

Managing Version Control

Using Subversion, TRAC and Mylyn

Introduction

- ▶ Who am I?
 - ▶ Fred Anderson, ColdFusion Developer
 - ▶ Currently work for WolfNet Technologies.
 - ▶ I like Music, Playing GO! and predicting the outcome of sporting events.
- ▶ What is “Version Control”?
- ▶ Why do we need version control?
- ▶ Q&A: Who is using it now? What are you using? Tell us what you have found, positive and negative.



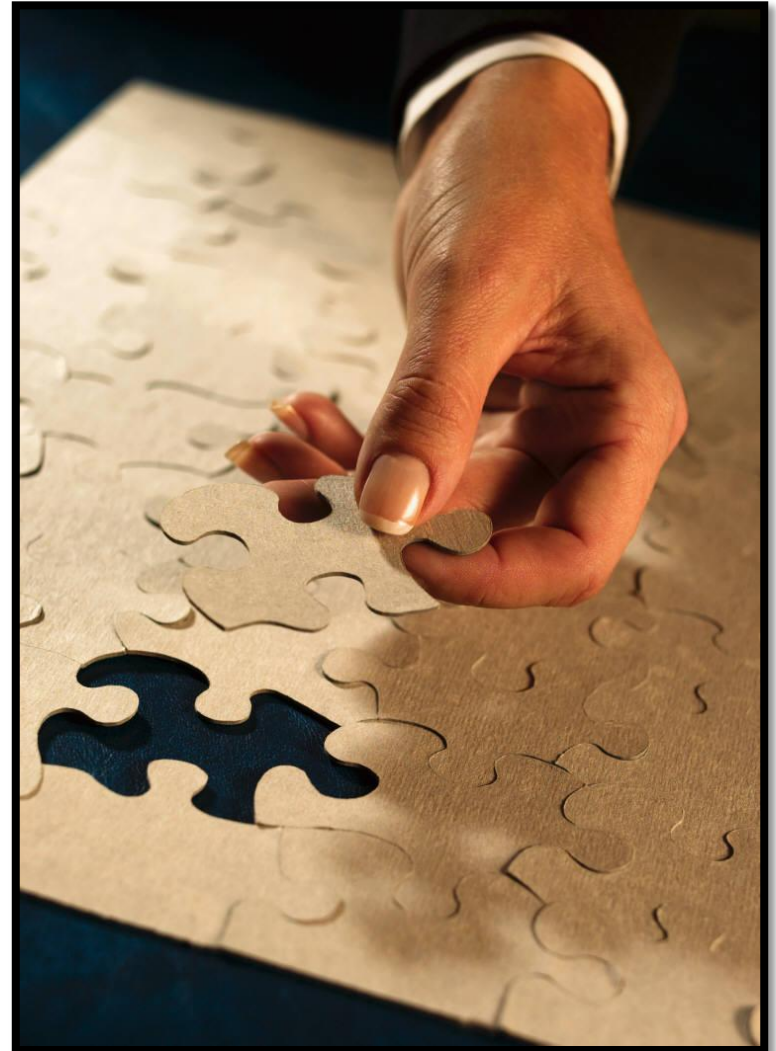
Agenda

- ▶ We are going to cover
 - ▶ SVN
 - ▶ TRAC
 - ▶ Mylyn
- ▶ I would like to spend about 20 minutes on each.
- ▶ We will have to move at the speed of the group to some extent.



Overview

- ▶ Managing Version Control, why?
- ▶ How do SVN, TRAC and Mylyn work together?



SVN, Subversion

- ▶ **Why SVN, why not CVS or some other VC product?**
 - ▶ Open Source
 - ▶ Free
 - ▶ Lots of Tutorials and Support
- ▶ **Installing an SVN server**
 - ▶ Using JumpBox
 - ▶ Using Assembla.com
- ▶ **Integrating an SVN Client**
 - ▶ Tortoise SVN Shell
 - ▶ Subclipse for Eclipse

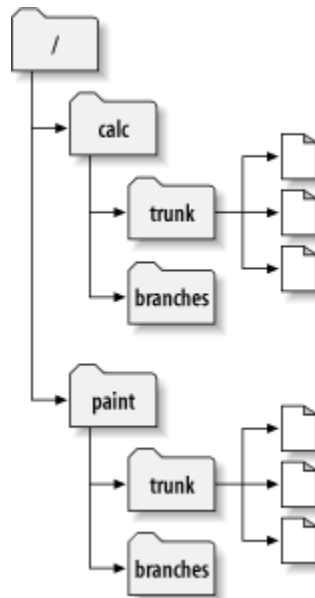


Vocabulary, Terms for using SVN

- ▶ Repository
- ▶ Project
- ▶ Working Copy
- ▶ Checking Out
- ▶ Export
- ▶ Committing
- ▶ Update
- ▶ Projects / Directories (see photo)



Vocabulary (cont.) Folder Picture



Vocabulary (cont.)

- ▶ Tagging
- ▶ Branching
- ▶ Merging
- ▶ Locking
 - ▶ Strict Locking
 - ▶ Optimistic Locking



Simple Version Control

- ▶ **Straight Up Linear Version Control**
 - ▶ Check Out
 - ▶ Commit
 - ▶ Revert to a previous version.
- ▶ **Explain The Version Numbers**

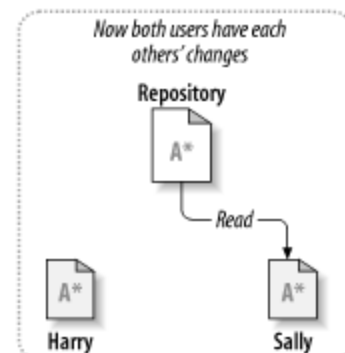
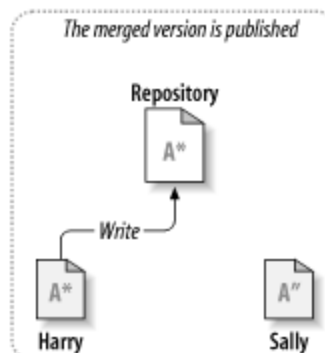
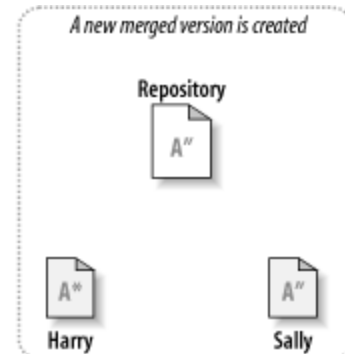
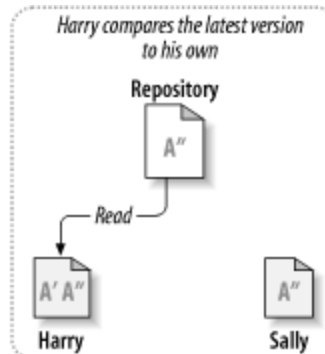
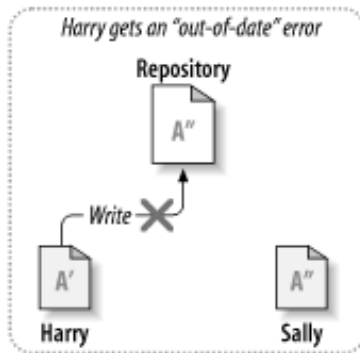
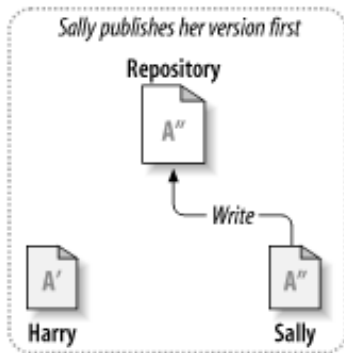
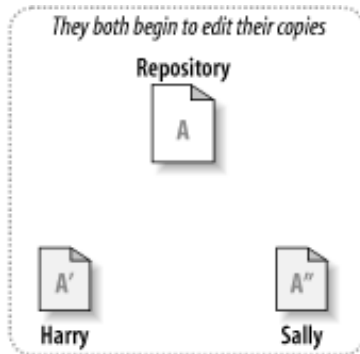
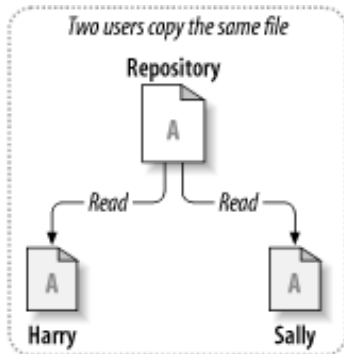


Merging Example

- ▶ A little more complex, using two people and reconciling a commit conflict by merging.
- ▶ Be aware of Auto (smart) Merging.
- ▶ Sample
 - ▶ Person A Check Out
 - ▶ Person B Check Out
 - ▶ Person A Commit
 - ▶ Person B Commit
 - ▶ Person B Resolve Conflict
- ▶ Explain Checking Out and Sandboxes
- ▶ Talk about Version History.



The Long and Merging Road (picture)

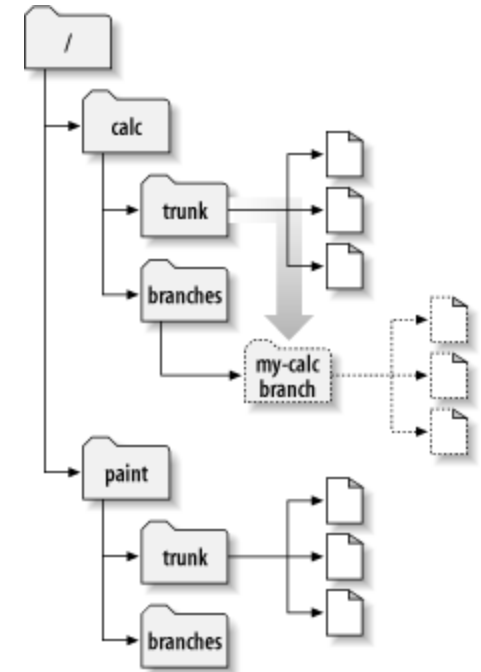
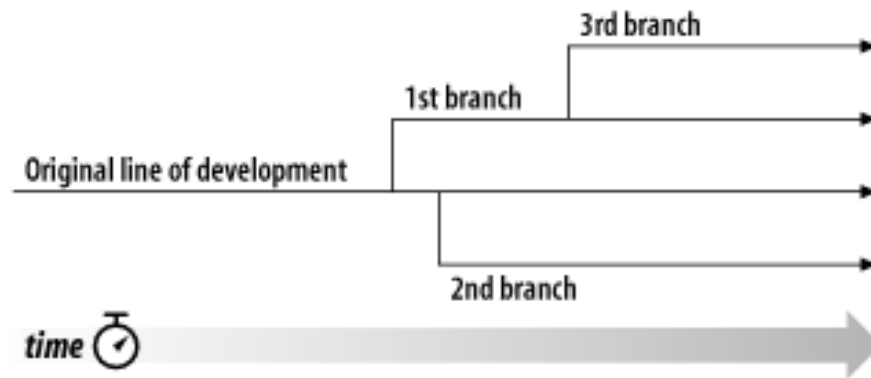


Branching Your Source Code

- ▶ **When should I branch?**
 - ▶ Try not to go crazy with branching. If you start to feel like you are using branches excessively, it may be a sign there is something wrong with your overall process.
 - ▶ If your end goal is to merge your code back into the trunk, try to do that on schedule before branching out again.
- ▶ **Branching Example**
 - ▶ Ver. 1 Branch
 - ▶ Edit the Trunk
 - ▶ Edit Ver. 1
 - ▶ Merge Ver. 1 back into the trunk.
- ▶ **Q&A on Branching**



Branch Graphics



TRAC, brought to you by Edgewall

- ▶ What is TRAC?
- ▶ TRAC integrates Wiki, SVN interface, Issue and bug Tracking, and Reporting Tools.
- ▶ Installing TRAC
 - ▶ Use Assembla.com
 - ▶ Use JumpBox



The Parts of TRAC

- ▶ **WIKI:** your basic Wiki, too much to cover here.
 - ▶ Edit the front page
 - ▶ Create a new page
- ▶ **TimeLine/Roadmap:** revisit this after we have a little more in the code base.
- ▶ **Browse Source:** interface for browsing the SVN repository, allows version comparison.
- ▶ **Tickets:** Create and Edit tickets.
- ▶ **Admin:** All the settings for your TRAC environment.



Walking along the TRAC

- ▶ Admin, Setting up TRAC
 - ▶ Ticket System
 - ▶ Components
 - ▶ Milestones
 - ▶ Priorities
 - ▶ Severities
 - ▶ Ticket Types
 - ▶ Versions
- ▶ Creating a Ticket
- ▶ Edit a Ticket
- ▶ Re-Assign a ticket
- ▶ Q&A for TRAC?



Presently Mylyn, formerly Mylar.

- ▶ What is Mylyn?
- ▶ Installing is just like any other Eclipse Plug-in.
- ▶ Setting up the Task Repositories
- ▶ Using the Task List
 - ▶ New Query
 - ▶ Edit Task
 - ▶ Activate a Task
- ▶ Explain Context and Sharing Context
- ▶ Hands on, as much as Time allows.
- ▶ Q&A for Mylyn.



Summary

- ▶ That is how Mylyn can hold together SVN and TRAC
- ▶ Getting started is simple.
- ▶ Any Questions?



References and Resources

- ▶ SVN:
 - ▶ Subclipse
 - ▶ TortoiseSVN
- ▶ TRAC:
 - ▶ Edgewall TRAC
 - ▶ Assembla.com
 - ▶ JumpBox.com
 - ▶ Sean Tierney Blog: scrollingondubs.com
- ▶ Mylyn
 - ▶ <http://www.eclipse.org/mylyn>
- ▶ Books
 - ▶ Red Bean Book
 - ▶ <http://svnbook.red-bean.com/>
 - ▶ The Pragmatic Bookshelf, Andy Hunt
 - ▶ <http://www.pragprog.com/titles/svn2>
- ▶ Google.com

