

Creating your First Customization

We will demonstrate the recommended step-by-step instructions on how to customize an element, how to begin to create customization, how to create customization data, and how the customization data will be represented on the DSL element.

1. [Create a new project](#) and name it *Organization_Stereotypes.mdzip*.
2. Create a Profile element and name it *Stereotypes*.

 The purpose of the Profile named *Stereotypes* is to store all the stereotypes. Later we will share the package in order to use the stereotypes in the customization project.

3. [Create a Profile Diagram](#) and name it *Stereotypes*.

 Profile Diagram pallet contains all the necessary for the customization creation buttons.

4. In the Profile Diagram, [create a Stereotype element](#) and name it *Company*.
5. Apply the Class metaclass to the *Company* Stereotype.



-  You can see how customization rules will be passed to the *DSL* element by using the stereotype.
-  We selected the *Class* metaclass, because the «*Company*» stereotype will be applied to a class element. In other words, the type of the *DSL* element will be the class.

6. [Share the stereotypes package](#). The *Organization_Stereotypes.mdzip* project becomes a shared project.
 -  You can also assign an icon to the stereotype. The icon will be represented on the *DSL* element.

 Only the content of the shared *stereotypes* package will be visible in the project that will use the project.

7. Save the *Organization_Stereotypes.mdzip* project.
8. [Create a new project](#) and name it *Organization_Customizations.mdzip*.
9. [Create a package](#) and name it *customizations*.

 The purpose of the *customizations* package is to store all the customization data. Later we will share the package.

10. [Create a profile diagram](#) and name it *Customizations*.

 The *Customizations* diagram is intended for customization elements creation.

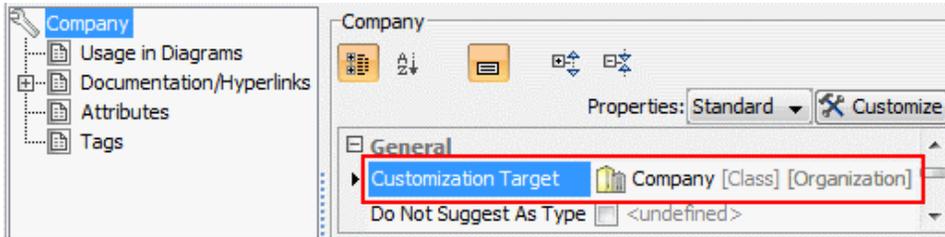
11. Create a customization element and name it *Company*.



 In a diagram, you can see that the customization element is a class with the applied «*Customization*» stereotype.

12. [Use](#) the *Organization_Stereotypes.mdzip* project in the current project.

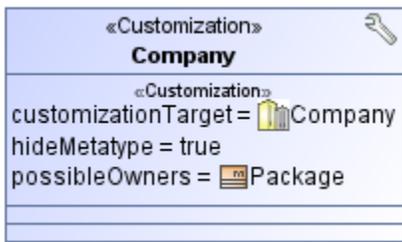
- Open the *Company* customization element [Specification window](#), under the **General** category, click the **Customization Target** property and then specify the *Company* stereotype.



- To assign a customization target quickly, select the *Company* stereotype in the Model Browser and drag it to the shape of the *Company* customization element on the diagram pane.

- In the **Customization** Specification window, you can specify customization data that will be passed to the DSL element.

- In the *Company* customization element Specification window, under the **General** category, set the **Hide Metatype** check box to true. If the value is *true*, the element acts like a new standard element type in the modeling tool.
- In the *Company* customization element Specification window, under the **Owned Elements** category, click the **Possible Owners** property and then select the *Package* metaclass.



- The DSL element will be added to the package shortcut menu, under the **Create Element** command.

- After click on the **Possible Owner** property, the element Selection dialog appears. In this dialog, by default metaclasses are not shared. To display the *Package* metaclass, click the *Include meta classes into search results* button.

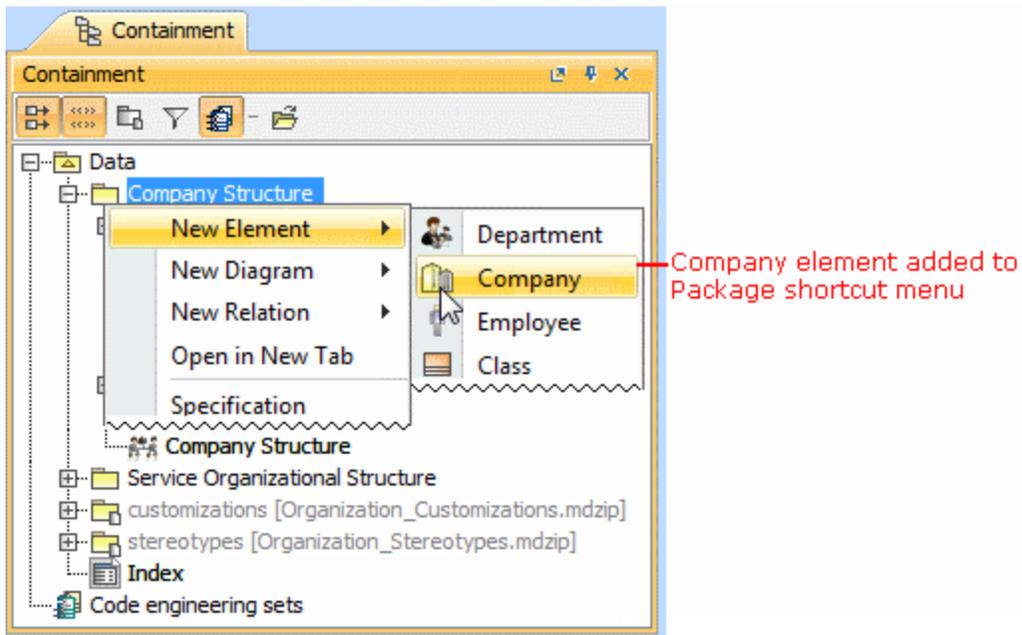
- Save the *Organization_Customizations.mdzip* project.
- Create a project and name it *Organization*.
- Use the *Organization_Customizations.mdzip* project in the *Organization* project.



The *Organization_Stereotypes.mdzip* project will be used in the *Organization* project automatically, because the *Organization_Customizations.mdzip* project uses the *Organization_Stereotypes.mdzip* project.

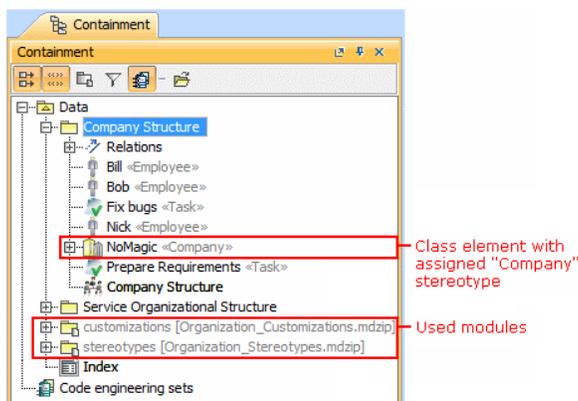
- In the *Organization* project, create a Package and in that package, create a class element and name it *NoMagic*.
- Apply the *Company* stereotype to the *NoMagic* class element.
- Save and reopen the project.

In the following figure, you can see the Containment tree of the project with the used *Organization_Stereotypes.mdzip* and *Organization_Customizations.mdzip* projects.



Structure of a project that use other projects

In this example, the «*Company*» stereotype is applied to the *NoMagic* class element. You can see that the *Company* element is added to the package shortcut menu.



Example of the "Possible Owner" property realization



Create Element

If you do not want the new DSL element to appear on the **Create Element** menu, you can hide the appropriate command when [customizing your modeling tool perspective](#).

Related pages

- [Rules of Stereotypes that cannot be Allowed to Apply](#)
- [Customization Elements](#)
- [Customization Element Properties](#)
- [Creating Customization Data](#)
- [Project partitioning](#)