

1 Git CheatSheet

TOOLS

- PDF Link: [cheatsheet-git-A4.pdf](#), Category: tools
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-git-A4>
- Related posts: Visual Studio CheatSheet

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1.1 Git Advanced

| Name | Comment |
|-------------------------------------|---|
| Git squash to make history clean | <code>git rebase -i HEAD~4; git push origin <branch-name> --force</code> |
| Find git branch by commit hash | <code>https://\protect\T1\textdollar\{git_repo_link\}/commit/\protect\T1\textdollar</code> |
| List all remote git branches | <code>git ls-remote --heads origin</code> |
| Git clone repo with another ssh key | <code>ssh-agent bash -c 'ssh-add yourkey; git clone git@github.com:user/project.git'</code> |
| Git clone to a specific folder | <code>git clone https://github.com/google/cadvisor.git /go/src/github.com/google/c</code> |
| Code Owners | Define individuals or teams that are responsible for code in a repository. |

1.2 Git Remote

| Name | Comment |
|----------------------------------|---|
| Git add a remote source | <code>git remote add upstream git@github.com:thoughtbot/dotfiles.git</code> |
| Git add a local folder as remote | <code>git init ., git remote add bak /tmp/test_git_folder</code> |

1.3 Git Commit

| Name | Comment |
|----------------------------------|--|
| Git squash to make history clean | <code>git rebase -i HEAD~4; git push origin <branch-name> --force</code> |
| Git amend | <code>git commit --amend --no-edit</code> |
| Git commit and squash | <code>git commit --amend --no-edit, git push origin <branch-name> --force</code> |
| Git add patch | <code>git add -p</code> |
| Git commit | <code>git commit -m 'XXX'</code> |
| Git add and commit | <code>git ci -m 'XXX'</code> |

<https://raw.githubusercontent.com/dennyzhang/cheatsheet-git-A4/master/git-concept.png>

1.4 Git Undo

| Name | Comment |
|-----------------|--------------------------------------|
| Undo git commit | <code>git reset --hard HEAD~1</code> |
| Undo git pull | <code>git reset --hard</code> |
| Undo git add | <code>git reset filename.txt</code> |
| Undo git merge | <code>git merge --abort</code> |

1.5 Git log

| Name | Comment |
|--|--|
| git sh1sum | <code>git log -1 --pretty=format:%h</code> |
| Check recent commits | <code>git log -n 3</code> |
| Show change content between tow commits | <code>git log --pretty=oneline --abbrev-commit 1234...5678</code> |
| Check commit by username | <code>git log origin/master -n 3 --author <denny></code> |
| Check changes for a given file from a given user | <code>git log origin/master -n 3 --author <denny> <somefile.py></code> |

1.6 Git Diff

| Name | Comment |
|---------------------------------------|---|
| Compare git diff after commit | <code>git diff --cached</code> |
| Compare two git tags | <code>git diff \${sha1sum}..\${sha2sum}</code> |
| Show changed file list | <code>git diff --name-status, git diff --name-status --cached</code> |
| Git diff two revision | <code>git diff \${sha1sum}..\${sha2sum}</code> |
| Git show file changes | <code>git diff --name-only \${sha1sum} \${sha2sum}</code> |
| Show changeset of the latest commit | <code>git diff HEAD~</code> |
| Show previous changeset for one file | <code>git diff HEAD~ default.rb</code> |
| Compare two branches in CLI | <code>git diff <branch_1>..<branch_2></code> Make sure you have those branches locally |
| Compare two revision in GitHub UI | https://github.com/.../.../compare/sha1...sha2 |
| Compare latest 3 commits in GitHub UI | https://github.com/dennyzhang/cheatsheet-git-a4/compare/HEAD~3...HEAD |

1.7 Git Config

| Name | Comment |
|--------------------------|---|
| Show git config | <code>git config --global/system</code> |
| Configure default editor | <code>export pager=cat, git config --global core.editor nano</code> |
| Edit git global config | <code>git config --global --edit</code> |
| Alias for git status | <code>git config --global alias.st status</code> Link: git aliases |
| Alias for git checkout | <code>git config --global alias.co checkout</code> |
| Alias for git commit | <code>git config --global alias.ci commit</code> |
| Reset git url | <code>git config --global url."git@github.com:dennyzhang/myrepo.git:".insteadOf "https://git</code> |
| Reference | GitHub: gitignore examples |

1.8 Git Branch

| Name | Comment |
|------------------------------|---|
| List all remote git branches | <code>git ls-remote --heads origin</code> |
| Delete local branch | <code>git branch -d <branch_name></code> |
| Delete remote branch | <code>git push origin --delete <branch_name></code> |

1.9 Git Tag

| Name | Comment |
|-----------------------|---|
| Git list all tags | <code>git ls-remote --tags</code> |
| Git Fetch all tags | <code>git fetch --tags; git checkout tags/<tag_name></code> |
| Git delete local tag | <code>git tag -d <tag_name></code> |
| Git delete remote tag | <code>git push --delete origin <tag_name></code> |

1.10 Git Submodule

| Name | Comment |
|--------------------------------|---|
| Git add a repo to current repo | <code>git submodule add <git_repo_url></code> |
| Update submodule | <code>git submodule update</code> |

1.11 GitHub

| Name | Comment |
|-----------------|---|
| Github Shortcut | Link: Using keyboard shortcuts |
| Generate TOC | <code>gh-md-toc</code> |
| Reference | link: generate link for code block, link: git clone wiki repo |

1.12 More Resources

<https://github.com/git-tips/tips>

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