

Getting a Git Repository - p. 26

Initializing Repository in Existing Directory

Go to directory \$ cd C:/Users/user/my_p-roject

Initialize .git subdirectory \$ git init

Begin file tracking \$ git add *.c

\$ git add
LICENSE

Initial Commit \$ git commit -m <message>

Cloning Existing Repository

Clone directory \$ git clone <url> <directory name>

Tracking File Status - p. 28

Tracked files

Files that were in last snapshot + any newly staged files

can be unmodified, modified, or staged

Untracked Files

any files in working directory that were not in your last snapshot and are not in your staging area.

won't be included in your commit snapshots until explicitly told

\$ git status check status

\$ git add <file/directory name> track new file, stage file

If you modify a file after you run git add, you have to run git add again to stage the latest version of the file

\$ git status -s check status (short)

?? new untracked files

A newly staged files

M modified files

lefthand column indicates status of staging area and the right-hand column indicates status of working tree

Ignoring Files

Tracking File Status - p. 28 (cont)

repository might have a single .gitignore file in its root directory, which applies to the entire repository

additional .gitignore files in subdirectories possible

specifies which files are ignored by version control

View and Commit Changes - p. 33

git diff view unstaged changes

git diff --staged compare staged changes to last commit

If all changes are staged, git diff will give no output.

git difftool view changes in graphical difftool

git commit commit changes, launches editor for commit message

git commit -m add message in command line

git commit -a commit all changed files, skip staging

git rm remove file from tracked files

git rm -f force removal of already staged file

git rm --cached remove file from Git track, keep it on hard drive

If you simply remove the file from working directory, it shows up under the "Changes not staged for commit"

git mv file_from file_to Move/Rename File

Git doesn't explicitly track file movement

Viewing the Commit History - p. 40

git log list commits made in chronological order

git log -p show difference introduced in each commit

git log -2 show last two log entries

git log --stat show abbreviated stats for each commit

git log --pretty change log output format

pretty=format: "%h - %an, %ar : %s"

%h abbreviated commit hash

%an author name

%ar author date, relative

%s Subject

git log --graph display ASCII graph for merging history

git log --since=x limit log output to time x

git log --author=x limit log output to author x

git log --all-match limit output to those that match all limiting patterns

git log -S Only show commits adding or removing code matching string

-- path/file limit log output to changes introduced in specified files

Is always the last option and is generally preceded by double dashes (--) to separate paths from the options

--no-merges prevent display of merge commits