Sourcetalk User Manual

Setup and User Guide

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Abstract

This document is the end user manual of Sourcetalk, the Monticello 2 distributed Smalltalk code repository. It explains the main functionality for users. Furthermore in an advanced section we will help administrators to set up a Sourcetalk code repository and present the main administration functionality.

Contents

Chapter 1

Introduction

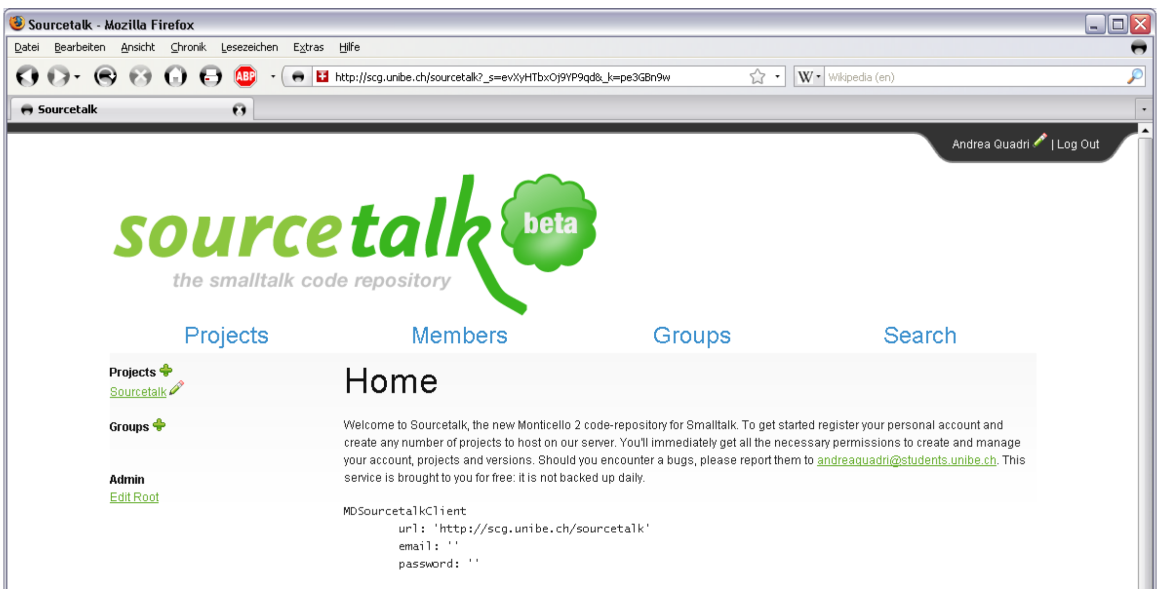

Figure 1.1: Sourcetalk code repository in Firefox.

This guide explains the main features of Sourcetalk. For example it shows how to connect to Sourcetalk using a Monticello 2 browser, how to create a group and how to browse through Smalltalk code in Sourcetalk. Furthermore it guides you through the process of setting up your own Sourcetalk code repository.

Chapter 2: Using Sourcetalk shows how to install Monticello 2, create and edit an account on Sourcetalk and how to use the search functionality.

Chapter 3: Using Projects presents how to create, edit and delete projects in Sourcetalk and how to up- and download code from Sourcetalk using Monticello 2. Furthermore we show how to browse through committed versions.

Chapter 4: Using Groups explains how to create, edit or delete groups in Sourcetalk.

Chapter 5: Sourcetalk Server Setup explains how to set up a Sourcetalk server. Furthermore it instructs how to define an initial superuser and edit the root.

Chapter 2

Using Sourcetalk

Sourcetalk can be found at http://scg.unibe.ch/sourcetalk. To get started you need the Monticello 2 versioning system. Monticello 2 allows you to upload source code to a Sourcetalk project or to download source code directly into your image. You are also able to download .st files through the web browser and of course use Sourcetalk without having Monticello 2 installed. Being registered on Sourcetalk is not necessary, but allows you to see public projects only. Furthermore only registered users can create projects. Public projects can always be downloaded, through Monticello 2 or directly from the Sourcetalk website. Unregistered users are allowed to commit to public projects. However creating new groups or projects, or edit existing ones, is only possible for registered users. If you are registered you have access to protected projects, or private ones if you are part of their development team.

2.1 Installation of Monticello 2

First of all you need a running Pharo[1] or Squeak [2] image. Both of them can be downloaded for free either at the Pharo[3] or at Squeak web site[4]. Download the latest version of Monticello 2 from http://www.wiresong.ca/static/releases/Monticello-current.zip. Monticello 2 depends on two packages, OmniBrowser and OB-Morphic. If you're already using the OmniBrowser development tools, this will fulfill Monticello's prerequisites. If not, load `0-Preload-Squeak310.st` contained in the distribution before

[1]http://code.google.com/p/pharo/

[2]http://www.squeak.org/

[3]http://gforge.inria.fr/frs/?group_id=1299

[4]http://www.squeak.org/Download/

loading Monticello 2. Once the prerequisites are in place, load Monticello 2 itself by filing-in `1-Monticello2.st`. Afterwards you can open a Monticello 2 project browser by selecting `open...` and `Monticello project browser`, as seen in Figure 2.1. The opened browser should look like in Figure 3.3.

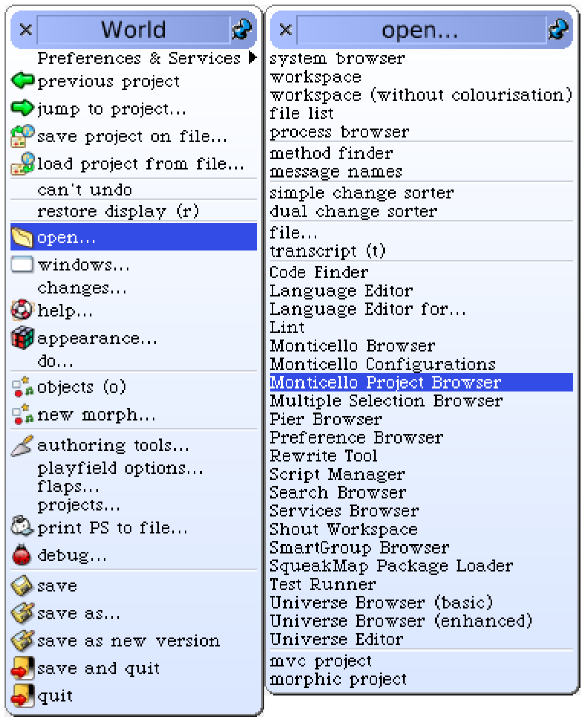

Figure 2.1: Steps to open a Monticello 2 project browser.

Now you are all set to use Sourcetalk. If you would like to create your own projects in Sourcetalk you need to register, as explained in the following section.

2.2 Creating an Account

Click on the register button at the top right of the Sourcetalk application at http://scg.unibe.ch/sourcetalk, as seen in Figure 2.2.

This opens a form to register a new user as seen in Figure 2.3.

Enter a valid email address and a secure password of your choice. Afterwards hit the `Register User` button (see Figure 2.3) or simply press ENTER. That's it, now you are registered, logged in and ready to get started.

Figure 2.2: Register button.

Figure 2.3: Register View.

2.3 View and Edit an Account

If you are not logged in, click on `Log In / Register` as seen in Figure 2.2, enter your email address and password and click on `Log In`. Now you are able see your email-address at the top right of the page. If you have already added your full name it is displayed instead of the email like in Figure 2.4.

Figure 2.4: Login state view.

Click on that email address or full name to go to your personal page. Click on the pen next to your username (see Figure 2.4) at the right top of the page to update or change your data.

2.4 Searching

If you would like to search Sourcetalk for a project, group or user click on the `Search` tab seen in Figure 1.1. Now you get a search view in which you can enter a search expression. You are also able to select respectively deselect categories with the checkboxes. Hitting the `Search` button or pressing ENTER will give you the matching results as seen in Figure 2.5.

Note that the search function looks at titles, names and tags. Feel free to add tags to your account, projects or groups to improve the search accuracy.

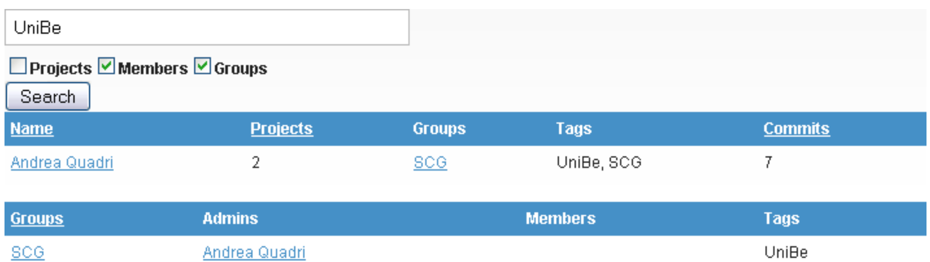

Figure 2.5: Search for UniBe without projects.

Chapter 3

Using Projects

3.1 Creating a project

If you are logged in you see a + next to the Projects entry in the menu on the left (see Figure 3.1).

Figure 3.1: Add projects in menu.

Click on the + and enter the name of the new project. You automatically become the creator and one of the admins of the new project. To add other Admins or developers to your project read Section 3.5.

3.2 View or edit a project

You can view a project by clicking on its name. If you are logged in you can see all projects you are a member of on the left. Editing a project is only possible if you are an admin of the given project. If so, select either the pen icon next to your project on the left seen in Figure 3.2, or go to your project page and click on the pen next to the title of the project seen in Figure 3.10.

Figure 3.2: Project with edit button in menu.

3.3 Committing Code to a Project

Open a `Monticello Project Browser` in your local image as explained in Section 2.1. You should get a window that looks like in Figure 3.3.

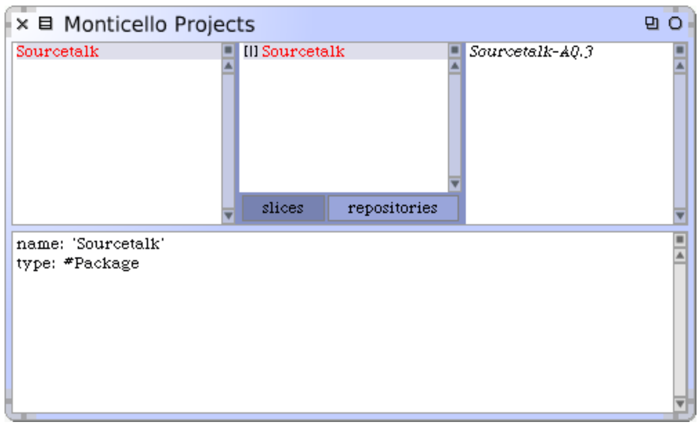

Figure 3.3: The Monticello Projects browser.

Enter a Project with a name at the left top of the browser. This name must not match the project name in Sourcetalk, but it helps so you won't get confused. Then add one or multiple *PackageInfo slices* by RIGHT CLICKING in the top center of the window and then clicking on `add packageinfo slice...` as seen in Figure 3.4.

Figure 3.4: Add a packageinfo slice.

3.3.1 Adding a Project

Switch to `repositories` in the center and RIGHT CLICK again in the top center. Select `add sourcetalk project...` as seen in Figure 3.5.

Now you get a new window that should look like in Figure 3.6.

Enter the missing information of your email, password and the name of the project. You can also get the full template for this at the respective project page.

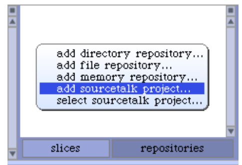

Figure 3.5: Add a Sourcetalk project with Monticello 2.

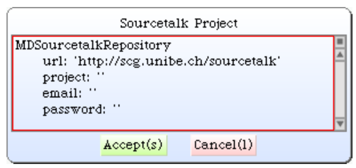

Figure 3.6: Add a Sourcetalk project data.

3.3.2 Selecting a Project

Alternatively to the previous subsection you can also choose `select sourcetalk project...` and select one project from all your projects by simply entering your email and password. This should look like in Figure 3.7. There is a template on

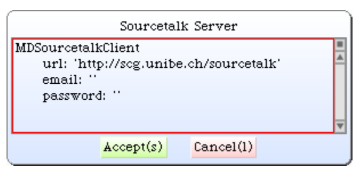

Figure 3.7: Select a Sourcetalk project with Monticello 2.

the Sourcetalk welcome page. After you entered the information you should be able to see on the top right every committed version of the packages, like in Figure 3.3. If it is void, then there are no versions committed yet. If you would like to commit your packages, click on `slices` and RIGHT CLICK on the top middle part. Select `save (s)` and all your packages will be committed to the repository of your project in Sourcetalk. You can check this by going to the project page in Sourcetalk and have a look at the versions table.

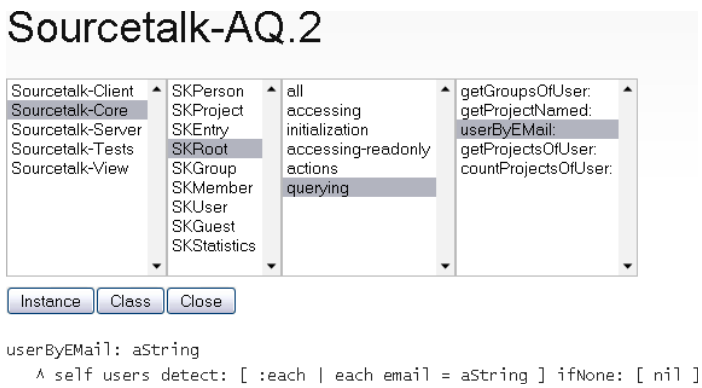

Figure 3.8: The code browser of Sourcetalk.

3.4 Browsing a Project Version

Go to a project page on Sourcetalk and click on an available version of a package in the versions table. Now you will get a code browser like in Figure 3.8, that starts with the instance view of the selected package. This can be changed by clicking on the `Class` button, and changed again back with a click on the `Instance` button. If you select a Method, it will be displayed below the browser, as seen in Figure 3.8. With the `Close` button you return to the project view.

3.5 Adding and removing Project Members

You can add or remove admins or members of projects if you are an admin of the particular project. If so, go to the project page and in the section members you will find `+` and `-` signs for add and for remove admins and developers.

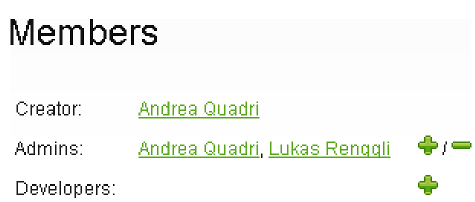

Figure 3.9: Admin view of all the members and developers of the project selected.

If there are no developers, there is also no possibility to remove them as seen in Figure 3.9.

To add users or groups to a category click on the `+` button of the desired category and select a user or group by clicking on his or its name or select entries users by holding CTRL. Afterwards hit the `Add` button and you are done.

For removing users or groups of one category click on the `-` button of the desired category and select a user or group by clicking on the name or select multiple entries by holding CTRL. Afterwards hit the `Remove` button and you are done.

If you removed every admin from your project, it will be deleted after a confirmation.

3.6 Deleting Projects

Deleting a project is only possible if you are an admin of the particular project. If so, go to the project page and click on the delete symbol next to the title of the project at the top, as seen in Figure 3.10.

Figure 3.10: Admin buttons on the project page, next to the title.

Click on it and confirm the action. Another way to get the same result is to remove every admin from the project see Section 3.5.

Chapter 4

Using Groups

4.1 Creating a Group

If you are logged in you see a + next to the Groups entry in the left menu seen in Figure 4.1.

Figure 4.1: Add group in menu.

Click on the + sign and enter a group name and you are all set. You automatically become the creator and an admin of the new group.

4.2 Viewing and editing Groups

Editing a group is only possible if you are an admin of the group. If so, select either the pen icon next to your group in the left menu as shown in Figure 4.2 or go to your group page and click on the pen button near the title like in Figure 4.4.

Figure 4.2: Edit group.

4.3 Adding and removing Group Members

You can add or remove admins or members of groups if you are an Admin. If so, go to the group page and at the members section shown in Figure 4.3 you will find + and - signs for add and remove either admins or members. If there is no member, there is also no possibility to remove, as seen in Figure 4.3.

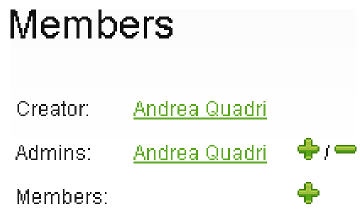

Figure 4.3: Group members with admin buttons.

To add users to a category click on the + button of the desired category and select a user by clicking on his name or multiple users by holding CTRL. Afterwards hit the `Add` button and you are done.

For removing users of one category click on the - button of the desired category and select a user by clicking on his name or multiple users by holding CTRL. Afterwards hit the `Remove` button and you are done.

If you remove every admin of a group, the group will be deleted.

4.4 Deleting Groups

Deleting a group is only possible if you are an admin of the group. If so, go to the group page and click on the delete symbol next to the title of the group at the top as shown in Figure 4.4.

Figure 4.4: Admin view of group page.

Click on it and confirm the action. Another way to get the same result is to remove every admin from the group (see Section 4.3).

Chapter 5

Sourcetalk Server Setup

5.1 Setup

Because Sourcetalk is built using Seaside, Magritte and Pier it is essential to have them loaded into your image. Instructions on loading Seaside are located at http://www.seaside.st/download. Magritte is available at SqueakMap http://map.squeak.org/. Pier can be downloaded from http://www.piercms.com/download. Now you need the source code of Sourcetalk. You can download it from Sourcetalk itself at http://scg.unibe.ch/sourcetalk/projects/4da845d9-6b83-434d-ad82-30652139199e, or with Monticello 2 by connecting to Sourcetalk. Make sure to confirm the MIT license under which it is provided.

1. Start the web by evaluating `WAKom startOn: 8080`, change the port number if necessary.
2. In Seaside config set the *base path* to match your setup and assure that *deployment* is set to `true`.
3. Test if the server is reachable from a web browser.

5.2 Creating an initial Superuser

For security reasons we only allow registered users to be set as superuser by inspecting `self s2root` in your Smalltalk image as shown in Figure 5.1.

In the instance variable `users` you will find all registered users as shown in Figure 5.1. Select the chosen one in the object explorer, type `superuser := true` and

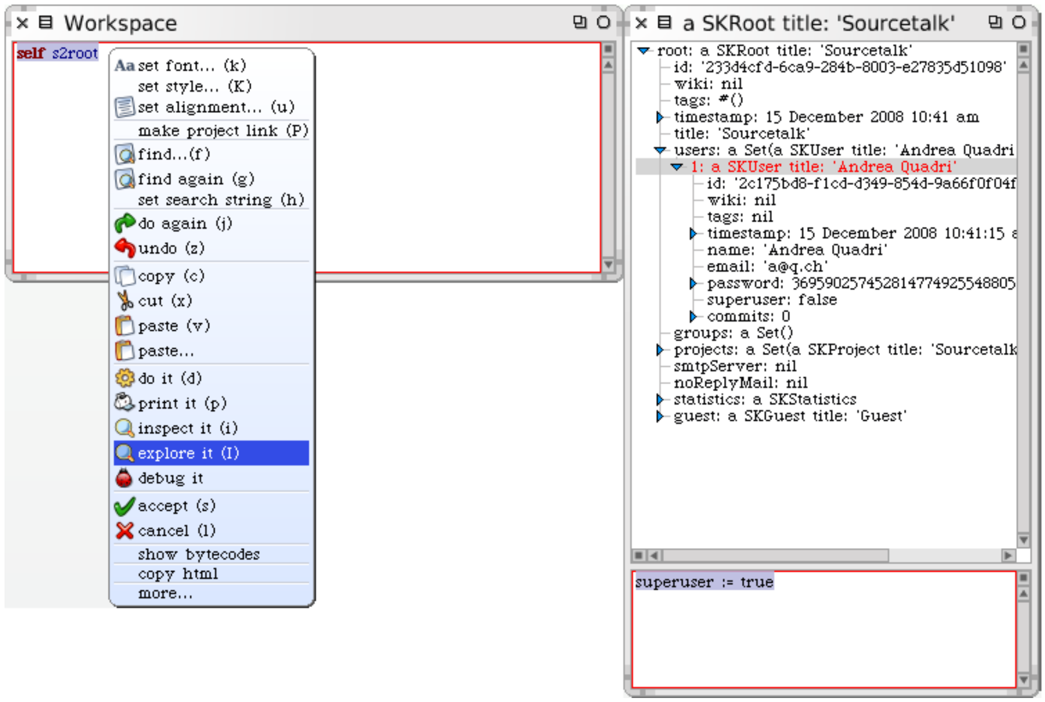

Figure 5.1: Exploring the s2root and its users.

evaluate the expression. If you refresh the view you can see in the details of that user object, that its superuser flag is set to `true`. If you log in as superuser there is a new menu entry as depicted in Figure 5.2. A superuser has the right to edit everything. Moreover the superuser is able to delete any user, group or project. The superuser also has the right to see every project and to commit to every project using Monticello 2.

5.3 Editing the Root

If you are a logged in as superuser you will be able to see an admin menu entry, as depicted in Figure 5.2.

Figure 5.2: Edit root.

Click on `Edit Root` to get to a new view in which you can change the properties of the application. First of all a Sourcetalk server has a title. Changing this property, will change the name of the application on the view. Furthermore you can configure the SMTP server to be able to send emails, that are generated if someone has forgotten their password. Every generated mail will also be sent to the email address entered in `Generated Mail`. Therefore the owner of the email address gets notified of every attempt to set a new password. This is done because of security concerns. The email address should be owned by a superuser.