

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:

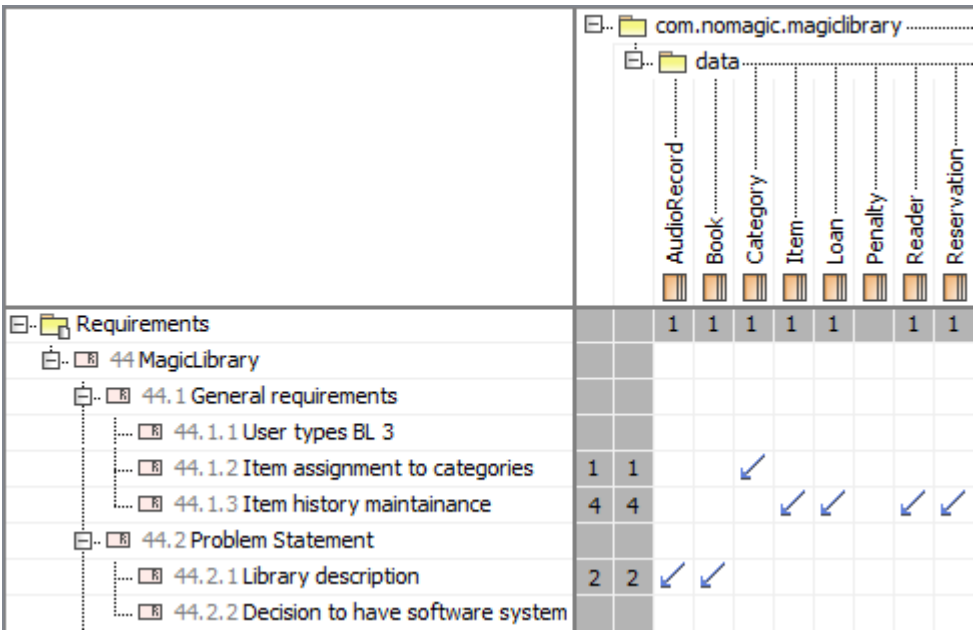
- The visualization of more than one element relations from different diagrams.
- The capability to create domain-specific matrices and their templates.
- Ready-to-use matrix templates: traceability of elements and behavior diagrams, traceability of requirements, traceability of requirements and elements 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.
2. Type a diagram name.
3. Select criteria and a scope to be represented in the matrix.

 You 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](#)