

### 9.1.12 AssertedInference Class

The AssertedInference association class records the inference that a user declares to exist between one or more Assertion (premises) and another Assertion (conclusion). It is important to note that such a declaration is itself an assertion on behalf of the user.

#### Superclass

AssertedRelationship

#### Semantics

The core structure of an argument is declared through the inferences that are asserted to exist between Assertions (e.g., Claims). For example, an AssertedInference can be said to exist between two claims (“Claim A implies Claim B”). An AssertedInference between two claims (A – the source – and B – the target) denotes that the truth of Claim A is said to infer the truth of Claim B.

#### Example

```
<containsAssertedRelationship xsi:type="ARM:AssertedInference" xmi:id="16" identifier="C1.1.1" description="" target="5" source="1"/>
```

```
inv SourceMustBeAssertion : self.source->forAll(s|s.oclIsTypeOf(Assertion))
```

#### Invariants

```
inv TargetMustBeAssertion : self.target->forAll(t|t.oclIsTypeOf(Assertion))
```

```
context AssertedInference
```

```
inv SourceMustBeClaim : self.source->forAll(s|s.oclIsTypeOf(Claim))
```

```
inv TargetMustBeClaimOrAssertedRelationship : self.target->forAll(t|t.oclIsTypeOf(Claim) or  
t.oclIsTypeOf(AssertedRelationship))
```

### 9.1.13 AssertedEvidence Class

The AssertedEvidence association class records the declaration that one or more items of Evidence (cited by InformationItems) provides information that helps establish the truth of a Claim. It is important to note that such a declaration is itself an assertion on behalf of the user. The information (cited by an InformationItem) may provide evidence for more than one Claim.

#### Superclass

AssertedRelationship

#### Semantics

Where evidence (cited by InformationItems) exists that helps to establish the truth of a Claim in the argument, this relationship between the Claim and the evidence can be asserted by an AssertedEvidence association. An AssertedEvidence association between some information cited by an InformationElement and a Claim (A – the source evidence cited – and B – the target claim) denotes that the evidence cited by A is said to help establish the truth of Claim B.

#### Example

```
<containsAssertedRelationship xsi:type="ARM:AssertedEvidence" xmi:id="22" identifier="S1.1" target="10" source="5 6"/>
```