Subject: Re: 3d device coordinates from a 3D polyline....
Posted by George.millward on Thu, 04 Oct 2012 16:23:57 GMT
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On Wednesday, October 3, 2012 2:29:02 PM UTC-6, Karl wrote:
> On Tuesday, October 2, 2012 3:32:02 PM UTC-6, Mike Galloy wrote:
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>> On 10/2/12 3:02 PM, Karl wrote:
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>
>>> It should also be possible to write a general-purpose function that
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>
>>> takes a "leaf" graphics object and walks up the scene graph,
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>>
>
>>> computing the single 4x4 combined matrix and returns it. You would
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>
>>> then use that single matrix to transform your points.
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>
>>> In a way, you are duplicating the entire transform that IDL applies
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>
>>> to the points via the underlying graphics system (OpenGL). I don't
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>
>>> remember if there is a way to get this transform directly from IDL -
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>>
>
>>> don't think so. And someone out there may have already written an
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>
>>> IDL function to do this. But, I don't know of any.

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>> Isn't this the ::getCTM() method or am I misunderstanding the situation?
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>> Mike
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>> --
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>
>> Michael Galloy
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>
>> www.michaelgalloy.com
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>
>> Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)
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>
>> Research Mathematician
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>
>> Tech-X Corporation
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>
> yep, that's it.

Actually, this IS a 3D perspective view I'm working with. I have a polyline in a 3D perspective scene. One end of the polyline is at the center of my 3D coordinate system (ie, [0,0,0]) and the other end is at (say) [+10,0,0]. As I rotate it around with a trackball the 2D projection in the window

can assume any
'size' (from a single pixel dot to a line of length 10) and any orientation (0 to 360 if you like).

I'm amazed there isn't an inbuilt function to tell me what these 2D window coordinates are - but there you go, nothing like spending a couple of weeks fiddling with IDL - it's fun right ?

I'll take a look a Michael's object graphics chapter. For me that is the ideal sample chapter....

Cheers

George.
