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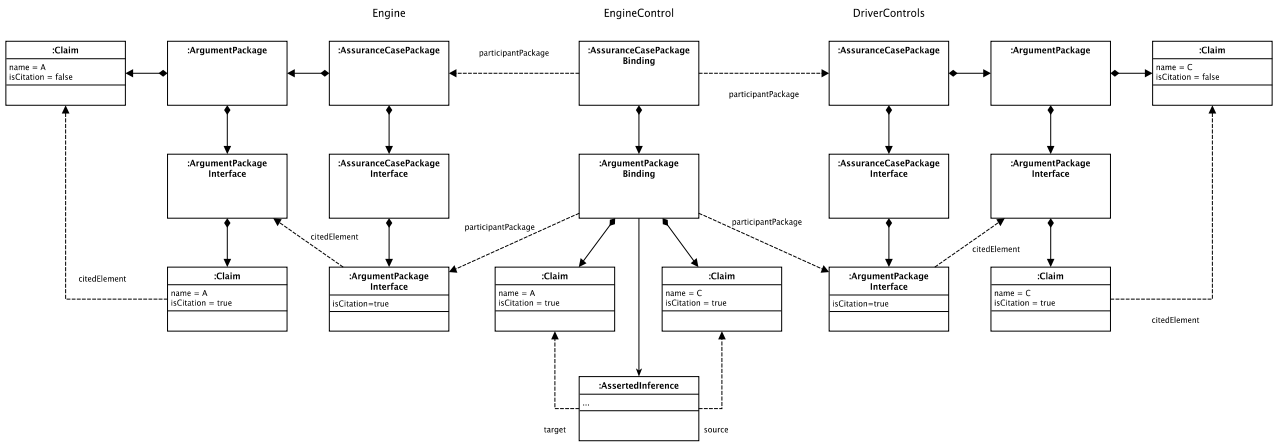
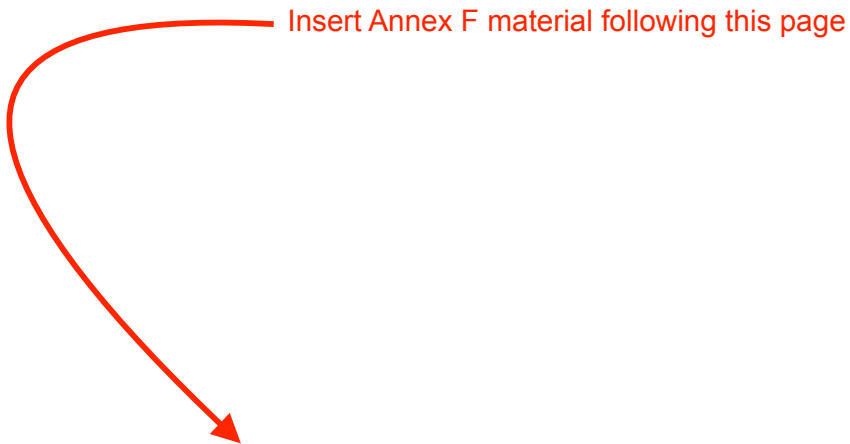


Figure E6 – Specific Relationships between DriverControls, EngineControl, and Engine Assurance Cases Illustration

Finally, in Figure E6 the specific (model element wise) relationships between DriverControls, EngineControl, and Engine Assurance Cases are shown, where some claims are omitted to improve readability.



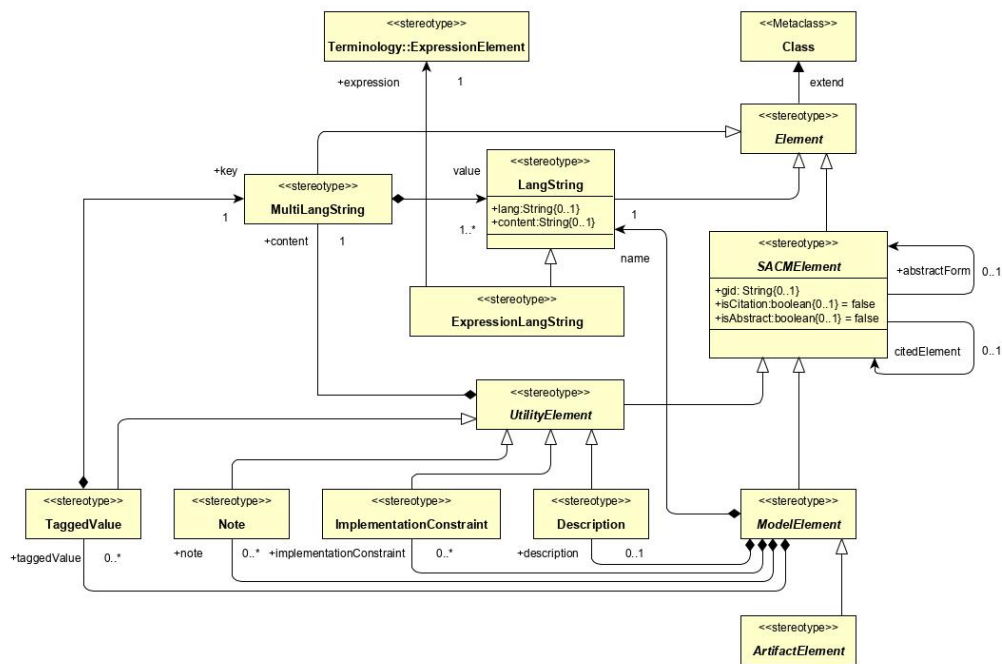
Annex F: SACM UML profile

(informative)

The SACM UML profile is created by extending meta element Class and Association from standard UML.

F.1 Base component

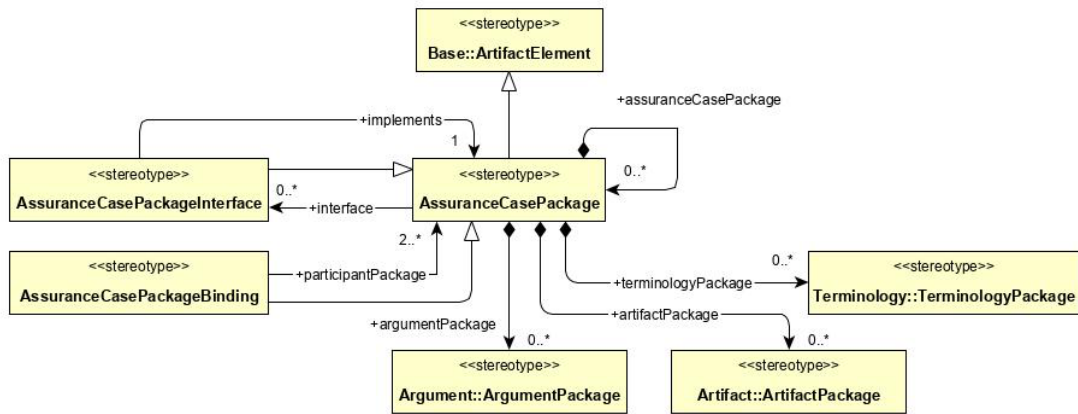
The base component of the SACM profile is Shown in F.1. In this component, the metaclass **Class** from the standard UML is imported and is generalized by Element of SACM, which is defined as a stereotype. Other elements of SACM are generalizations of Element and are also defined as stereotypes. The descriptions of the elements in SACM can be found in the specification.



F.1 Base component of the SACM profile.

F.2 Assurance case component

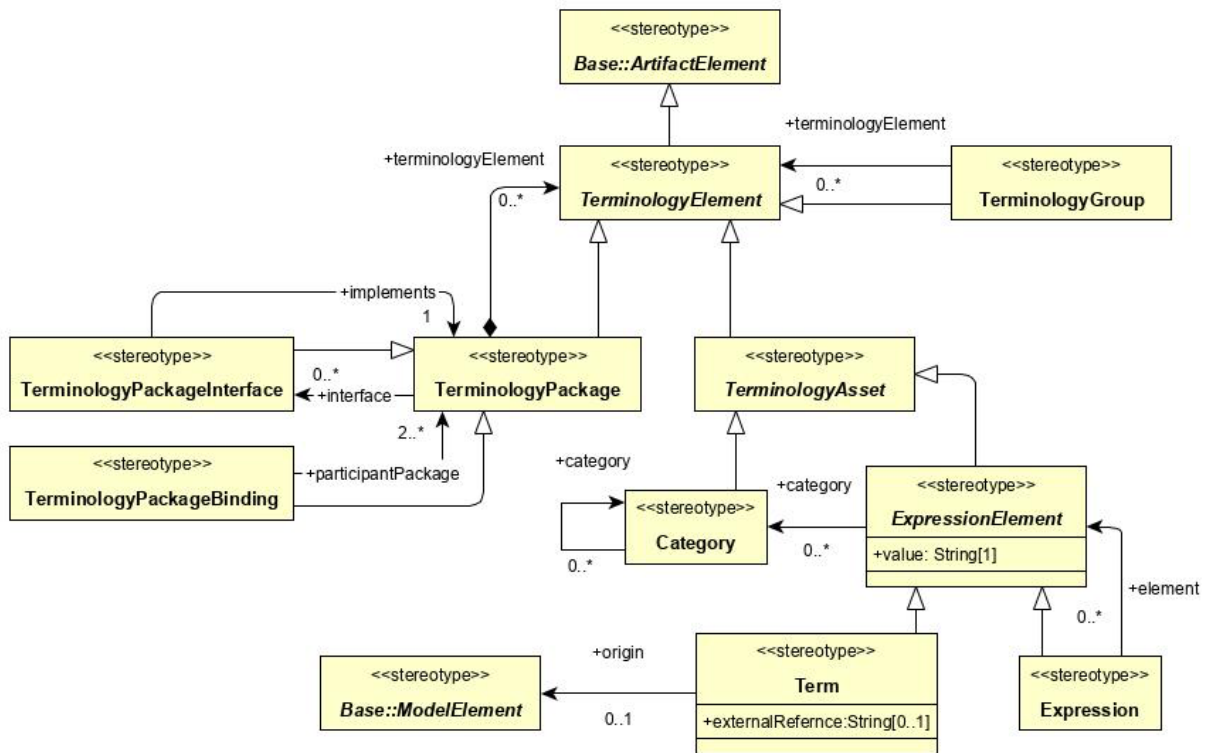
The assurance case component of the SACM profile is Shown in F.2. In this component, all elements are defined as stereotypes, the descriptions of which can be found in the specification. In particular, stereotype *AssuranceCasePackage* is defined as a generalization of stereotype *ArtifactElement*, which is defined in the base component.



F.2 Assurance case component of the SACM profile.

F.3 Terminology component

The terminology component of the SACM profile is shown in F.3. In this component, all elements are defined as stereotypes, the descriptions of which can be found in the specification. In particular, stereotype TerminologyElement is a generalization of stereotype ArtifactElement, which is defined in the base component.

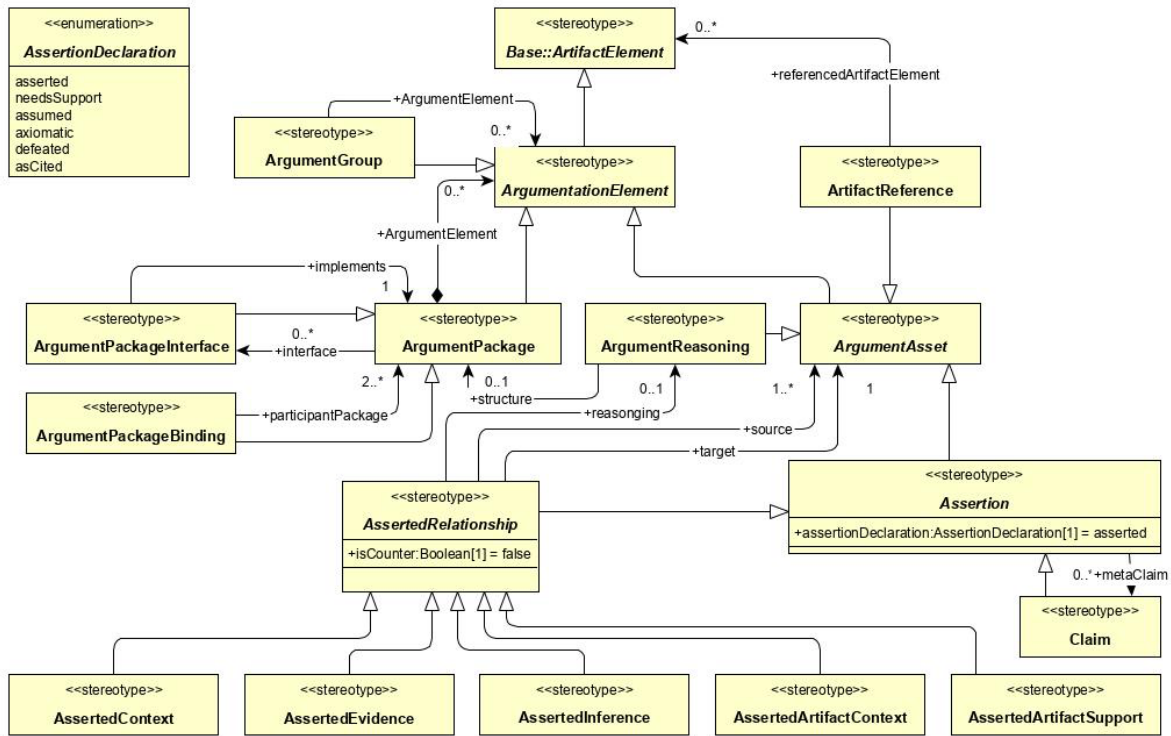


F.3 Terminology component of the SACM profile.

F.4 Argumentation component

The argumentation component of the SACM profile is shown in F.4. In this component, all elements are defined as stereotypes, the descriptions of which can be found in the specification. In particular, stereotype ArgumentationElement is a generalization of stereotype ArtifactElement, which is defined in the base component. It is to be noted that stereotype *AssertedRelationship* does not import **Association** from the

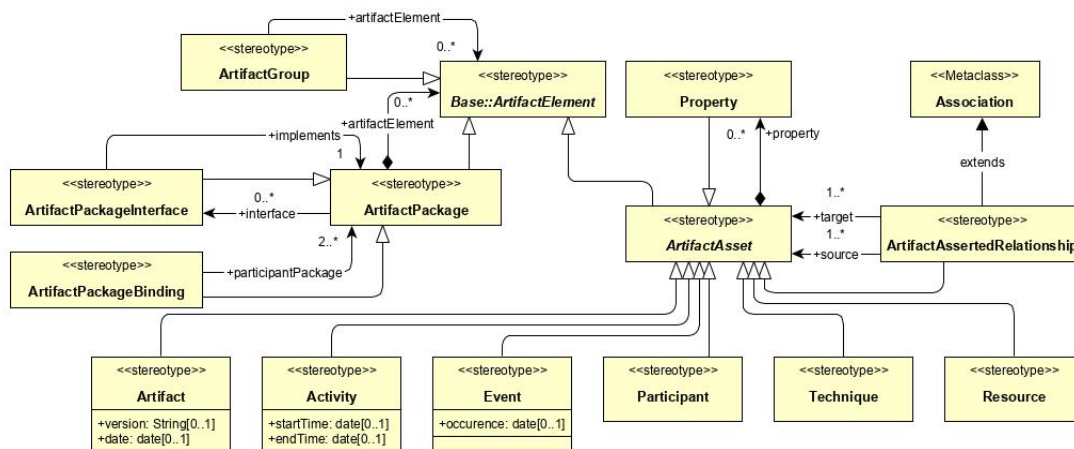
standard UML package, it is due to the fact that *AssertedRelationship* acts as an object in SACM's concrete syntax, although it has a notion of source and target.



F.4 Argumentation component of the SACM profile.

F.5 Artifact component

The artifact component of the SACM profile is shown in F.5. In this component, all elements are defined as stereotypes, the descriptions of which can be found in the specification. In particular, stereotype *ArtifactElement* is a generalization of stereotype *ArtifactElement*, which is defined in the base component. It is to be noted that stereotype *ArtifactAssertedRelationship* extends metaclass *Association* from the standard UML package, it defines additional source and target features which are both navigable.



F.5 Artifact component of the SACM profile.