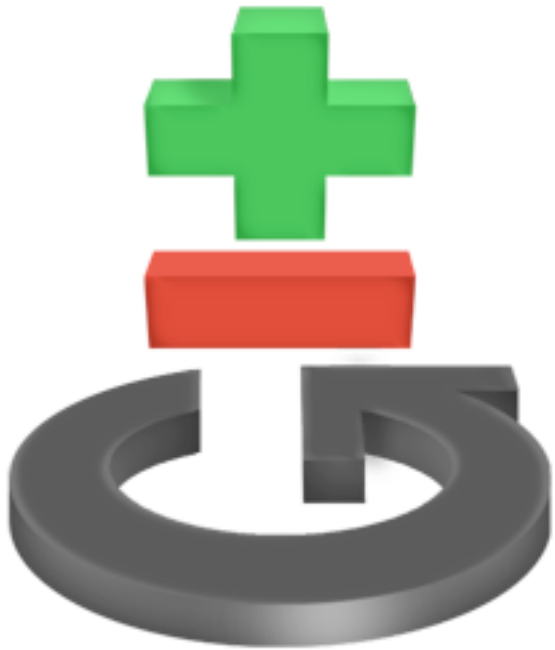
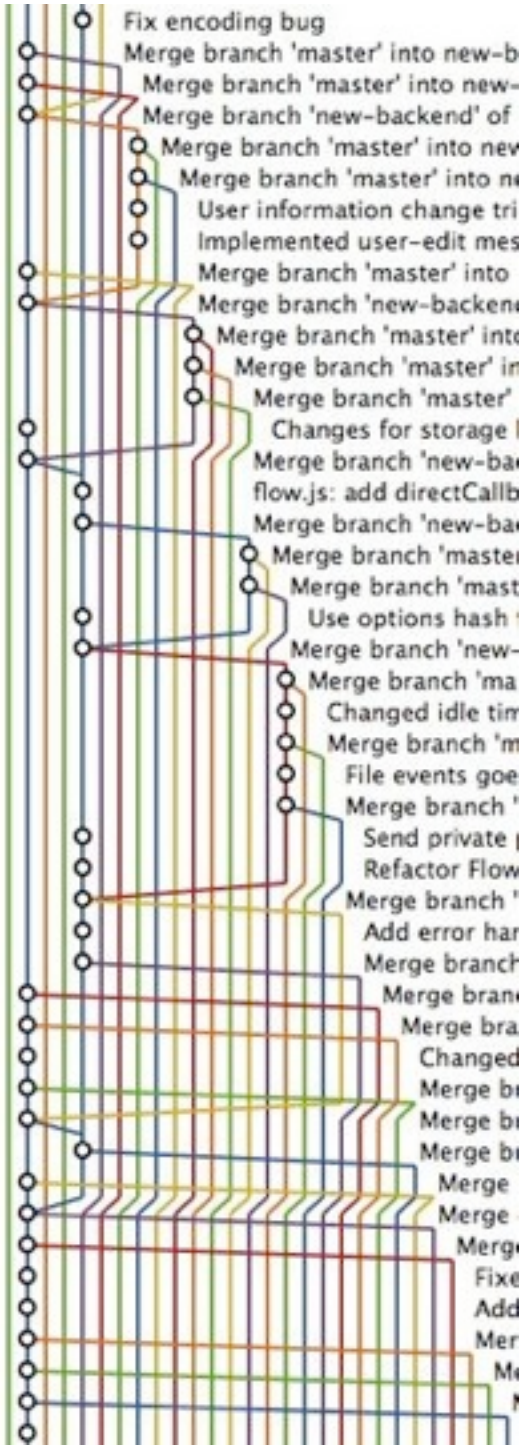
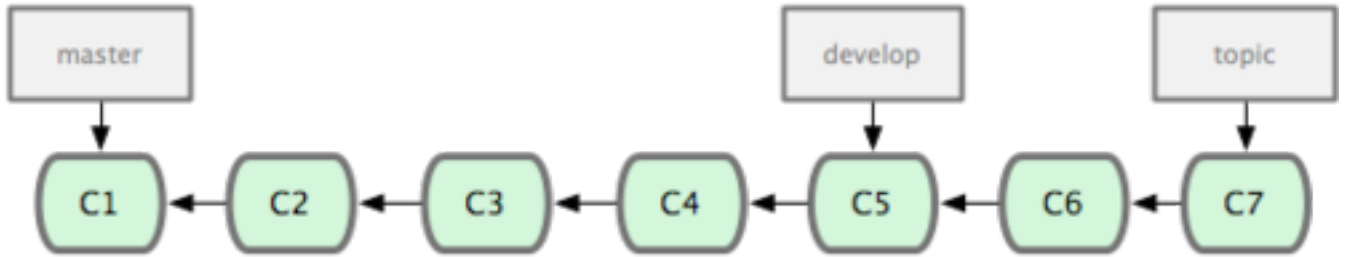


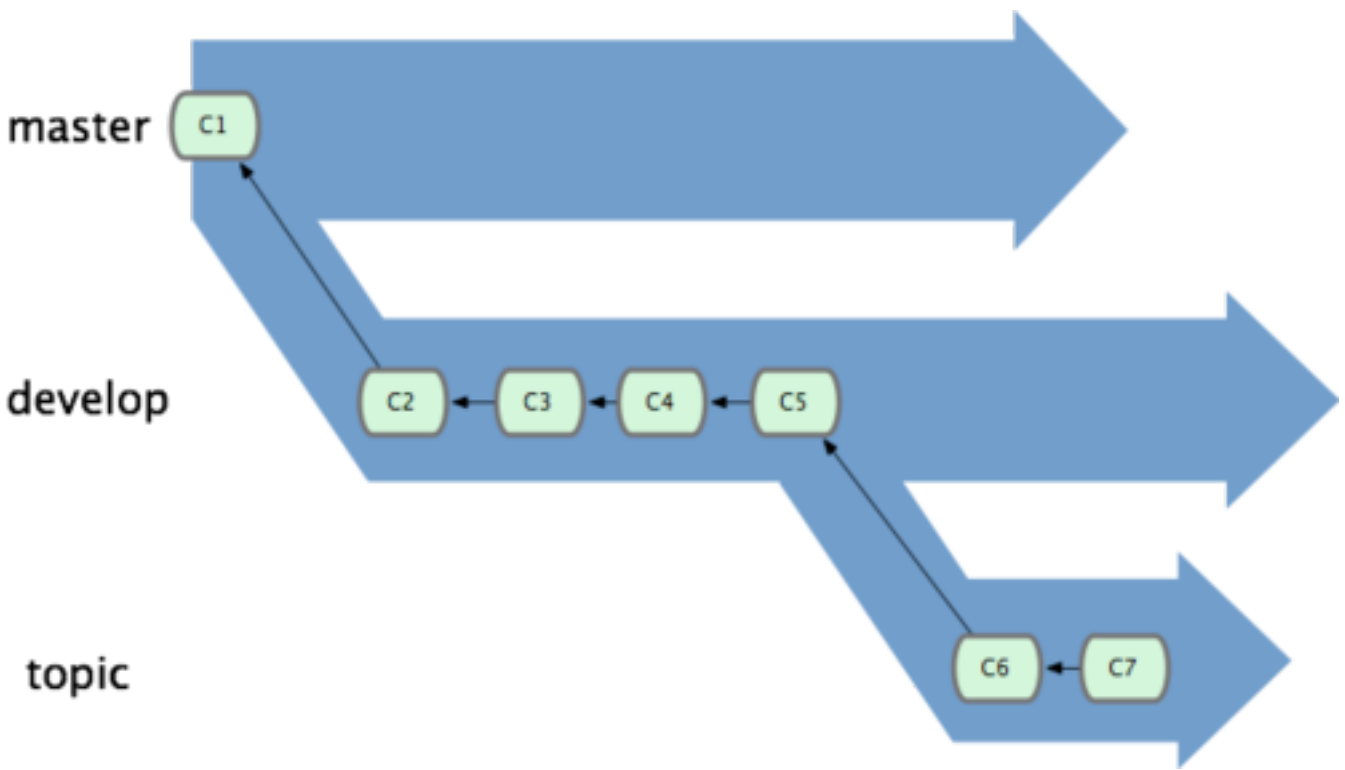
Git Branching and Workflows

by Jason Meridth

Branching


Fix encoding bug
Merge branch 'master' into new-b
Merge branch 'master' into new-
Merge branch 'new-backend' of
Merge branch 'master' into nev
Merge branch 'master' into n
User information change tri
Implemented user-edit mes
Merge branch 'master' into
Merge branch 'new-backen
Merge branch 'master' int
Merge branch 'master' in
Merge branch 'master'
Changes for storage
Merge branch 'new-ba
flow.js: add directCallb
Merge branch 'new-ba
Merge branch 'master
Merge branch 'mast
Use options hash
Merge branch 'new-
Merge branch 'ma
Changed idle tim
Merge branch 'm
File events goe
Merge branch
Send private
Refactor Flow
Merge branch
Add error han
Merge branch
Merge bran
Merge bra
Changed
Merge b
Merge b
Merge b
Merge
Merge
Merg
Fixe
Add
Mer
M

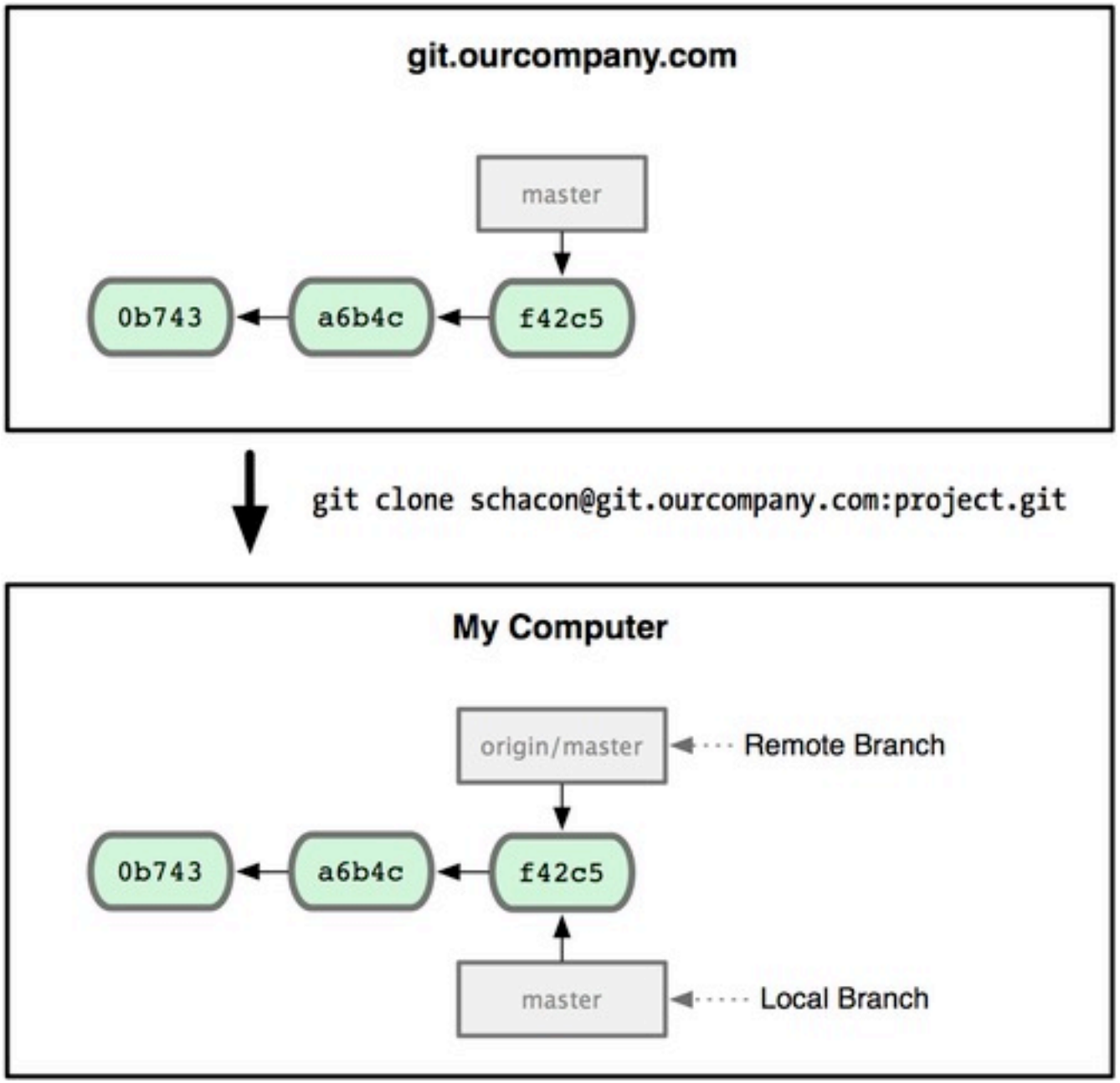


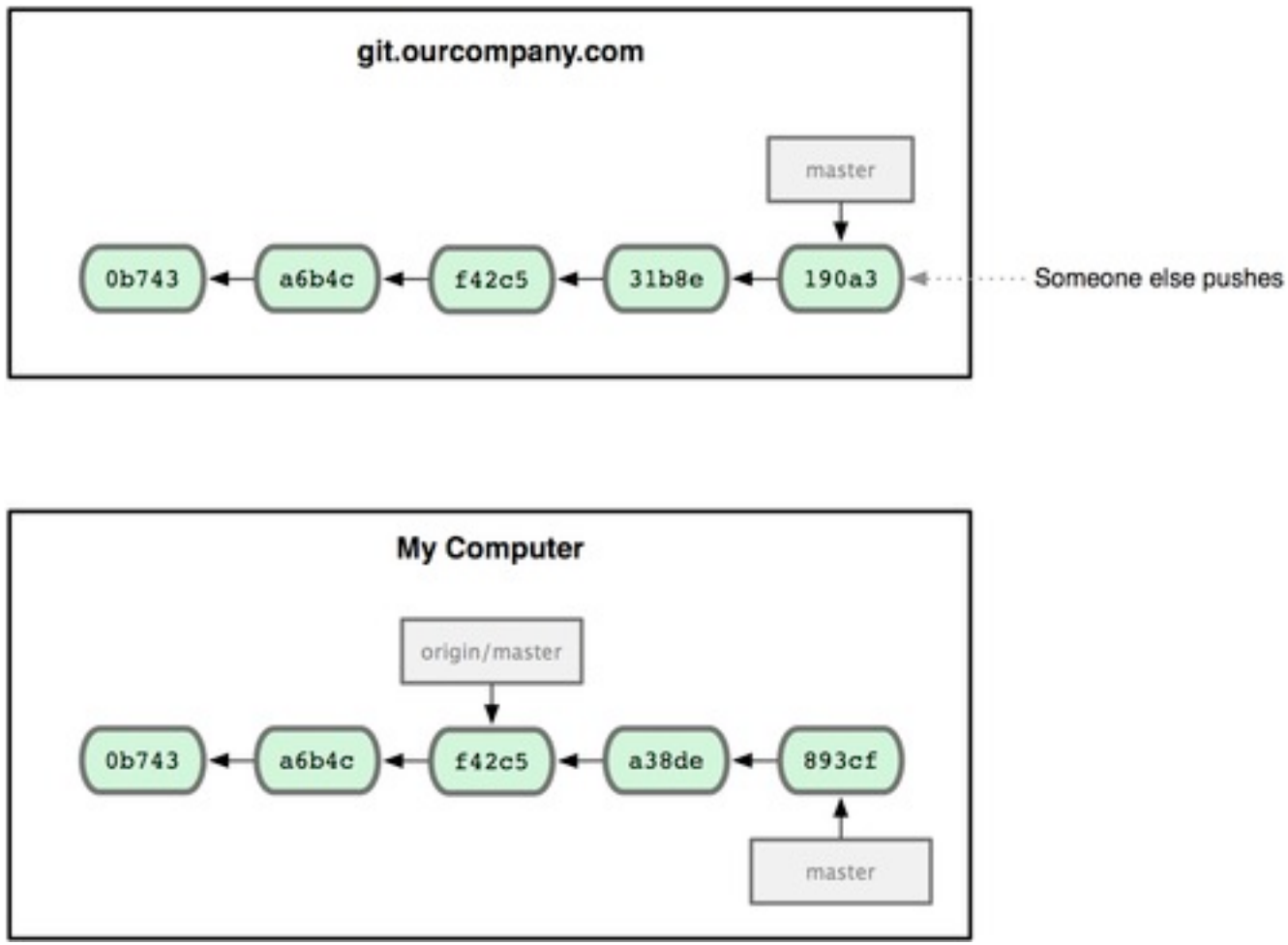


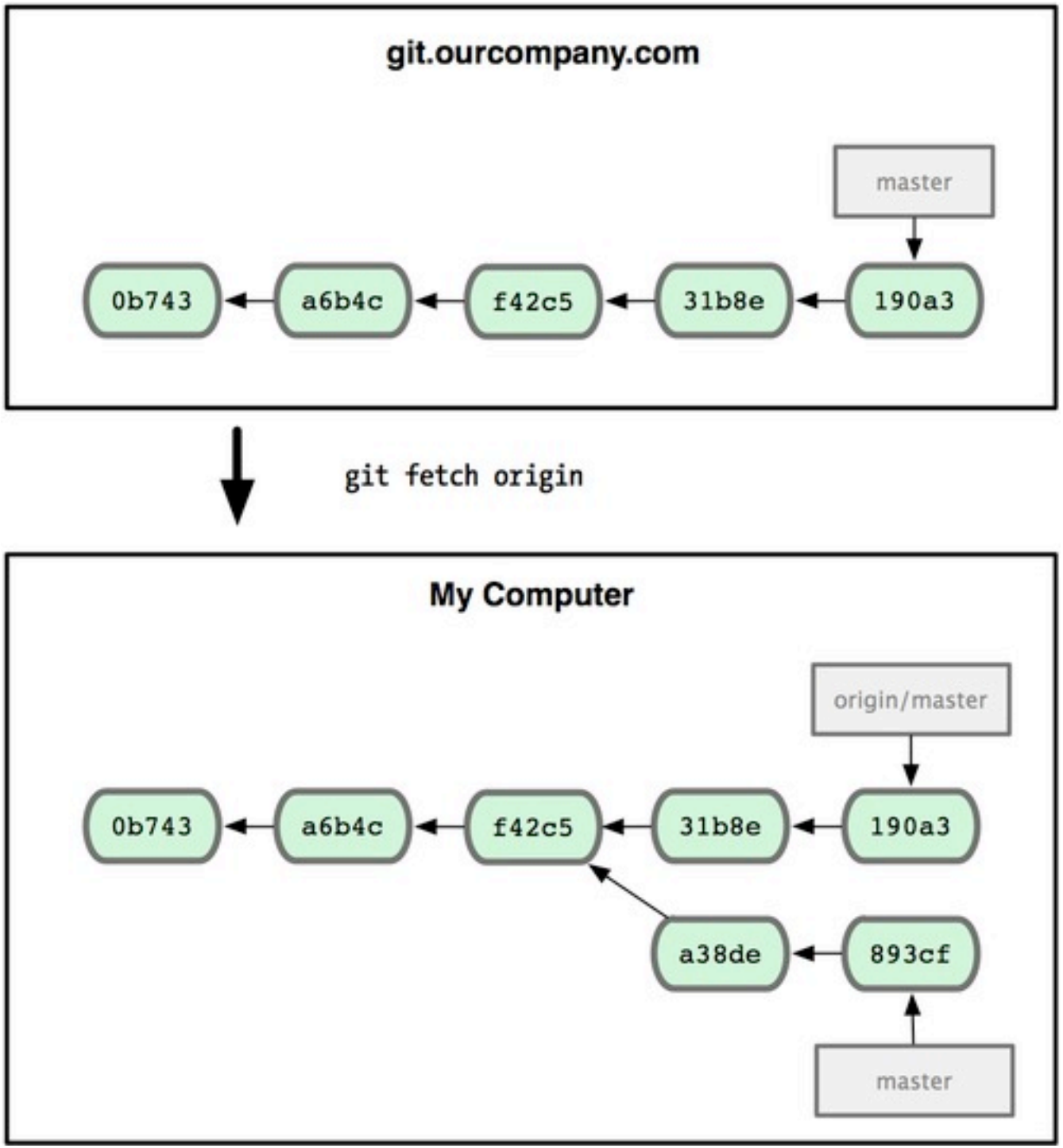
Local Branching and It's Power

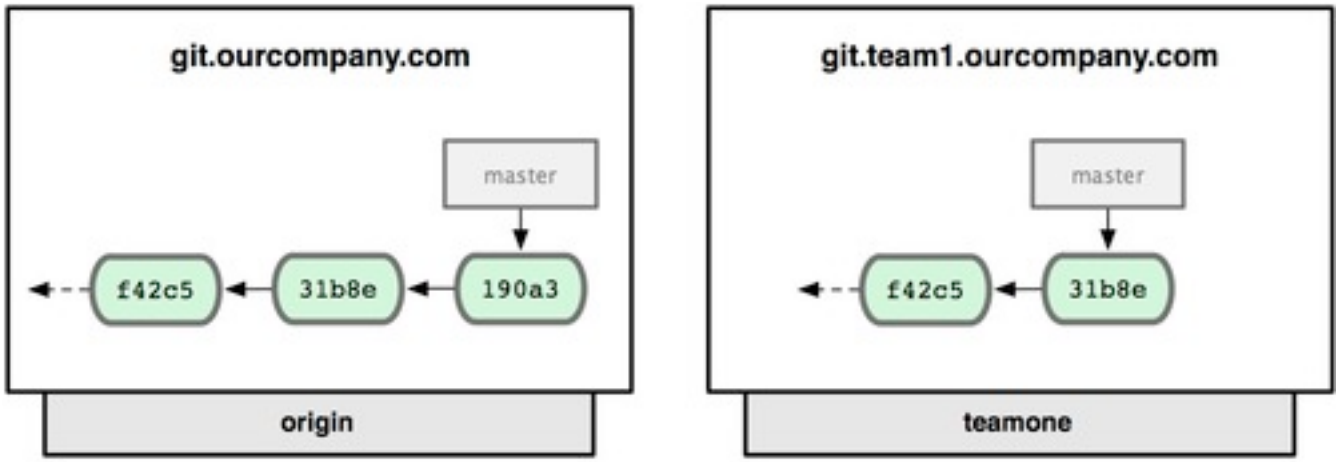
"Remote branches are references to the state of branches on your remote repositories. They're local branches that you can't move; they're moved automatically whenever you do any network communication. Remote branches act as bookmarks to remind you where the branches on your remote repositories were the last time you connected to them...They take the form (remote)/(branch)" Chapter 3 sect. 5 Pro Git Book

Remote Branches

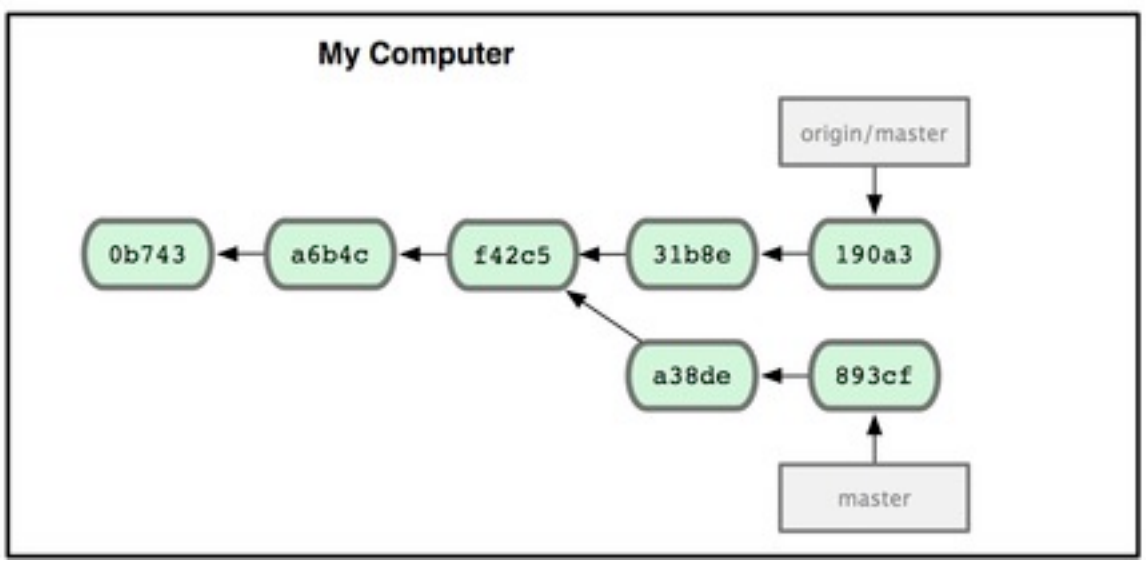

git.ourcompany.com
master
0b743
a6b4c
f42c5
git clone schacon@git.ourcompany.com:project.git
My Computer
origin/master
Remote Branch
0b743
a6b4c
f42c5
master
Local Branch

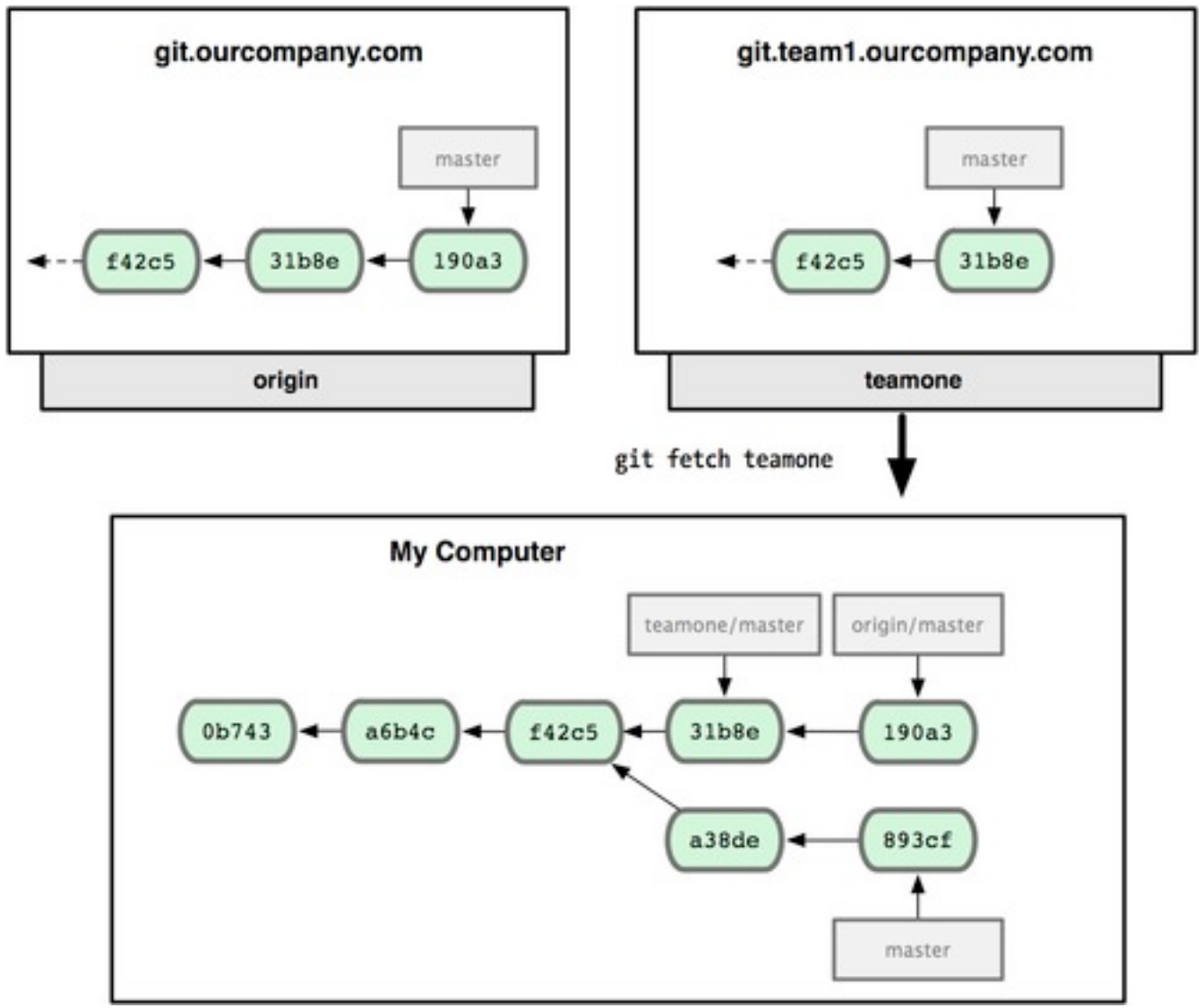

git.ourcompany.com
master
0b743
a6b4c
f42c5
31b8e
190a3
Someone else pushes
My Computer
origin/master
0b743
a6b4c
f42c5
a38de
893cf
master

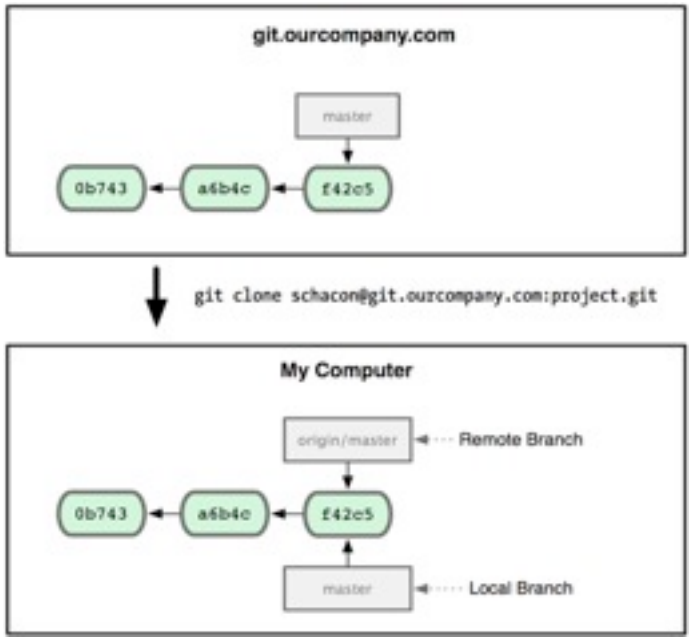

git.ourcompany.com
master
0b743
a6b4c
f42c5
31b8e
190a3
git fetch origin
My Computer
origin/master
0b743
a6b4c
f42c5
31b8e
190a3
a38de
893cf
master




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




git.ourcompany.com
master
f42c5
31b8e
190a3
origin
git.team1.ourcompany.com
master
f42c5
31b8e
teamone
git fetch teamone
My Computer
teamone/master
origin/master
0b743
a6b4c
f42c5
31b8e
190a3
a38de
893cf
master

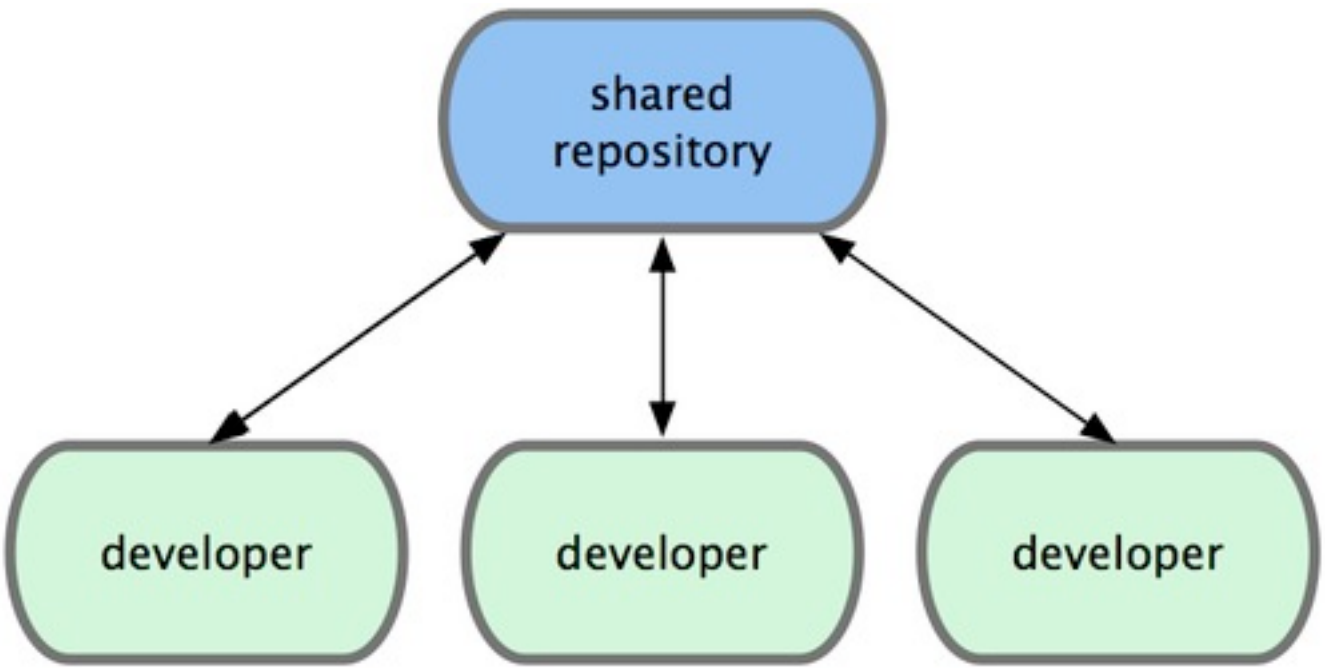


allows you to type git push or git pull without the remote or branch name.
$ git checkout -b serverfix origin/serverfix Branch serverfix set up to track remote branch refs/remotes/origin/serverfix. Switched to a new branch "serverfix"$ git checkout -b sf origin/serverfix Branch serverfix set up to track remote branch refs/remotes/origin/serverfix Switched to a new branch "sf"
$ git checkout --track origin/serverfix Branch serverfix set up to track remote branch refs/remotes/origin/serverfix. Switched to a new branch "serverfix"

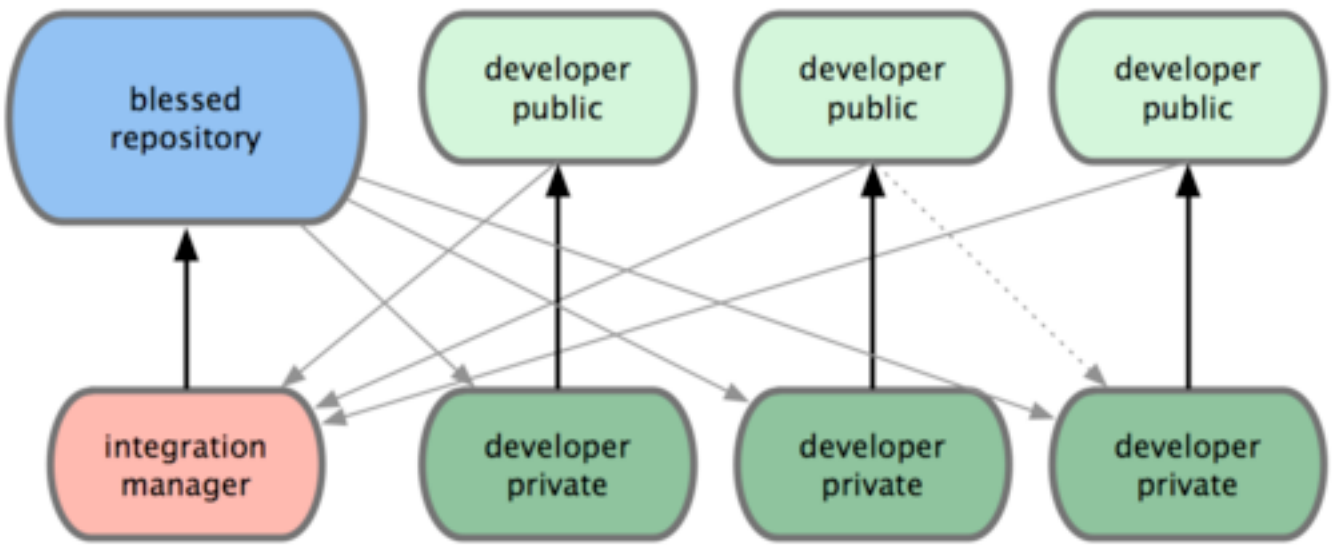
"Tracking" Branches

Branch by Feature

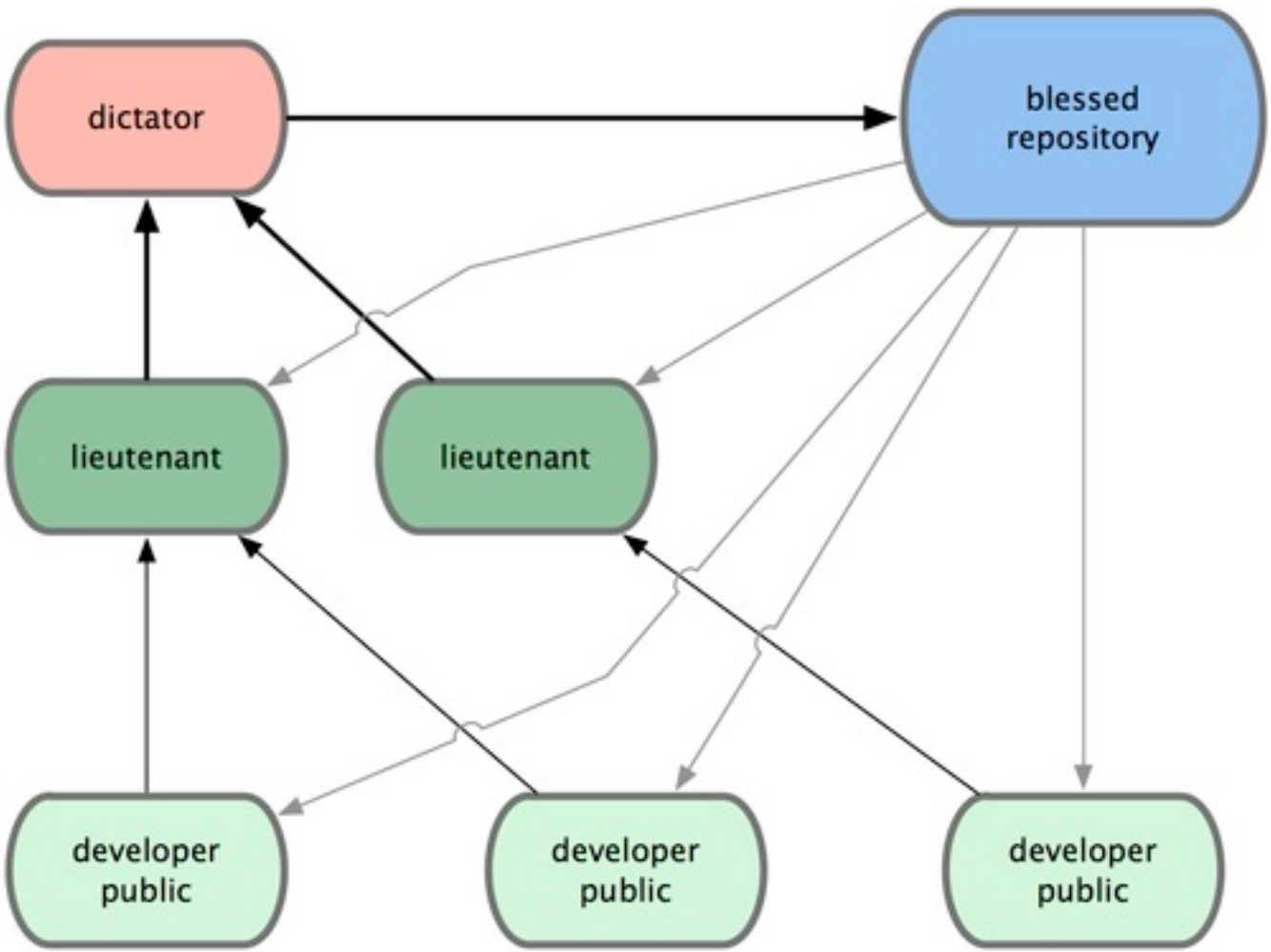
THE THREE MUSKETEERS
FRAN CAVILLA F.09
Image © 2009 Francesco Francavilla - www.francescofrancavilla.com



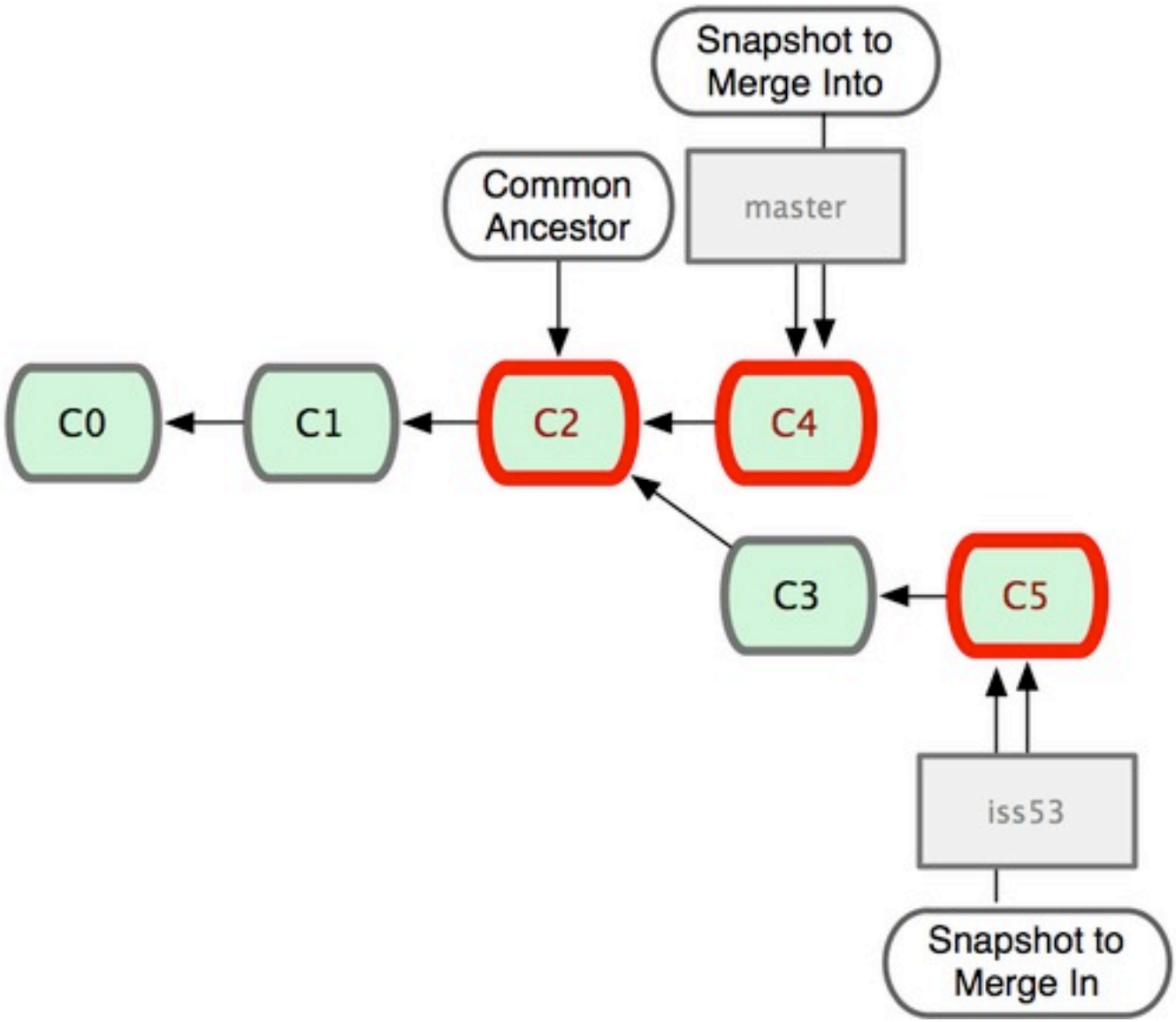
centralized



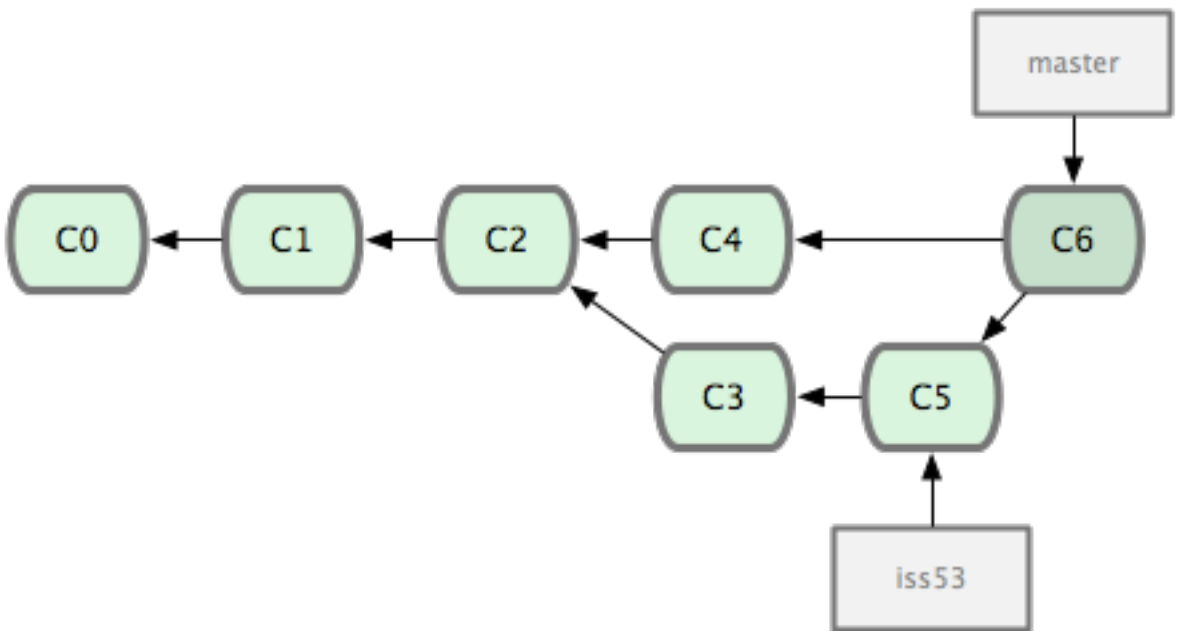
integration manager

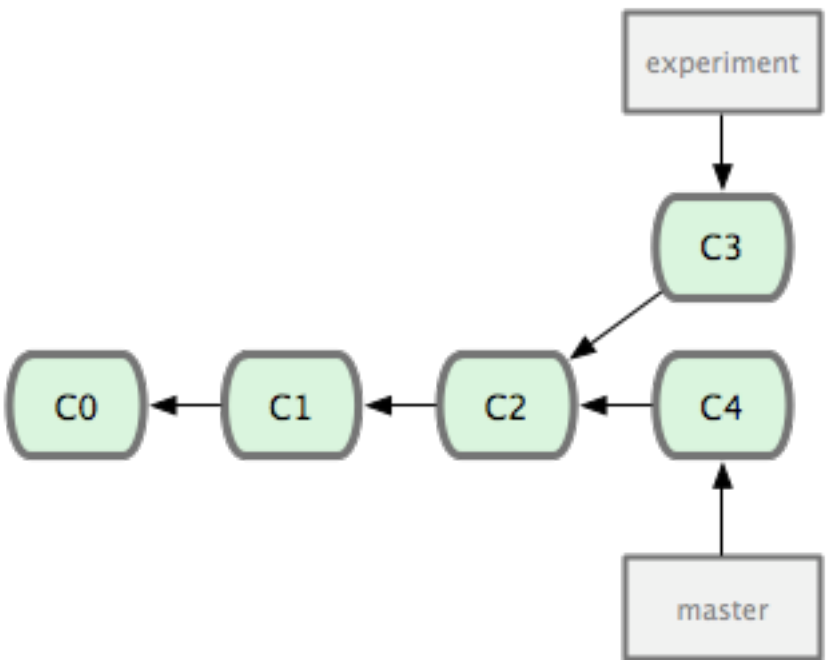


dictator & lieutenant



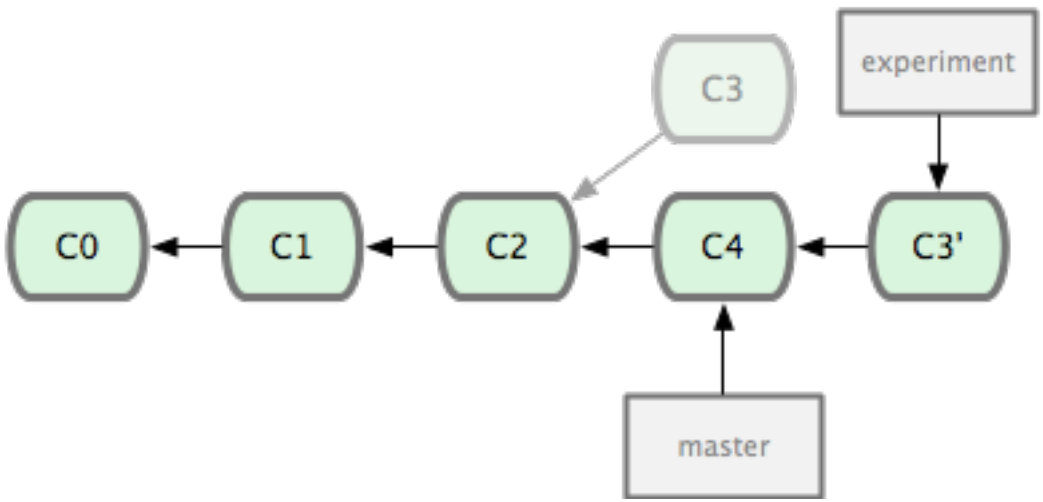
Merging Workflows

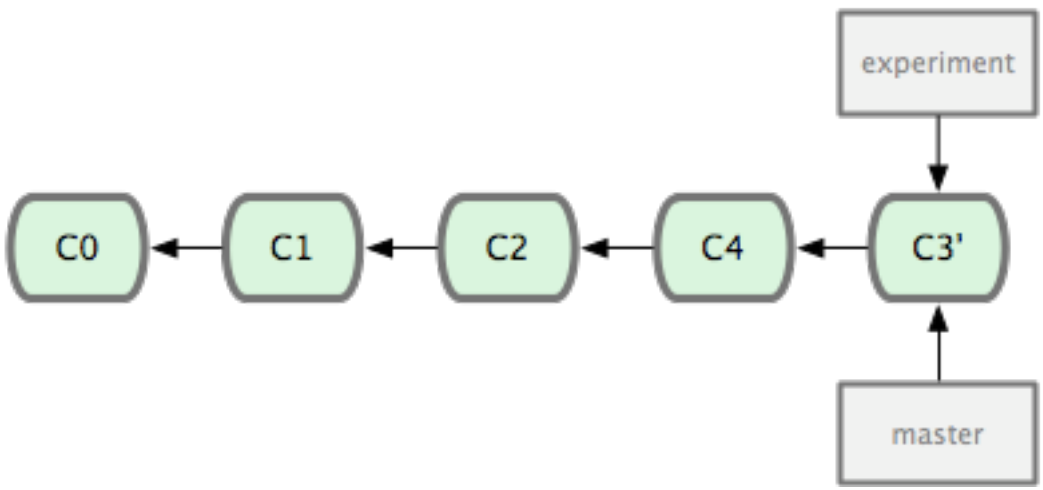

master
C0
C1
C2
C4
C6
C3
C5
iss53

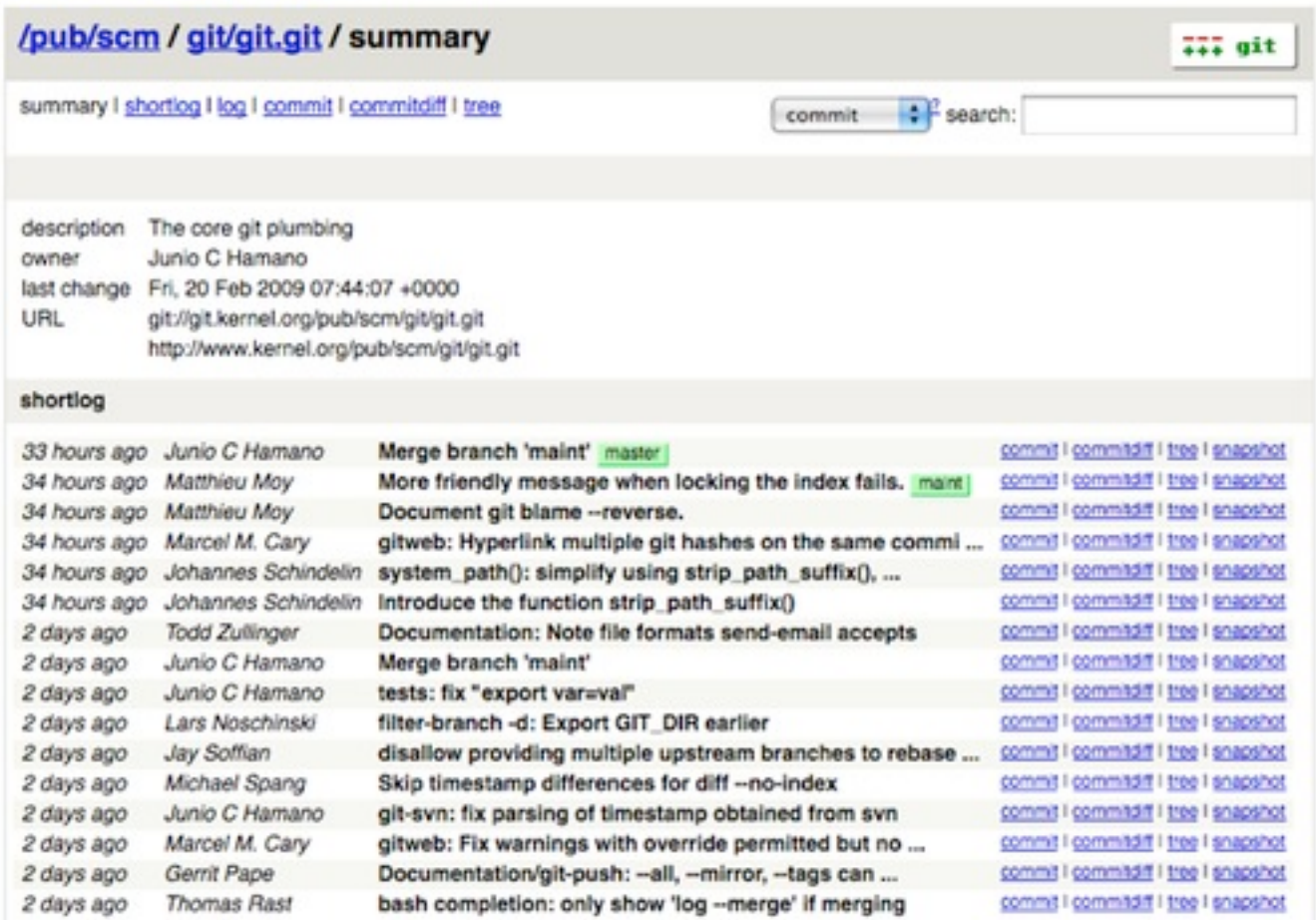


Rebasing Workflows

$ git checkout experiment $ git rebase master First, rewinding head to replay your work on top of it... Applying: added staged command


C3
experiment
C0
C1
C2
C4
C3'
master


experiment
C0
C1
C2
C4
C3'
master



Gitosis + Gitweb

Gitorious

Credits

IMAGES
http://andyjeffries.co.uk/uploads/articles/33/view_git-logo.png
http://blog.nodeta.fi/wp-content/uploads/2009/07/git-branching.jpg
http://www.francescofrancavilla.com/gallery/images/3_musketeers_low.jpg
http://progit.org/figures/ch5/18333fig0501-tn.png
http://progit.org/figures/ch5/18333fig0502-tn.png
http://progit.org/figures/ch5/18333fig0503-tn.png
http://progit.org/figures/ch3/18333fig0318-tn.png
http://progit.org/figures/ch3/18333fig0319-tn.png
http://progit.org/figures/ch3/18333fig0322-tn.png
http://progit.org/figures/ch3/18333fig0323-tn.png
http://progit.org/figures/ch3/18333fig0324-tn.png
http://progit.org/figures/ch3/18333fig0325-tn.png
http://progit.org/figures/ch3/18333fig0326-tn.png
http://commune.s3.amazonaws.com/uploaded/cusp/site/github.png
http://antonlindstrom.com/public/graphic/octocat_stroked.png
http://progit.org/figures/ch4/18333fig0401-tn.png
http://upload.wikimedia.org/wikipedia/en/9/93/Gitorious.png

BOOKS
Pro Git by Scott Chacon - http://progit.org/book/
Git Community Book by Scott Chacon - http://book.git-scm.com
Pragmatic Version Control Using Git by Travis Swicegood - http://www.pragprog.com/titles/tsgit/pragmatic-version-control-using-git