

Working with Template

This section demonstrates how to create a template and how to use it.

Follow these instructions from the first step consistently. If you do not, and if you do not define the template parameter, you will not be able to draw a template binding relationship. You can omit optional procedures only.



Precondition

Assume you already have an element to which you want to apply a template. This element is an actual element. The actual element can be a classifier, package, or operation.

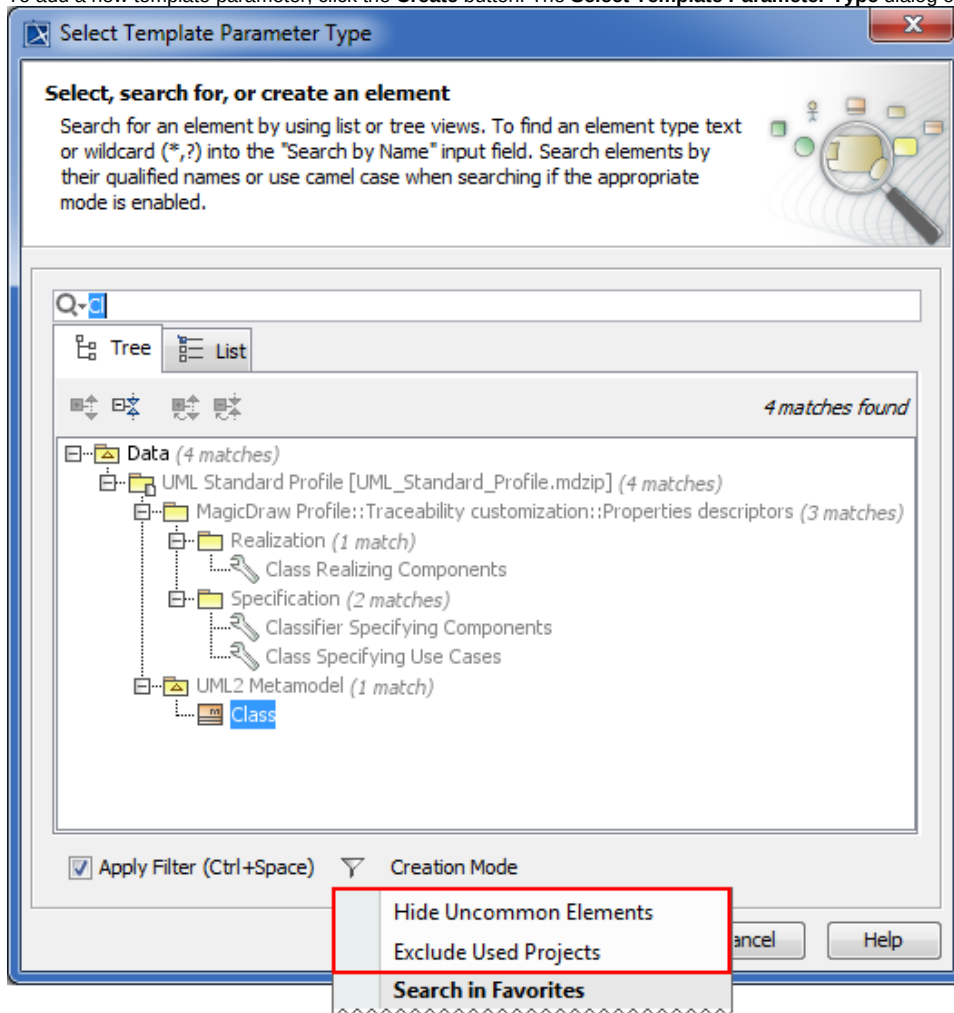
To create and apply a template to an actual element, see the following procedures:

- [To create a template](#)
- [To apply a template to an actual element](#)

In the following procedures, we will show you how to create a template with parameters and how to define these parameters.

To create a template

1. Create or select a template element for which you will create template parameters.
2. Open the element's [Specification](#) window.
3. Change the property display mode to **All**, if it is not changed already. The **Template Parameters** property group appears in the property group list.
4. Click the **Template Parameters** property group.
5. To add a new template parameter, click the **Create** button. The **Select Template Parameter Type** dialog opens.



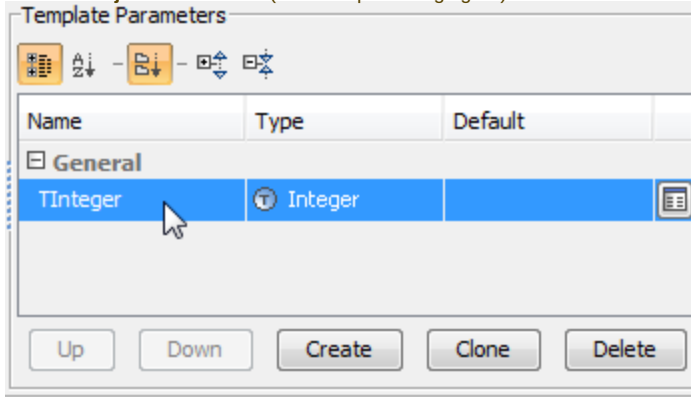
6. In the Model tree, select an existing or create a new type of the template parameter.

Template Parameter

If you do not want to specify the concrete template parameter type, you can select the *Class* type (the *Class* from the UML metamodel).

When the *Class* type is specified, type is not displayed on the diagram pane. Only the name of the template parameter is represented.

- Click **OK**. The template parameter is created. The name of the template parameter is defined automatically by compounding the T letter and the name of the template parameter type - *T<type name>*. For example, *TInteger*. You can change the name of the template parameter if you need the **Project** commands (as in the preceding figure). For more information, read [Searching for elements in the Element Selection dialog](#).



- (Optional) Assign the default value to the created template parameter.

More Information

For more information about symbol representation properties, see [Formatting Symbols](#).

Value Specification

To assign a particular value of the value specification, you must specify a Value Specification first and then type its particular value in the Actual value cell. For more information about Value Specification, read [Value Specification](#).

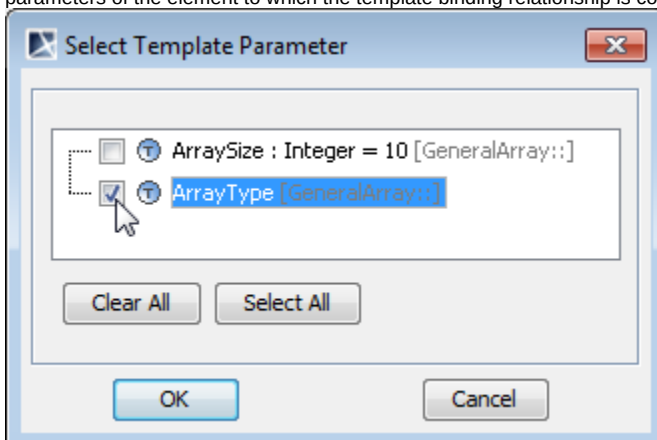
After the template is created, you can apply it to the actual element. The following procedures describe how to apply the template to the actual element.

To apply a template to an actual element

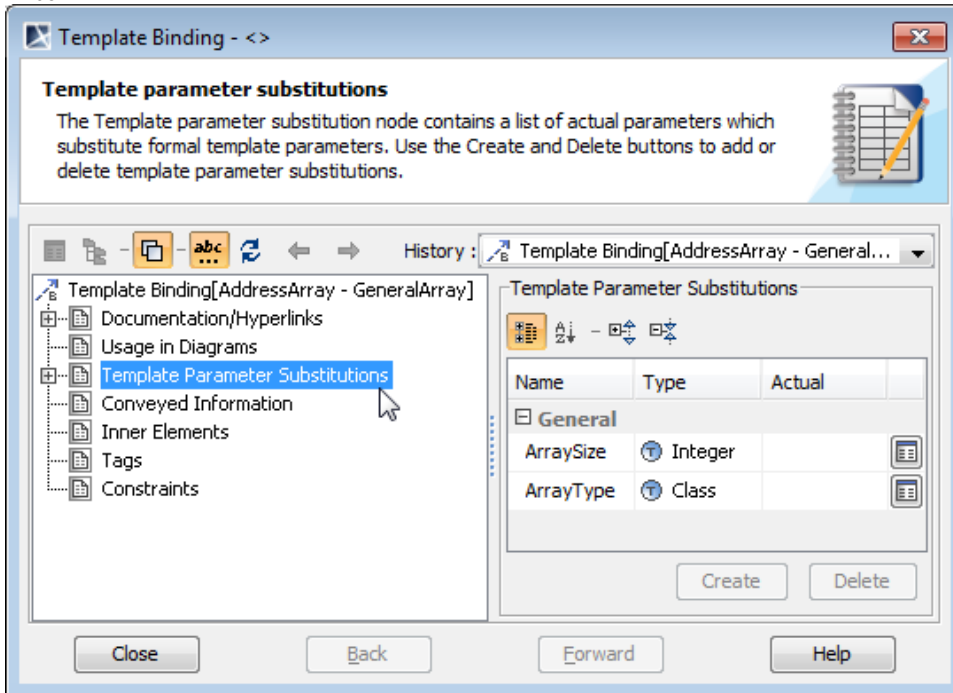
- Bind the actual element to the template element. In the diagram palette, click the **Template Binding** button or click the **B** shortcut key and draw a template binding relationship from the actual element to the template element.

If the **Template Binding** button is not visible, change the the modeling tool's perspective to Full Featured or Software Architect. See the [Customizing and Selecting Perspective](#) page on how to change the perspective.

- Define a template parameter substitution. Open the Template Binding Specification window and click the **Template Parameter Substitutions** property group.
- To add a new template parameter substitution, click the **Create** button. The Select Template Parameter dialog opens, listing the template parameters of the element to which the template binding relationship is connected.



4. Select one or more template parameters to add as template parameter substitutions. Click **OK** to return to the Template Binding Specification window.



5. (Optional) Assign the actual value for each template parameter substitution.



More Information

For more information about specifying property values, see [Editing property values](#).



Value Specification

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Related pages

- [Model elements](#)
- [Auxiliary Diagram Symbols](#)
- [Diagramming](#)