Thoughts on a hierarchy of Shape objects linking the very basic definitions in CAOM to a representation using the full Coordinates model (for the values).

The UML project has 3 packages (basic, quantity, full). Each has the same-named Shapes with content reflecting that level of normalization. I'm not sure if maybe "Shape" itself maybe should be at the main level, and then extended within each package, but that is a detail.

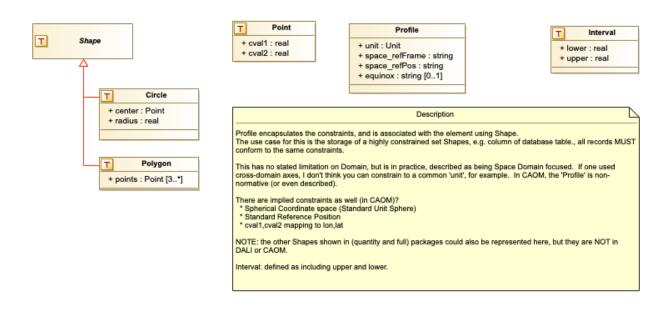
\*\* they would all be extensions of the same base Shape class.

It'd be interesting if one could import a 'package' from a model.. selecting which level of generality the is expected/contained.

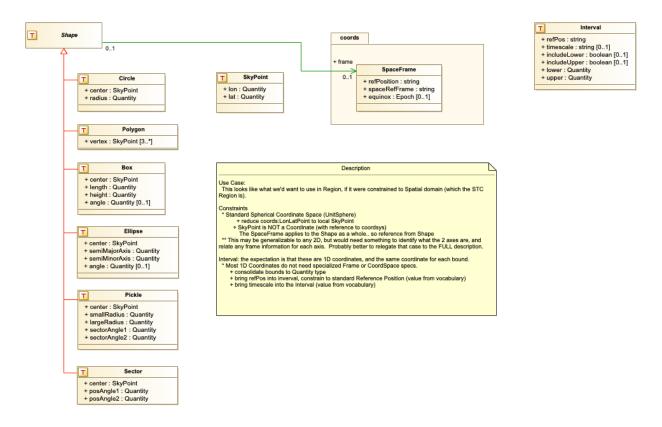
Models considered here:

- \* CAOM
- \* DALI-1.1
- \* STC-1.33
- \* FOV-0.0 (see October 2022 interop; DM program)
- \* Mango-1.0
- Shape Property: this takes a 'string' representation from the DB/Catalog and associates it with the serialization standard defining it (SMOC, STC-S, DALI?). No model for Shape here.
- \* NOTE: Measurements model defines Error Shape Types (Ellipse), and Bounds == Interval, these are stripped of any coordinate system information (that is all on the Measure) and they are expected to map to the axes of the Measure. These could be revamped to a GeometricUncertainty which holds a Shape.??

## **BASIC Level Representation: CAOM, DALI**



## **Quantity Level Representation: STC-Region-ish**



## Full Coordinates Representation: Field Of View (prototype model.. see Oct 22 Interop)

