



git & **GitHub**

A small introduction :)



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@jclermont



 **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.

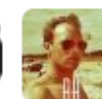


RETWEETS

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



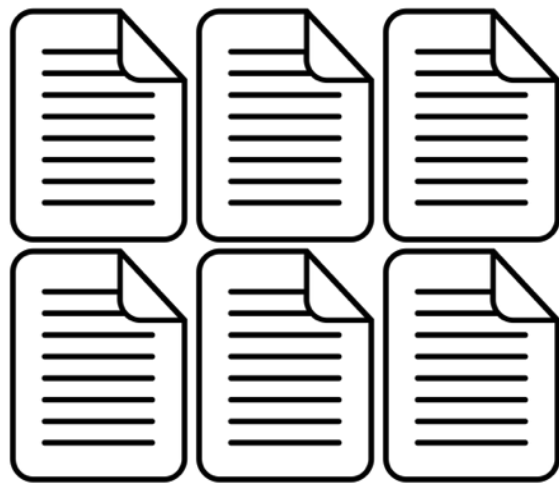
“**Git** is a free and open source **distributed version control system** designed to handle everything from small to **very large projects** with **speed** and **efficiency**.”

–The “website” git-scm.com

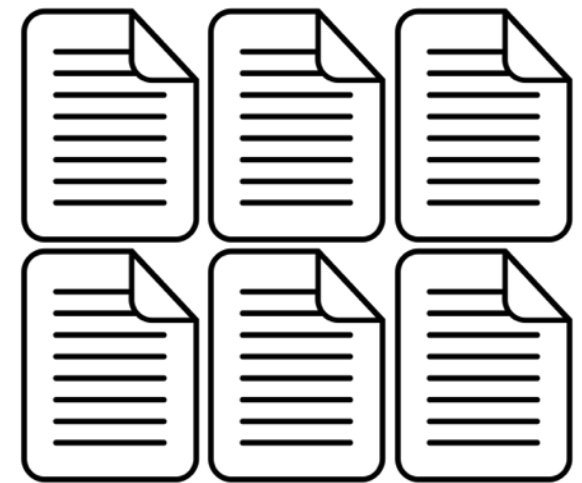
Theory



Subversion-Repository

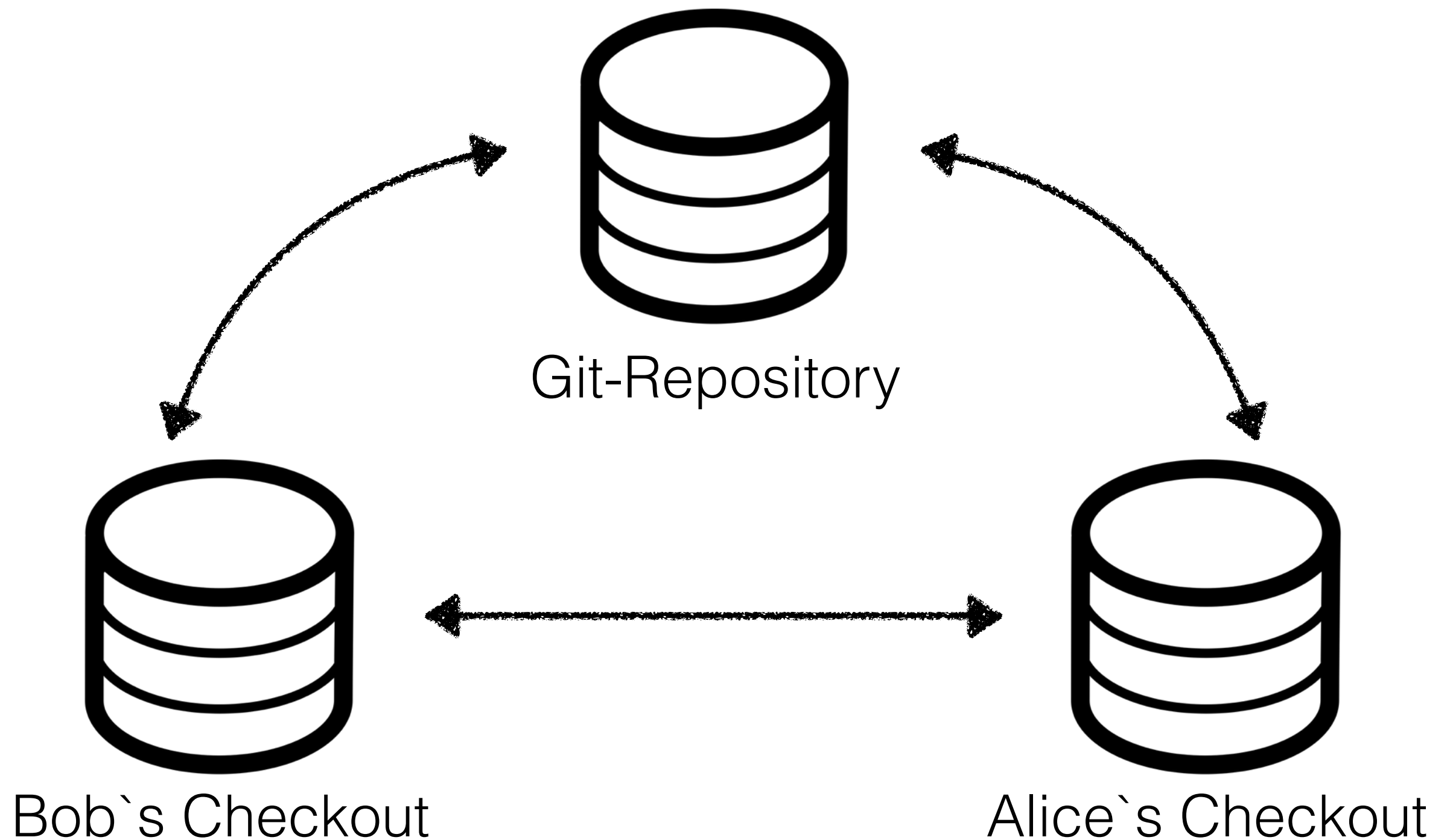


Bob`s Checkout



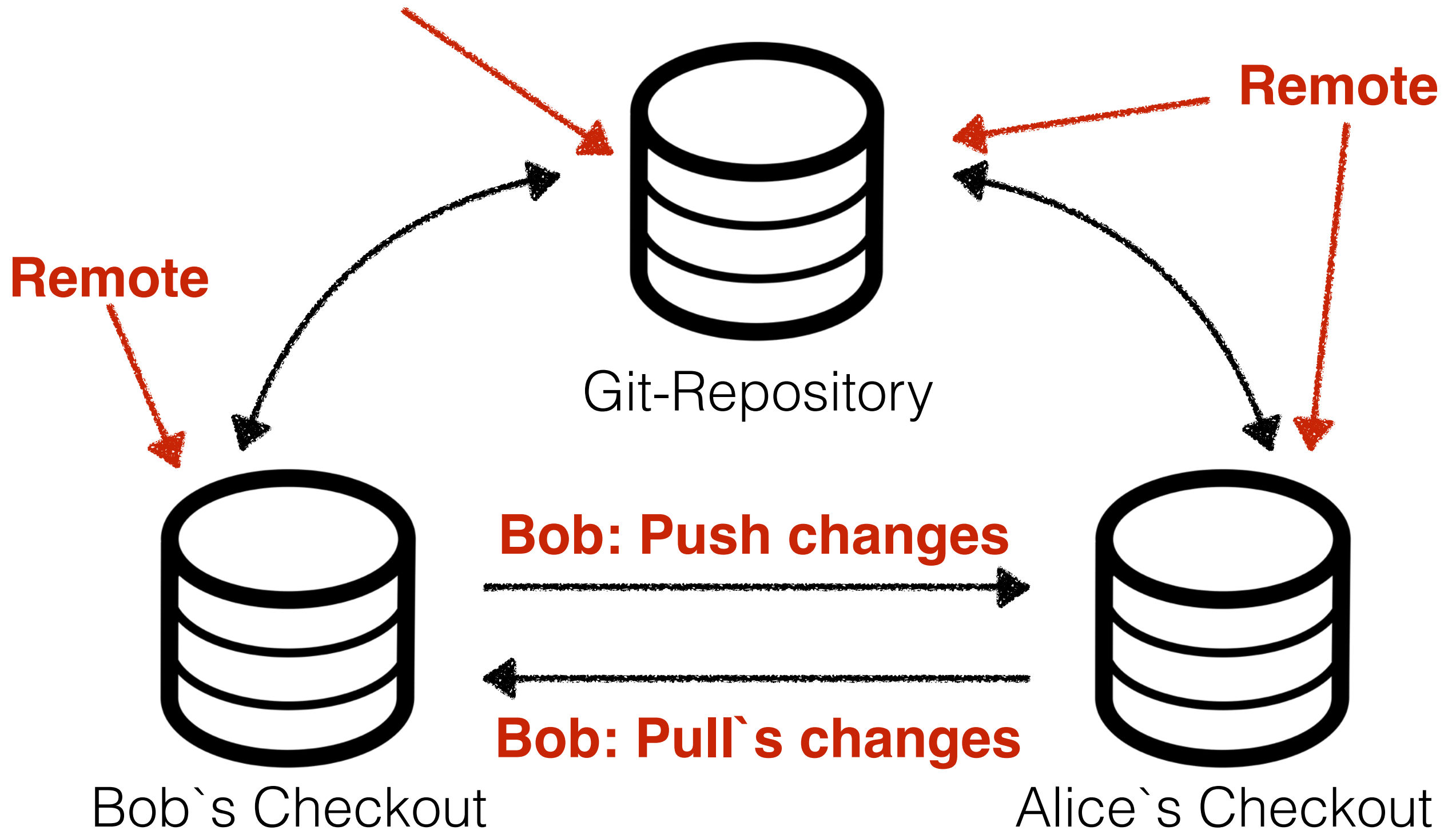
Alice`s Checkout

Theory



**Main Repository:
Only a convention**

Theory



[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 agobadboy starred [derric/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 agomre forked [collectd/collectd](#) to mre/collectd 4 hours agomarkuspoerschke starred [symfony/symfony](#) 4 hours agothomashempel 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](#)

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

New repository







ExploreGistBlogHelp



 dsiebel +


 PHPUGDus ▾


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 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

Find a repository...

AllForksSourcesPrivatePublic

 PHPUGDus/Github-Workshop

 PHPUGDus/Github-Dashboard

 Subscribe to the PHPUGDus organization news feed

Push your repository

Name of remote

URL of remote

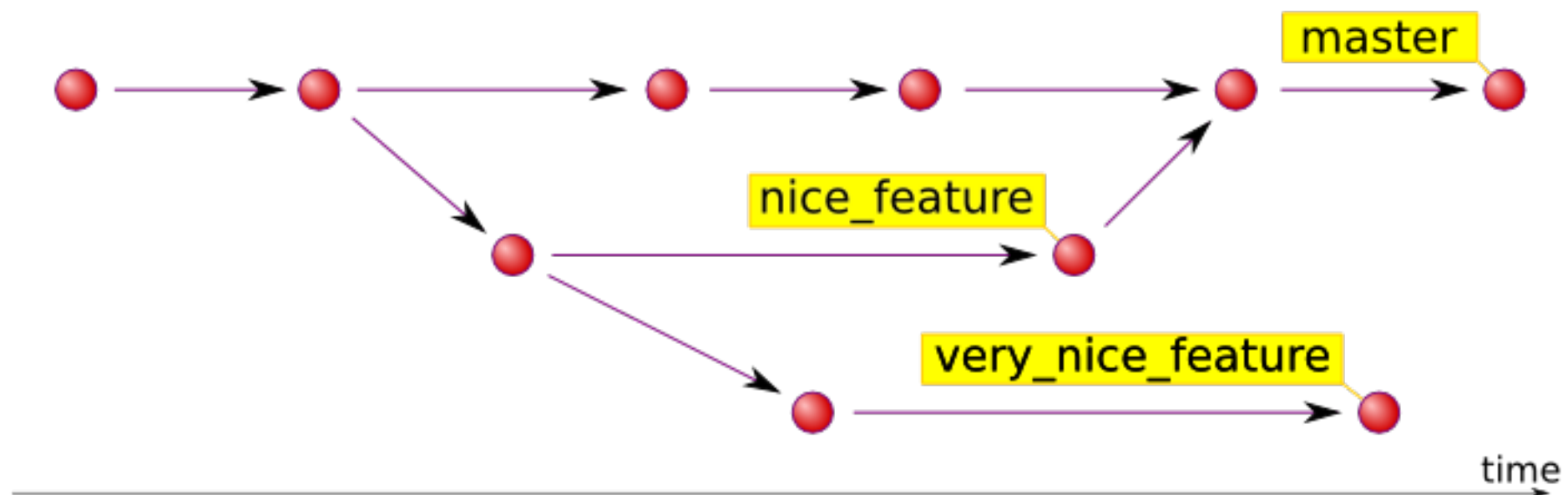
\$ git remote add origin git@github.com:name/repo.git

\$ git push -u origin master

Target remote

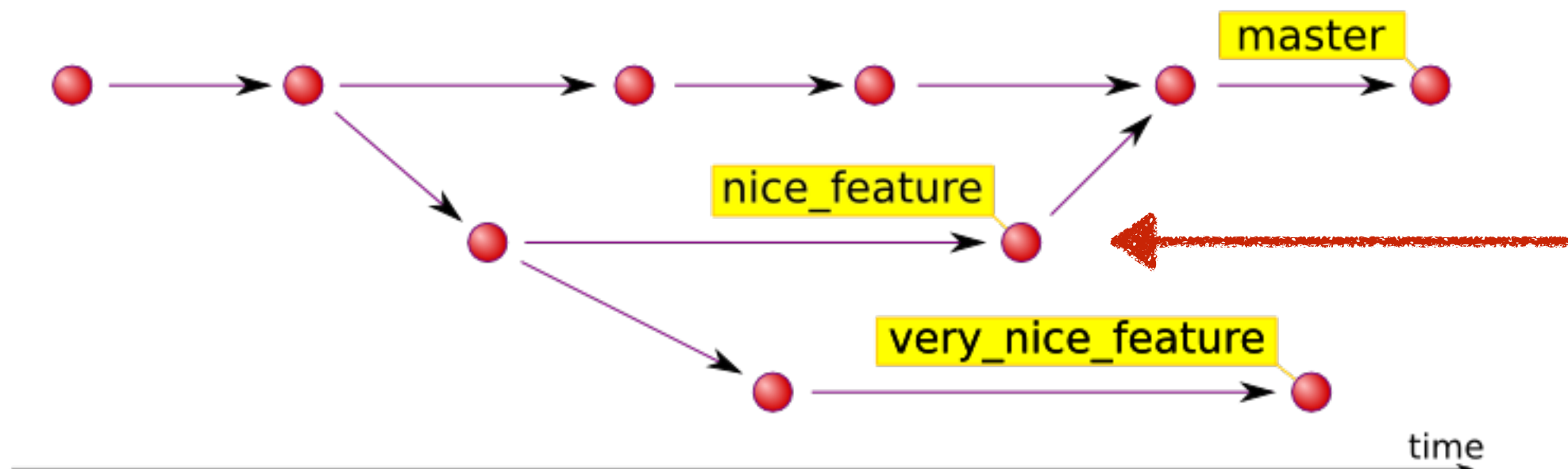
Branch to push

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
```



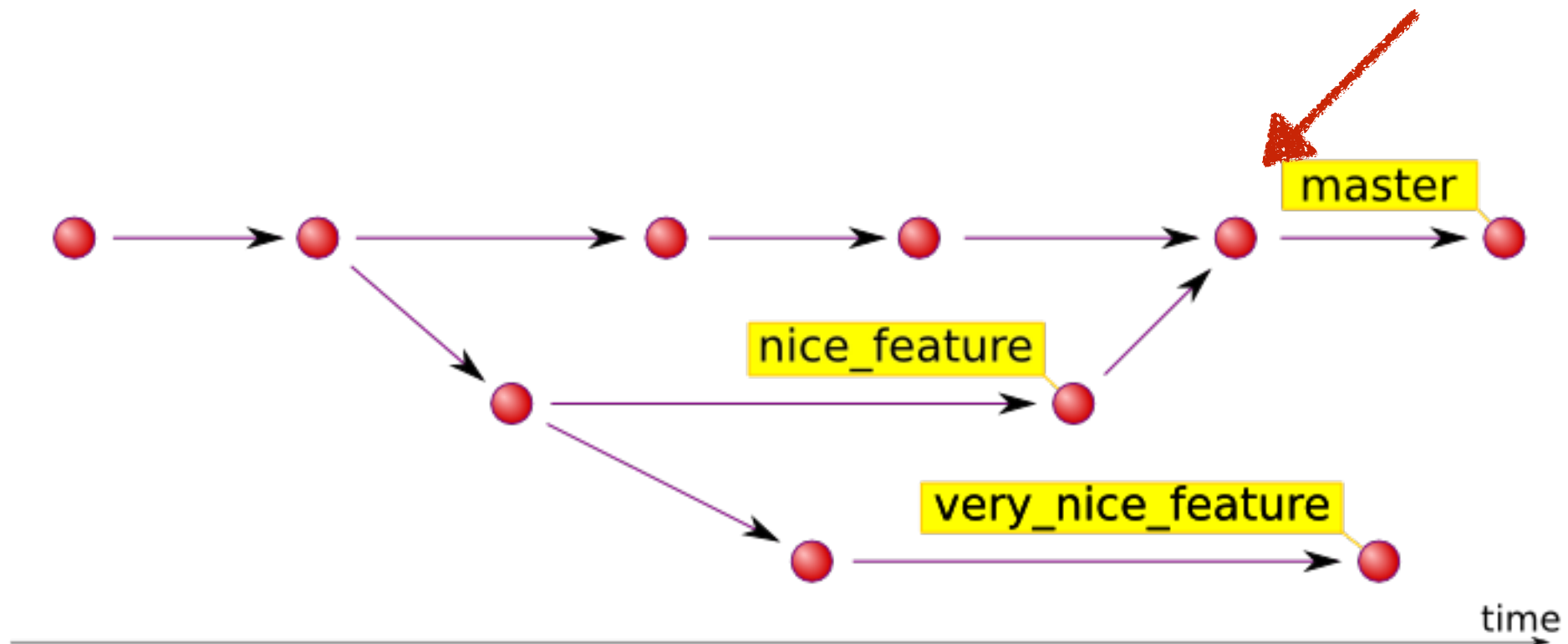
Merging a branch

```
$ 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](#)

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  
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?