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Subject: Re: Object Graphics: multiple Views of same model  
Posted by [David Fanning](#) on Tue, 18 Dec 2001 14:34:43 GMT  
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Martin Downing (martin.downing@ntlworld.com) writes:

> Ok, todays object graphics question:  
> Say you have a 3D object model and you want to view it in 2 or 3 orthogonal  
> directions as you rotate/manipulate it.  
> Can this be done with a single object instance? Which we would represent :  
>  
> 

```
graph TD
  grObject --> IDLgrModel_Group
  IDLgrModel_Group --> IDLgrModel_Transform1
  IDLgrModel_Group --> IDLgrModel_Transform2
  IDLgrModel_Transform1 --> View1
  IDLgrModel_Transform2 --> View2
```

  
> I guess not as we now have the reverse of IDLs graphics Hierarchy, and our  
> model\_group is not allowed two parents (poor thing!). However it seems to me  
> a very reasonable thing to want to do, as a graphics model should be  
> viewable from multiple positions. I cant see how Scenes or Viewgroups can  
> help, so is the only way to use one view, switching all its settings and the  
> top level model transform to look like other views before drawing to the  
> other windows?

I didn't mean to insult you the other day, Martin.  
I know perfectly well you know what you are doing with  
3D graphics, but sometimes I like to overemphasize the  
point for our readers. :-)

If I wanted to see two or more views of the same  
polygon object, I think I would start by create  
two or more polygon objects that all shared the  
same data (with the SHARE\_DATA keyword). Each  
object could go into its own model, each model  
into its own view, and the views could be  
collected into a scene, that I would display  
in my window.

This scheme allows you to manipulate the models  
independently to get two or more views of the  
same polygon dataset.

I have to admit, I've never had occasion to  
use the shared data trick, but it seems to me  
the application you describe is exactly why

it is there.

Cheers,

David

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