

# Links

- this: [//nasinf001/abajric/git-doc.git](https://nasinf001/abajric/git-doc.git)
- Demo: [//nasinf001/abajric/git-demo.git](https://nasinf001/abajric/git-demo.git)
- Pro Git: <http://git-scm.com/book/>
- Branching Model:  
<http://nvie.com/posts/a-successful-git-branching-model/>
- Tutorial: <https://www.atlassian.com/git/tutorial>

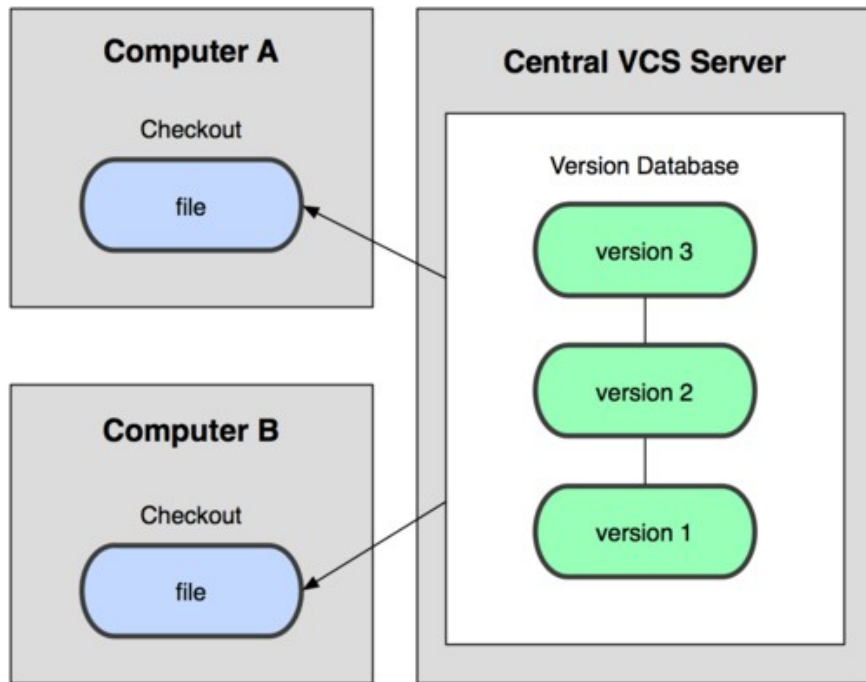
# Vorteile gegenüber SVN

- Verteilt
- Schnell
- Branch/merge einfacher
- Non-linear History
- workflow
- simple

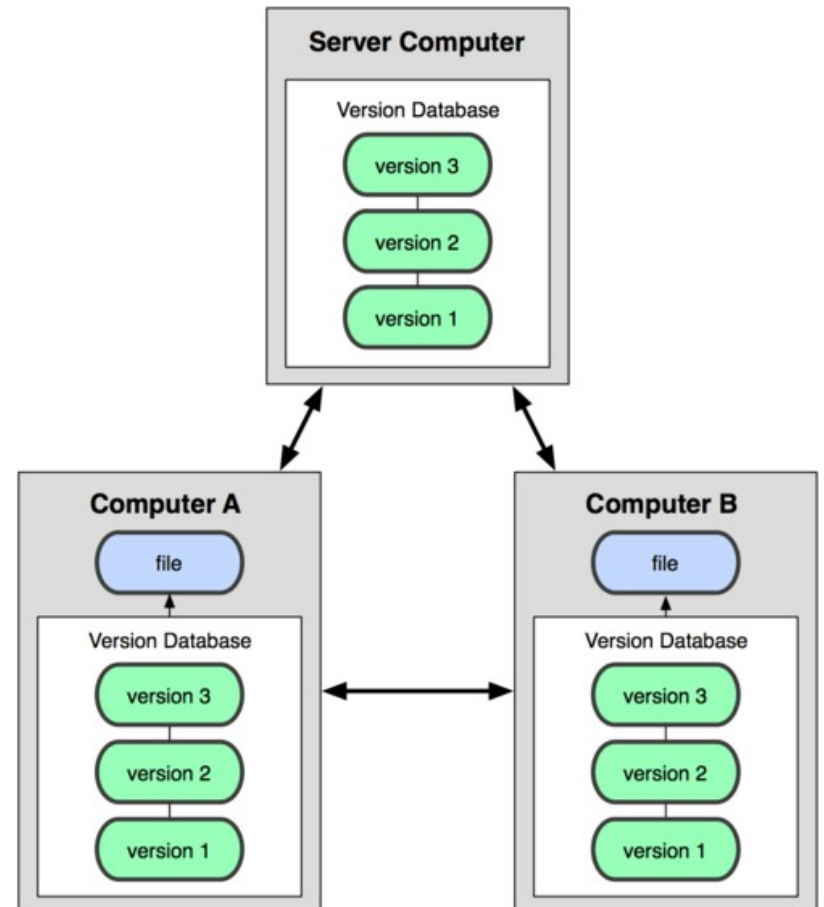
# Nachteile gegenüber SVN

- komplexer
- Repositories sind grösser (nicht immer z.B. Mozilla)
- Kein Checkout von Unterordnern
- Kein Access Control
- Schlechterer GUI support
- Binäre Dateien (Grösse, history split)

# basics - distributed



centralized



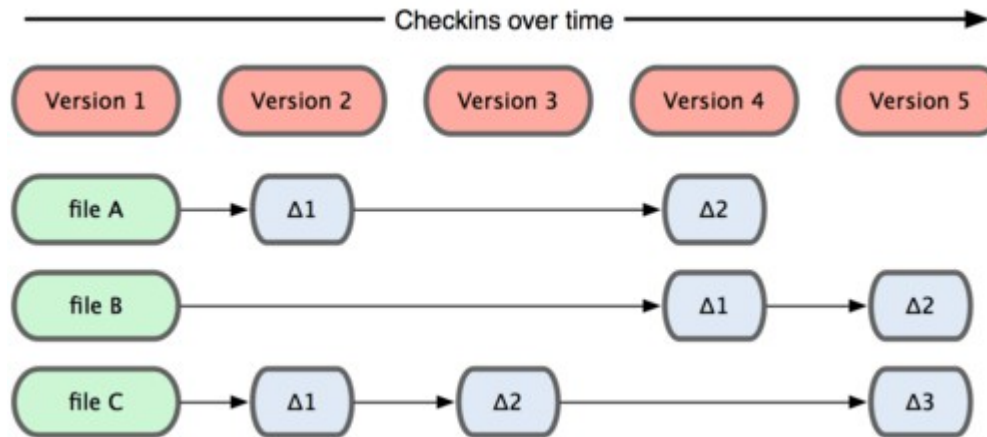
distributed

# basics

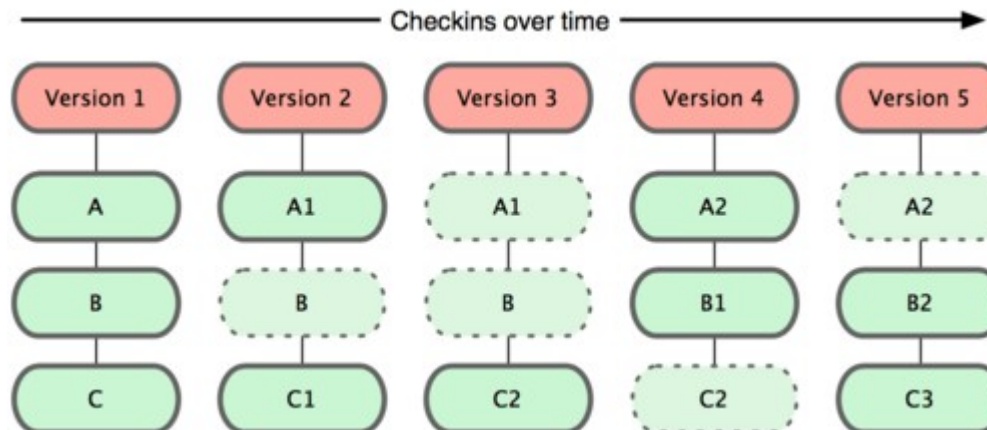
- Snapshots, Not Differences
- Hash
- fast alles wird local ausgeführt
- Daten werden nur hinzugefügt (GC 30 Tage)
- Username / E-Mail

# basics - database

SVN

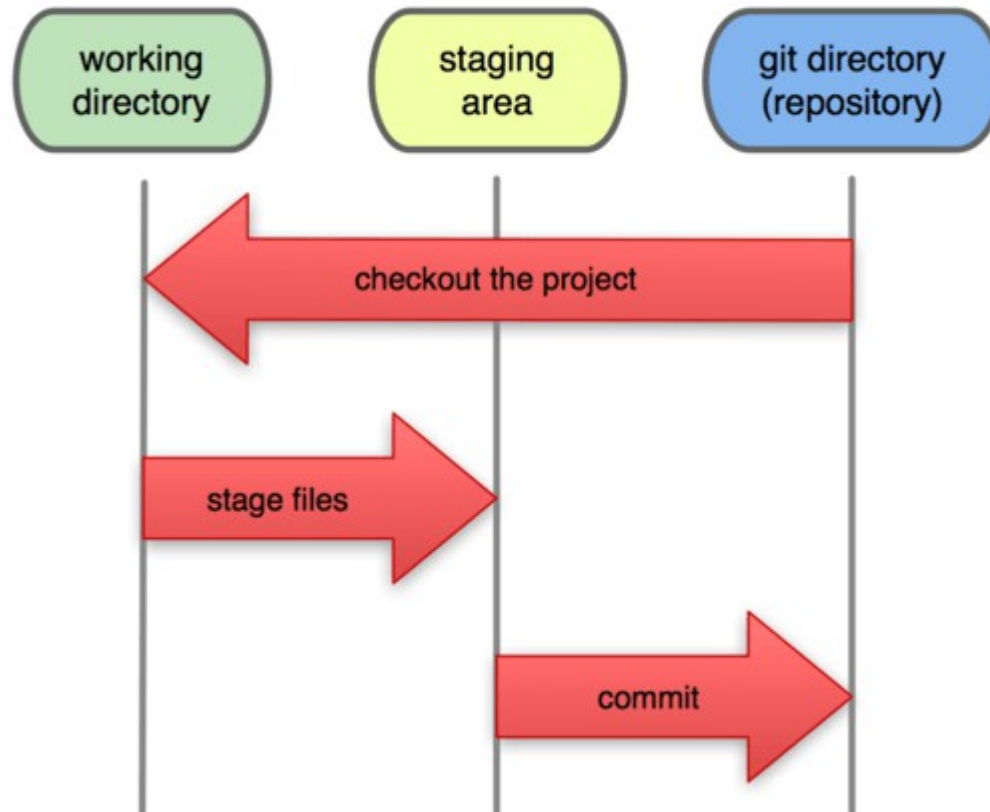


git

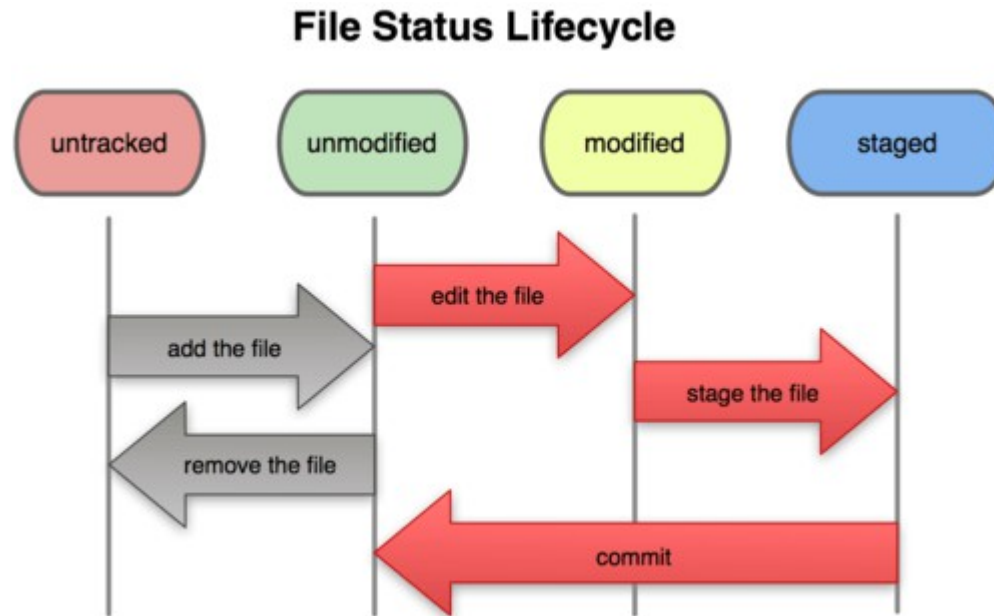


# basics - stagin

## Local Operations

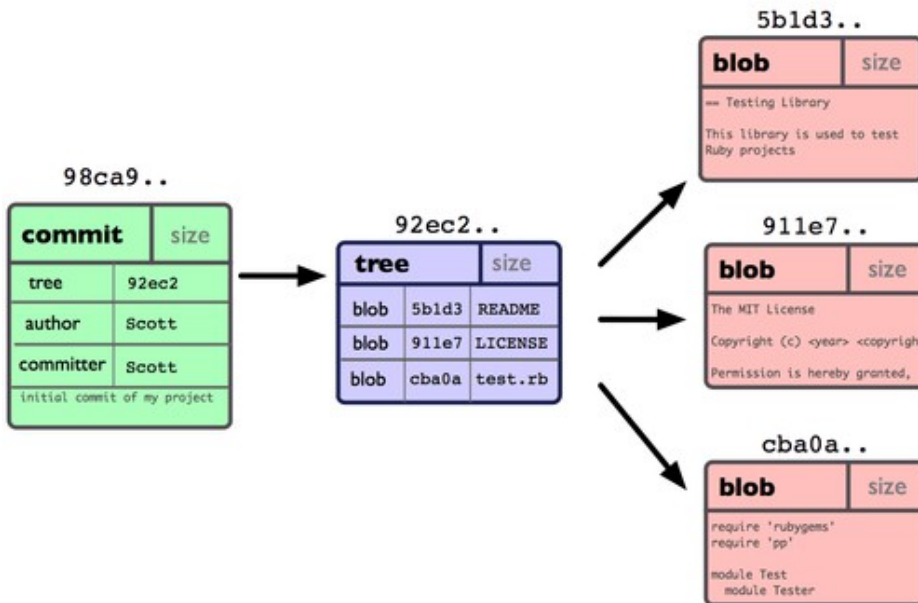


# basics – status lifecycle





# basics - commits



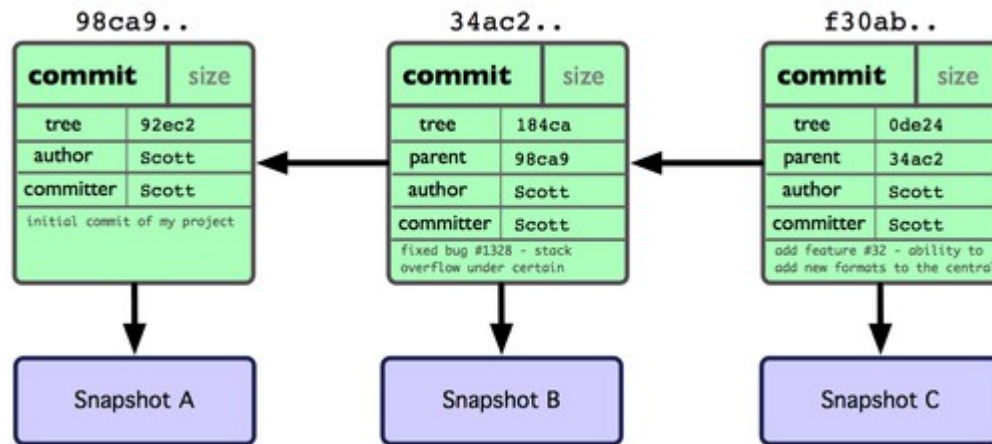
.git

README

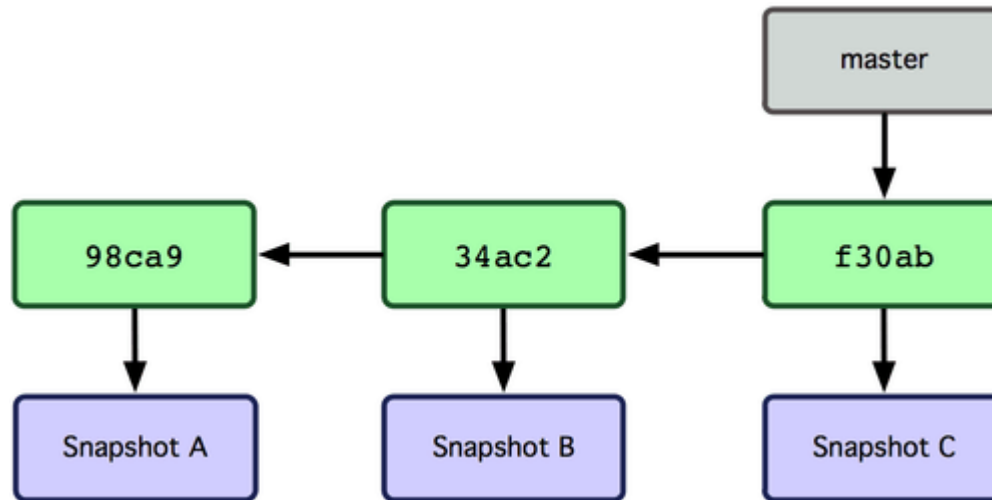
LICENSE

test.rb

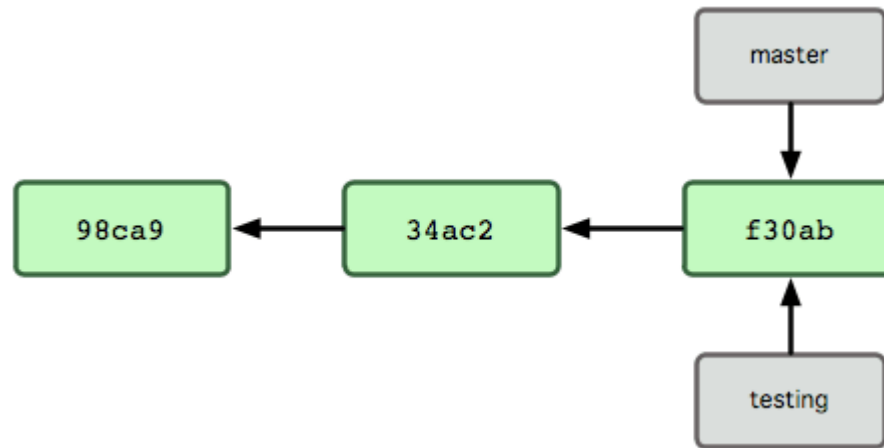
# basics - commits



# branches – pointer

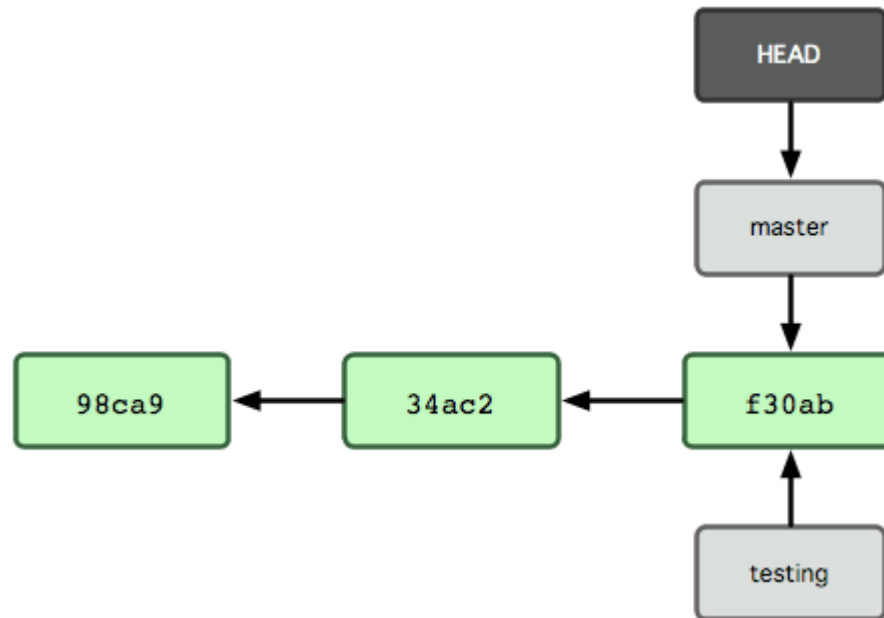


# branches - new

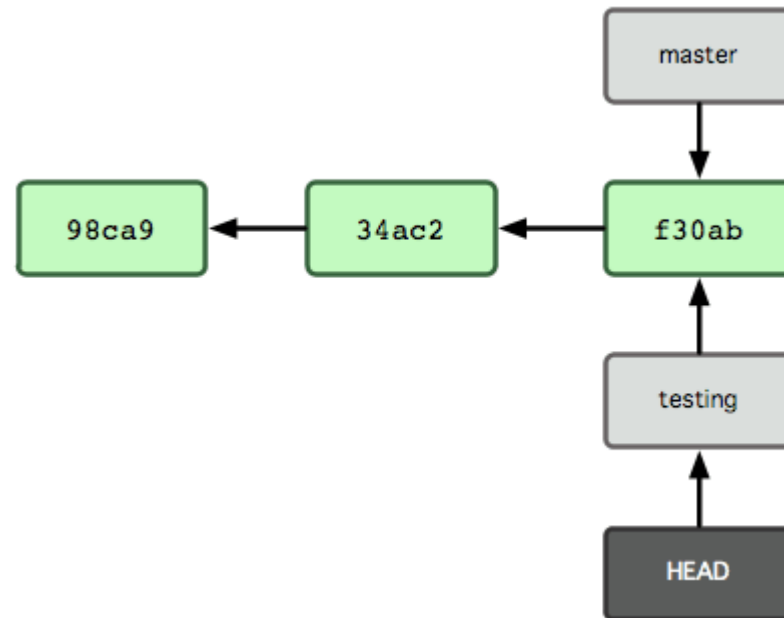


git branch testing

# branches - new

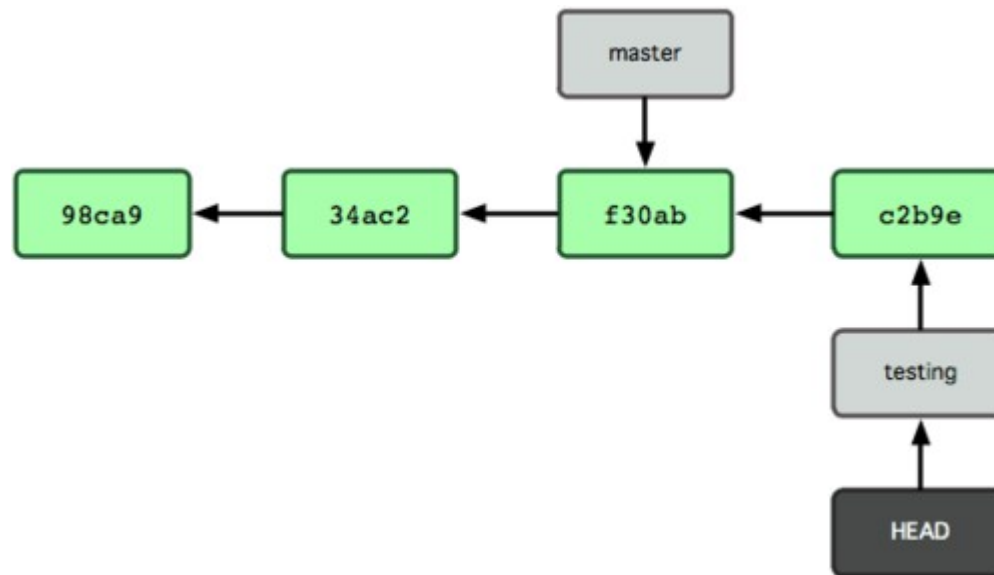


# branches - checkout

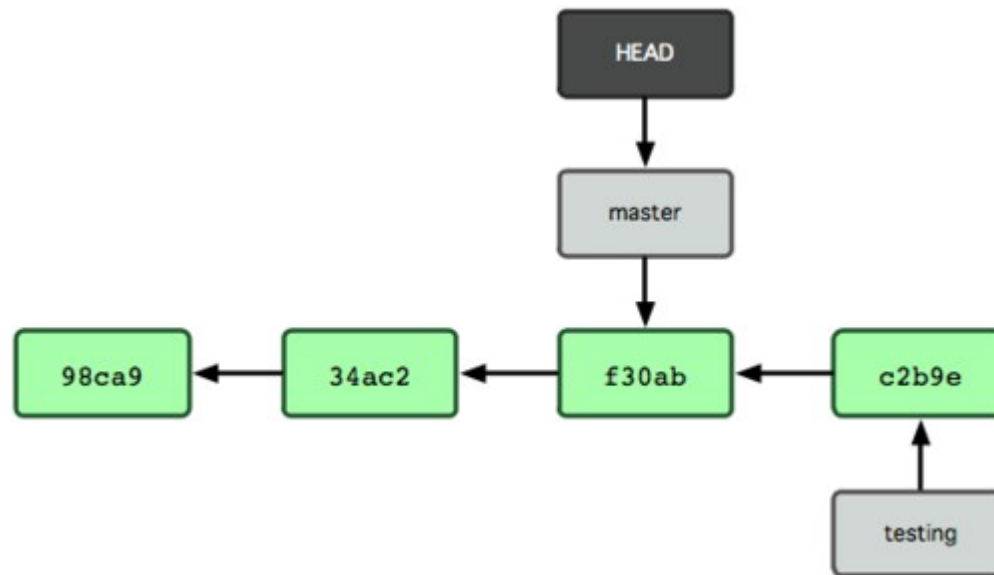


```
git checkout testing
```

# branches - divergence



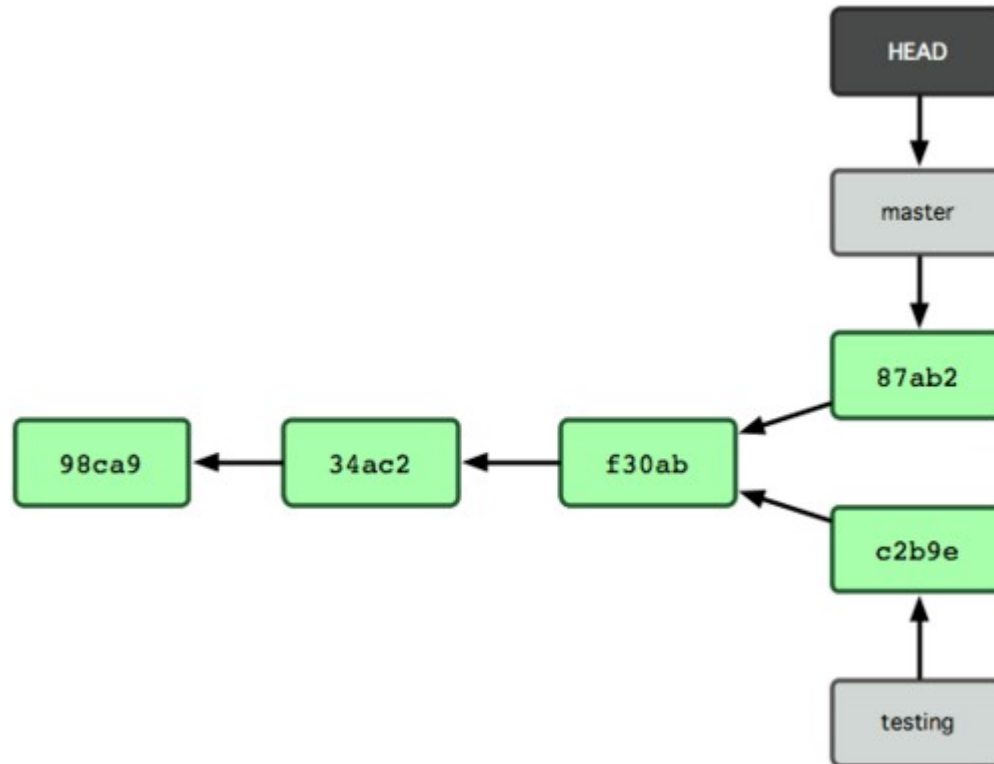
# branches - divergence



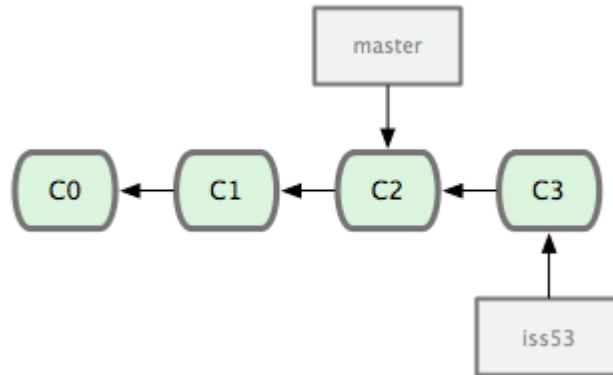
`git checkout master`



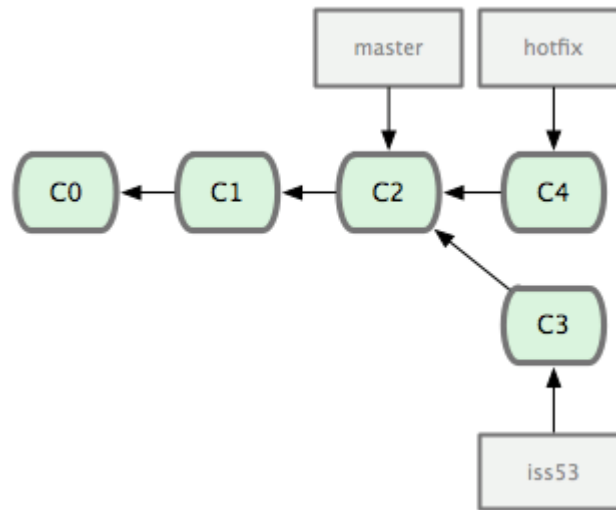
# branches - divergence



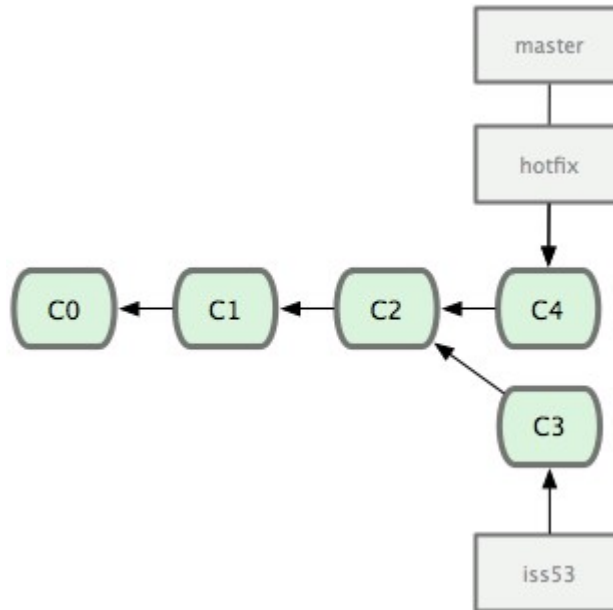
# branches - why



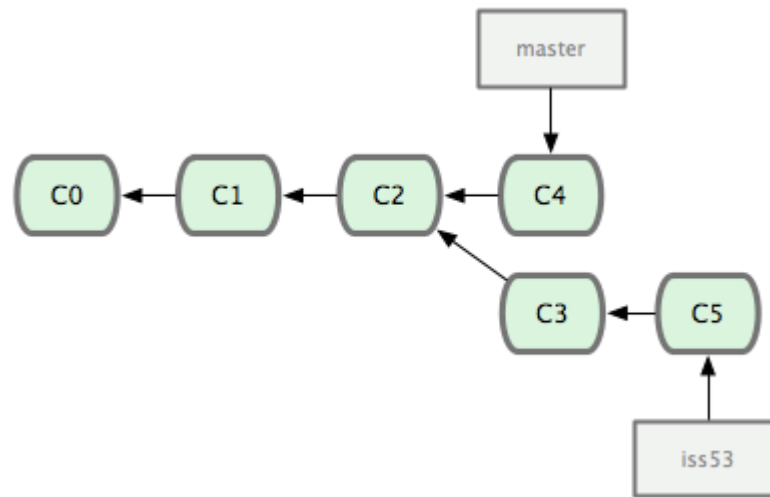
# branches - why



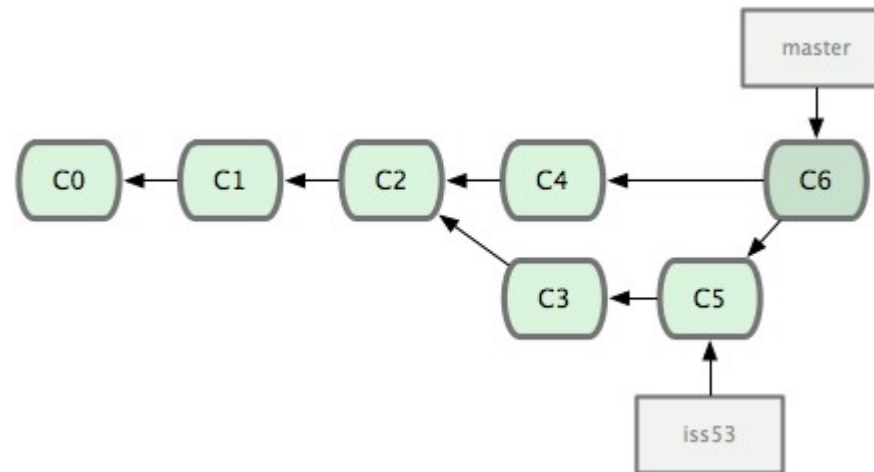
# branches - why



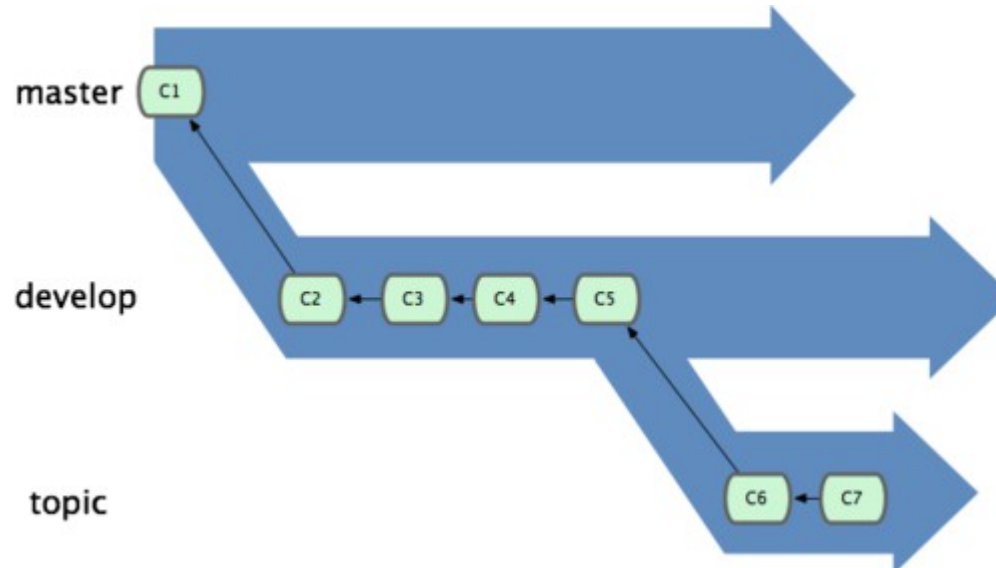
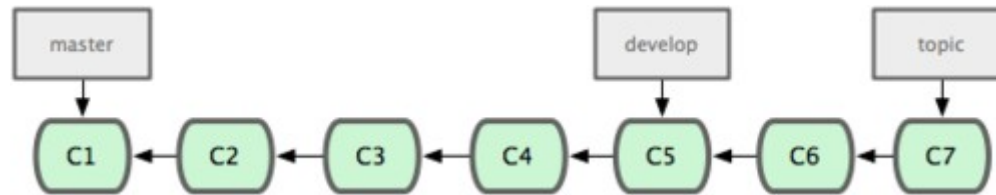
# branches - why



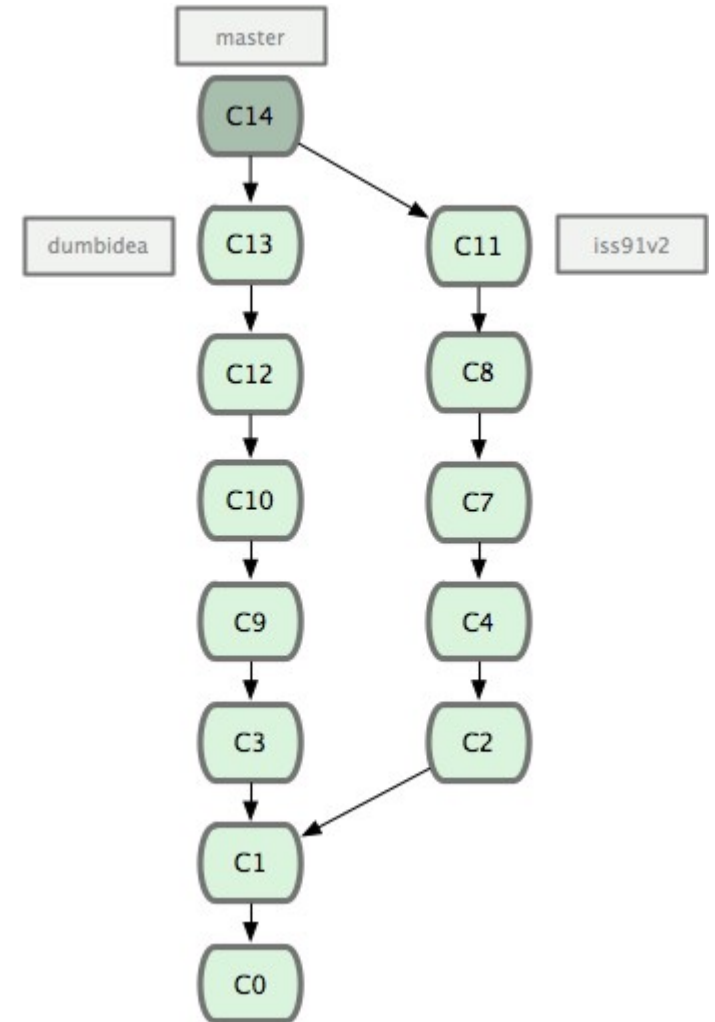
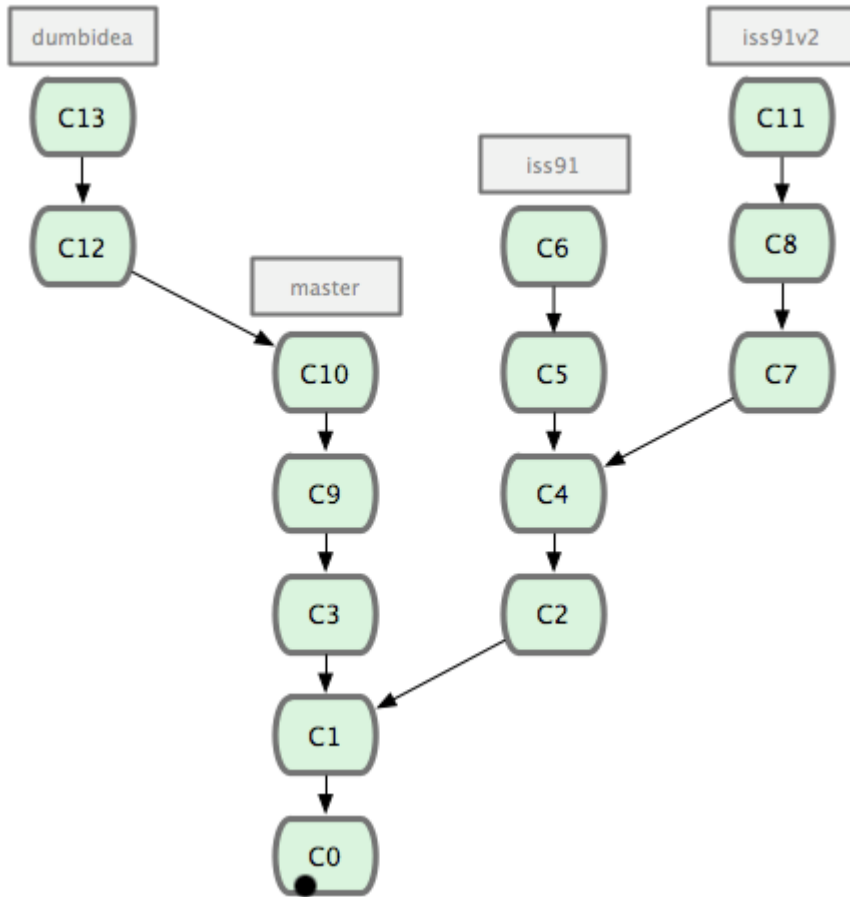
# branches - why



# branches – long-running

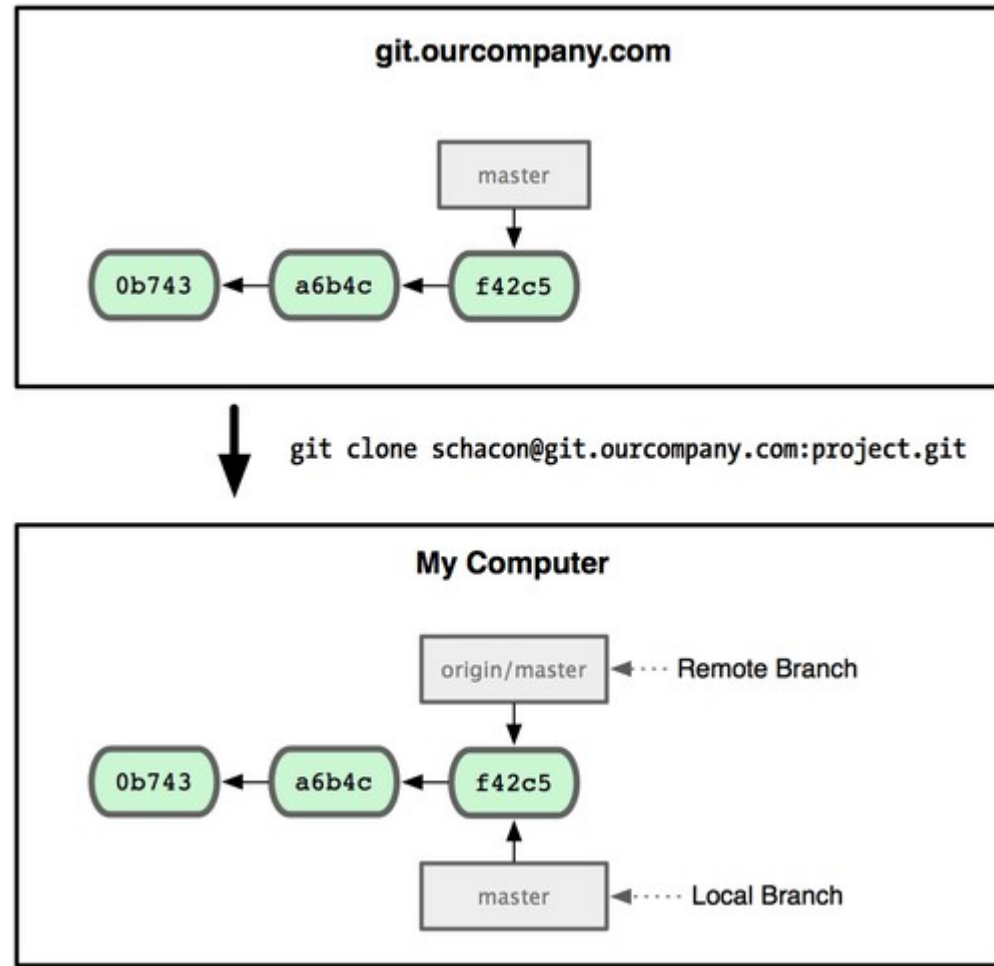


# branches - topic

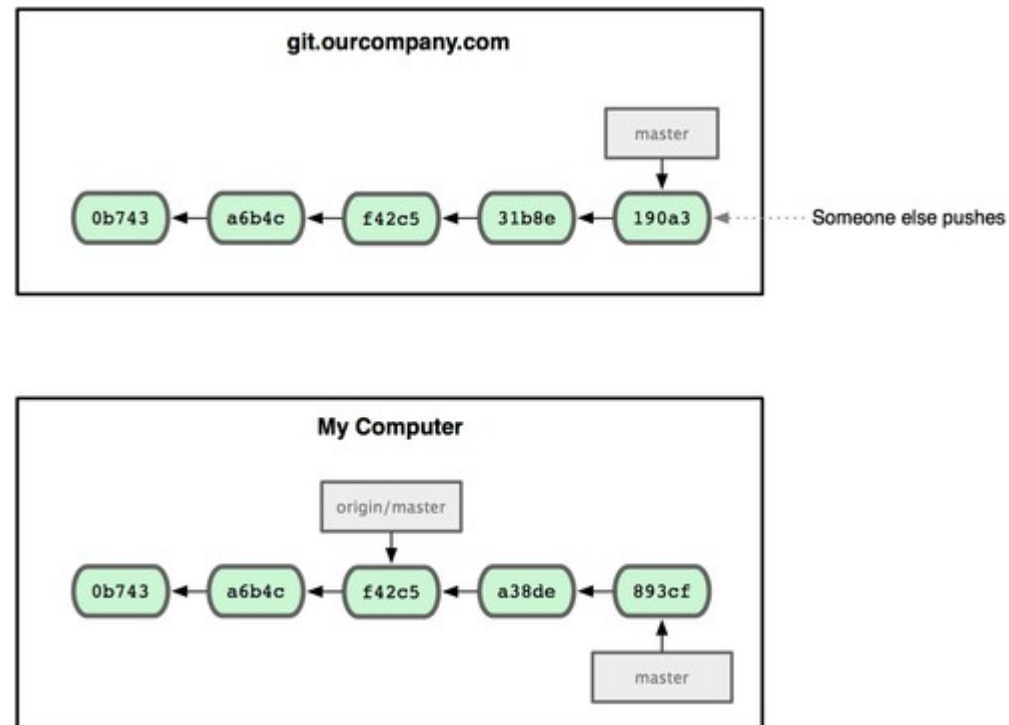




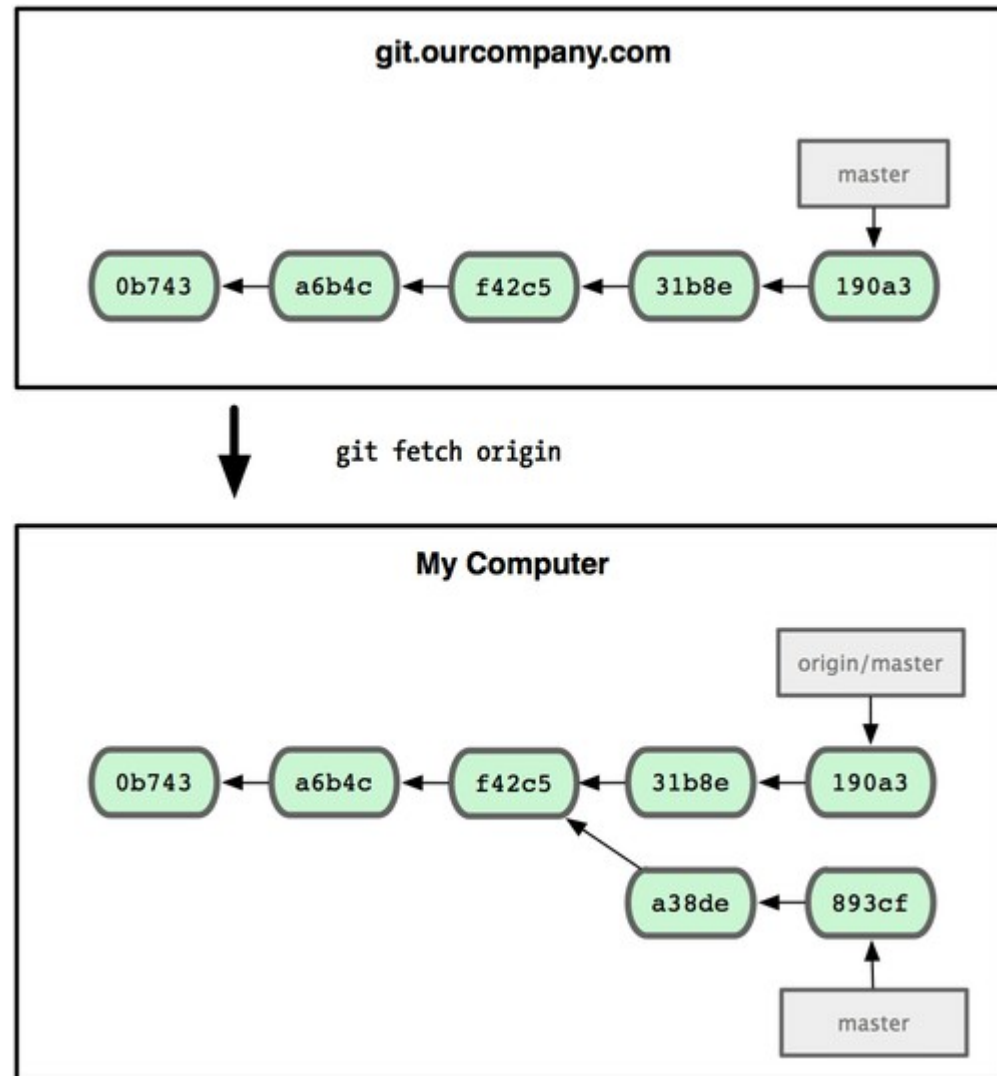
# remotes - clone



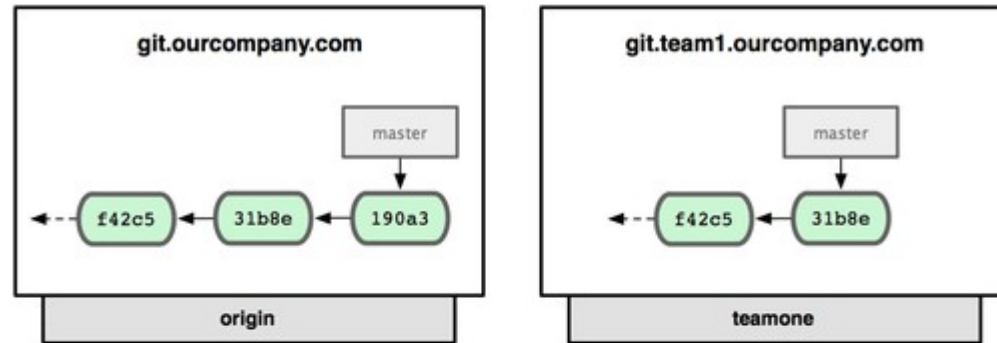
# remotes - divergence



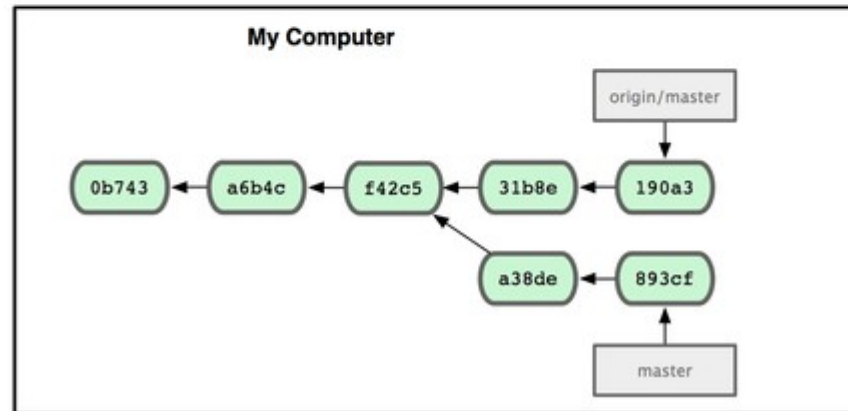
# remotes - fetch



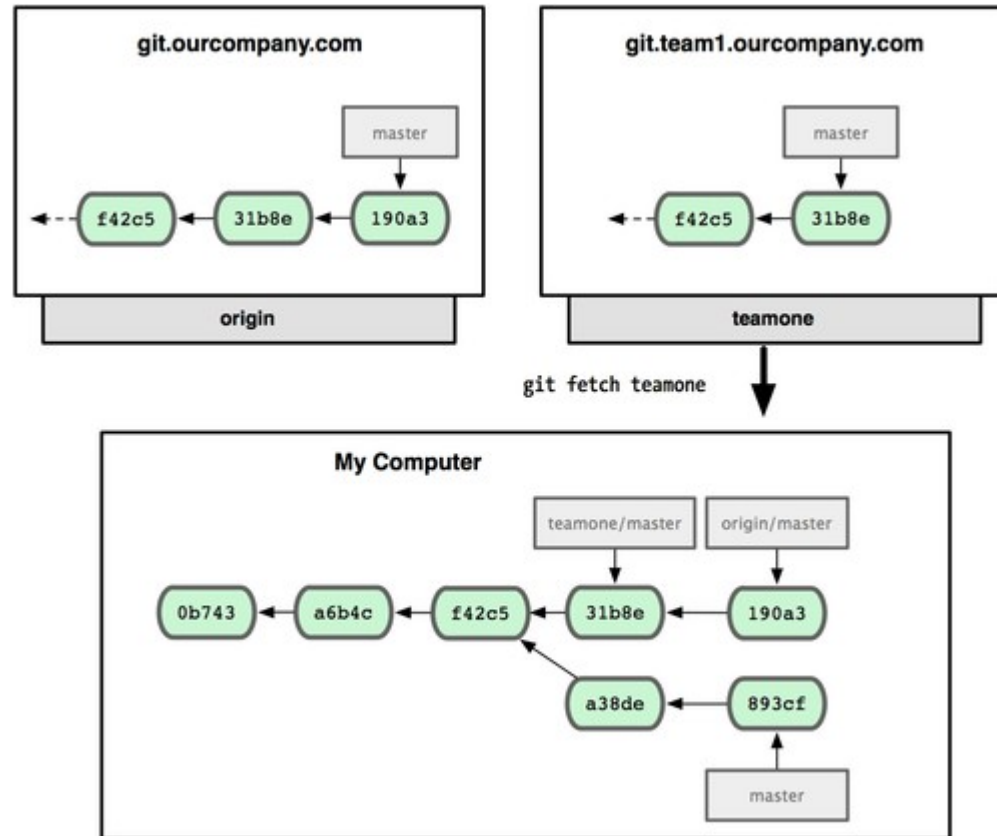
# remotes - divergence



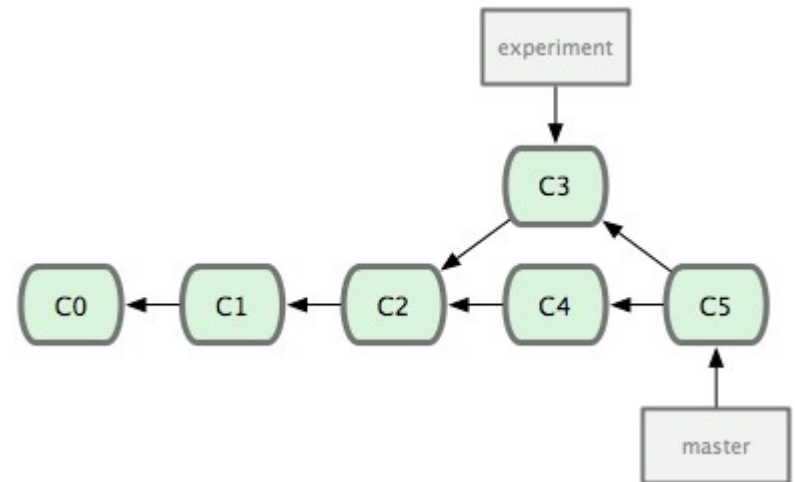
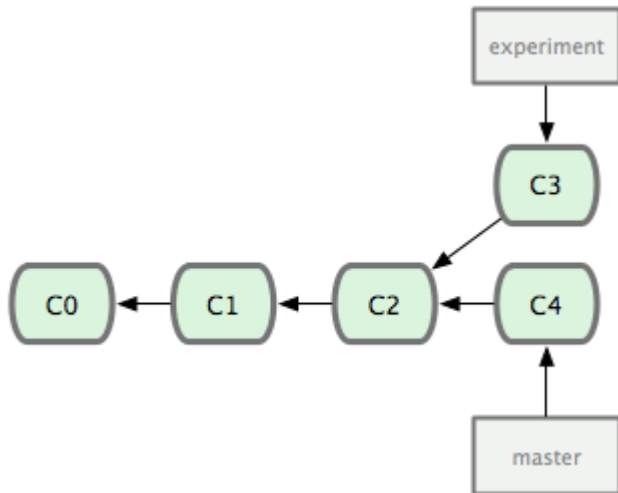
```
git remote add teamone git://git.team1.ourcompany.com
```



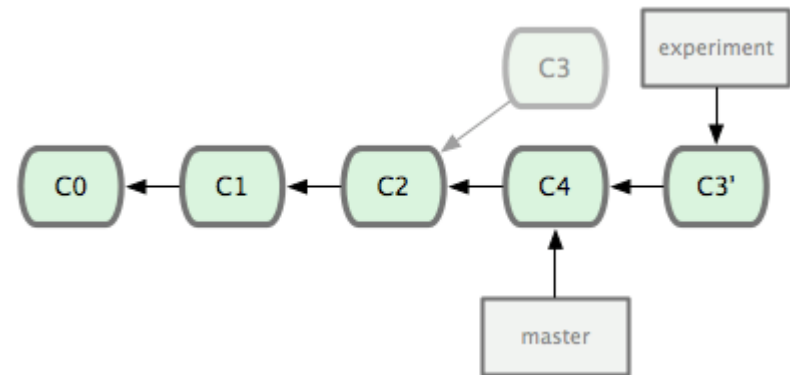
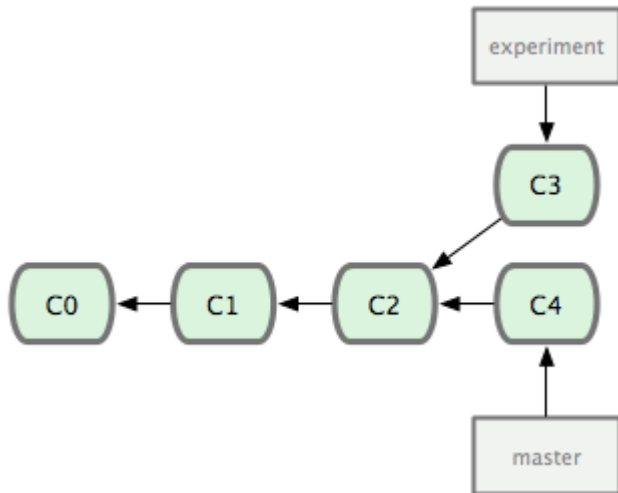
# remotes - fetch



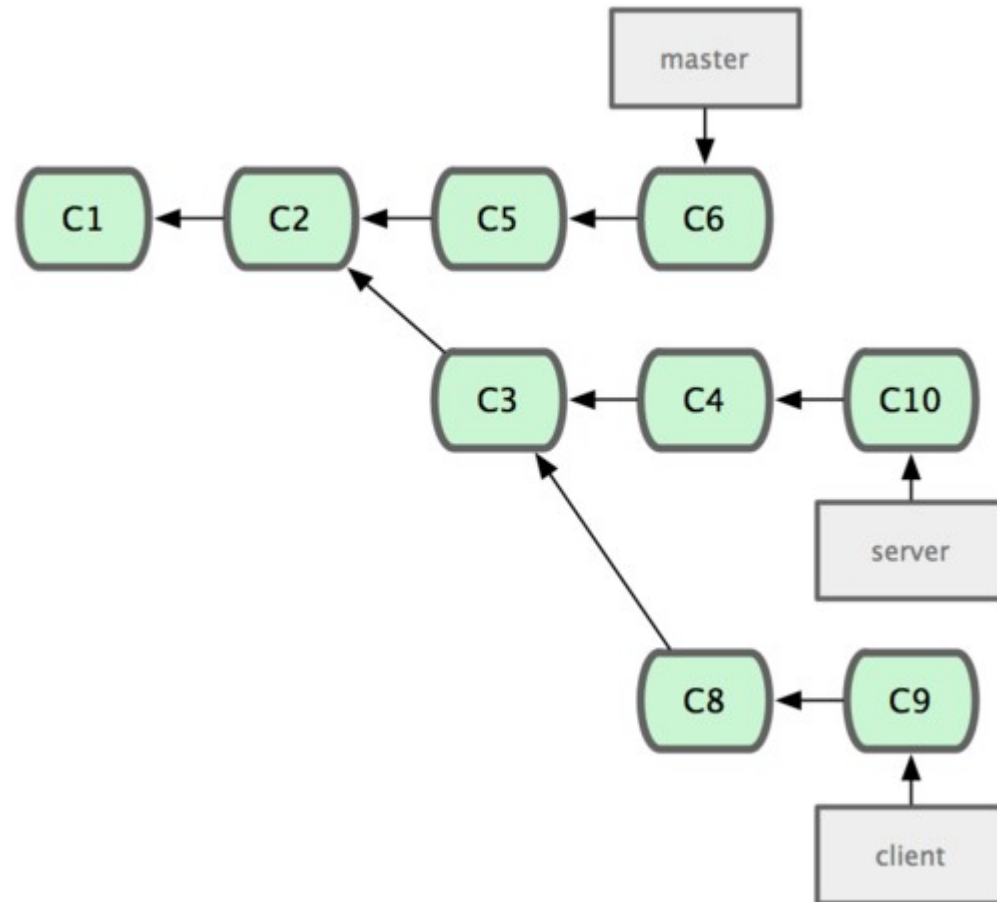
# rebase – no-ff merge



# rebase - linearization

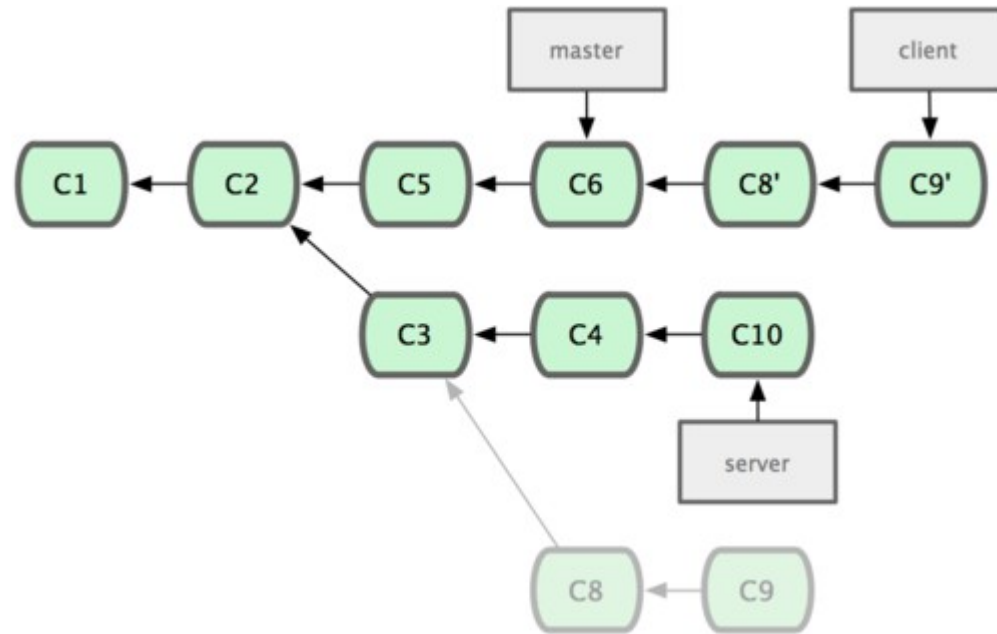


# rebase - example

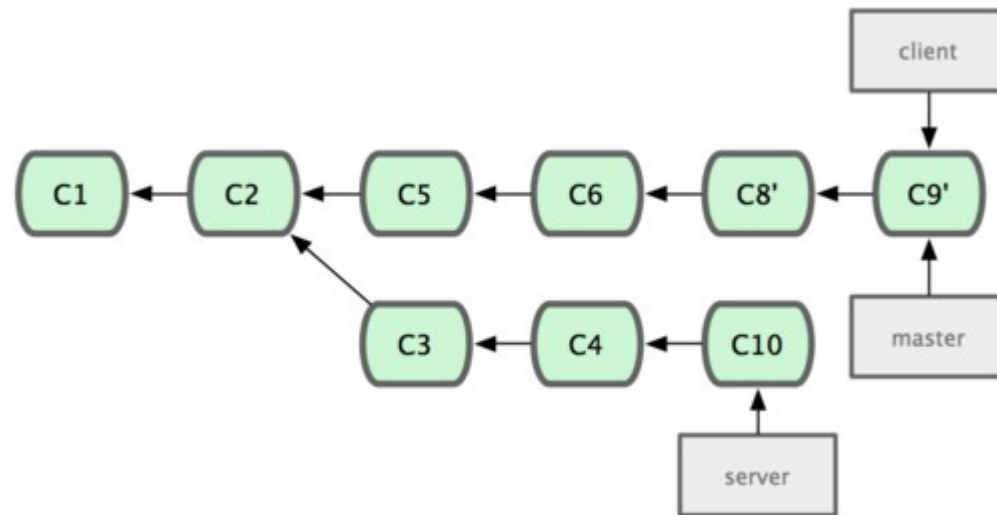




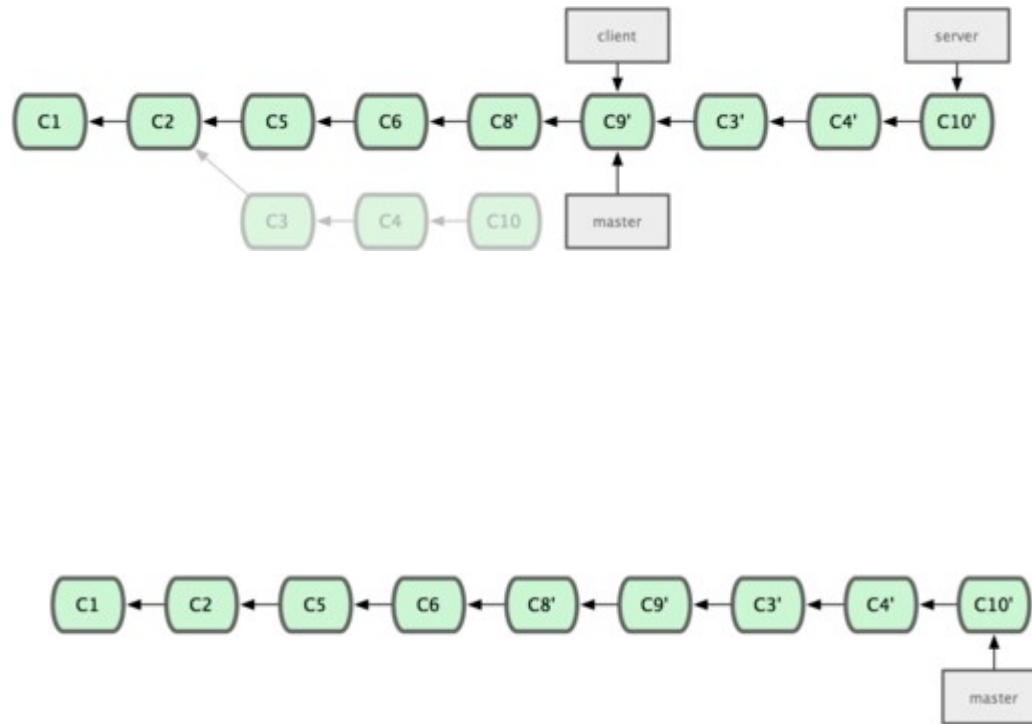
# rebase - example



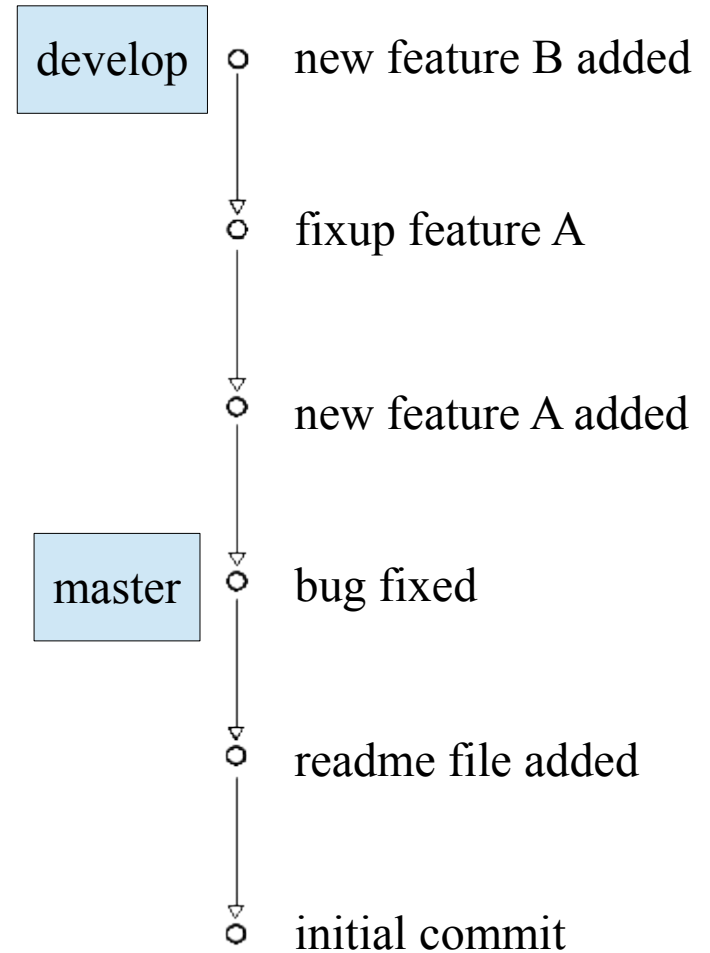
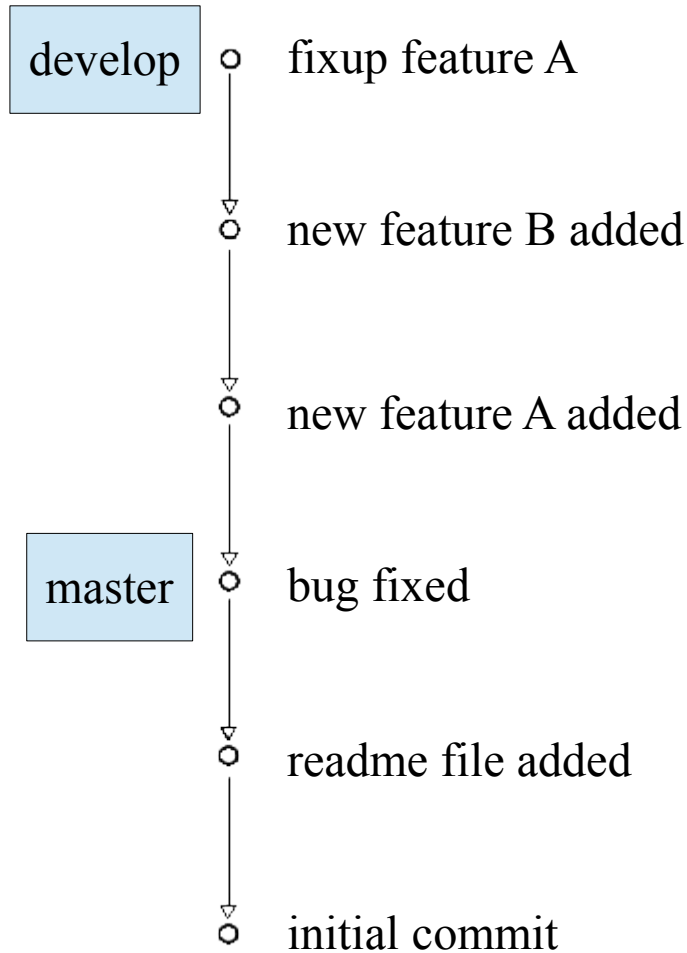
# rebase - example



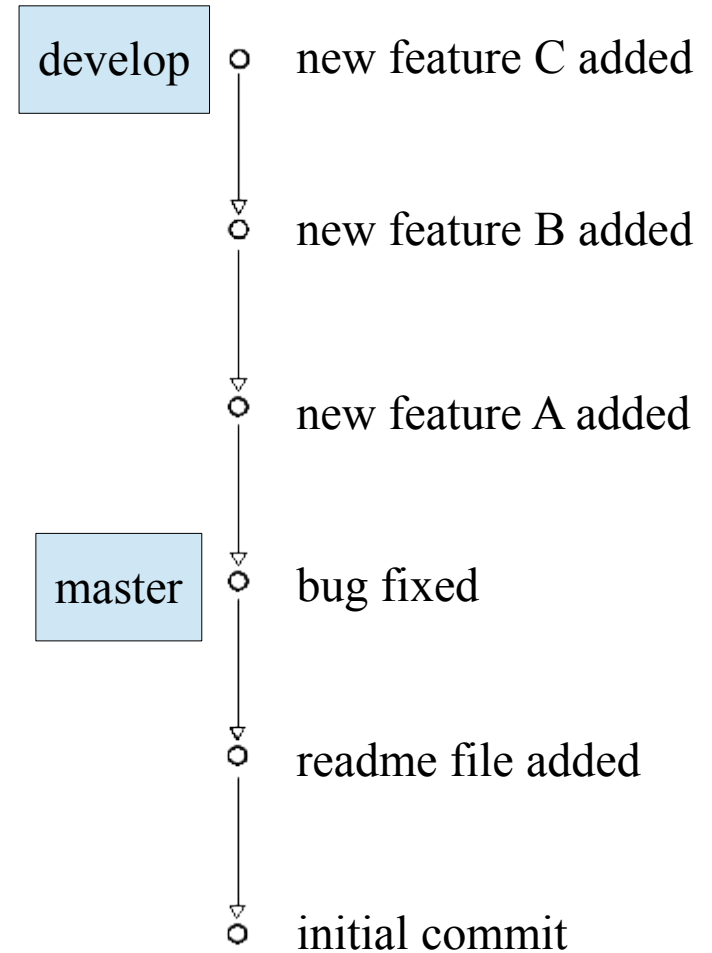
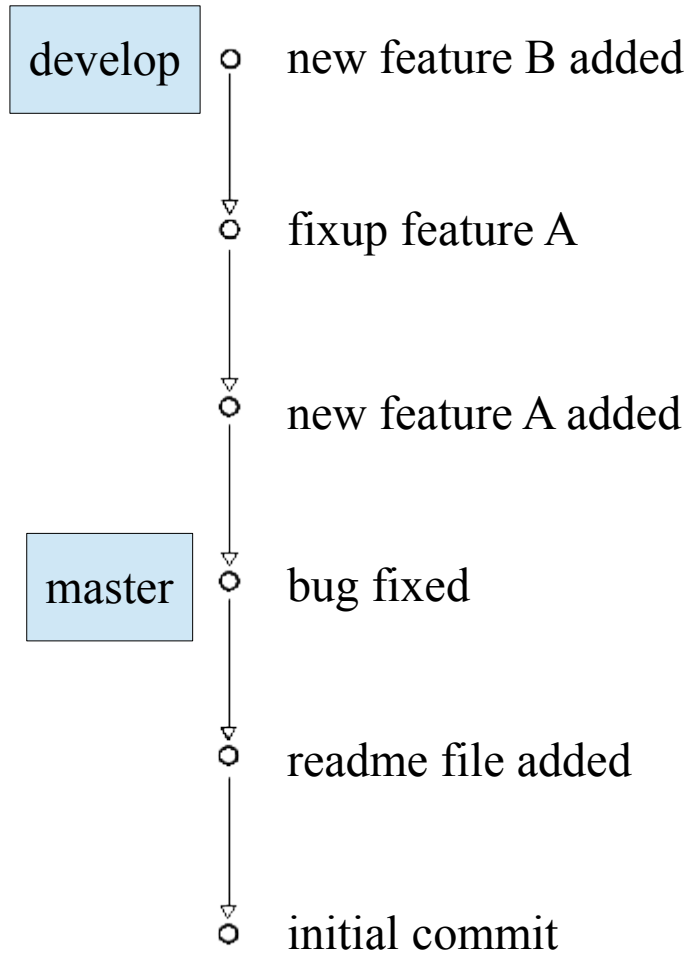
# rebase - example



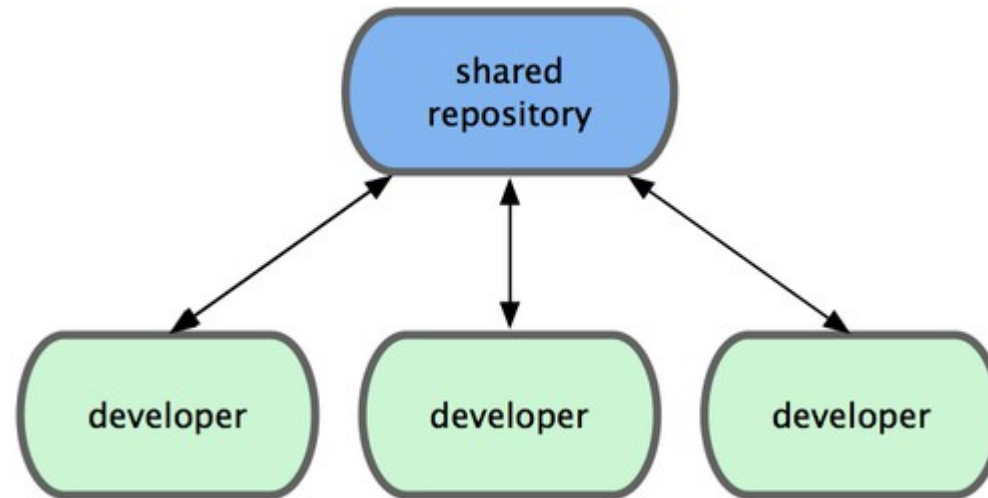
# rebase – rewrite history



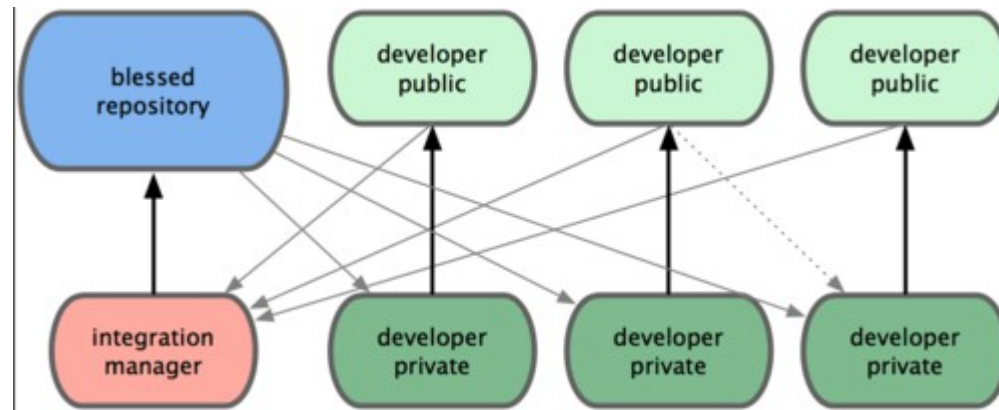
# rebase – rewrite history



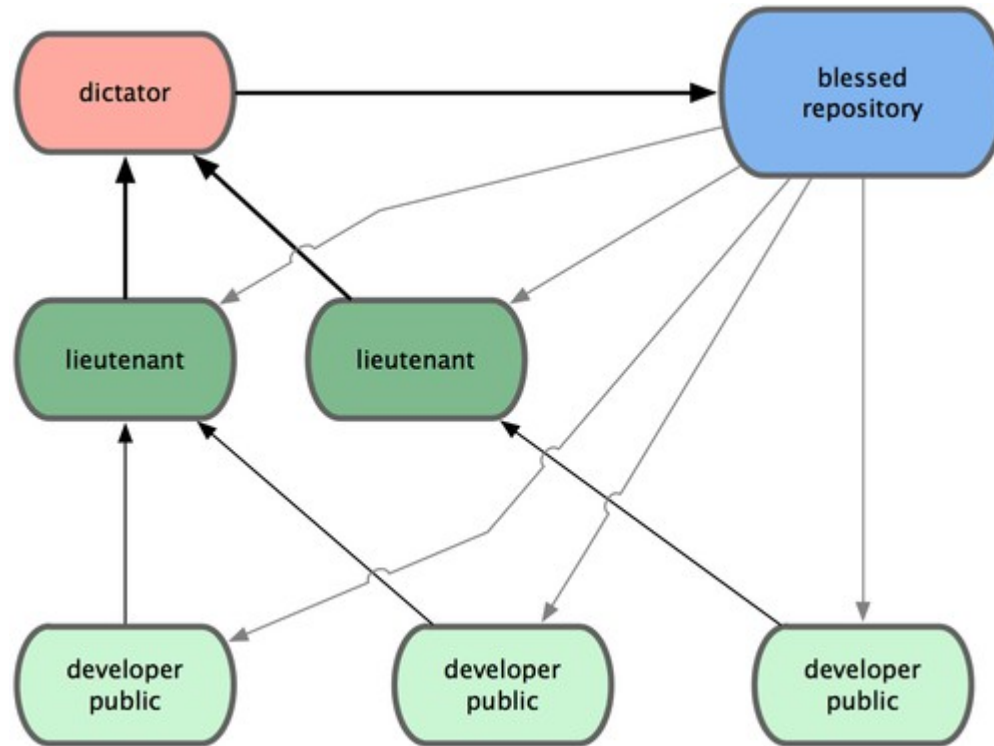
# workflow - centralized



# workflow – integration manager

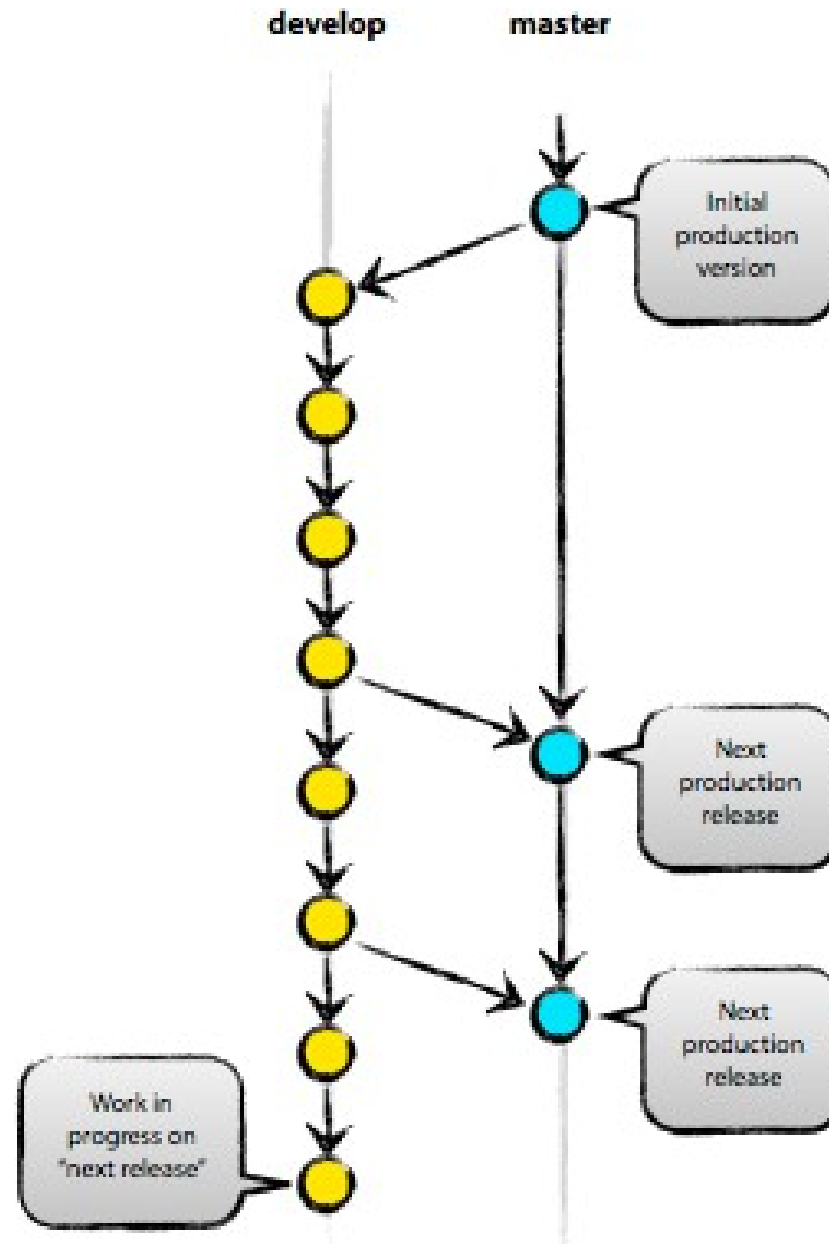


# workflow – dictator / lieutenants

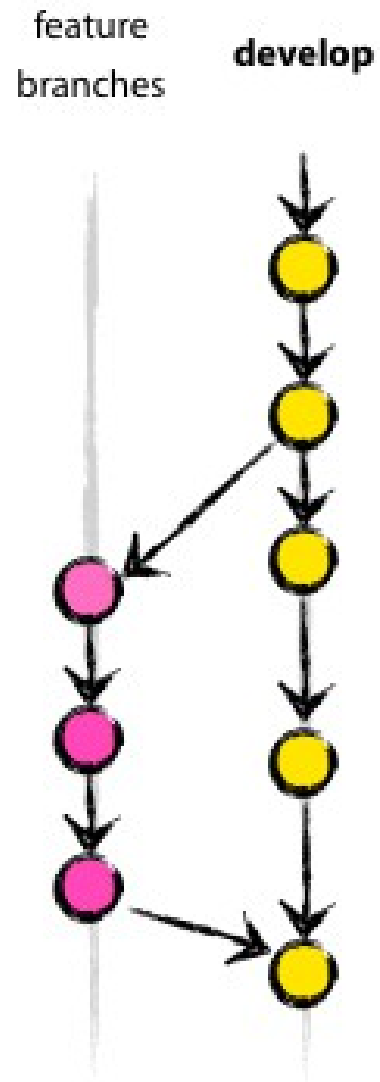




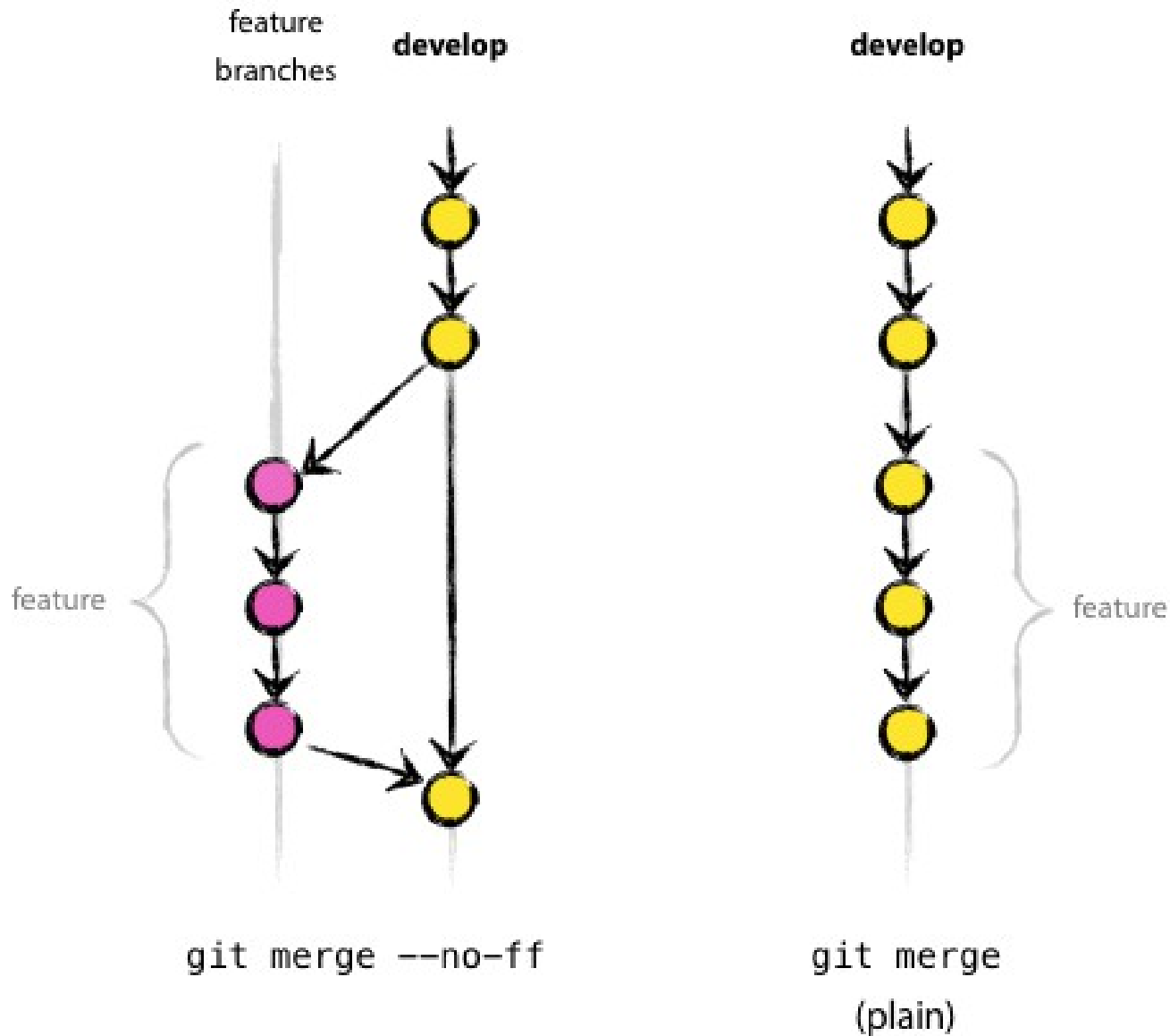
# gitflow – main branches



# gitflow – support branches

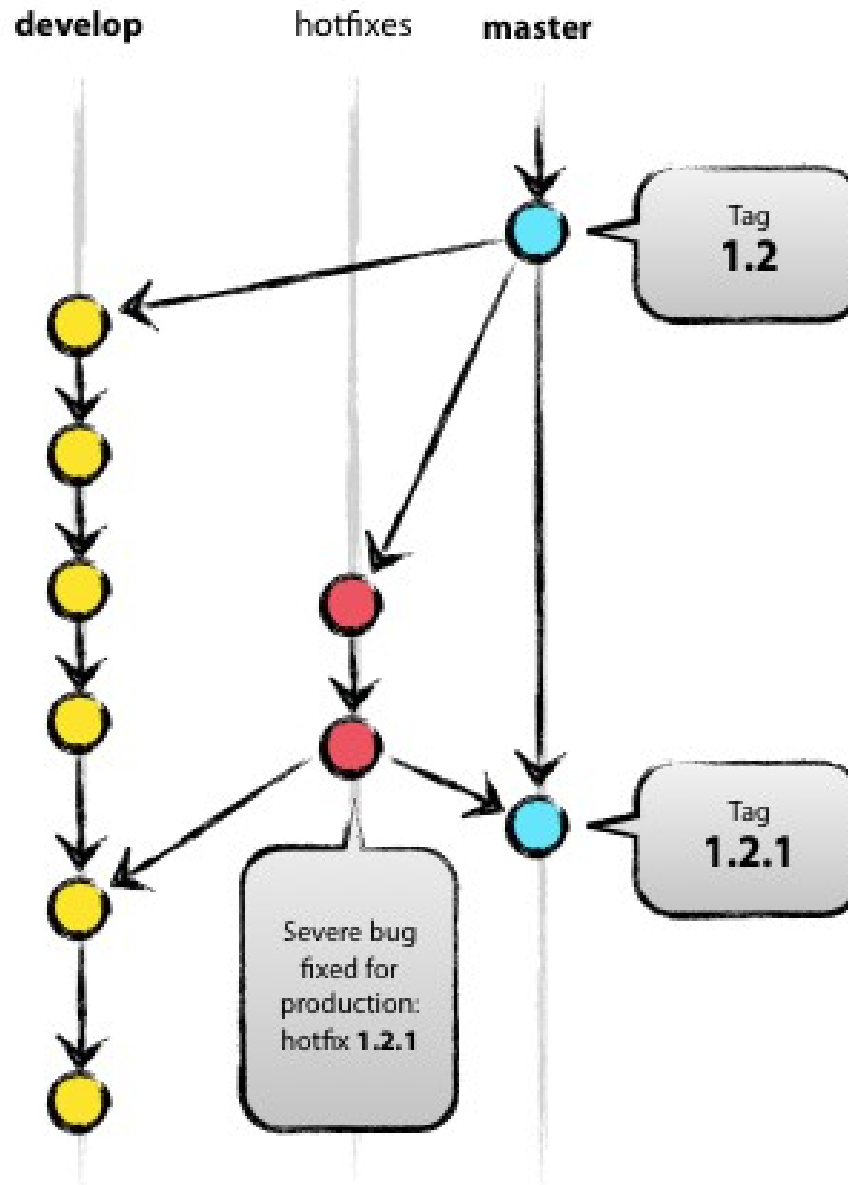


# gitflow – fast forward



gitflow – release

# gitflow – hotfix



# gitflow – hotfix

