

# Managing Shared Files in a Branched Environment

by Fernando Cremer

File sharing in Surround SCM allows a single copy of a file to exist in multiple repository locations. Any change made to a shared file is immediately available in all share locations, which can be a problem if the change should only be available after it has been tested.

For example, multiple projects share a common library. When a change is made to the library, it needs to be tested before the change is made available to the projects. You can use project branching to manage changes in shared files. Edit libraries in their own branch or in a project branch, test the changes, and then promote the changes to the mainline. After the changes are promoted, sharing automatically propagates any changes to the other projects.

## Understanding the repository structure

Continuing with the common library example, create a repository where libraries are stored for each project. The project only needs relative path references to the libraries, and the libraries will be included when you retrieve the project from Surround SCM.

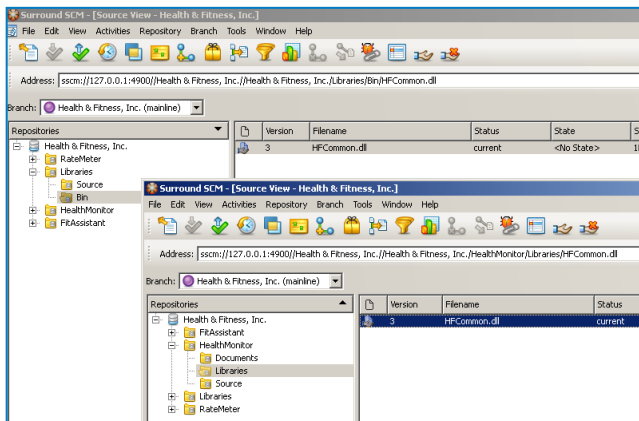


Figure 1: Repository Structure

## Working with shared files

Creating a branch specifically for shared files allows you to work without affecting other projects that use the files. You can edit a shared file in its own branch, and then test the changes in that branch. You can then promote the changes to the mainline branch

where the sharing will automatically propagate the changes to the other projects. To stay organized, create a Surround SCM workflow state to indicate that a shared file is tested and ready to be promoted.

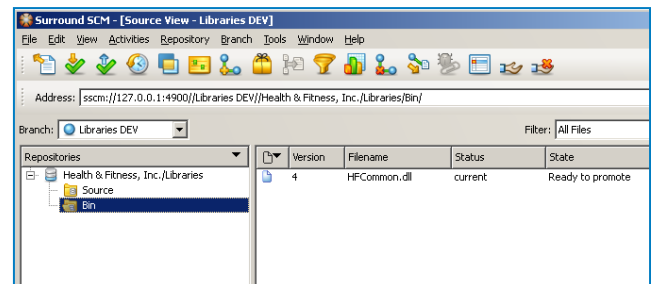


Figure 2: Shared File Branch

When you create a project branch, the branch also contains the latest version of the libraries. Any changes made to the libraries in the mainline branch will not affect the libraries in the project branch, which ensures that old versions of the libraries are maintained in the projects.

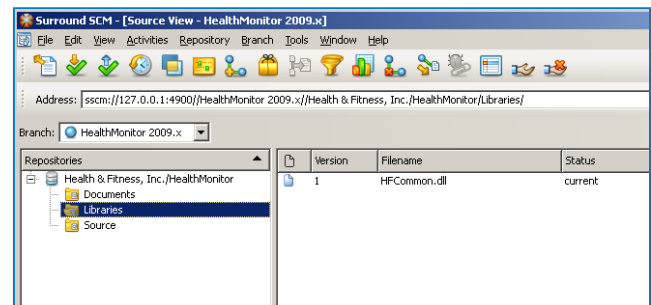


Figure 3: Project Branch

Managing shared files in Surround SCM improves development process efficiency. With proper use of branching, only tested and approved changes are shared. You will no longer have to spend time making the same change to the same file multiple times.

## About the Author

Fernando Cremer is a solutions consultant at Seapine Software, Inc. He has over 10 years of experience in customer support and service, 7 of which have been in the software industry. Fernando is responsible for software services, demonstrations, and training for Seapine's award-winning change management products.