An Introduction to Subversion

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- It's free

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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/`

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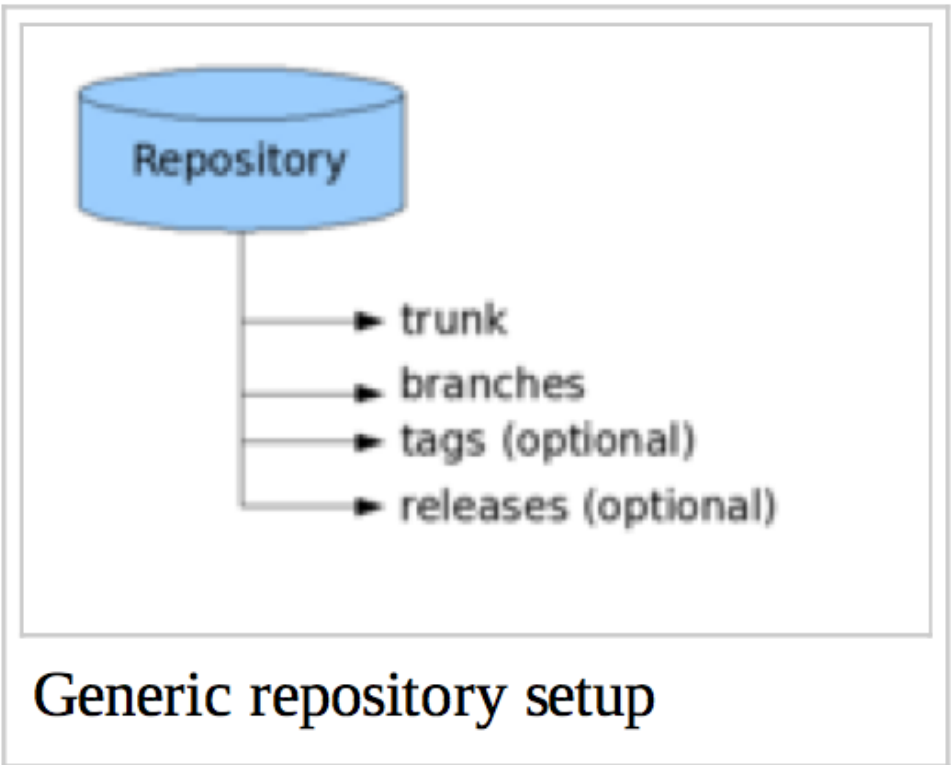
- Server-client approach
  - The repository is located in the server
  - No version control over local copies
- Version merging:
  - Multiple editors can check out any given file
  - Discrepancies are handled upon checkin

Generic setup

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



Generic repository setup

Local copy

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- Instead, check out a local copy of the repository (or of its subelements)
- Make changes to the local copy
  - 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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- Note: direct changes to the repository are immediately applied . . . while changes to the local copy are applied to the repository upon commit
- Hence, commit frequently!

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- Advantages:
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- Every command must be preceded by *svn*

```
server> svn co repository:trunk /programs/production/prod/current
```

Your best friend

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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*!

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1. Update your working copy or check out a new one
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6. Publish changes
   - Command: *ci* (commit)

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- Identifying changes
- Merging a branch back into the trunk