

More Relationships: Associations




Associations can be put in place between classes, which describe what sort of relationship their objects have. The concept of associations and how they are modelled in UML and Poseidon is covered in this section.

Associations

Associations are the most generic form of relationships. Everything that has been covered in the previous section holds for associations. If no additional constraints are specified in a relationship it is assumed that it is an association.

Just to recap: an association specifies that a relationship exists between two classes. Associations are modelled as lines connecting the two classes whose instances (objects) are involved in the relationship. When you model associations in UML class diagrams, you show them as a thin line connecting two classes.

Arrows indicate the directionality between the classes.

 (Bi-directional) Association (default)

 Directed Association

Every association has two association ends that are model elements in their own rights, as defined in the UML specification. Figure 1 shows the Poseidon Properties tab for a 1:1 *recognizes* association, in this case between *SloopyBoy* and *SloopyGirl*.

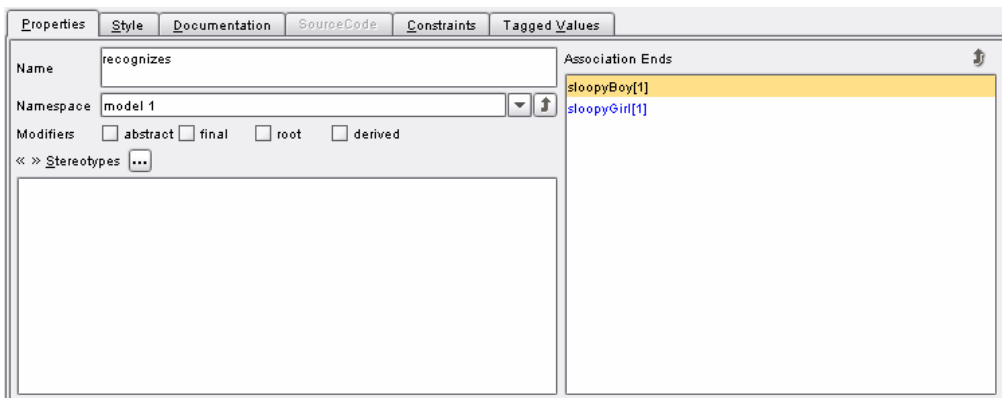


Figure 1: Association

An association end can also be given a name, and like an association it doesn't require one. If an association end does not have its own name, the class name at that end of the association is displayed. Look to the left hand side of Figure 2. In this

case, one association end has been named (*recognizes*) and one hasn't (default class name). Like hypertext, they link to the association end properties, not to the class properties.

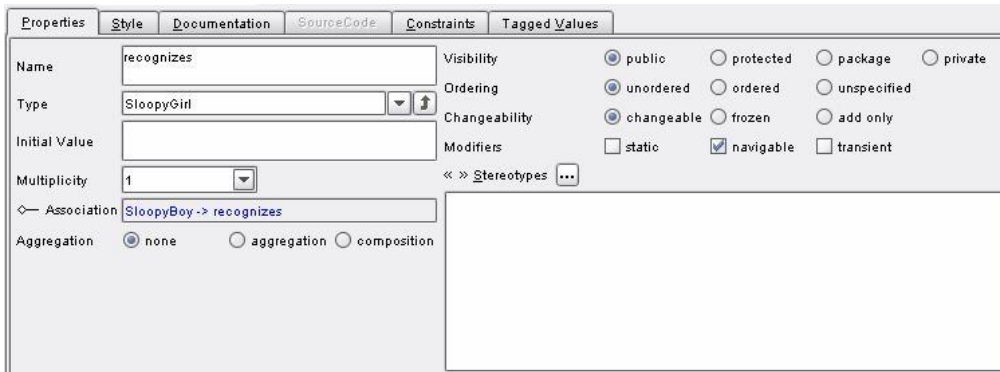


Figure 2: Association End

Associations usually connect two different classes. But they can also be drawn from one class to itself (see recursive relationships in previous Section). Simply use the rapid button in the lower right corner of the class.

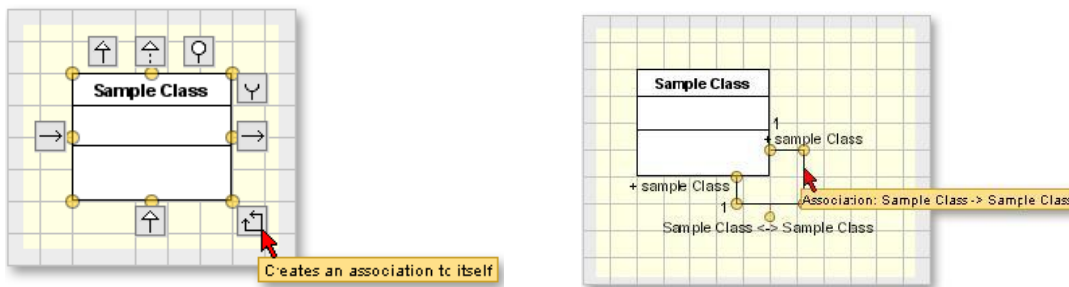


Figure 3: Self-Association

Just like a class, an association can have attributes and operations. In this case you have an association class. You visualise association classes the same way you show regular classes and you use a dotted line to connect it to the association line.



The concept of associations and how they are modelled in UML and Poseidon has covered in this section.