Subject: Re: setting zbuffer for rendering window/buffer Posted by Karl Schultz on Thu, 03 Oct 2002 15:34:31 GMT

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- "Sebastian Loebbert" <sebaaihb@peach.zrz.TU-Berlin.DE> wrote in message news:Pine.LNX.4.44.0210031359040.18755-100000@peach.zrz.TU-B erlin.DE...
- > Hi all,

>

- > I would like to set the z-buffer of an IDLgrWindow before rendering to an
- > array of z-buffer values I got from another IDLgrWindow using
- > win->GetProperty,ZBUFFER_DATA=my_z_buf
- > Unfortunately, the is no win->SetProperty, ZBUFFER DATA=my z buf.
- > Is there any trick to do this?

The only trick I can think of is to draw a surface that covers your window. Each point on the surface is a Z value that you read out of the other window. You could either draw it solidly with your preferred background color, or use a transparent texture map to set the Z buffer without setting any pixels in the color buffer.

So, if my_z_buf is a FLOAT(300,300):

- I assume your target window is the same size.
- Set your viewplane_rect to [0,0,300,300]
- Make an IDLgrSurface with my_z_buf as your Z data
- Make an IDLgrImage with a BYTARR(4,2,2) where all values are zero this is a transparent texture map set the TEXTURE_MAP property on the grSurface.
- The surface would be the first thing to draw
- You may have to fiddle with the Z values a bit to make them work with your ZCLIP view values, but this is very doable,
- If you don't want your viewplane_rect set to [0,0,300,300], you can use whatever setting you want, but you would have to use [XY]COORD_CONV to try to get your surface to draw one surface value per window pixel. I just used [0,0,300,300] to make the initial explanation of this idea easier.
- If you don't go with a transparent texture map, the solid surface may vary in color because of lighting. You may want to turn off lights while you draw this surface if you want it to be a solid background.

I may be leaving out something, but this is at least a start.

Karl