

# Using StereotypesHelper

Use utility class [com.nomagic.uml2.ext.jmi.helpers.StereotypesHelper](#) to work with profiles, stereotypes, tagged values.

[StereotypesHelper](#) extends [com.nomagic.uml2.ext.jmi.helpers.TagsHelper](#). Keep in mind that *Tagged Values* in these helpers are also called stereotype properties.



[StereotypeHelper](#) still provides deprecated API to check for stereotypes by a stereotype name. Try to avoid this API and pass Stereotype as object if possible. In many models several profiles with stereotypes with same names can be used and this "name based" API can cause unpredictable results.

So general rules are:

- Put URI for your profiles and find Profile in model by URI, not by profile name
- Find Stereotype element inside a specific Profile, not in a whole model
- Pass Stereotype element to [StereotypesHelper](#) methods instead of passing a stereotype name

## Find a stereotype by name

Find profile by URI (or by name) first using

[StereotypesHelper.getProfileByURI\(Project, java.lang.String\)](#)

[StereotypesHelper.getProfile\(Project, java.lang.String\)](#)

Find stereotype by name inside a profile using

[StereotypesHelper.getStereotype\(Project, java.lang.String, Profile\)](#)

## Check if stereotype is applied

Check if any stereotype is applied

[StereotypesHelper.hasStereotype\(Element\)](#)

or

check if [Element.getAppliedStereotype\(\)](#) collection is empty

Check if concrete stereotype is assigned

[StereotypesHelper.hasStereotype\(Element, Stereotype\)](#)

or

check if [Element.getAppliedStereotype\(\)](#) collection contains stereotype

Check if concrete stereotype or derived stereotype is applied

[StereotypesHelper.hasStereotypeOrDerived\(Element, Stereotype\)](#)

## Get value of tagged value



Values of tagged values are returned as [java.util.List](#) even if upper multiplicity of tag 1. In this case List will have zero or one object.

[TagsHelper.getStereotypePropertyValue\(Element, Property\)](#)

[TagsHelper.getStereotypePropertyValue\(Element, Stereotype, java.lang.String\)](#)

[\*TagsHelper.getStereotypePropertyFirst\(Element, Property\)\*](#)

[\*TagsHelper.getStereotypePropertyFirst\(Element, Stereotype, java.lang.String\)\*](#)

[\*TagsHelper.getTaggedValue\(Element, Property\)\*](#)

[\*TagsHelper.getTaggedValue\(Element, Stereotype, java.lang.String\)\*](#)

### Set value of tagged value

[\*TagsHelper.setStereotypePropertyValue\(Element, Stereotype, Property, java.lang.Object\)\*](#)

[\*TagsHelper.setStereotypePropertyValue\(Element, Stereotype, java.lang.String, java.lang.Object\)\*](#)

[\*TagsHelper.clearStereotypeProperty\(Element, Property\)\*](#)

[\*TagsHelper.clearStereotypeProperty\(Element, Property\)\*](#)

### Collect all elements with applied stereotype

For a concrete stereotype use

[\*StereotypesHelper.getStereotypedElements\(Stereotype\)\*](#)

For a concrete stereotype and derived stereotypes from it use

[\*StereotypesHelper.getStereotypedElementsIncludingDerived\(Stereotype\)\*](#)

### Check if stereotype can be applied to Element

[\*StereotypesHelper.canApplyStereotype\(Element, Stereotype\)\*](#)

### Remove stereotype from element

[\*StereotypesHelper.removeStereotype\(Element, Stereotype\)\*](#)

or

remove from collection [\*Element.getAppliedStereotype\(\)\*](#). TaggedValues of removed stereotype will not be removed immediately using this approach, but will be removed on transaction commit.

### Apply stereotype to element

[\*StereotypesHelper.addStereotype\(Element, Stereotype\)\*](#)

or

add into collection [\*Element.getAppliedStereotype\(\)\*](#)

#### Sample

```
Element element = ...; //Element for which we add stereotype, set tag value and then remove the stereotype.
Project project = ...; //Project
String tagValue = "test value";
Profile profile = StereotypesHelper.getProfile(project, "ProfileNameExample");
Stereotype stereotype = StereotypesHelper.getStereotype(project, "StereotypeNameExample", profile);
StereotypesHelper.addStereotype(element, stereotype); //We add stereoptype to element
StereotypesHelper.setStereotypePropertyValue(element, stereotype, "TagName", tagValue); //we set stereotype tag
named "TagName"
StereotypesHelper.removeStereotype(element, stereotype); //we remove stereotype from element
```