



@Ant:Architect

Git Made Simple

21 Commands to do almost anything in your
favorite DVCS

Overview

- Theory
- Some Things to Know
- Basic Commands
- Working in a Repository
- Working with Remotes
- Tools
- GitHub
- A Little More Advanced
- Resources

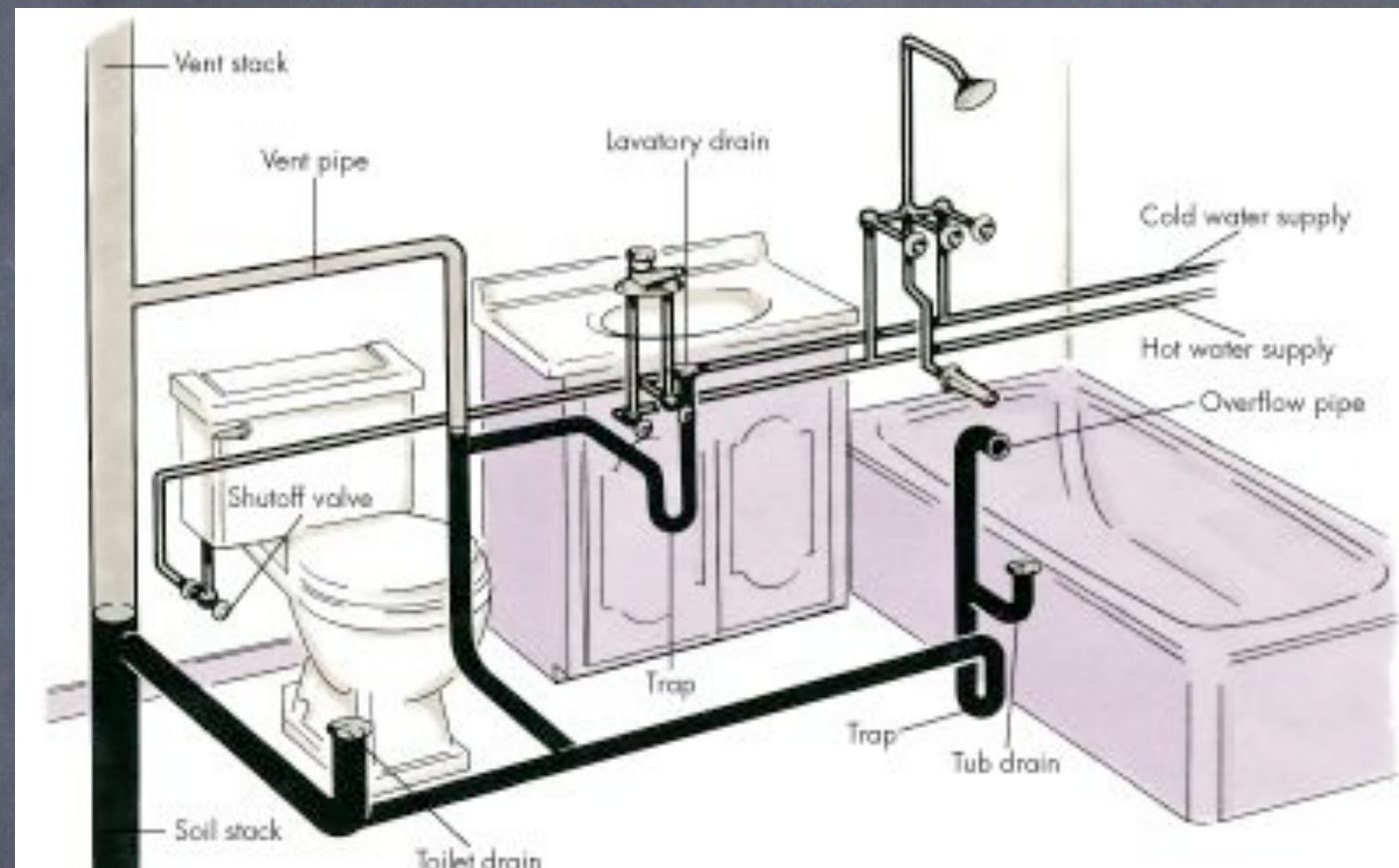
} 21 commands
are here.



Tower
(solid image)

Theory

Objects, Hashes, and Plumbing, oh my!



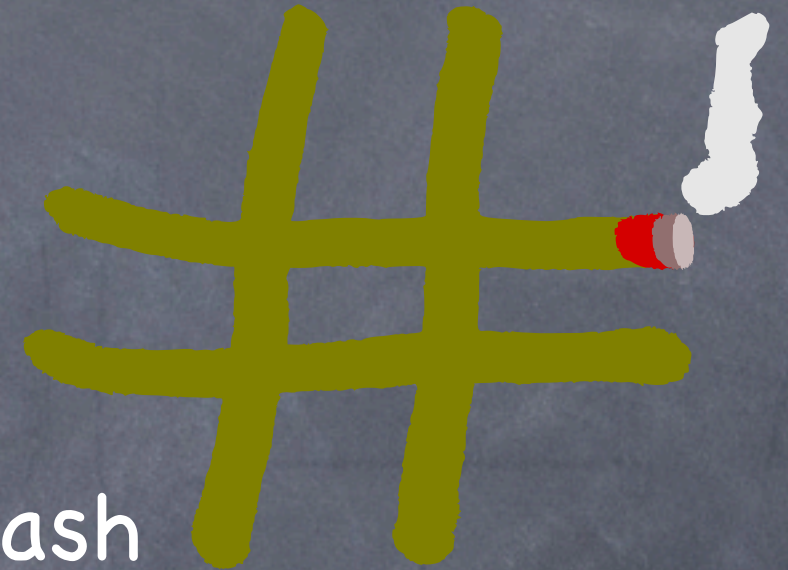
plumbing

Objects

- BLOB
 - The Files
- Tree
 - References other trees or blobs (like a directory)
- Commit
 - References a specific tree
- Tag
 - Named reference to a specific commit. May contain annotated data, including a signed key

The Hash is King

- All objects in Git have a hash
- A hash is a 40 character SHA1 hash
- They are effectively unique
- This is why Git is superdeyduperdey fast
- You can easily shorthand a hash by typing the first few characters of the hash



Some (potentially) Confusing Terms

- Git Directory
 - This is where Git keeps all of its stuff
- Working Directory
 - This is your file system
- Staging (Index)
 - This is where changes are stored before they are committed
- HEAD
 - This is the last commit on any branch



porcelain

Some Things to Know

- Configuring
- Line Endings
- Ignoring Files
- Tooling



Basic Commands

- git init
- git status
- git commit
- git add
- git log
- git show
- git reset
- git clean

A

B

C

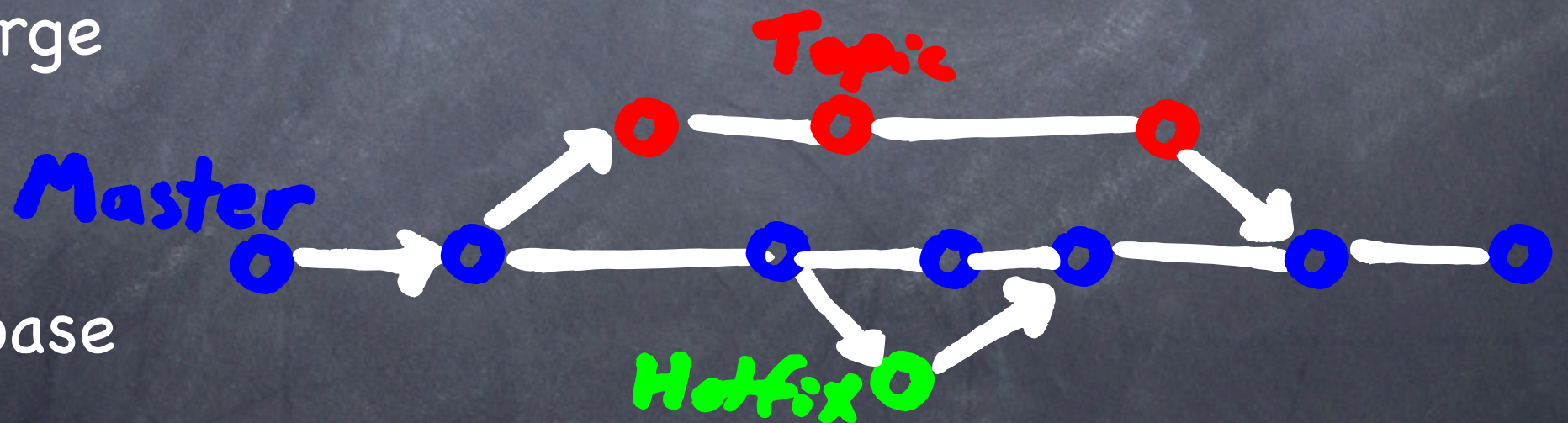
1

2

3

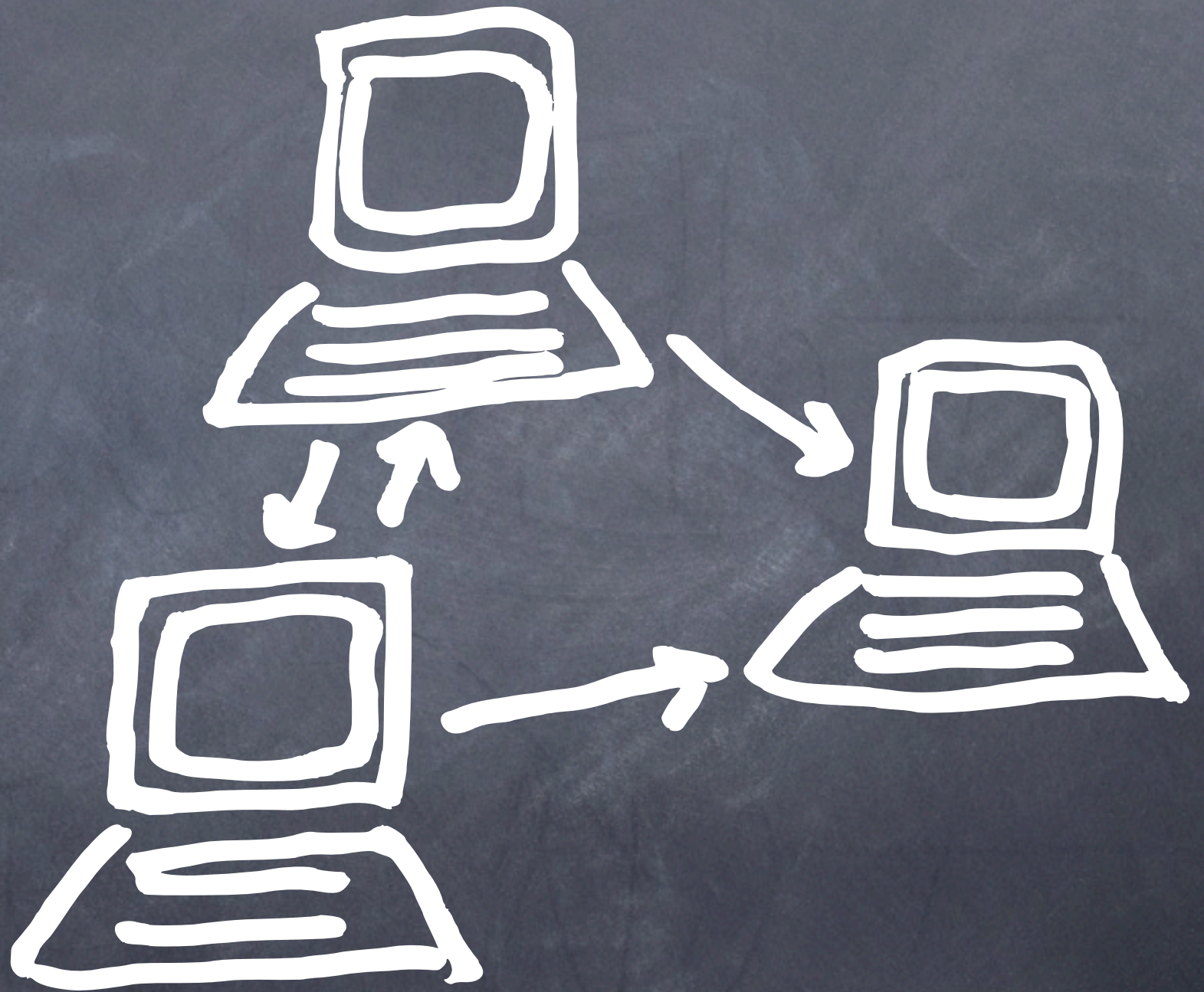
Working in a Repository

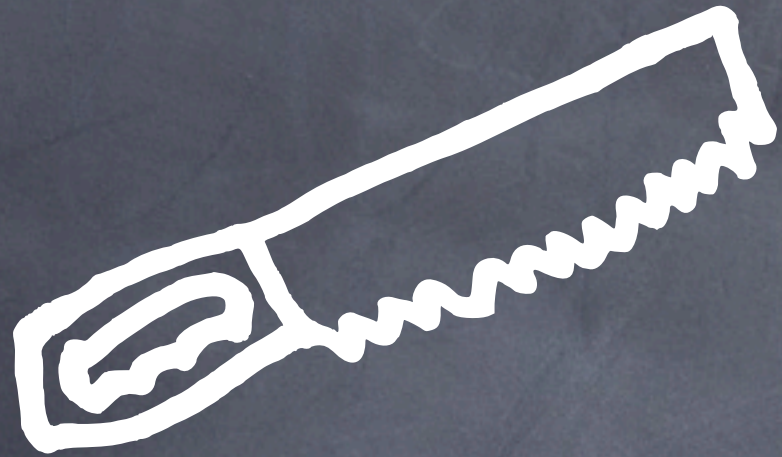
- git branch
- git checkout
- git diff
- git merge
- gitk
- git rebase
- git stash



Working With Remotes

- git clone
- git remote
- git fetch
- git pull
- git push





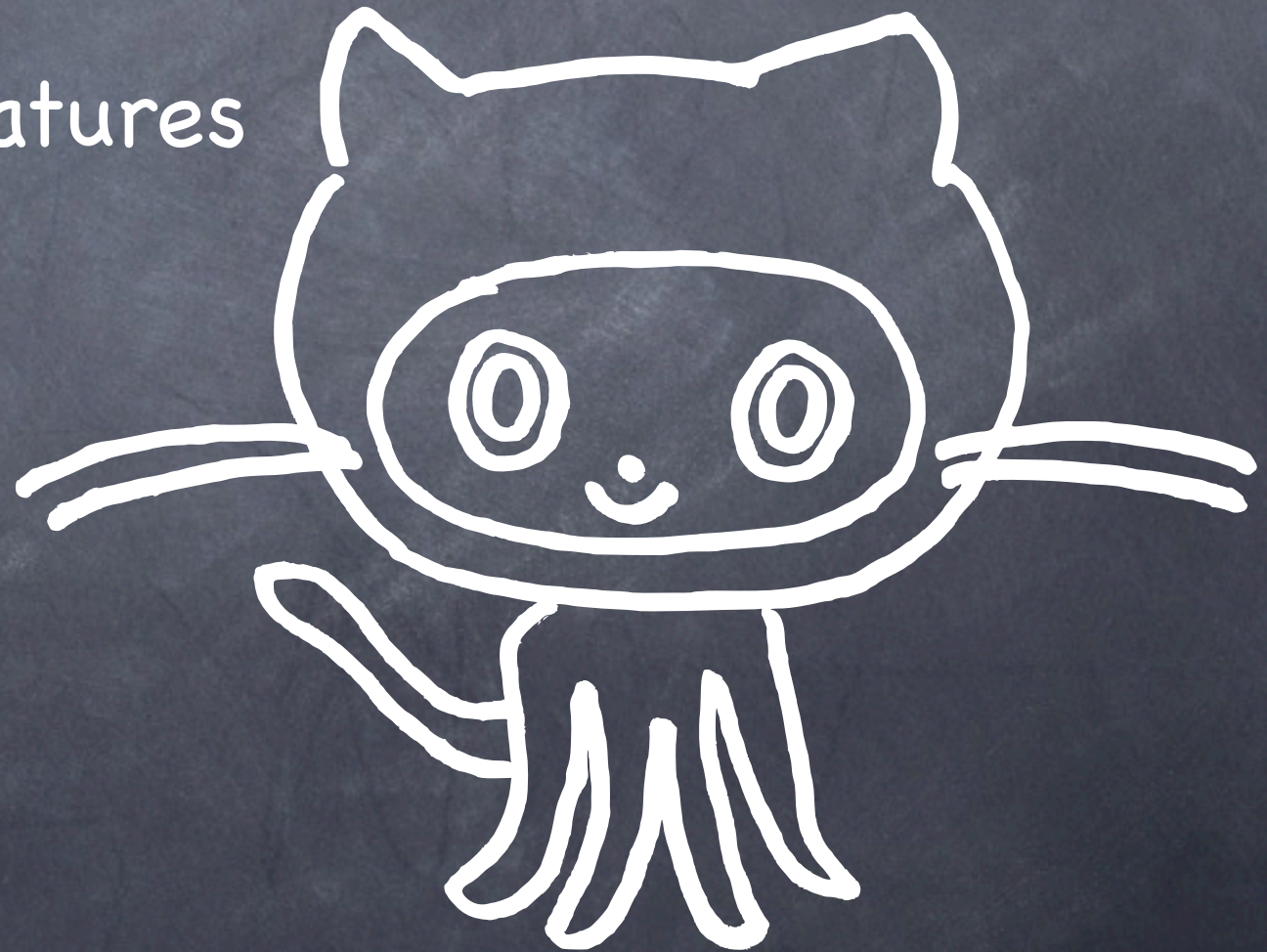
Tools



- gitk – Graphical branch representation
- git gui – a crutch that will result in you never mastering the command line and consequently always being less productive
- git citool – a visual commit manager... sometimes useful if the commit is particularly complex
- TortiseGit – a port of a port of something that wasn't that good in the first place
- GitHub Mac – Just like Github, but it does less and you have to download it

GitHub

- Public and Private Git Repositories
- Many Value Added Features
- Forking
- Pull Requests
- ACL



A Little More Advanced Stuff

- git archive
- git gc
- git bundle
- git am
- git bisect
- git cherry-pick
- git grep
- others





questions

Resources

- [Github](#)
- [Git Commands](#)
- [Git Community Book](#)
- [Pro Git](#)
- [Git Homepage](#)
- [My Github Account](#)
- [This Presentation](#)
- [@AntiArchitect](#) - That's me on the Twitters
- me@michaelmeadows.com - I'd be glad to help