

Hands-On Git

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Installing Git

- ✦ Windows

- ✦ msysGit (<http://msysgit.github.com>)
- ✦ GitHub for Windows (<http://windows.github.com/>)

- ✦ Mac OSX

- ✦ `brew install git`
- ✦ DMG (<http://git-scm.com/download/mac>)

- ✦ Linux

- ✦ `apt-get install git-core` (*Debian/Ubuntu distros*)
- ✦ `yum install git-core` (*Fedora distros*)
- ✦ For other distros, check your package manager

Configuring Git

- ✦ System-level configuration
 - ✦ `git config --system`
 - ✦ Stored in `/etc/gitconfig` or `c:\Program Files (x86)\Git\etc\gitconfig`
- ✦ User-level configuration
 - ✦ `git config --global`
 - ✦ Stored in `~/.gitconfig` or `c:\Users\<NAME>\.gitconfig`
- ✦ Repository-level configuration
 - ✦ `git config`
 - ✦ Stored in `.git/config` in each repo

Working Locally

- ✦ Creating a local repository
- ✦ Adding files
- ✦ Committing changes
- ✦ Viewing history
- ✦ Viewing a diff
- ✦ Working copy, staging, and repository
- ✦ Deleting files
- ✦ Cleaning the working copy
- ✦ Ignoring files with .gitignore

Working Remotely

- ✦ Cloning a remote repository
- ✦ Listing remote repositories
- ✦ Fetching changes from a remote
- ✦ Merging changes
- ✦ Pulling from a remote
- ✦ Pushing changes remotely
- ✦ Working with tags

Branching, Merging, and Rebasing

- ✦ Working with local branches
- ✦ Merging branches
- ✦ Rebasing commits
- ✦ Cherry-picking commits
- ✦ Working with remote branches

Git Protocols

Protocol	Port	Example	Notes
http(s)	80/443	<code>https://github.com/jquery/jquery.git</code>	Read-write Password for auth Firewall friendly
git	9418	<code>git://github.com/jquery/jquery.git</code>	Read-only Anonymous only
ssh	22	<code>git@github.com:jquery/jquery.git</code>	Read-write SSH keys for auth
file	n/a	<code>/Users/James/code/jquery</code>	Read-write Local only

Resources

- ✦ *Pro Git* by Scott Chacon
 - ✦ <http://git-scm.com/book>
- ✦ *Git Happens* by Jessica Kerr
 - ✦ <http://vimeo.com/46010208>
- ✦ *Think Like a Git* by Sam Livingston-Gray
 - ✦ <http://think-like-a-git.net/>