

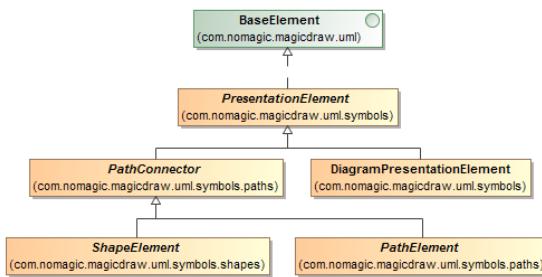
Presentation elements (symbols)

The UML semantic defines only the UML metamodel. A modeling tool has its own structure of classes for UML elements representation in the diagram. The base class of this structure is [com.nomagic.magicdraw.uml.symbols.PresentationElement](#). A presentation element is a textual or graphical presentation of one or more model elements.

Presentation elements are sometimes called symbols also.

In the metamodel, a [PresentationElement](#) is the [com.nomagic.magicdraw.uml.BaseElement](#) that presents a set of model elements to a user. It is the base for all metaclasses used for the presentation. All other metaclasses with this purpose are indirect subclasses of [PresentationElement](#).

A current version of Open API provides just a basic structure of presentation elements:



Every presentation element can have children. For example, [com.nomagic.magicdraw.uml.symbols.DiagramPresentationElement](#) has a collection of inner presentation elements. [PresentationElement](#) of some [Package](#) can have a collection of presentation elements for inner [Package](#) elements.

Current version [PresentationElement](#) API allows you to:

- Access element bounds `PresentationElement.getBounds()`
- Access a model `com.nomagic.uml2.ext.magicdraw.classes.mdkernel.Element` of a presentation element `PresentationElement.getElement()`. A presentation element can have no `Element`, for example, a `com.nomagic.magicdraw.uml.symbols.shapes.TextBoxView`.
- Access children `PresentationElement.getPresentationElements()`
- Access properties of the element `PresentationElement.getProperty(java.lang.String)`, `PresentationElement.setPropertyManager()`. The sample of properties would be the `Suppress Operations` property for a class presentation element, the `Autosize` property for any `com.nomagic.magicdraw.uml.symbols.shapes.ShapeElement`.
- Select/unselect or access a selection state of the presentation element (`PresentationElement.isSelected()`, `PresentationElement.setSelected(boolean)`).

A subclass of presentation elements `com.nomagic.magicdraw.uml.symbols.paths.PathConnector` provides information about connected paths to the presentation element. To get a collection of connected paths to the presentation element, use the method `PathConnector.getConnectedPathElements()`.

Related pages

- [Diagram presentation element](#)
- [Shapes](#)
- [Paths](#)
- [Working with presentation elements](#)
 - [Creating shape elements](#)
 - [Creating path elements](#)
 - [Reshaping shape elements](#)
 - [Moving symbols on diagram to another location](#)
 - [Moving symbols on diagram to another location and to different parent](#)
 - [Changing path break points](#)
 - [Deleting presentation elements](#)
 - [Changing properties of presentation elements](#)
 - [Managing compartments](#)
 - [Collecting presentation elements, finding usages in diagrams](#)
 - [Displaying related elements in the diagram](#)
 - [Laying out symbols in the diagram](#)
- [Custom presentation elements rendering](#)
 - [Custom renderer provider](#)
 - [Custom symbol renderer](#)
 - [Custom renderers sample](#)
 - [Registering custom symbol renderer provider](#)