

Resource

Online

- Official Website

Download

- GitCheatSheet [.pdf]
- Git cheat sheet, extended edition prepared [.svg]
- Git Quick Reference [.pdf]
- Git Cheat Sheet In Chinese

Related

- Bazaar
- CVS
- SVN

Create Git

From existing directory

- `cd project_dir`
- `git init`
- `git add .`

From other repository

- `git clone existing_dir new_dir`
- `git clone git://github.com/user/repo .git`
- `git clone https://github.com/user/repo.git`

Local Changes

Changed in working directory

- `git status`

Tracked file changes

- `git diff`

Add changed files

- `git add file1 file2 file3`

Remove file

- `git rm file`
- `git rm dir/ -r`
- *(recursive under directory)*

See files ready for commit

- `git diff --cached`

Commit changes

- `git commit`
- `git commit -m "My message"`
- `git commit -a -m "My Message"`
- *(tracked files only, auto add)*

Change last commit

- `git commit --amend`

Revert changes to file

- `git checkout -- file`

Revert changes (new commit)

- `git revert HEAD`

Return to last committed state

- `git reset --hard HEAD`

History

Show all commits

- `git log`

Short Format

- `git log --pretty=-short`

Patches

- `git log -p`

Show file commits

- `git log file`

Show directory commits

- `git log dir/`

Stats

- `git log --stat`

Who changed file

- `git blame file`

Merge/Rebase

Merge branch into current

- `git merge branch`

Rebase into branch

- `git rebase branch`
- `git rebase master branch`

Abort rebase

- git rebase --abort

Merge tool to solve conflicts

- git mergetool

To view the merge conflicts

- git diff
- *complete conflict diff*
- git diff --base \$file
- *against base file*
- git diff --ours \$file
- *against your changes*
- git diff --theirs \$file
- *against other changes*

To discard conflicting patch

- git reset --hard
- git rebase --skip

After resolving conflicts

- git add \$conflicting_file
- *do for all resolved files*
- git rebase --continue

Remote Update / Publish

List remotes

- git remote -v

Show information

- git remote show remote

Add remote

- git remote add path/url

Fetch changes

- git fetch remote

Fetch + merge

- git pull remote branch

Publish local to remote

- git push remote branch

Delete remote branch

- git push remote :branch

Publish tags

- git push origin/upstream --tags

Branching/Tagging

List branches

- git branch

Switch to branch

- git checkout branch

Create new branch

- git branch new

Create branch from existing

- git branch new existing

Delete branch

- git branch -d branch

Tag current commit

- git tag tagname

Useful Commands

Finding Regressions

- git bisect start
- *to start*
- git bisect good \$id
- *\$id is the last working version*
- git bisect bad \$id
- *\$id is a broken version*
- git bisect bad/good
- *to mark it as bad or good*
- git bisect visualize
- *to launch gitk and mark it*
- git bisect reset
- *once you're done*

Check for Errors and Cleanup Repository

- git fsck
- git gc --prune

Search Working Directory for foo()

- git grep "foo()"