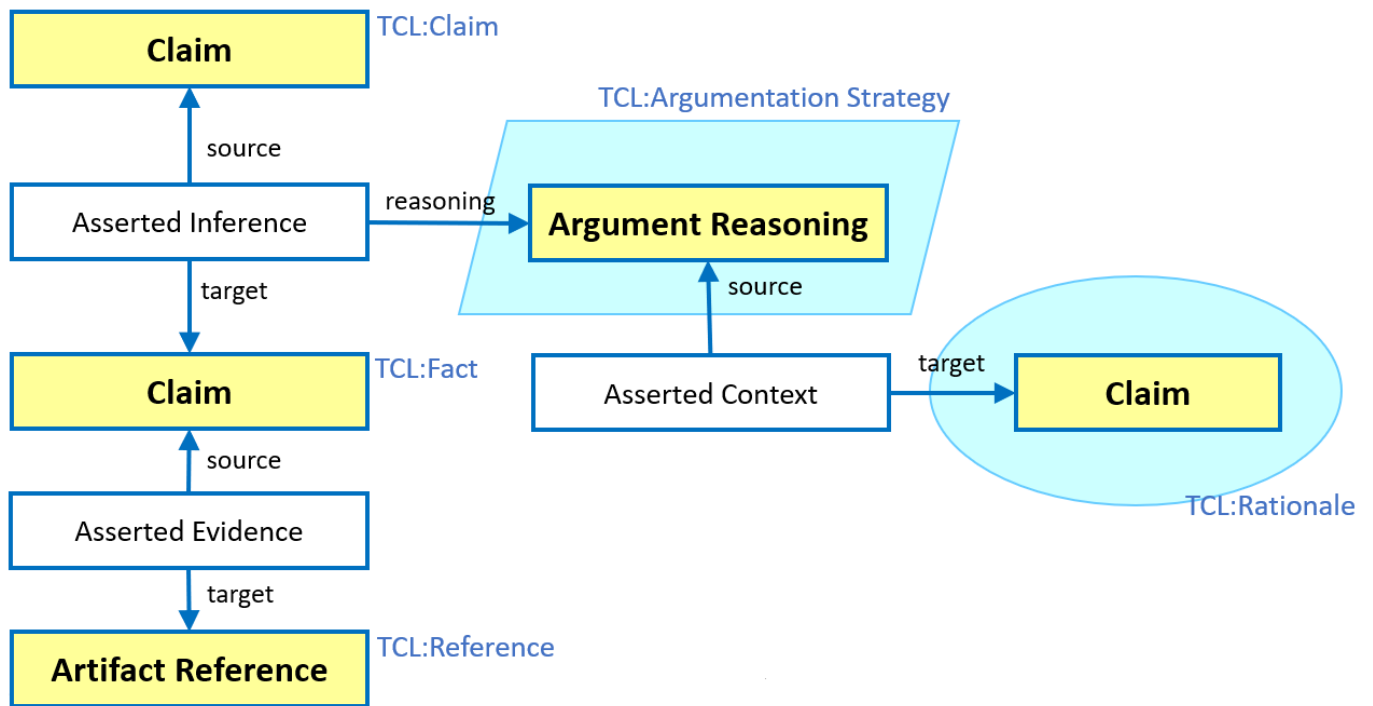


TCL (Trust Case Language) arguments can be fully translated to SACM 2.1 ([Structured Assurance Case Metamodel](#)) using model-to-model transformation.

The table below describes the mapping from TCL (Trust Case Language) elements onto OMG SACM 2.1 elements.

| TCL Element | SACM element | Notes |
|--------------------------------|--|---|
| Argument node elements: | | |
| TCL:Claim | SACM:Claim | <i>assertionDeclaration</i> = asserted |
| TCL:ArgumentationStrategy | SACM:ArgumentReasoning | attached to a single inference from source nodes (premises) to the target claim |
| TCL:CounterStrategy | SACM:ArgumentReasoning | attached to a single inference from source nodes (premises) to the target claim, where inference <i>isCounter</i> = true |
| TCL:Rationale | SACM:Claim | <i>assertionDeclaration</i> = asserted |
| TCL:Fact | SACM:Claim | <i>assertionDeclaration</i> = asserted |
| TCL:Assumption | SACM:Claim | <i>assertionDeclaration</i> = assumed |
| TCL:Reference | SACM:ArtifactReference | ArtifactReference referring to SACM:Artifact |
| TCL:Information | SACM:ArtifactReference | It contains textual information (usually contextual) and optionally some references (associated artefacts) |
| TCL:Link | SACM:ArgumentationElement (concrete class depends on the link target class) | <i>citedElement</i> pointing to the linked argument node; for claims: <i>assertionDeclaration</i> = asCited |
| Argument link elements: | | |
| TCL:Supports | SACM:AssertedInference | <i>source</i> attribute denotes the list of premises, <i>target</i> points to the conclusion and <i>reasoning</i> to the strategy |
| TCL:IsContextFor | SACM:AssertedContext | used to connect argument elements with TCL:Information elements which provide textual context information |
| TCL:IsEvidenceFor | SACM:AssertedEvidence | <i>source</i> attribute denotes the list of evidence (TCL:Reference), <i>target</i> points to the conclusion (TCL:Fact) |
| Container elements: | | |
| TCL:Folder | SACM:AssuranceCasePackage | |
| TCL:Module | SACM:ArgumentPackage | |
| TCL:ModuleInterface | SACM:ArgumentPackageBinding | |
| TCL:Template | SACM:ArgumentPackage | <i>isAbstract</i> = true |
| TCL:Repository | SACM:ArtifactPackage | |
| Evidence elements: | | |
| TCL:Evidence | SACM:Artifact SACM:Activity | SACM class depends on evidence repository type |

The diagram below presents SACM objects corresponding to elements and relations of a TCL argument step of a claim supported by a strategy and one fact supported by evidence.



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