
Subject: Re: Object Graphics: multiple Views of same model
Posted by [Rick Towler](#) on Tue, 18 Dec 2001 18:27:49 GMT
[View Forum Message](#) <> [Reply to Message](#)

I think Dick wins the prize. The alias keyword to IDLgrModel::Add will allow you to do exactly what you want to do.

On a related note, you should try my camera object instead of the IDLgrView object for setting up your view volume and manipulating your model transforms. It will simplify your life.

Create your object (we'll say it is centered at 0,0,0)

Add your object to 3 models, using the alias keyword for 2 of them.

Create 3 instances of the camera object, one with pitch and yaw of 0, one with a pitch of -90, yaw of 0, and one with a yaw of -90 and a pitch of 0 to get your 3 orthogonal views. Set the third_person keyword to something appropriate (say I have an orb with a radius of 1, and I want my "eye" to be 1 unit from the orb I would set third_person=2). Place the cameras at the origin.

Add one model to each camera.

Draw the cameras to your 3 windows.

To manipulate, use the camera::pan method. Since you specify the pan in change in degrees, you simply pan all three cameras the same way and you will keep your orthogonal views.

You can get my camera object here:
<http://www.acoustics.washington.edu/~towler>

As for viewgroups, the best use I have come up with is the heads up display. Two of the examples on the above web page demonstrate this technique.

-Rick

"Martin Downing" <martin.downing@ntlworld.com> wrote in message
news:CWGT7.26238\$4e3.3402029@news6-win.server.ntlworld.com.. .
> 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 :

>

>

grObject

|

IDLgrModel_Group

|

|

> IDLgrModel_Transform1

IDLgrModel_Transform2

>

|

|

>

View1

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?

>

> Martin

>

>

>

>

>