## Subject: Re: Transformation of Objects and Models Posted by Erik[1] on Tue, 19 Aug 2008 14:37:52 GMT

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On 19 aug, 14:16, Erik < jansse...@gmail.com> wrote:
> On 18 aug, 21:42, Rick Towler < rick.tow...@nomail.noaa.gov> wrote:
>
>
>> ben.bighair wrote:
>>> On Aug 18, 6:37 am, Erik wrote:
>>>> Hi all.
>
>>>> I'm working on a piece of code to make the handling of IDLgr objects a
>>>> lot easier (IDL 6.3). The goal is to easily select some visual objects
>>>> like ROI's, Lines and Text and move / resize or rotate them in the
>>>> drawwidget.
>>>> I used the translate/rotate/scale functions of the IDLgrROI / IDLanROI
>>> object a lot and it does exactly what it's supposed to do. But
>>> unfortunately the other IDLgr objects (like; IDLgrPolyLine, IDLgrText)
>>> does not have the transformation functions that the ROI object has :-
>>>> ( . For example, to move a polyline, I cannot use the code oLine->Translate, tx, ty. Instead I
must retrieve and alter the DATA
>>> property. To move a IDLgrText object, this must be done with the
>>>> LOCATION property... and so forth.
>>>> To make things easier I expected the IDLgrModel object to supply the
>>> solution for me, because the model has the same transformation
>>>> functions as a ROI. At first glance, it seems to work. When I add a
>>>> line to a model and give a translate command, the line get moved as
>>> expected. Same story for IDLgrText and IDLgrROI objects, so I suppose
>>>> this works for any object that can be added to a model.
>
>>>> My complaint however, is that the actual DATA of the IDLgr Objects
>>> stays the same! When I move a line to the right on my window, I also
>>> want the Object's X-data to be changed! It seems like the
>>>> transformation of the Model does not do this :-( .
>>>> I can understand if the Model is not meant to change this data, but
>>>> why doesn't have all IDLgr objects the same commands for
>>>> transformation?
>
>> Because you are supposed to stick those objects in models and not
>> transform them by altering their underlying data. :) If you mean to
>> drag around your graphic objects by changing their underlying data
>> values I foresee headaches and unreasonably slow and complicated code in
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>> your future.
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- >> The usual approach would be to stick every movable object in its own
- >> model. Transform the model and forget about the object's underlying
- >> data. If for some reason after dragging your object just so, you need
- >> to extract the transformed vertices you can get the model's
- >> transformation and apply that to the verts yourself.

>

>> -Rick

>

- > Thanks for your reply's. The reason why I wanted to alter the
- > underlying data, is because the property's of the objects will be used
- > for the rest of the program. For example, the number of counts in a
- > ROI will be different if the ROI is placed elsewhere on the widget.
- > Same goes for lines, which can be used to determine a start of an
- > analysis over a linogram. Guess I'll need to extract the model
- > tranformation then!

I have one more question;

How can I use a transform matrix of a model (which describes a rotation), to rotate the DATA of an IDLgrPolyline object?