

# git(hub) vs. SVN

## Introduction

git is a distributed version control system. github is an online service that provides repository hosting and a suite of source code management tools for projects that use git.

### No version control:

- ✗ Revision tracking: Arcane folder numbering schemes
- ✗ Code sharing: Email, scp, snail mail printout
- ✗ Collaborative development tools: Email/Gchat
- ✗ Bug tracking: Email, sticky notes
- ✗ Repository backup: None, probably

### SVN version control:

- ✓- Revision tracking: Snapshots of code numbered sequentially
- ✗ Code sharing: Email, scp, ...
- ✗ Collaborative development tools: email/Gchat
- ✓ Bug tracking: Trac tickets
- ✗ Repository backup: Do it yourself

### git version control with github:

- ✓ Revision tracking: changesets numbered, can be exchanged between repositories, picked and chosen individually
- ✓ Code sharing: git push/pull (pull requests)
- ✓ Collaborative development tools: github code commenting system
- ✓ Bug tracking: github Issues
- ✓ Repository backup: automatic with github

In SVN, there is one repository and users have “working copies” between which there is no way to share patches. With git, everything is a repository and code is easily shared between peers. Individual commits can be pushed and pulled from one repository to another.