

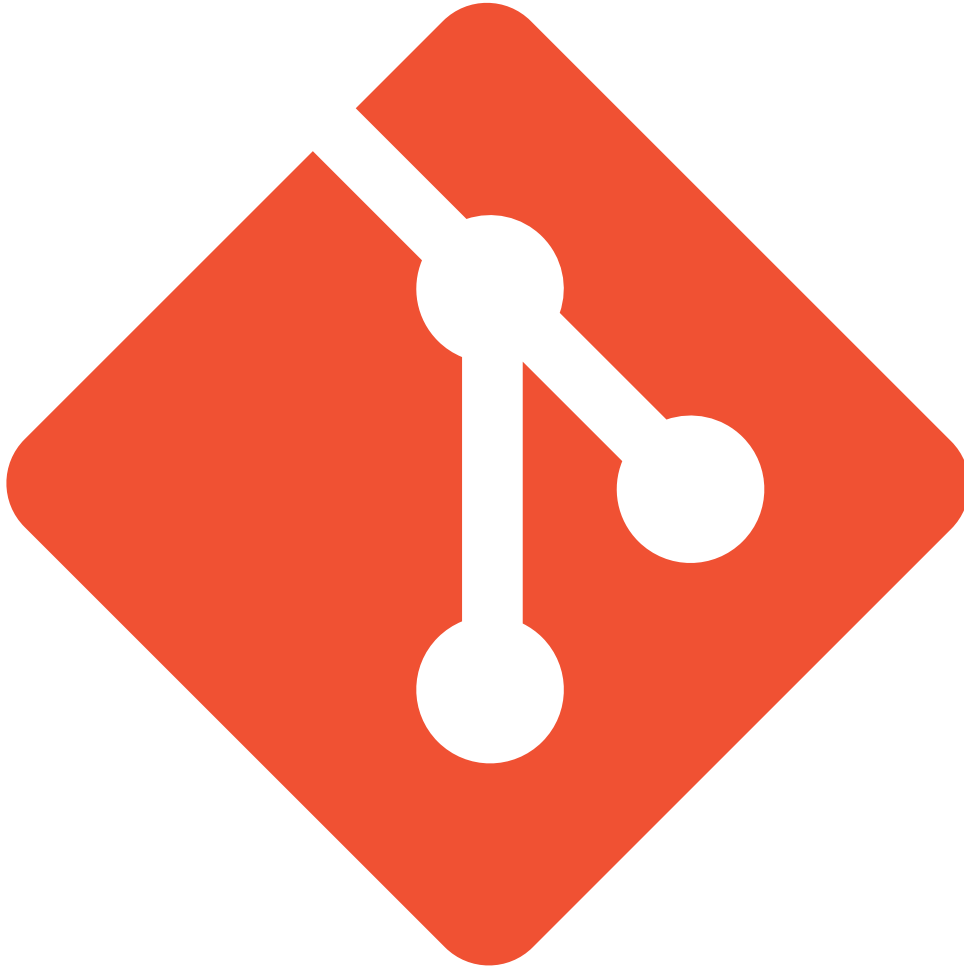
git

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# What is git?



[git logo](#) is used under fair use

- 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?

JULIA EVANS  
@b0rk

## git discussion bingo

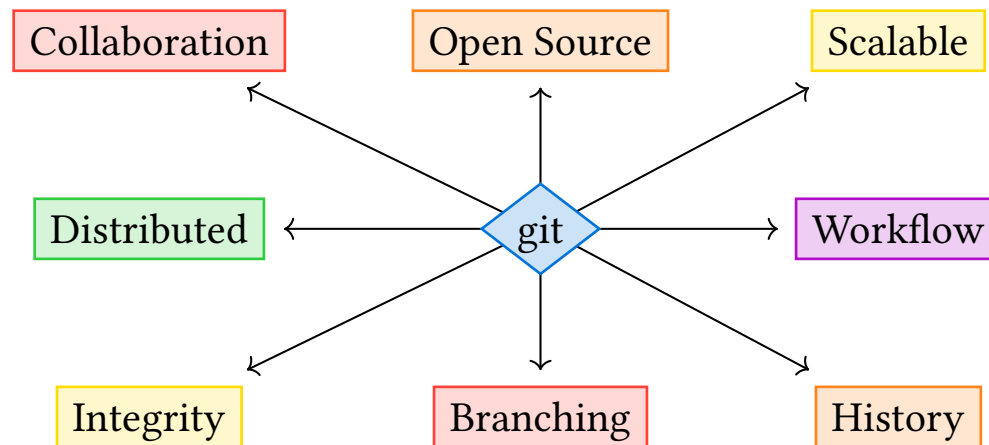
|                                  |  |  |  |   |
|----------------------------------|--|--|--|---|
| WTF is detached HEAD state       | I hate git                                     | git's design is so elegant                           | I've used git for 10 years and I have no idea how it works | 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/>

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# Why do we need it?

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



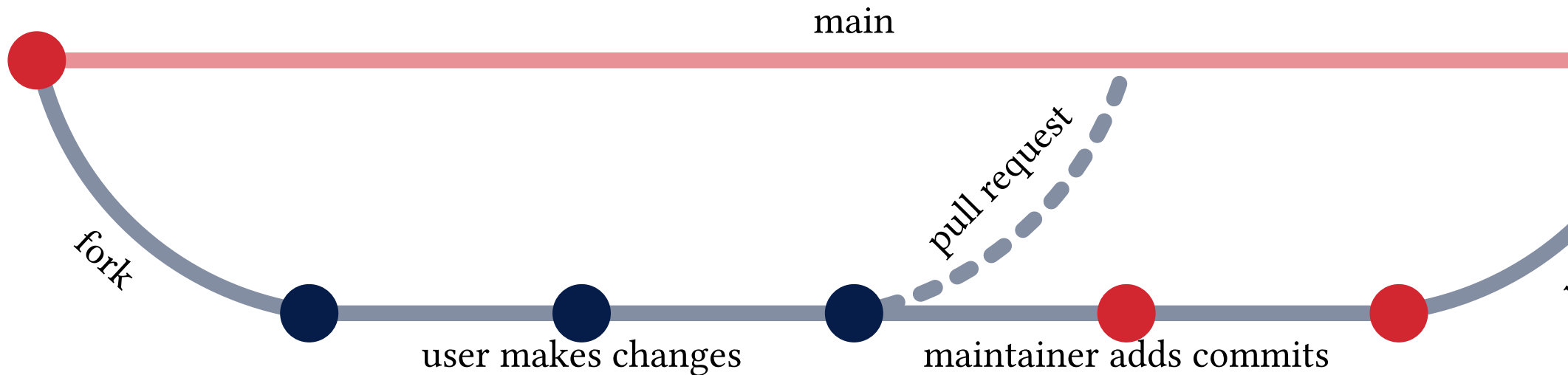
# How is it used?



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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)

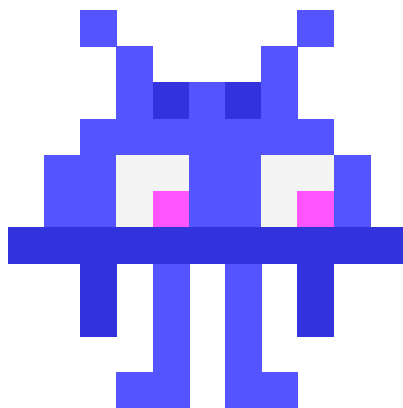
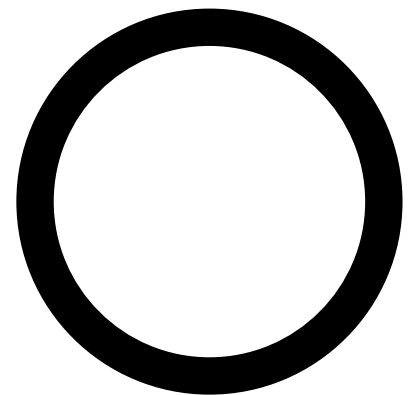
# Why are we talking about git in a sysadmin class?

- 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](#)
- [Radicale \(p2p, v1.0 just came out!\)](#)

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