

Analyzing Requirements

The requirements analysis encompasses those tasks that determine the needs or conditions a new or altered product or project must meet. It considers the possibly conflicting requirements of the various stakeholders by analyzing, documenting, validating and managing software or system requirements. Requirements analysis is critical to the success or failure of a systems or software project.

You can analyze requirements using the following tools:

- **Usages and Dependencies.** Discovers the Requirements usage and dependencies on other model parts: traceability, change impact analysis.
- **Dependency Matrix.** Checks the Gap analysis, Change Impact analysis, Requirements completeness and correctness.
- **Model validation.** Checks Requirements completeness and correctness based on built in or custom validation suites.
- **Traceability.** Tracks, visualizes, navigates, and analyzes the elements involved in traceability relations.
- **Relation Map.** Visualizes the relations of multilevel requirements: traceability, coverage analysis.
- **Generic and Requirements Tables.** Makes the coverage analysis in a compact format.
- **Report Wizard.** Analysis (e.g. coverage) and estimation (e.g. functional points method) based on built in or custom documentation generation templates.

The following sections describe the procedures for analyzing requirements:

- [Coverage analysis](#)
- [Change impact analysis](#)
- [Analyzing dependencies in dependency matrix](#)
- [Analyzing dependencies in relation map](#)
- [Tracing requirements](#)
- [Validation](#)
- [Metrics](#)