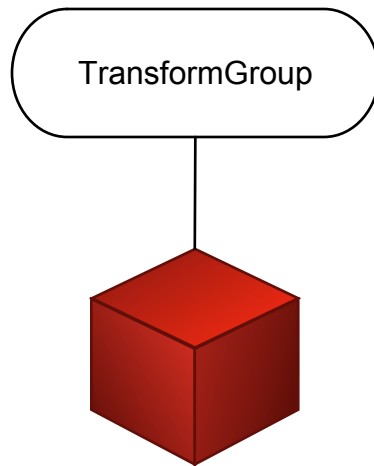


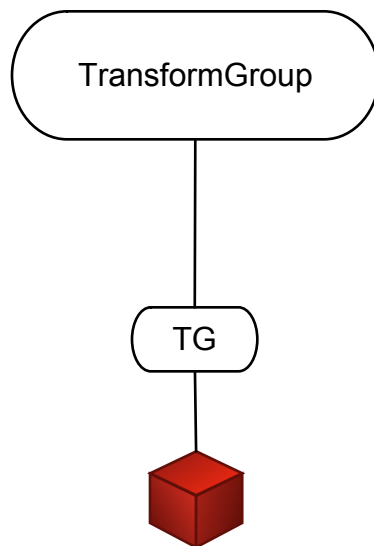
What a typical SimplePortrayal3D.getModel() returns



Passed to you via getModel(...), or if null, you have to make one. Owned by the parent (typically a FieldPortrayal3D, or a wrapper like TransformedPortrayal3D or CircledPortrayal3d or LabelledPortrayal3D) and used to translate the SimplePortrayal3D as necessary — don't fool with it except to hang stuff off of it.

The scenegraph which represents your object. Your SimplePortrayal3D can make it anything appropriate. Make it pickable if you want the object inspectable by the user — try SimplePortrayal3D.setPickableFlags()

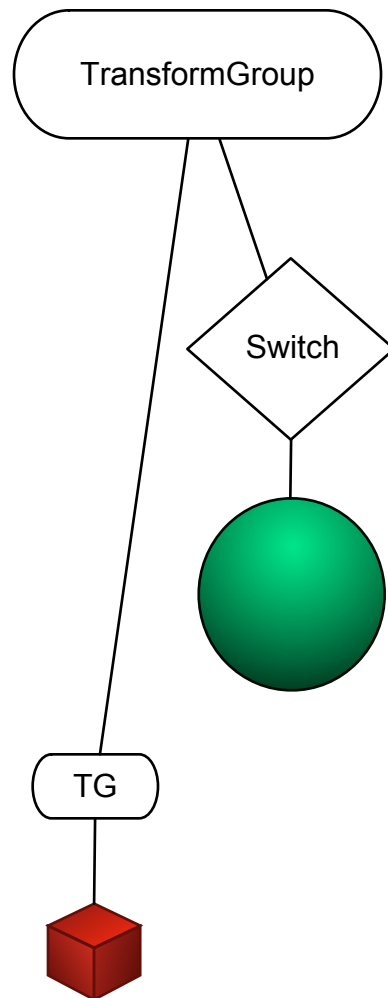
What TransformedPortrayal.getModel() returns



As usual, this transform group shouldn't be played with — it's for the parent's use at its discretion.

The TransformedPortrayal3D uses the underlying SimplePortrayal3D's transform group to transform the model as appropriate.

What CircledPortrayal3D.getModel() returns

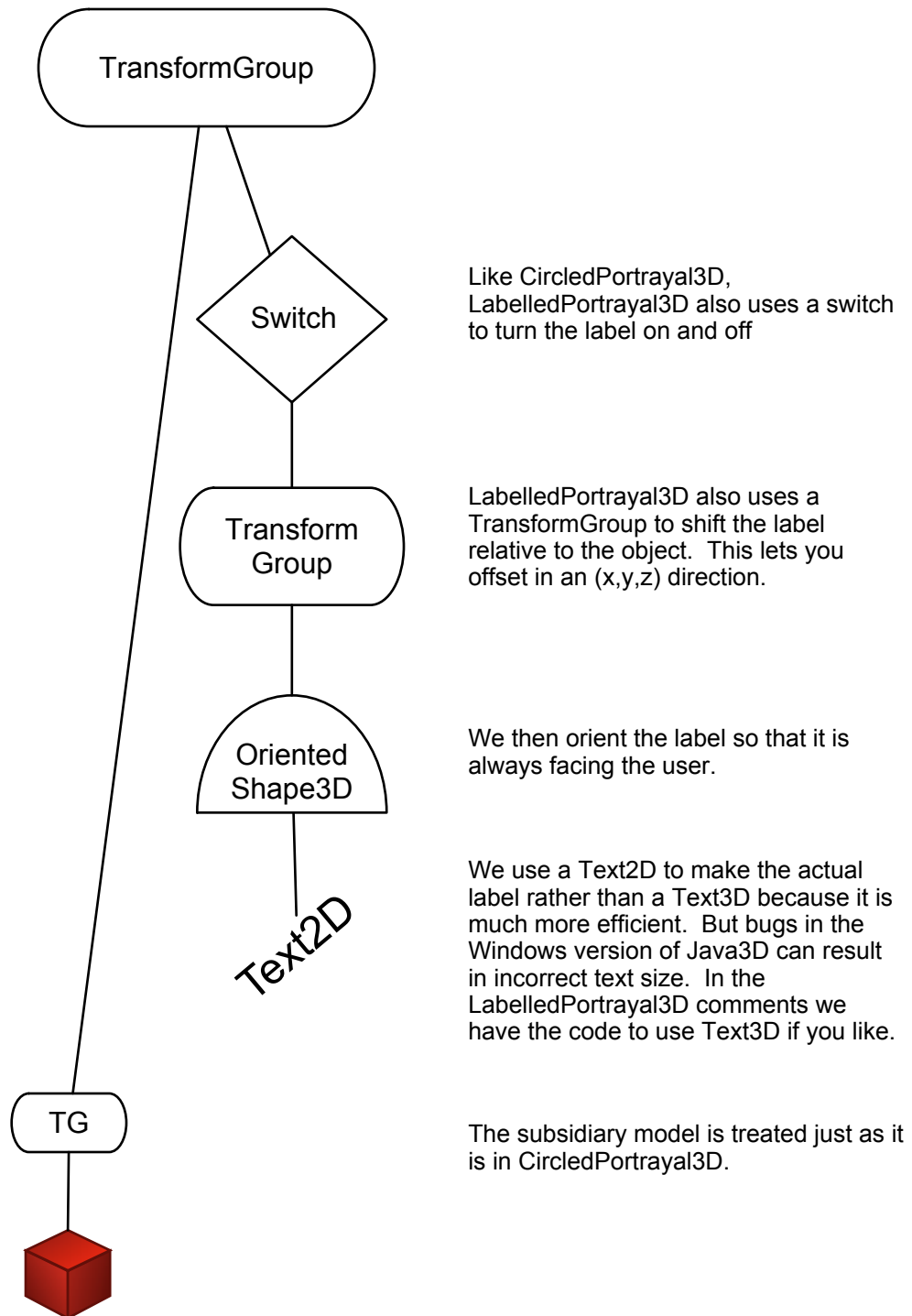


When a CircledPortrayal2D provides its model, it provides a TransformGroup on which it has hung a Switch and a semitransparent Sphere3D. The Switch turns the Sphere3D on and off.

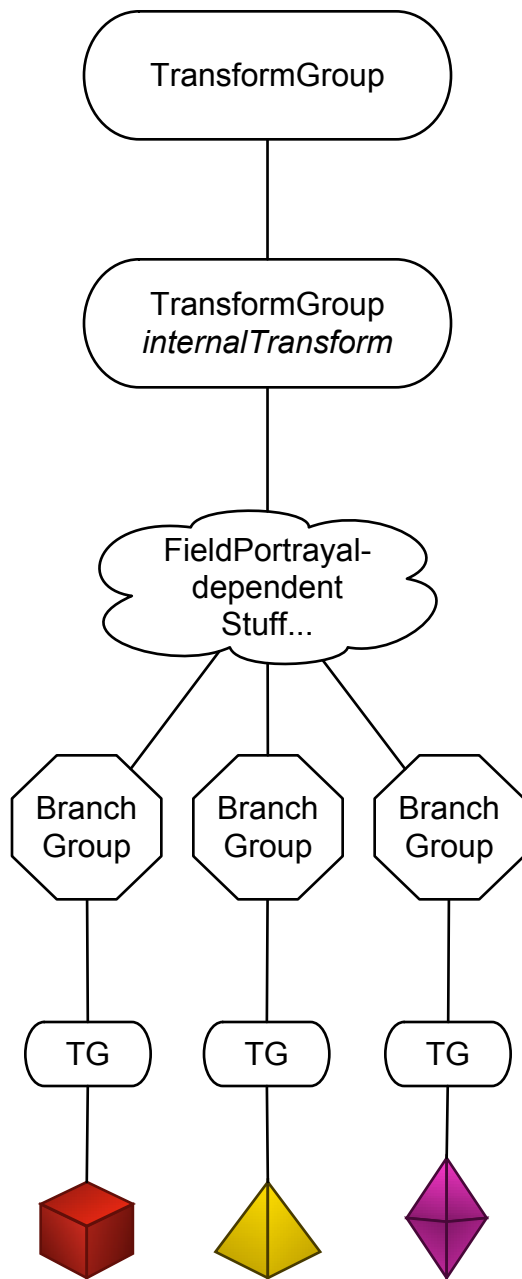
Here's the Sphere3D.

The CircledPortrayal2D also hangs off of its TransformGroup the model provided by the SimplePortrayal3D you had given it. The subsidiary TransformGroup is not modified.

What LabelledPortrayal3D.getModel() returns



What a typical FieldPortrayal3D.getModel() returns



Passed to you via `getModel(...)`, or if null, you have to make one. Owned by the `Display3D` and used to translate the `FieldPortrayal` as necessary — don't fool with it except to hang stuff off of it

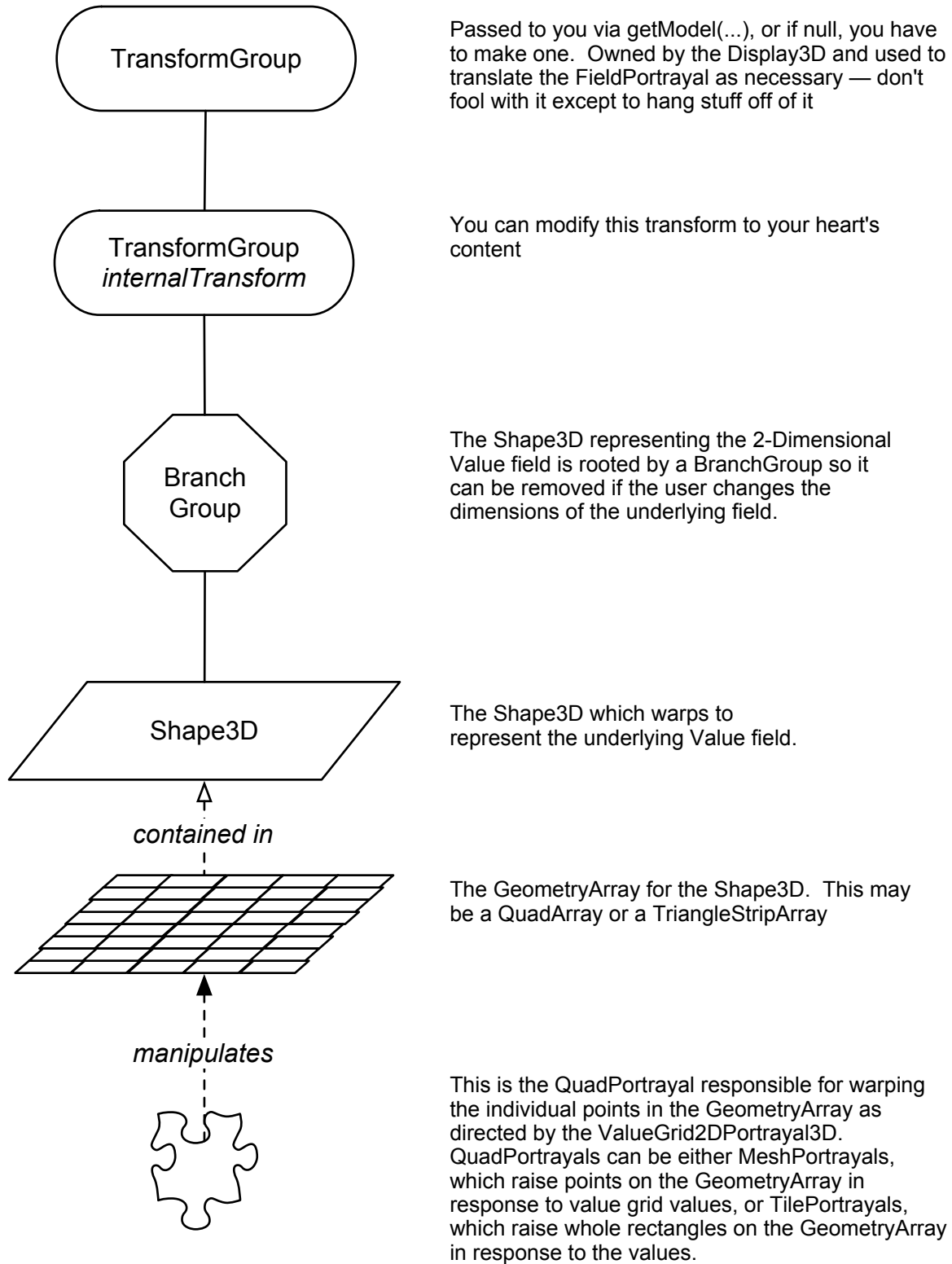
You can modify this transform to your heart's content

`FieldPortrayals` may have different internal structures at this point

The `TransformGroup`-rooted scenegraphs for the objects in the field, as provided by each `SimplePortrayal3D`'s `getModel(...)` method, get hung somewhere down here, usually themselves rooted by a `BranchGroup`. The `BranchGroup` allows the `FieldPortrayal3D` to delete or add the models as the objects come and go in the field. The `TransformGroups` are used to transform the scenegraph for each object to move it to the right location in the field.

Typically the field's objects, or other references to them, are stored in the user data of the `BranchGroups` so when the model is selected the `FieldPortrayal` knows what object it represents.

What ValueGrid2DPortrayal3D.getModel() returns



What EdgePortrayal3D.getModel() returns

What NetworkPortrayal3D.getModel() returns

(These portrayals are undergoing slight internal modifications — we'll get back to you on them)

Public scenegraph members of Display3D's CapturingCanvas3D

