## Analyzing dependencies in dependency matrix

You can create, analyze, and modify requirement relations in the matrix, which provides a compact visual view for analysis. Using a dependency matrix, you can also edit relations between a selected requirement and model element (i.e., add or remove a desired relation).

The Dependency Matrix enables:

- The visualization of more than one element relations from different diagrams.
- The capability to create domain-specific matrices and their templates.
- Ready-to-use matrix templates: traceability of elements and behavior diagrams, traceability of requirements, traceability of requirements and elements refining, satisfying, verifying them, and others.
- Faster creation of traceability links between elements (for example, between requirements and the architecture or requirements and test cases).
  This improvement saves a huge amount of time in comparison to linking elements in diagrams.

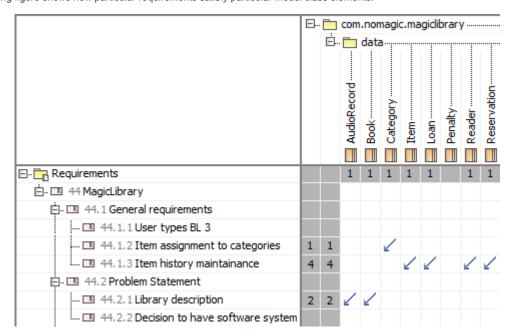
To create a dependency matrix

- 1. From a requirements specification package shortcut menu in the Containment tree, select Create Diagram and then select one of the following:
  - Derive Requirement Matrix to create a Dependency Matrix to analyze, create, and modify derivation relations between a derived requirement and a source requirement.
  - Refine Requirement Matrix to create a Dependency Matrix to analyze, create, and modify refined relations between a requirement and a model element or a set of elements refining the requirement.
  - Satisfy Requirement Matrix to create a Dependency Matrix to analyze, create, and modify satisfaction relations between requirements and model elements fulfilling the requirements.
  - Verify Requirement Matrix to create a Dependency Matrix to analyze, create, or modify verification relations between requirements and named elements that can determine whether the systems fulfill the requirements.
- Type a diagram name.
- 3. Select criteria and a scope to be represented in the matrix.

can specify requirements to be represented as rows and class elements to be represented as columns.

4. Click the Refresh button.

The following figure shows how particular requirements satisfy particular model class elements.



Example of a dependency matrix.

You can also remove redundant or create missing dependencies using a dependency matrix. For detailed instructions on how to use dependency matrixes, see Dependency Matrix.

## Related pages

Dependency Matrix

Requirement matrices