

Source Code Documentation for the Master
Thesis “Benutzerzentrierte Entwicklung eines
Nutzungskonzepts für das Saros-Whiteboard
unter Berücksichtigung der Unterstützung von
Grafiktablets”

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1 Installation & Setup

- Open Eclipse 3.6 with a fresh workspace
- in the Eclipse menu open *File/Import...*
- choose *General/Existing Projects into Workspace*
- select the *root directory* containing all three source directories (“Saros”, “de.fu_berlin.inf.dpp.whiteboard”, “de.fu_berlin.inf.nebula”)
- make sure all three projects are selected in the *Projects* list
- tick *Copy projects into workspace*
- click finish
- wait for the projects to be imported and built

2 Code

The *implemented* code developed within the scope of the master thesis consists of two parts: whiteboard code and testing code. However the *packaged* code includes a complete snapshot of the Saros code in order to avoid complications due to the revision control system change taking place at the moment. It provides the quickest way to build a working whiteboard and to start testing/exploring it.

2.1 Whiteboard

The whiteboard code is packaged in

*de.fu_berlin.inf.dpp.whiteboard*¹

Note that there is also an important change in the *plugin.xml* of

de.fu_berlin.inf.dpp (Saros plugin)

where the *Saros.whiteboard* context extension is provided in order to make whiteboard shortcuts work.

2.2 JUnit Code

The code extending the STF-Framework is mainly located in

de.fu_berlin.inf.dpp.stf.server.rmi.superbot.component.view

RMI export is done in

de.fu_berlin.inf.dpp.stf.server.STFController

STF testing code for the whiteboard is located in the

de.fu_berlin.inf.dpp.stf.test.whiteboard

package. An additional JUnit-Test for testing the scaling calculation is in

de.fu_berlin.inf.dpp.whiteboard.gef.editpolicy

¹For a comparison TODO

3 Whiteboard Exploration

After installation successfully finished open *Run/Run Configurations...* from the Eclipse menu. Select *Saros_Alice_Host* and click on the *Run-Button*. A new Eclipse instance should open and you should see the *Saros Whiteboard* view next to the *Saros* view.²

Feel free to explore the whiteboard as you wish. Note that there are a lot of keyboard shortcuts you can use. Most of them are available via *Ctrl+<?>* where *<?>* is a placeholder for the respective key. See table 1 for an overview.³

If you are using a tablet and installed its driver correctly, everything should work out of the box.

Shortcut	Result
Del	Delete
Backspace	Delete
Ctrl+C	Copy
Ctrl+V	Paste
Ctrl+Z	Undo
Ctrl+Y	Redo
Ctrl+A	Select All
Ctrl+S	Export
Ctrl+F	Freehand Tool
Ctrl+R	Rectangle Tool
Ctrl+E	Ellipse Tool
Ctrl+D	Diamond Tool
Ctrl+T	Text Tool
Ctrl+B	Rubber Tool
Ctrl+W	Connection Tool
Ctrl+Q	Selection Tool
Ctrl+G	Panning Tool
Ctrl+Click	add to current selection
Shift+Click	add to current selection
Pfeil	select (direction based)
Shift+Pfeil	add to current selection (direction based)

Table 1: Shortcuts

²If this is not the case you are probably using an already existing workspace for the *Saros_Alice_Host*. In this case open *Window/Show View/Other...* from the menu and open the *Saros/Saros Whiteboard* manually.

³For a more detailed list refer to the master thesis.

4 STF Testing

Executing the whiteboard's STF tests works analogously to the ordinary Saros STF tests, but make sure to use a fresh workspace for the tester Eclipse instances. Refer to

<http://www.saros-project.org/Testing>
for further information on how to run them locally.