

How GitHub will save the World Economy

a humble talk by Scott Chacon

Me

Scott Chacon



github
SOCIAL CODE HOSTING

**schacon**

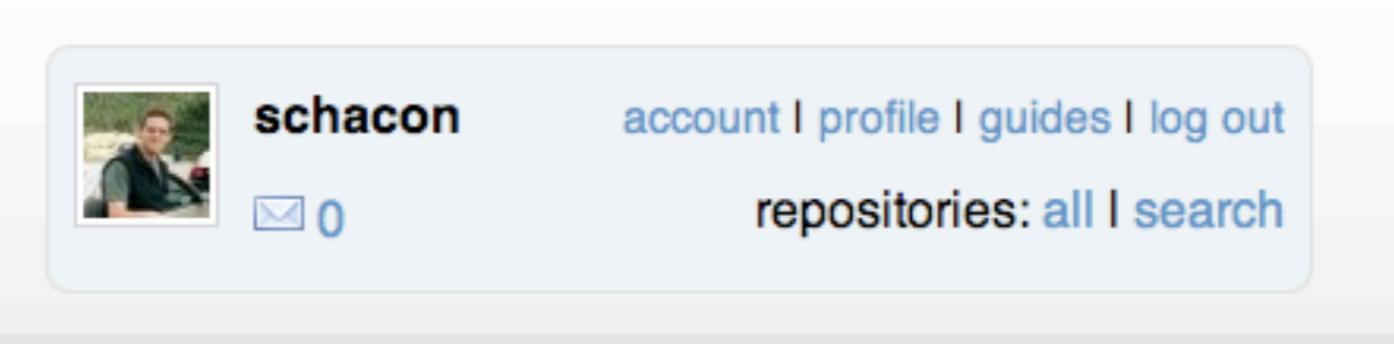
✉ 0

[account](#) | [profile](#) | [guides](#) | [log out](#)[repositories: all](#) | [search](#)

Your Repositories (create a new one)

[all](#) | [public](#) | [private](#) | [sources](#) | [forks](#) [asgit](#) [fireeaglet](#) [git-lighthouse](#) [git-ruby](#) [git-source](#) [munger](#) [ruby-git](#) [simplegit](#) [ticgit](#)

github.com/schacon



 **schacon** account | profile | guides | log out
✉ 0 repositories: all | search

Your Repositories (create a new one)

[all](#) | [public](#) | [private](#) | [sources](#) | [forks](#)

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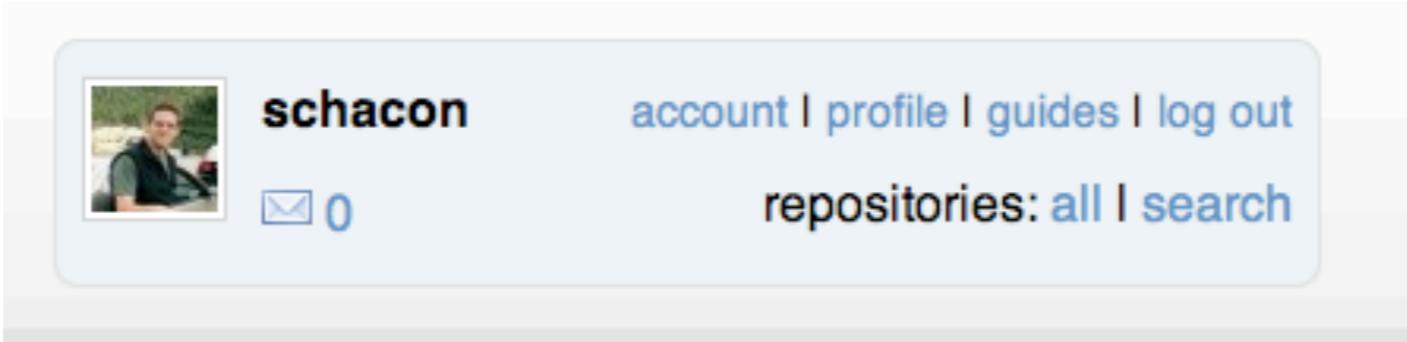
 [munger](#)

 [ruby-git](#)

 [simplegit](#)

 [ticgit](#)

github.com/schacon



A screenshot of a GitHub user profile. At the top left is a small square thumbnail of a man's face. To its right is the username "schacon". Further to the right are links for "account", "profile", "guides", and "log out". Below the username is a blue envelope icon followed by the number "0". To the right of the envelope are links for "repositories: all" and "search".

Your Repositories (create a new one)

[all](#) | [public](#) | [private](#) | [sources](#) | [forks](#)

 [asgit](#)

 [fireeaglet](#)

 [git-lighthouse](#)

 [git-ruby](#)

 [git-source](#)

 [munger](#)

 [ruby-git](#)

 [simplegit](#)

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\$9

Git Internals

Source code control and beyond

by Scott Chacon

THE EXPERT'S VOICE®

Pro Git

Patrick Aljord and Scott Chacon

Apress®

git-scm.com



+++ git

git the fast version control system

A cartoon orange character with a single sprout on its head is standing in a field of small green trees.

Home About Git Documentation Download Related Tools Wiki

The [Git User's Survey 2008](#) is up! Please devote a few minutes of your time to fill it out, so we can improve Git!

Git is...

Git is an **open source, distributed version control system** designed to handle everything from small to very large projects with speed and efficiency.

Every Git clone is a full-fledged repository with complete history and full revision tracking capabilities, not dependent on network access or a central server.
Branching and merging are fast and easy to do.

Git is used for version control of files, much like tools such as [Mercurial](#), [Subversion](#), [CVS](#), [Perforce](#), [Bitkeeper](#), and [Visual SourceSafe](#).

Projects using Git

- [Git](#)
- [Linux Kernel](#)
- [Ruby on Rails](#)
- [WINE](#)
- [Fedora](#)
- [X.org](#)
- [Rubinius](#)
- [VLC](#)
- [Prototype](#)

Download Git

The latest stable Git release is

v1.6.0.2

[release notes](#) (2008-09-12)



[tar.bz2 \(sign\)](#)



[tar.gz \(sign\)](#)

[Other Download Options](#)

[Source and History](#)

Git Quick Start

Cloning and Creating a Patch

```
$ git clone git://github.com/git/hello-world.git  
$ cd hello-world
```

Creating and Committing

```
$ cd (project-directory)  
$ git init
```

Got a Question?

If you are curious about something, feel free to ask on the [IRC](#) channel or the [mailing list](#).

book.git-scm.com



The Git Community Book

Home About Git Documentation Download Related Tools Wiki

The Git Community Book

Welcome to the Git Community Book. This book has been built by dozens of people in the Git community, and is meant to help you learn how to use Git as quickly and easily as possible.

If you see anything out of date, have a suggestion on how to improve it, or would like to help add to the book, please see the [How to Contribute](#) page, or just send [our maintainer](#) a note.

Download

Click [here](#) to download the current PDF version of this book.



New to Git?

If you want to really understand Git, You may want to start at [the beginning](#).

If you just want to jump right in, you can skip right to [setting it up](#).

1. Introduction

[Welcome to Git](#)

[The Git Object Model](#)

[Git Directory and Working Directory](#)

[The Git Index](#)

2. First Time

[Installing Git](#)

5. Advanced Git

[Creating New Empty Branches](#)

[Modifying your History](#)

[Advanced Branching And Merging](#)

[Finding Issues - Git Bisect](#)

[Finding Issues - Git Blame](#)

[Git and Email](#)

[Customizing Git](#)

GitCasts

Browsing Git Objects

May
23

In this episode, I show how to browse and inspect raw Git objects. The major tools covered are the git cat-file and git ls-tree commands to inspect the object contents, and then I cover some of the included graphical browsers, gitk and gitweb.

[watch episode](#) (7:26)

Git Log

May
19

This episode is on git-log, which demonstrates most of the major features and options to the git-log command. It includes showing the stat, short-stat and name-stat options, the —pretty options, the since and until limiters, the path limiter and author field searching.

[watch episode](#) (6:20)

Interactive Adding

May
19

This episode demonstrates how to use the git interactive add command. It covers all of the major features of interactive adding, including status, update, revert, add untracked, patch and diff.



To support GitCasts, and to have a nice searchable PDF of a lot of this stuff, please consider buying my [Git Internals book](#) published by Peepcode Press.



[GitHub](#) : Social Git hosting, a home for your codes.

schacon@gmail.com

How

**GitHub will
save**

the World Economy

How Git and GitHub will
help developers save time
and help businesses be
efficient so they can turn
the World Economy
around

What is Git?

**Git is an open source,
distributed version control
system designed for speed
and efficiency**

version control

mercurial (hg)

bazaar

subversion (svn)

version control

concurrent version system (cvs)

perforce

visual source safe

mercurial (hg)

bazaar

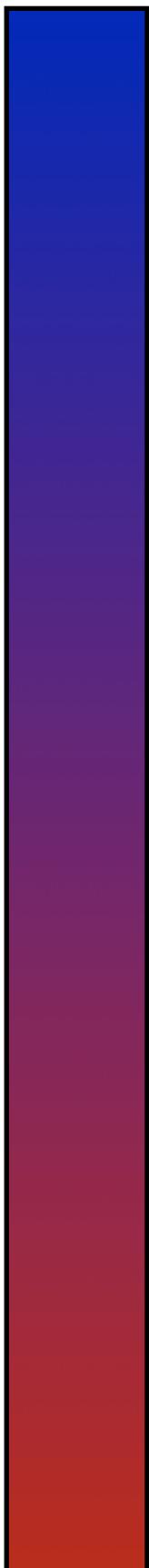
subversion (svn)

version control

concurrent version system (cvs)

perforce

visual source safe



SoS



mercurial (hg)

“not bad”

bazaar

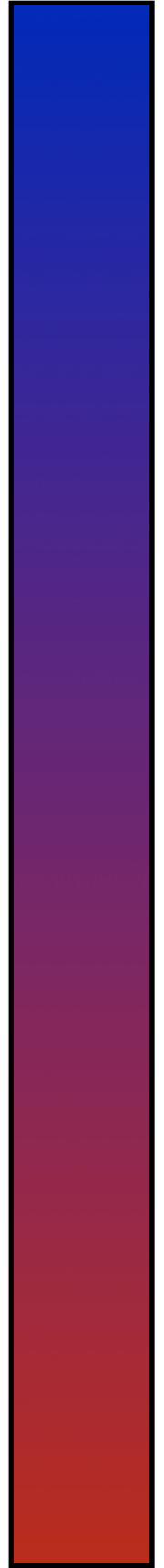
subversion (svn)

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concurrent version system (cvs)

perforce

visual source safe



SoS

mercurial (hg)

bazaar

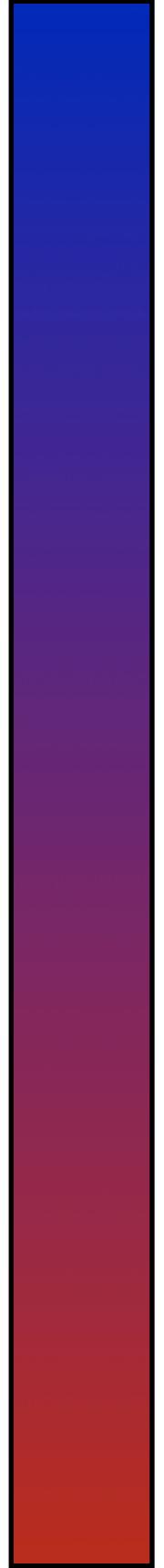
subversion (svn)

version control

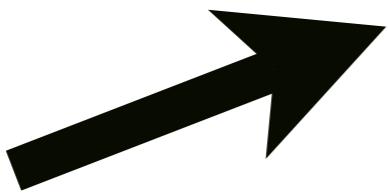
concurrent version system (cvs)

perforce

visual source safe “kill self”



git



mercurial (hg)

bazaar

subversion (svn)

version control

concurrent version system (cvs)

perforce

visual source safe

**Git is an open source,
distributed version control
system designed for speed
and efficiency**

git-scm.com

The screenshot shows the official website for Git (git-scm.com). The header features the word "git" in large letters with a small icon above it, followed by the tagline "the fast version control system". Below the header is a navigation bar with links for Home, About Git, Documentation, Download, Tools & Hosting, and Wiki. A cartoon character of a brown bear holding a branch is visible on the right side of the header.

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- [Ruby on Rails](#)
- [Android](#)
- [WINE](#)
- [Fedora](#)
- [X.org](#)
- [VLC](#)
- [Prototype](#)

Download Git

The latest stable Git release is **v1.6.1.1**

[Release notes \(2009-01-25\)](#)

 [tar.bz2 \(sign\)](#)

 [tar.gz \(sign\)](#)

[Other Download Options](#)

[Source and History](#)

Git Quick Start

Git is an open source,
distributed version control
system designed for speed
and efficiency

Fully Distributed

(almost) everything is local

which means

which means

everything is fast

which means

everything is fast

every clone is a backup

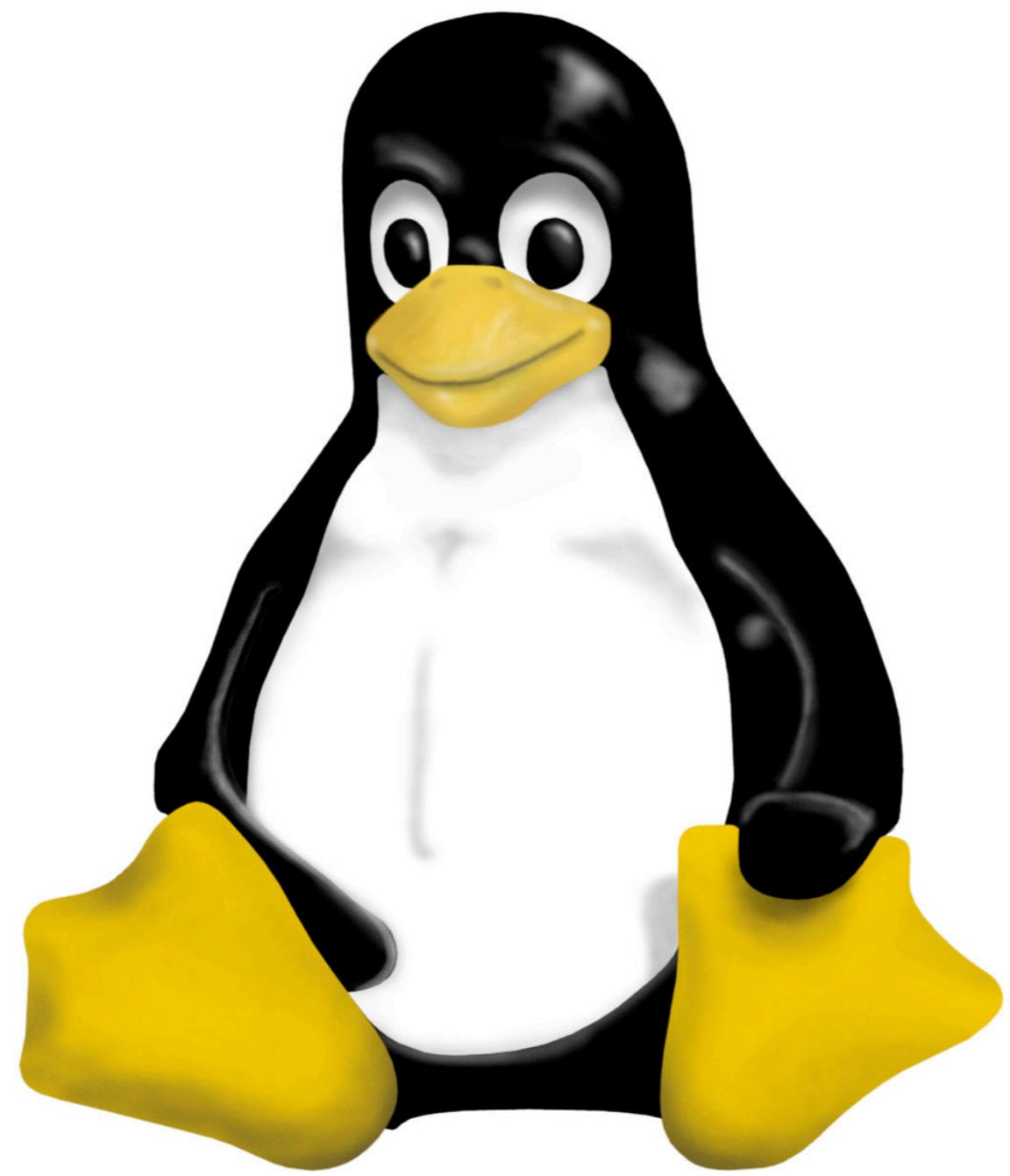
which means

everything is fast

every clone is a backup

work offline

**Git is an open source,
distributed version control
system designed for
speed and efficiency**



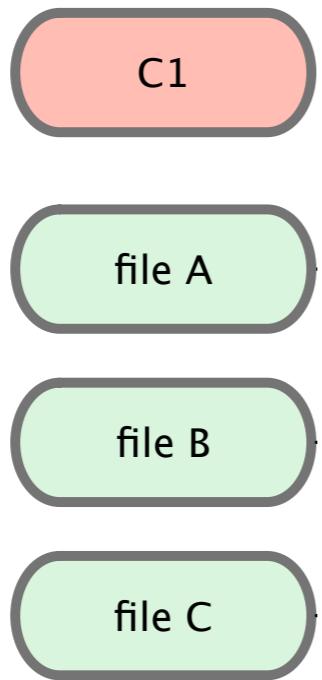
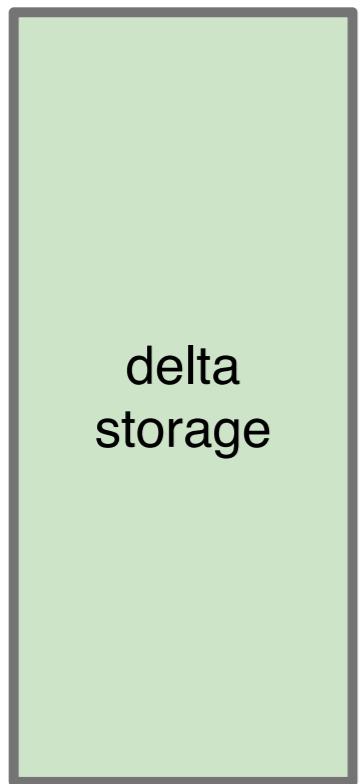
Immutable

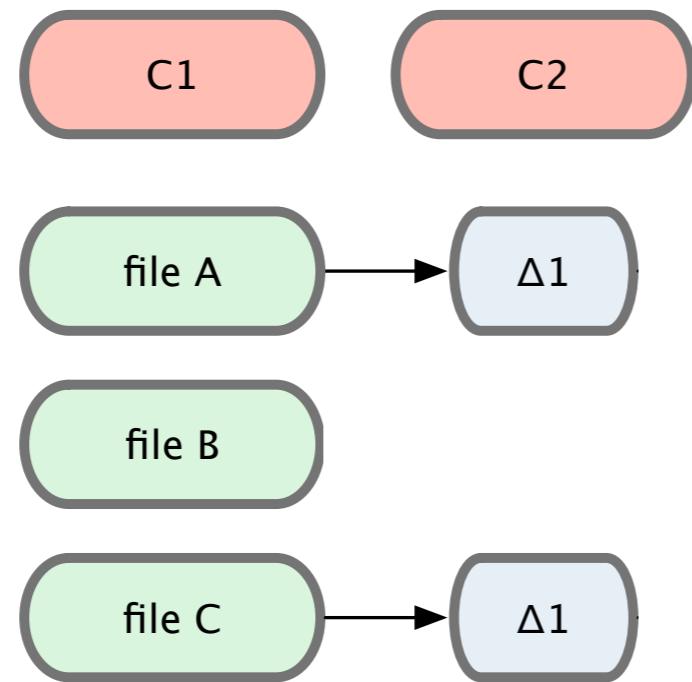
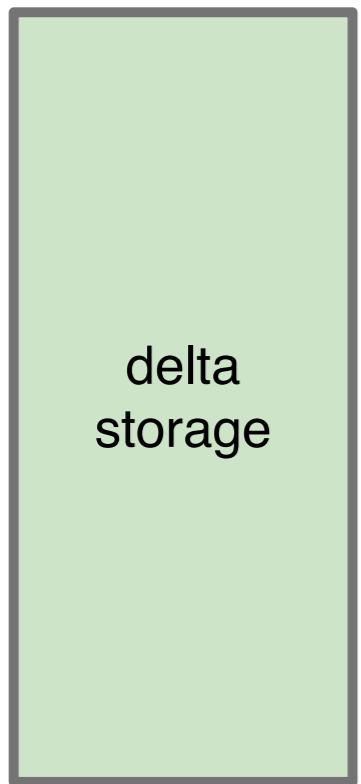
(almost) never removes data

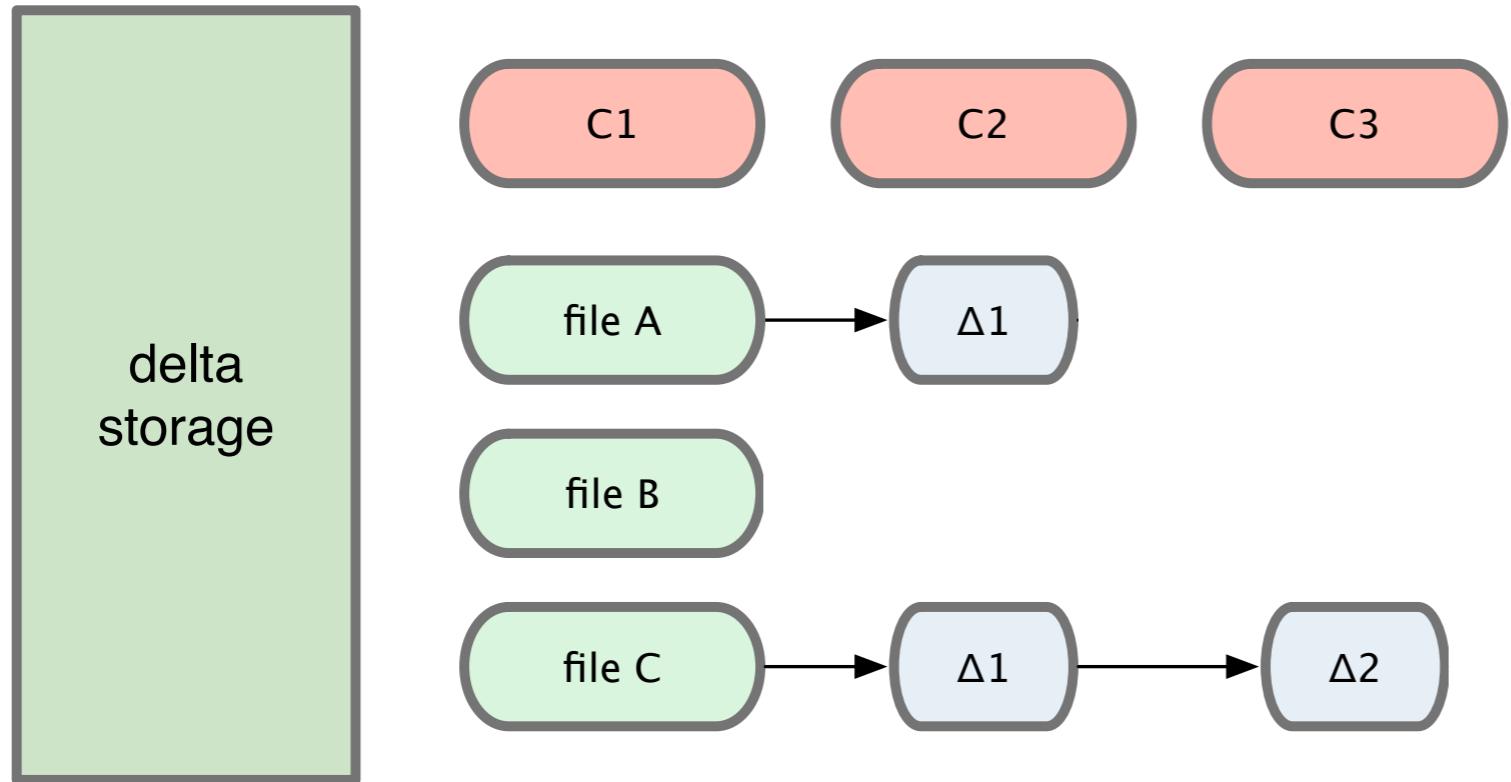
Snapshots, not Patches

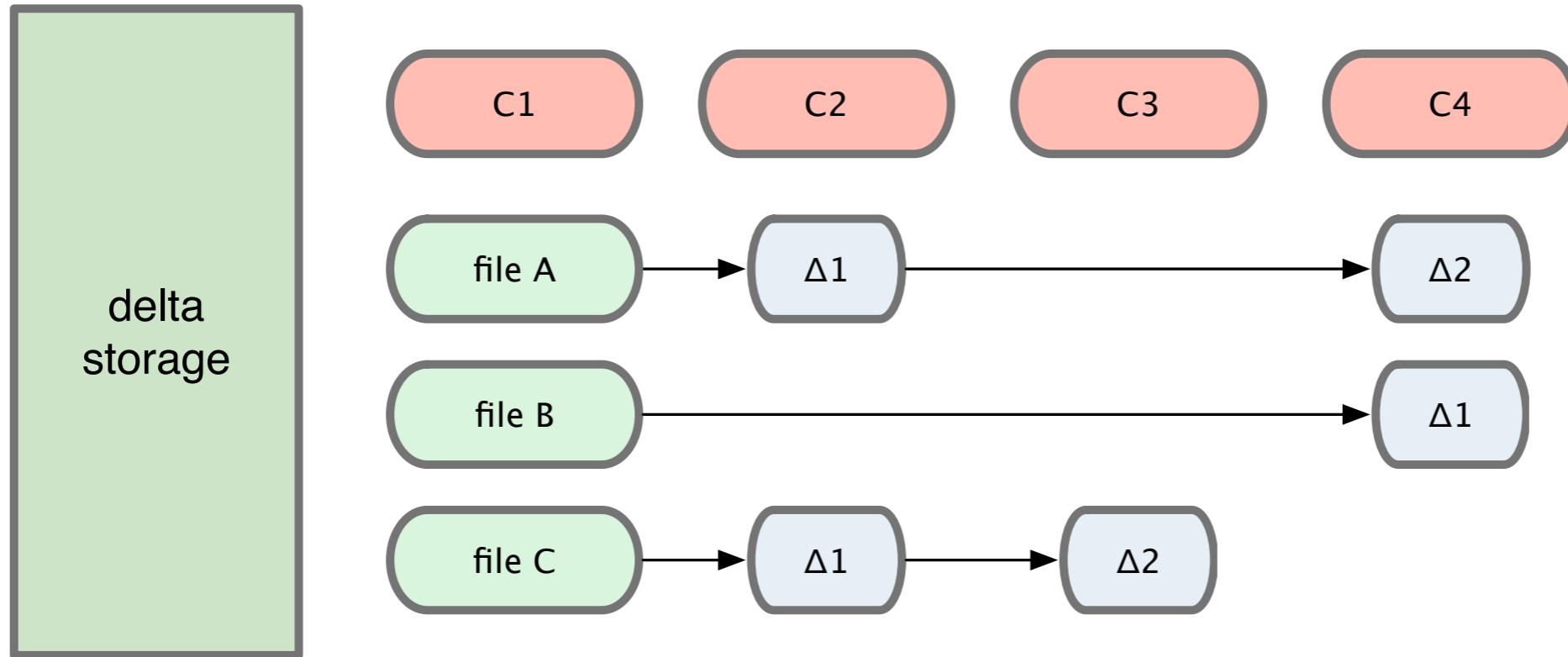


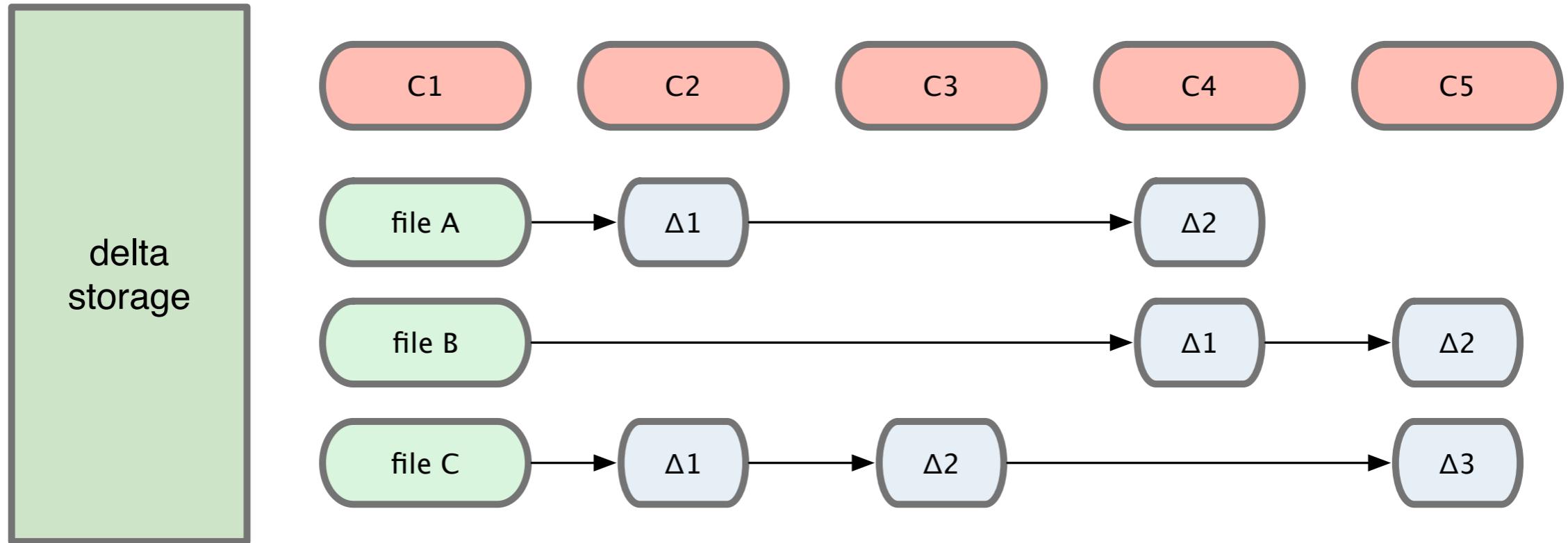
delta
storage

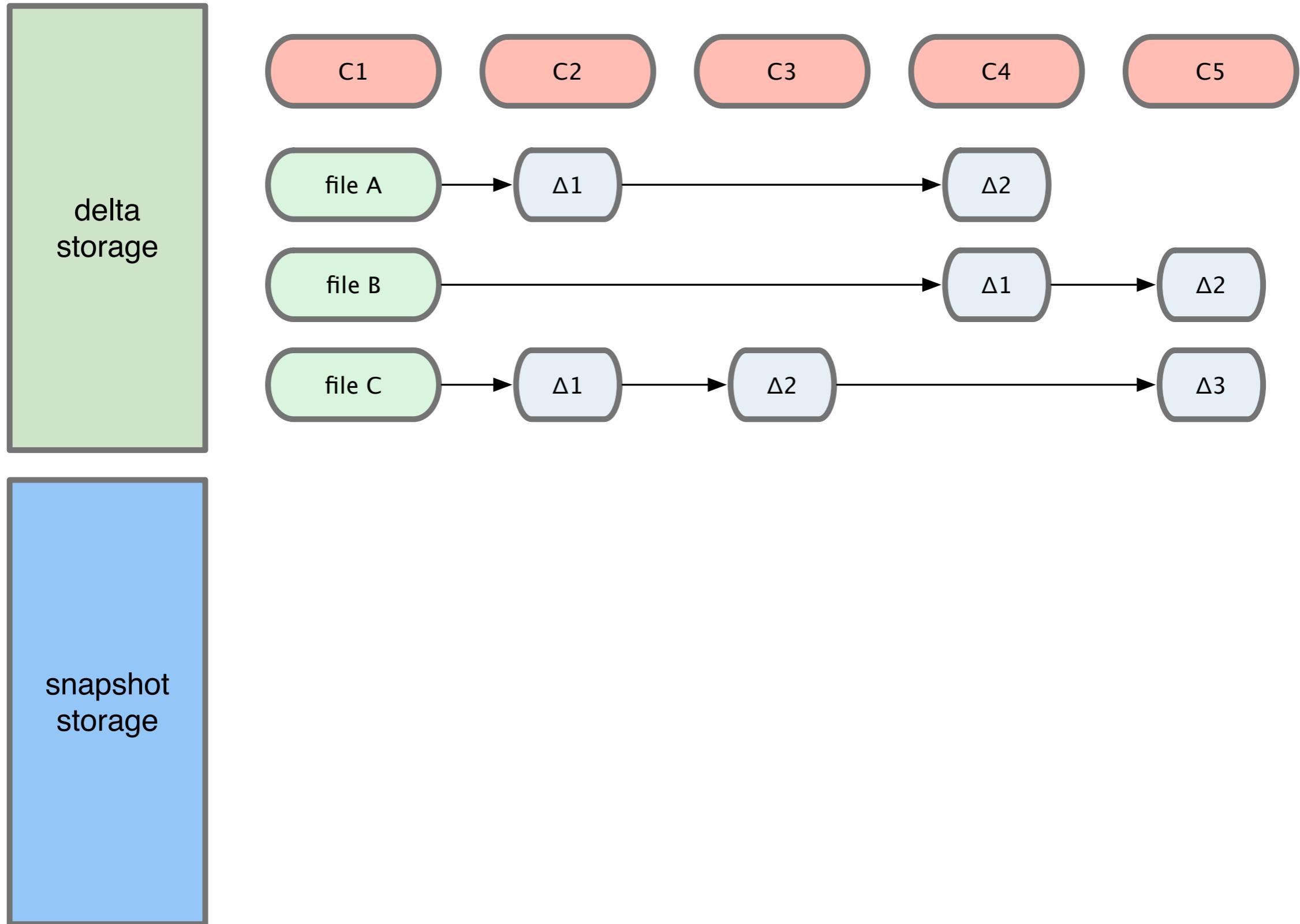


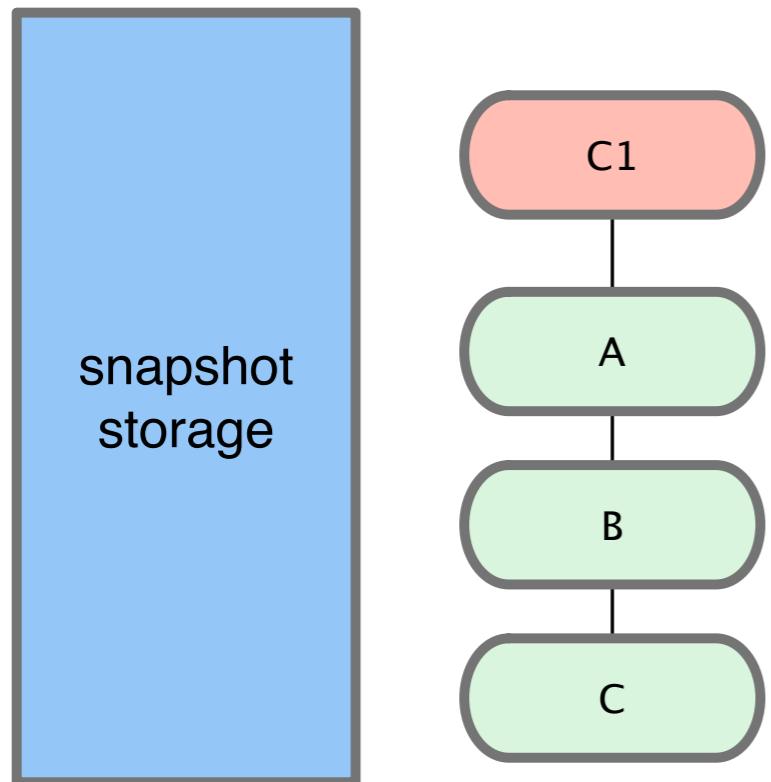
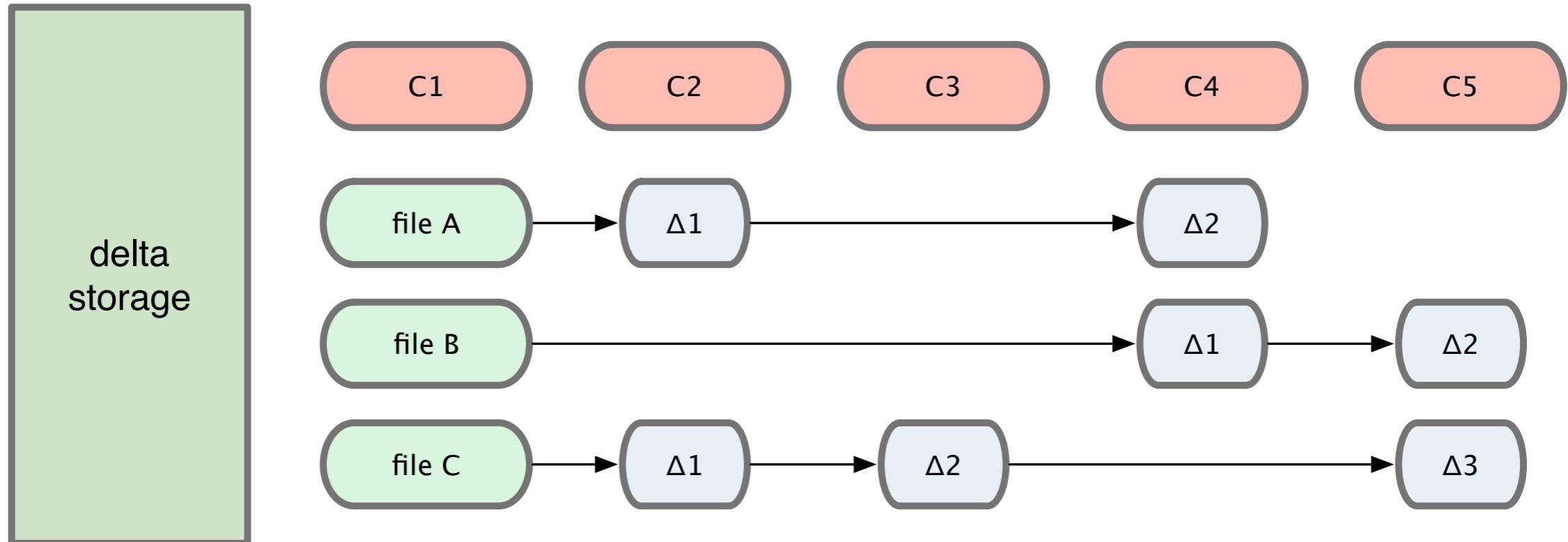


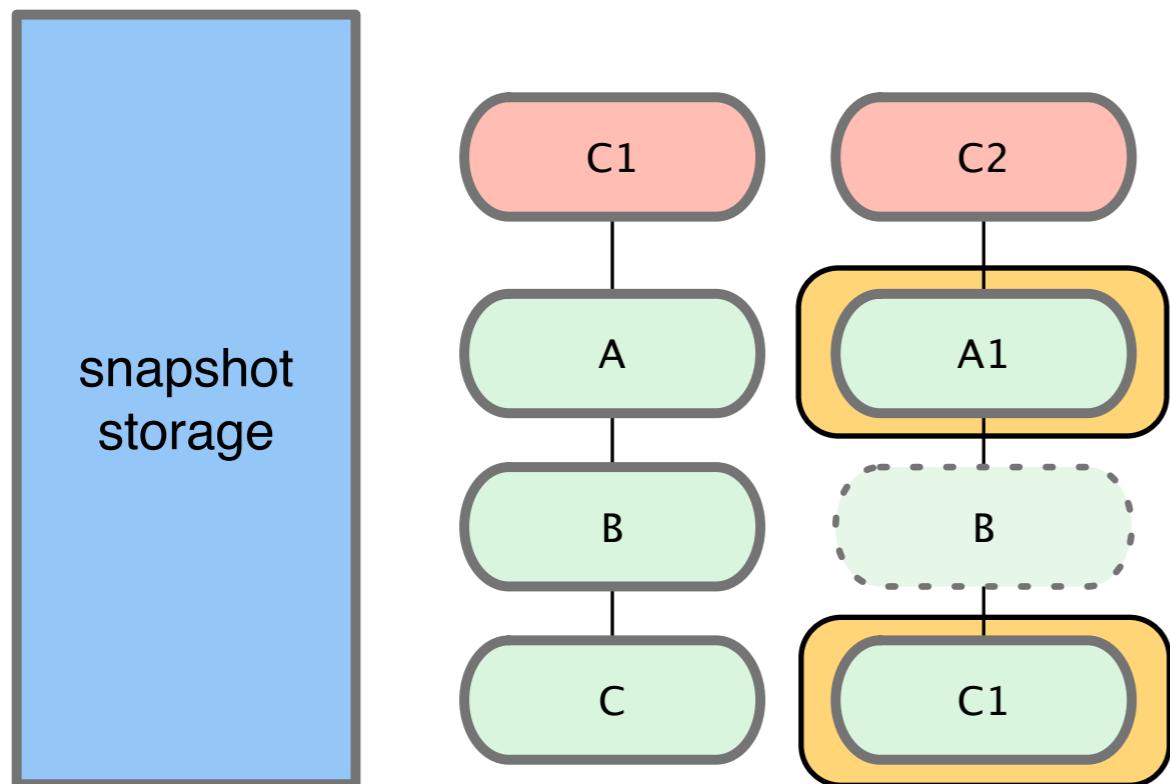
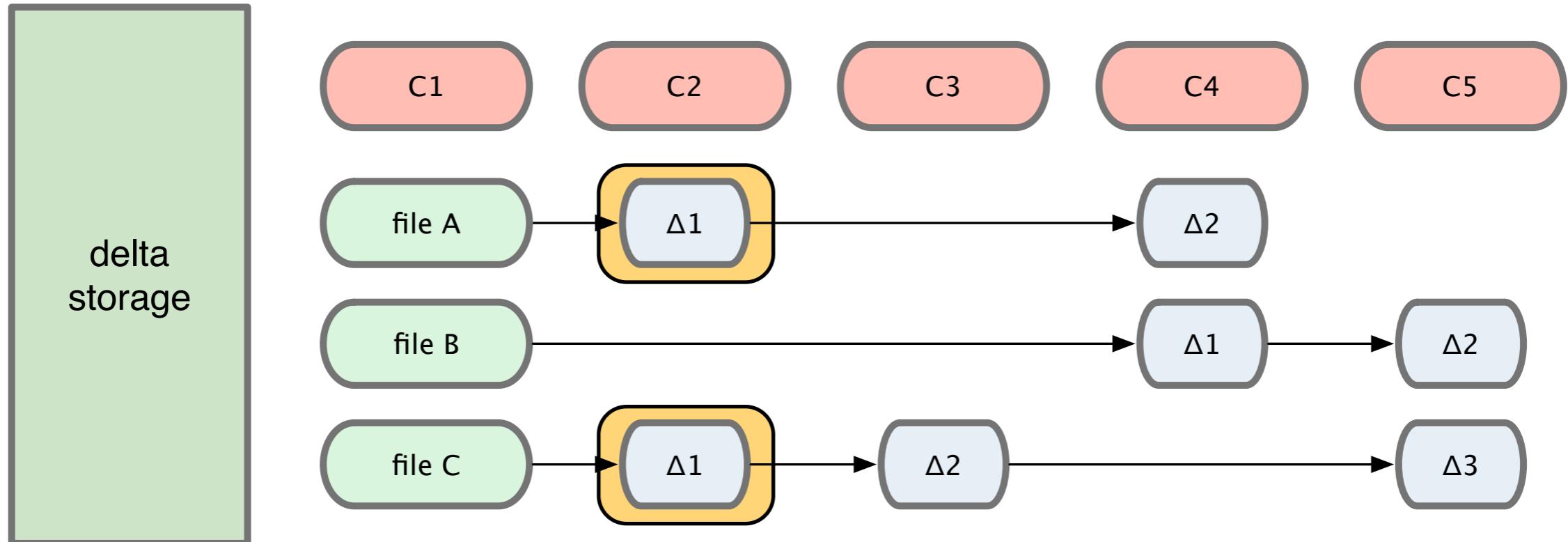


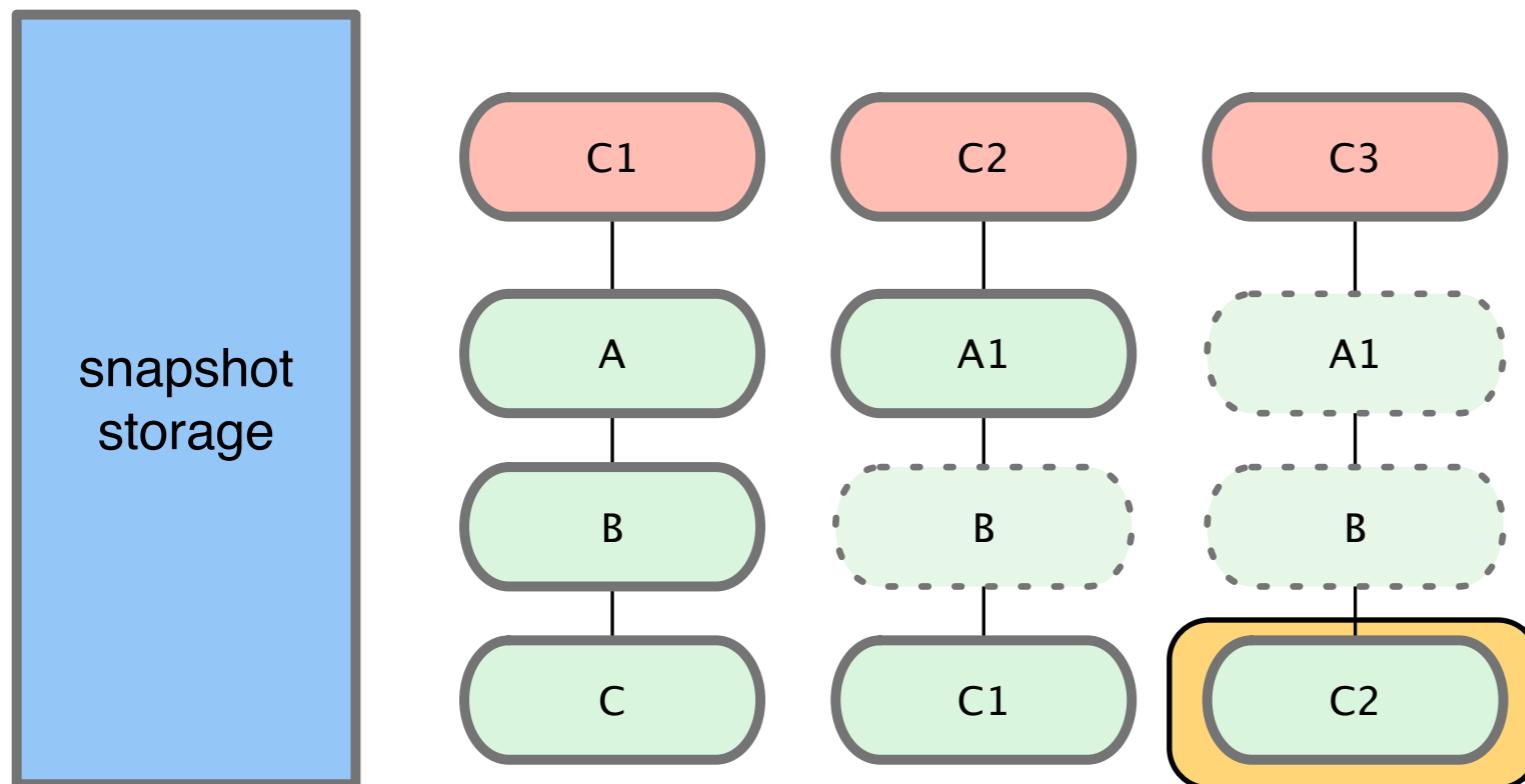
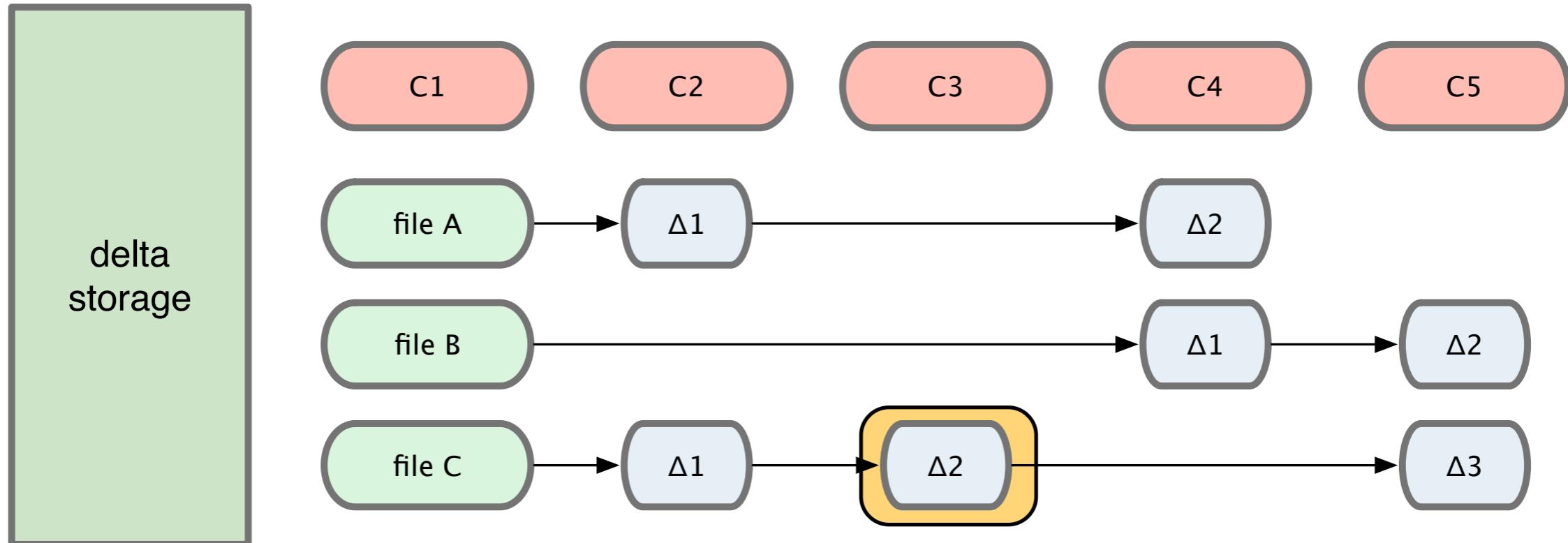


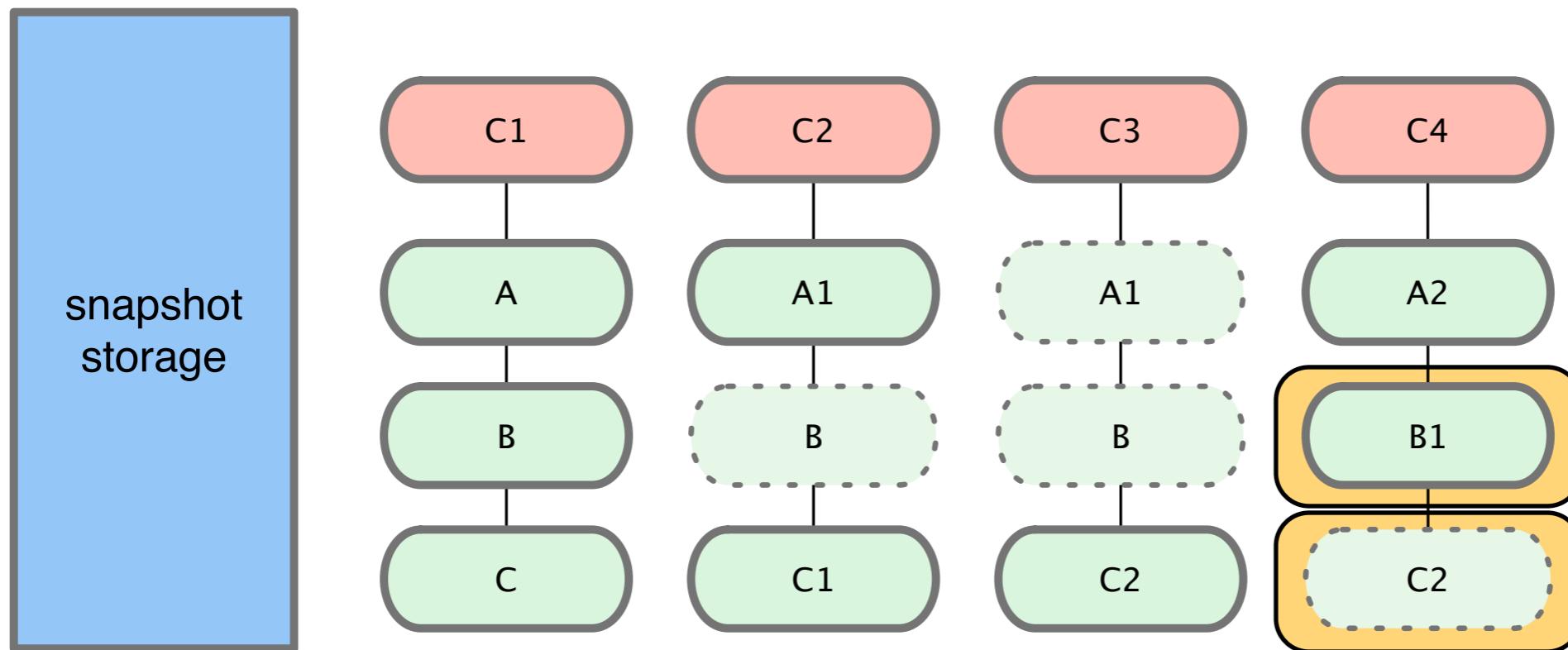
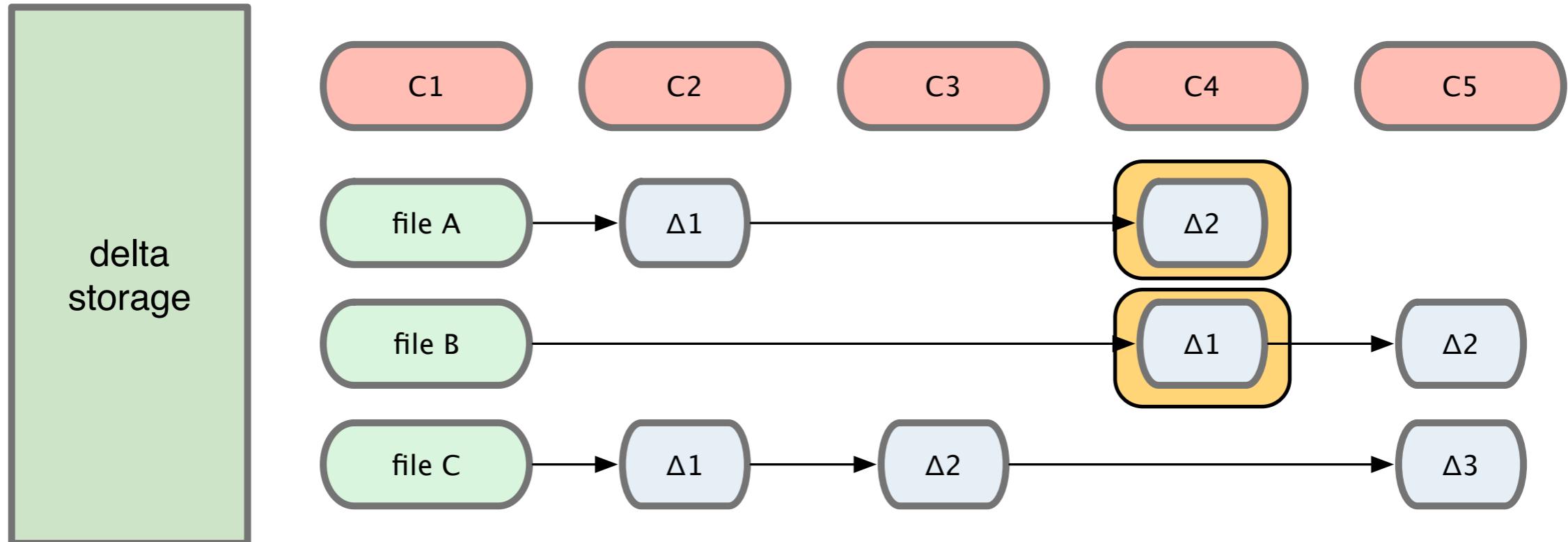


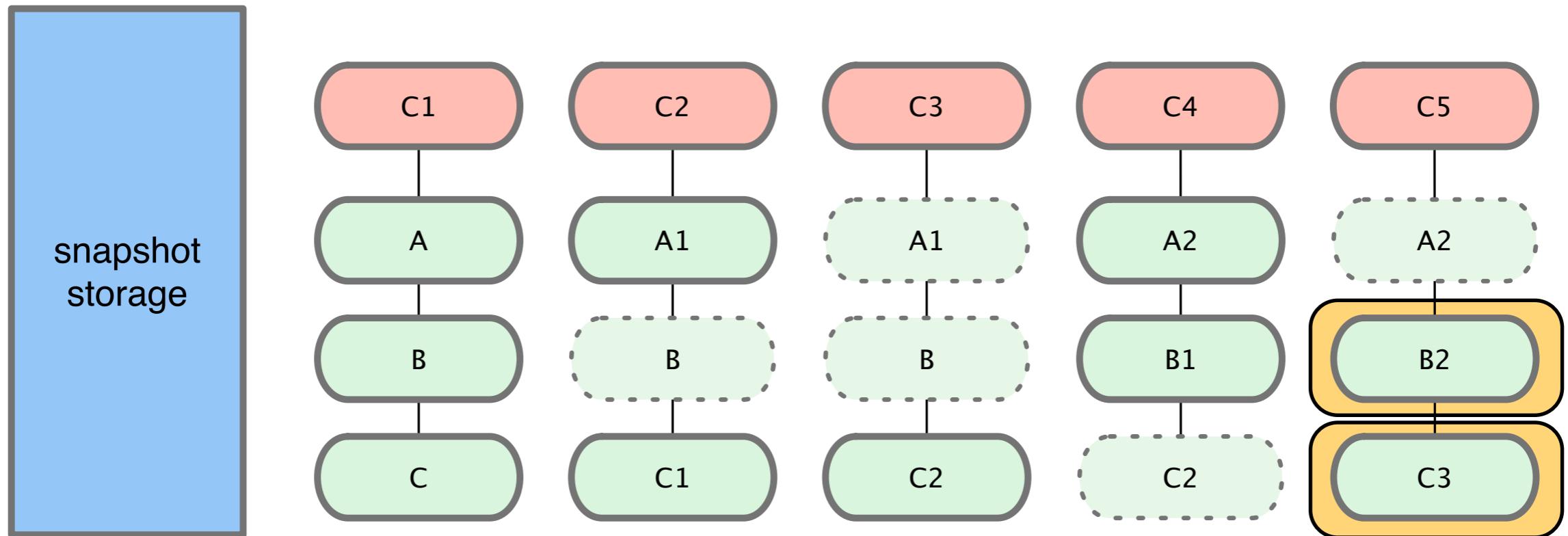
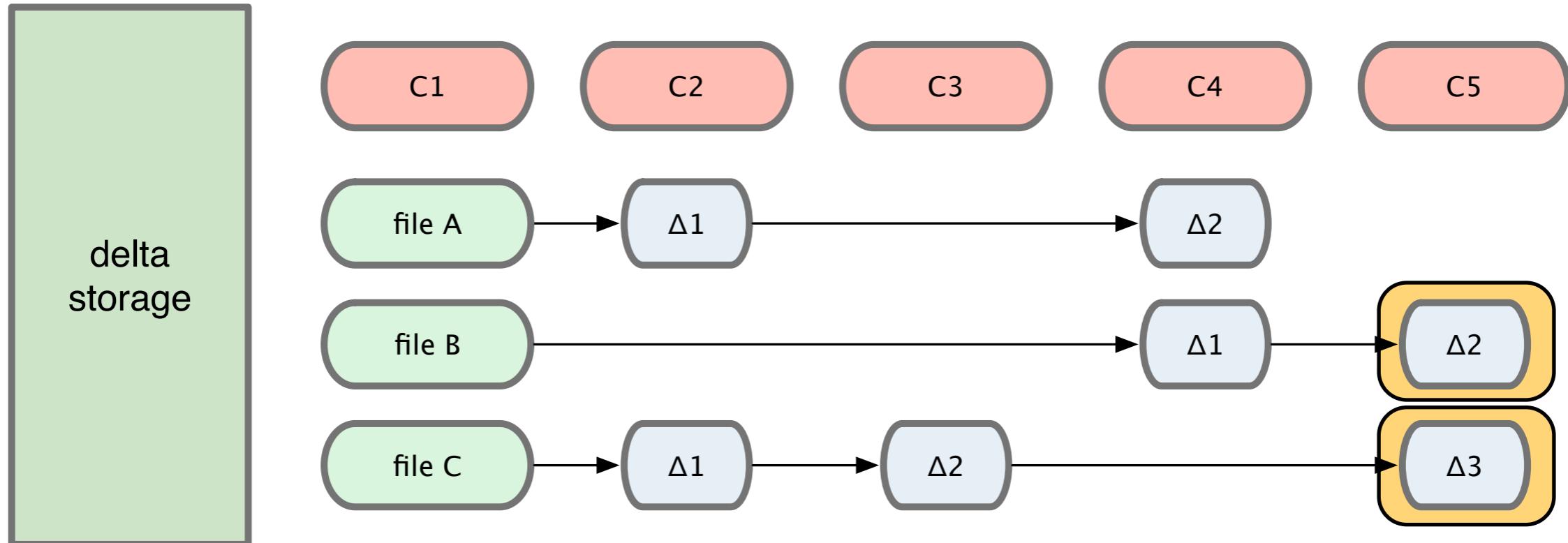


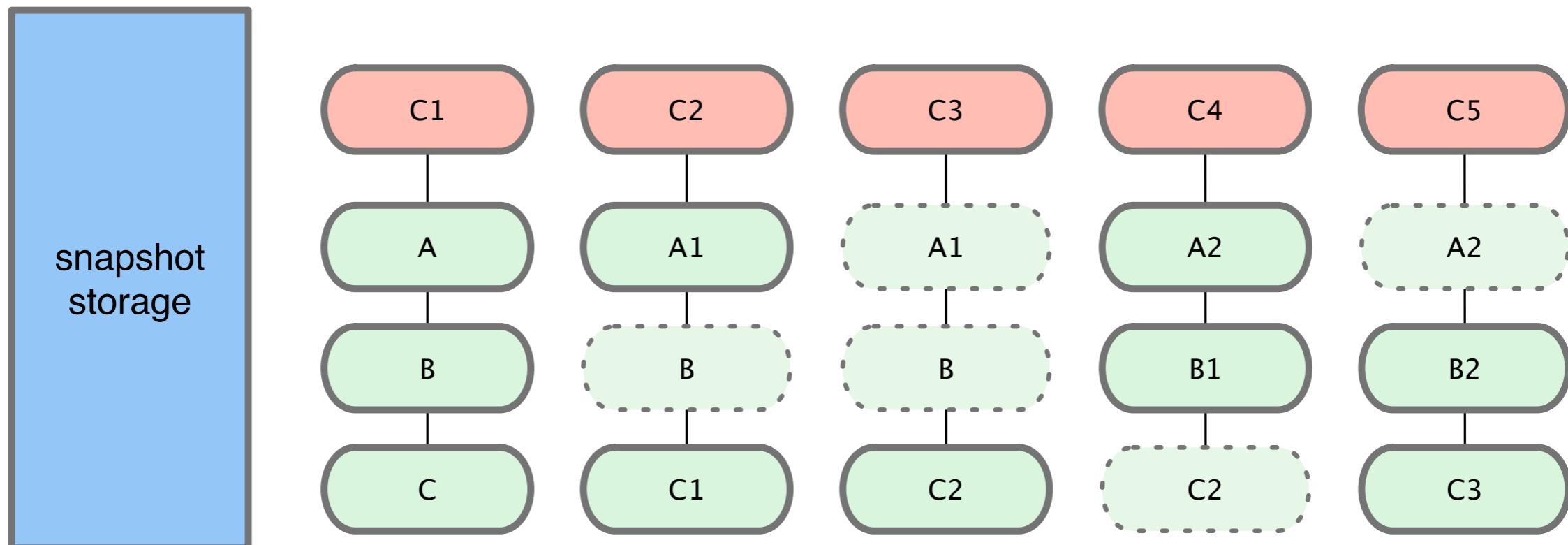
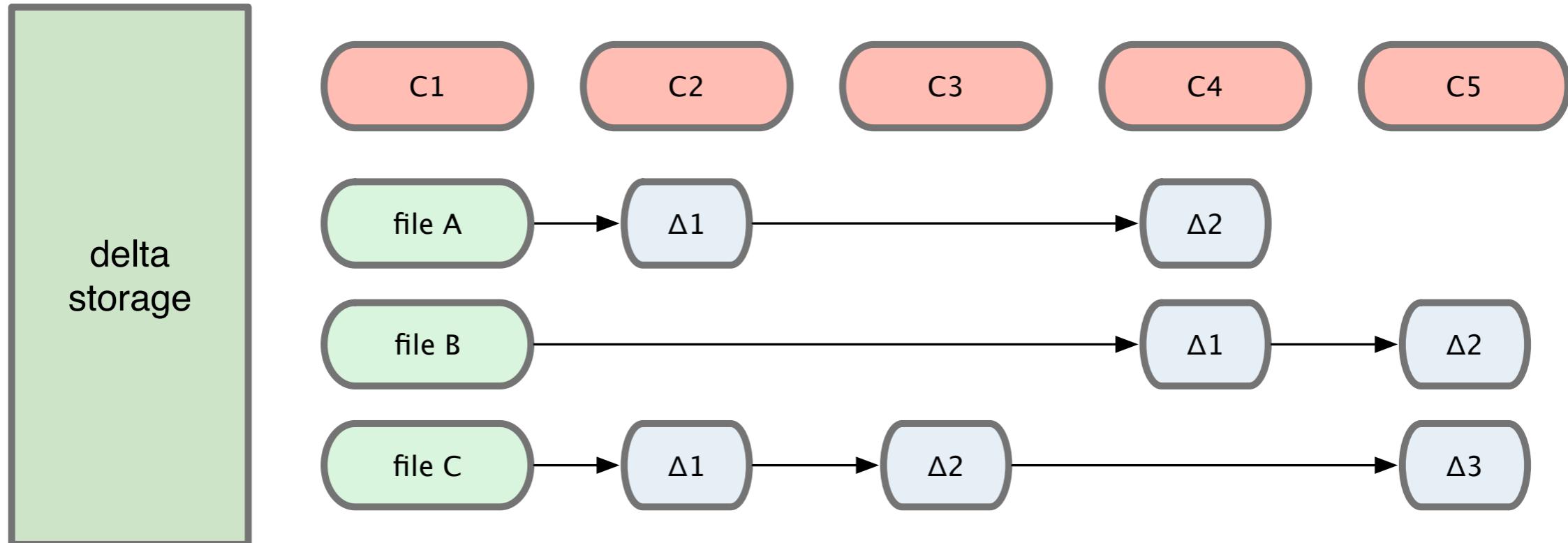












How Git and GitHub will
help developers save time
and help businesses be
efficient so they can turn
the World Economy
around

Point

#1

How Git and GitHub will

help developers save time

and help businesses be
efficient so they can turn
the World Economy
around

2

individual

individual

team

individual

team

**how Git saves the
individual time**

git ist schnell!

No Network Needed

No Network Needed

Performing a diff

No Network Needed

Performing a diff

Viewing file history

No Network Needed

Performing a diff

Viewing file history

Committing changes

No Network Needed

Performing a diff

Viewing file history

Committing changes

Merging branches

No Network Needed

Performing a diff

Viewing file history

Committing changes

Merging branches

Obtaining any other revision of a file

No Network Needed

Performing a diff

Viewing file history

Committing changes

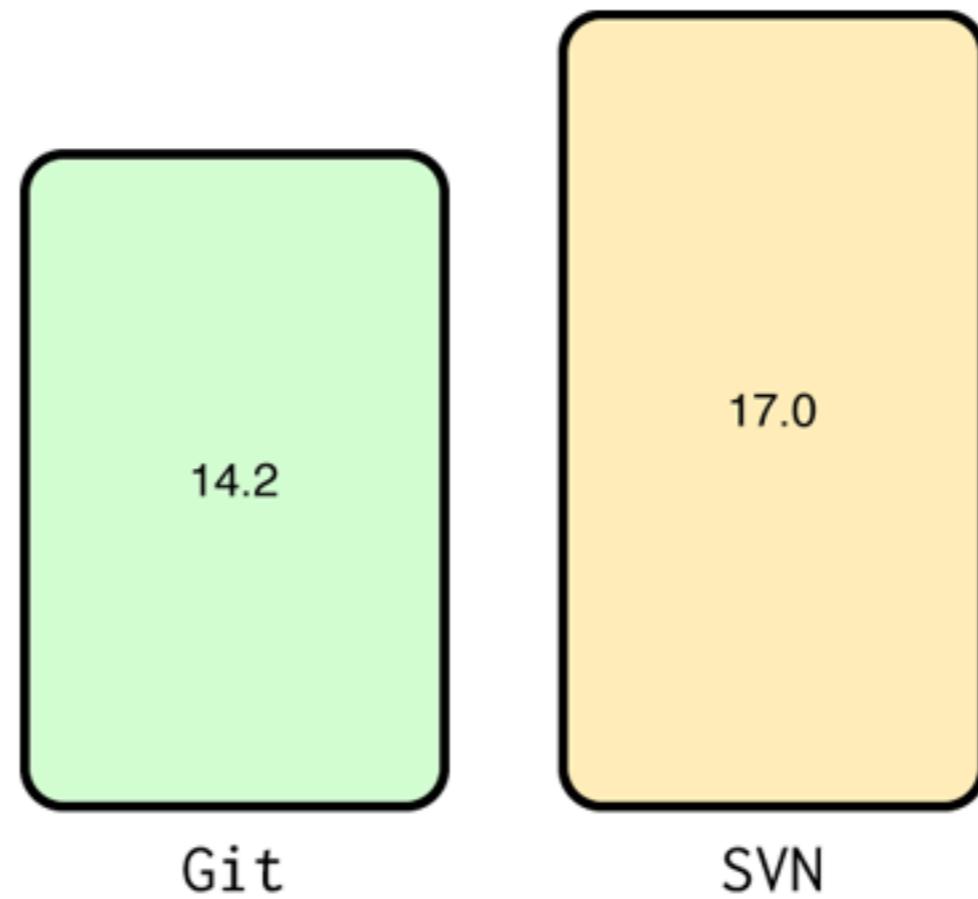
Merging branches

Obtaining any other revision of a file

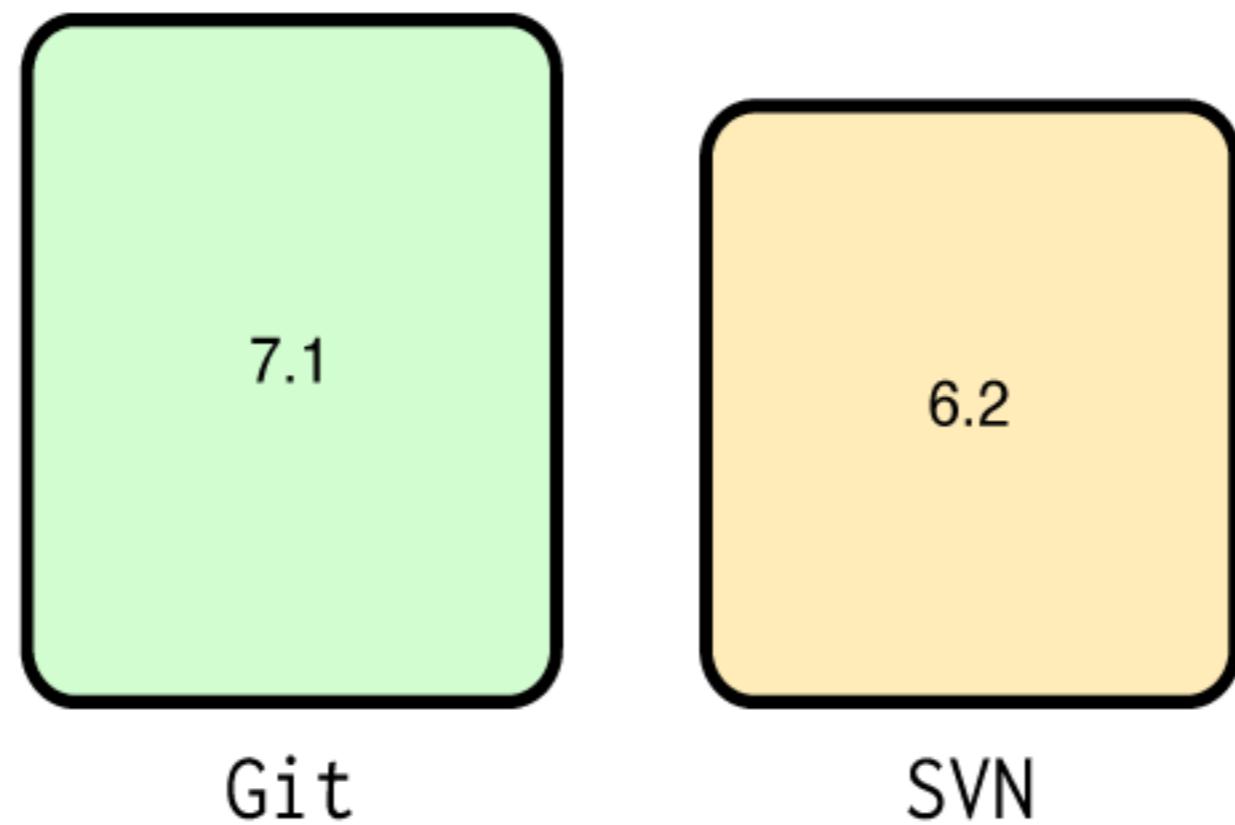
Switching branches

jQuery tests

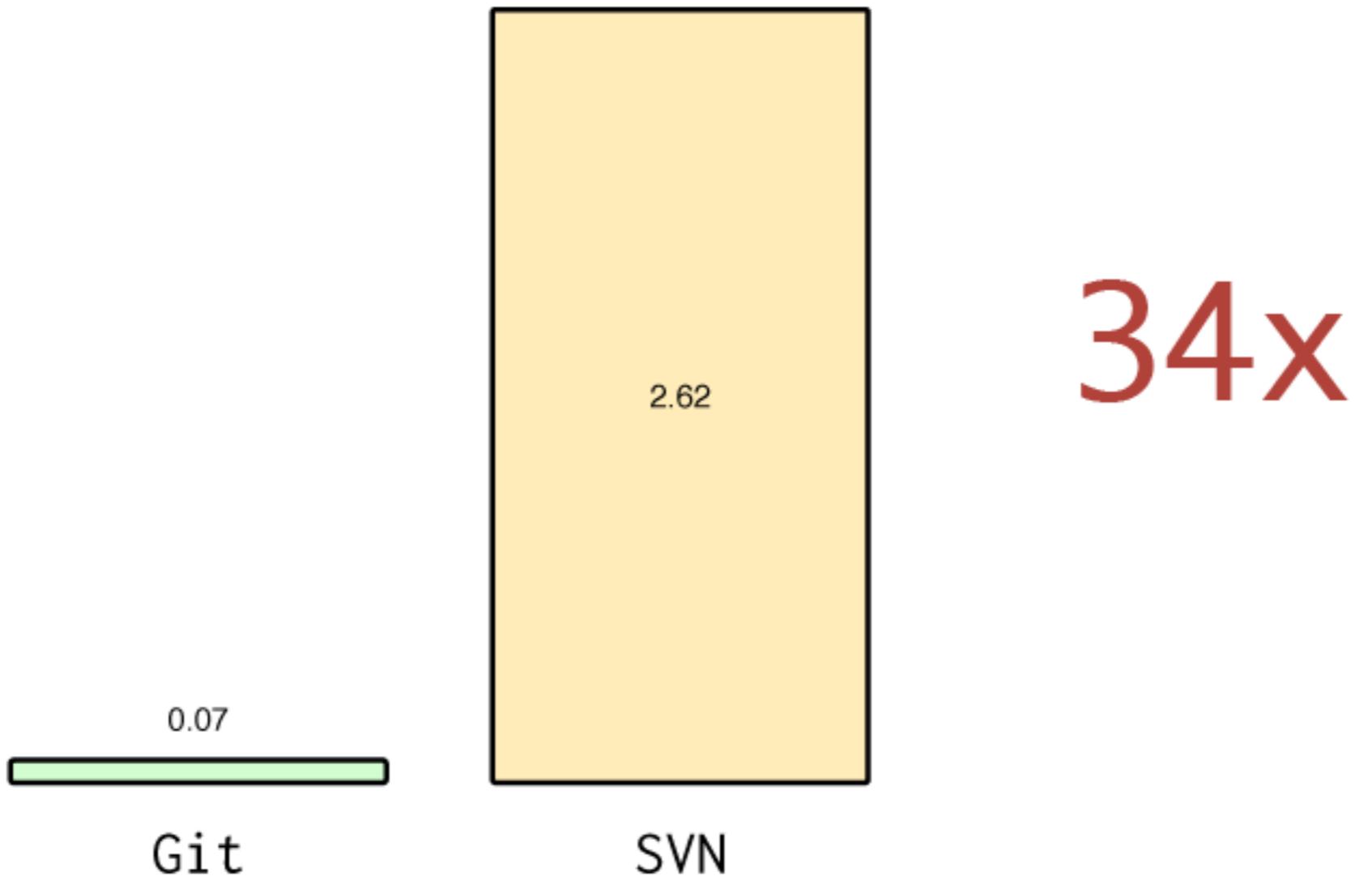
Clone/Checkout



Size



Log



Diff

3.50

318x

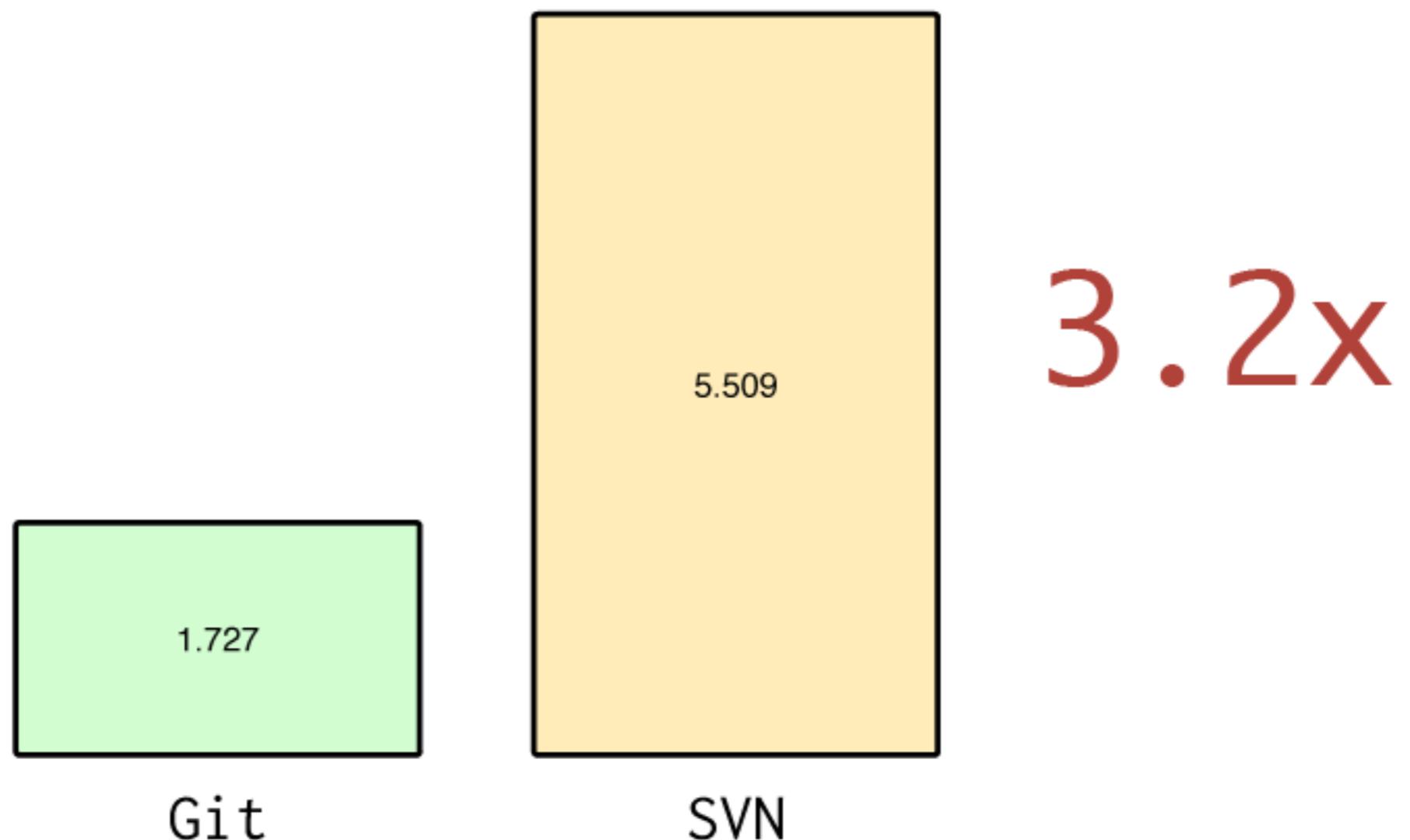
0.01



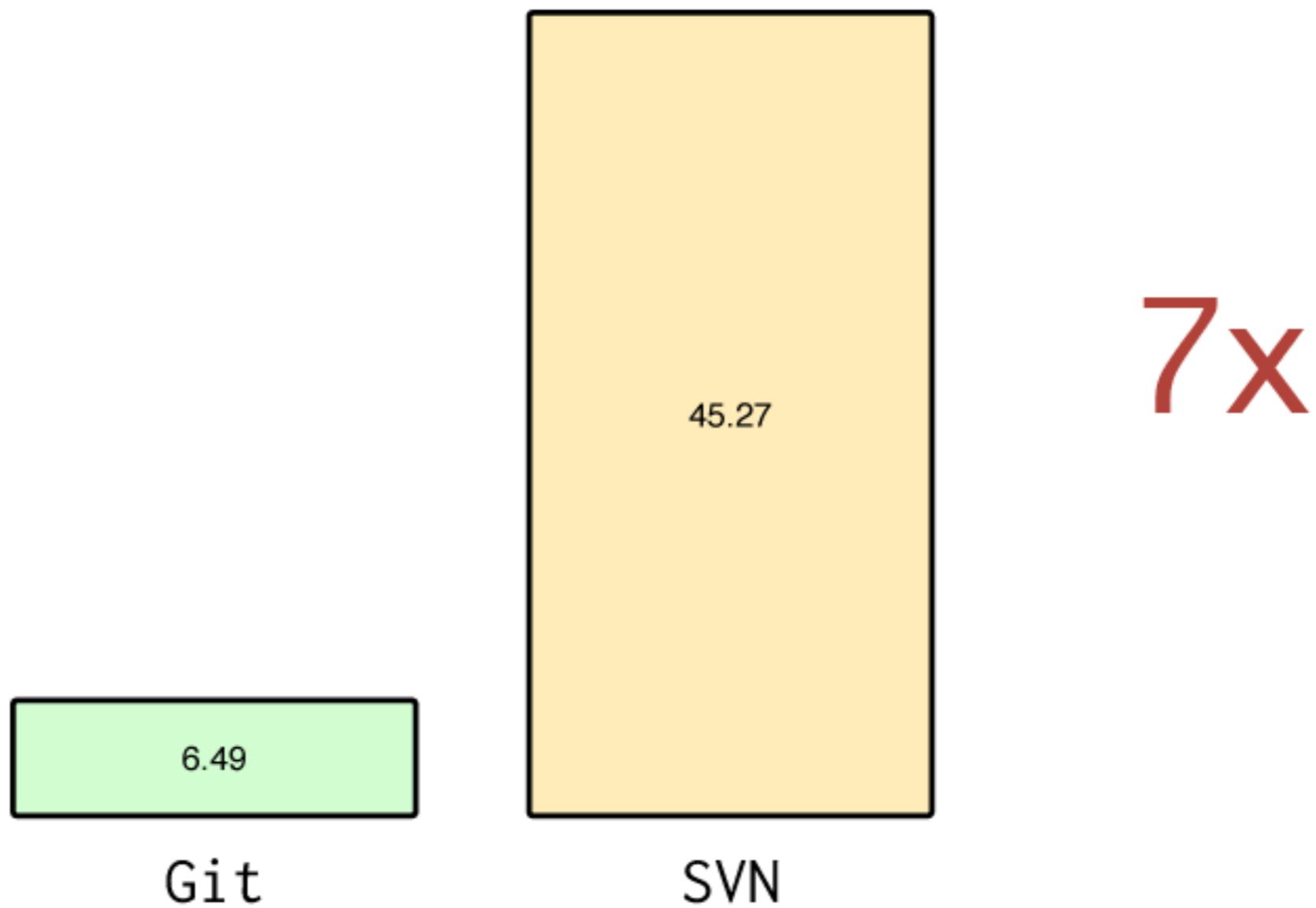
Git

SVN

Commit



Substantial Commit



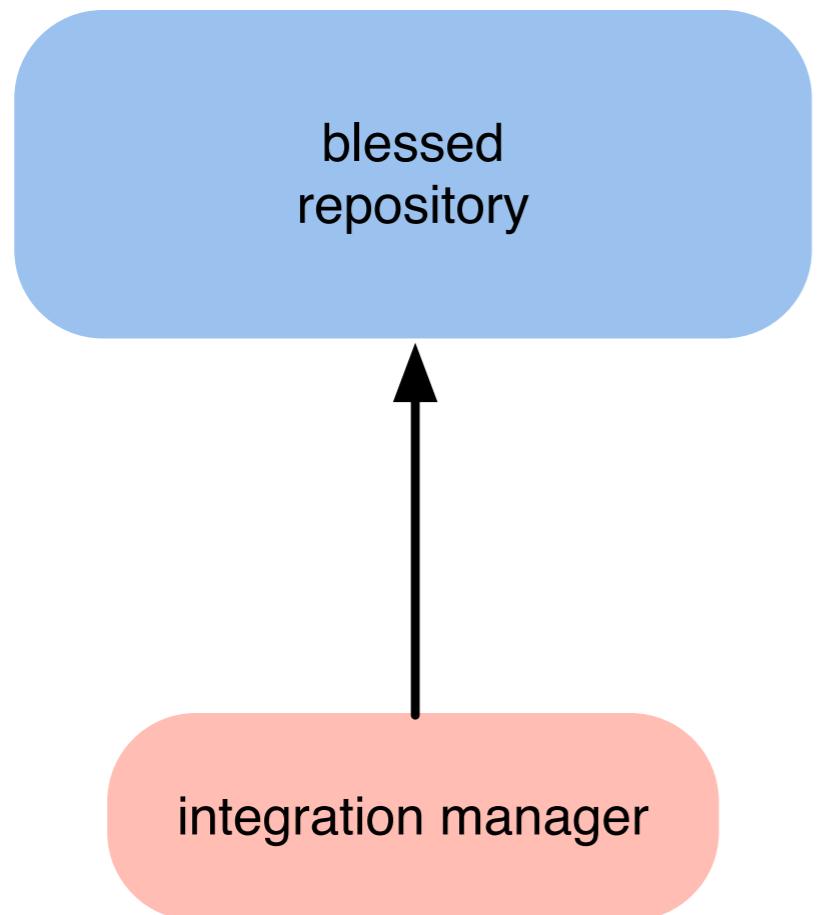
distributed

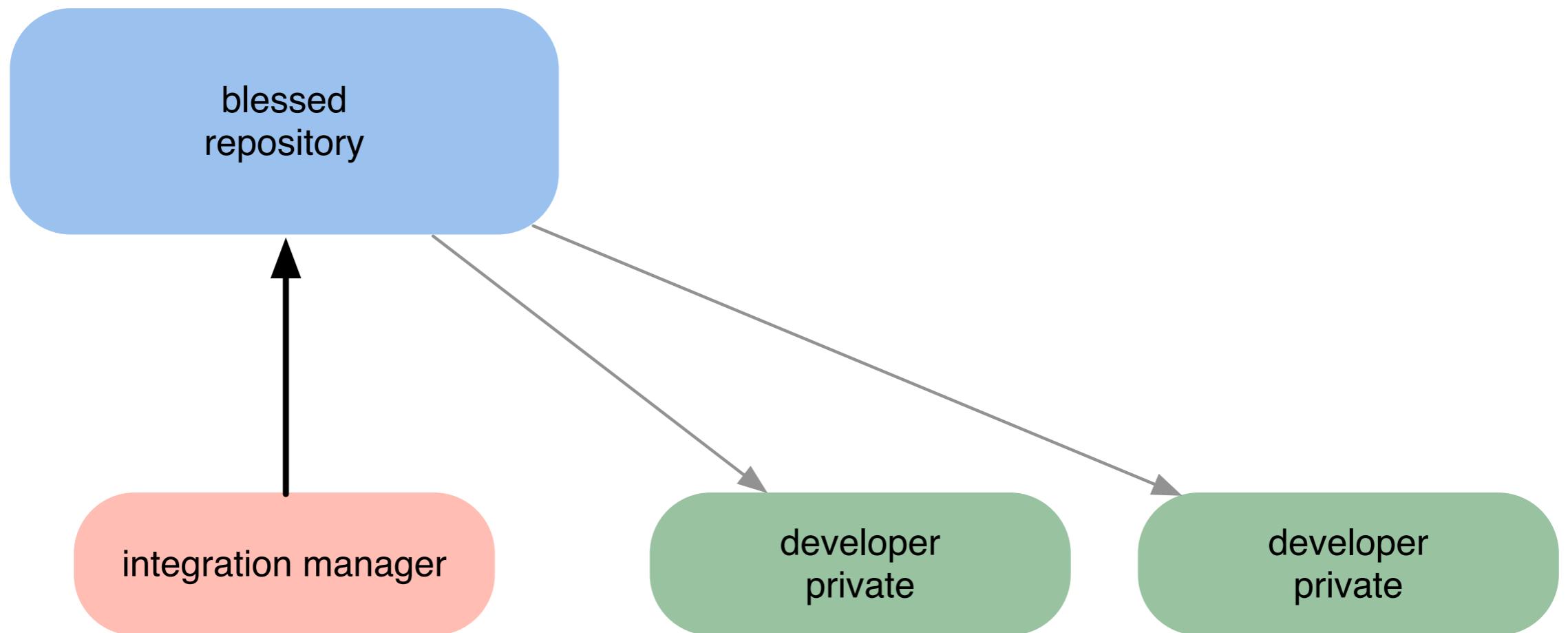
canonical read source

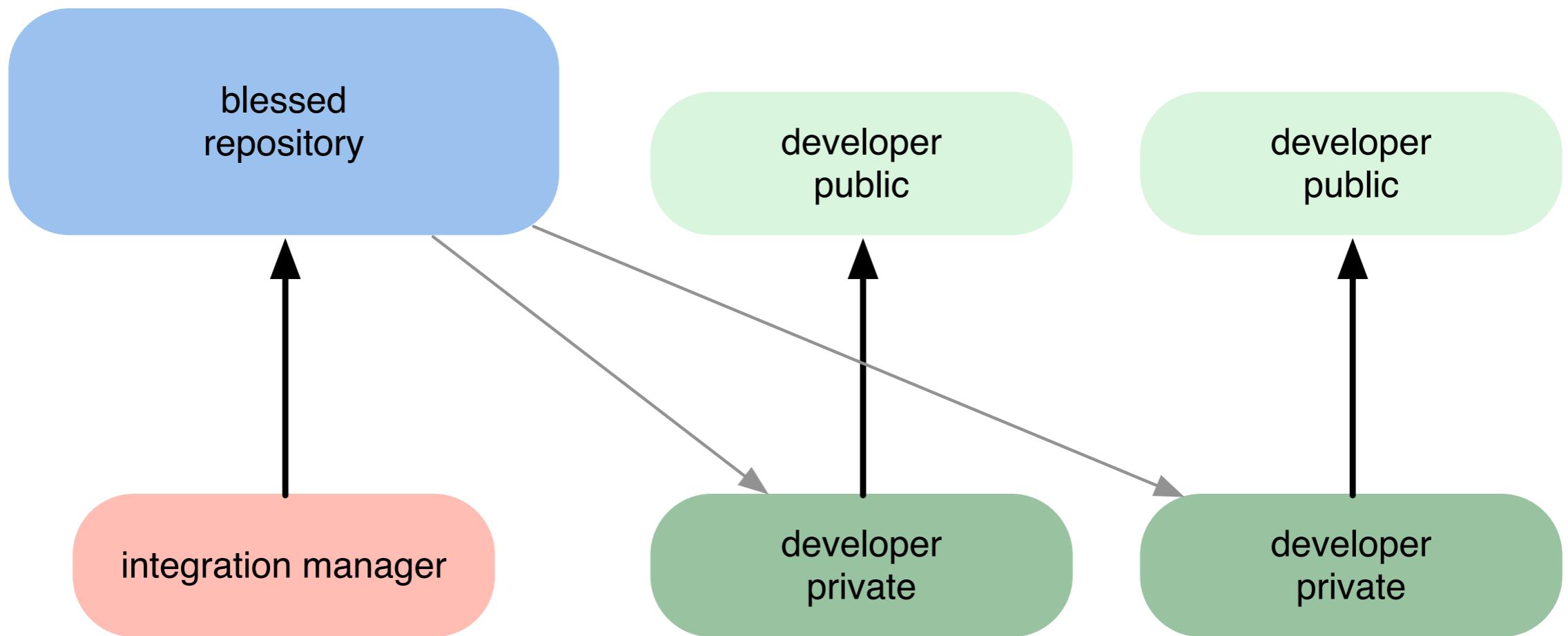
canonical read source

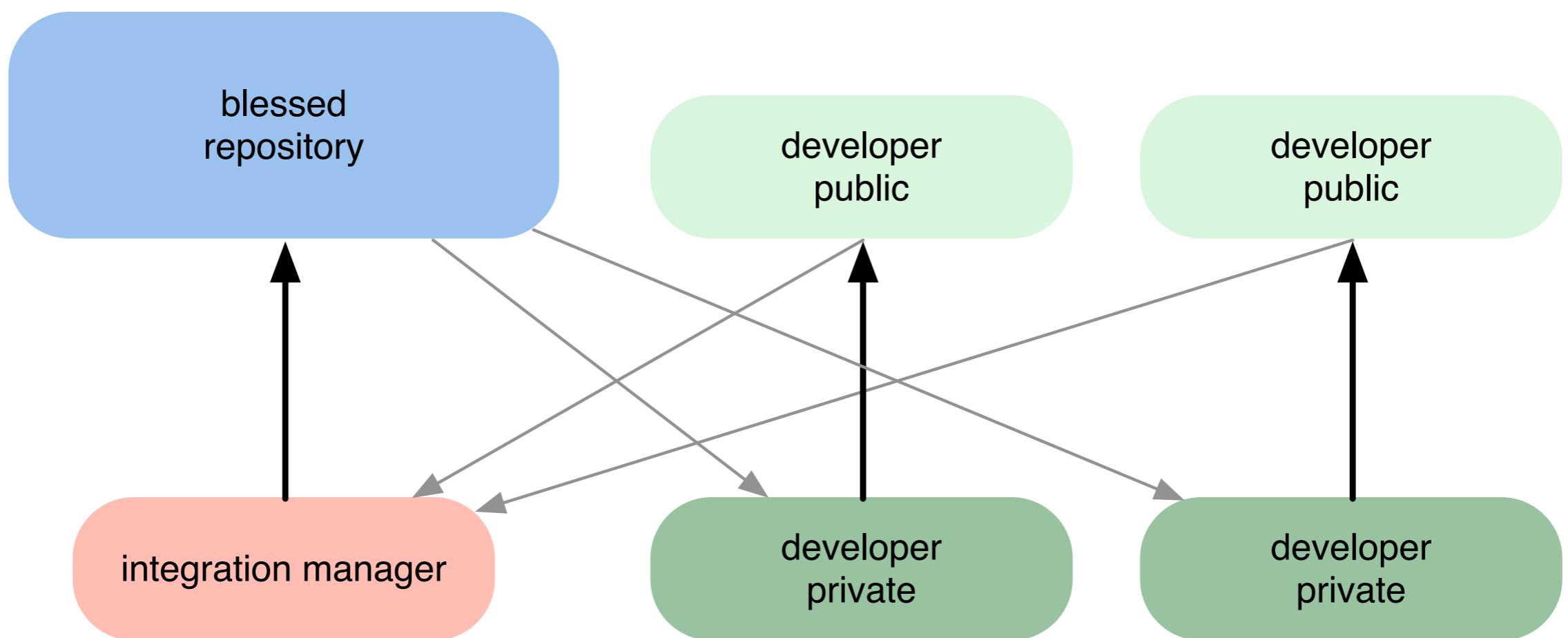
personal write source

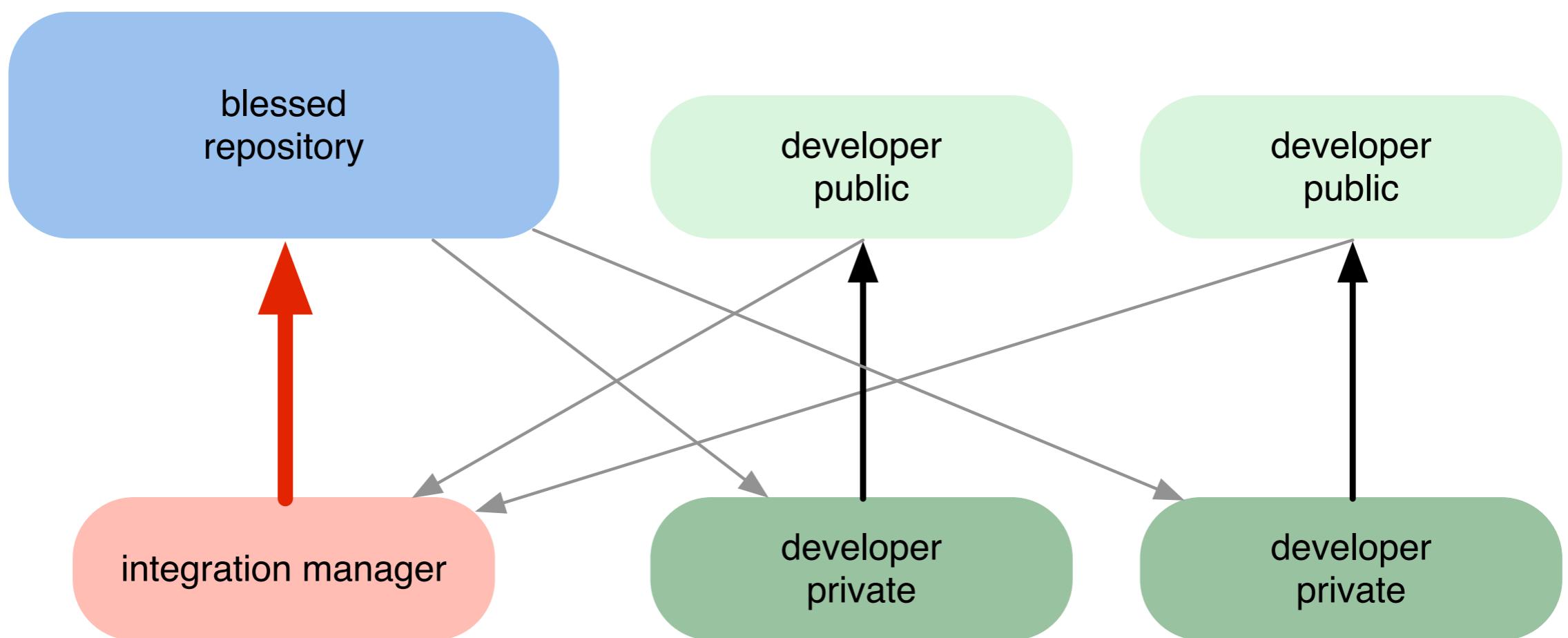
don't have to wait for
or earn write
permissions











cheap local branching

cheap local branching
and easy merging

```
$ du -h testrepo/  
78M testrepo/
```

```
$ du -h testrepo/  
78M testrepo/  
$ cd testrepo/
```

```
$ du -h testrepo/  
78M testrepo/  
$ cd testrepo/  
$ time git checkout -b newbranch
```

```
$ du -h testrepo/  
78M testrepo/  
$ cd testrepo/  
$ time git checkout -b newbranch  
Switched to a new branch "newbranch"  
  
real 0m0.091s  
user 0m0.016s  
sys 0m0.023s
```

```
$ du -h testrepo/  
78M testrepo/  
$ cd testrepo/  
$ time git checkout -b newbranch  
Switched to a new branch "newbranch"  
  
real 0m0.091s  
user 0m0.016s  
sys 0m0.023s
```

```
$ time cp -Rf testrepo r2
```

```
real 0m13.684s
user 0m0.085s
sys  0m1.215s
```

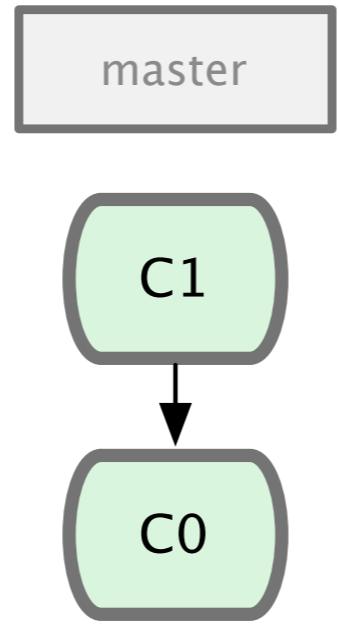
| 3.68 vs 0.09

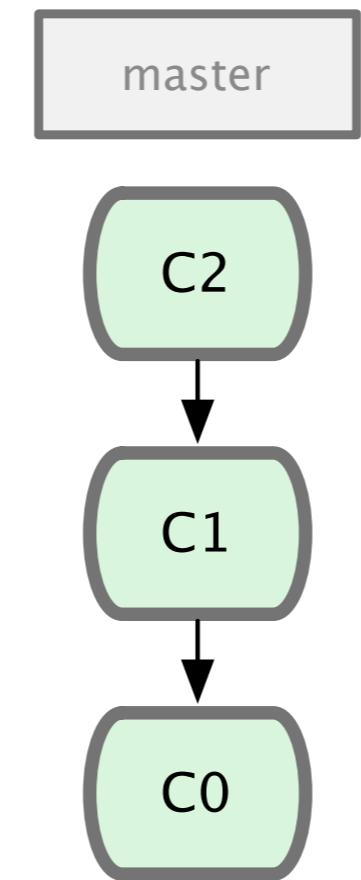
so what?

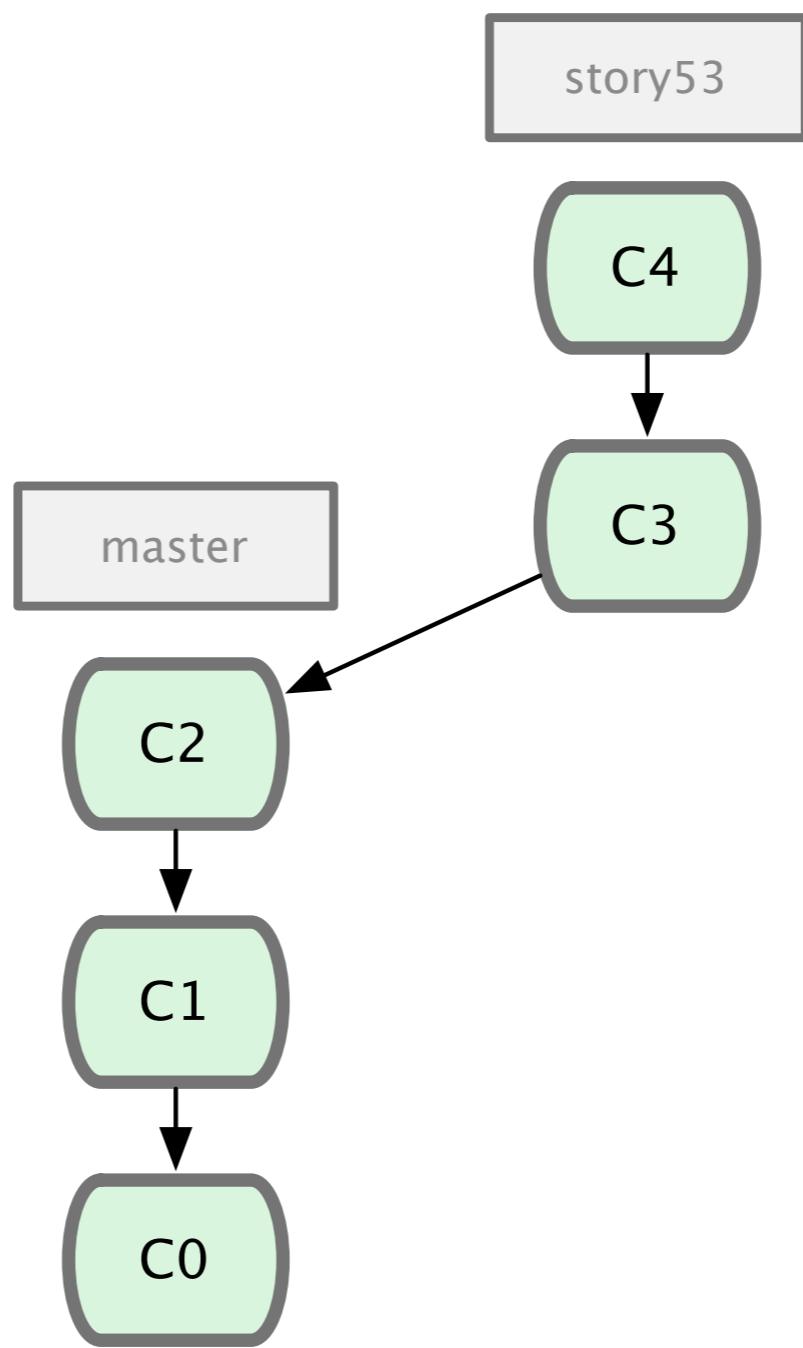
**frictionless context
switching**

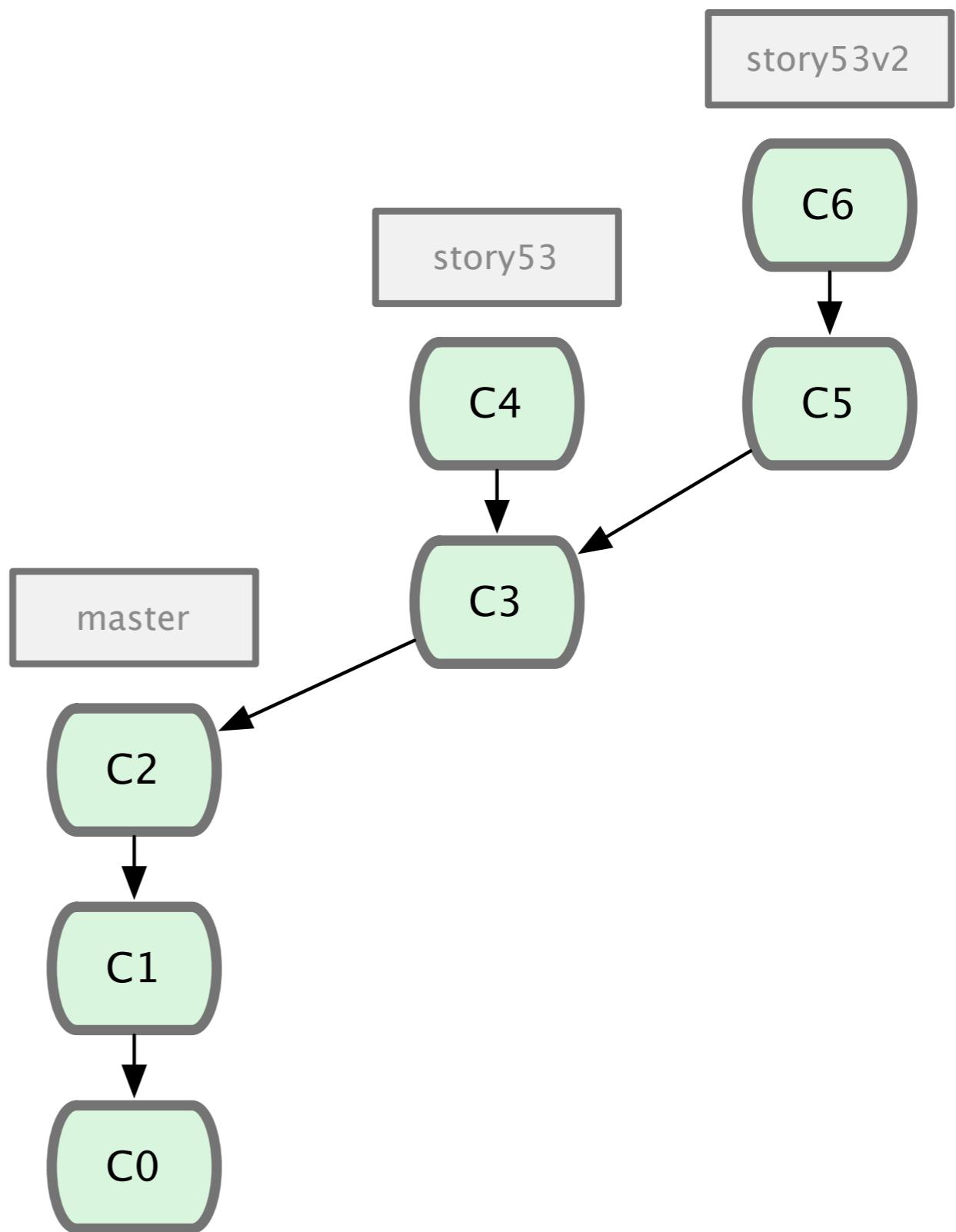
try out new ideas

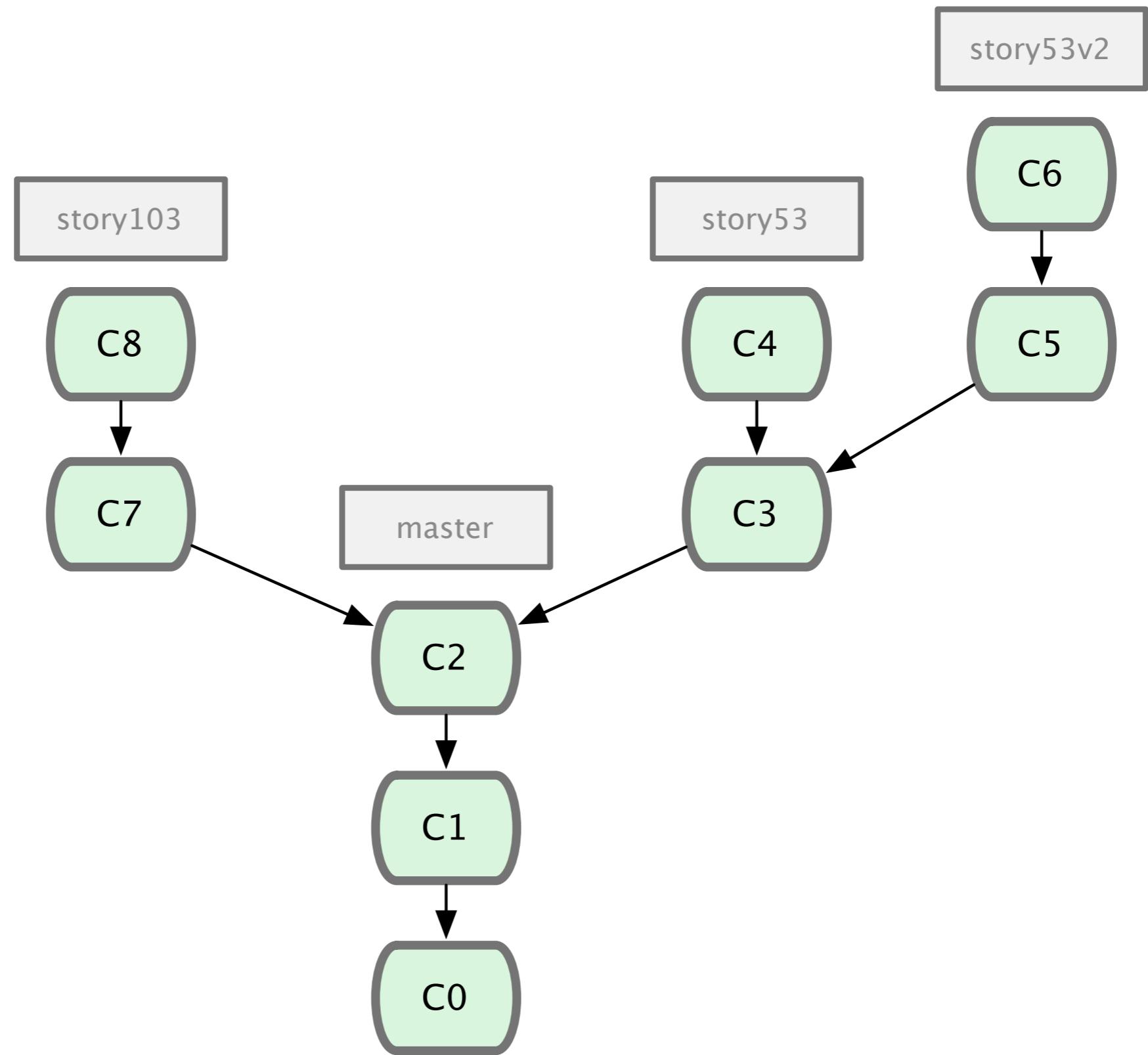
non-linear development

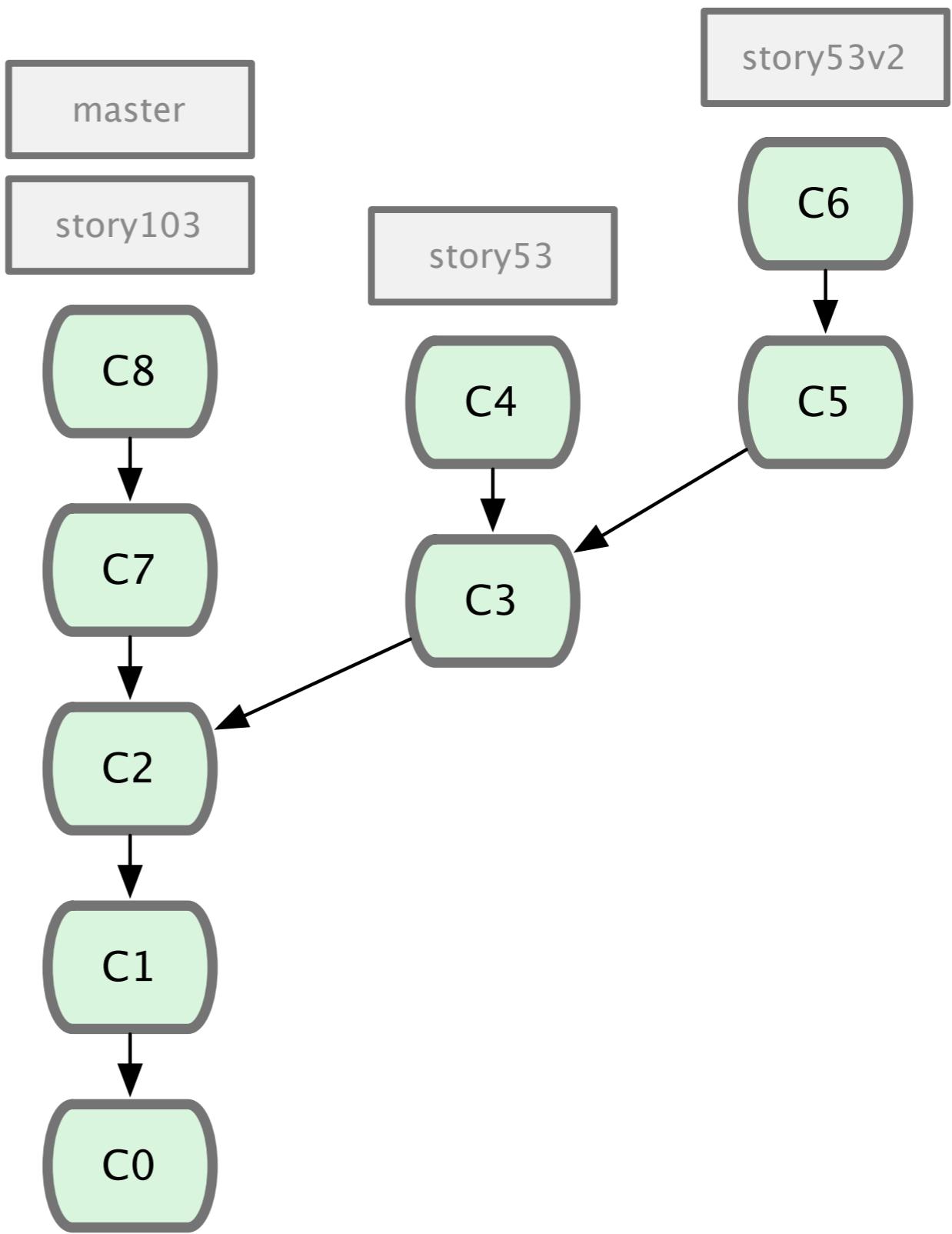


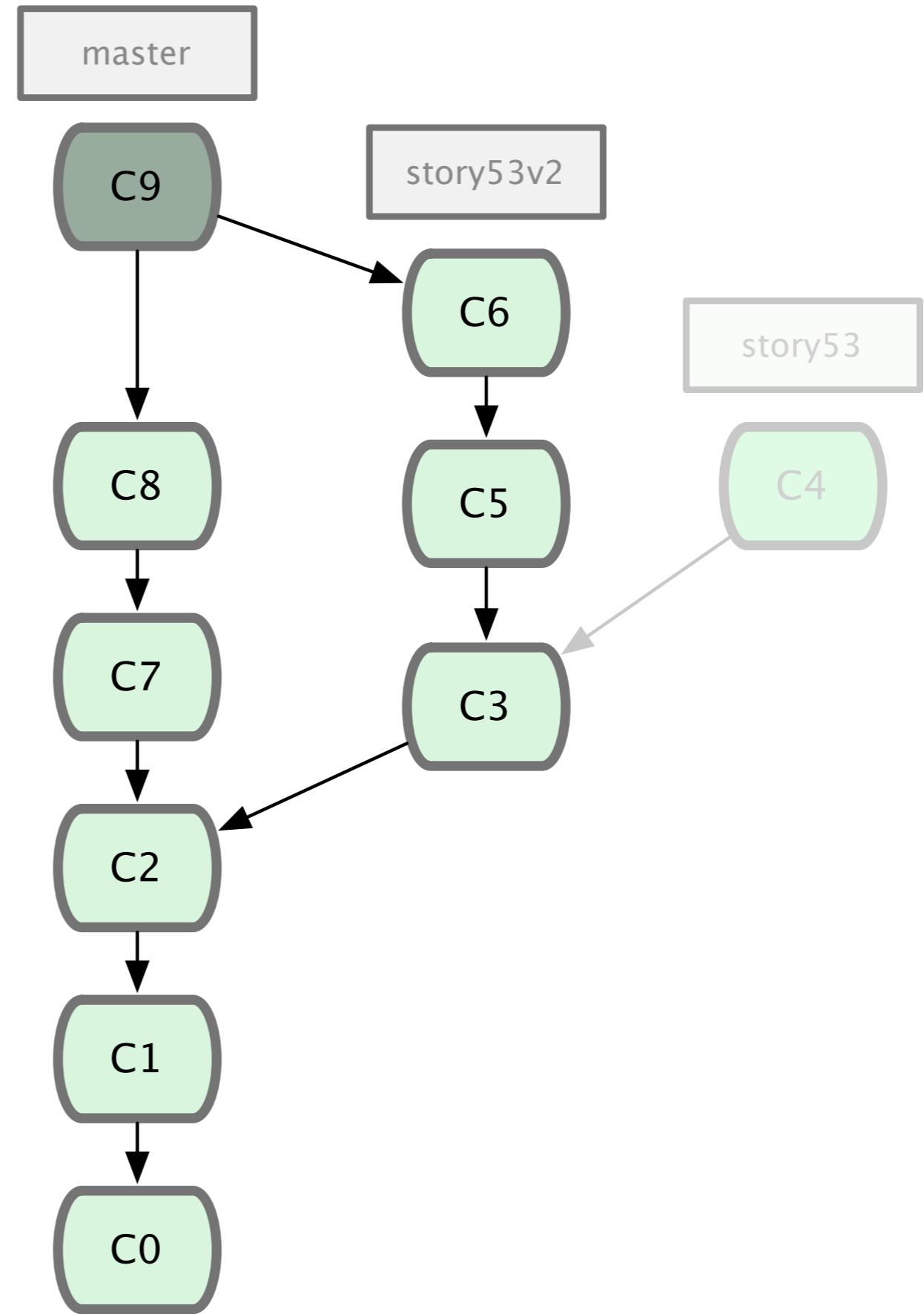












**frictionless context
switching**

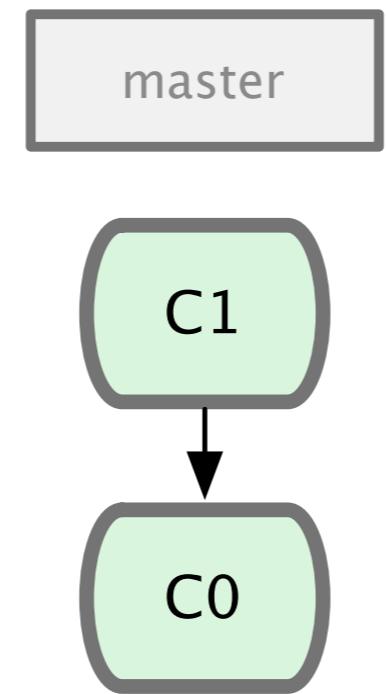
individual

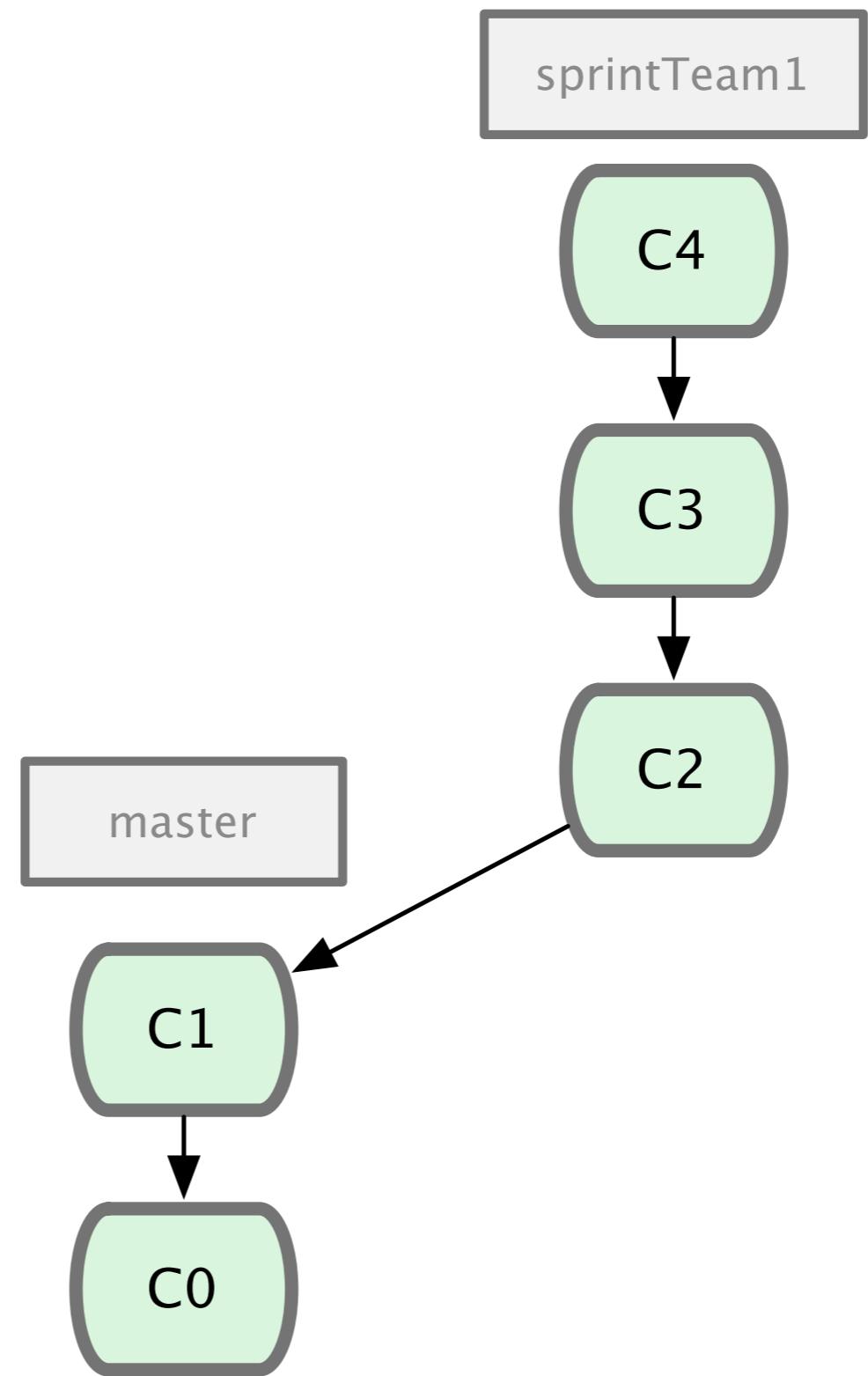
team

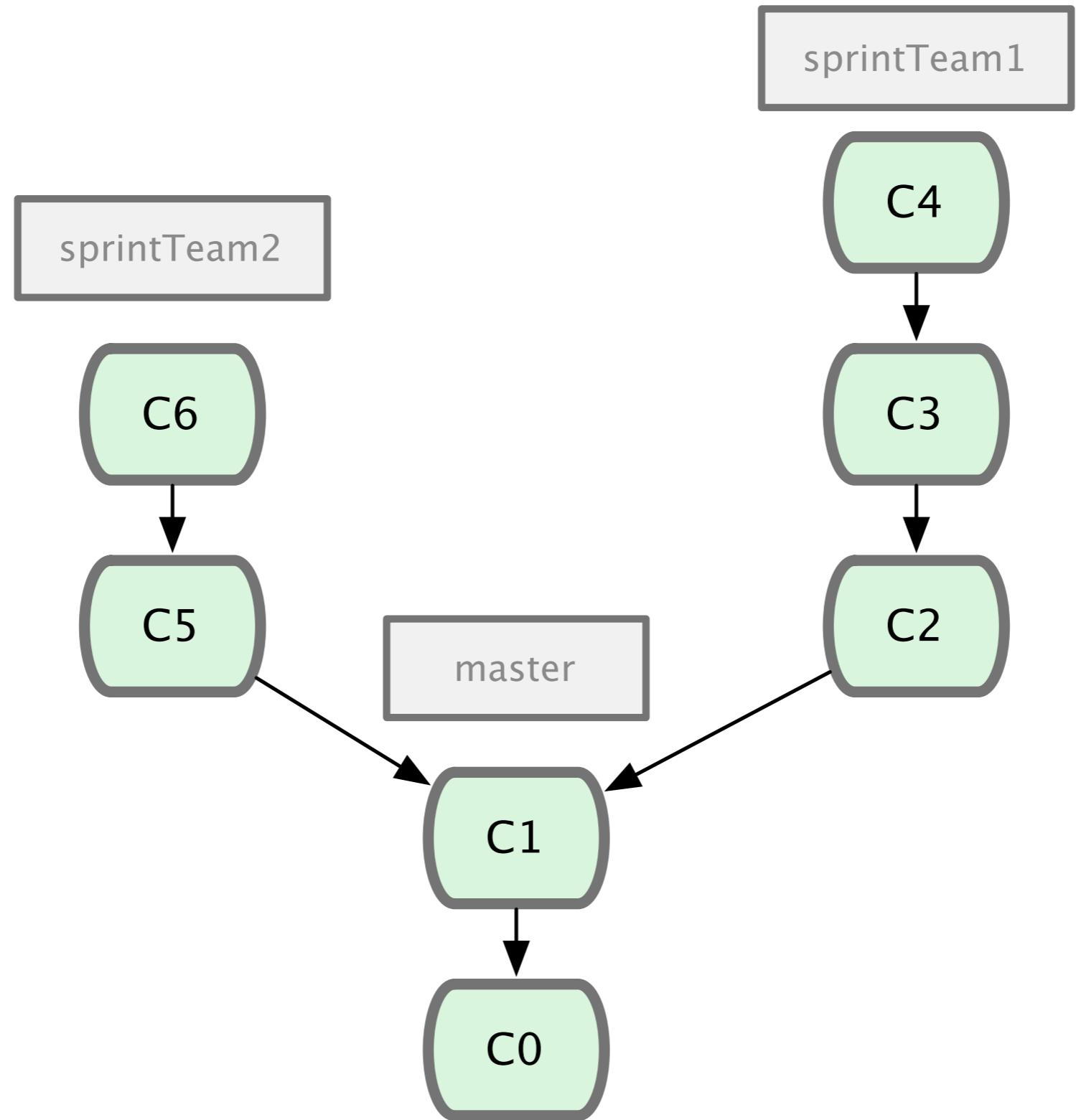
how Git saves
a team time

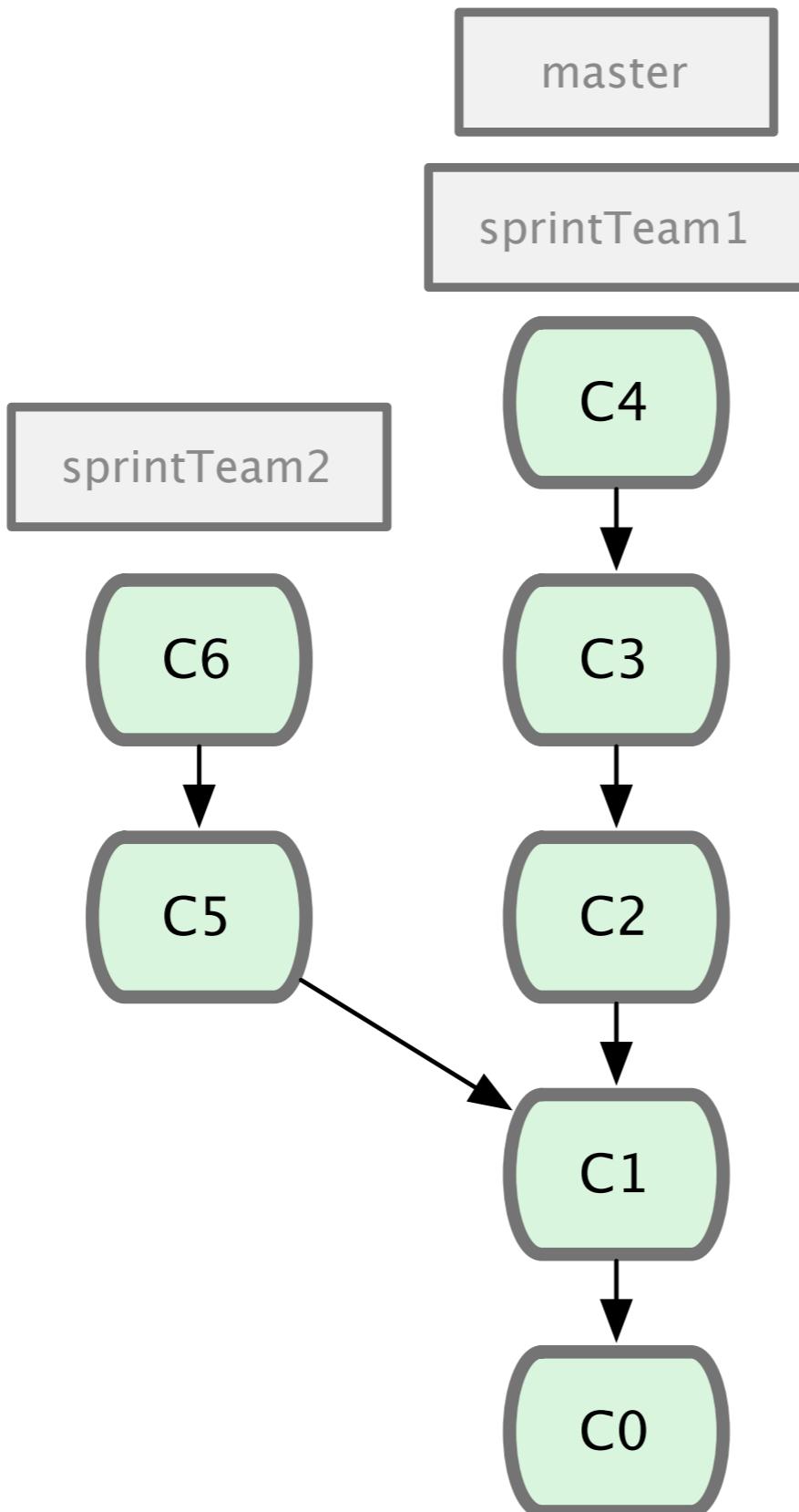
**non-linear team
development**

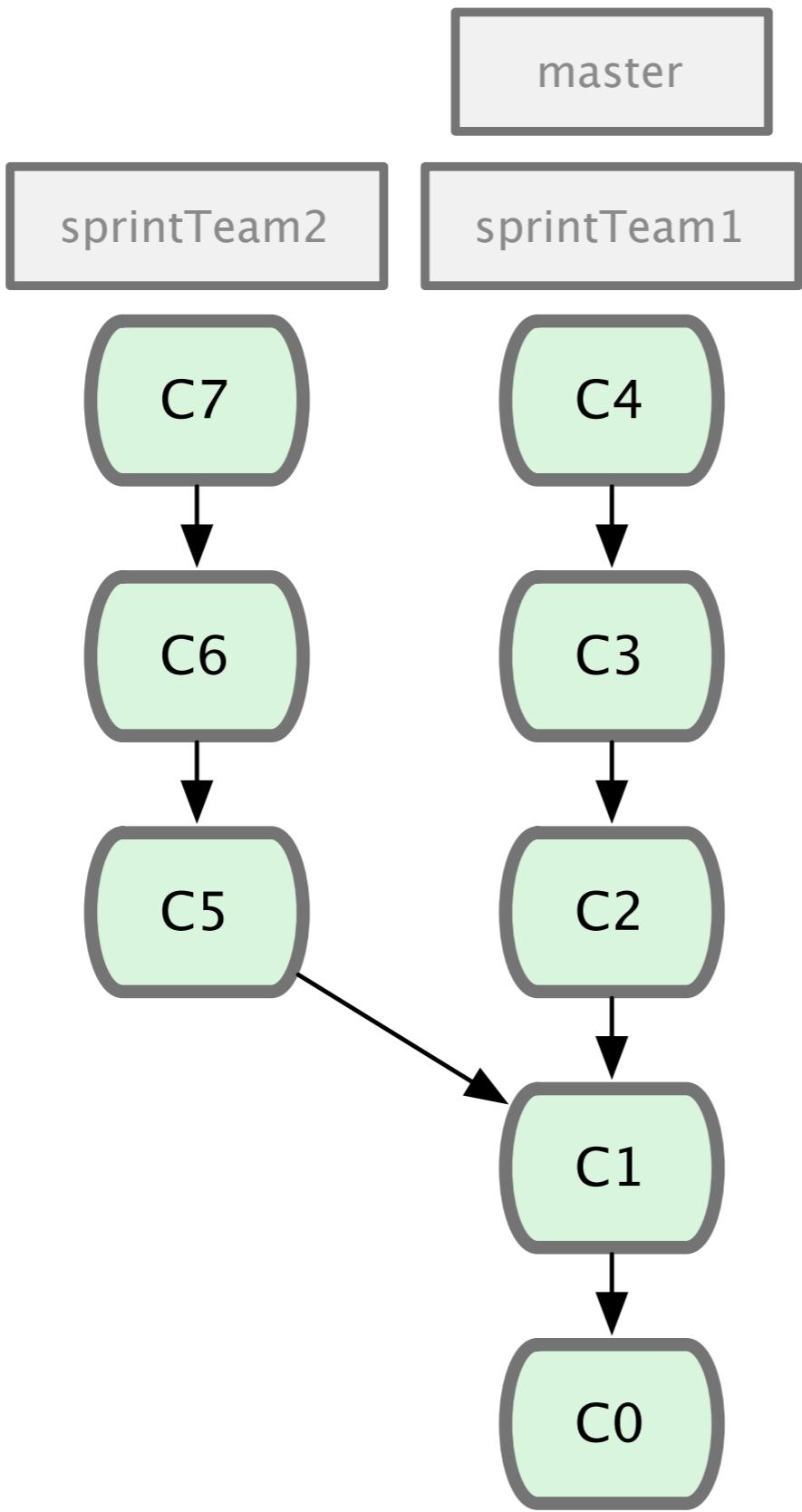
eg: sprint teams can
work on branches,
merge in when ready

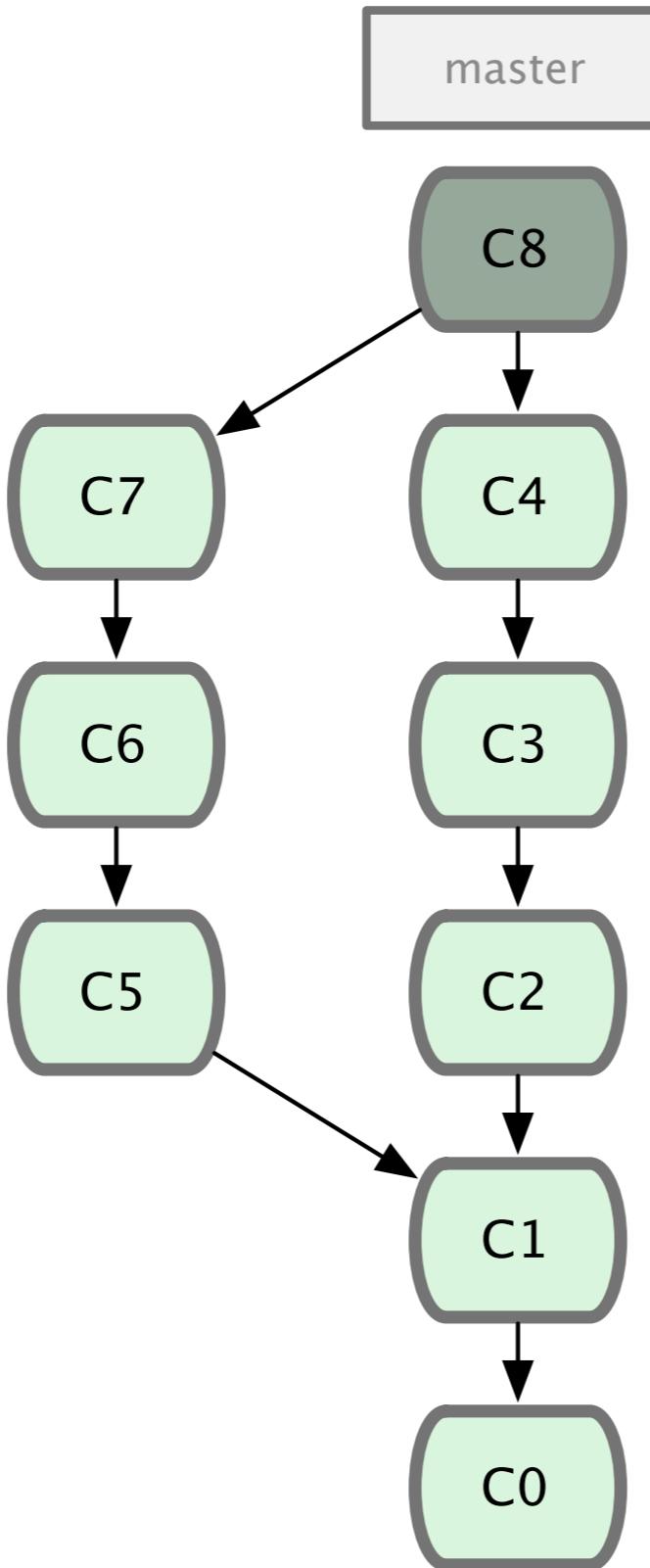


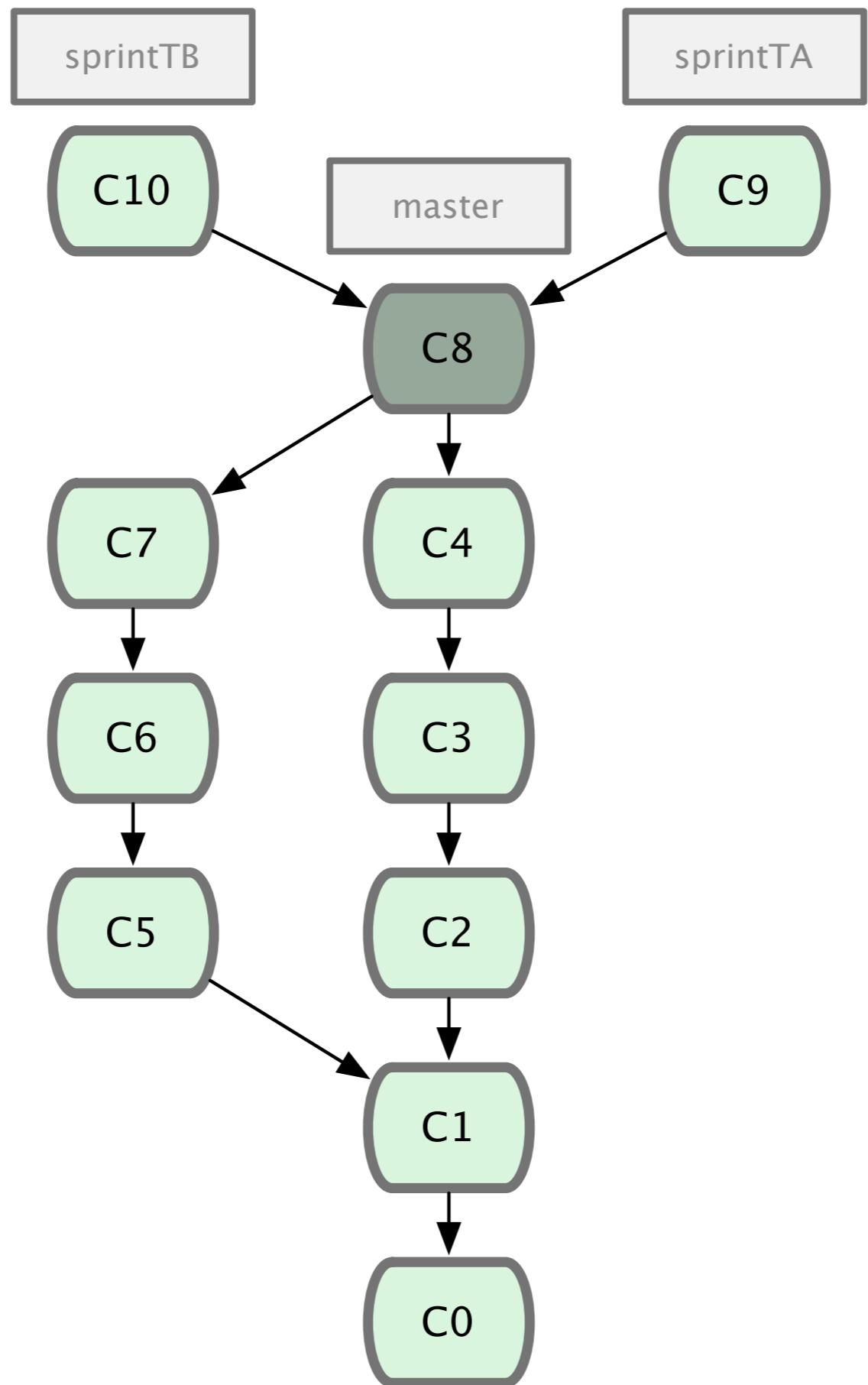




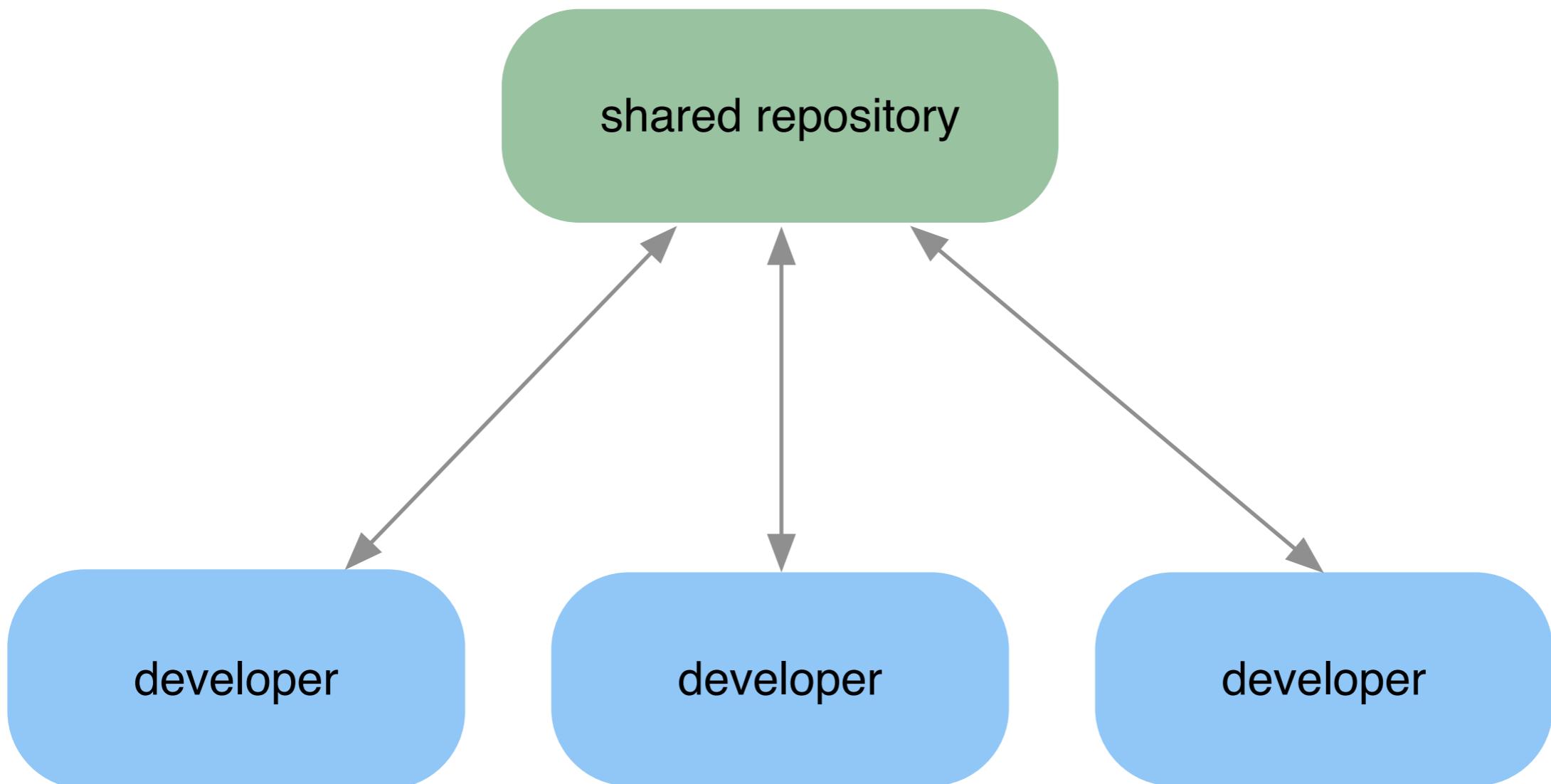


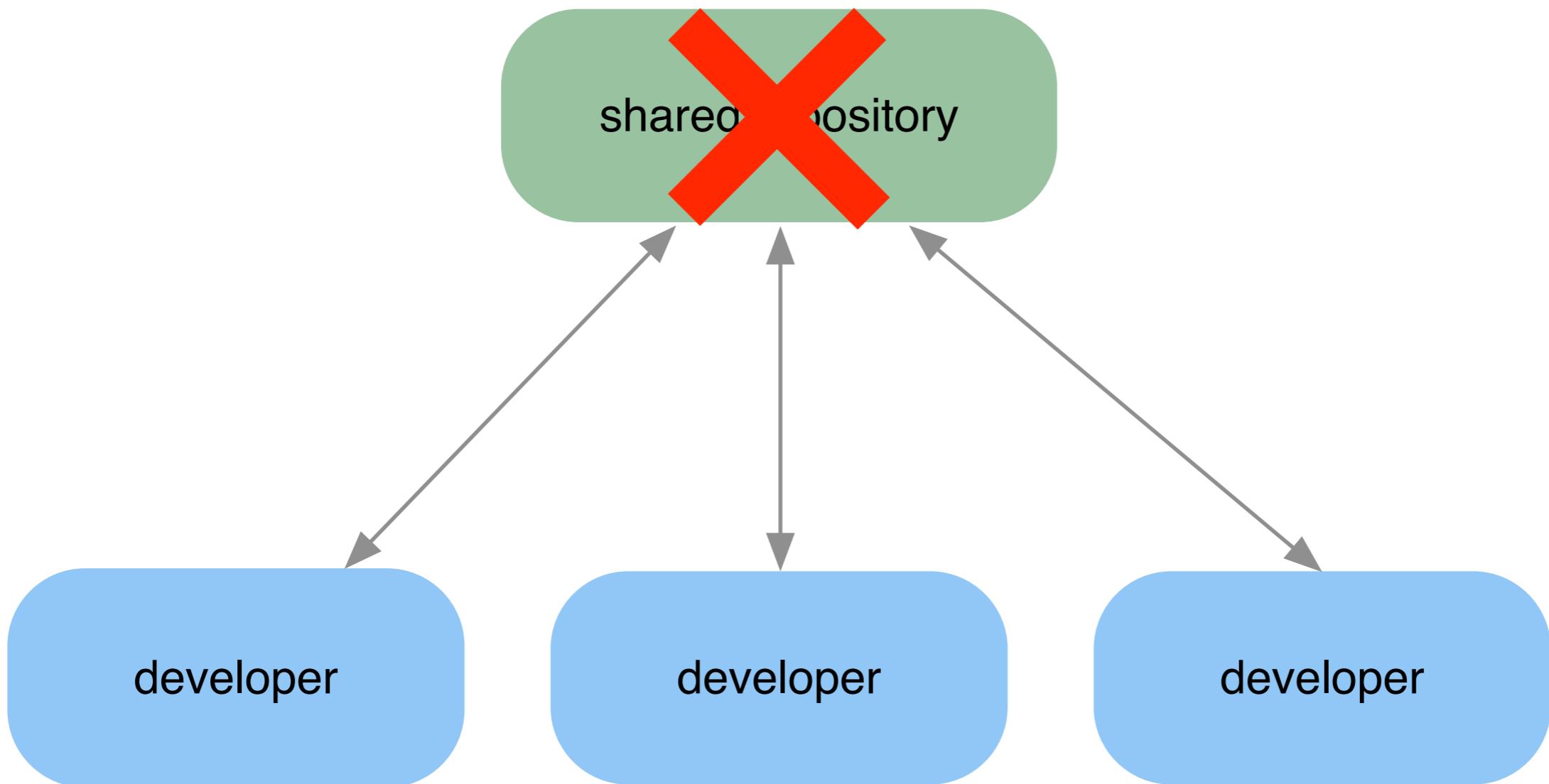


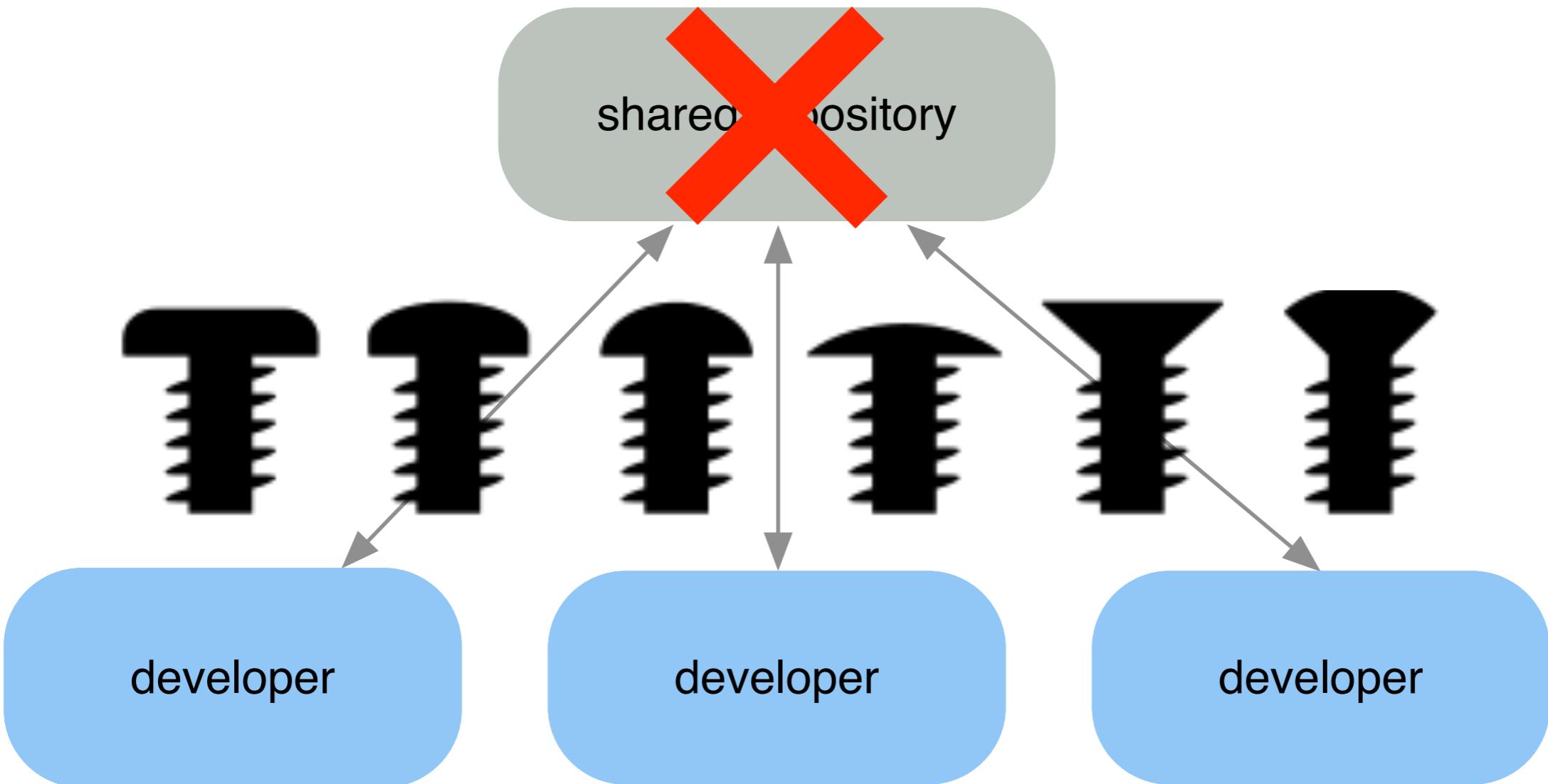




no necessary SPOF







shared repository

A central gray rounded rectangle contains the text "shared repository" in black. A large black X is drawn across the text. Three blue rounded rectangles, each containing the word "developer", are positioned below the central box, connected to it by thin lines.

developer

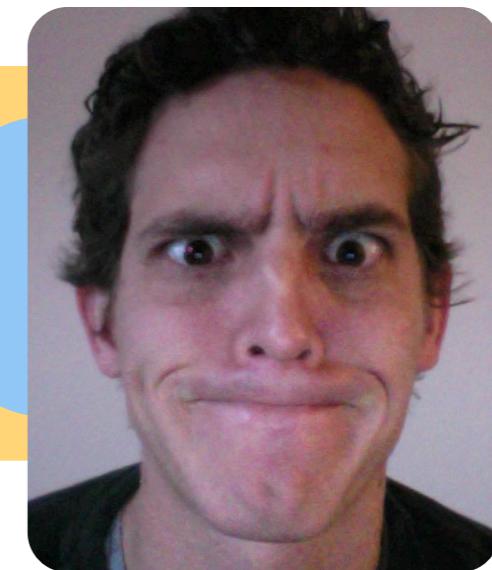
developer

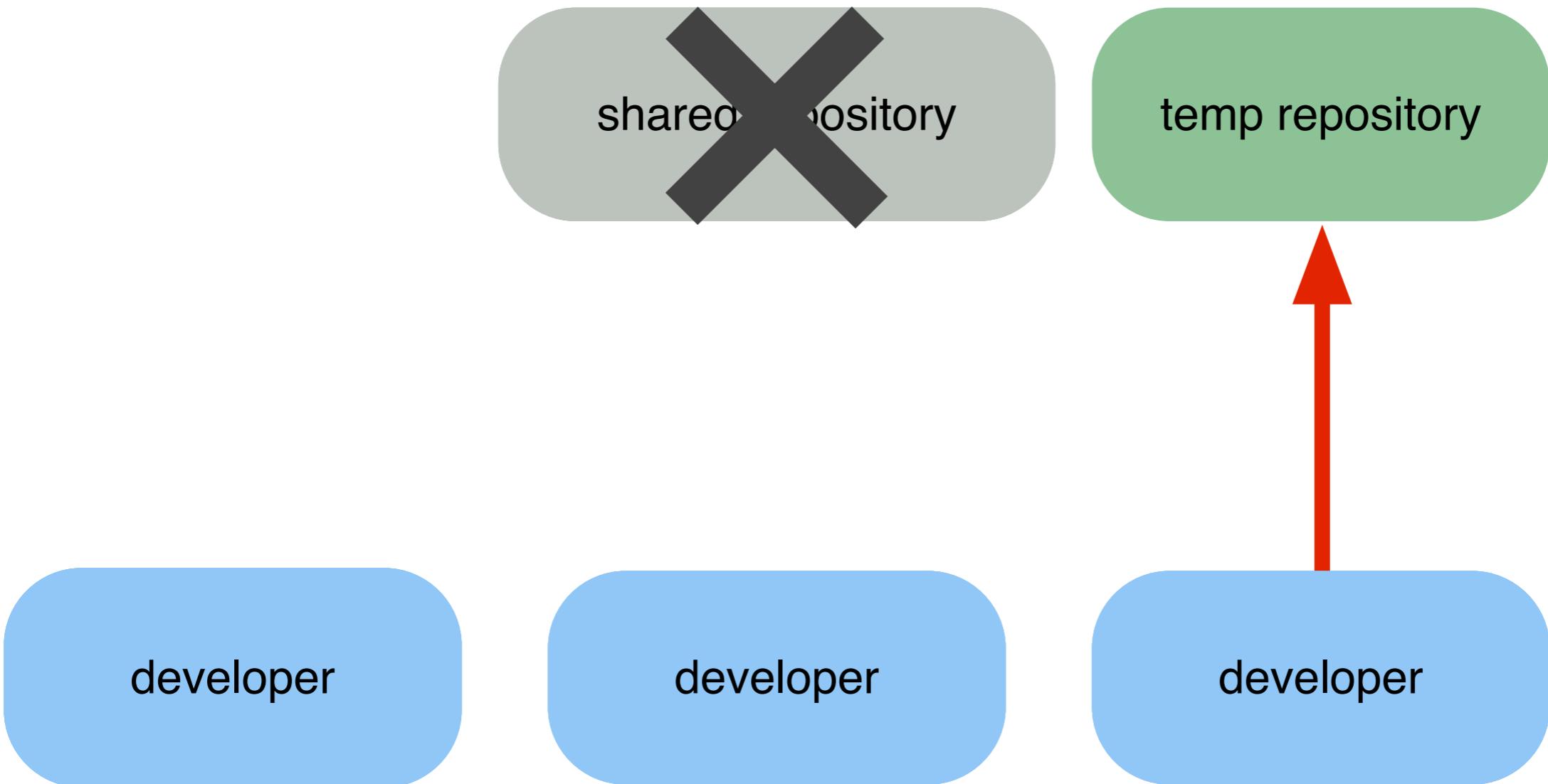
developer

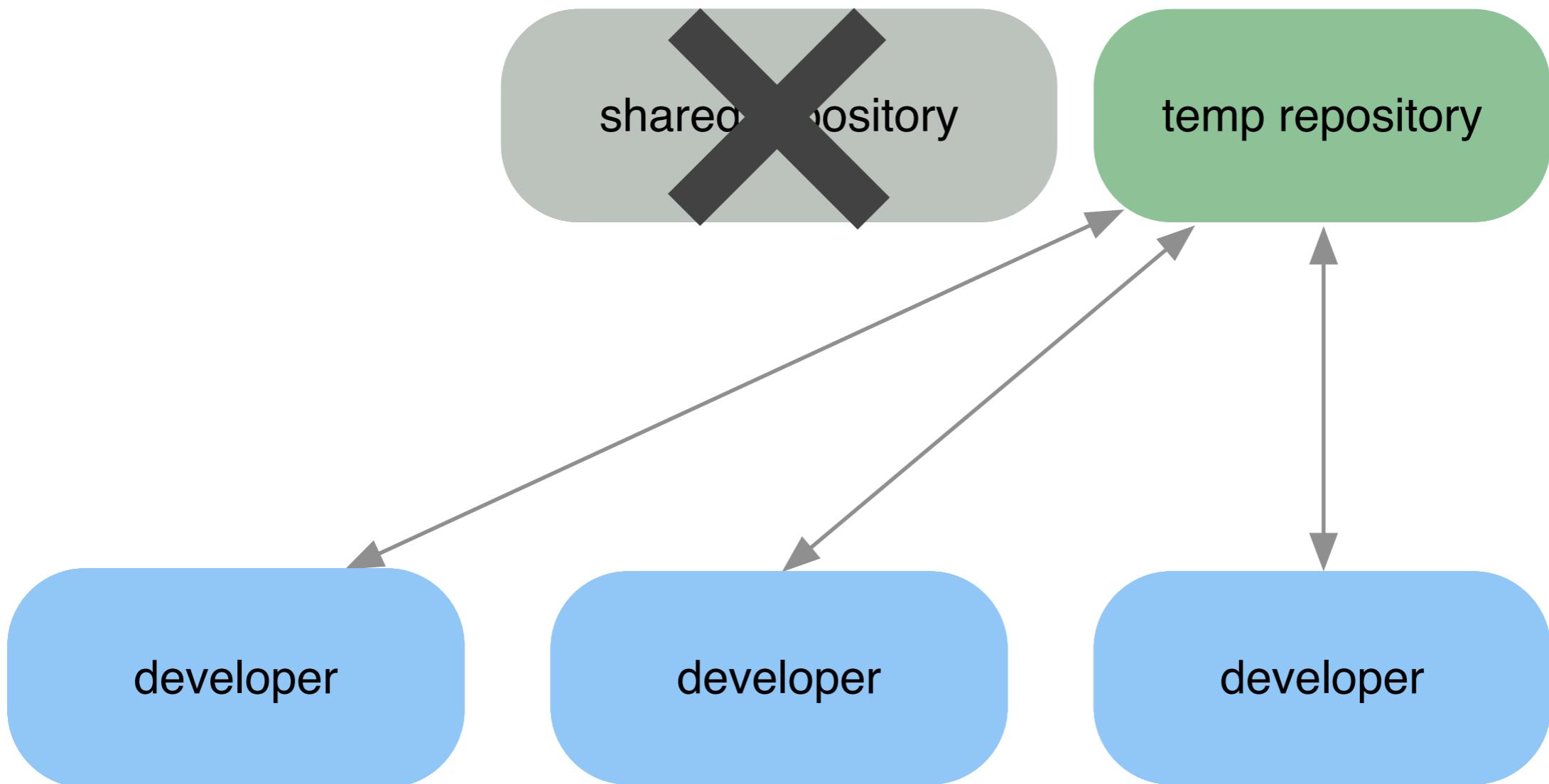
developer

developer

shared repository









GitHub and Open Source

GitHub provides tools
to make it easy to share
code, submit and accept
patches, find projects

GitHub provides tools
to make it easy to share
code, submit and accept
patches, find projects

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to make it easy to share
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patches, find projects

GitHub provides tools
to make it easy to share
code, submit and accept
patches, find projects

easy to share

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schacon

✉ 177

[account](#) | [profile](#) | [log out](#)[stafftools](#) | [dashboard](#) | [gists](#)

News Feed

[for you](#) | [from you](#)

[nmerouze](#) started watching [schacon/ticgit](#) about an hour ago



ticgit's description:

Git based distributed ticketing system, including a command line client and web viewer

[newbamboo](#) started watching [schacon/ticgit](#) about an hour ago



ticgit's description:

Git based distributed ticketing system, including a command line client and web viewer

[zkiraly](#) started watching [schacon/igithub](#) about 2 hours ago



igithub's description:

github for the iphone

[lifo](#) pushed to master at [rails/rails](#) about 4 hours ago

HEAD is [53cd102b39eb62567298430cbd94e40dd78d46a0](#)

Your Repositories [\(create a new one\)](#)

[all](#) | [public](#) | [private](#) | [sources](#) | [forks](#) [acts_like_git](#) [apressgit](#) [asgit](#) [cocoagit](#) [cucumber](#) [dotgit](#) [fireeaglet](#) [fuzec2](#) [gist](#) [git-cheetah](#) [git-lighthouse](#)

Create a New Repository

Create a new empty repository into which you can push your local git repo.

NOTE: If you intend to push a copy of a repository that is already hosted on GitHub, then you should fork it instead.

Project Name

Description

Homepage URL

Who has access to this repository? (You can change this later)

- Anyone ([learn more about public repos](#))
- Only the people I specify ([learn more about private repos](#))

[Create Repository](#)

```
$ git remote add github \
git@github.com:user/project.git
```

```
$ git remote add github \
git@github.com:user/project.git
```

```
$ git push github master
```

github
SOCIAL CODING

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[stafftools](#) | [dashboard](#) | [gists](#)

[Source](#) [Commits](#) [Network \(3\)](#) [Fork Queue](#) [Downloads \(0\)](#) [Wiki \(1\)](#) [Graphs](#) [Admin](#)

master all branches all tags

[schacon / asgit](#) [12](#) [3](#)

Description: ActionScript Git library and browser implementation [edit](#)

Homepage: [Click to edit](#) [edit](#)

Public Clone URL: <git://github.com/schacon/asgit.git>

Your Clone URL: <git@github.com:schacon/asgit.git>

added adobe libraries and bunches of changes

 **schacon** (author)
May 27, 2008

commit [711c3bd72f9bd4fe3e8de9360ed94a076c5806d1](#)
tree [fdd13476d91a6b9caa9f2d5dda7cd6775301aa2b](#)
parent [2e1ed7683c0a3ebb5d495a3356defa9b973c9940](#)

asgit /

name	age	message	history
.actionScriptProperties	March 29, 2008	first commit [schacon]	
.flexProperties	March 29, 2008	first commit [schacon]	
.gitignore	May 27, 2008	added adobe libraries and bunches of changes [schacon]	
.project	March 29, 2008	first commit [schacon]	

<http://github.com/schacon/asgit>

Screenshot of the GitHub repository page for schacon/asgit.

Header:

- GitHub logo: SOCIAL CODING
- Search bar: Search
- User profile: schacon (Profile picture, 177 notifications)
- Links: account | profile | log out, stafftools | dashboard | gists

Navigation:

- Source (selected), Commits, Network (3), Fork Queue, Downloads (0), Wiki (1), Graphs, Admin
- Branches: master, all branches, all tags

Repository Information:

schacon / asgit [edit](#) [pull request](#) [unwatch](#) [download](#) (12 issues, 3 pull requests, 0 discussions)

Description: ActionScript Git library and browser implementation [edit](#)

Homepage: Click to edit [edit](#)

Public Clone URL: <git://github.com/schacon/asgit.git>

Your Clone URL: <git@github.com:schacon/asgit.git>

Commit History:

added adobe libraries and bunches of changes  schacon (author) May 27, 2008	commit 711c3bd72f9bd4fe3e8de9360ed94a076c5806d1 tree fdd13476d91a6b9caa9f2d5dda7cd6775301aa2b parent 2e1ed7683c0a3ebb5d495a3356defa9b973c9940
--	---

File History:

name	age	message	history
.actionScriptProperties	March 29, 2008	first commit [schacon]	
.flexProperties	March 29, 2008	first commit [schacon]	
.gitignore	May 27, 2008	added adobe libraries and bunches of changes [schacon]	
.project	March 29, 2008	first commit [schacon]	

easy to submit patches

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schacon

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Source

Commits

Network (83)

Downloads (41)

Wiki (39)

Graphs

master

all branches

all tags

[aslakhellesoy / cucumber](#)

fork



watch



download



712



83



▼



▼

Description: BDD that talks to domain experts first and code second

Homepage: <http://github.com/aslakhellesoy/cucumber/wikis>Public Clone URL: <git://github.com/aslakhellesoy/cucumber.git>

Use yellow to help color blind people



aslakhellesoy (author)

February 11, 2009

```
commit e1afbf1908fdb3867d857478847403abeedd91d7
tree 695d5667a9708e4439d0adfda7aa0332886e6a6e
parent 44f3118f7ebb88ab698d4b0d5bf18bf12cc87381
```

cucumber /

name	age	message	history
.gitattributes	October 05, 2008	Adding spec for DOS line endings. [aslakhellesoy]	
.gitignore	December 12, 2008	Add yard - a better rdoc [aslakhellesoy]	
History.txt	February 09, 2009	Use ~ to negate tags [#194 state:resolved] [aslakhellesoy]	

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schacon

✉ 177

[account](#) | [profile](#) | [log out](#)[stafftools](#) | [dashboard](#) | [gists](#)[Source](#) [Commits](#)
[master](#) [all branches](#)

Use this clone URL yourself.
`git clone git@github.com:schacon/cucumber.git`

CLOSE X

[schacon / cucumber](#) [edit](#) [unwatch](#) [1](#) [84](#) *Fork of [aslakhellesoy/cucumber](#)*

Description: BDD that talks to domain experts first and code second [edit](#)

Homepage: <http://github.com/aslakhellesoy/cucumber/wikis> [edit](#)

Public Clone URL: <git://github.com/schacon/cucumber.git>

Your Clone URL: <git@github.com:schacon/cucumber.git>



Use yellow to help color blind people



aslakhellesoy (author)

February 11, 2009

commit e1afbf1908fdb3867d857478847403abeedd91d7
tree 695d5667a9708e4439d0adfda7aa0332886e6a6e
parent 44f3118f7ebb88ab698d4b0d5bf18bf12cc87381

[cucumber /](#)

name	age	message	history
.gitattributes	October 05, 2008	Adding spec for DOS line endings. [aslakhellesoy]	

```
$ git clone git@github.com:schacon/cucumber.git
```

```
$ git clone git@github.com:schacon/cucumber.git  
$ (make it awesomer)
```

```
$ git clone git@github.com:schacon/cucumber.git  
$ (make it awesomer)  
$ git commit  
$ git push
```

**75% of forked projects have
work contributed back**

18,000 projects with at
least one watcher

25% get outside contributions

easy to accept patches

sans-github

- someone emails you a patch as an attachment

- someone emails you a patch as an attachment
- you save it as a temp file

- someone emails you a patch as an attachment
- you save it as a temp file
- you try to apply it with *patch -p*

- someone emails you a patch as an attachment
- you save it as a temp file
- you try to apply it with `patch -p`
- it fails

- someone emails you a patch as an attachment
- you save it as a temp file
- you try to apply it with *patch -p*
- it fails
-



```
$ gh network fetch
```

```
$ gh network fetch
```

```
$ git checkout -b testpatch
```

```
$ gh network fetch  
$ git checkout -b testpatch  
$ git merge user/branch
```

```
$ gh network fetch  
$ git checkout -b testpatch  
$ git merge user/branch  
$ git checkout master  
$ git merge testpatch
```

schacon / ruby-git

[edit](#)[pull request](#)[unwatch](#)[download](#)

113

30



Ruby/Git is a Ruby library that can be used to create, read and manipulate Git repositories by

Description: wrapping system calls to the git binary. [edit](#)

② Your current integration branch is: master [change it](#)

2009-02-12 schacon

version bump to 1.1.1

commit 076df646

tree cd85479a

Your ruby-git Fork Queue ②

Will likely apply cleanly

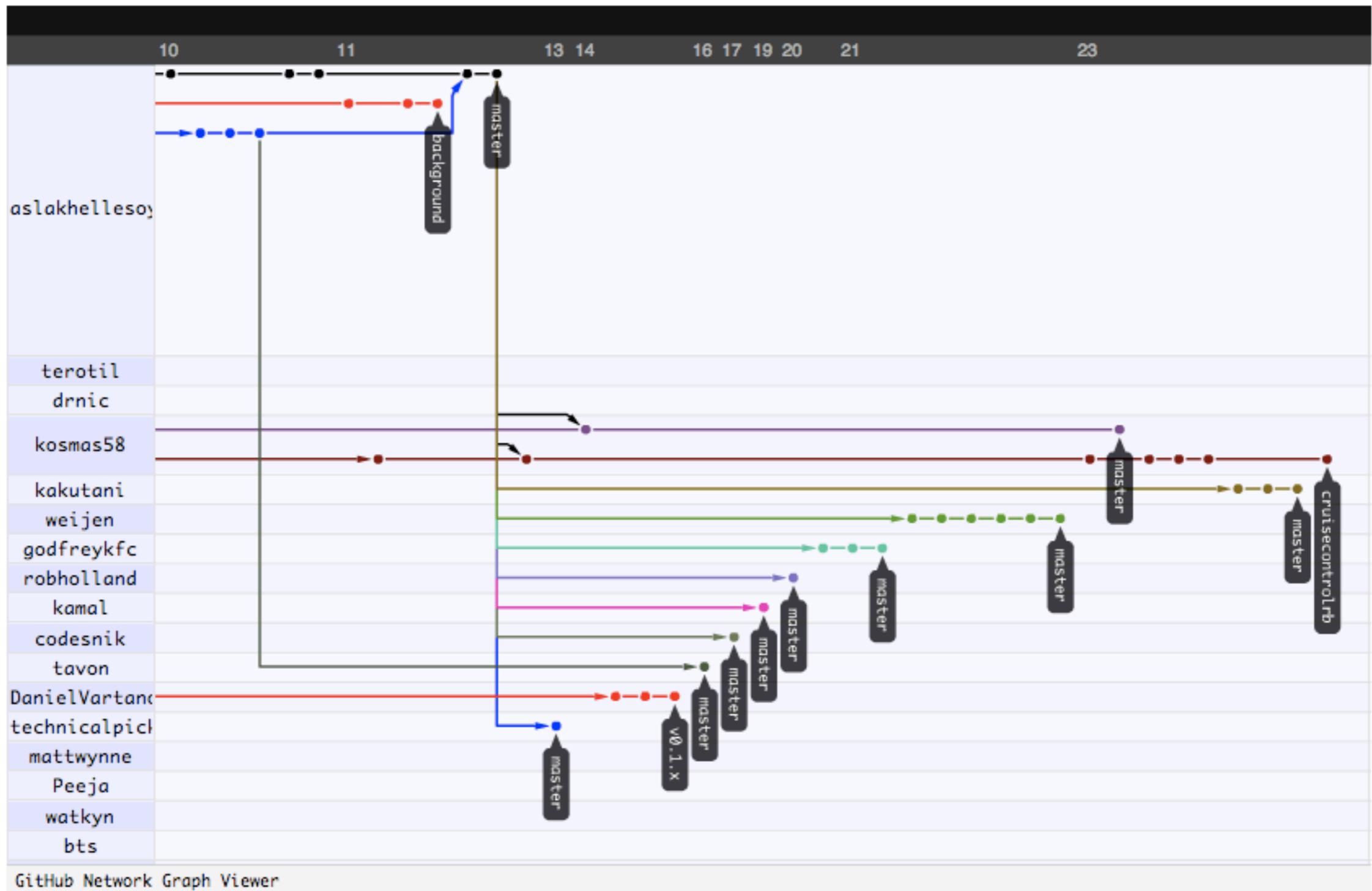
Will likely not apply cleanly

This data is out of date. We are showing you a cached version. Please refresh in a minute for more up to date data.

peterwald / ruby-git

Select: All, None [Actions](#)

<input type="checkbox"/>	2e937a	master~5	peterwald	bump version to get gem to rebuild.	February 16, 2009
<input type="checkbox"/>	ad8603	master~4	peterwald	Added fast-import streaming functionality (stre...	5 days ago
<input type="checkbox"/>	eb89cd	master~3	peterwald	Fix author initialization code.	4 days ago
<input type="checkbox"/>	673165	master~2	peterwald	Added fast-import commands to the library and t...	4 days ago
<input type="checkbox"/>	c6c23e	master~1	peterwald	Bump Gem Version	1 day ago
<input type="checkbox"/>	61f577	master	peterwald	Added stream.rb to the package.	1 day ago



easy to find projects

Search **Repositories** using **Any Language**

aspect-oriented



Repositories (8)

(0.045 seconds)

[teejayvanslyke / gazer](#) (Ruby)

poor man's aspect-oriented ruby

343.8 KB | 0 forks | 11 watchers | last activity 4 days ago

[hanekomu / aspect](#) (Perl)

(Perl) Aspect-oriented programming (AOP) for Perl

535.2 KB | 0 forks | 2 watchers | last activity 22 days ago

[Lewisham / tag-game-commentator](#) (Python)

An aspect-oriented implementation of a video game commentator, forked from John Funge's ai4games project

757.8 KB | 0 forks | 1 watchers | last activity about 1 month ago

[Lewisham / aspect-oriented-commentator](#)

An aspect-oriented implementation of a video game commentator

0 Bytes | 0 forks | 1 watchers | last activity about 1 month ago

[baris / pyaspects](#) (Python)

aspect oriented programming library for Python

113.3 KB | 0 forks | 1 watchers | last activity 11 days ago

[teejayvanslyke / aquarium-rails](#) (Ruby)

Rails GemPlugin for integrating the Aquarium aspect-oriented programming library into your Rails development

Breakdown

Languages

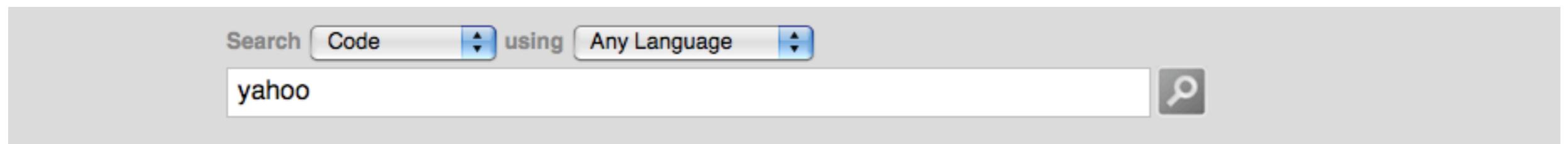
Python (2)

Ruby (2)

C++ (1)

PHP (1)

Perl (1)



Code (10014)

(1.335 seconds)

[betarelease/betarelease.github.com](#) » index.html (HTML)

[Yahoo](#) on Github pages

[steveyen/community-site](#) » vendor / venus / tests / data / filter / stripAd-yahoo.ini (INI)

[Planet]
filters = stripAd/yahoo.sed

[standardpixel/slides](#) » lib / docs / classmap.js (JavaScript)

YAHOO.env.classMap = {"YAHOO.widget.Panel": "container", "YAHOO.util.KeyListener": "event", "YAHOO

[brianmario/adium](#) » Frameworks / libpurple.framework / Versions / 0.5.3 / Headers / yahoo_packet.h

(C)

```
/**  
 * @file yahoo_packet.h The Yahoo! protocol plugin  
 *  
 * purple  
 *  
 * Purple is the legal
```

[brianmario/adium](#) » Frameworks / libpurple.framework / Versions / 0.5.3 / Headers / yahoo_friend.h

Breakdown

Repositories

standardpixel / slides (1229)
bobmcwhirter / jruby (478)
vvs / jruby (443)
davglass / yui-examples (437)
jianglibo / fao (285)
nicksieger / jruby (272)
jeffbrown / sample-ajax-in-grails (233)
ino110987 / innovative (221)
Macarse / trifiori (218)
jianglibo / movieshowtimes (213)
mghaught / yui4rails (202)
hartym / sfdynamicplugin (201)
esjewett / glue (197)
hwork / mousebase (171)
brosner / oebfare (154)
lancecarlson / yahoo-site-explorer (121)
jbeduya / websites (99)

easy to share

easy to share

easy to submit patches

easy to share

easy to submit patches

easy to accept patches

easy to share

easy to submit patches

easy to accept patches

easy to find projects

**the open source
PITA threshold**

setting up a new
repository

DIY

setting up a
website for the
project

setting up a new
repository

DIY

setting up a patch
acceptance policy

setting up a
website for the
project

setting up a new
repository

DIY

accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

DIY

PITA TH

accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

DIY



accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

PITA TH

DIY

GitHub

accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

PITA TH

new repository

DIY

GitHub

accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

DIY

setting up a website for the project
new repository

GitHub

PITA TH

accepting and applying patches

setting up a patch acceptance policy

setting up a website for the project

setting up a new repository

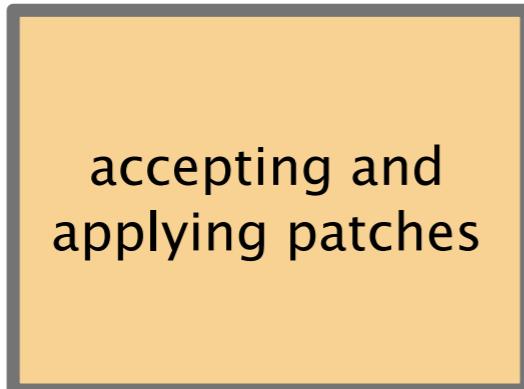
DIY

accepting and applying patches
setting up a website for the project
new repository

GitHub

PITA TH

(all graphs precisely to scale)



PITA TH



DIY

GitHub

to summarize

GitHub improves OSS
efficiency by reducing the
frictions of the transactions
involved

**to summarize
in pictures**







open source





JELLY/GELÉE

Personal Lubricant
Lubrifiant personnel

*#1 Doctor
Recommended Brand
Gentle and Safe
Water-Based*

• • •

*La marque n° 1
des médecins
Doux et sûr
Fabriqué à base d'eau*

Net Wt. 4 oz (113 g)



boom

How Git and GitHub
will help developers save
time and businesses be
efficient until they turn
the World Economy
around

Point

#2

How Git and GitHub will
help developers save time
and **help businesses be**
efficient so they can turn
the World Economy
around

I
more efficient
developers



I
more efficient
developers

#2

**github can get you
free work**

outsourcing

insourcing

offshoring

multisourcing

co-sourcing

homeshoring

nearshoring

crowdsourcing

outsourcing
insourcing
offshoring
multisourcing

GitSourcing

co-sourcing
homeshoring
nearshoring
crowdsourcing

Crowdsourcing

```
/* crowdsourcing code */  
  
#include<stdio.h>  
  
main()  
{  
    printf("Crowdsourcing");  
}
```

how do you gitsource?

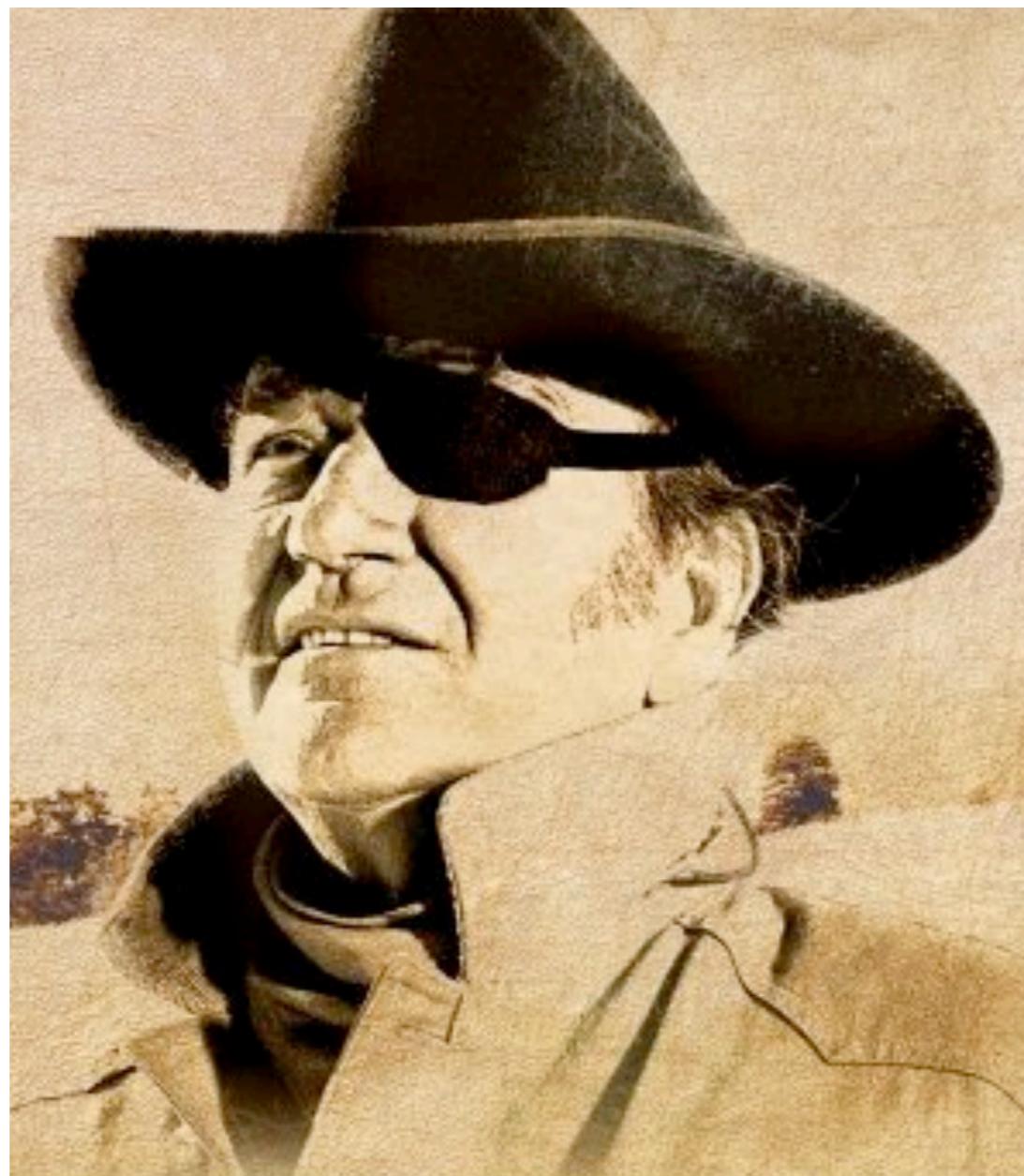
**take any generic code
that your company uses**

put it on GitHub

reap the benefits of
free development

examples

Grit



Grit

Contributors: 13

Total LoC: 1097

Total Commits: 41

Jekyll



Jekyll

Contributors: 28

Total LoC: 1475

Total Commits: 79

GitHub Services & Gems

Basecamp

Url
Username
Password
Project
Category
Active

[Update Settings](#) [Help](#)

CIA

Active

[Update Settings](#) [Help](#)

Campfire

Subdomain
Email
Password
Room
Ssl
Active

[Update Settings](#) [Help](#)

Email

FogBugz

Cvssubmit Url
Active

[Update Settings](#) [Help](#)

FriendFeed

Nickname
Remotekey
Active

[Update Settings](#) [Help](#)

Irc

Server
Port
Room
Password
Nick
Ssl
Active

[Update Settings](#) [Help](#)

Jabber

User
Active

GitHub Services & Gems

Contributors: 8

Total LoC: 1515

Total Commits: 36

Total

Contributors: 49

Total LoC: 4087

Total Commits: 159

This benefits you
(free work)
and the larger community
(software commoditization)

summary

Git makes developers more efficient



Git makes developers more efficient

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions



Git makes developers more efficient



GitHub lowers barriers to Open Source contributions

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions

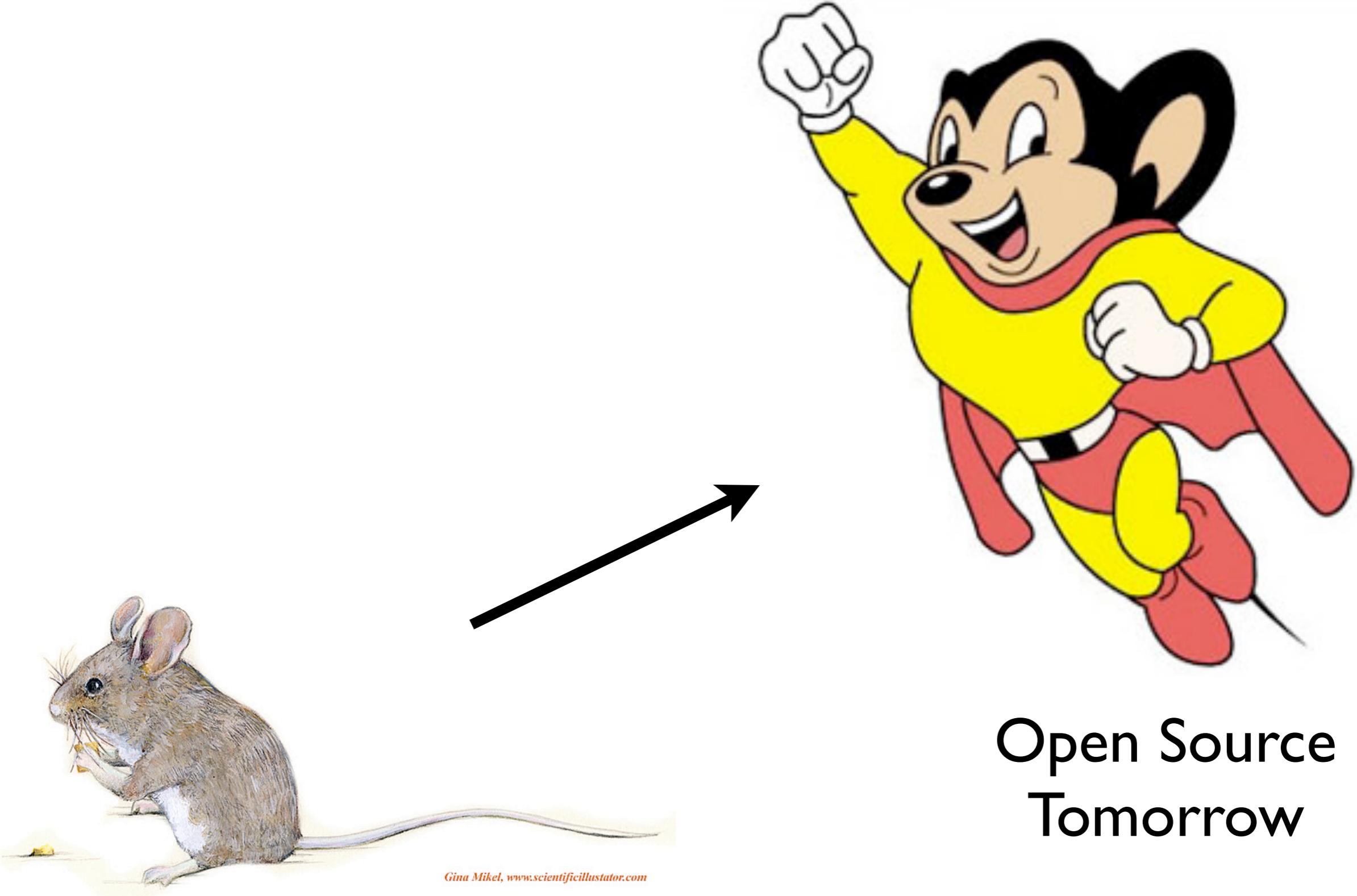


More code is released as Open Source, quality improves



Gina Mikel, www.scientificillustrator.com

**Open Source
Today**



Open Source
Tomorrow

Open Source
Today

Gina Mikel, www.scientificillustrator.com

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions



More code is released as Open Source, quality improves

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions



More code is released as Open Source, quality improves



Businesses can use more efficient developers, better OS software and free work on their OSd projects to more effectively concentrate on innovation

HAVE YOU SEEN THIS CAT?



BECAUSE IT IS
AWESOME

HAVE YOU SEEN THIS CAT?



BECAUSE IT IS
AWESOME

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions



More code is released as Open Source, quality improves



Businesses can use more efficient developers, better OS software and free work on their OSd projects to more effectively concentrate on innovation

Git makes developers more efficient



GitHub lowers barriers to Open Source contributions



More code is released as Open Source, quality improves



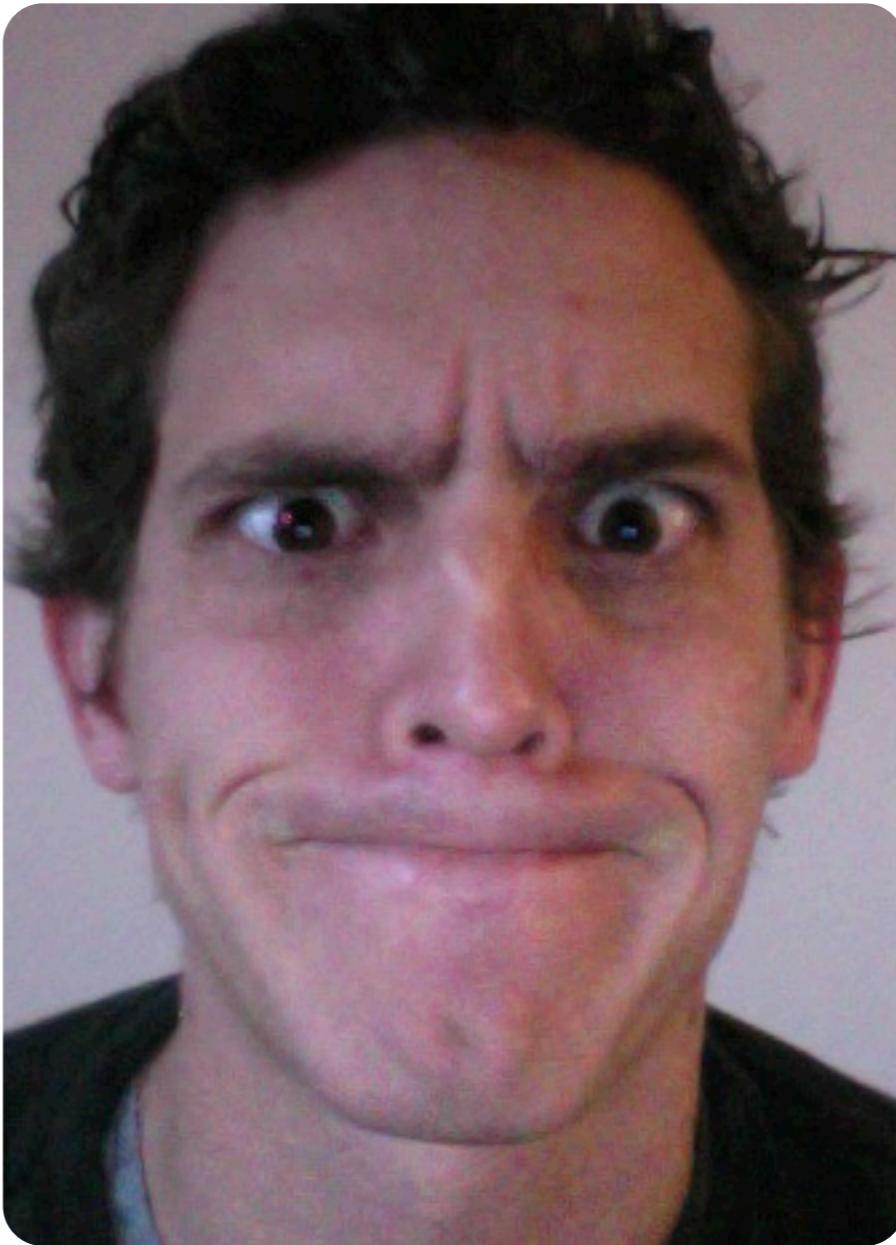
Businesses can use more efficient developers, better OS software and free work on their OSd projects to more effectively concentrate on innovation



Innovation saves the world economy

ergo

you



you (and your company)



**you (and your company)
should use Git**



**you (and your company)
should use Git and GitHub**



**you (and your company)
should use Git and GitHub
to save the world economy**