

---

Subject: Re: IDLgrPoly[line|gon] and cv\_coord  
Posted by [David Fanning](#) on Wed, 08 Jan 2003 13:23:37 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

Thomas Gutzler (tgutzler@ee.uwa.edu.au) writes:

> I used to scale every Object to have max 2 Units in each dimension and  
> translating it to have 0/0/0 in its center because I discovered that the  
> visible area is only [-1..1] in each dimension. I tried to enlarge it  
> but without any success. Did I miss something or is that the way to do  
> it correctly?

I think you missed something. What you describe is the default viewplane rectangle. It is certainly not "wrong" to scale everything to it. It's just that this particular coordinate system is not always convenient.

If you are working with images of a particular size, for example, it is sometimes convenient to have an "image" coordinate system (0 to 512, say). I often prefer to have a "normalized" coordinate system of 0 to 1, since I am more familiar with how to scale things into this coordinate system than one that goes from -1 to 1.

The thing about object graphics is, you can do whatever you like and whatever is convenient for the problem at hand. But, if you are like me, I find all of this terribly confusing, and it took me literally weeks before I could get the components of a line plot (axes, titles, the line plot itself) with all the bits showing up in the proper relationship to one another.

That's why I wrote the NORMALIZE function. That little guy, which you see in every object graphics program I've ever written, is magical. It just seems to \*know\* how to put things where they need to go. I'm sure I couldn't write an object graphics program without it, Ronn Kling's excellent book on the subject notwithstanding. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

Fanning Software Consulting, Inc.  
Phone: 970-221-0438, E-mail: david@dfanning.com  
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>  
Toll-Free IDL Book Orders: 1-888-461-0155

---