## 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

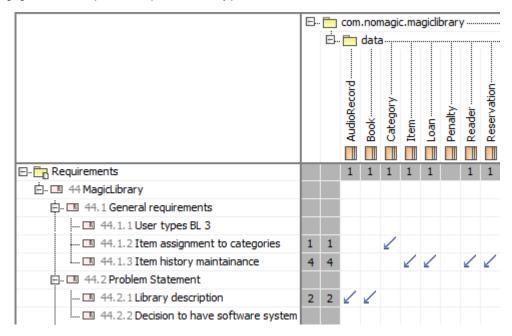
- From a requirements specification package shortcut menu in the Containment tree, select Create Diagram and then select one of the following:

   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.
- 2. 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