An Introduction to Subversion

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- It's free

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- Git development started in 2005 to substitute BitKeeper (Linus Torvalds is one of the founders)

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- If you are using Linux . . . use the terminal!

Subversion on Cornell servers

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- Quick reference guide at `http://www2.vrdc.cornell.edu/news/documentation/subversion/`

Where to create a repository?

- TeamForge:
  - Create an account at `https://forge.cornell.edu`
  - Follow the instructions at `http://www.it.cornell.edu/services/subversion/howto/index.cfm`

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- GitHub at `https://github.com/`
- Use *svnserve* as a lightweight custom server
- Test repository at `http://repository.vrdc.cornell.edu/public/test` (When prompted for a login, use 'testuser'/'testuser')

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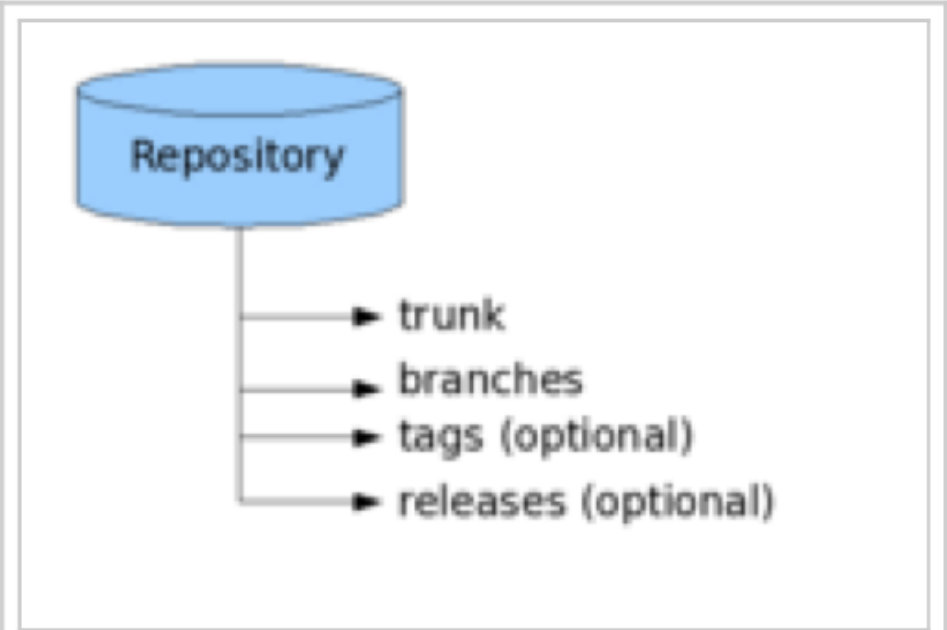
- Version merging:
  - Multiple editors can check out any given file
  - Discrepancies are handled upon checkin

Generic setup

- Trunk: contains all the clean code
- Branches: where all initial work occurs
- Tags and releases (optional)



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  - Important: use Subversion commands to do this, so that every change is registered
- Commit the changes back into the repository
  - Add a commit (log) message
  - Every commit is registered with a revision number

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- Hence, commit frequently!

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server> svn co repository:trunk /programs/production/prod/current
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- svn <subcommand> [options] [args]

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6. Publish changes
   - Command: *ci* (commit)

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  - *--depth infinity* to have full recursion (default)

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- Identifying changes
- Merging a branch back into the trunk

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- Calling *help* alone will print a summary of the commands and their usage
- Calling *help* followed by the name of a command will print a short description of the command and its options
- Options are often useful (and sometimes necessary), but it's hard to remember them all: use *help*!