Property ownership

The concept modeling profile of UML interprets the owner of a property as a context in which that property must conform to certain constraints. These constraints can include multiplicity (which includes a minimum cardinality and a maximum cardinality), a type for the property, existential quantification, and universal quantification. When an instance is a member of an owning class, all of that class' constraints must be met.

An OWL ontology may define a property that is foreign to its namespace. If you import an OWL ontology into CCM that defines a property that is in a foreign namespace, you will see the association ends with cross (x) marks. In the Concept Modeler, these non-navigable association ends mean that the properties belong to foreign domains and therefore, they are owned by the association. The following diagram shows the examples of non-navigable association ends.

package Company [📲 Company]		
Employer (Company) employeed by	owner owns	Vehicle (Vehicle) drives
employees Employed (People)	driven by →<	

Properties owned by an association.

In the diagram, the Employer, Vehicle, and Employed classes belong to three different namespaces, and the association belongs to the same namespace as that of the Employer.

Note recommended that duplicate property names in a concept modeling diagram be avoided because they will result in conflicting definition of domains

and ranges when exported to OWL.

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