

# git

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### 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 @bork

#### git discussion bingo

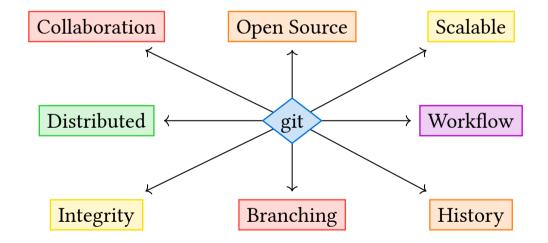
WTF is detached HEAD state	I hate git	git's design is so elegant	I've used git for 10 years and I have no idea how it works	commits are immutable snapshots
just use magit	git is a directed acyclic graph	you have to understand the linux kernel dev workflow	mercurial is better	git is not github
subversion 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/

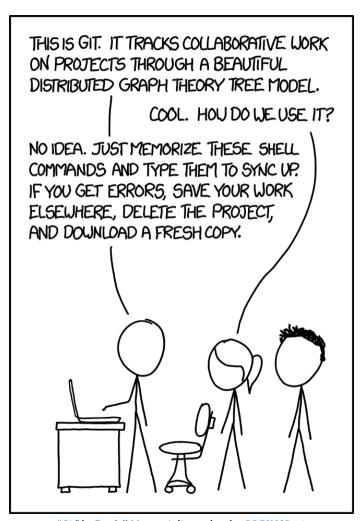
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#### Why do we need it?

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



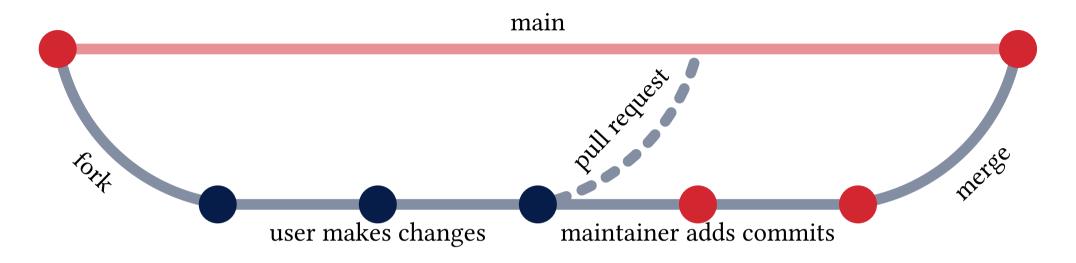
#### How is it used?



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- 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)

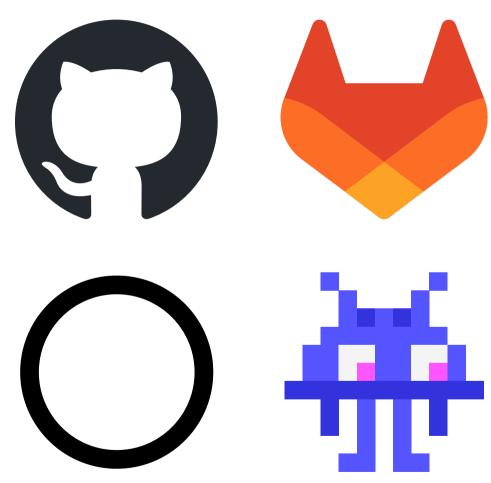
# Why are we talking about git in a sysadmin class?

- 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-push-git-paid.svg" by Ryan Tolboom is licensed under CC BY-NC 4.0

#### git services



GitHub, GitLab, SourceHut, and Radicle logos are used under fair use.

- <u>GitHub</u>
- GitLab
- SourceHut
- Radicle (p2p, v1.0 just came out!)