Creating new dependency matrix type

⚠️ Creating new dependency matrix types is available in Standard, Professional, Architect and Enterprise editions.
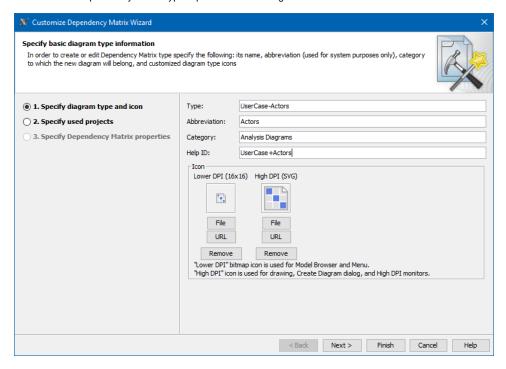
The **Customize Dependency Matrix Wizard** contains the following steps for creating a new dependency matrix type or modifying a chosen one.

- Step 1: Specify Name for a New Matrix Type and Icons
- Step 2: Specify Used Projects
- Step 3: Specify Dependency Matrix Properties

Step 1: Specify Name for a New Matrix Type and Icons

To create your own custom matrix type, first define the following properties

- Matrix type name (for example, UseCase-Actors).
- Abbreviation – a short form of the dependency matrix type. It is displayed on the diagram overview shape of the custom matrix, when the **Show A bbreviated Type** property is set to *true*.
- Category – your specific category where the new matrix type will be stored. The category is displayed on the main menu under **Diagrams** and in the command list of **Create Diagram** on the **Model Browser** shortcut menu. You can keep the default value, if you need the new matrix type to be stored in the **Analysis Diagrams** category.
- Help ID – sets a specific Help ID to invoke help or documentation topics.
- Icons – several icons for the new dependency matrix type representation in MagicDraw GUI.
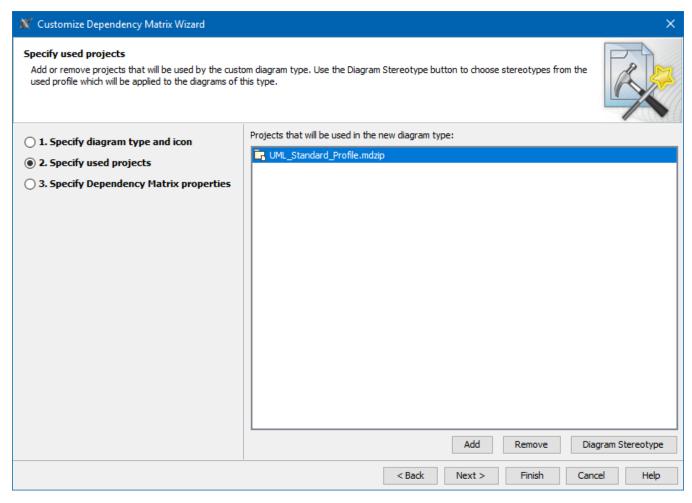

Step 2: Specify Used Projects

Select the required used projects or profiles.

🛈 Do not remove the UML Standard Profile, which is selected by default, from the list. It must be used by any custom dependency matrix type.

A custom dependency matrix can represent the relationships among stereotyped elements. Profiles that define these stereotypes must be used by the custom dependency matrix type.

All the selected used projects or profiles load when a dependency matrix of the custom matrix type is created in the project.

To choose the stereotype for the custom dependency matrix type

- Click the **Diagram Stereotype** button.

Step 3: Specify Dependency Matrix Properties

This step allows you to specify the appearance of the new dependency matrix type. For example, you can predefine the default column text direction, row and column scope, and so forth.

Property name	Description
Dependency Matrix	
Legend Location	Select to choose the location of the legend (**Top-Left Corner** or **Above Column Header**) or set the **Do Not Display** mode to keep it hidden.
Take Whole Model As Scope	Set to *true* to select the whole model as a scope for relation analysis. The root package *Model* will be selected by default in both the **Row Scope** and **Column Scope** boxes.
Direction	Select a direction of relationships for the relation analysis and representation in the dependency matrix. Be aware that new relationships will be created with the selected direction.
Dependency Criteria	Select an expression type and specify the expression to be used as the relation criteria.
Show Elements	Select to show only related (by a selected dependency criteria), only non- related, or all elements.

Show Inner Dependencies	Set to *true* to show the number of relationships in every owning element cell.
Suppress Criteria Area	Set to *true* to suppress the **Criteria** area toolbar.
Read Only	Set to *true* to make the matrix read-only. You will not be able to create or delete relationships.
Description Area	Type the description for the dependency matrix. The text will be displayed in the description area of the matrix.
Hide Types	Set to *true* to hide the **Row Element Type** and **Column Element Type** boxes from the **Criteria** area.
Hide Scope	Set to *true* to hide the **Row Element Scope** and **Column Element Scope** boxes from the **Criteria** area.
Hide Dependency Criteria	Set to *true* to hide the **Dependency Criteria** and **Direction** boxes from the **Criteria** area.
Column	
Column Scope Defined	Set to *true* to take empty scope as a whole model.
Column Types Include Subtypes	Set to *true* to display subtypes of selected element types, for example, if a class is selected, then all its subtypes, such as component or custom subtypes, will be displayed.
Column Owner Display Mode	- Select the **Compact tree** mode to display elements with their direct and common owners in the column header. The data will be represented as a tree. - Select the **Complete tree** mode to display elements with all their owners in the column header. The data will be represented as a tree. - Select the **Hidden** mode to display elements without any owners in the column header. The data will be represented as a list. - Select the **Full qualified name** mode to display elements with their owners in the column header. The data will be represented as a list.
Column Text Direction	Specify the direction of the text in the column header. Be aware that this property value can be applied only when the **Column Owner Display Mode** property value is **Hidden** or **Full qualified name**.
Column Element Type	Specify the element types to show in the columns of the dependency matrix.
Column Query	Select **Containment** or **Custom** to specify the expression to collect column elements.
Column Property Filter	Select properties and their values to create more specific filters for column elements.
Column Sorting Mode	Select **Ascending** or **Descending** to sort elements alphabetically. You can also select the **Custom** sorting mode to use your own order.
Column Header Height	Specify the height of the column header in pixels.
Column Types Include Subtypes	Set to *true* to display subtypes of selected element types. For example, if a class is selected, then all its subtypes (such as component or custom subtypes like SysML block) and requirements will be displayed.
Row	
Row Scope Defined	Set to *true* to take empty scope as a whole model.
Row Types Include Subtypes	Set to *true* to display the subtypes of selected element types. For example, if a class is selected, all its subtypes (such as component or custom subtypes like SysML block) and requirements will be displayed.
Row Owner Display Mode	- Select the **Compact tree** mode to display elements with their direct and common owners in the row header. The data will be represented as a tree. - Select the **Complete tree** mode to display elements with all their owners in the row header. The data will be represented as a tree. - Select the **Hidden** mode to display elements without any owners in the row header. The data will be represented as a list. - Select the **Full qualified name** mode to display elements with their owners in the row header. The data will be represented as a list.
Row Element Type	Specify the element types to show in the rows of the dependency matrix.
Row Query	Select **Containment** or **Custom** to specify the expression to collect row elements.
Row Property Filter	Select properties and their values to create more specific filters for row elements.

Row Sorting Mode	Select **Ascending** or **Descending** to sort elements alphabetically. You can also select the **Custom** sorting mode to use your own order.
Row Header Width	Specify the width of the row header in pixels.