Subject: Re: selecting model objects Posted by Mark Hadfield on Wed, 26 Jul 2000 07:00:00 GMT View Forum Message <> Reply to Message

"Rick Towler" <rtowler@u.washington.edu> wrote in message news:397E213D.4C565D8@u.washington.edu...

>

- > I require the ability to select individual models within a view and to
- > translate them AS A GROUP.

- > If I have model "A" which is a child (added to) model "B" within a view
- > that is drawn to a window, will the select method return ALL of the
- > models or just the parent model B? As my program is working now only
- > model B is being returned even if I click on it's child model A.

Yes, if model B has its SELECT\_TARGET property set then it "traps" selection for all its children.

You shouldn't be thinking about "clicking on models". Models are containers with a transformation matrix. They don't have any spatial extent. Sort of like invisible elbow joints (for rotation) or zoom lenses (for scaling). I like the zoom lens analogy better: you look \*through\* a model at its children. The things you can click on are atoms. Models with the SELECT\_TARGET property set are a special case: they let you gather several atoms together and make them all act like a single atom. But unless you're building such a composite atom, I don't think you should be setting a model's SELECT\_TARGET property.

Perhaps what you need to do is work upwards through the graphics tree. Having caught a selection on one of the atoms (or composite atoms) find the model it is attached to via the atom's PARENT property. If you scale/translate/rotate the parent then you affect the selected atom and all its siblings. (Is that what you want to do? Or do you need to go further up the tree?)

Mark Hadfield

m.hadfield@niwa.cri.nz http://katipo.niwa.cri.nz/~hadfield/ National Institute for Water and Atmospheric Research PO Box 14-901, Wellington, New Zealand

- > If in theory the select method can return an array of models (all of the
- > children models plus the parent model) any ideas why the child model
- > information isn't trickling down? The /SELECT\_TARGET keyword is set on
- > both models.

>

> Adding model "A" and model "B" directly to the view does allow for

```
> selection of individual models. But, this approach requires that I keep
> track of all of the models in the view and translate them individually
> when one of them is selected to move.
>
 I guess I have a solution but I am still curious. Has anybody tried
> using the select method to select child models within a parent model?
  Is this just impossible?
>
  Thanks all!
>
  -Rick Towler
>
>
>> Rick Towler (rtowler@u.washington.edu) writes:
>>
>>> I have a base model (a map) that contains other models (geographic
>>> data). I need to select data within the map using the IDLqrWindow
>>> Select method. Right now I am only getting the base model returned.
>>> object heirarchy is: [data_model]->[map_model]->[oView]->[oWindow]
>>>
>>> : my select code
>>> item = oWindow->Select(oView, [event.x, event.y])
>>> item contains the reference to map_model only.
>>>
>>> A key point is that I need to anchor the geographic data to the map
and
>>> I need to be able to translate and scale the map. Because of this I
>>> haven't been able to add the data objects directly to the view since
>>> each of the objects would translate/scale independently and the
>>> geographic data would be dereferenced from the underlying map.
>>>
>>> is it possible to select a model (or atom) that is contained in
another
>>> model that is contained in a view?
>>>
>>> If not, is there a way to "join" 2 or more models so when translating
or
>>> scaling they behave as 1?
>>
>> To make a model object "selectable" you must first set
>> its SELECT_TARGET keyword. The Select method should then
>> return an array of selected objects located under the
>> selection point.
>>
>> Cheers,
```

- >>
- >> David
- >>
- >> --
- >> David Fanning, Ph.D.
- >> Fanning Software Consulting
- >> Phone: 970-221-0438 E-Mail: davidf@dfanning.com
- >> Coyote's Guide to IDL Programming: http://www.dfanning.com/
- >> Toll-Free IDL Book Orders: 1-888-461-0155