

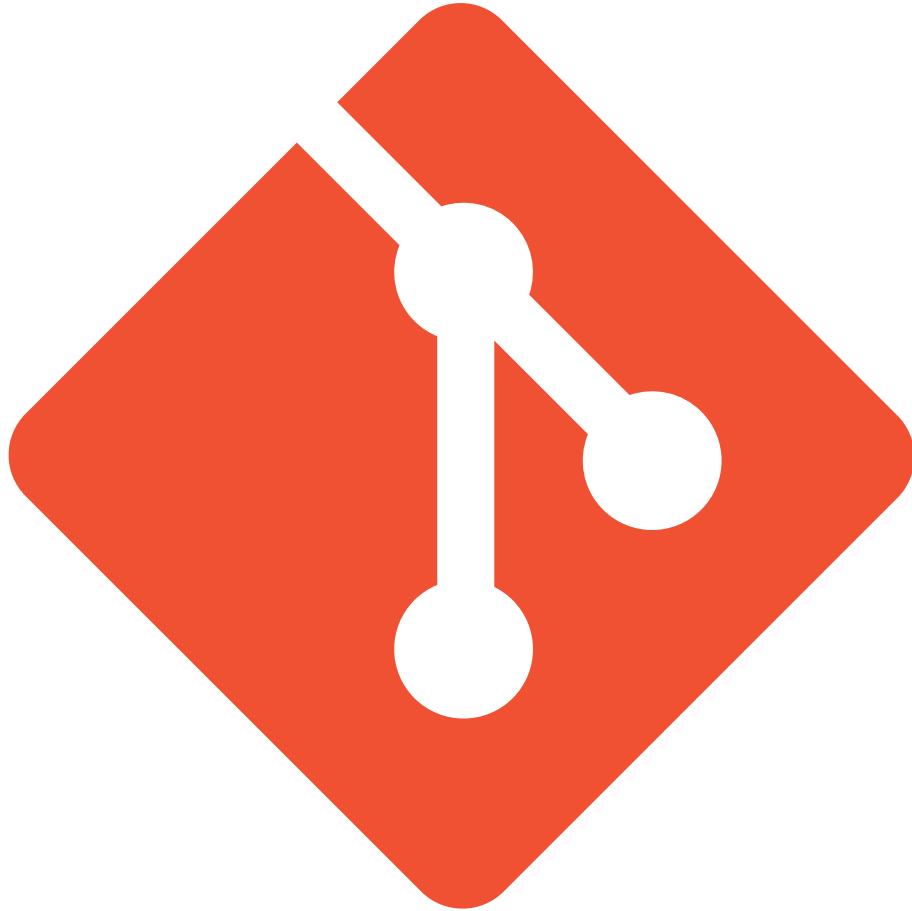


git

Ryan Tolboom

New Jersey Institute of Technology

What is git?



- a version control system
- command line based
- keeps track of files and changes to them
- works locally but can “push” to a remote

What do people think of git?

SULIA EVANS
@b0rk

git discussion bingo

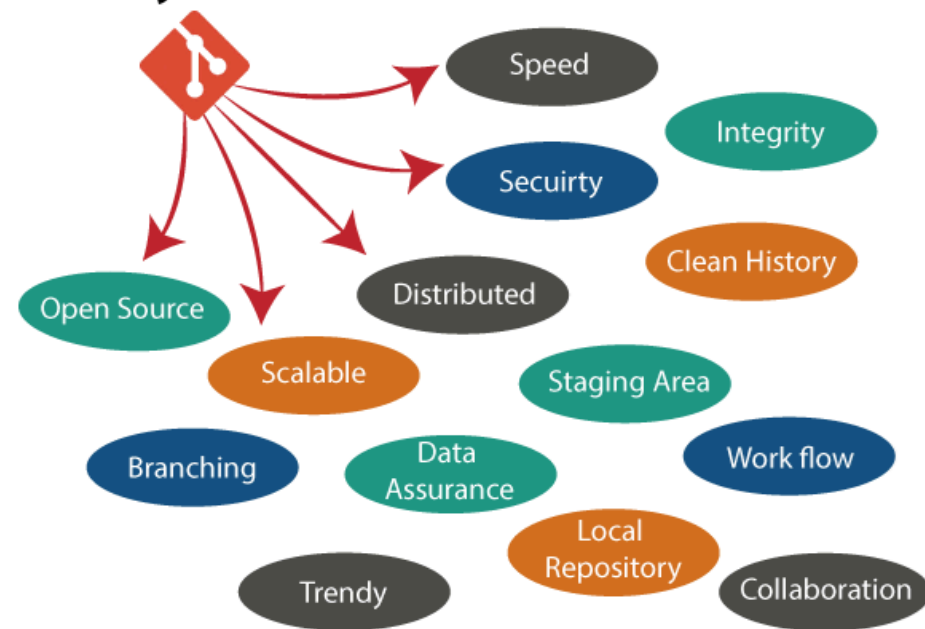
| | | | | |
|----------------------------------|--|--|--|---|
| WTF is detached HEAD state | I hate git | git's design is so elegant | I've used git for 10 years and I have no idea how it works | commits are immutable snapshots |
| just use magit | git is a directed acyclic graph | you have to understand the linux kernel dev workflow | mercurial is better | git is not github |
| subversion was so much worse | I only know 5 commands | a branch is just a pointer to a commit | the CLI is badly designed | you should just read Pro Git |
| rewriting history is bad | just spend 15 minutes learning git's internals | something about "porcelain" | merge sucks, only use rebase | rebase sucks, only use merge |
| I just do not care how git works | content addressed storage | subversion was better | something about Linus Torvalds | I just delete my git repo if I mess it up |

<https://wizardzines.com/comics/git-discussion-bingo/>

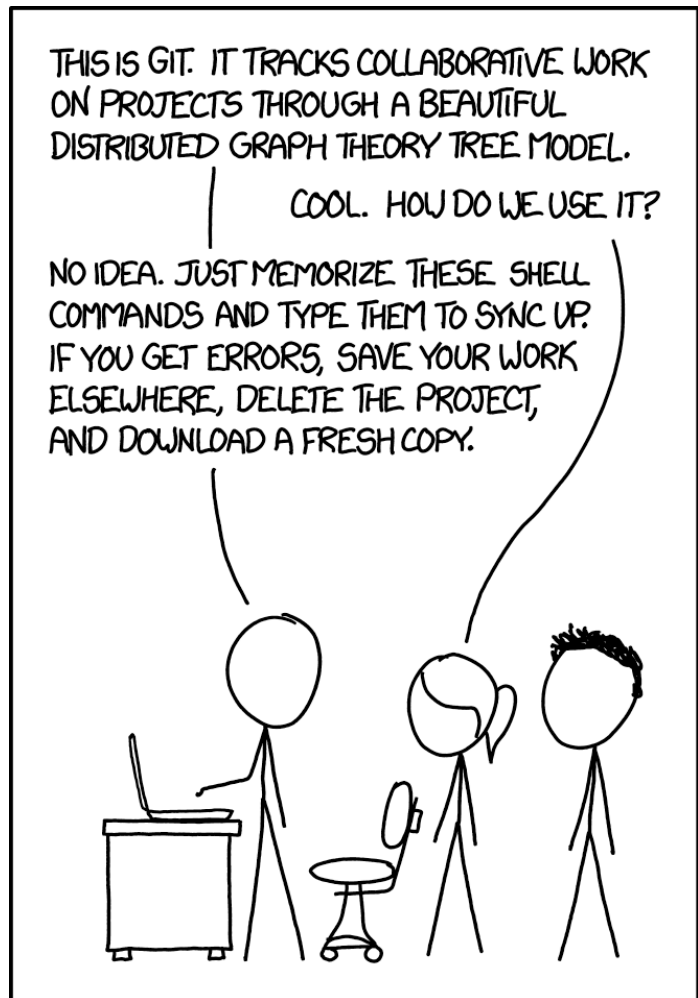
Why do we need it?

- make things less brittle
- keep track of things
- find out who changed things

Why Git?

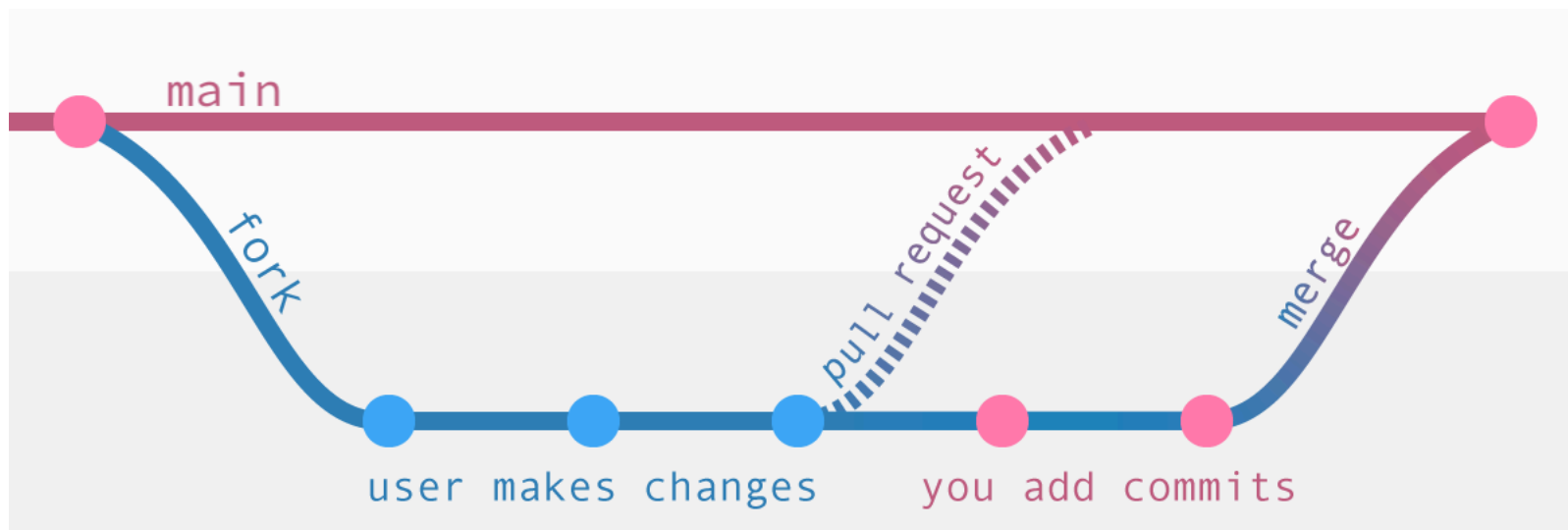


How is it used?



- create a repo: `git init` (local or remote, GitHub can do this for you)
- clone the repo: `git clone`
- add files you want tracked:
`git add`
- commit changes: `git commit`
- push changes: `git push`

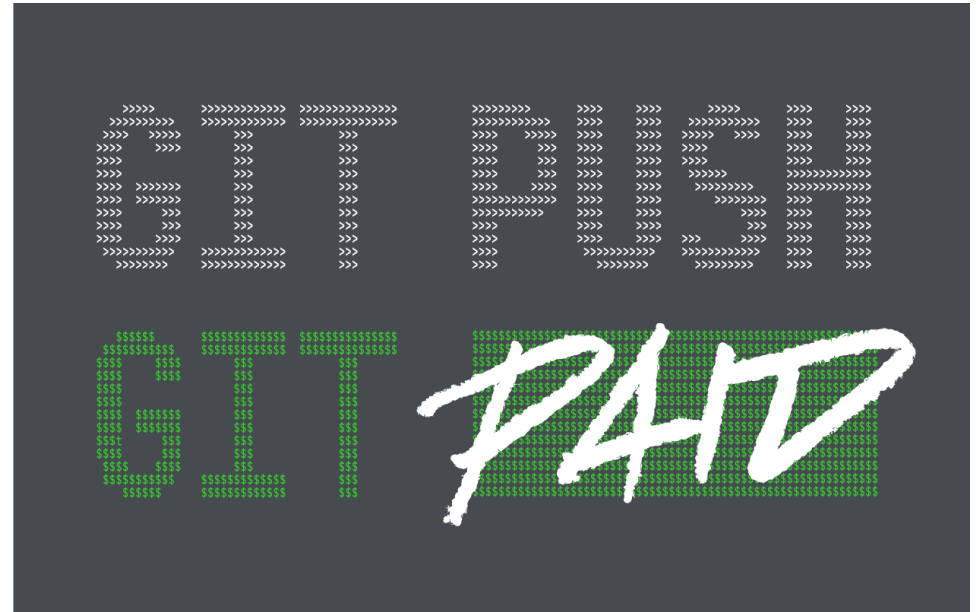
How do I collaborate with git?



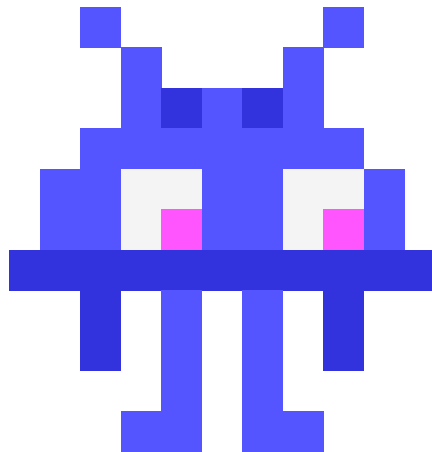
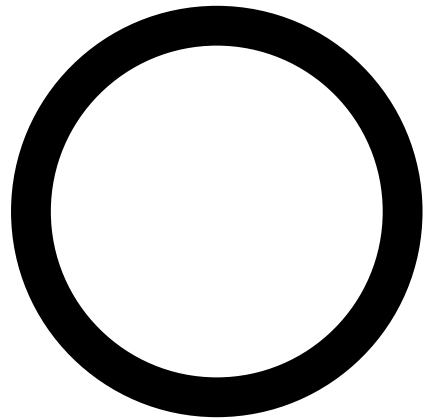
- fork a repo (create a branch)
- make your changes
- submit a PR
- PR gets merged (hopefully)

Why are we talking about git in a sysadmin class?

- configurations a typically lots of little files we need to track
- Docker Compose projects can be tracked in git
- Kubernetes projects can be tracked in git
- git helps with change management



git services



- [GitHub](#)
- [GitLab](#)
- [SourceHut](#)
- [Radicle \(p2p, v1.0 just came out!\)](#)