Distributed Version Control



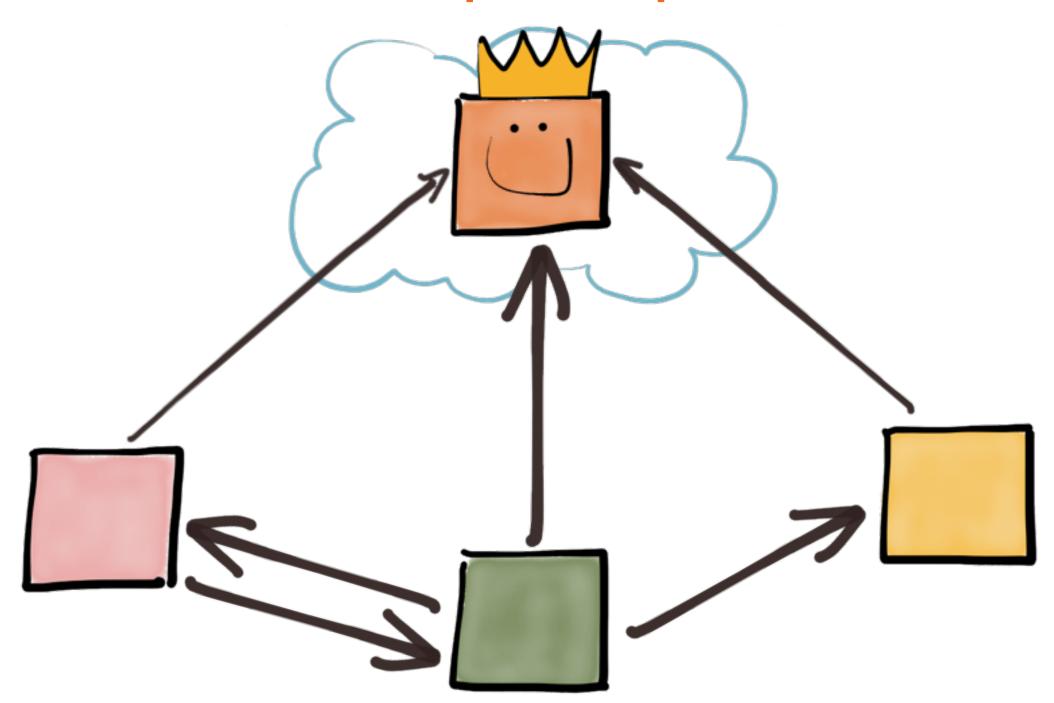
Paolo Perrotta

@nusco

...a Distributed Revision Control System



Multiple Repos

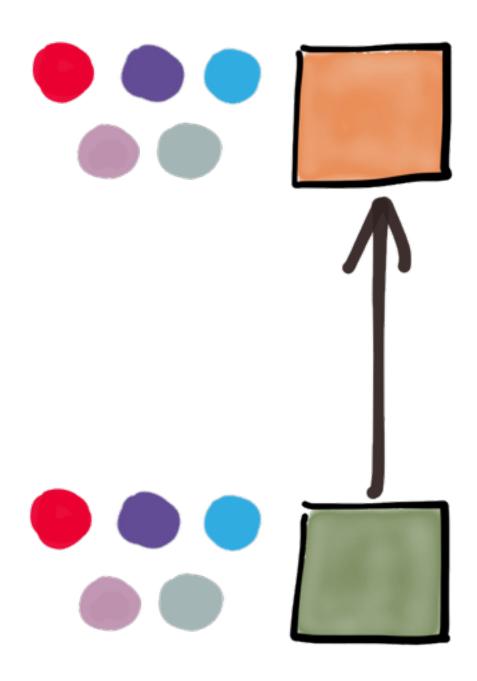


Like a local branch, a remote branch is just a reference to a commit.

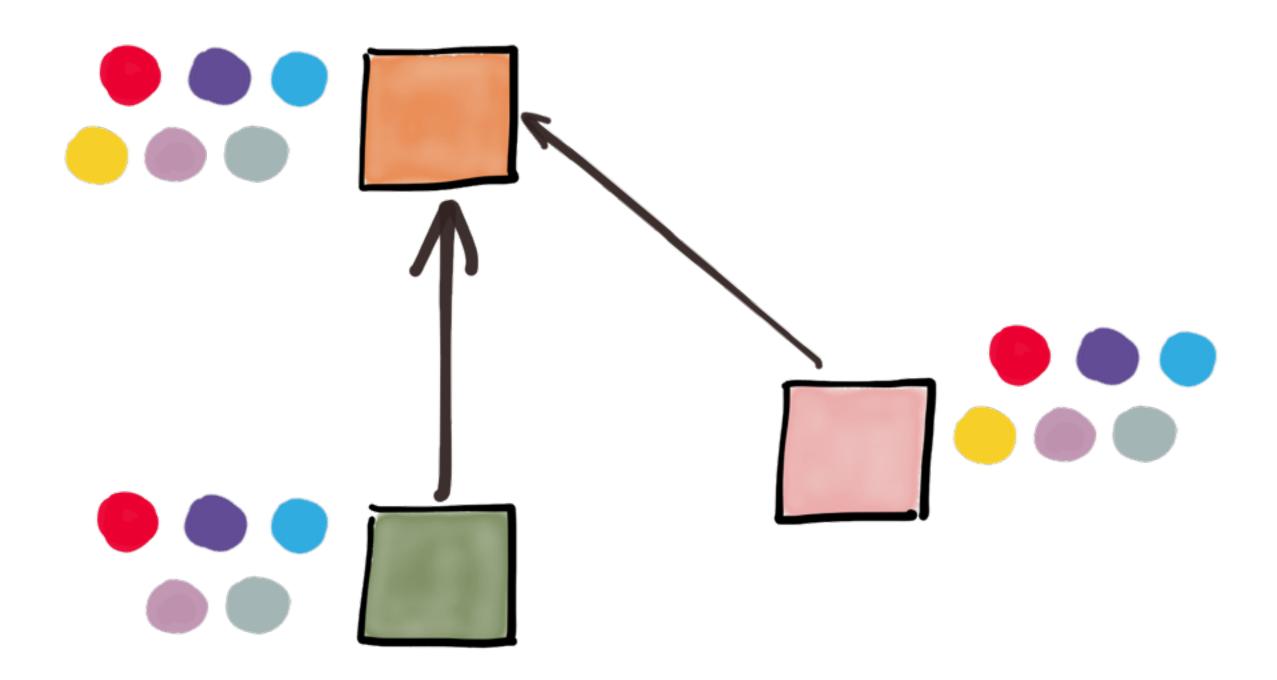
"Apple Pie"

23991897e13e47ed0adb91a0082c31c82fe0cbe5

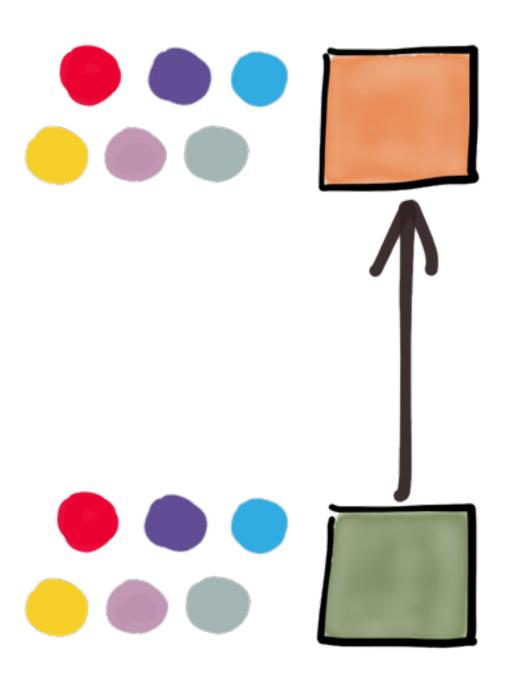
Synchronizing Repos



Synchronizing Repos



Synchronizing Repos

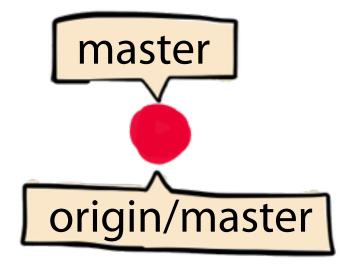


Synchronizing with a Remote







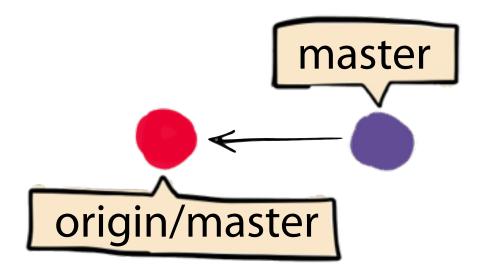


Adding a Commit

origin

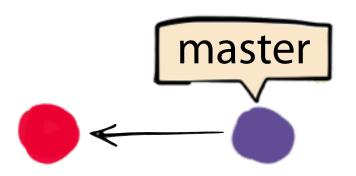


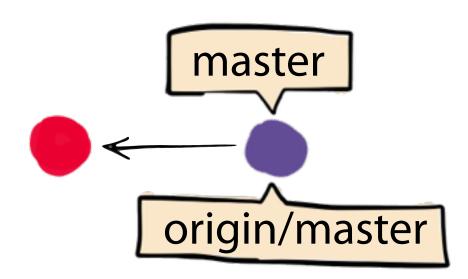




git push

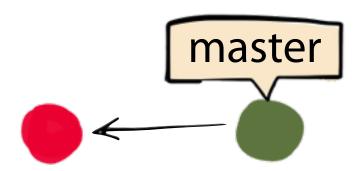
origin

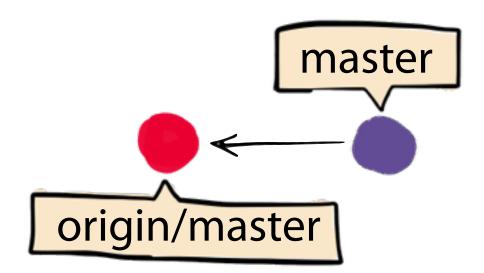




Conflict!

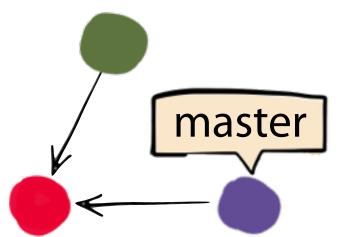
origin

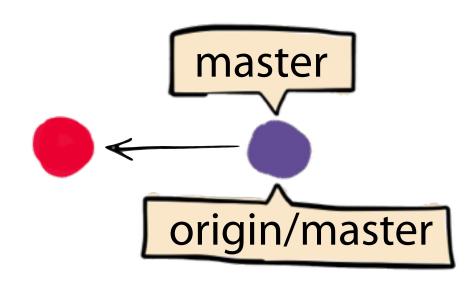




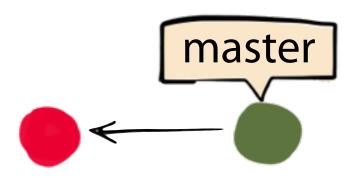
git push -f

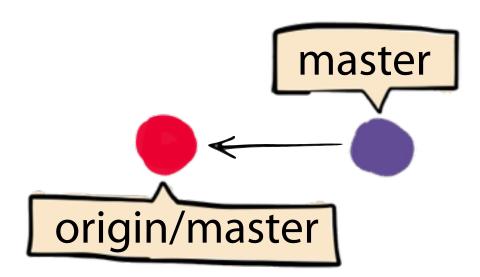
origin





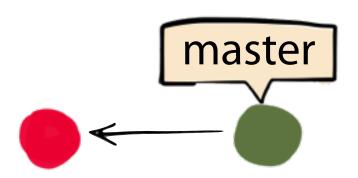
origin

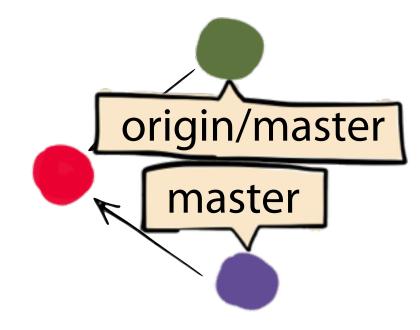




git fetch

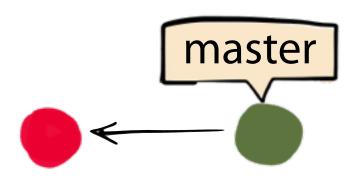
origin



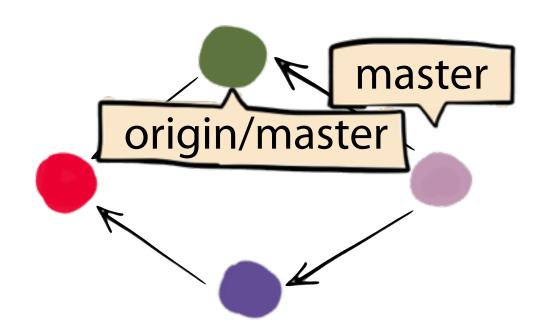


git merge origin/master

origin

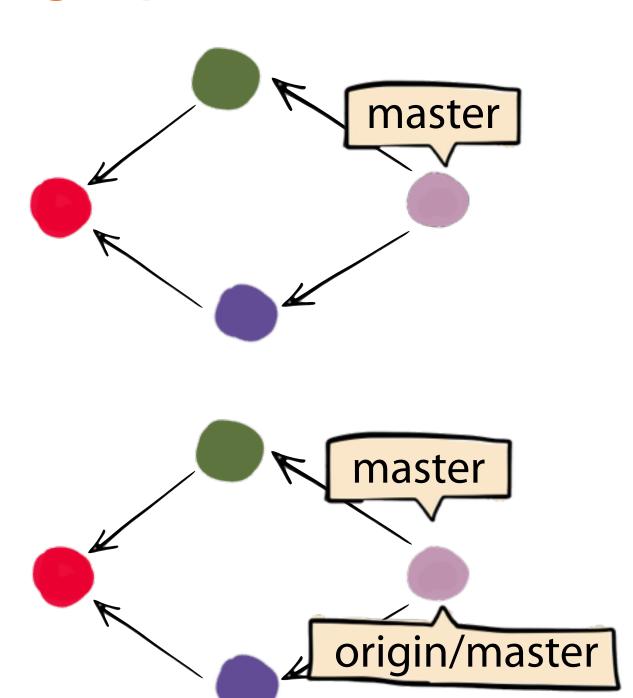




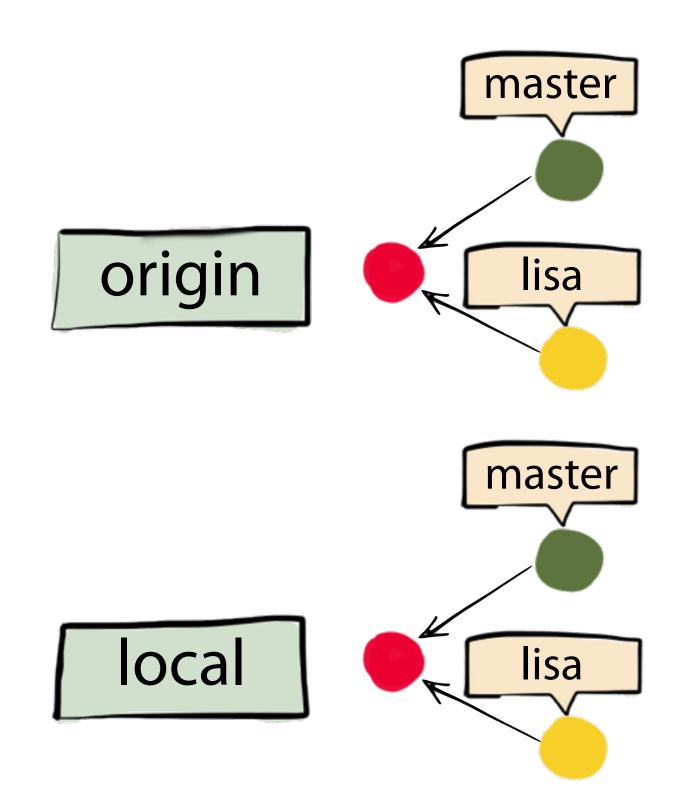


git push

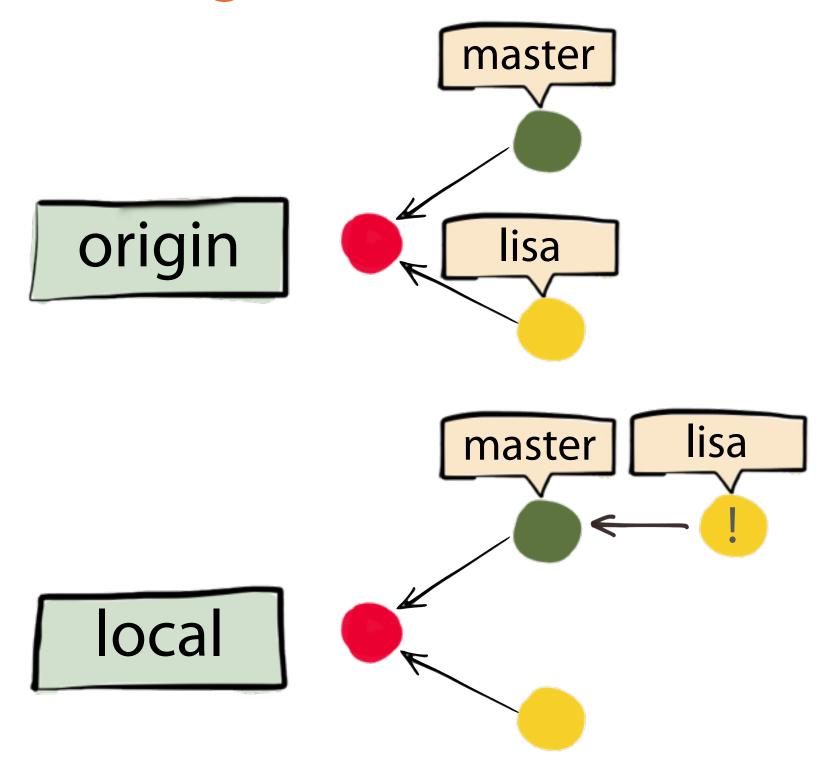
origin



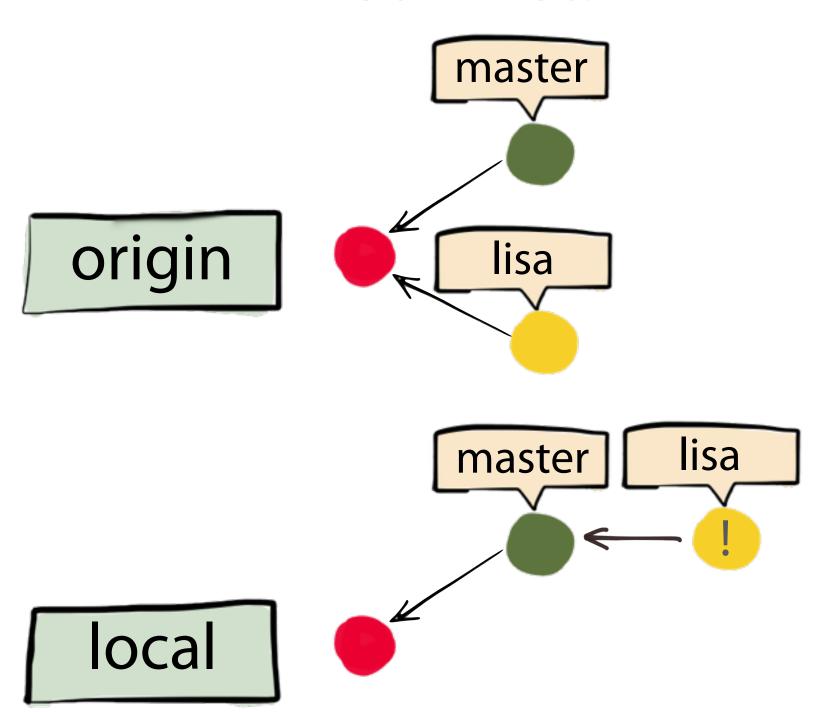
You "pull", then you "push".



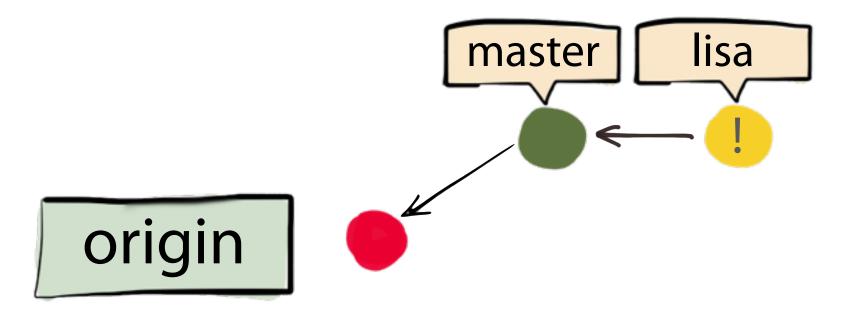
git rebase master

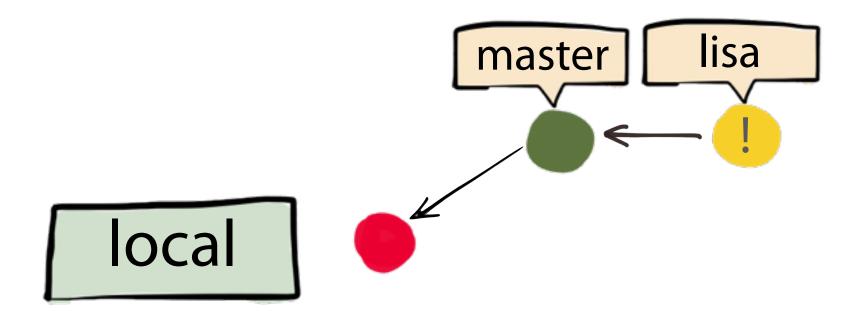


Conflict!

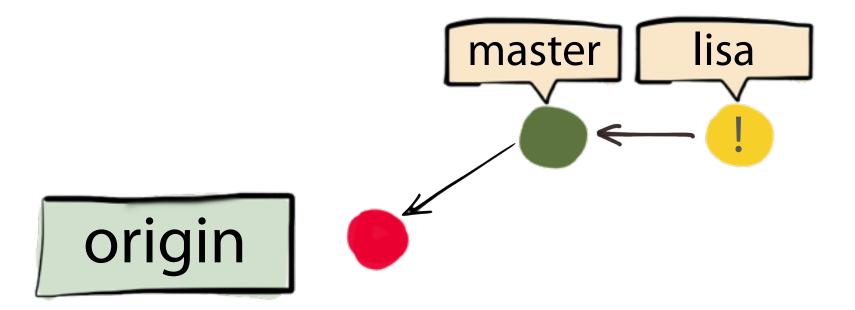


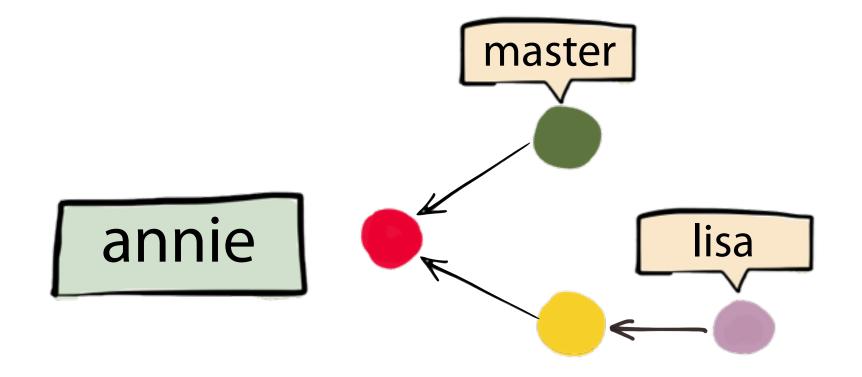
Solve the Conflict





Another User

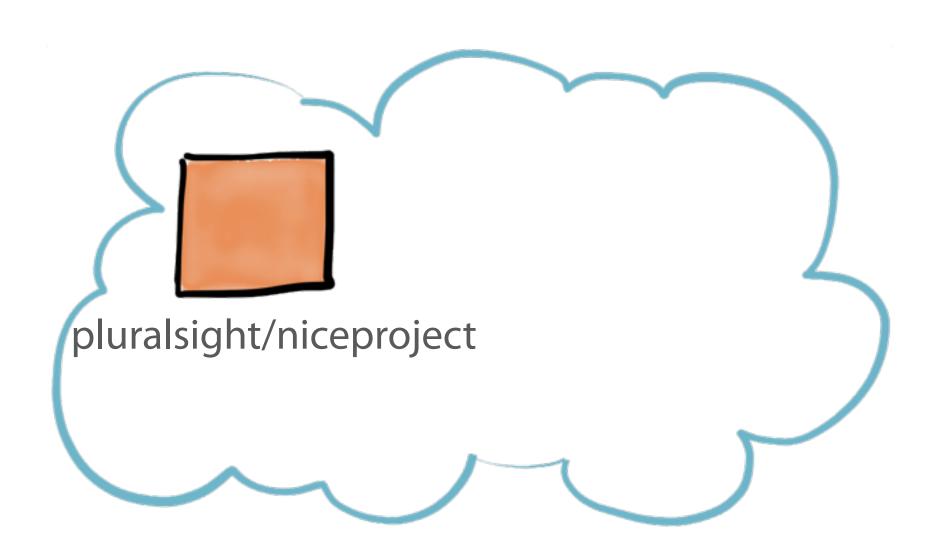


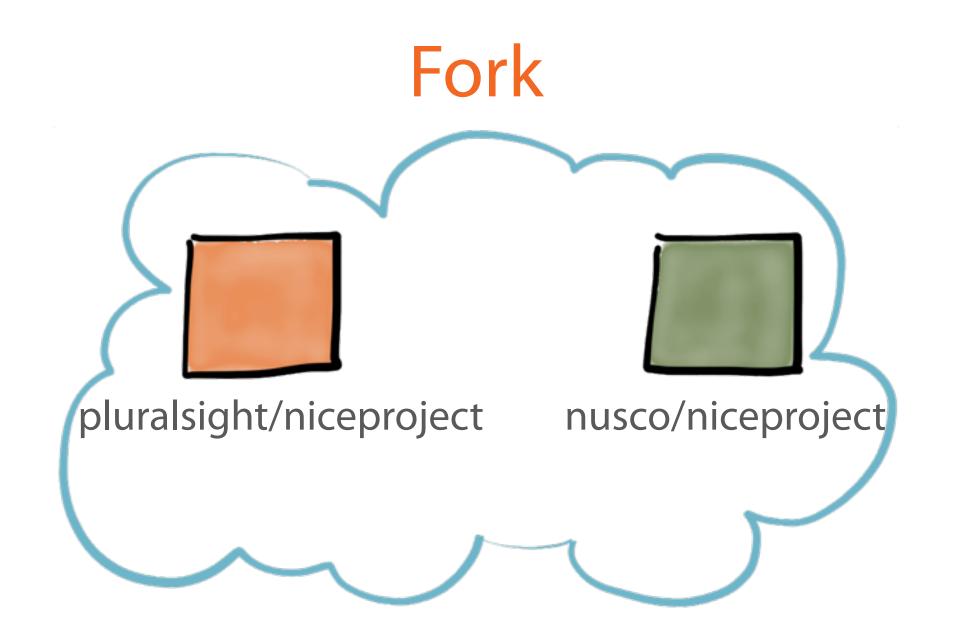


Never rebase shared commits.

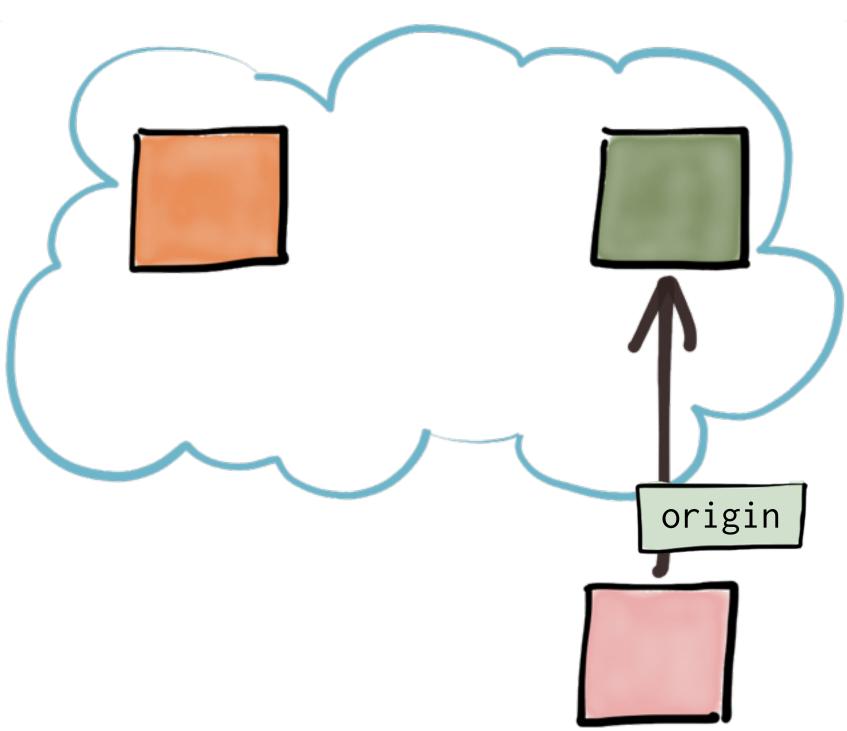
GitHub Features



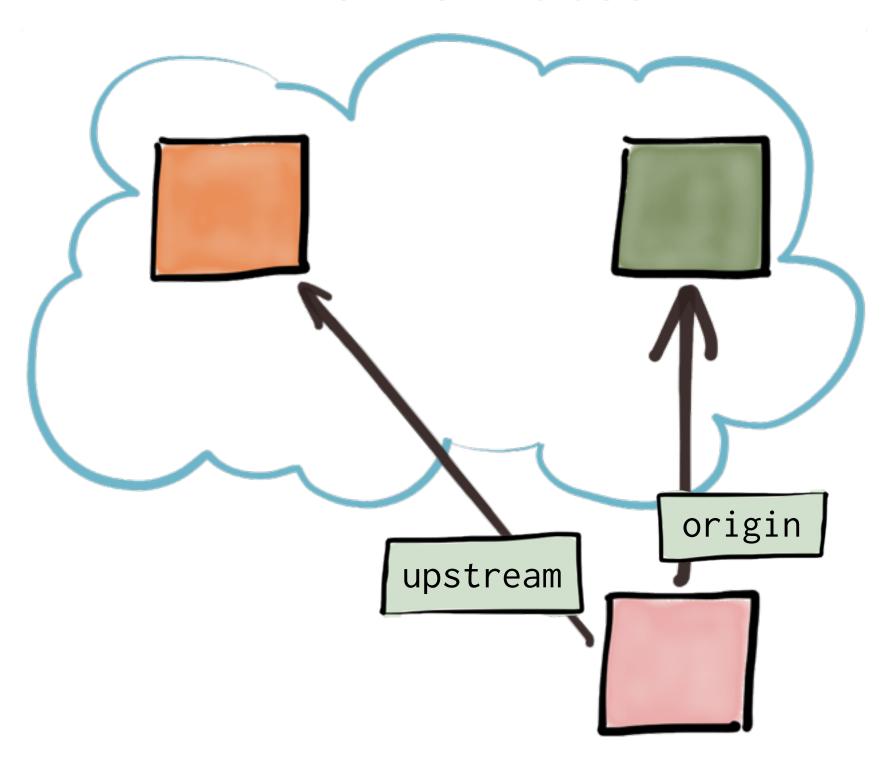




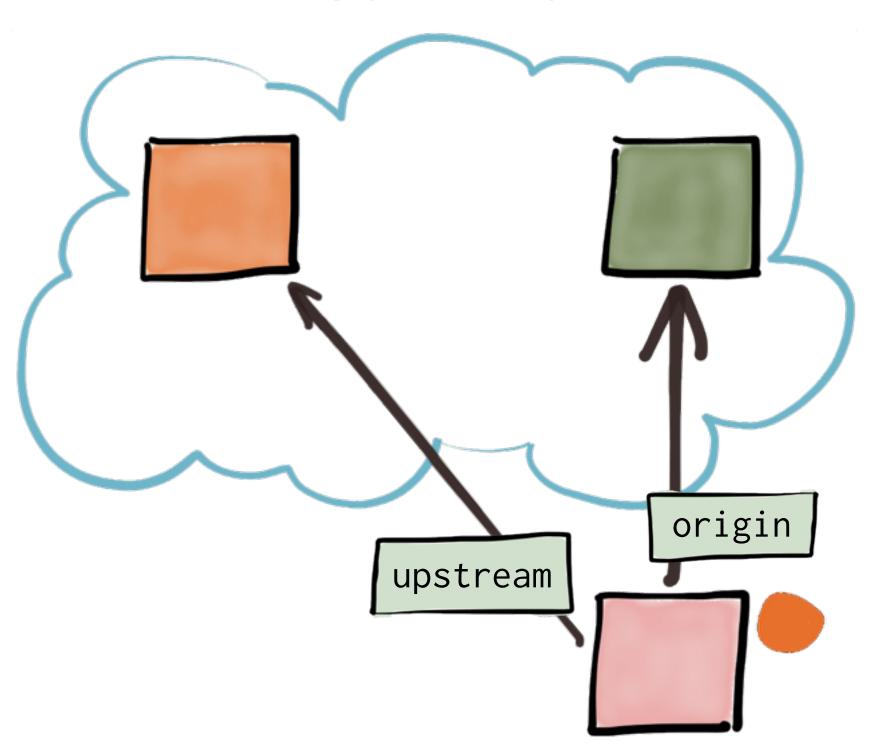
Clone



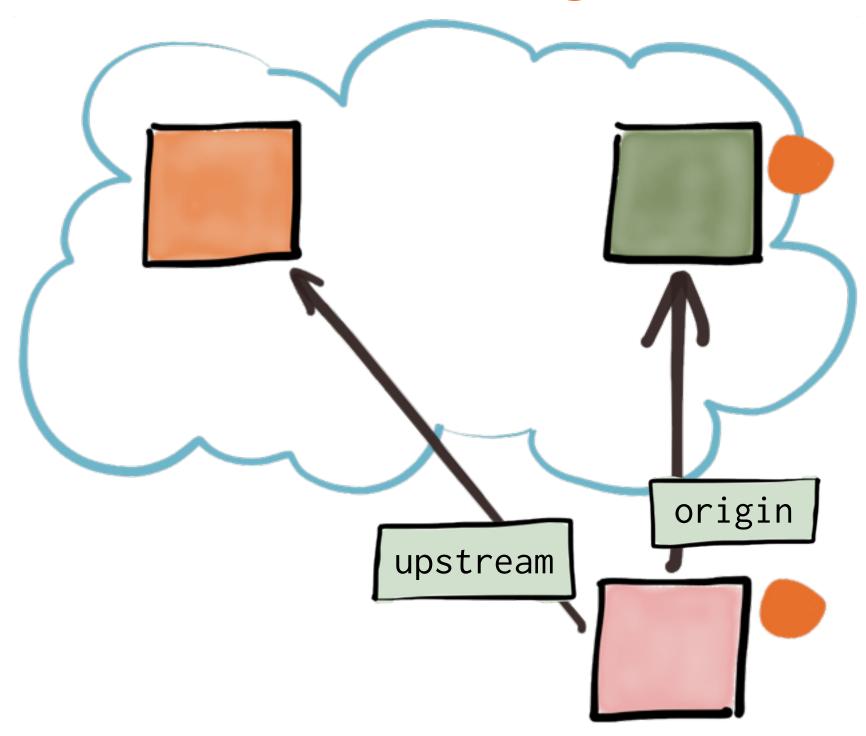
Two Remotes

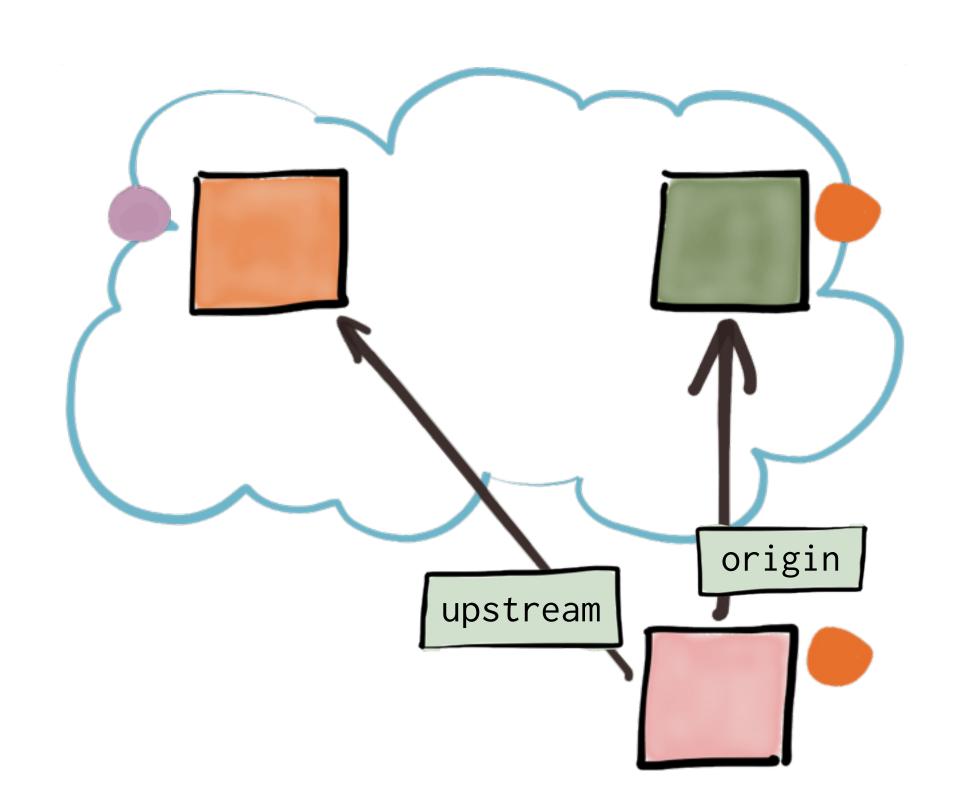


Commit

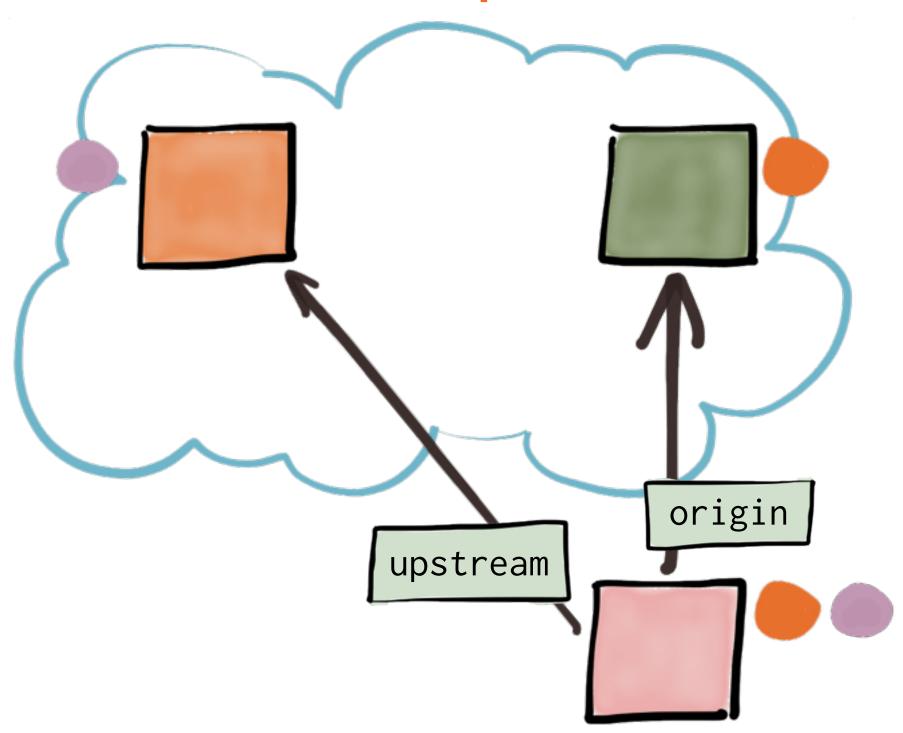


Push to Origin

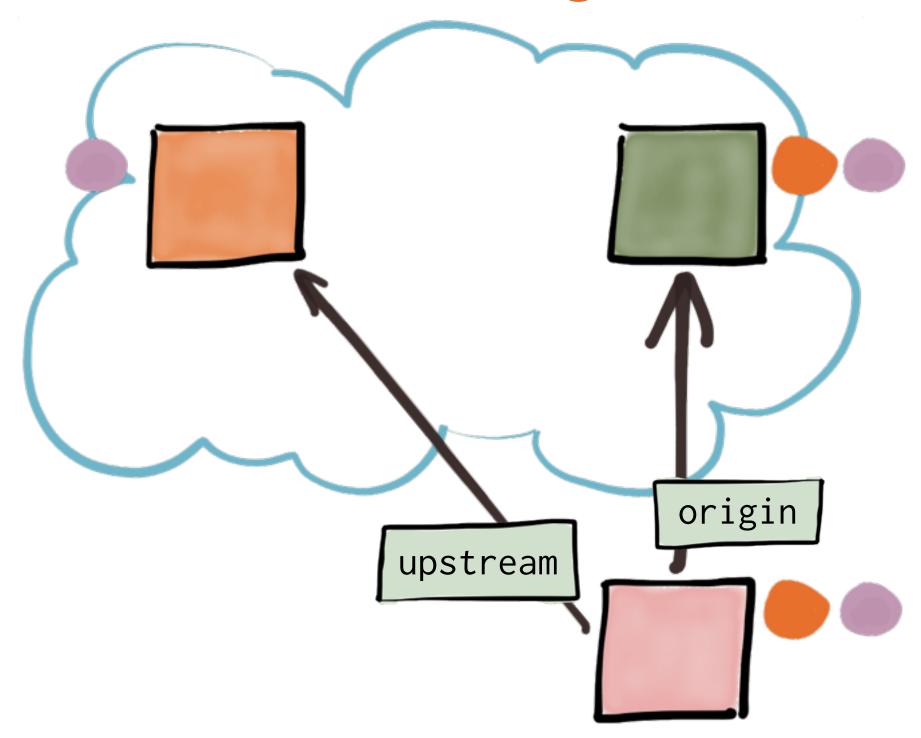




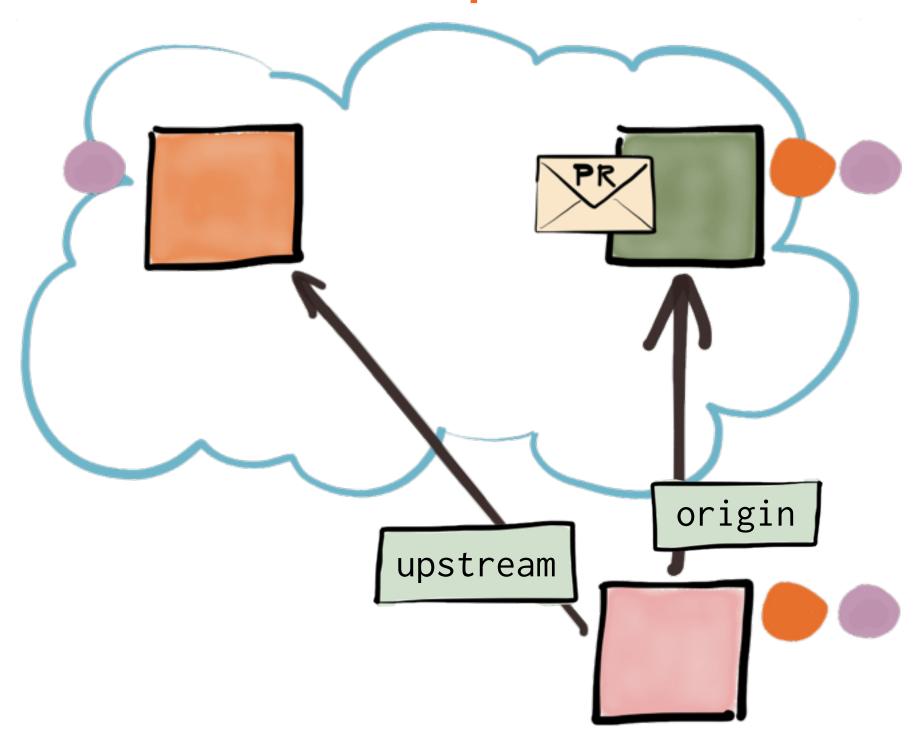
Pull from Upstream



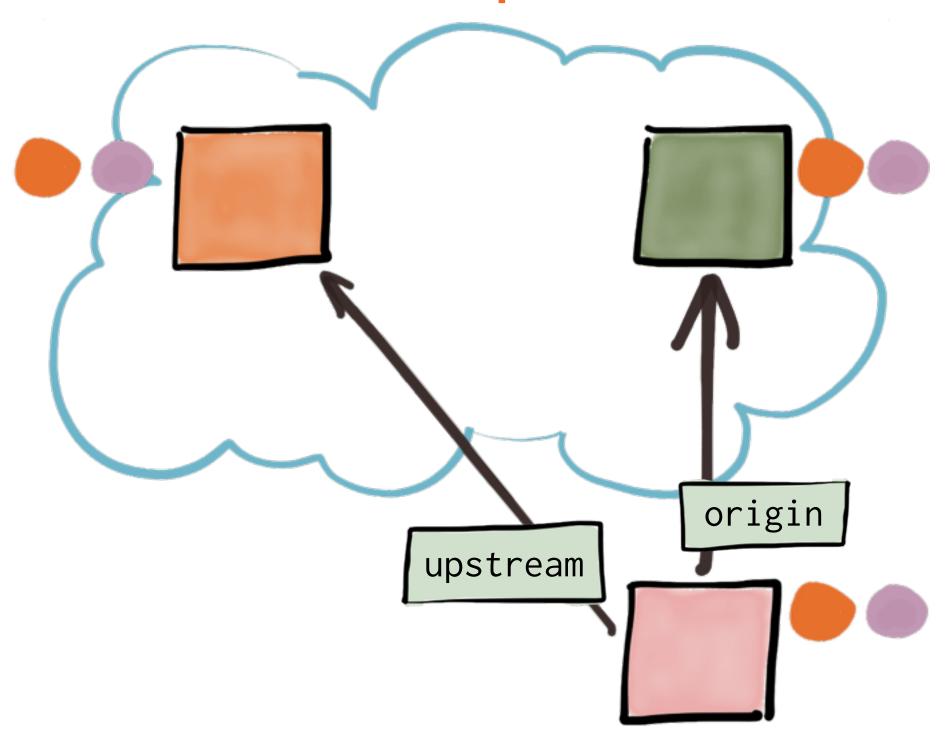
Push to Origin



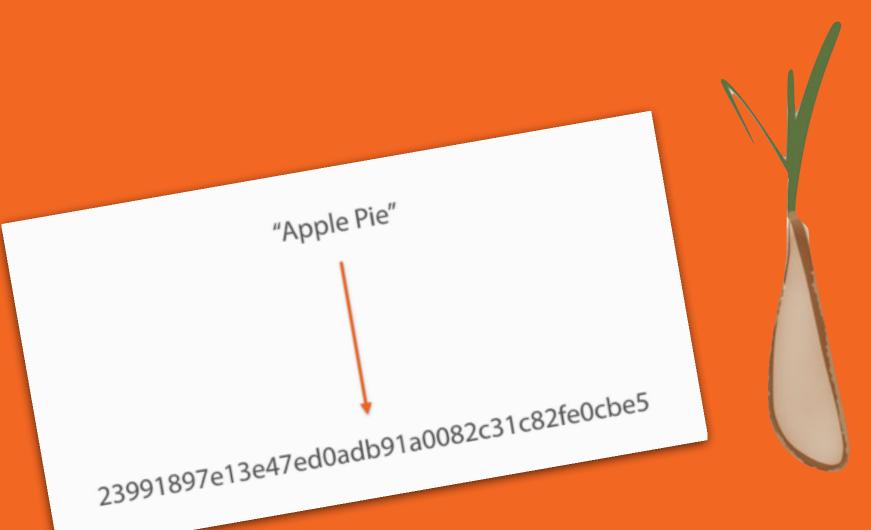
Pull Requests



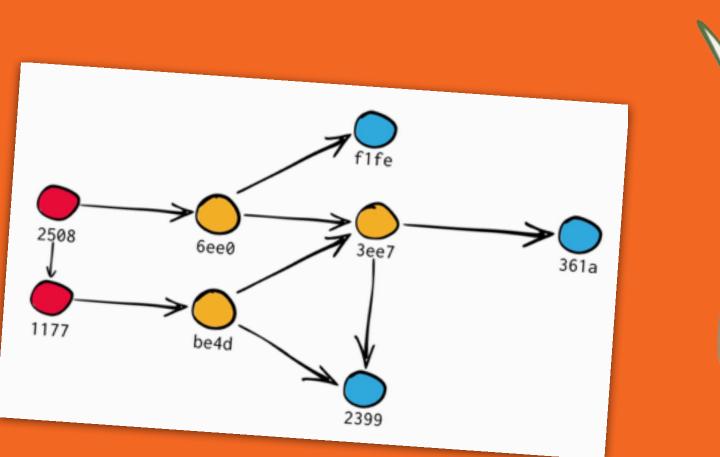
Pull Requests



...a Persistent Map

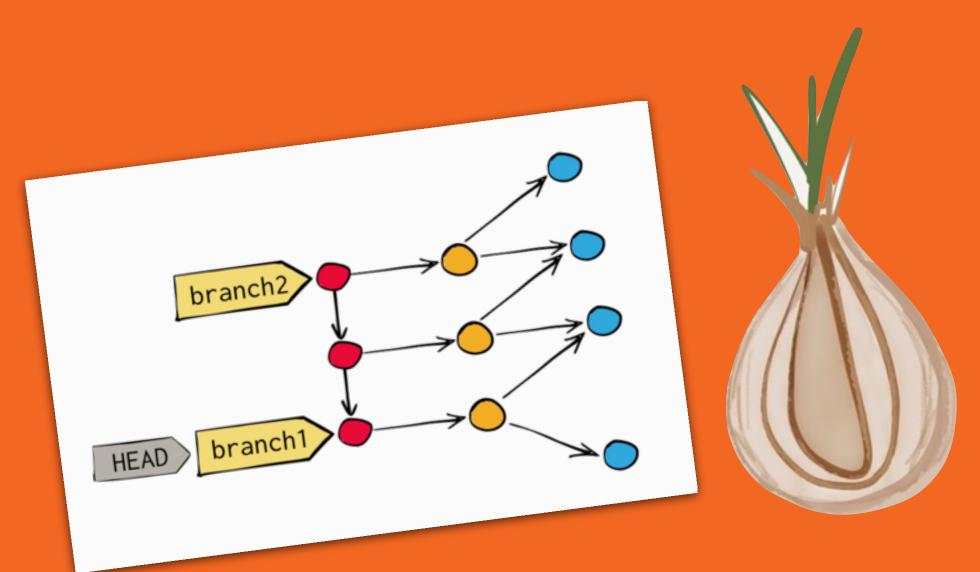


...a Stupid Content Tracker





...a Revision Control System



...a Distributed Revision Control System

