Creating new diagram type

The Customize Diagram Wizard contains the following steps for creating a new diagram type or modifying a chosen one.

- Step 1: Specify diagram type and icon

- Step 1: Specify diagram type an
 Step 2: Specify used projects
 Step 3: Specify Toolbars
 Step 4: Specify Toolbar Buttons
- Step 5: Specify Symbol Properties
- Step 6: Specify Smart Manipulators

All Custom Diagrams are based on standard UML diagrams (like Class, Use Case, Sequence, and other).

Step 1: Specify diagram type and icon

To create your own diagram, first specify the following properties

- Diagram type name (for example, Robustness Diagram).
- Base Diagram Type standard UML diagram to be extended. All configurations, semantics, and other settings will be inherited from this diagram type.
- Abbreviation a short form of the diagram name. It will be used in Diagram Frames header or Diagram shapes in Content diagrams.
- Category creates your specific category in the Diagrams menu or in the Create Diagram command list. You can store all your customized diagrams in this category. If you leave this field empty, the customized diagrams will be added to the Custom Diagrams category.
- Help ID sets a specific Help ID to invoke help or documentation topics.
- · Icons several icons for your custom diagram representation in MagicDraw GUI.

A custom diagram icon that you can upload from your file system must be in .gif, .jpg, .jpeg, .svg, .png., or .wmf file format. ∕!∖

Customize Diagram wizard			^
Specify basic diagram type informatio In order to create or edit a diagram type, s system purposes only), category to which	pecify the following: its n	ame, diagram type on which it will be based, abbreviation (used for ng, and customized diagram type icons.	
I. Specify diagram type and icon	Type:	Robustness Diagram	
○ 2. Specify used projects	Base Diagram Type:	Class Diagram	~
○ 3. Specify toolbars	Abbreviation:	Robustness	
○ 4. Specify toolbar buttons	Category:	Specific Diagrams Library	
5. Specify symbols properties	Help ID:	Robustness+Diagram	
⊖ 6. Specify smart manipulators		High DPI (SVG) File URL Remove icon is used for Model Browser and Menu. ed for drawing, Create Diagram dialog, and High DPI monitors.	
		< Back Next > Finish Ca	ncel Help

Step 2: Specify used projects

Custom Diagrams are oriented to a new specific domain, technology or platform, and are often based on a custom profile.

Select the required used projects or local profiles. How to use a custom server profile see in customizing diagram palette.

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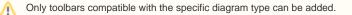
🗶 Customize Diagram Wizard		×
Specify used projects Add or remove projects that will be used by used profile which will be applied to the diag	the custom diagram type. Use the Diagram Stereotype button to choose stereotypes from the grams of this type.	
1. Specify diagram type and icon	Projects that will be used in the new diagram type:	
O 2. Specify used projects	🔂 UML_Standard_Profile.mdzip	
○ 3. Specify toolbars		
O 4. Specify toolbar buttons		
○ 5. Specify symbols properties		
○ 6. Specify smart manipulators		
	Add Remove Dia	gram Stereotype
	< Back Next > Finish Cane	tel Help

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- Selected profiles must be local, the server profiles cannot be used.
- ٠ Do not remove the UML Standard Profile, which is selected by default, from the list. It must be used by any custom diagram type.

The custom diagram could use stereotyped elements. Profiles defining these stereotypes must be used by the custom diagram. The selected used projects or profiles load when a user creates a custom diagram in a project. You can choose a stereotype for the diagram by clicking the **Diagram** Stereotype button.

Step 3: Specify Toolbars

Every diagram differs by the elements used in them. In the Specify toolbars step, you can group standard or custom elements.



You can:

- Create your own custom diagram toolbar.
- Create your own toolbar, name it, and select an icon.
 Choose standard toolbars that will be visible in your diagram.
- Select existing toolbars inherited from the base diagram type.
- ٠ Arrange the order of toolbars by using "Up" and "Down" buttons.
- Select which toolbars will expand or collapse by default (use the **Open** check box).

💢 Customize Diagram Wizard			×		
Specify diagram toolbars Use the Add Toolbar button to create new o change toolbar properties or remove toolbar	or add predefined diagram toolbars to a diagram type. Also, use the Edit or Remov rs.	e buttons to			
1. Specify diagram type and icon	Toolbar	Open	Add Toolbar	ď	New Toolbar
○ 2. Specify used projects	Common Robustness Diagram		Edit		Common (from Any Diagram)
③ 3. Specify toolbars	Robustness Diagram			ď	Information Flows (from Any Diagram)
○ 4. Specify toolbar buttons			Remove		Common (from Class Diagram)
5. Specify symbols properties			Up	8	Class Diagram (from Class Diagram)
6. Specify smart manipulators			Down		Common (from Static Diagram)
0			Down	8	Class Diagram (from Static Diagram)
				8	Use Case Diagram (from Static Diagram)
					Composite Structure Diagram (from Static Diagram)
					Package Diagram (from Static Diagram)
				ei M	Object Diagram (from Static Diagram)
				8	Component Diagram (from Static Diagram)
				ð E	Deployment Diagram (from Static Diagram) Profile Diagram (from Static Diagram)
					Information Flows (from Static Diagram)
			l		montation nows (non state blagran)
	< Back Next > Fini	sh Cano	el Help		

Step 4: Specify Toolbar Buttons

Select standard or stereotyped elements for your custom diagram toolbars.

💥 Customize Diagram Wizard				×			
Specify diagram toolbar buttons Diagram toolbar buttons allow creating elen new or add predefined buttons to the custo				R			
 1. Specify diagram type and icon 2. Specify used projects 3. Specify toolbars 4. Specify toolbar buttons 5. Specify symbols properties 6. Specify smart manipulators 	Toolbar: Robustness Diagram V			Add Edit Remove Up Down	New Button New Group Common Class Diagram Use Case Diagram Component Diagram Deployment Diagram Composite Structure Diagram Profiling Mechanism Information Flows Profile Diagram	> > > > > > >	Actor Use Case Package System Boundary Subsystem Include Extend Extend Interface Realization Association Generalization Generalization
		< Back Next >	Finish Car	ncel Help			

Click Add and select standard UML elements or click Add and then New Button to create your own buttons to create customized or stereotyped elements.

Only buttons compatible with the specific diagram type can be added to the toolbar.

Customize the following properties when creating a new button:

- Model element type
- Custom icon for a button
- Shortcut that activates the button
- Tooltip description

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- Stereotype(s) to apply to the created element
- Symbol style selected symbol properties will be used only when the element is created using this button
 Default values for some primitive model element properties (like isAbstract = true or similar)

🗶 Edit Button					×
General Symb	ol Properties	Stereotypes	Element Properties		
Model Element Type:	Abstraction				~
Description:					
Shortcut:					
Icon Lower DPI (16x16) File URL URL Lower DPI" icon is u It is recommended	File URL URL used for lowe sed for high re	r resolution dispesolution dispesolution display	/S.		
List as element	Opposite	2			
			ОК	Cancel	Help

- List as element select this check box to add the button as a command in the Create Element command list.
- Opposite this check box is only available for relationship buttons. Select it to add the opposite relationship button.

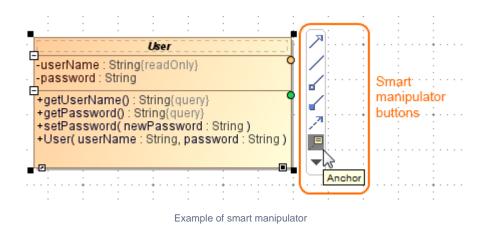
Step 5: Specify Symbol Properties

This step allows you to customize the style for any element appearing in your custom diagram (e.g. a class dropped in your diagram should be suppressed and red).

You can change the appearance of standard symbols, symbols of stereotyped elements, and the custom diagram itself. The customized element style will be used only in the appropriate custom diagram type.

Step 6: Specify Smart Manipulators

Only elements and relationships that are available in the toolbars specified for the diagram being customized can be added to the smart manipulator of the element shape or path.



You can configure the element or kind of relationship suggested when a custom shape or path is selected on a diagram.

There are three main sub-steps:

- Create a new configuration (or modify an existing one). Select the element to customize. The smart manipulators configuration can be related to:

 Element, displayed as [Element name]
 - Element + stereotype(s)
 - Symbol, displayed as {Symbol name}
 - Symbol + stereotype(s)
 - Stereotype(s), displayed as «Stereotype name»
- 2. Select suggested relationships for the selected configuration.
- 3. Select target elements for the selected relationship.

If several configuration settings could be applied to the same selected element on the diagram, only one configuration will be used according to this priority:

#	Configuration	Comment
1	Symbol + stereotype(s)	When stereotype(s) for symbol applied
2	Stereotype	
3	Symbol	
4	Element + stereotype(s)	When stereotype(s) for element applied
5	Element	

If several configurations are created for a few stereotypes (for example, Stereotype1 and Stereotype2) in the same diagram, when both stereotypes are applied to one symbol on that diagram pane, the first configuration (in this case, Stereotype1) is used, unless you specify a symbol+ stereotype(s) configuration.

Inheritance of configurations

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All diagrams inherit their configurations from a base diagram (example: in this hierarchy: Any diagram > Static diagram > Class diagram > Generic DDL diagram).

If you add a new configuration to a class diagram (for example, Symbol A + stereotype B), the configuration will be used in the generic DDL diagram, as the class diagram is its base diagram. Any static diagrams will not have such configurations.

To change the configuration from the base diagram type

• From the **Configurations** list, select the configuration by the element type and choose the **Specify own configuration** button. This overwrites the inherited configuration.