

An Introduction to Version Control

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Table of Contents

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- ▶ Find out where things broke
- ▶ Make features without breaking production
- ▶ Work with a group

Distributed versus Centralized

What's the difference?

Distributed

Each person gets a full repository that they can modify on their machine. Each user can contribute to the same branch without major concerns as merge markers will be inserted.

Centralized

Each person contributes to a repository located in one place. All changes end up in this centralized location allowing easy code review, but requires the use of branching or file locking(in the repo file system) to avoid conflicts.

Examples

Distributed

- ▶ Git
- ▶ Mercurial
- ▶ Bazaar
- ▶ SVK

Centralized

- ▶ CVS
- ▶ Subversion
- ▶ Google docs*
- ▶ Word '07
- ▶ Wikipedia*

distributed vs centralized

distributed

- ▶ Able to work offline
- ▶ Can run the project yourself
- ▶ History can be edited before pushing
- ▶ Team can work on the same branch

Centralized

- ▶ Must communicate with server
- ▶ Code run by a select few
- ▶ All code is seen and can be reviewed
- ▶ Branches for individuals encouraged

Questions?