## Creating an existential quantification (qualified) constraint for a property

In the Concept Modeling interpretation of UML, subsetting a property without giving the new property a different name (or leaving off the new property name altogether) creates an existential quantification constraint (see Existential Quantification Constraint). As {subsets} with an omitted name is not well defined in UML, it is used in the Concept Modeling profile to express that a subset of values must meet the stated cardinality and type constraints of the subsetting property.

To add an existential quantification constraint to a property

1. Drag and drop a subsetted property (e.g., "has" from "Person") onto the cardinality of the property that will subset another property (e.g., "unnamed" from "Dog Caretaker"). Note that the target can have the same name as the source, or can be unnamed.

the resulting subsetting property's multiplicity is adjusted to conform to the dragged, subsetted property, and to have a minimum cardinality of at least one.



Figure 1: Dragging a subsetted property to a cardinality of another property to create an existential quantification constraint.

2. Right-click on the subsetted property, and select Create existential quantification.





To remove an existential qualification constraint

- 1. Right-click on a subsetting property.
- 2. Select Concept Modeling.
- 3. Select Remove existential quantification.



Figure 3: The Remove existential quantification shortcut menu.

## **Related Pages:**

📜 Unknown macro: 'list-children'