kind of 3D 'world coordinate' data and renders it at a high frame
> rate, you would be better off working directly with a lower level API
> such as OpenGL or Direct3D.

In this latter case, you might consider looking at VTK:

http://www.kitware.com/vtk/index.html

VTK is an open-source, 3D computer graphics package, somewhat higher level than OpenGL or Direct3D, but not a scientific & numerical analysis system like IDL. It is a C++ class library, but can invoked via various interface layers in Java, Tcl/Tk & Python. As an example of VTK's capabilities, there's a very nice data visualiser, using the Python-VTK interface, called MayaVi:

http://mayavi.sourceforge.net/

PV-Wave, a cousin of IDL, uses VTK for its 3D graphics.

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