

Introduction to Git

at the Transylvania JUG



by Matthew McCullough

Hello
my name is

Matthew McCullough



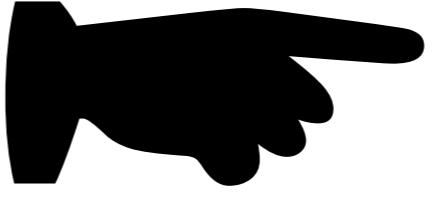
@matthewmccull

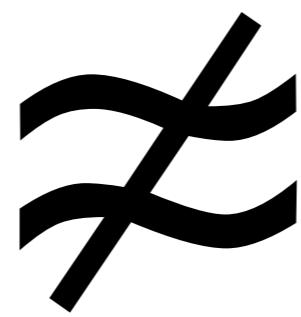


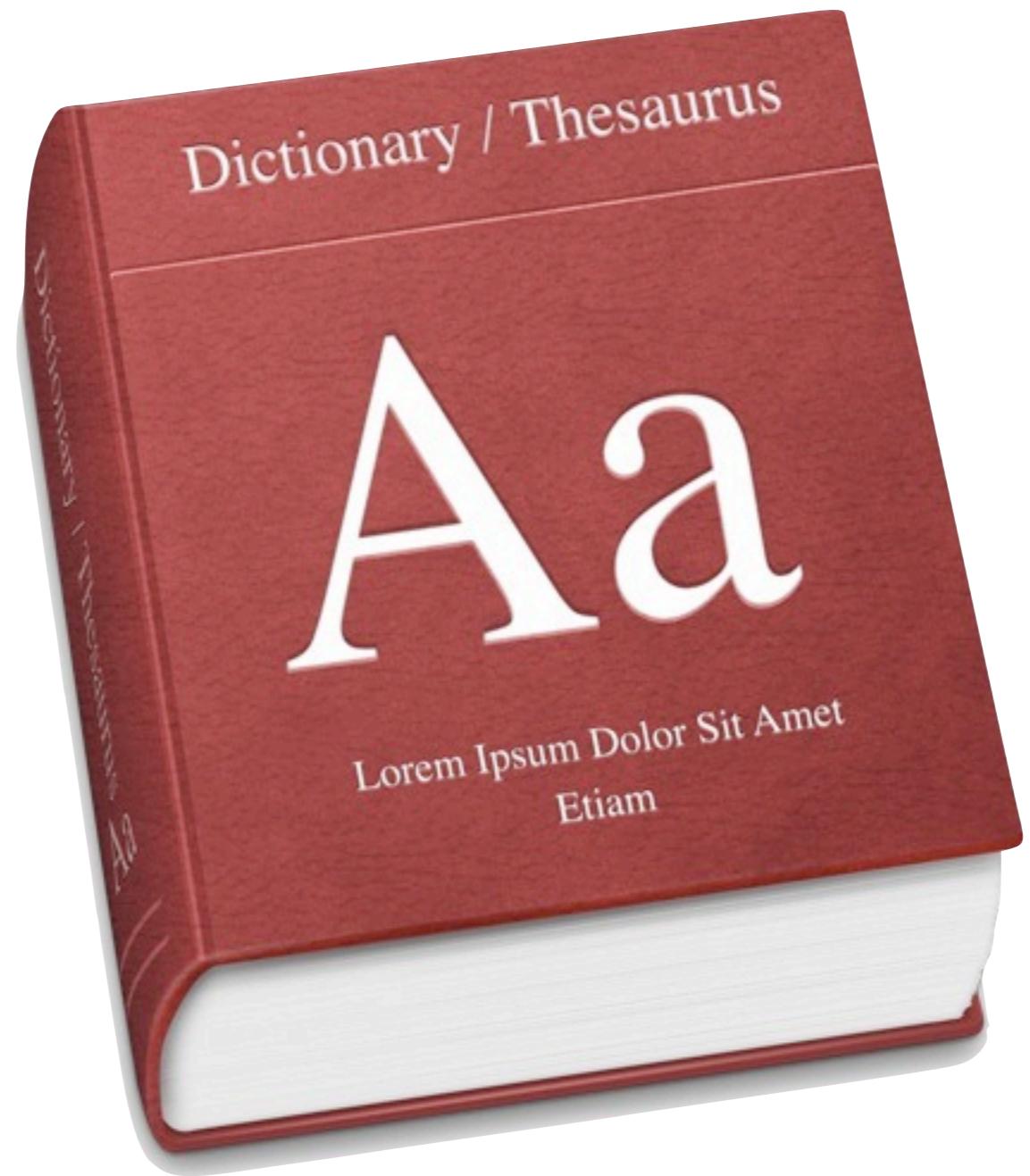
quit

"cool kids" version control system

Open Source

bash scripts  **C code**





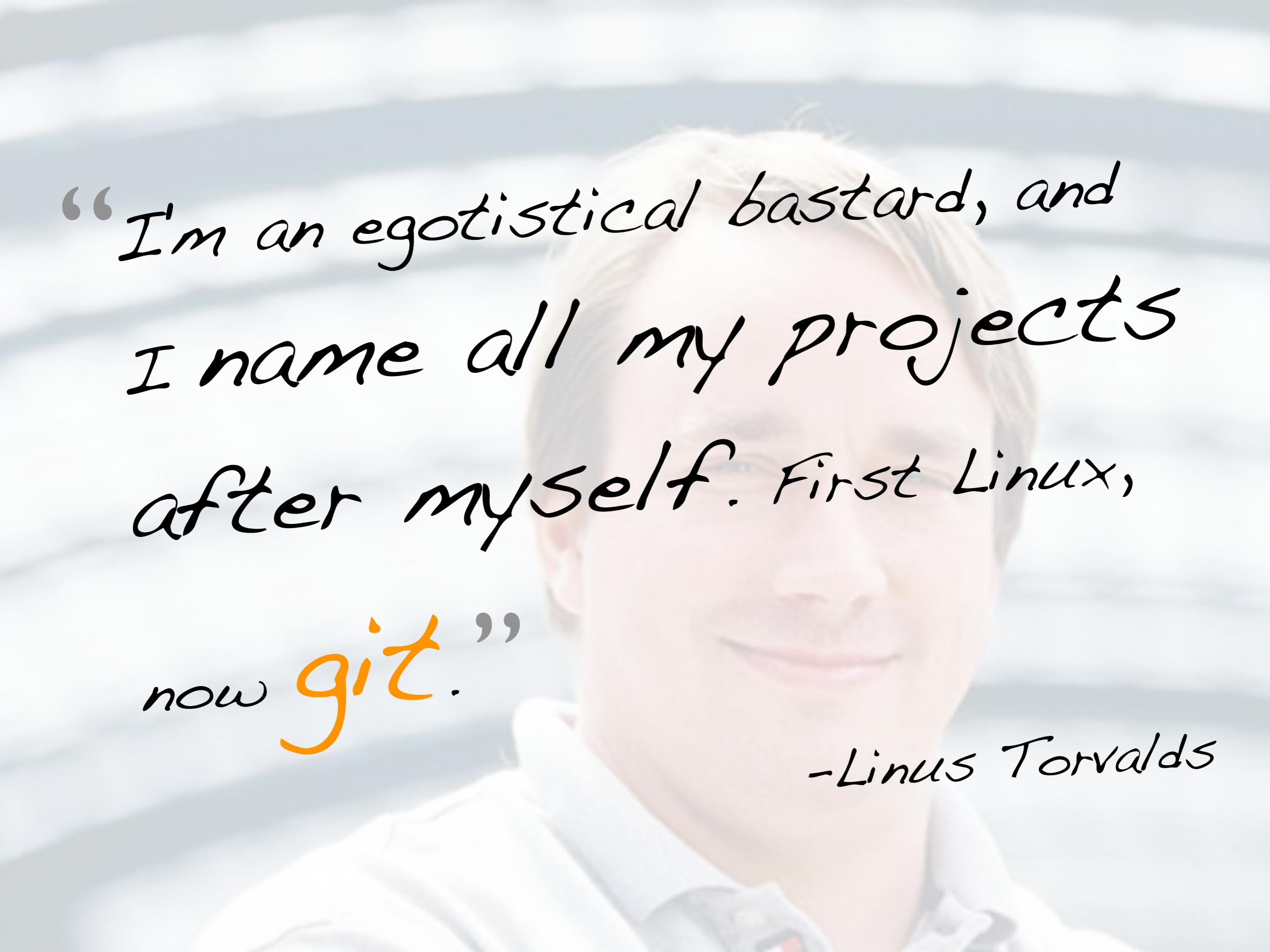
“Git

-noun

British Slang. an **unpleasant**
or contemptible person”

-Oxford English Dictionary



A portrait of Linus Torvalds, a man with short brown hair and a beard, wearing a light-colored shirt. He is looking slightly to his left with a neutral expression.

“I'm an egotistical bastard, and
I name all my projects
after myself. First Linux,
now git.”

-Linus Torvalds

- How to set up a Git repository
- How to commit, branch and tag
- How Git implements a new commit-referencing syntax
- How to pull and push changes between repositories

 **How to set up a Git repository**

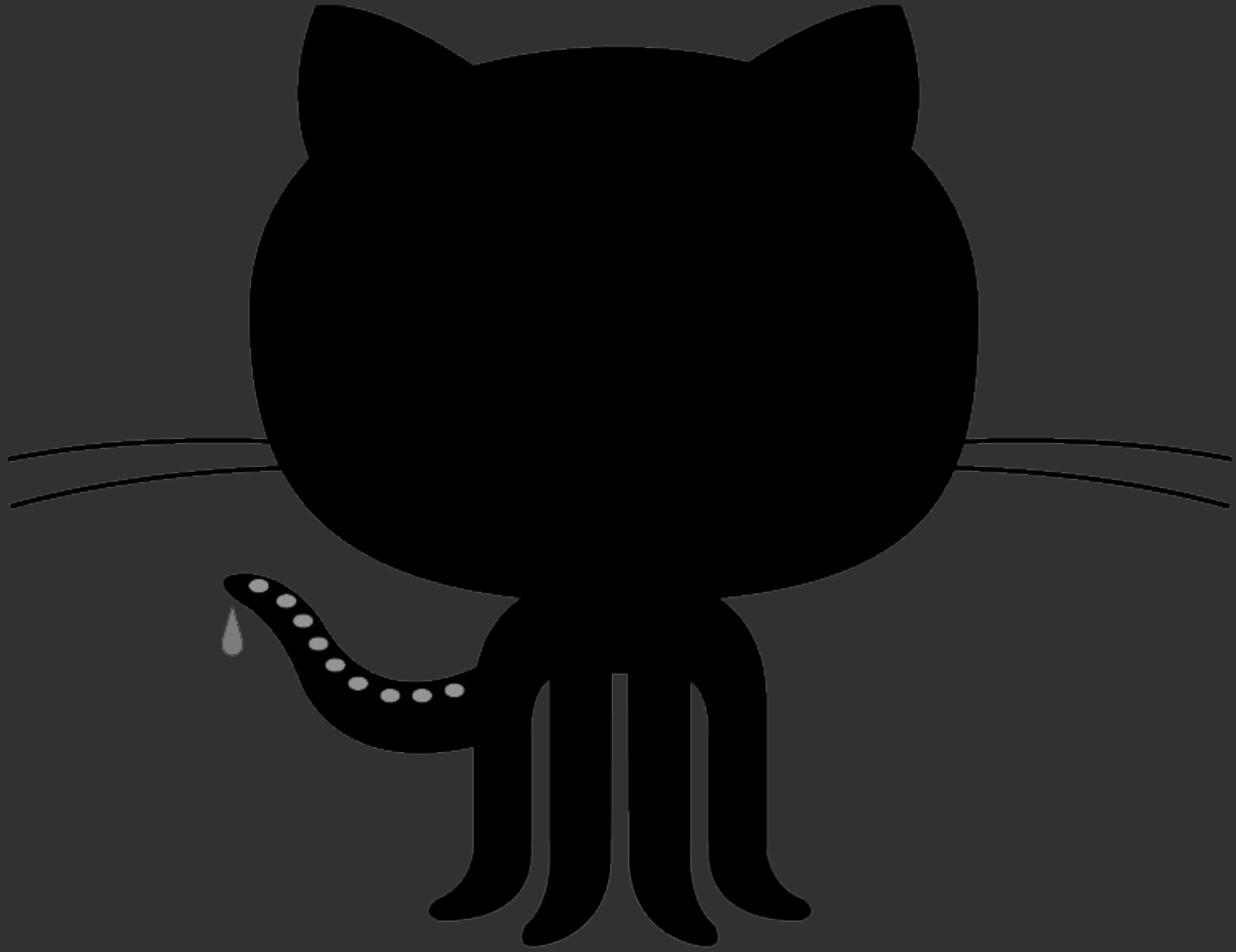


```
> cd myproj  
> git init
```

Initialized empty Git repository
in /stuff/myproj/.git/



 **How to set up a Git repository**



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How to commit, branch and tag

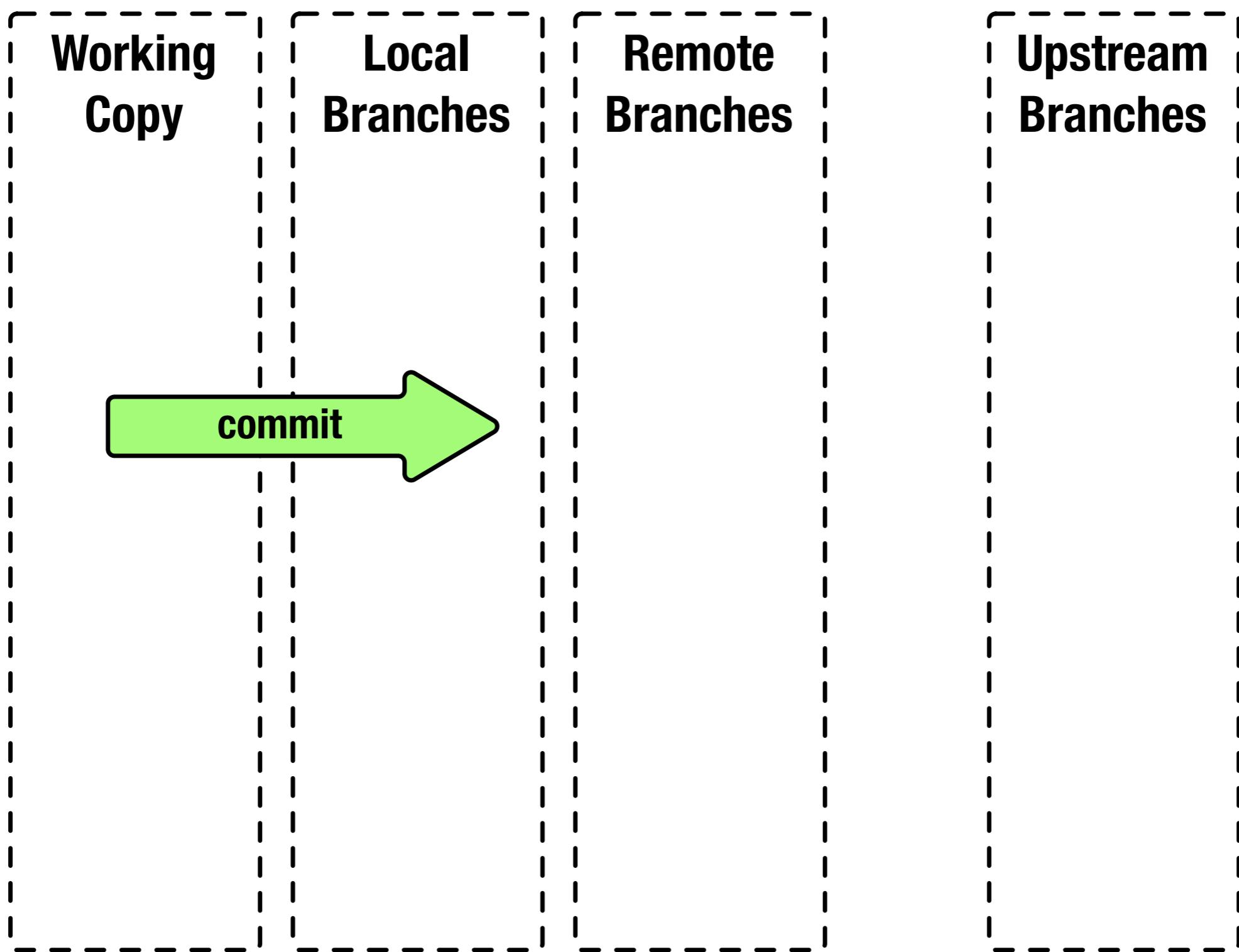


→ **How to commit**



```
> git add <FILENAME>
```





```
> git status
# On branch master
# Initial commit
# Changes to be committed:
#   (use "git rm --cached <file>..." to unstage)
# new file:   myfile.txt
```



```
> git commit -m"<MESSAGE>"  
[master (root-commit) 498cc44] My first commit  
 1 files changed, 5 insertions(+), 0 deletions(-)  
 create mode 100644 myfile.txt
```

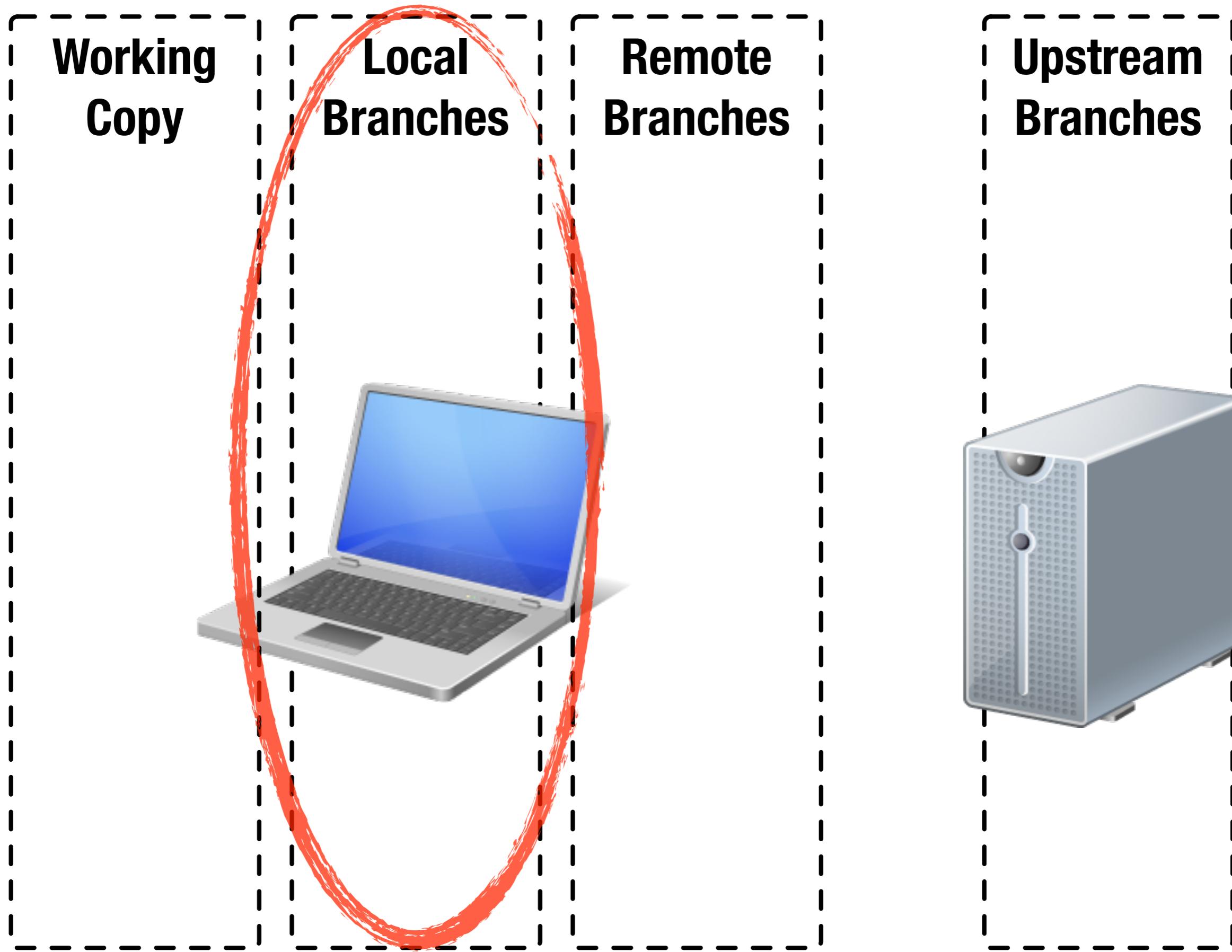


→ **How to branch**



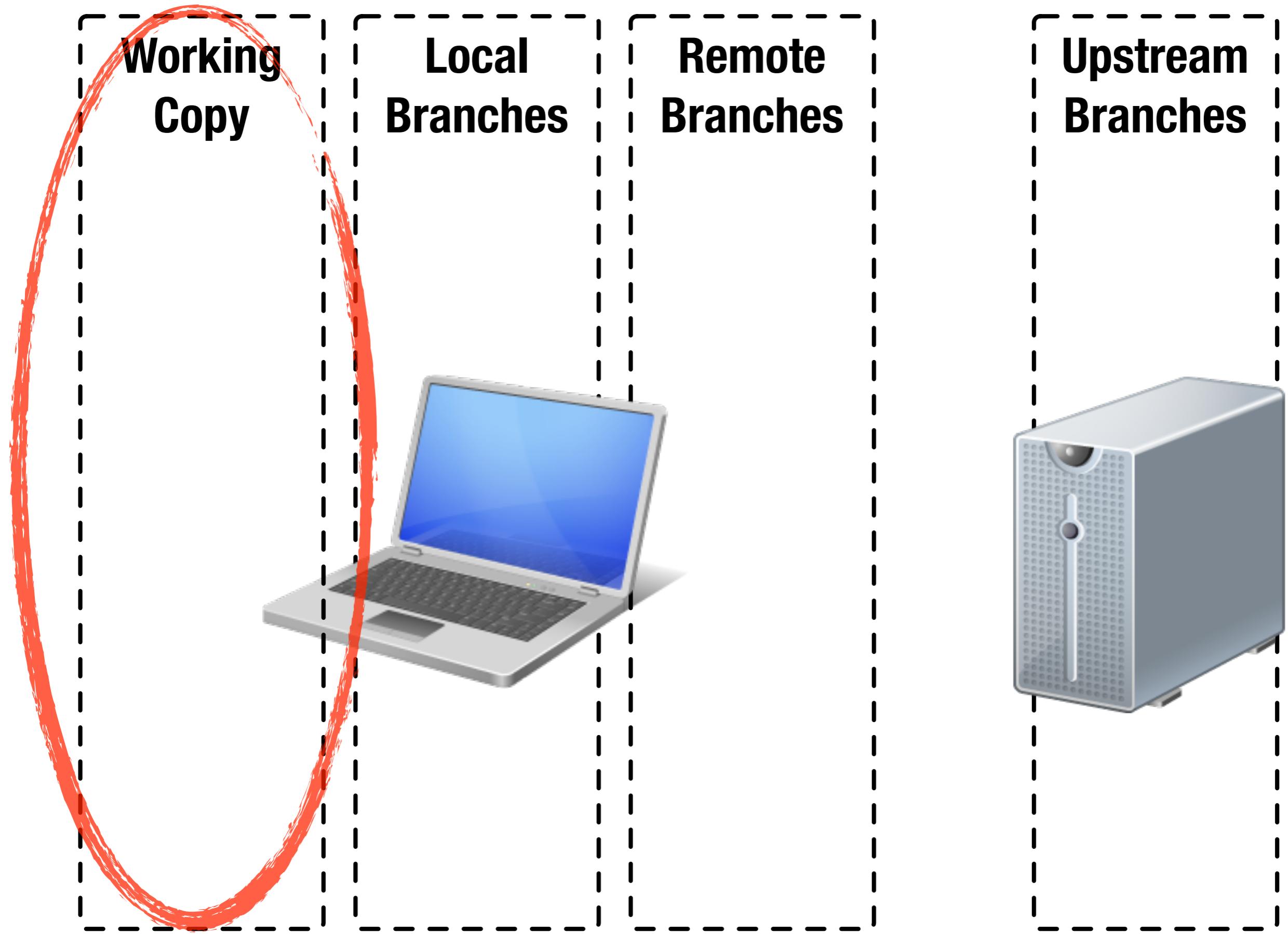
```
> git branch <BRANCHNAME>
```



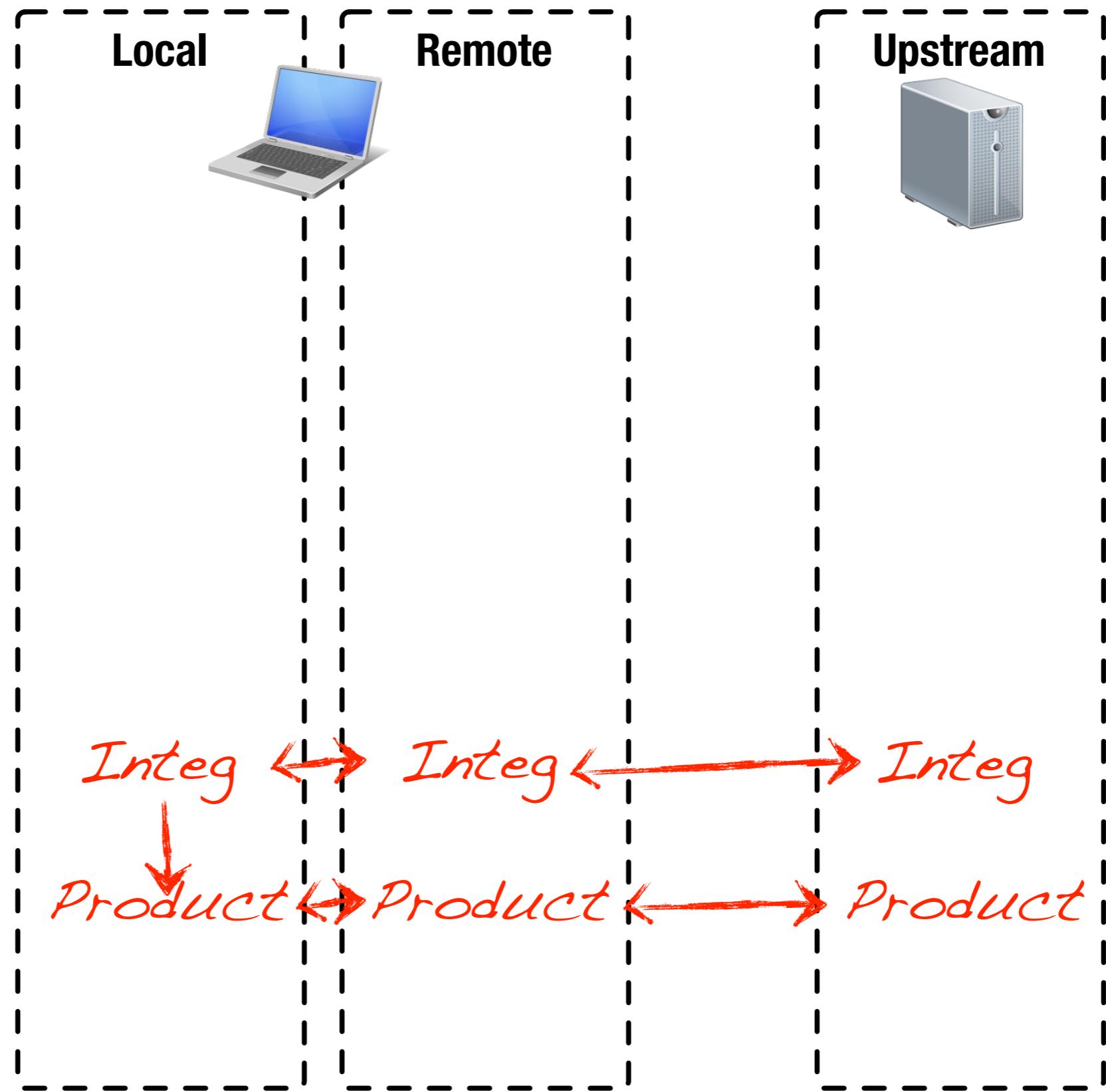


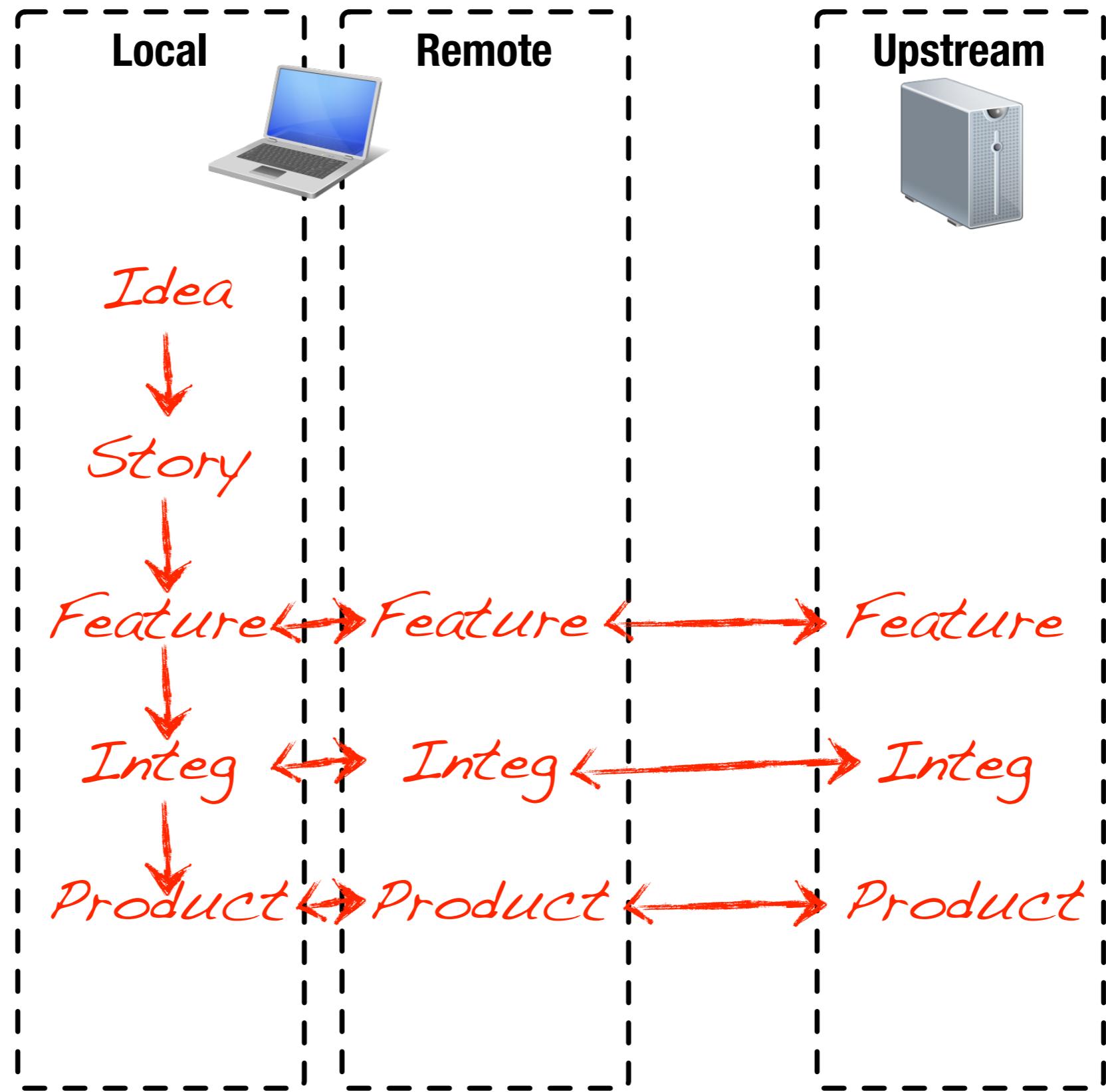
```
> git checkout <BRANCHNAME>  
Switched to branch 'mybranch'
```

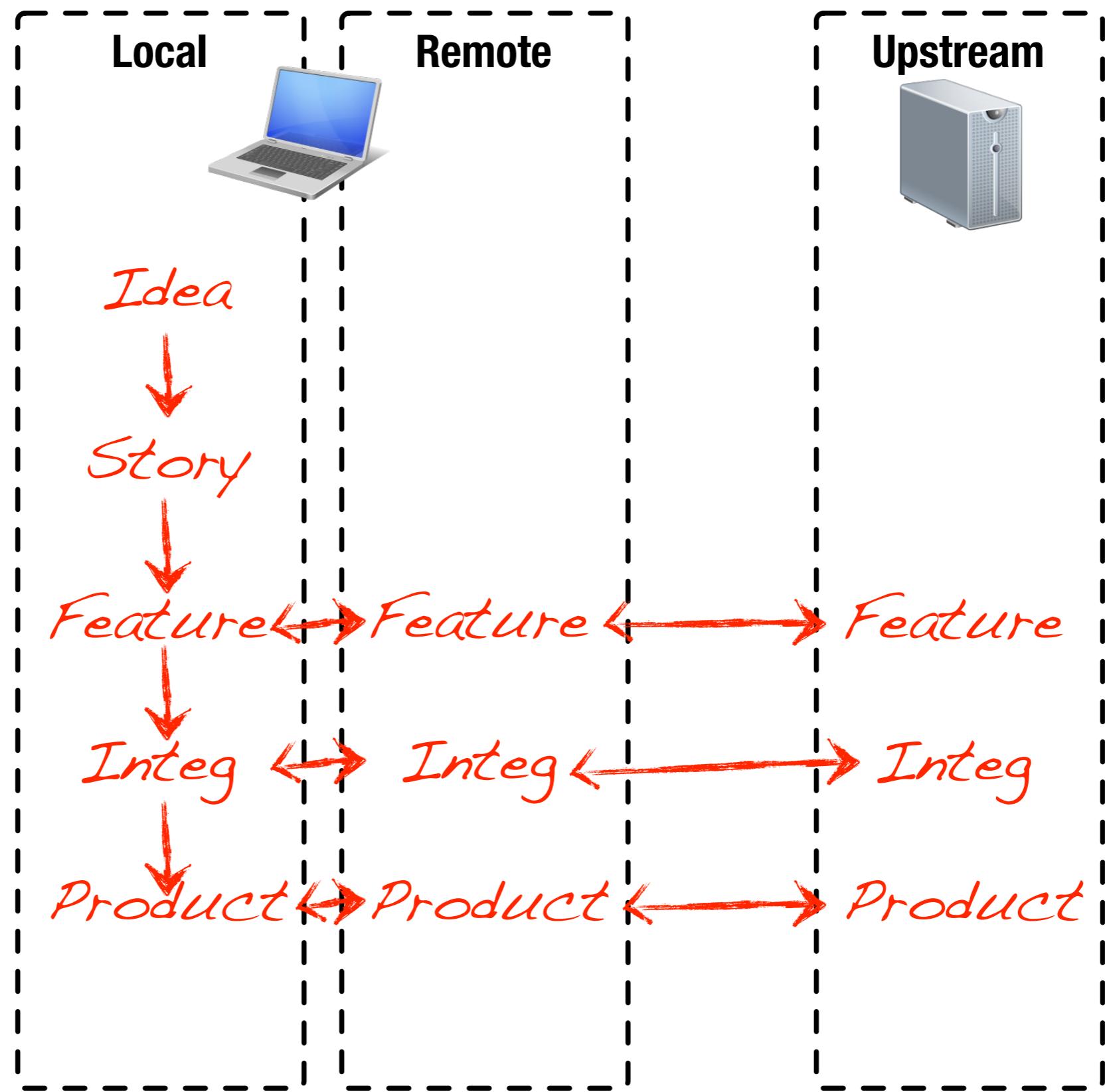




Insane branch count?







→ How to tag



```
> git tag <TAGNAME>
```

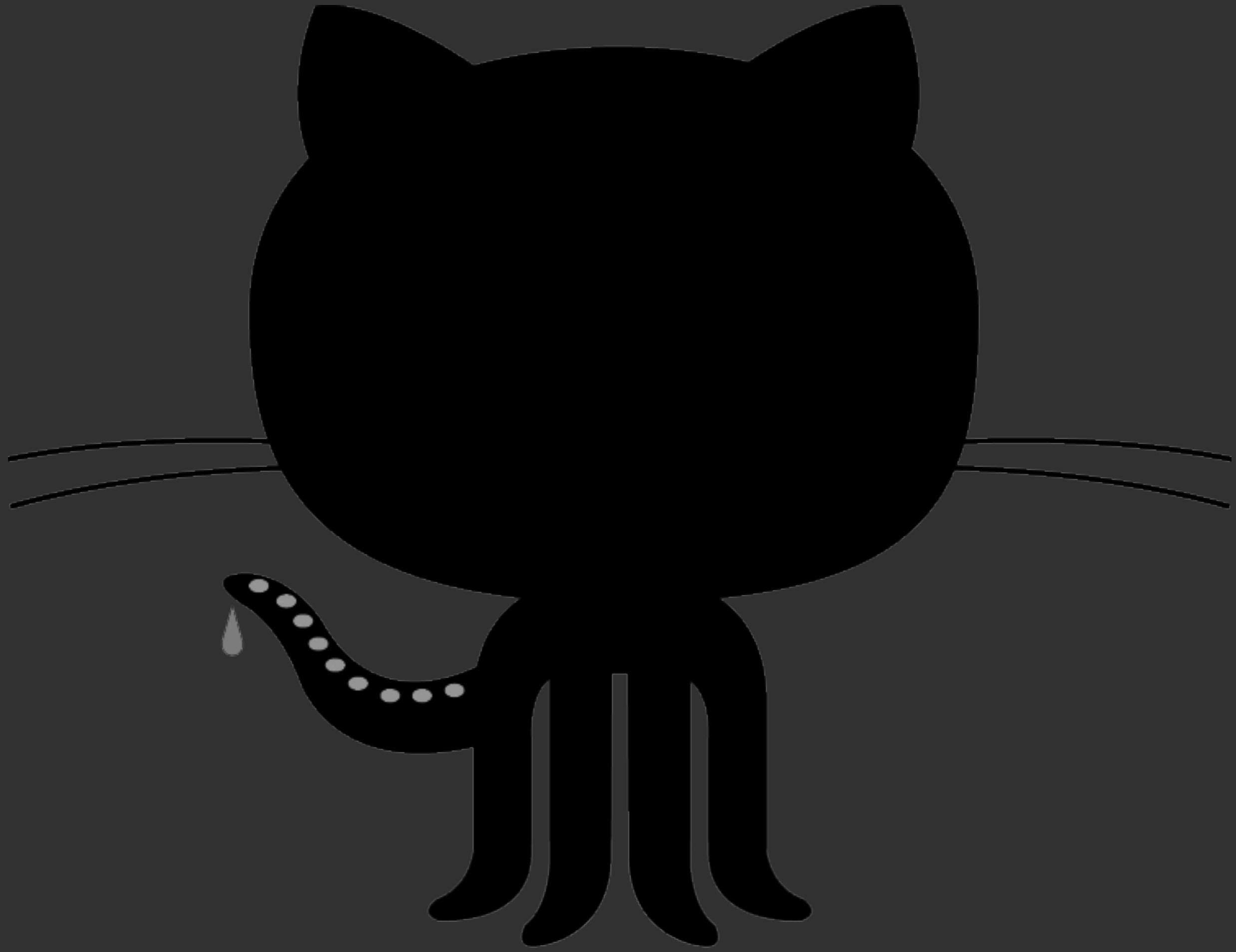


```
> git tag -a <TAGNAME> -m”<MESSAGE>”
```





How to commit, branch and tag



- How to set up a Git repository
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 **How Git implements a new commit-referencing syntax**



```
<html>
  <body>
    <p>This is a test</p>
    
  </body>
</html>
```

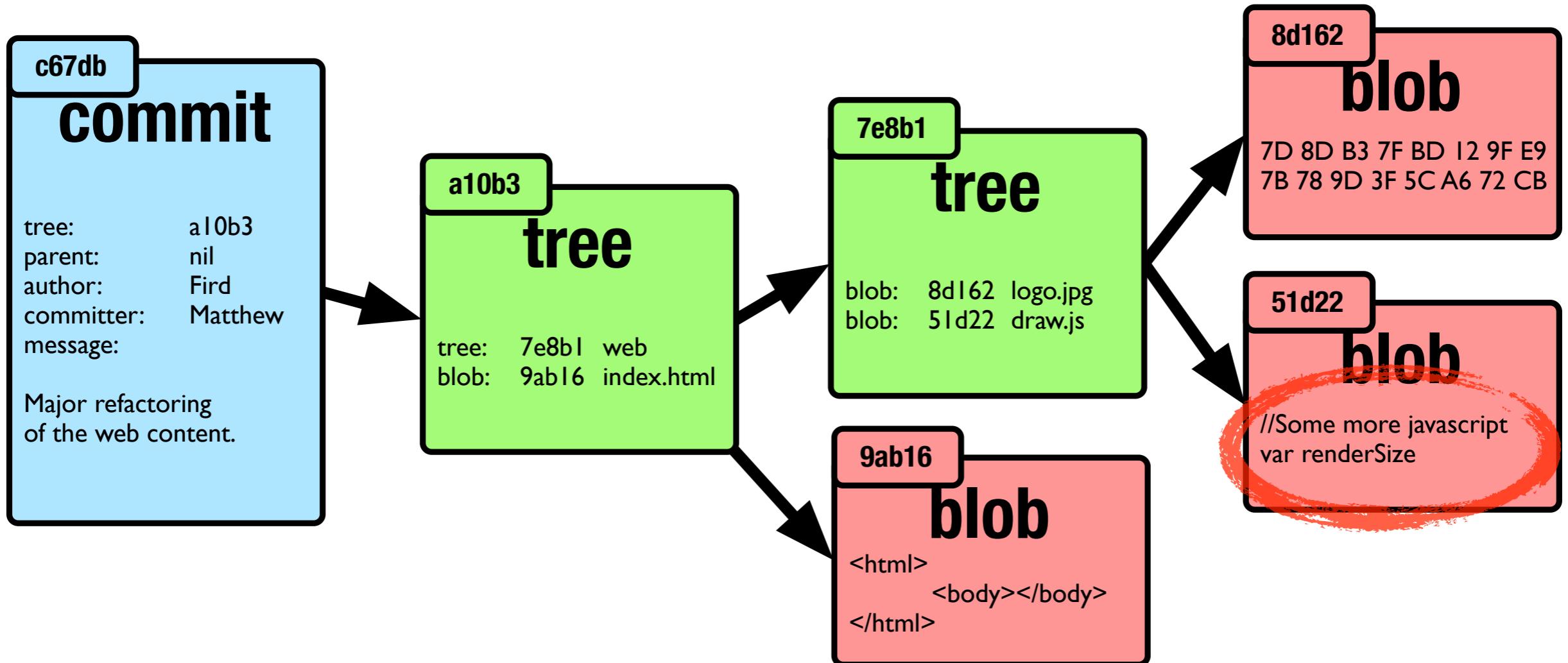


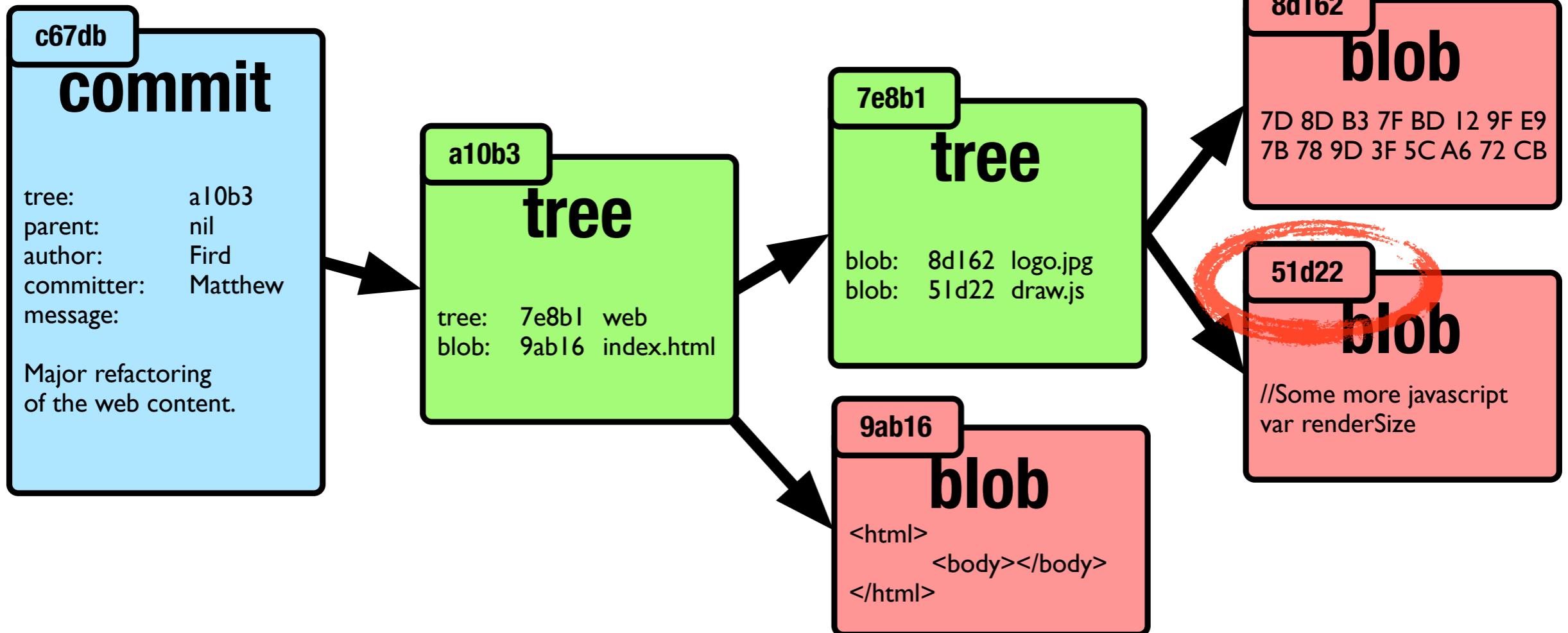
```
> git log  
commit 0fc27c73dea82a0576c6cf262fb517d24e75a223  
Author: Matthew McCullough <matthewm@ambientideas.com>  
Date: Mon Oct 24 10:42:20 2013 +0300
```

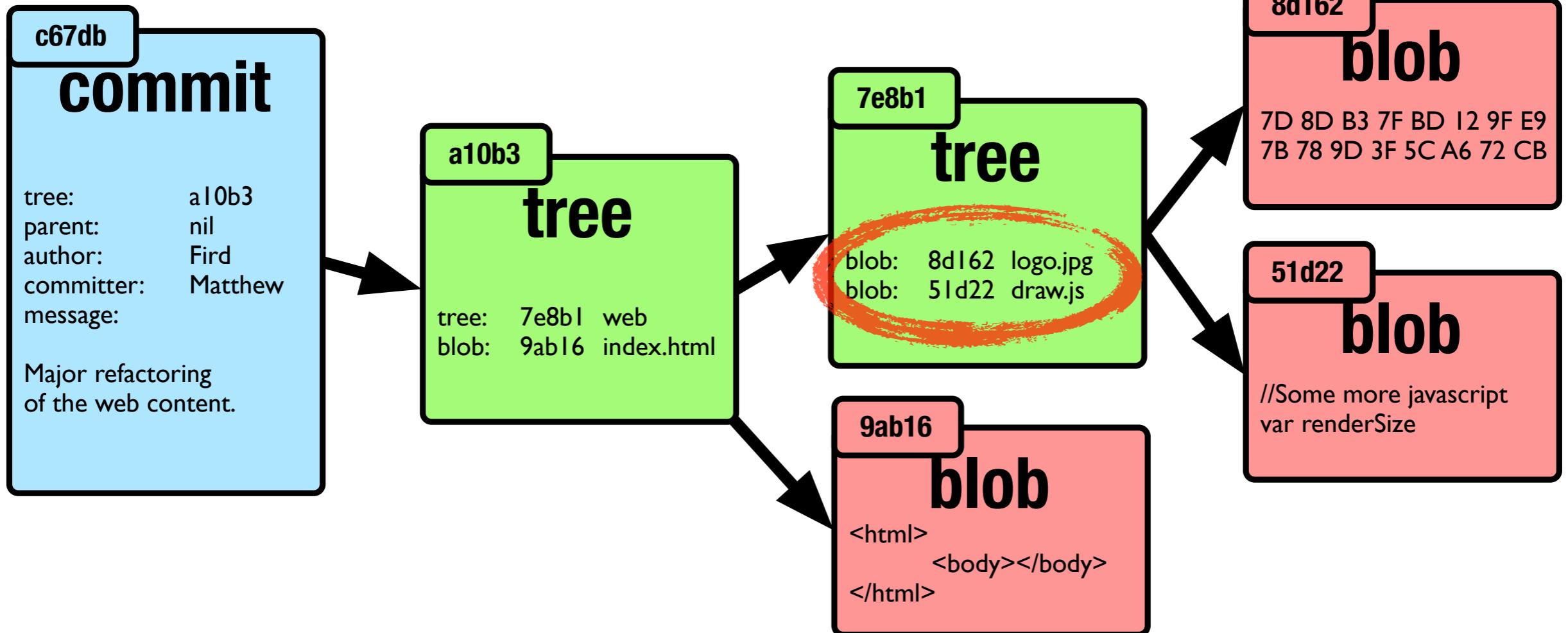
Performance enhancement of calc engine

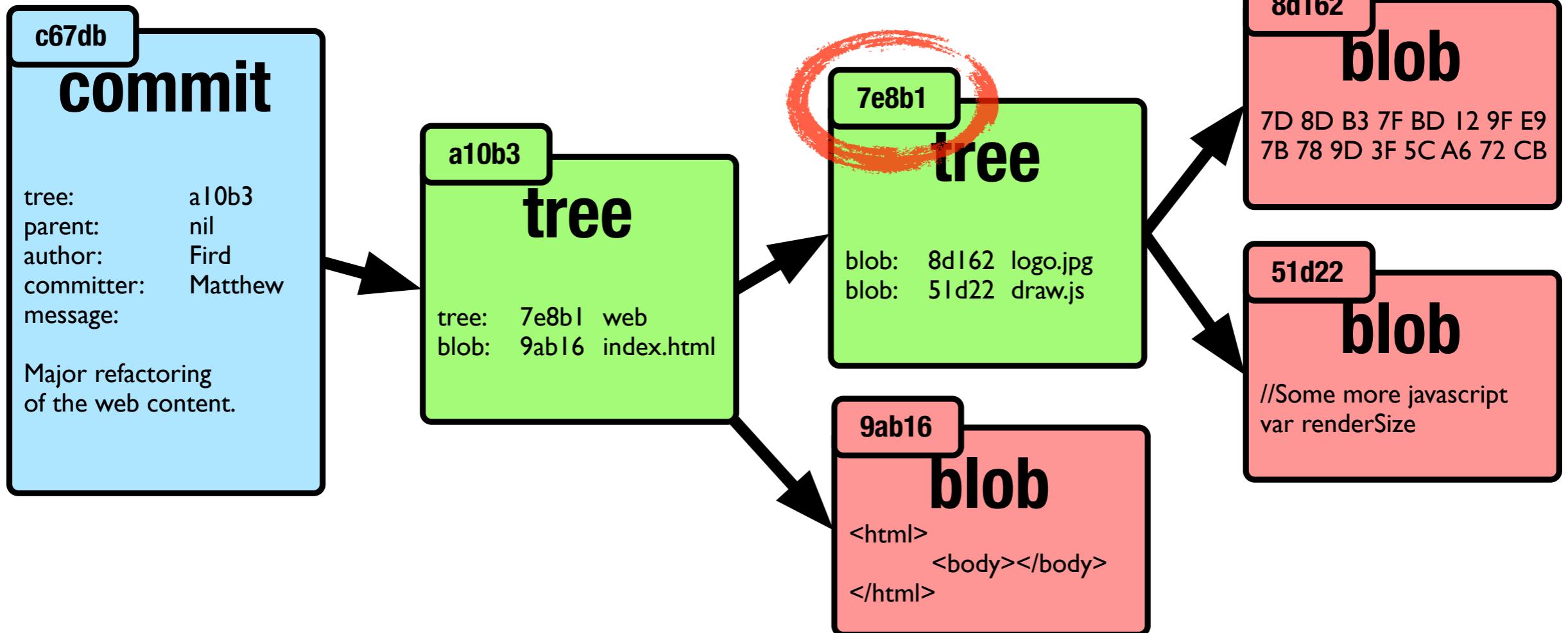
```
commit 7d946e814233814b1780ed1035da271cbb37206d  
Author: Matthew McCullough <matthewm@ambientideas.com>  
Date: Mon Oct 24 12:59:41 2013 +0300
```

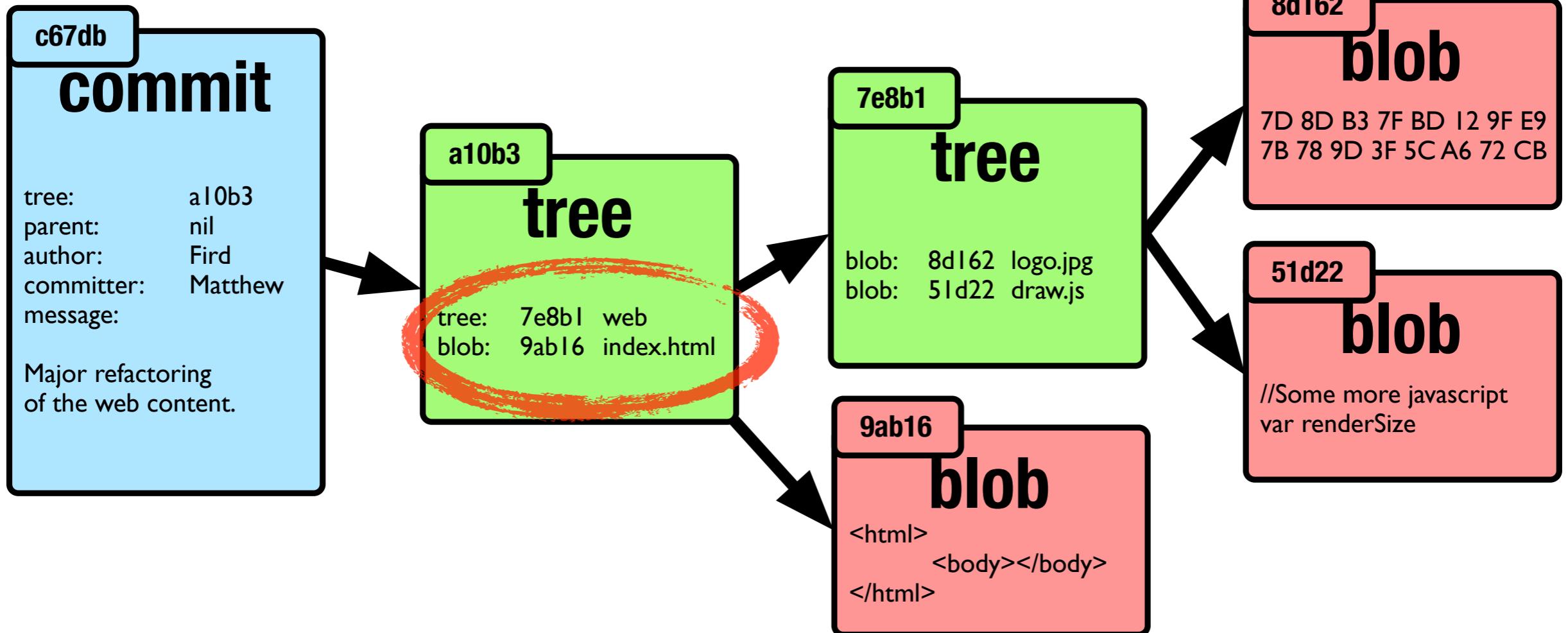
Translation to Esperanto











c67db
commit

tree: a10b3
parent: nil
author: Fird
committer: Matthew
message:
Major refactoring
of the web content.

a10b3
tree

tree: 7e8b1 web
blob: 9ab16 index.html

7e8b1
tree

blob: 8d162 logo.jpg
blob: 51d22 draw.js

9ab16
blob

```
<html>
  <body></body>
</html>
```

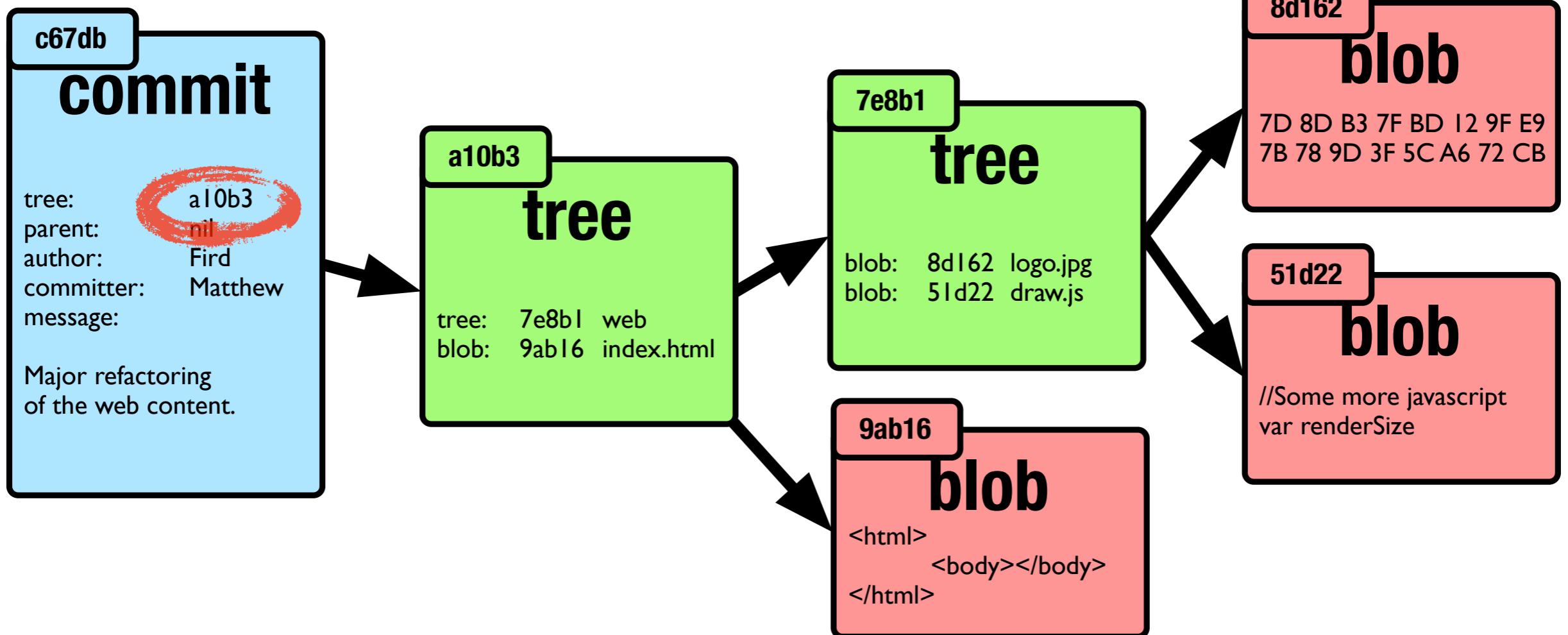
8d162
blob

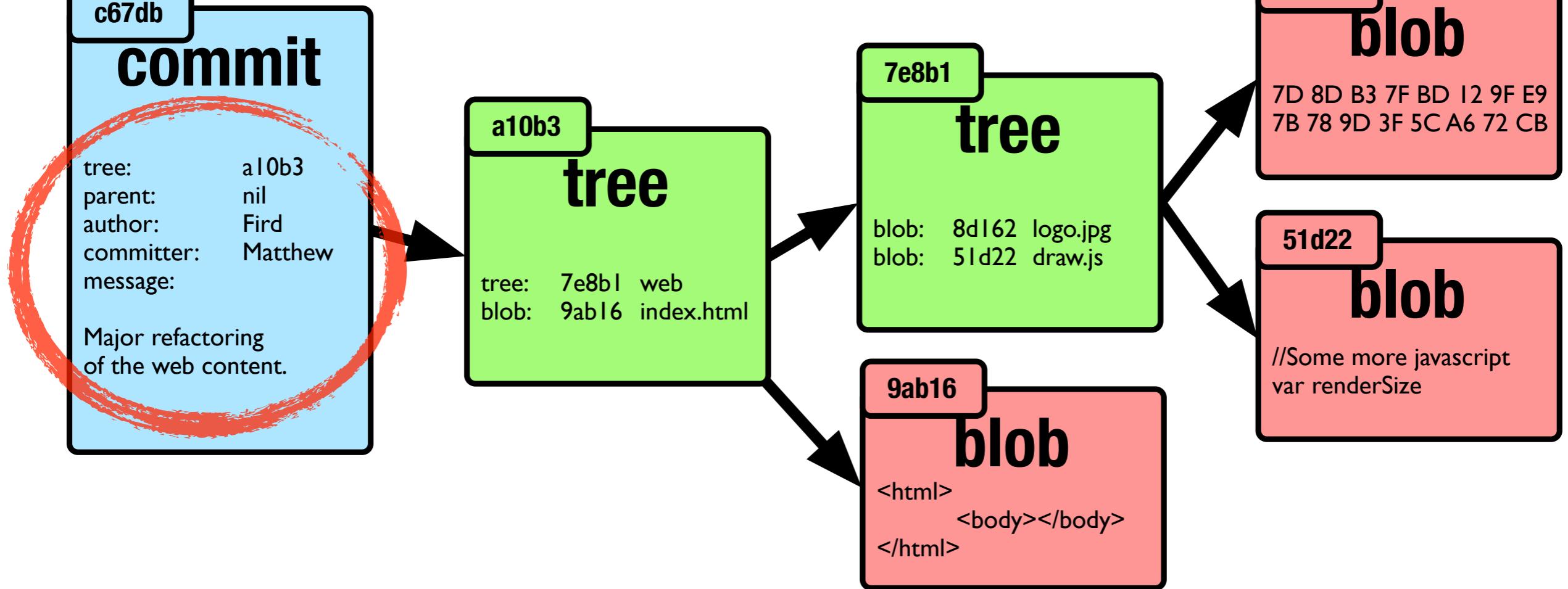
7D 8D B3 7F BD 12 9F E9
7B 78 9D 3F 5C A6 72 CB

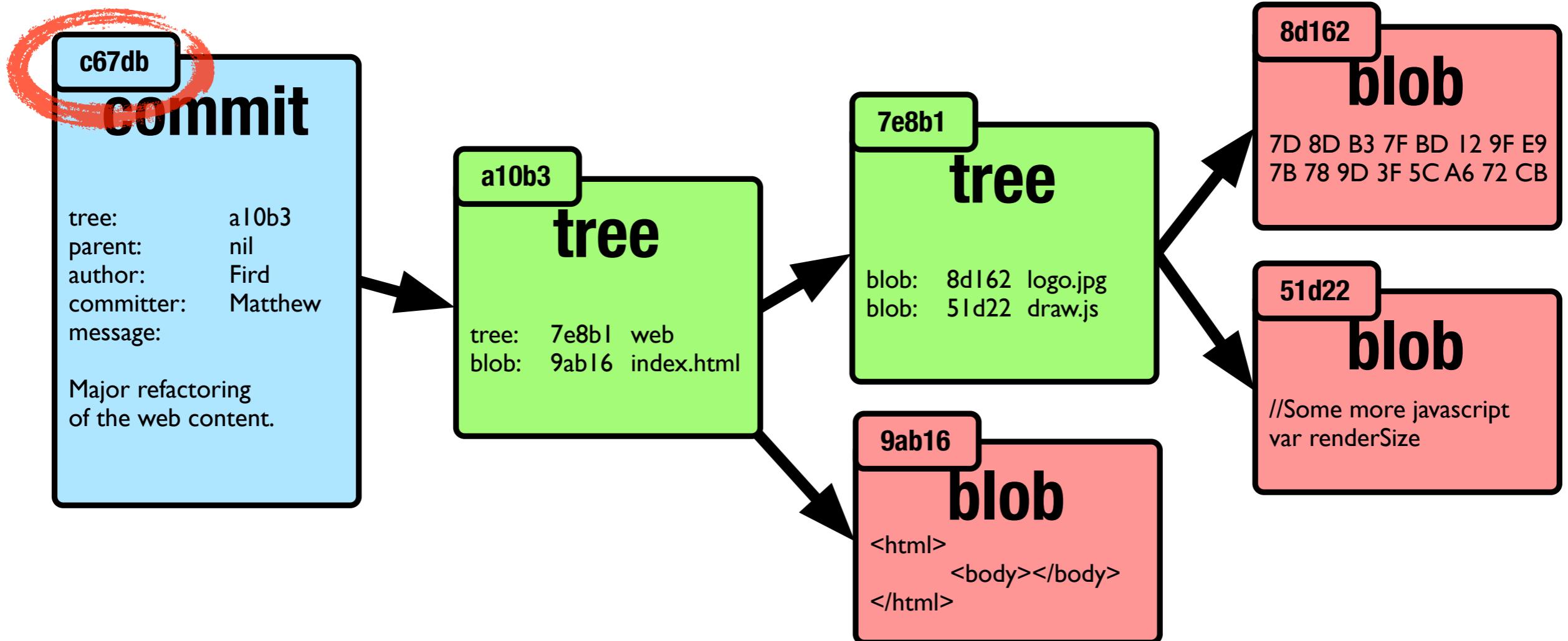
51d22
blob

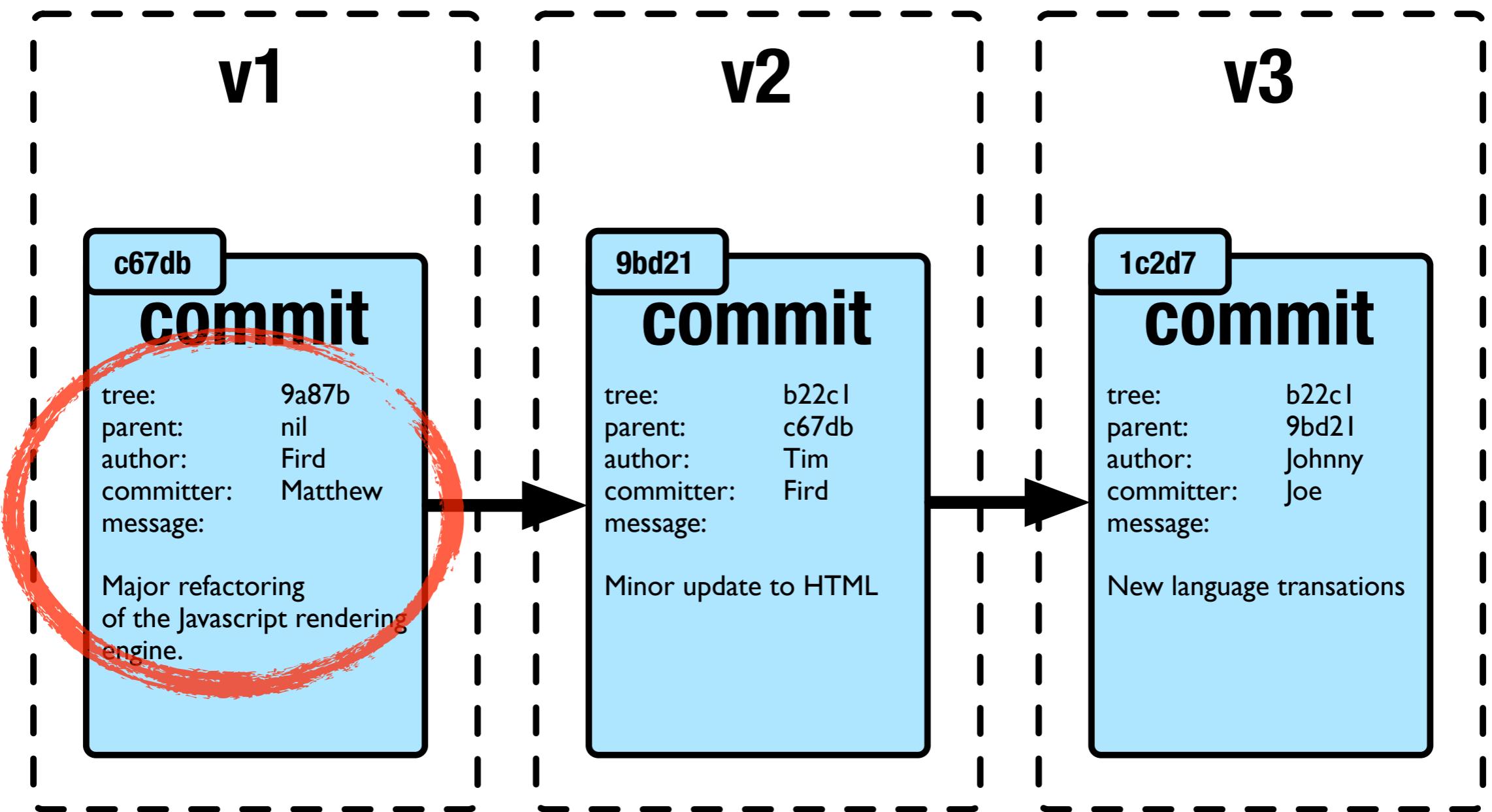
```
//Some more javascript
var renderSize
```

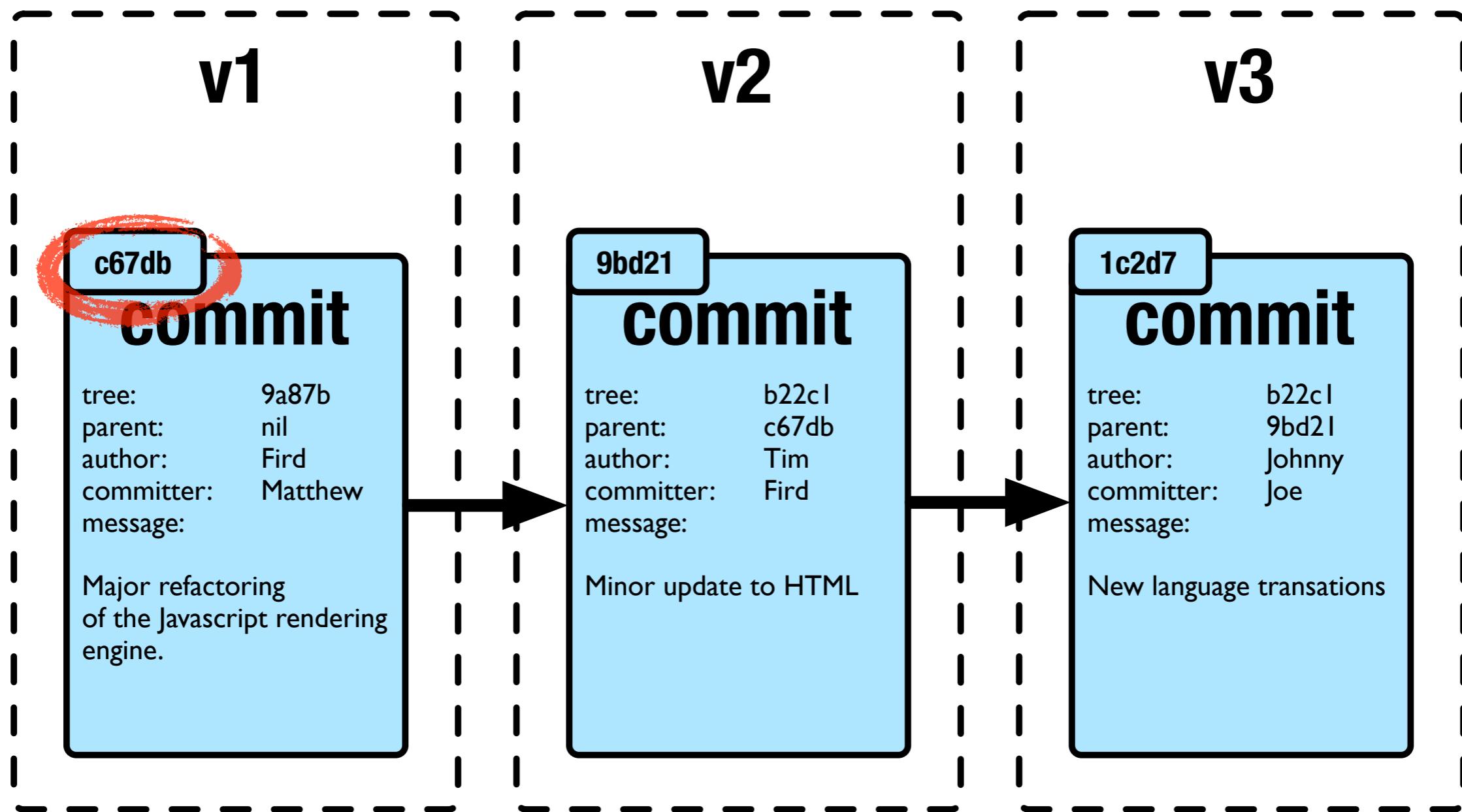


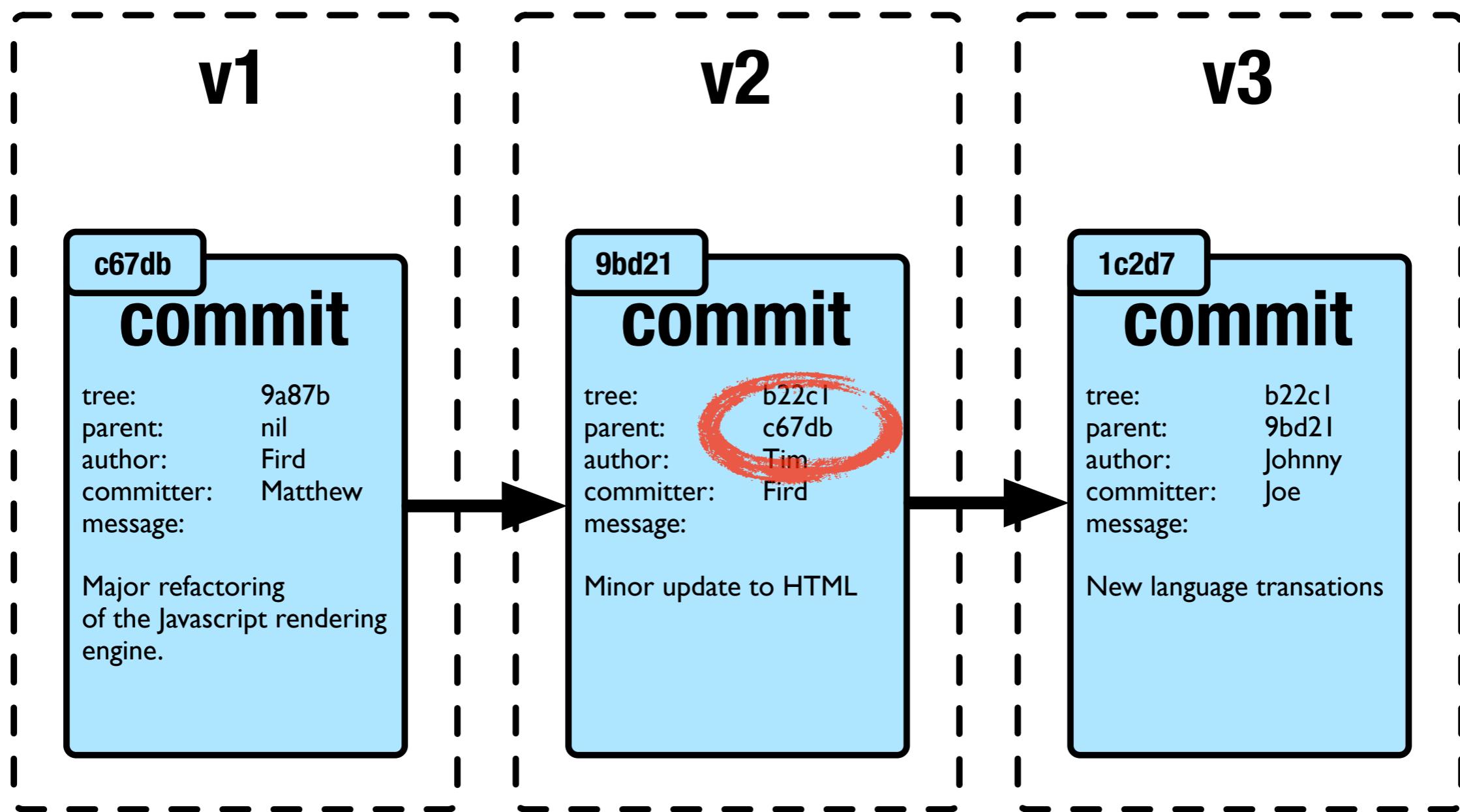


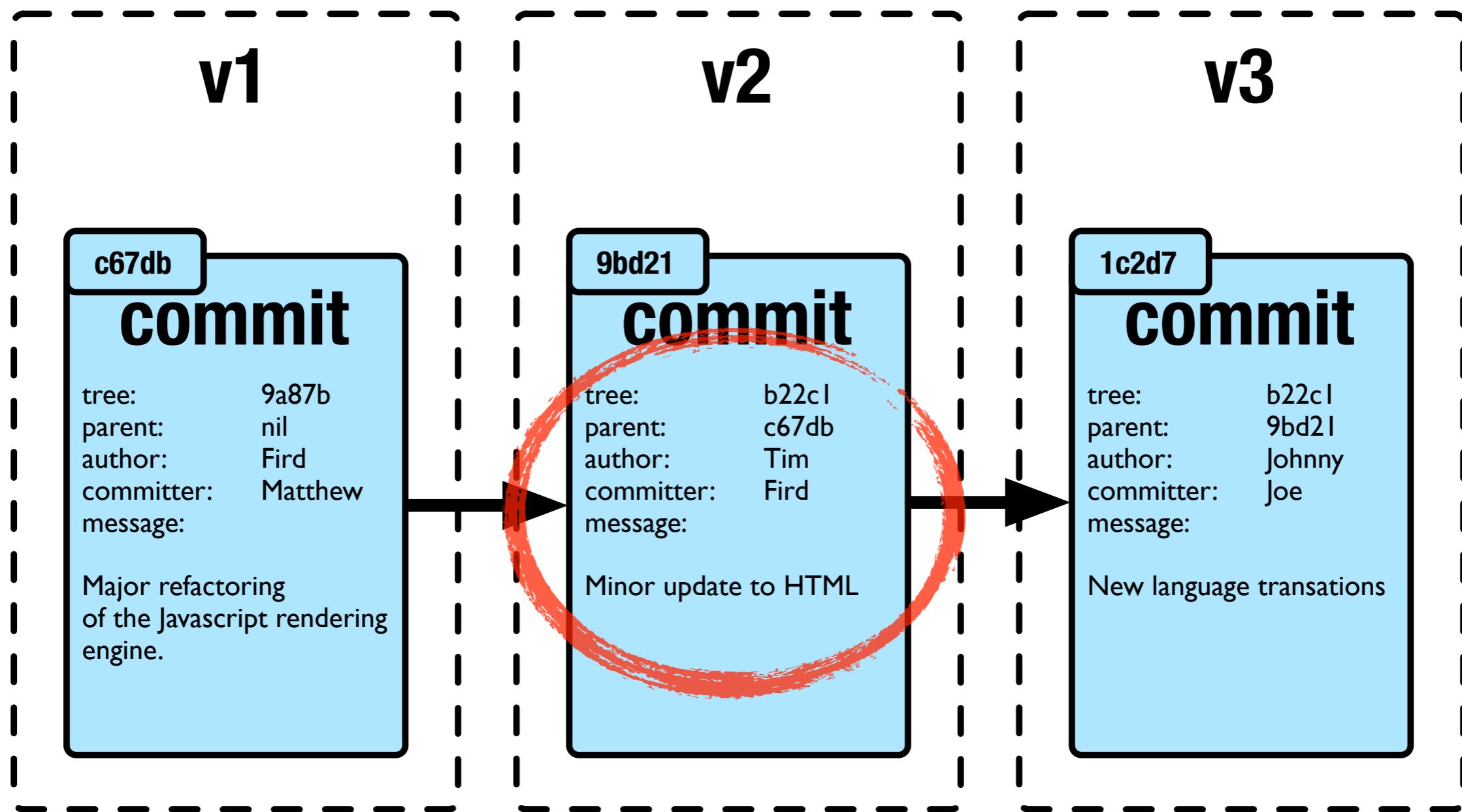


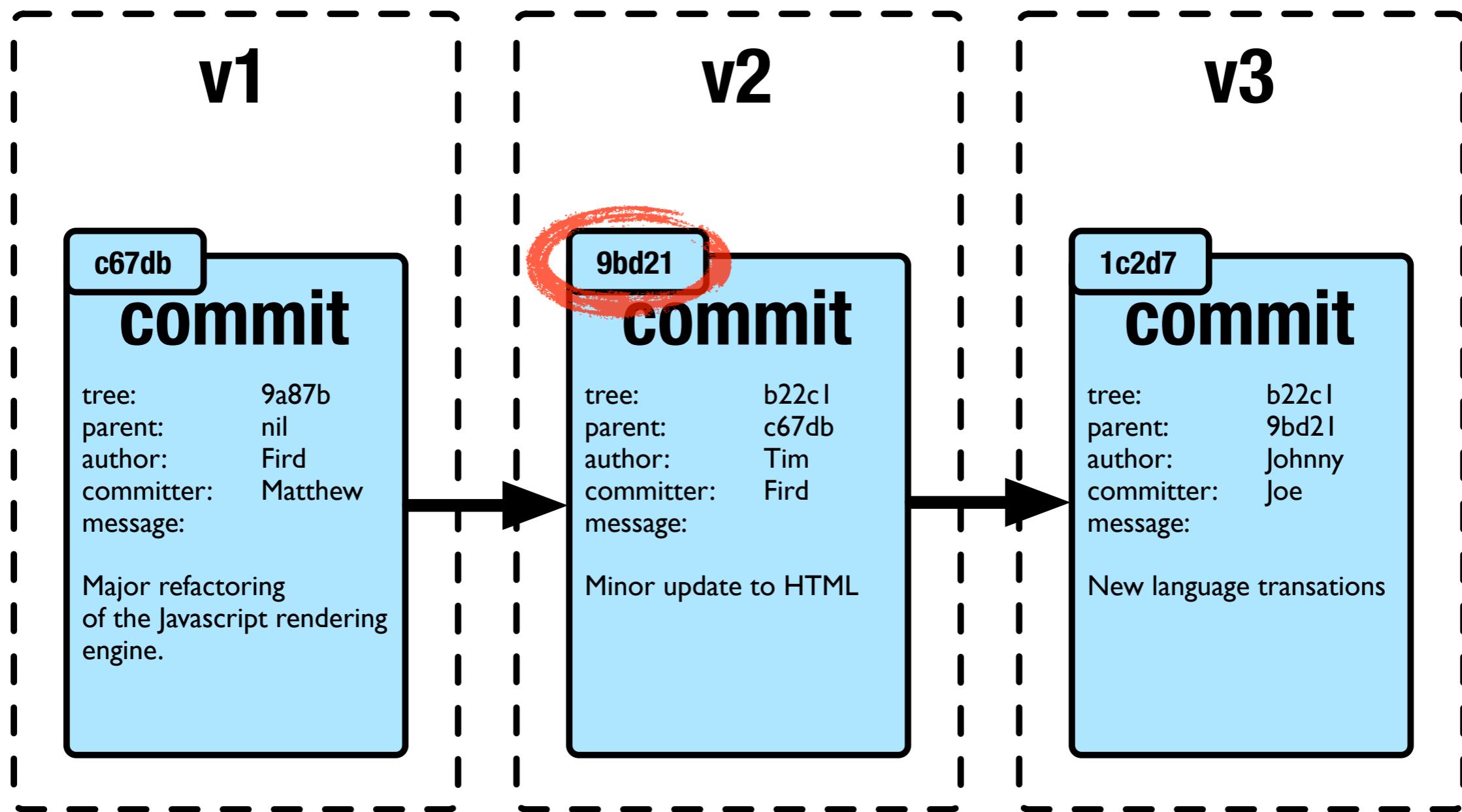


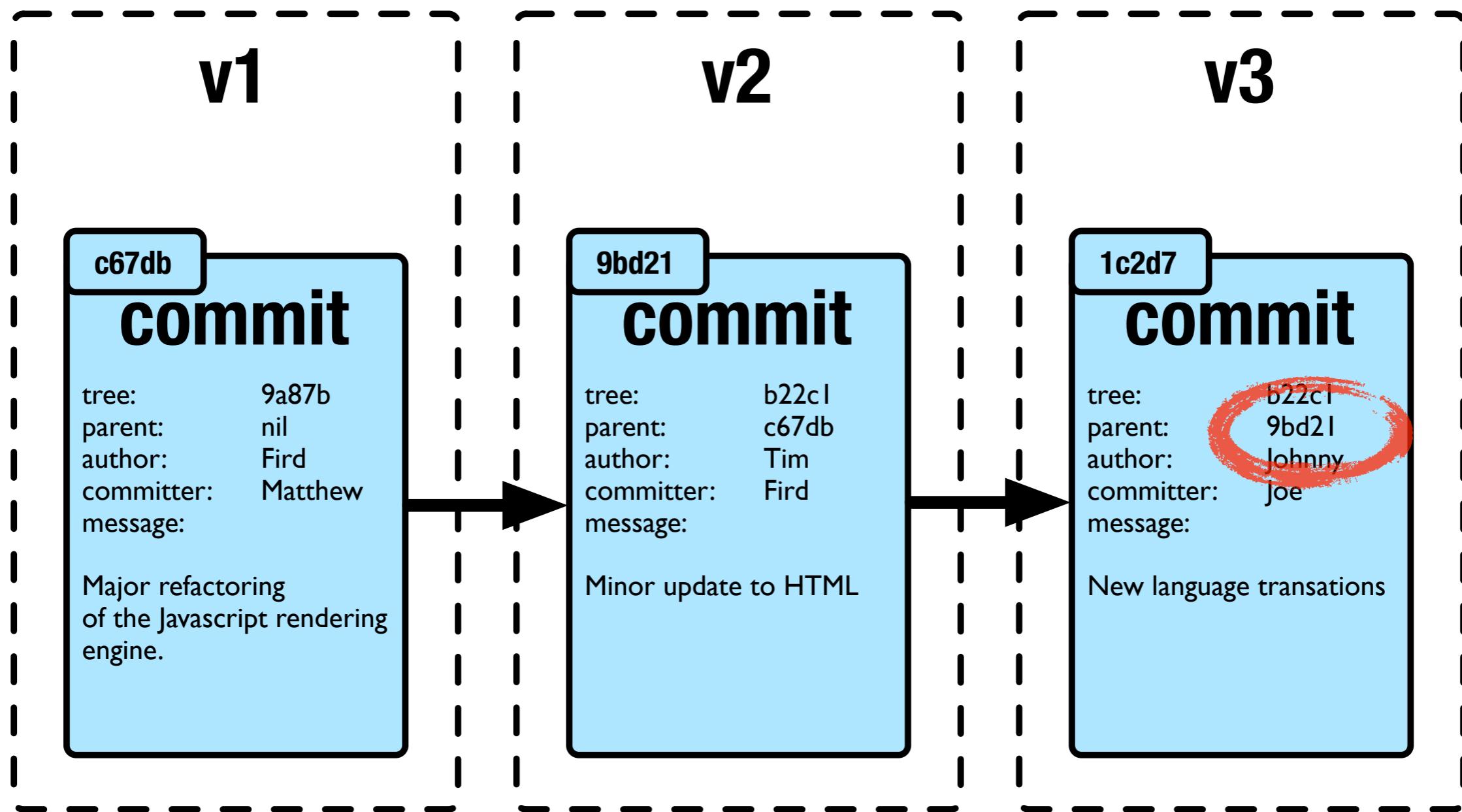


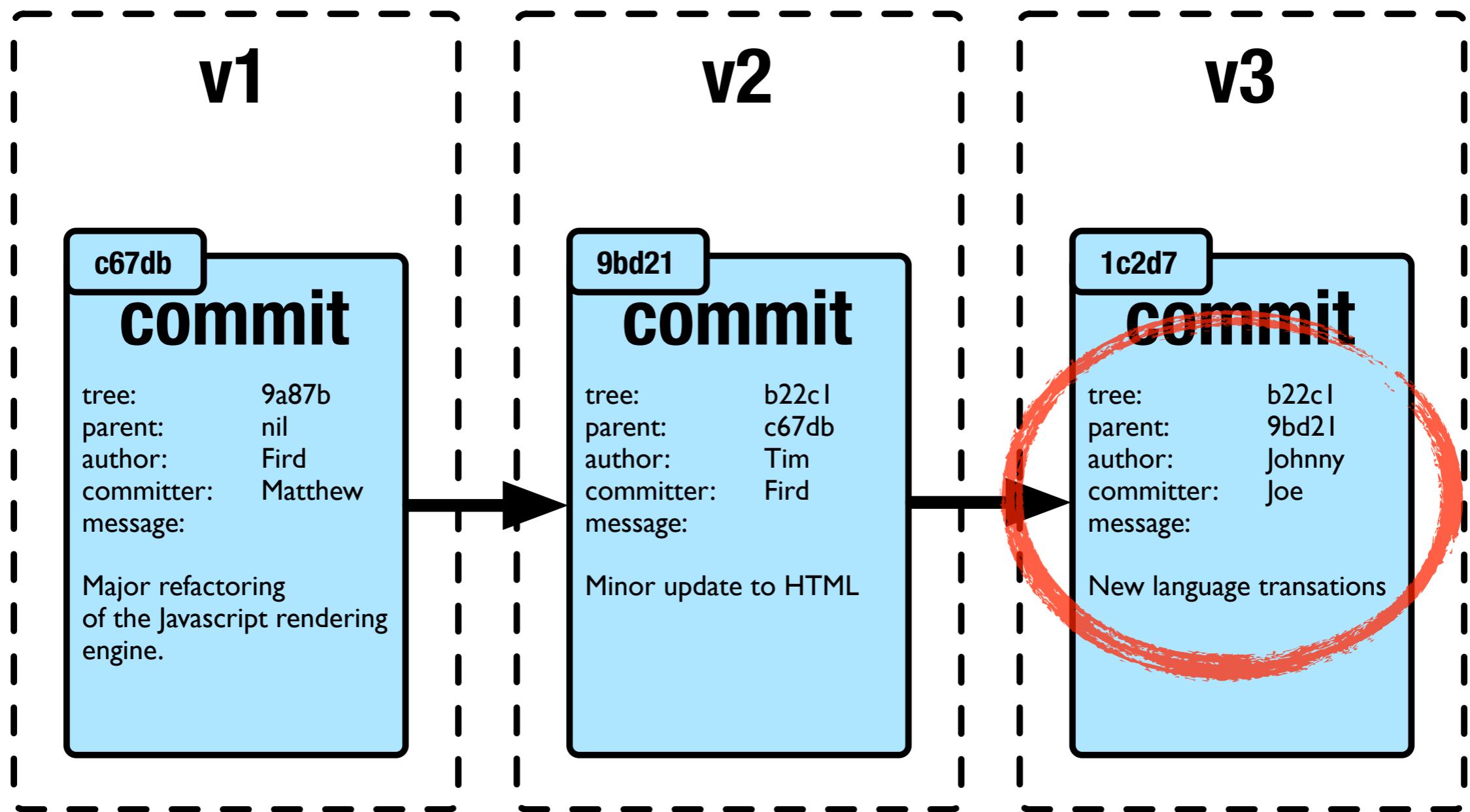


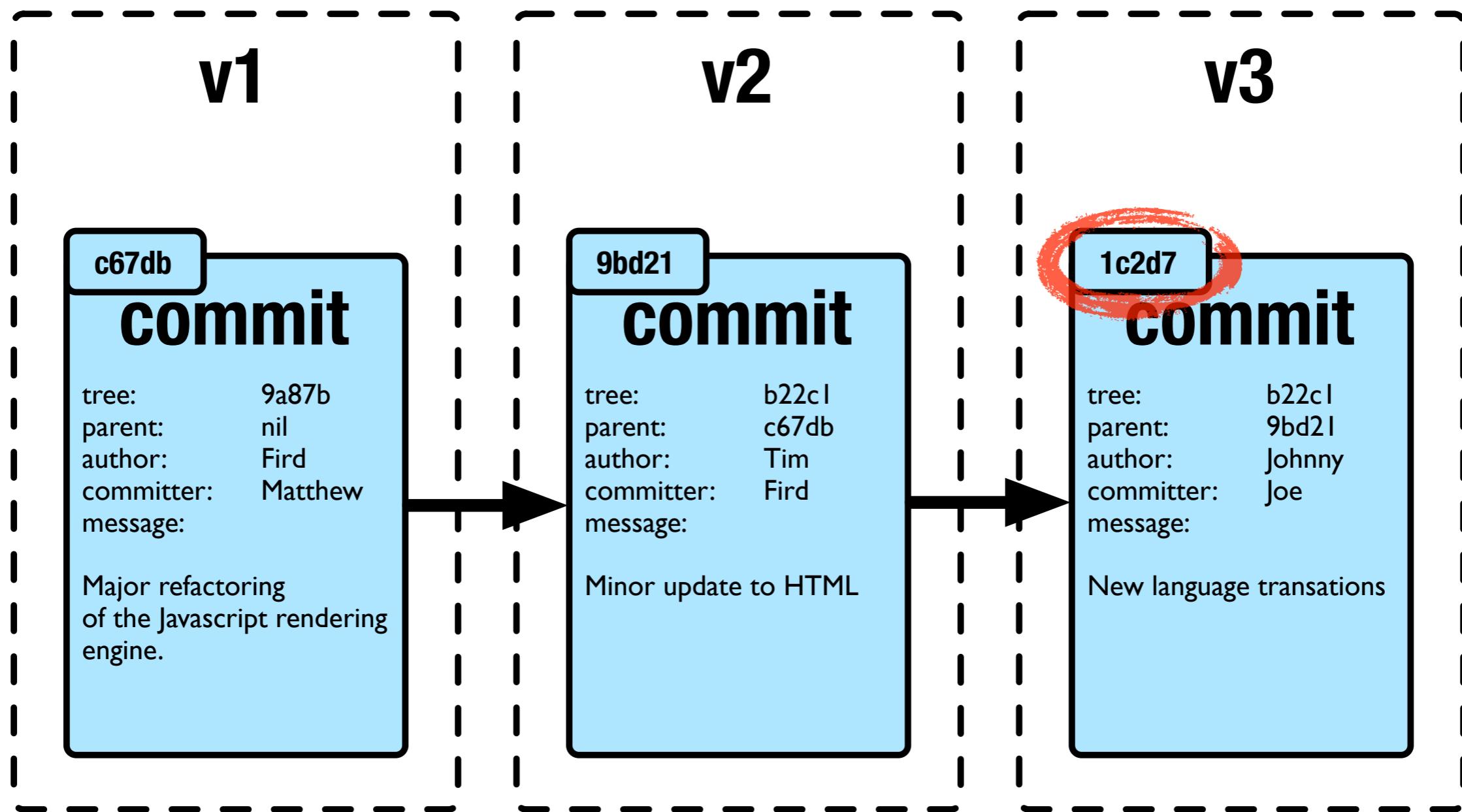


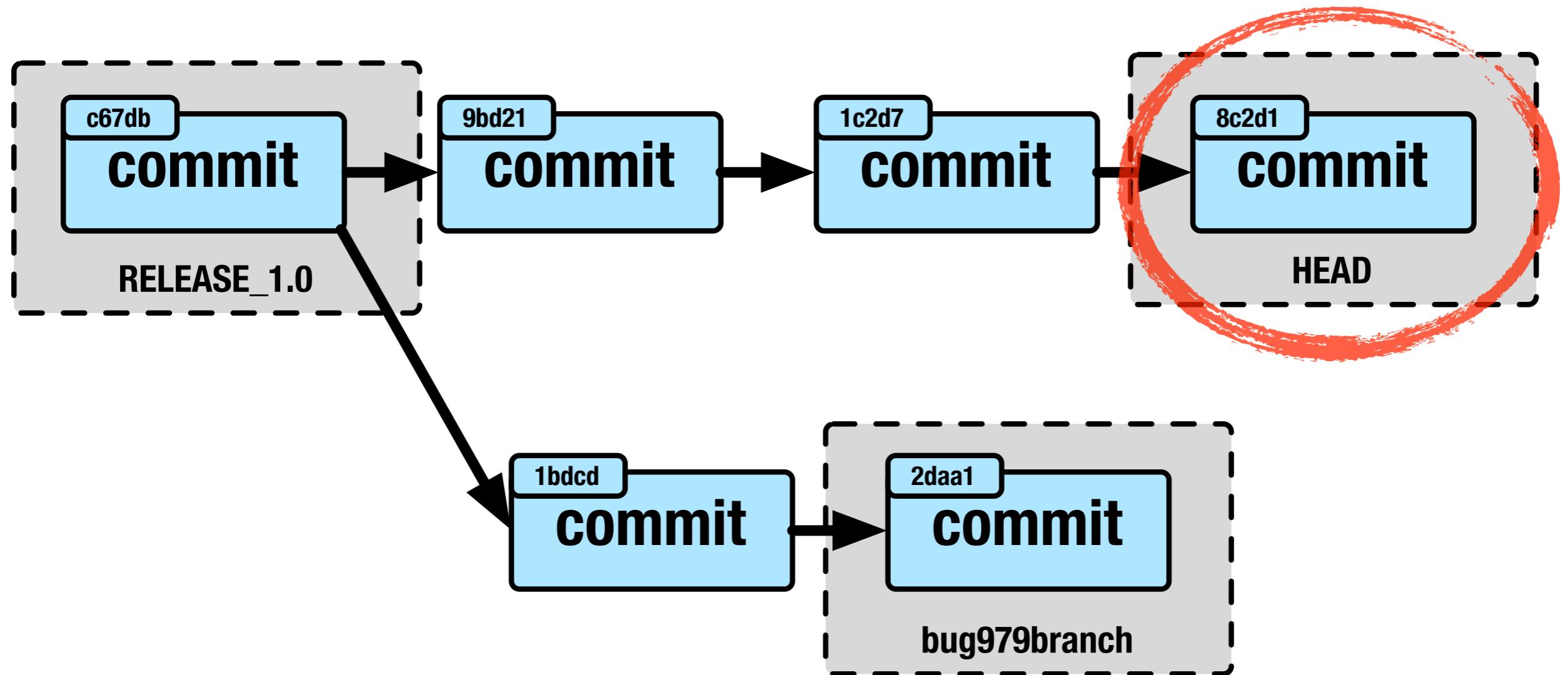


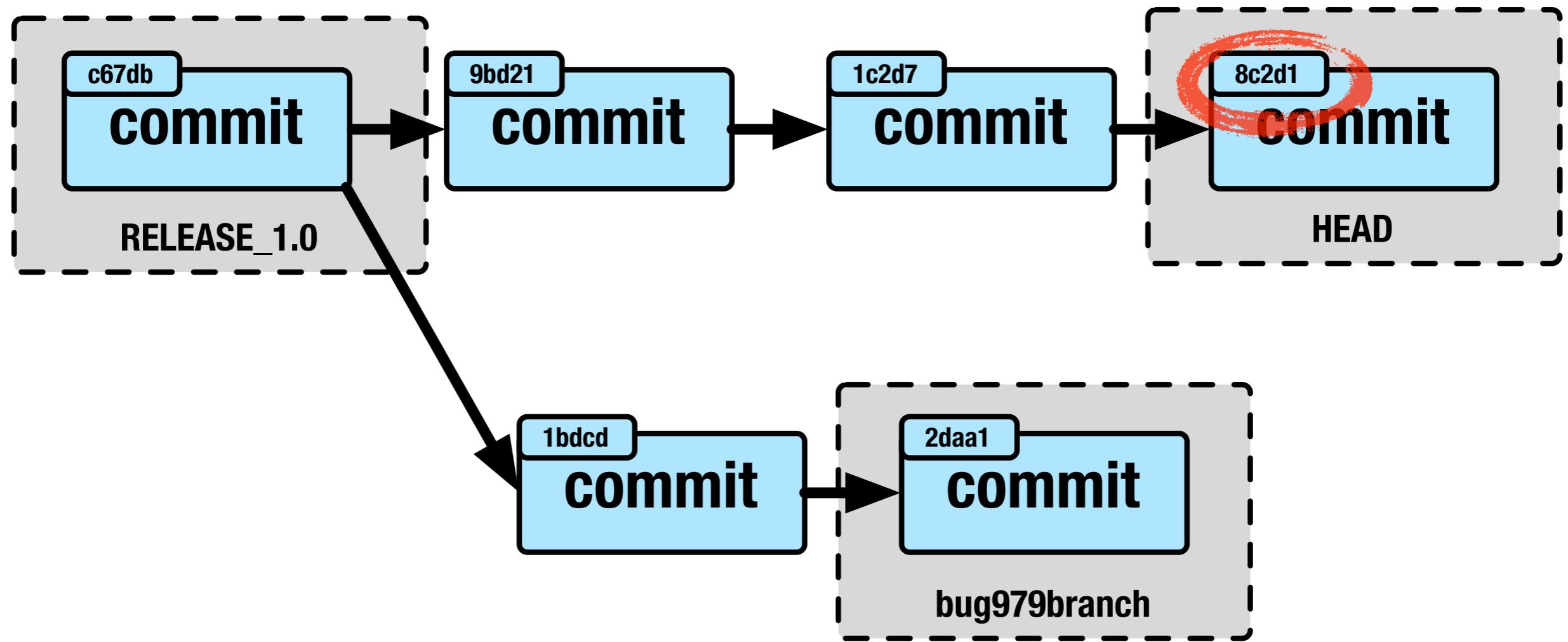


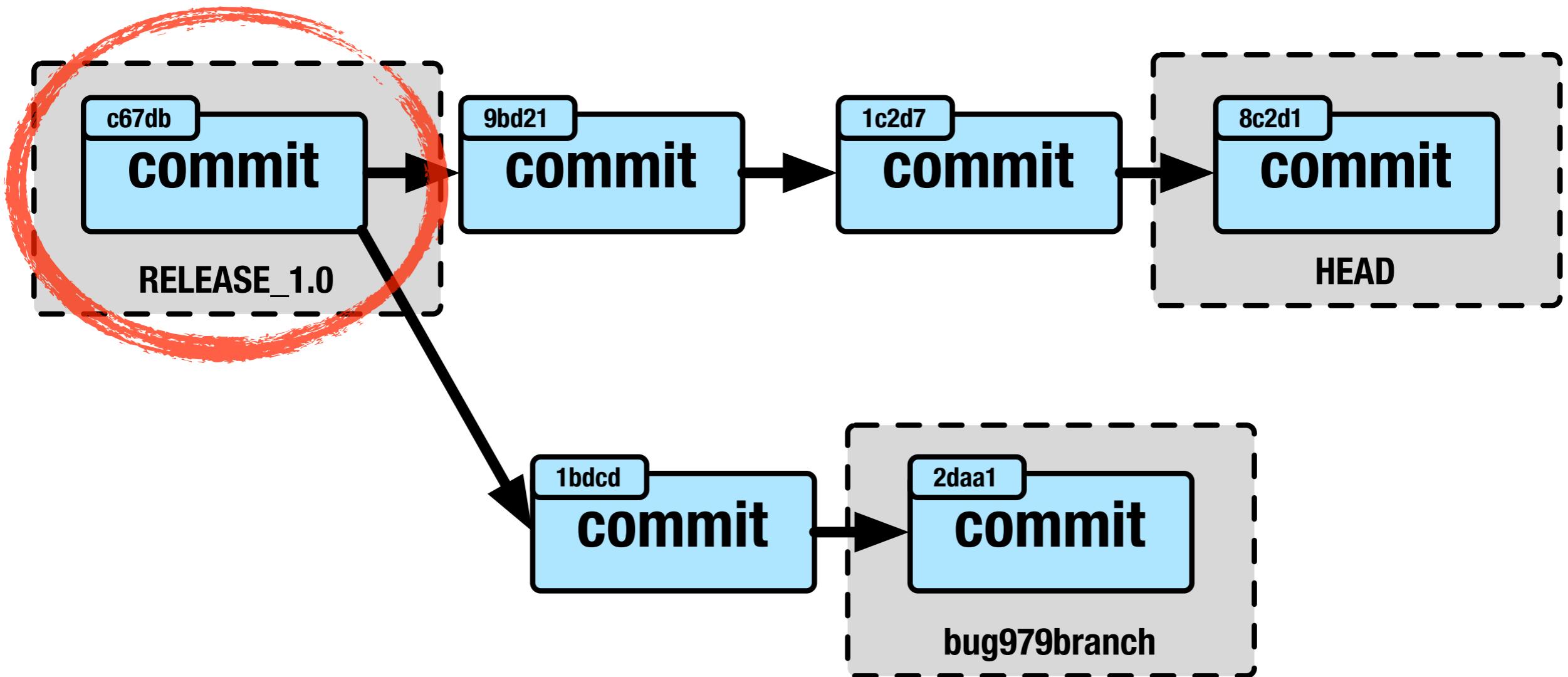


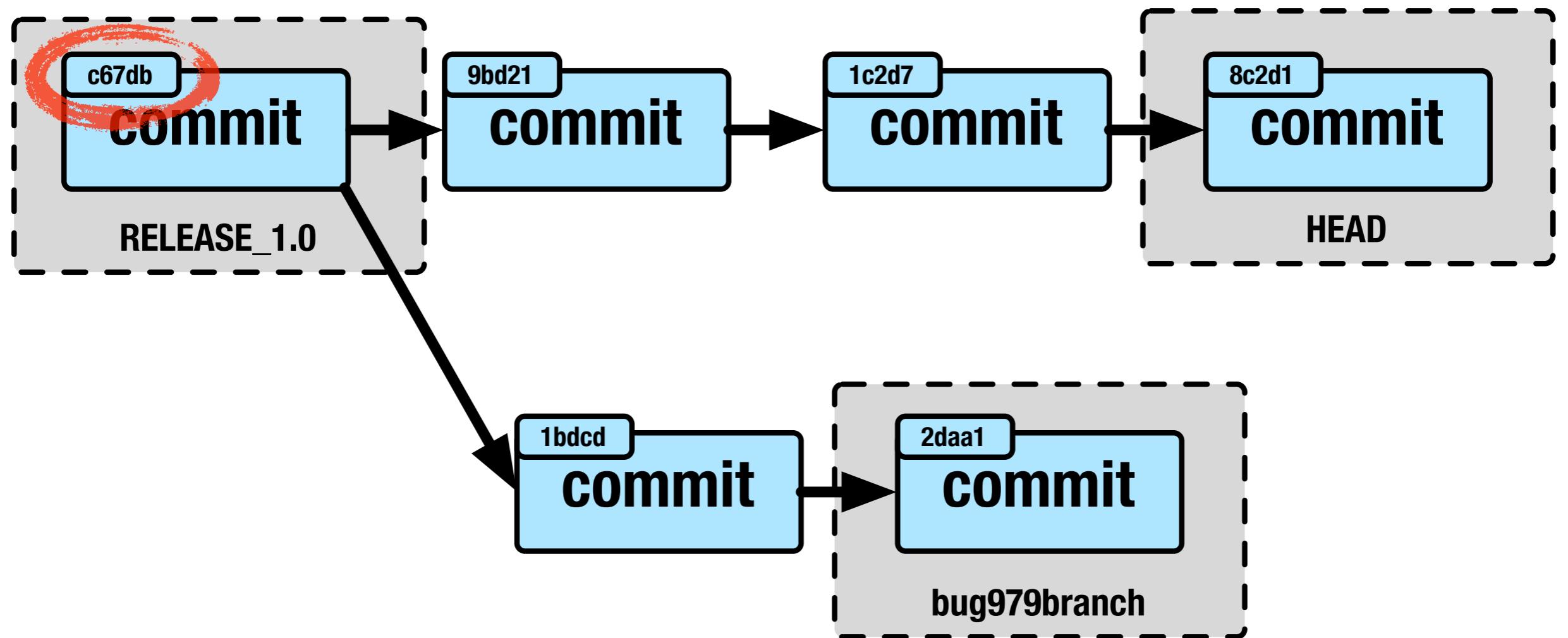


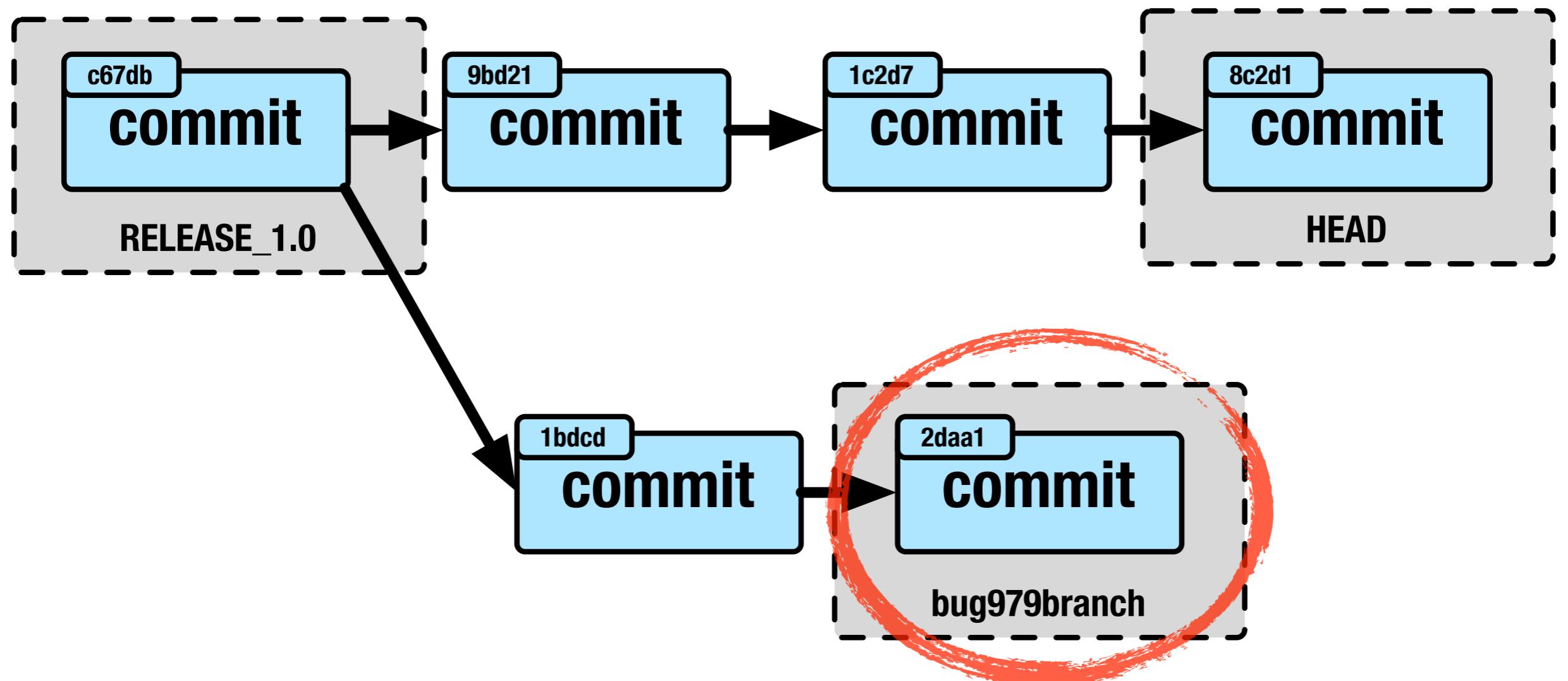


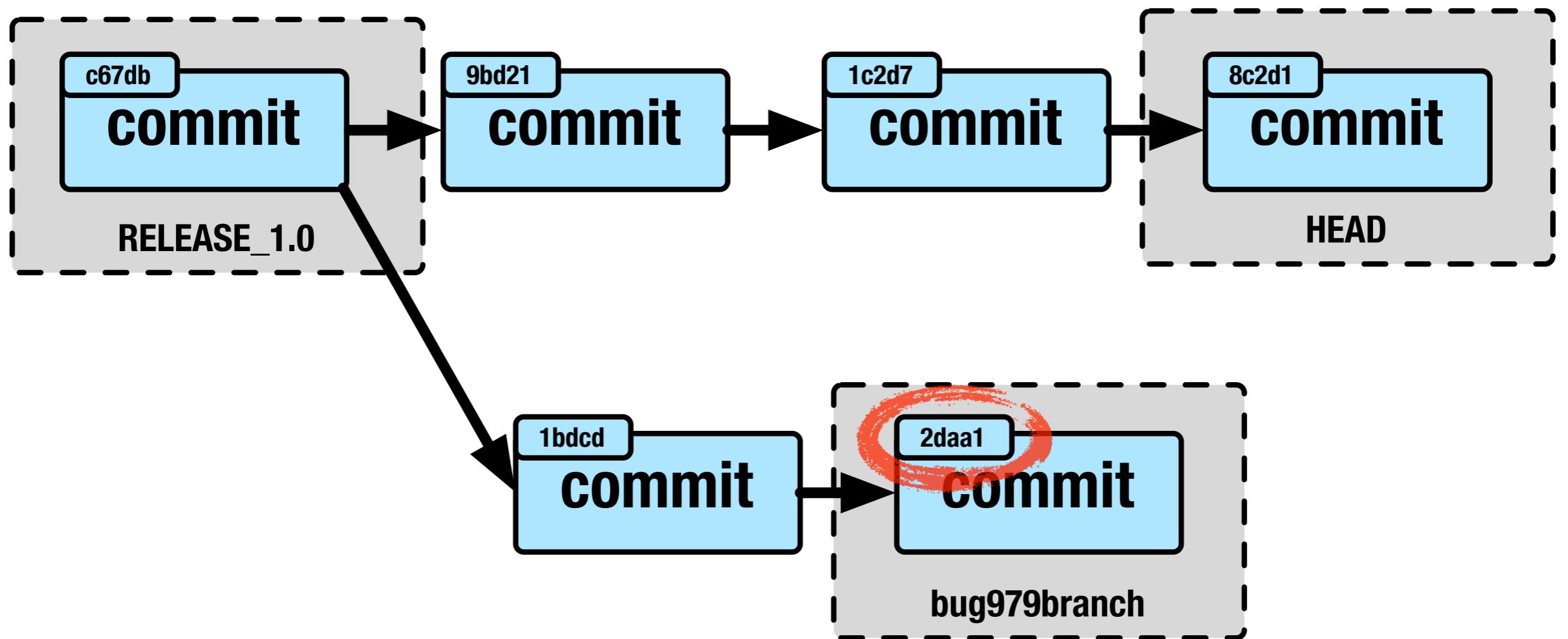




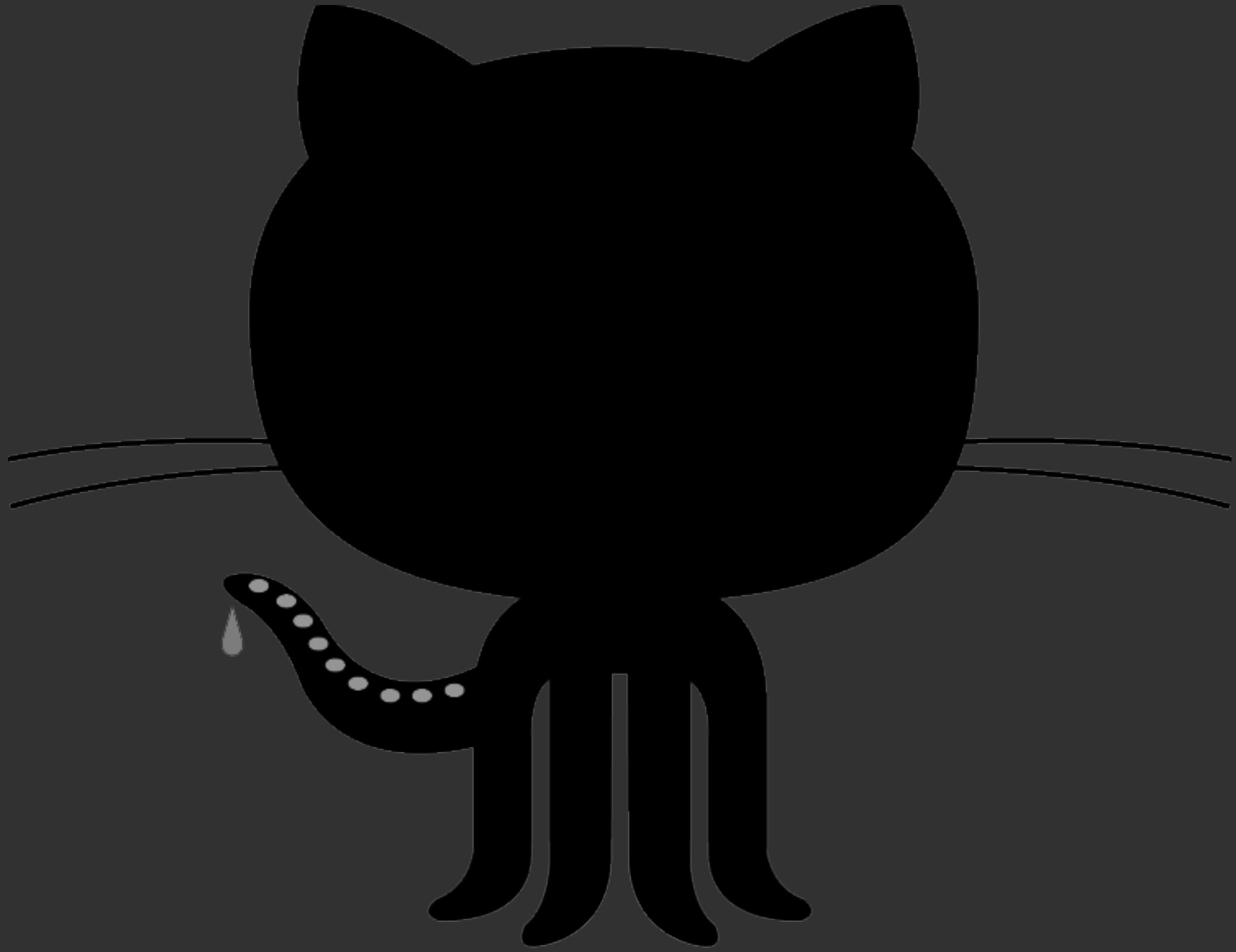








 **How Git implements a new commit-referencing syntax**



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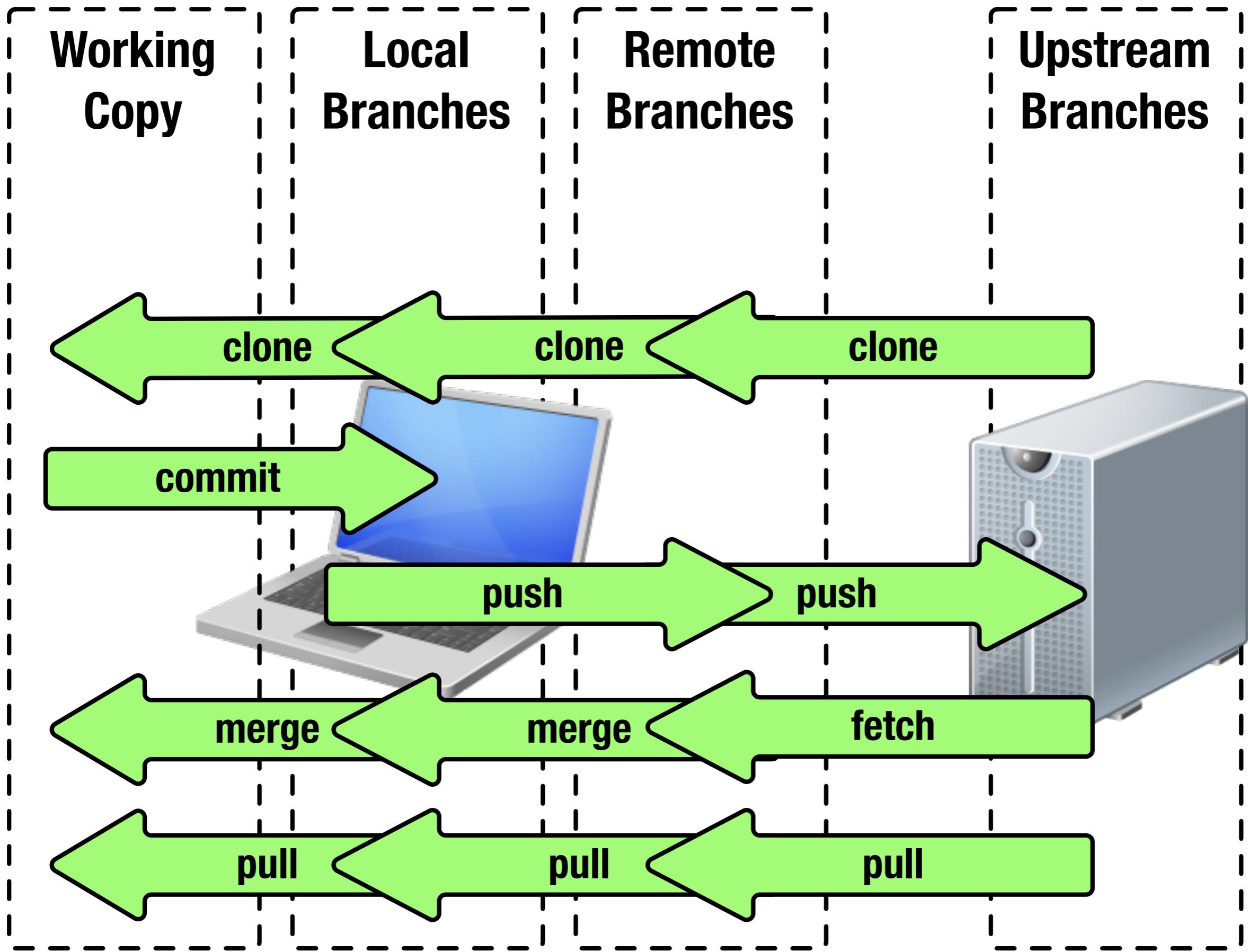


How to pull and push changes between repositories

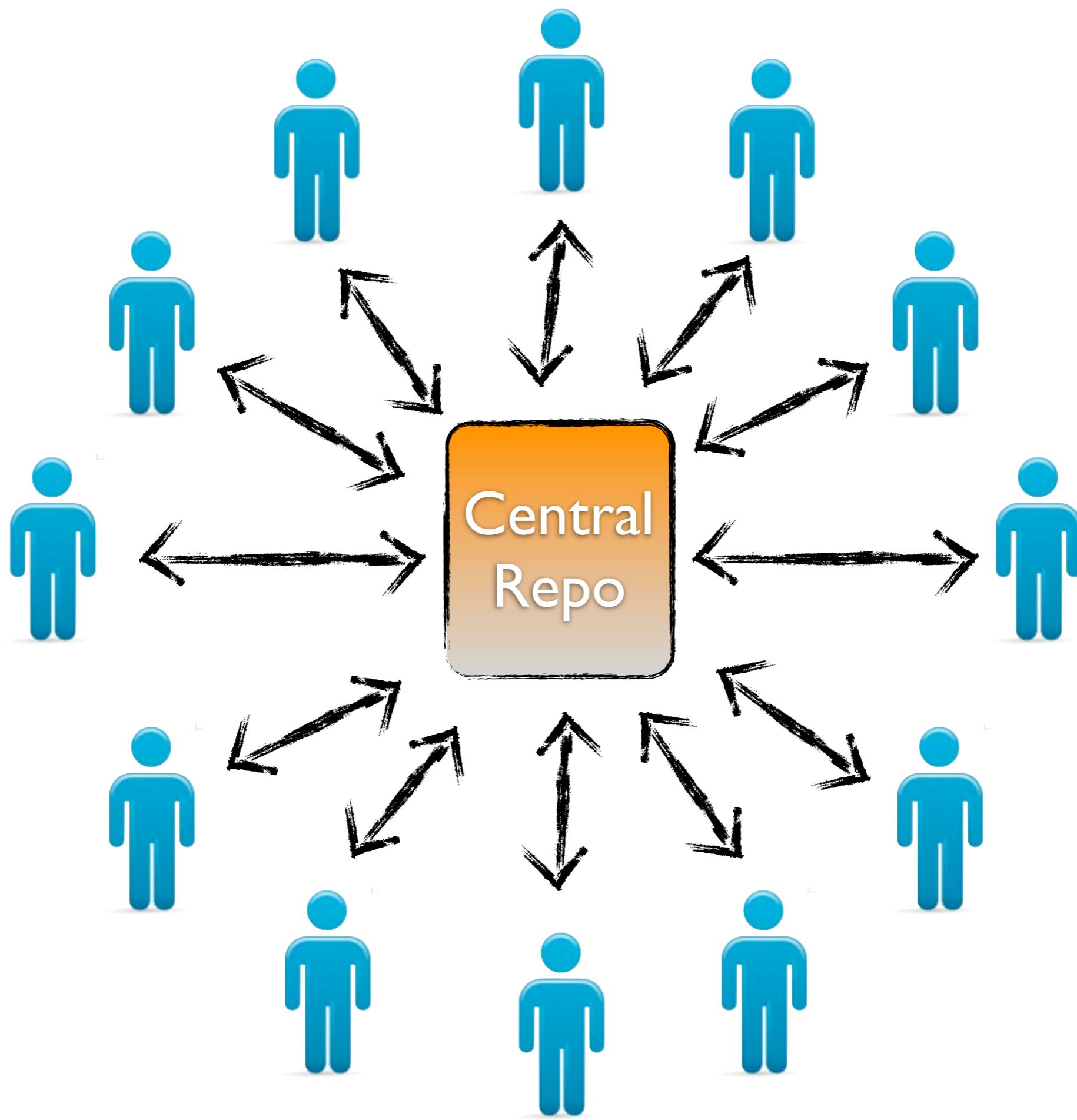


```
> git clone http://this.com/myproj.git  
> cd myproj  
Cloning into hellogitworld...  
remote: Counting objects: 3871, done.  
remote: Compressing objects: 100% (73/73), done.  
remote: Total 3871 (delta 51), reused 3853 (delta 36)  
Receiving objects: 100% (3871/3871), 297.88 KiB | 35 KiB/s, done.  
Resolving deltas: 100% (51/51), done.
```

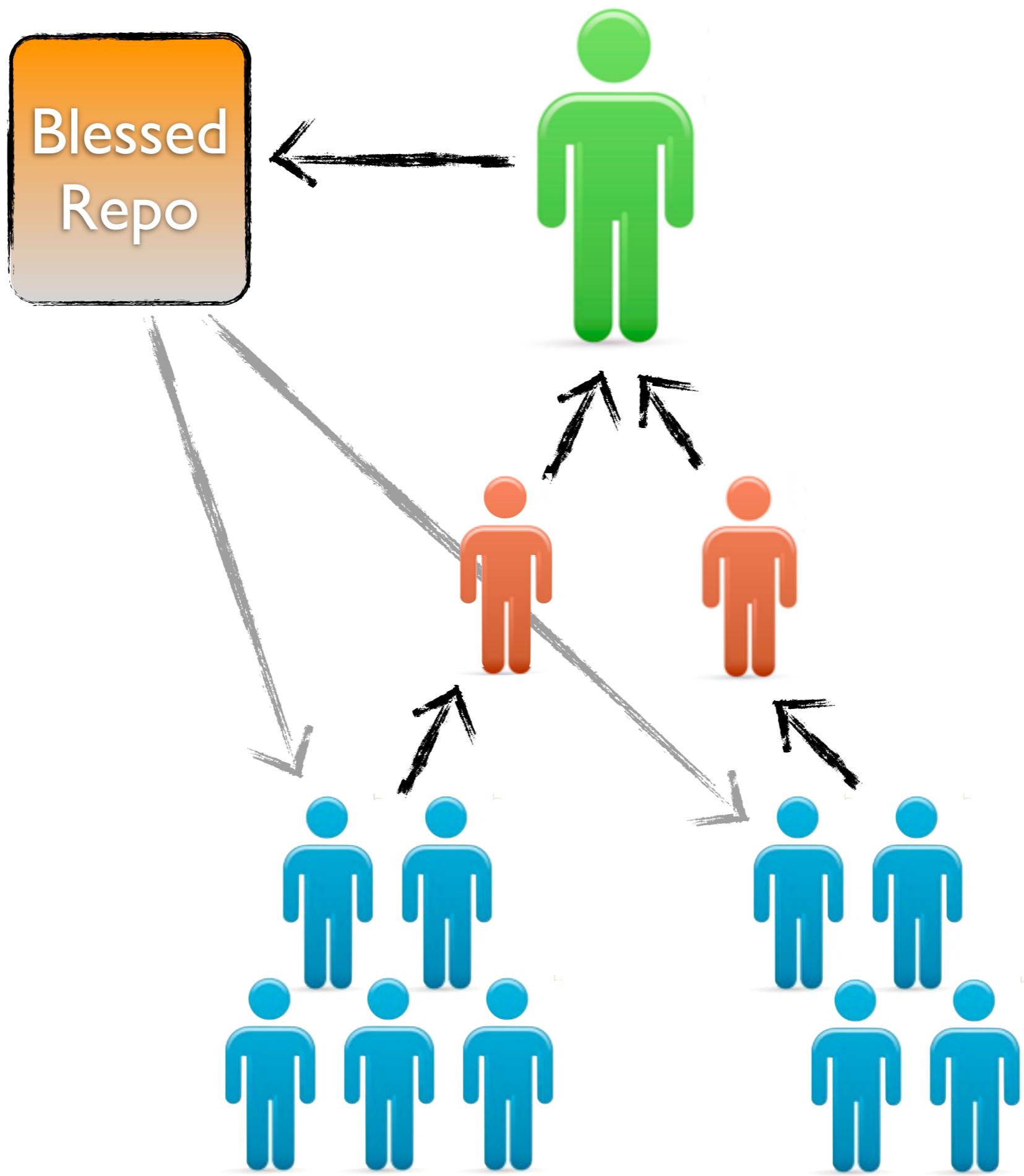




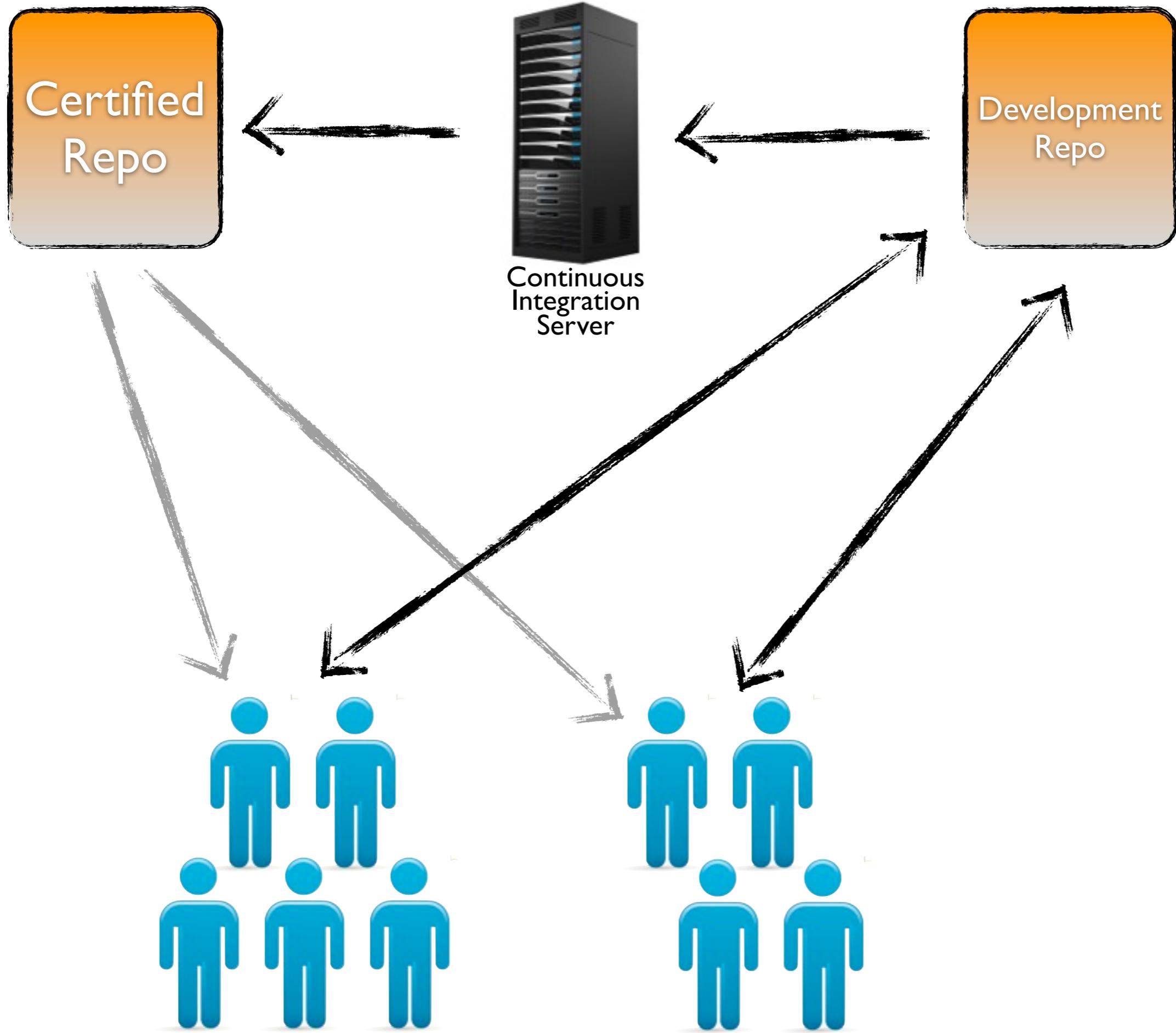
Centralized



Dictatorship

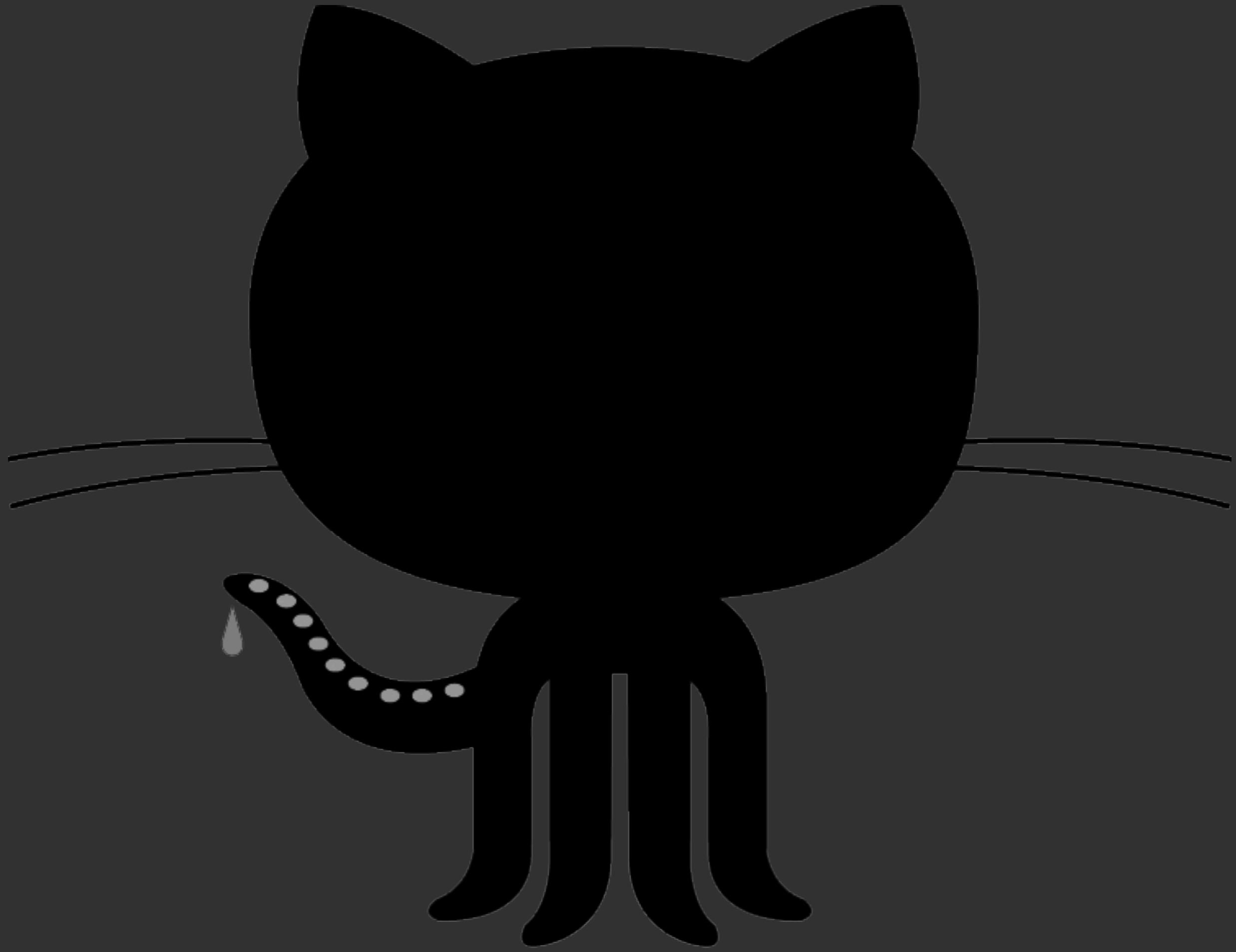


Integrating Managed





How to pull and push changes between repositories





Introduction to **Git & Gerrit**

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