

VCS and Productivity Night

Bettering your Workflow

Feb 12, 2021

What is a VCS?

A Version Control System (VCS) is a piece of software that helps people properly manage versions of a project over time.

Benefits of a VCS

- Collaboration

1. Easier file management
2. Allows *any* file to be edited without fear of overwriting someone else's changes
3. A central VCS allows the team to see the most current file version and changes to be merged in as needed

- Proper Version Storage

1. How much of the project do you save?
 - Only changed files? (Hard to view whole project)
 - the complete project? (Lots of unnecessary data on the disk)
2. Name scheming? (Ineffective over time)
3. How do we track *what* is different?
 - Most people do not fully read a README

A VCS realizes that there is only **one project** and that is the current version. If a user needs to see any past changes, they are neatly stored away inside the VCS.

- Easy Version Restoration
 - Since the files are in the VCS, if something goes wrong rollback is super easy!
- Understanding changes between Versions
 - Most VCS's require a message of some sorts to be included among a version "commit"
 - These allow for anyone with access to the repository (where the project is saved) to read the logs to find out what changes occurred.
- Backup
 - Since each member of the team has a local VCS on their disk, if a system fails, recovery is possible