Resonant Divergence
Collaboration in Diverged Branches

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Branching Basics

Branch

Main line of development (i.e., trunk)
Merging Basics

Main line of development (i.e., trunk)

Branch

Merging Process
Multiple Goals
The Applications

I. Offline Work
II. Stable Versions
III. Permanent Divergence
Revision control

Revision control (also known as version control, source control or (source) code management (SCM)) is the management of multiple revisions of the same unit of information. It is most commonly used in engineering and software development to manage ongoing development of digital documents like application source code, art resources such as blueprints or electronic models and other critical information that may be worked on by a team of people. Changes to these documents are identified by incrementing an associated number or letter code, termed the "revision number", "revision level", or simply "revision" and associated historically with the person making the change. A simple form of revision control, for example, has the initial issue of a drawing assigned the revision number "1". When the first change is made, the revision number is incremented to "2" and so on.

Software tools for revision control are increasingly recognized as being necessary for the organization of multi-developer projects.

[edit] Overview
State of the Art: Software Merge Tools
What are Wikis Missing?

I. Merging
II. History Sensative Merging
III. Branch "Accounting"
IV. Conflict Representation and Resolution
V. Text Specific Interfaces
History Sensitive Merging

- Initial document by Alice
- Branch of document by Bob
- Bob merges changes from Alice
- Alice merges changes from Bob
Resonance

A Wiki That Has...

- Branch Accounting
- History Sensitive Merging
- Conflict Resolution

And Work Toward...

- Using Mediawiki Articles as Branches
- Integration *Into* Other Wikis
Resonance

Quick Demo
Implementation Details

Python: Wiki, Document Model, Diff

Bazaar: Differential Storage, Merge Algorithm

Javascript: Conflict Resolution, Rendering
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