## **Use Cases and Scenarios**

The *Use Cases and Scenarios* pattern creates elements and a Use Case diagram that describes the goals that Actors (roles played by users) want to achieve from their interaction with the system. The use Case model has been structured using a number of relationships including Generalization, Extend and Include. A system Actor has also been included indication that a computer system has an interaction with the system.

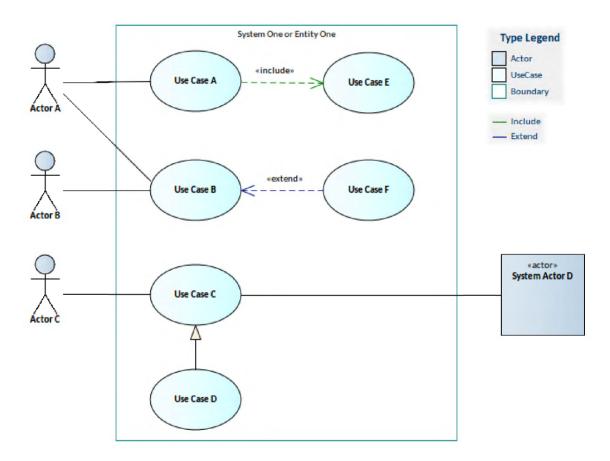


Figure 1. Shows a Use Case diagram that has been structured to use Include, Extend and Generalization relationships.

# **Discussion**

The purpose is to allow Business Analysts and other stakeholders to describe the value

that Actors (the roles that users play) want to achieve when interacting with the system.

The pattern is typically used in the analysis phase of an initiative and can be used to realize any number of Requirements and as a way of providing specification for the implementation team.

The following is a list of some things you may want to do when working with this pattern.

- · Change the name of the diagram to suit the initiative.
- · Change the name of the Boundary element to name the system or the part of the system being modeled by the use cases.
- · Change the name of the Actors and Use Cases to suit the initiative.
- · Create additional Actors and Use Cases where required.
- · Change the relationships to suit adding other relationships where required.

The following is a list of some of the next steps available when applying the pattern.

- Use the Scenario Builder to elaborate the Use Cases including Pre-conditions and Post-conditions.
- Structure the Use Case model by adding Extend, Include and Generalization relationships between Use Cases and between Actors.
- Create Trace relationships between Use Cases and other elements in the model including up-process elements such as Requirements and down-process elements such as Components.
- Generate documentation automatically from the repository using built-in or user defined templates.

## Reference

The following help topics will assist you learn about how to work with this pattern.

**Use Cases and Scenarios** 

Scenario Builder

Use Case Diagram

Business Analysis Body of Knowledge (BABOK)

**Traceability Tools** 

## Documentation

The following are some of the tools that will be helpful when working with this pattern.

#### Scenario Builder

The Scenario Builder is a productive and unique tool and editor that allows the analyst to work with the text of Use Cases and Scenarios directly inside the model. Many analysts will be familiar with creating long and voluminous Word Processor documents describing the details of Use Cases. With the Scenario Builder the descriptions and steps of Scenarios can be entered directly into the repository and linked to other elements. Alternate and Exception paths can be defined including branch and re-entry points. Diagrams representing the steps in a scenario can be generated and automatically synchronized. For more details see the Scenario Builder help topic.

### Use Case Diagram

The Use Case Diagram is a simple and powerful way of describing the goals the users of a system (or entity) want to achieve. It describes who wants to achieve a particular goal but not how the goal will be delivered. Use Case diagrams can be simple or structured and relationships such as Include, Extend and Generalization can be added to refine the model. A system (or entity) boundary can be added with a descriptive name showing clearly that Use Cases reside inside the system and Actors outside. For more details see the Use Case Diagram help topic.

#### **Document Generator**

The Document Generator is a powerful facility in Enterprise Architect that allows a Database Engineer or other stakeholder to create high quality corporate or technical documentation directly from the model, suitable for internal or external audiences. For more details see the <a href="Documentation">Documentation</a> help topic or the more general topic on <a href="Model">Model</a> Publishing.

## **Element Discussions**

The Element Discussion facility is a fully featured collaboration tool allowing modelers and model viewers and reviewers to communicate with each other directly inside the repository. Modelers using the full client or occasional viewers using WebEA can both post and reply to discussions and communicate and engage in chat. For more details see the Element Discussions help topic.

## **Specification View**

The Specification View can be used as a way of working with any element type in a spreadsheet or word process view. It is particularly useful when there are a large number of elements as is typically the case when describing a system of any appreciable size. For more details see the Specification View help topic.

## **Relationship Matrix**

The Relationship Matrix provides a spreadsheet like view of two groups of elements and the relationships that exist between them. It can be a used as a powerful analysis mechanism to visually indicate how elements are related to each other and to discover which elements are missing relationships. For more details see the <u>Relationship Matrix</u> help topic.

### **Traceability Window**

The Traceability Window automatically displays the relationships that exist between Use Cases and other model elements including up-process and down-process elements. The traceability tree view can be conveniently expanded to see deeper relationships and elements displayed in the window can be located in all diagrams in which they appear. For more details see the Traceability Window help topic.

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