

One Level Requirement Hierarchy

The *One Level Requirement Hierarchy* pattern allows requirements to be visualized in a hierarchy permitting complex requirements to be decomposed into more granular ones down to a single level.

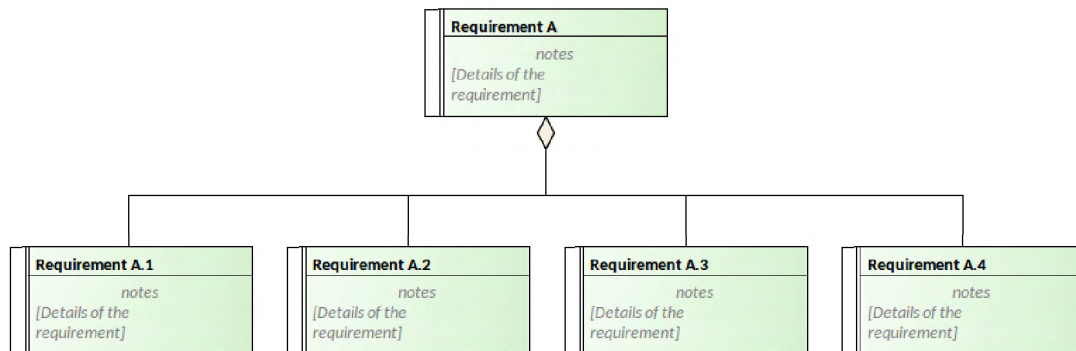


Figure 1. Shows Requirements organized into a hierarchy using an Aggregation relationship with a vertical-tree line style. The color bands allow status to be visualized.

Discussion

The purpose is to provide a way of visualizing the structure of a set of Requirements allowing the modeler to express the fact that one Requirement is composed of a number of other Requirements and to be able view the Requirements id and text in the diagram.

When the Requirements describe an entire system It is typically created early on in a system description; it can however be created at any time, particularly when the requirements describe a subsystem or a part of the system under focus.

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

- Rename the diagram.
- Rename the Requirements to suit the initiative.

- Add detailed notes that describe the business or system significance of the Requirement.
- Update the properties of the Requirements to suit the initiative.

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

- Define Trace relationships showing how the Requirements relate to up-process elements such as Strategies, Business Rules and other Requirements and down-process elements such as User Stories, Use Cases, Components, Artifacts and database tables.
- Create high quality documentation generated automatically from the model.

Useful Workspace Layouts Core | Core Modeling

Reference

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

[Requirements Diagram](#)

[Requirements Diagrams Examples](#)

[Requirements Overview](#)

[Working In Diagrams](#)

[What are Requirements](#)

[Meet the Requirement Tools](#)

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

[Specification View](#)

The Specification View can be used as a way of working with the Components and Interfaces particularly 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 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 [Relationship Matrix](#) 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.

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.

Diagram Layout

The Diagram Layout tool allows you to layout an entire diagram, selected elements or sections of a diagram to make it more visually appealing or meaningful to a particular audience. There are a wide range of layout types to choose from and some types have filters that can be applied. For more details see the [Diagram Layout](#) help topic.

Pan and Zoom

The Pan and Zoom facility is one of the tools that can be used to navigate around a large diagram. Often the resolution of a diagram must be reduced to ensure it is wholly visible but by using the Pan and Zoom window you can leave the diagram at a readable resolution and pan around to areas of interest zooming in when necessary. For more details see the [Pan and Zoom](#) help topic.

Diagram Legends

The Diagram Legend facility is useful for manually or automatically changing the appearance of elements and connectors on a diagram. A legend can be added from the Common Toolbox and configured to codify the fill and line color and line thickness. This is a powerful way to add meaning and expression to a diagram and is particularly expressive when applied automatically based on element or connector properties. It can be used with a number of specialized diagrams such as roadmaps to create a powerful visualization. For more details see the [Diagram Legends](#) 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 [Documentation](#) help topic or the more general topic on [Model Publishing](#).