



**git** & **GitHub**

A small introduction :)



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**Follow**

Hard to believe that in 2015 I still run into developers who neither use version control nor see any problem with not using version control.



RETWEETS

**71**

FAVORITES

**28**



4:48 PM - 19 Jan 2015

# Version Control System?

concept\_projectx\_v1.pdf  
concept\_projectx\_v2.pdf  
concept\_projectx\_v3.pdf  
concept\_projectx\_final.pdf

**concept\_projectx\_final\_v2.pdf**  
**concept\_projectx\_final\_v3.pdf**

# V Version C Control S System?



git



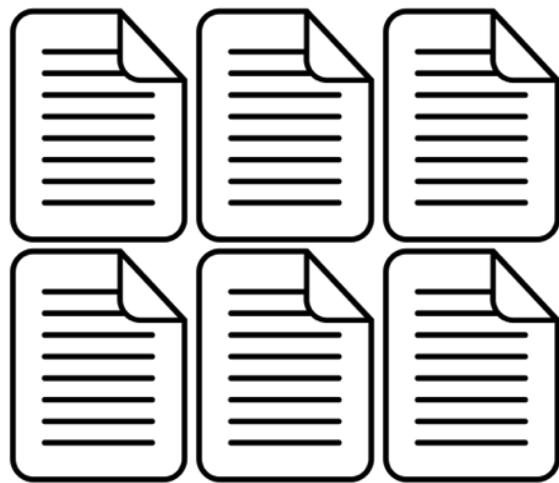
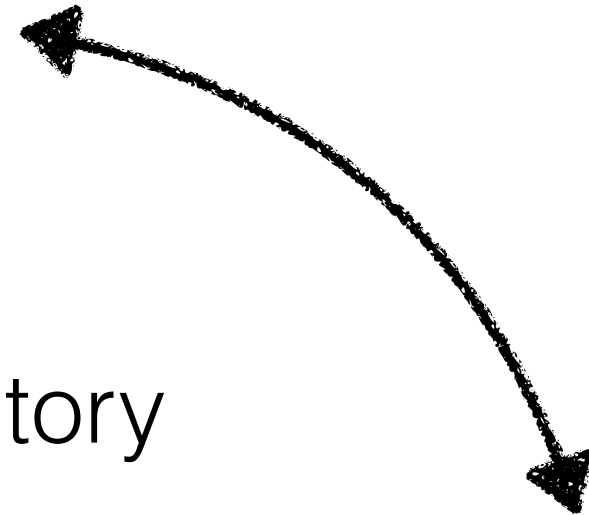
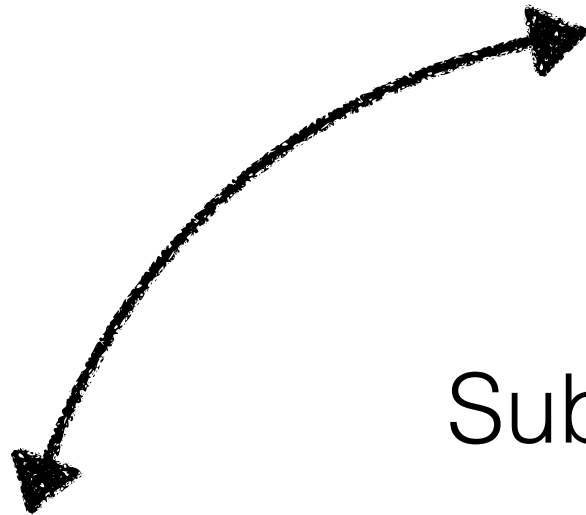
“**Git** is a free and open source **distributed version control system** designed to handle everything from small to **very large projects** with **speed** and **efficiency**.”

–The “website” [git-scm.com](https://git-scm.com)

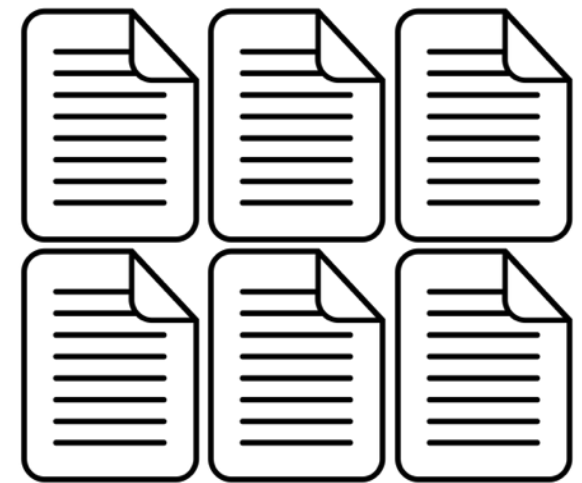
# Theory



Subversion-Repository

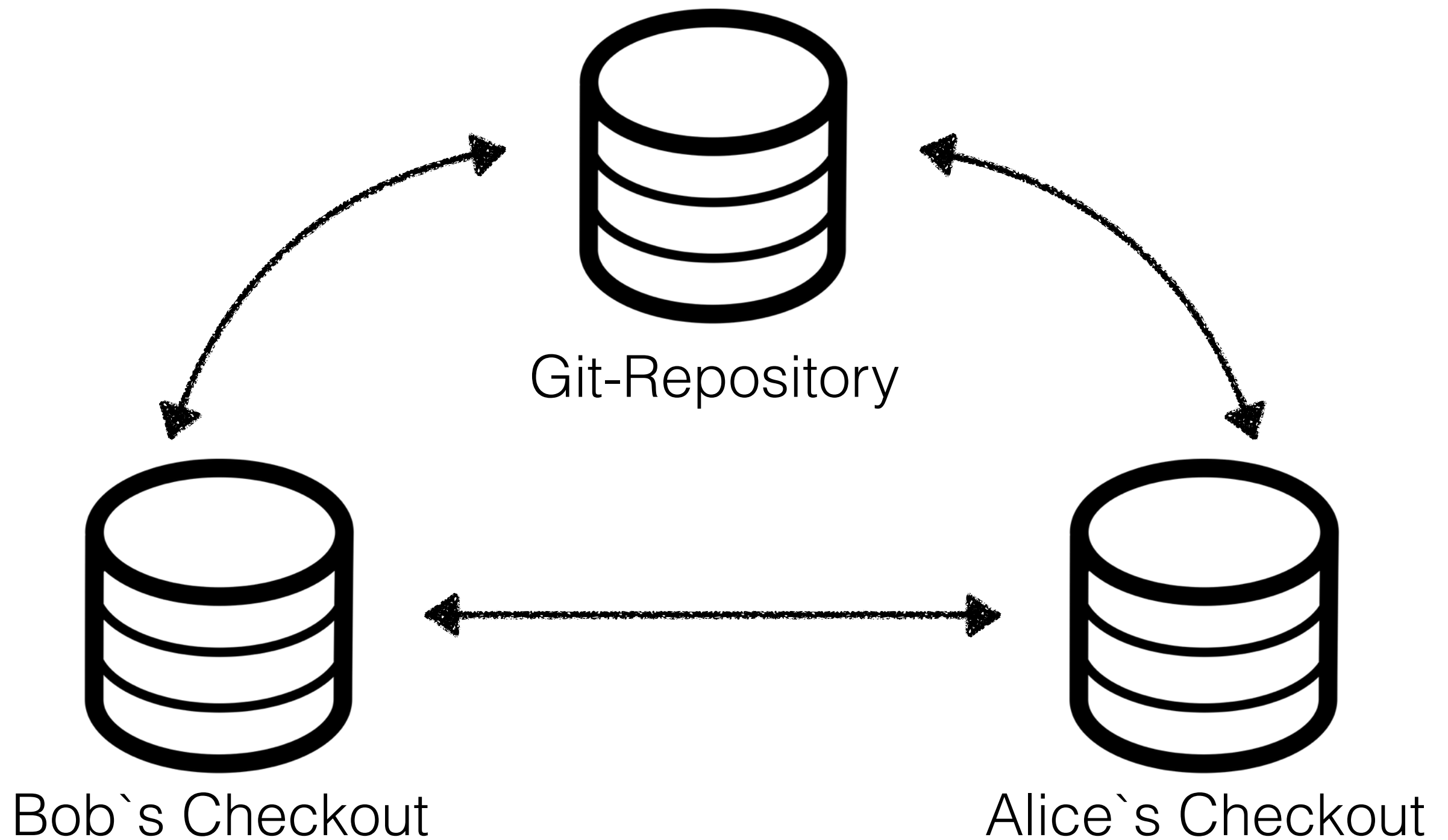


Bob`s Checkout



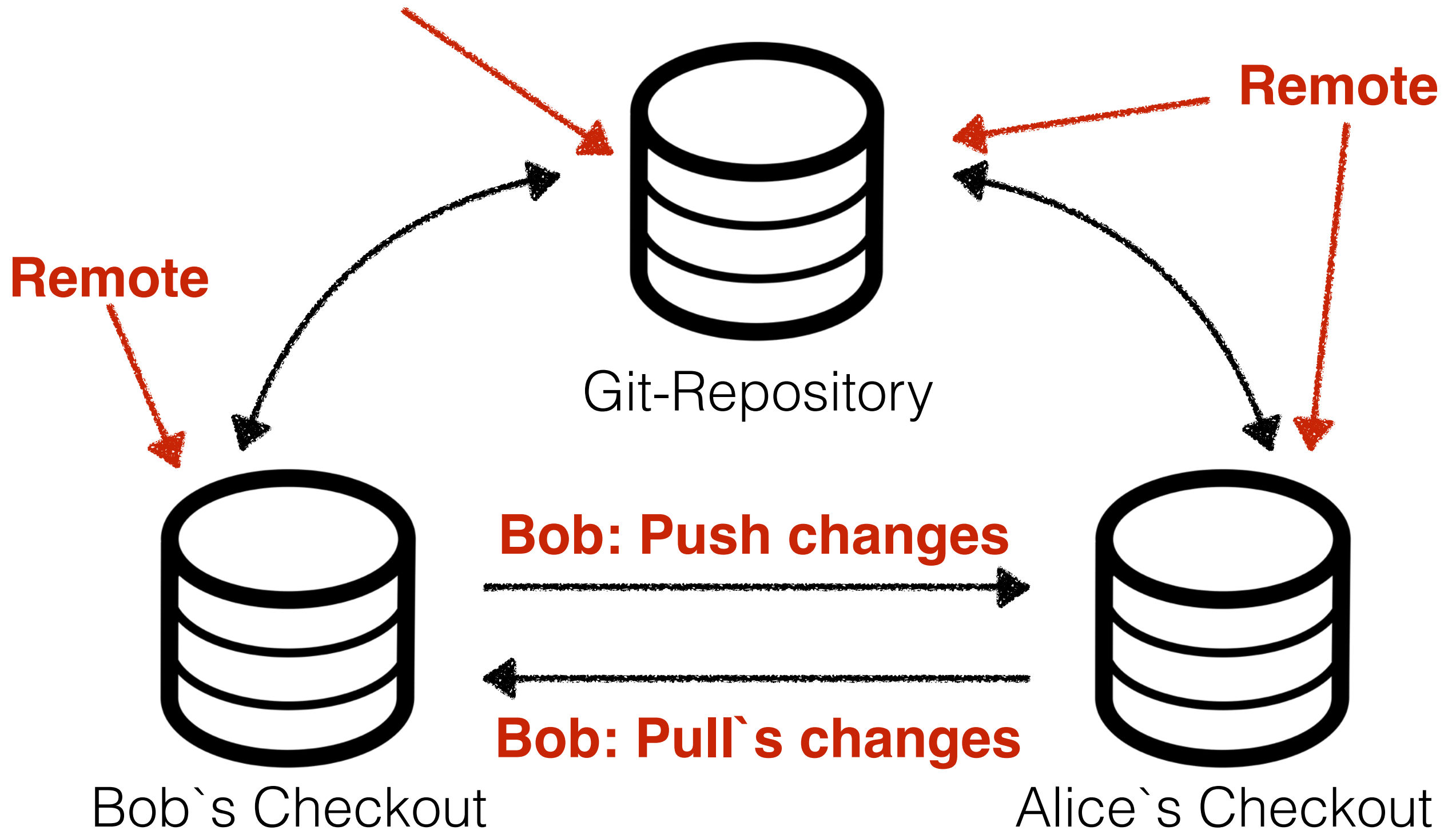
Alice`s Checkout

# Theory



**Main Repository:  
Only a convention**

# Theory





# Setup

```
$ git config --global user.name "octocat"  
$ git config --global user.email "octocat@me.com"  
$ git config --global color.ui auto
```

# New repository

```
$ mkdir my-first-repo
```

```
$ cd my-first-repo
```

```
$ git init
```

Initialized empty Git repository in `~/my-first-repo/.git/`

# First commit

```
$ touch README.md
```

```
$ vim README.md
```

```
$ git status
```

On branch `master`

...

Untracked files:

`README.md`

nothing added to commit [...] (use "git add" to track)

# First commit

```
$ git add README.md
```

```
$ git status
```

On branch `master`

...

Changes to be committed:

(use "git rm --cached <file>..." to unstage)

new file: README.md

# First commit

```
$ git commit
```

```
$ git log
```

```
commit e213ae022ce72c72e5062ab65f4e3791023b0e22
```

```
Author: octocat <octocat@me.com>
```

```
Date:   Wed Jan 22 19:17:24 2015 +0100
```

Initial commit

[Explore](#) [Gist](#) [Blog](#) [Help](#)

andygrunwald



andygrunwald ▾

[News Feed](#)[Pull Requests](#)[Issues](#)dsiebel created branch `made-a-whoopsie-there` at PHPUGDus/Github-Workshop 10 minutes ago

25 minutes ago

dsiebel pushed to **master** at PHPUGDus/Github-Work...

692d9be add more text to README



27 minutes ago

dsiebel opened pull request PHPUGDus/Github-Workshop#1



dome's first commit



1 commit with 2 additions and 0 deletions

dsiebel created branch `dome's first commit` at PHPUGDus/Github-Workshop 28 minutes ago

badboy starred derrick/cleanthesis 3 hours ago



MakaHost forked PHPUGDus/Github-Dashboard to MakaHost/Github-Dashboard 3 hours ago



MakaHost forked PHPUGDus/Github-Workshop to MakaHost/Github-Workshop 3 hours ago



MakaHost starred PHPUGDus/Github-Dashboard 3 hours ago



mre forked collectd/collectd to mre/collectd 4 hours ago



markuspoerschke starred symfony/symfony 4 hours ago



thomashempel starred JVillella/JVFloatingDrawer 10 hours ago

**Announcing GitHub Enterprise 2.1.0**

LDAP Sync, support for OpenStack KVM, instance monitoring, and more.

[View 7 new broadcasts](#)

### Repositories you contribute to

	Jacobine/Jacobine	12 ★
	Jacobine/Jacobine-Vagrant	2 ★
	MetricsGrimoire/CVSAnalY	20 ★
	MetricsGrimoire/MailingListStats	23 ★
	zoepage/shalli	5 ★

### Your repositories 18

[+ New repository](#)[All](#)[Public](#)[Private](#)[Sources](#)[Forks](#)

Gerrie


Konafets/PHP\_CodeSniffer

gomposer





andygrunwald.github.io


FOM-LaTeX-Template

# New repository







ExploreGistBlogHelp



 dsiebel +


 PHPUGDus ▾


News FeedPull RequestsIssuesView PHPUGDus


 dsiebel created branch `made-a-whoopsie-there` at PHPUGDus/Github-Workshop 6 minutes ago


 22 minutes ago  
dsiebel pushed to **master** at PHPUGDus/Github-Work...  
  692d9be add more text to README

 23 minutes ago  
dsiebel opened pull request PHPUGDus/Github-Workshop#1  
 dome's first commit  
1 commit with 2 additions and 0 deletions

 dsiebel created branch `domes-first-commit` at PHPUGDus/Github-Workshop 25 minutes ago


 MakaHost forked PHPUGDus/Github-Dashboard to MakaHost/Github-Dashboard 3 hours ago


 MakaHost forked PHPUGDus/Github-Workshop to MakaHost/Github-Workshop 3 hours ago


 You're an owner of the PHPUGDus organization! (2 days ago)

**Repositories** 2 [+ New repository](#)

AllForksSourcesPrivatePublic

 [PHPUGDus/Github-Workshop](#)

 [PHPUGDus/Github-Dashboard](#)

 Subscribe to the **PHPUGDus** organization news feed

# Push your repository

**Name of remote**

**URL of remote**

\$ git remote add origin git@github.com:name/repo.git

\$ git push -u origin master

**Target remote**

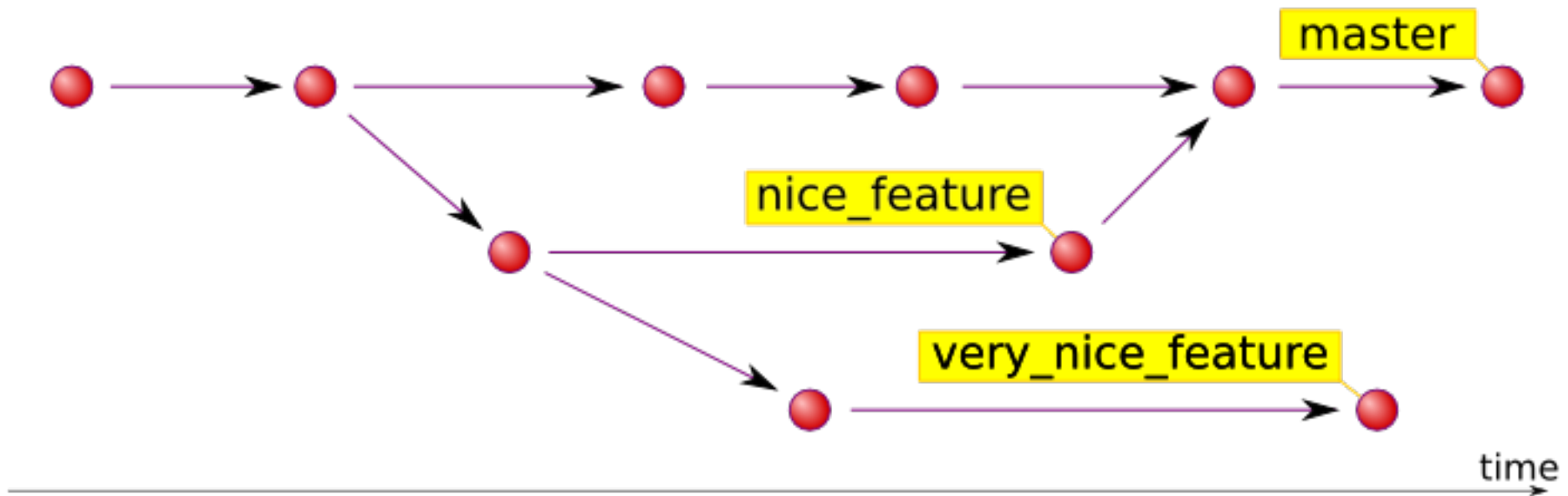
**Branch to push**



# Other hosters

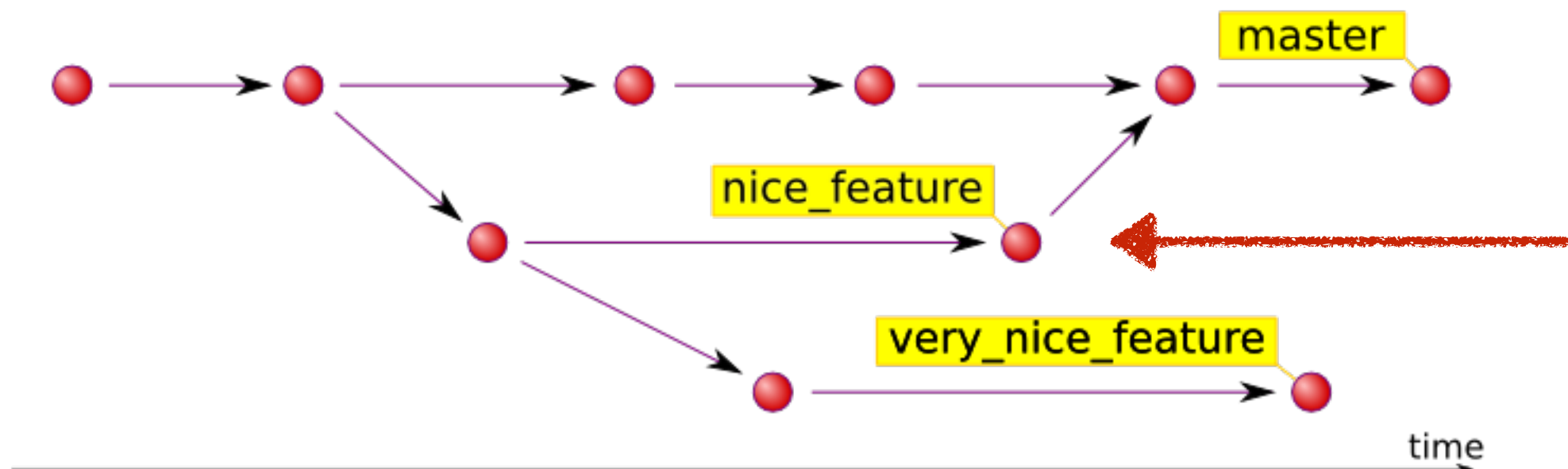
- bitbucket <https://bitbucket.org/>
- gitlab <https://gitlab.com/>
- sourceforge <http://sourceforge.net/>

# Branch + Merge



# Creating a branch

```
$ git checkout master  
$ git branch nice_feature  
$ git checkout nice_feature  
$ touch nice_feature_file  
$ vim nice_feature_file  
$ git add nice_feature_file  
$ git commit
```



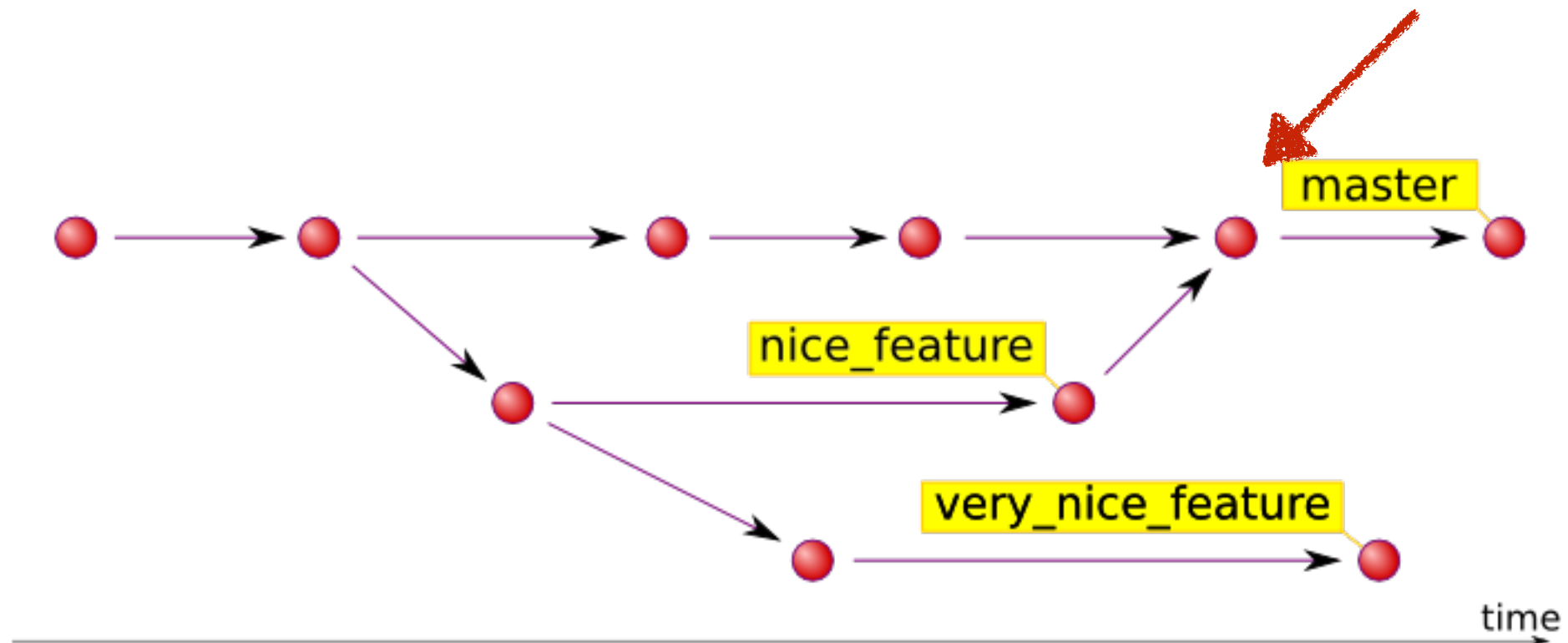
# Merging a branch

```
$ git checkout master
```

```
$ git merge nice_feature
```

\$ git log

\$ gitk



# Pull Requests

```
$ git clone git@github.com:PHPUGDus/Github-Workshop.git
$ cd Github-Workshop
$ git checkout -b my-awesome-changes
$ vim README.md
$ git status
$ git commit -a
$ git remote -v
$ git push origin my-awesome-changes
```

# Pull Requests

 PHPUGDus / Github-Workshop

 Watch ▾ 1

Example Repository for the Github-Workshop — Edit


 2 commits

 3 branches

 0 releases

 1 contributor

Your recently pushed branches:

 **made-a-whoopsie-there** (less than a minute ago)

 Compare & pull request



 branch: master ▾

Github-Workshop / +



# Pull Requests

## dome's first commit #1

[Edit](#)[New issue](#)**Open**

dsiebel wants to merge 1 commit into `master` from `domes-first-commit`



Conversation 0



Commits 1



Files changed 1

+2 -0



dsiebel commented 14 minutes ago

Owner



I did something awesome here!



dome's first commit

01270aa

Add more commits by pushing to the `domes-first-commit` branch on **PHPUGDus/Github-Workshop**.



**We can't automatically merge this pull request.**

Use the [command line](#) to resolve conflicts before continuing.

[Merge pull request](#)

Write

Preview

Markdown supported

[Edit in fullscreen](#)

Leave a comment

Attach images by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Labels



None yet

Milestone



No milestone

Assignee

No one—[assign yourself](#)

Notifications

[Unsubscribe](#)

You're receiving notifications because you authored the thread.

1 participant

[Lock pull request](#)[Close pull request](#)[Comment](#)

# SVN to Git (without history)

```
$ svn export svn://<your_svn_repo> svn_export
$ cd svn_export
$ git init
$ # Create Repository at Github
$ git add *
$ git commit -m "Initial commit"
$ git remote add origin git@github.com:user/repo.git
$ git push -u origin master
```



# SVN to Git (without history)

\$

\$

\$

\$

\$

\$

\$

\$

---

**Don't try this at home!**  
**History is important!**  
**<https://github.com/dsiebel/svn2git.php>**

```
# Create Repository at Github
git add *
git commit -m "Initial commit"
git remote add origin https://github.com/dsiebel/svn2git.php
git push -u origin master
```

# ~/.gitconfig

[user]

name = octocat

email = octocat@me.com

[alias]

st = status

ci = commit

co = checkout

pom = push origin master

branches = branch -av

tags = tag -l

remotes = remote -v



**potch**  
@potch



**Follow**

alias yolo='git commit -am "DEAL WITH IT"  
&& git push -f origin master'



RETWEETS

**3,165**

FAVORITES

**1,414**



11:49 PM - 18 Jan 2013

# Further resources

- `$ git help <subcommand>`
- Official git book: <http://git-scm.com/book/en/v2>
- Official git documentation: <http://git-scm.com/doc>
- Ask your colleagues / developers :)

# Further resources

- Try git: <https://try.github.io/>
- Debugging cheat sheet: <https://pbs.twimg.com/media/BjF0pvrCcAAiVRG.png:large>
- Cheat sheet: <https://github.com/tiimgreen/github-cheat-sheet>

# Tooling

- GushPHP:
- Debugging cheat sheet: <https://pbs.twimg.com/media/BjF0pvrCcAAiVRG.png:large>
- Cheat sheet: <https://github.com/tiimgreen/github-cheat-sheet>

Questions?

# <https://github.com/PHPUGDus/Github-Workshop>

Welcome @PHPUGDus

Push to PHPUGDus/Github-Workshop @ Github  
to see your actions here!

URL: <https://github.com/PHPUGDus/Github-Workshop>



## Github News Feed

7 minutes ago



*dsiebel pushed master at PHPUGDus/Github-Workshop*  
added slides

47 minutes ago



*dsiebel pushed master at PHPUGDus/Github-Workshop*  
add more text to README

1 days ago



*andygrunwald pushed master at PHPUGDus/Github-Dashboard*  
Added a few more files to ignore

## Github Repos

Github-Dashboard	2
Github-Workshop	0

# of watchers

Last updated at 18:33

## Open Pull Requests

Added a few more information  
to the README

Github-Dashboard \* @andygrunwald \* Jan  
20 2015, 8:01 PM

dome's first commit

Github-Workshop \* @dsiebel \* Jan 22  
2015, 4:01 PM

Last updated at 18:34