

Eclipse Sirius: Specification model initializer

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Abstract

The current version of Sirius does not have a live mode of an “Initializer”, in this patch Sirius will be able to have “Initializer” allowing the user to create patterns on vsm.

The current enhancement aims to add the capability to init predefined skeletons of representation descriptions to the Viewpoint Specification Model Editor of Sirius

In the begin we expected the creation of a new plugin, but the current result is a prototype of menu/wizard which still need to be extracted to its own plugin (or the core sirius editor plugin) and need some extensibility features (extension point) to let each specific dialect module (tree, table, diagram) or additional plugins to provide their own pattern.

Description

This proposal is based on the Request/Bug nr. 438074 (“[GSOC2014] Creation of Initializer to VSM”) for Sirius. The specifier will be able to initialize some common types of representation(diagram, table or tree) like one pattern have been identified: Class Diagram Pattern.

Class Diagram Pattern: is one pattern of the VSM where it have relation between mappings and tools, It have a Class Mapping where it are linked to Node Mapping, The package of the pattern reuse the class mapping allowing to display another hierarchy level. It can correspond to a mapping of EcreTools or UML designer VSM.

The specifier: it is your user because he manipulates the Viewpoint Specification Editor to describe its modeler. Then the final user will use the described modeler/designer to manipulate its domain models. You could present this

The Initializer: is the wizard available from contextual menu where it will allow the specifier to choose a pattern available and configure it.

Deliverables

A new sirius eclipse prototype to help in future the creation of the new Initializer plugin.

How it works:

To use the Initializer the specifier need to right click on Viewpoint where it have some options and menus, when him open the “Initializer” it show a wizard of the Initializer allow the specifier to choose a pattern and configure it, to configure it him can chose a ID different from the default ID, In Class Diagram for example, it allow the specifier to chose if he want a single or many Direct Edit Tool/s and Delete Tool/s

Pattern Selection
Select a pattern to init a representation.

Select Pattern

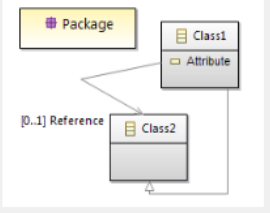
Description:

Pattern Selection
Select a pattern to init a representation.

Select Pattern

Description:

This pattern is a Class Diagram Skeleton which contains default id, default styles, relations between mappings and tools/other mappings. The node mappings are linked to the Class mapping. On package it reuse the class mapping to allowing to display another hierarchy level.
The pattern can correspond to a mapping of a ECoreTools or UML designer VSM.



Pattern Creation
Configure the creation of your Class Diagram skeleton.

ID
Prefix ID:

Tools

Delete Tool: ☒ Single ☐ Many

Direct Edit Tool: ☒ Single ☐ Many

Bugs:

[Bug 436332](#) - Selection only detect one selected item.

[Bug 434698](#) - [gsoc2014] Tool groups/sections creation by refactoring.

[Bug 438074](#) - [GSOC2014] Creation of Initializer to VSM

[Creation of a command for Class Diagram Pattern.](#)

[Creation of a Wizard for VSM Initializer.](#)

What went during the GSOC2014?

In the begin of the GSOC2014 when I started the project and read all the documentation it was hard to me where I got some difficulties as understand where to do the things and how to do. With the help of Maxime Porhel(Mentor), I can do some resolutions, not many as I want but I have try always do my best to give a good contribution to Sirius. With the guidance of Mentor I was able to have a good experience during the project and realise I have much to learn on work world.

What I do if I had more time?

The current version of the plugin are a prototype of the future new plugin of the Initializer where it currently allow the specifier to create and configure a skeleton of a Class Diagram has it are explain before. The prototype I don't have time to move it to the Sirius core editor plugin.

If I have more time to work on the plugin I add to the plugin a Table Description and Tree Description patterns, this is a common kind of representation (Table and Tree).