

Semantics

Artifacts are located and accessible somewhere, usually in the form of some electronic file for an assurance case. Such information is specified by means of Resources.

12.11 Activity

Activity represents units of work related to the management of ArtifactAssets.

Superclass

ArtifactAsset

Attributes

startTime: ~~Date~~^d[0..1] - time when the activity started.

endTime: ~~Date~~^d[0..1] - time when the activity ended.

Semantics

The Artifacts used in an assurance case are the result of and managed via the execution of processes, which consist of Activities: specification of requirements, design of the system, integration of system components, etc. ArtifactActivityRelationships can be used to specify the relationship between Activities and Artifacts. Activities can, for instance, be described as using a given Artifact as input or producing an Artifact as output. Activities can be related to one another using ActivityRelationships (e.g., 'preceding'). The purpose of an activity can be specified in its description.

12.12 Technique

Technique represents techniques associated with Artifacts (e.g., associated with the creation, inspection, review or analysis of an Artifact).

Superclass

ArtifactAsset

Semantics

Artifacts are created, or managed from a more general perspective, via some method whose use results in specific characteristics for the Artifacts. For example, the use of UML (as a Technique) for designing a system results in a design specification with a set of UML diagrams that could represent static and dynamic internal aspects of the system.

12.13 Participant

Participant enables the specification of the parties involved in the management of ArtifactAssets.

Superclass

ArtifactAsset

Semantics

Different parties can participate in an assurance case effort, such as specific people, organizations, and tools.

12.14 ArtifactAssetRelationship

ArtifactAssetRelationship enables the ArtifactAssets of an structured assurance case to be linked together. The linking together of ArtifactAssets allows a user to specify that a relationship exists between the assets.

Superclass