

Using StereotypesHelper

Use utility class `com.nomagic.uml2.ext.jmi.helpers.StereotypesHelper` to work with profiles, stereotypes, tagged values. Keep in mind that *Tagged Values* in this helper class are called Slots or stereotype properties.



`StereotypeHelper` provides 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)`

Check if concrete stereotype is assigned

`StereotypesHelper.hasStereotype(Element, 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.

`StereotypesHelper.getStereotypePropertyValue(Element, Stereotype, java.lang.String)`

`StereotypesHelper.getStereotypePropertyFirst(Element, Stereotype, java.lang.String)`

Set value of tagged value

`StereotypesHelper.setStereotypePropertyValue(Element, Stereotype, java.lang.String, java.lang.Object)`

Collect all elements with applied stereotype

For a concrete stereotype use

`StereotypesHelper.getExtendedElements(Stereotype)`

For a concrete stereotype and derived stereotypes from it use

`StereotypesHelper.getExtendedElementsIncludingDerived(Stereotype)`

Check if stereotype can be applied to Element

`StereotypesHelper.canApplyStereotype(Element, Stereotype)`

Remove stereotype from element

`StereotypesHelper.removeStereotype(Element, Stereotype)`

Apply stereotype to element

`StereotypesHelper.addStereotype(Element, Stereotype)`

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 stereotype to element  
StereotypesHelper.setStereotypePropertyValue(element, stereotype, "TagName", tagValue); //we set stereotype tag  
named "TagName"  
StereotypesHelper.removeStereotype(element, stereotype); //we remove stereotype from element
```