

Process Analysis

The *Process Analysis* pattern creates a simple Business Analysis Diagram with one Activity that has a number of Issues and Decisions defined. These can be viewed through the Change Management windows (Issues, Decisions) or through the Element Browser. Process Analysis allows processes to be analyzed for efficiency and efficacy.

Figure 1. Shows the Issues Change Management window with two Process Issues that have been recorded against an Activity in a Process diagram.

Discussion

The purpose of the pattern is to allow a Business or Process Analyst to record information about a process' efficiency, effectiveness or issues that arise during the analysis of a process.

The pattern is typically used when Business Processes have been documented and an issue or opportunity has been identified with a particular process. These include things such as the following:

- Identifying opportunities for increasing efficiency and through-put times.
- Identifying opportunities for automating decisions using Decision Models
- Articulating gaps that exist between baseline and target state processes.
- Visualizing how business Rules are being operationalized.
- Determine the impact of changes to existing processes.

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

- Rename the diagram.
- Rename the Activity to suit the initiative.
- Add detailed notes that describe the Activity.
- Change the name of the Issues raised against the Process.

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

- Consider using the built in Simulator to visualize the process.
- Consider using BPSim to simulate the process and perform sophisticated analysis on the process to determine bottlenecks and opportunities for improvement.
- 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.
- Create Discussions and Reviews and engage in Chat to collaborate with team members, Requirement owners, Product Managers and other stakeholders.

Reference

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

[Process Analysis](#)

[Model Simulation](#)

[Business Process Simulation \(BPSim\)](#)

[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.

[BPMN Business Process Diagram](#)

Business Process Diagrams are part of the Business Process Model and Notation (BPMN) standard and allow a modeler to document a business process, including the way the process starts, what work is performed and how it ends. Gateways and connecting lines determine the sequence of activities. Current state and Future state process models can be created and managed in Enterprise Architect. The diagrams can be organized into a process hierarchy allowing drill down from high level to lower level diagrams. BPMN is emerging as an important standard for modeling business processes and has gained much traction with business and technical communities. It can be automatically generated to the Business Process Execution Language (BPEL), which is an XML based language that can be ingested by a number of orchestration engines. For more details see the [BPMN Business Process Diagram](#) help topic.

[UML Activity Diagram](#)

Activity diagrams are one of the Behavioral Unified Modeling Language diagrams and allow a modeler to describe the sequence of behaviors including how they start, what work is performed and decisions that change the flow and the way the process ends. They are a useful alternative to using other diagrams such as flow charts and business process diagrams. The syntax of activity diagrams when Actions and Pins are used can be drawn at the execution level and express detailed system semantics. For more details see the [Activity Diagram](#) help topic.

[Model Simulator](#)

Model Simulation brings your behavioral models to life with instant, real-time behavioral model execution. Coupled with tools to manage triggers, events, guards, effects, breakpoints and simulation variables, plus the ability to visually track execution at run-time, the Simulator is a powerful means of 'watching your behavioral models in action' and verifying their correctness. With Simulation you can explore and test the dynamic behavior of models. For more details see the [Model Simulation](#) help topic.

[Business Process Simulation \(BPSim\)](#)

The BPSim facility provides a way of simulating processes written in Business Process Model and Notation (BPMN), providing valuable results that can be used in process

analysis. The BPMN models are augmented with extra data as parameters to the simulation. It allows structural and capacity analysis to be performed, providing for pre and post execution optimization. Enterprise Architect allows you to construct the Process models and enter the appropriate data, which is then sent to an internal or external BPSim Simulation engine. For more details see the [Business Process Simulation \(BPSim\)](#) 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](#).

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 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.

© 2000 - 2018 Sparx Systems Pty Ltd. All rights Reserved.