

- [4] The type of the connector referred to by a connector attribute must be an association class stereotyped by Block.
- [5] A property stereotyped by ConnectorProperty must have the same name and type as the connector referred to by the connector attribute.

8.3.2.7 DirectedRelationshipPropertyPath

Description

The DirectedRelationshipPropertyPath stereotype based on UML DirectedRelationship enables directed relationships to identify their sources and targets by a multi-level path of properties accessible from context blocks for the sources and targets. Context blocks are typically the owner of the first property in the path of properties, but can be specializations of the owner to limit the scope of the relationship.

Attributes

- sourcePropertyPath: Property [0..*] {ordered, nonunique}
A series of properties that identifies the source of the directed relationship in the context of the block specified by the sourceContext property. The ordering of properties is from a property of the sourceContext block, through a property of each intermediate block that types the preceding property, ending in a property with a type that owns or inherits the source of the directed relationship. The source is not included in the propertyPath list. The same property might appear more than once because a block can own a property with the same or specialized block as a type.
- targetPropertyPath: Property [0..*] {ordered, nonunique}
A series of properties that identifies the target of the directed relationship in the context of the block specified by the targetContext property. The ordering of properties is from a property of the targetContext block, through a property of each intermediate block that types the preceding property, ending in a property with a type that owns or inherits the target of the directed relationship. The target is not included in the propertyPath list. The same property might appear more than once because a block can own a property with the same or specialized block as a type.
- sourceContext: Classifier [0..1]
Gives the context for sourcePropertyPath to begin from.
- targetContext: Classifier [0..1]
Gives the context for targetPropertyPath to begin from.

Constraints

- [1] sourceContext must have a value when sourcePropertyPath has a value.
- [2] targetContext must have a value when targetPropertyPath has a value.
- [3] The property in the first position of the sourcePropertyPath list, if any, must be owned by the sourceContext or one of its generalizations.
- [4] The property in the first position of the targetPropertyPath list, if any, must be owned by the targetContext or one of its generalizations.
- [5] The property at each successive position of the sourcePropertyPath and targetPropertyPath, following the first position, must be owned by the Block or ValueType that types the property at the immediately preceding position, or a generalization of the Block or ValueType.
- [6] The type of the property at the last position of the sourcePropertyPath list must own or inherit the source of the stereotyped directed relationship.
- [7] The type of the property at the last position of the targetPropertyPath list must own or inherit the target of the stereotyped directed relationship.