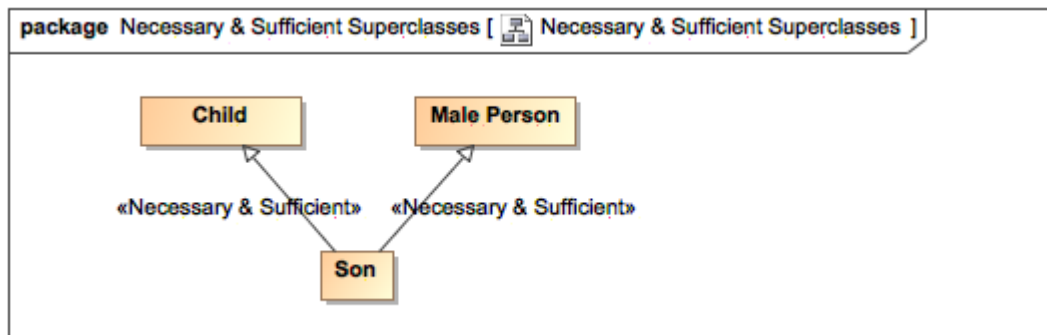# Intersection

An intersection is a different statement than a subclass of multiple superclasses, which is a subset of the intersection. A particular thing that is a member of all the superclasses implies it is also an instance of the intersection. For intersection, the modeling tool considers UML generalization and UML realization equivalent. This is due to ownership and legacy considerations in UML. Generalization is the preferred representation.

There are two ways to express an intersection in this profile.

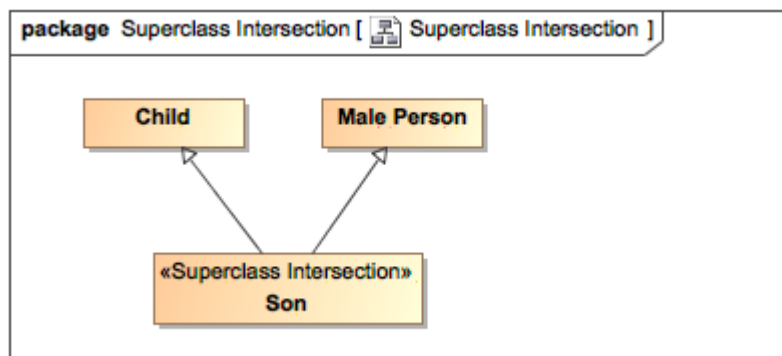1. **Using Necessary and Sufficient stereotypes**

The modeling tool intersects together every necessary and sufficient condition, including UML Generalizations marked as «Necessary & Sufficient».

Example of Intersection using «Necessary & Sufficient»

2. Using Superclass Intersection stereotype

Apply the «Superclass Intersection» stereotype to a subclass of two or more other classes.

«Example of Intersection Using «Superclass Intersection»