

Une histoire de GIT

Alexandre Badez

<alexandre.badez@gmail.com>

Une histoire de GIT

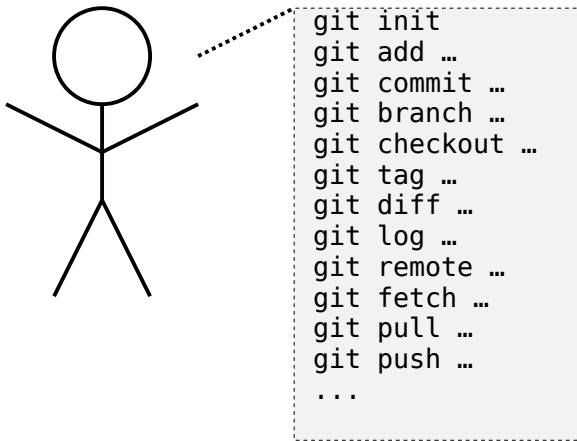
- Copié de Johan Herland
https://github.com/jherland/git_parable
- ...lui même copié de Tom Preston-Werner
<http://tom.preston-werner.com/2009/05/19/the-git-parable.html>
- Un peu de paresse
- J'aime les histoires...
- C'est une bonne histoire.
- Et la meilleure pour comprendre Git.

Une histoire de GIT

- Git - simple et puissant

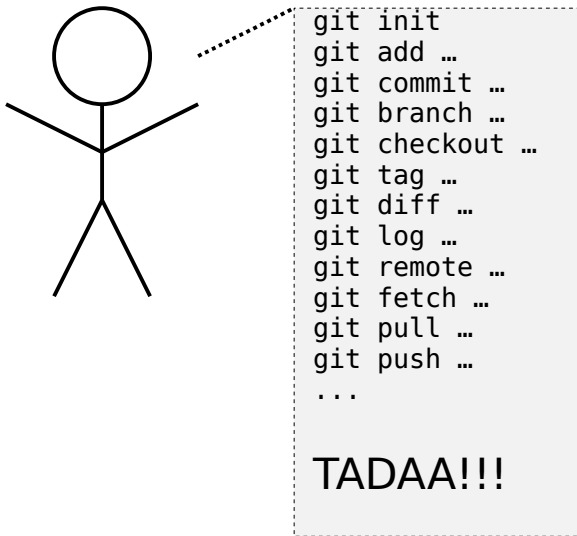
Une histoire de GIT

- Git - simple et puissant



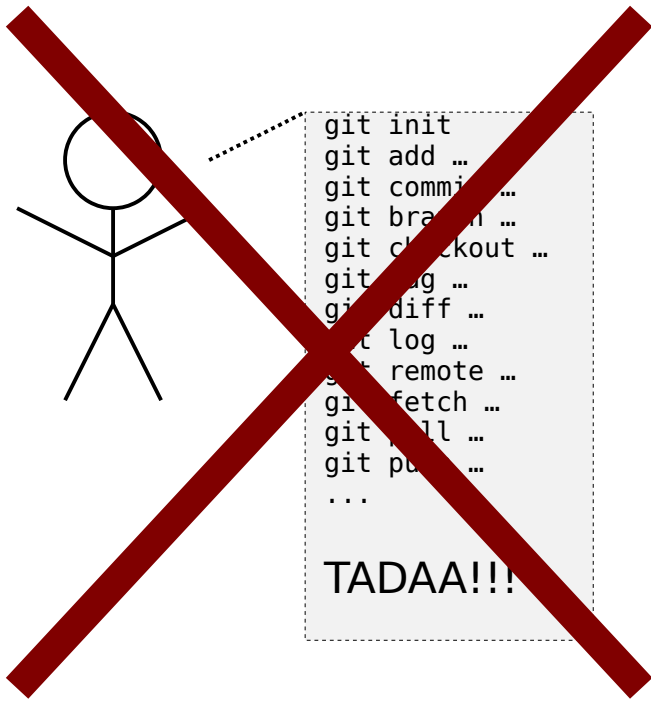
Une histoire de GIT

- Git - simple et puissant



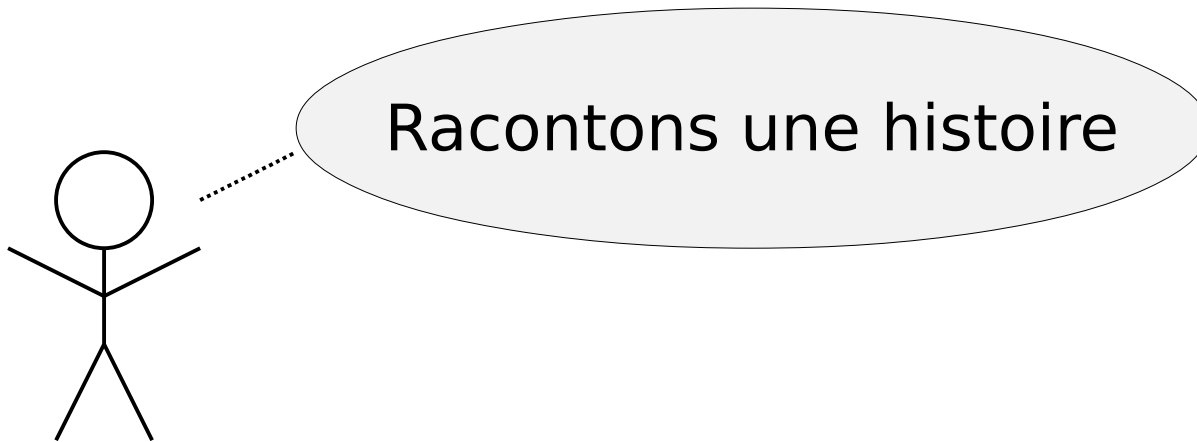
Une histoire de GIT

- Git - simple et puissant



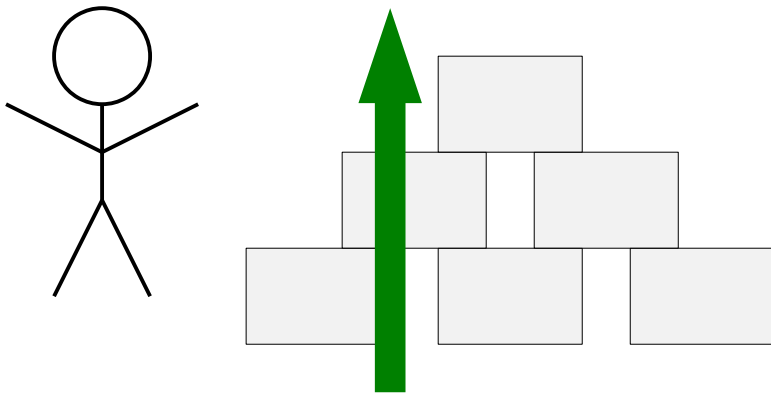
Une histoire de GIT

- Git - simple et puissant



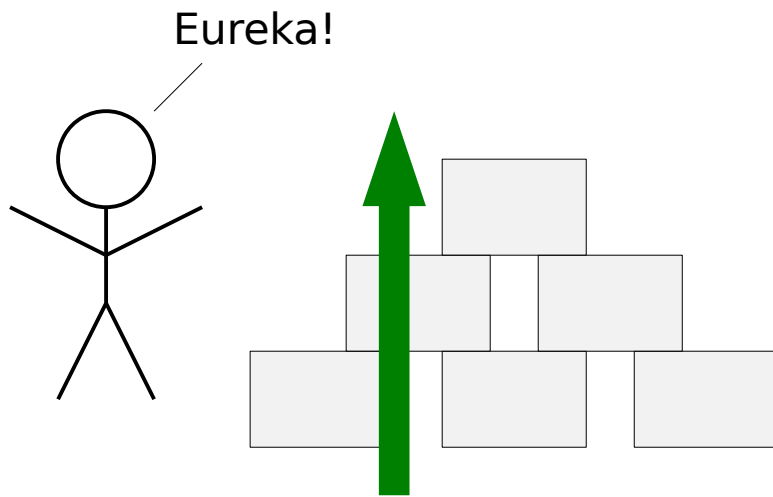
Une histoire de GIT

- Git - simple et puissant



Une histoire de GIT

- Git - simple et puissant



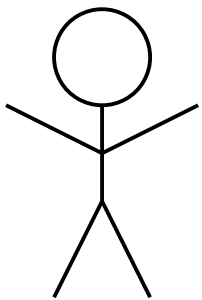
L'Histoire

- Un simple ordinateur
 - Un simple éditeur de texte.
 - Un système de fichier simple.



L'Histoire

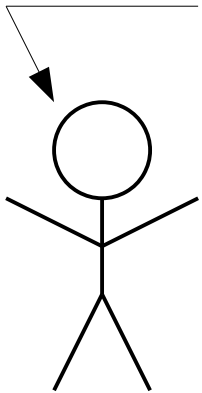
- Ecrire un logiciel complexe



L'Histoire

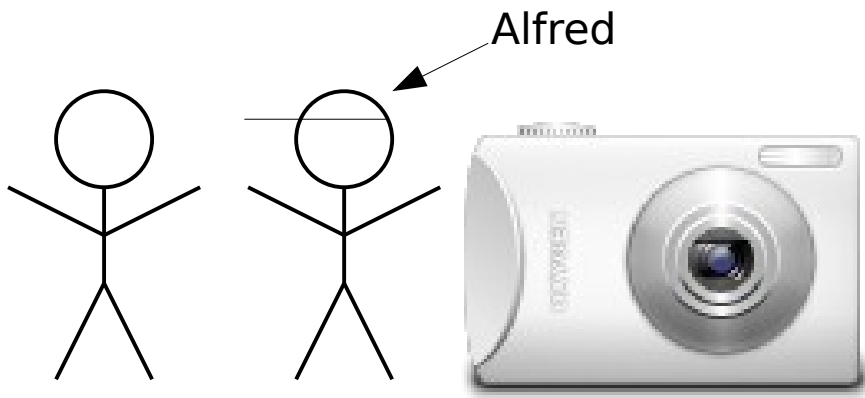
- Ecrire un logiciel complexe
- Inventer une méthode pour garder une trace des différentes versions.
 - récupérer du code modifié et/ou effacé

Responsable!



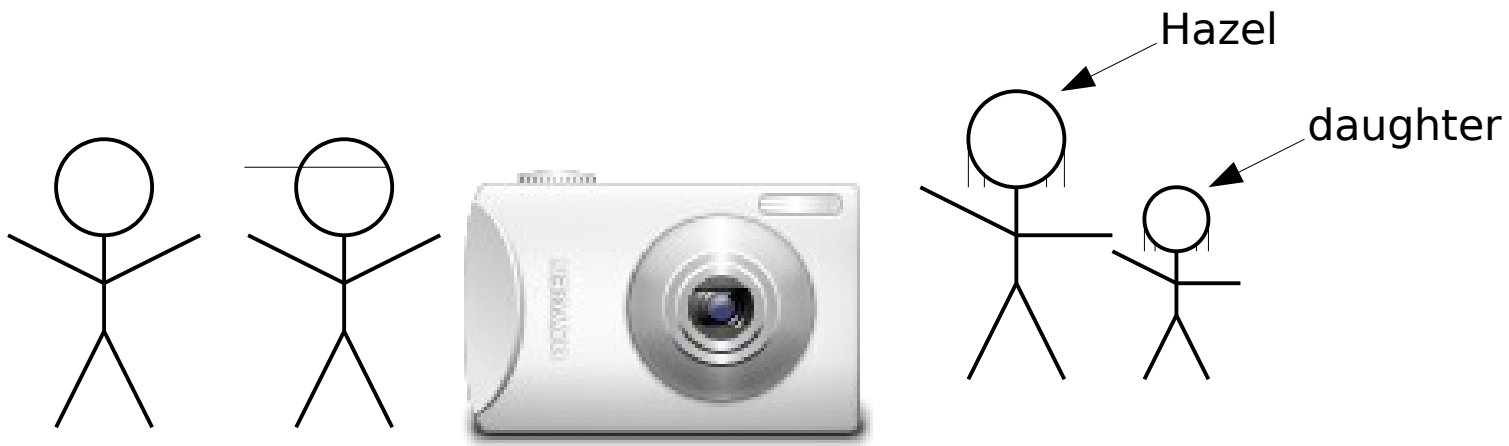
Snapshots

- Alfred, le photographe



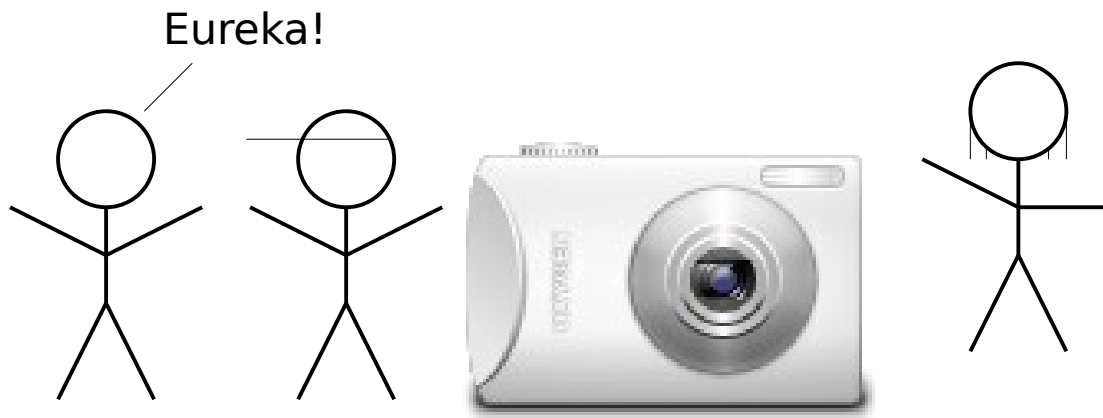
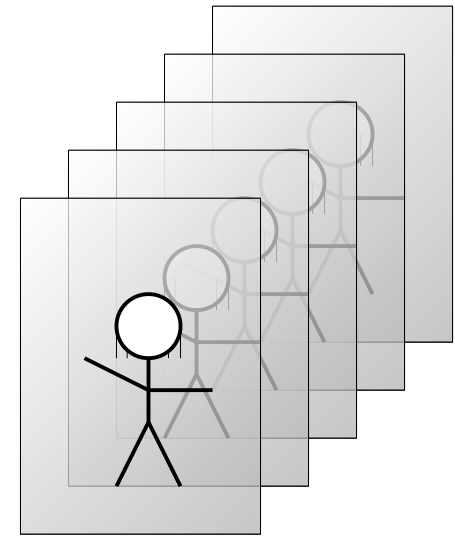
Snapshots

- Alfred, le photographe
- Hazel et sa fille



Snapshots

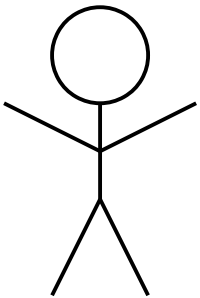
- Alfred, le photographe
- Hazel et sa fille
 - Se souvenir de sa fille à ses différents âges



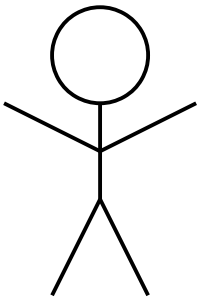
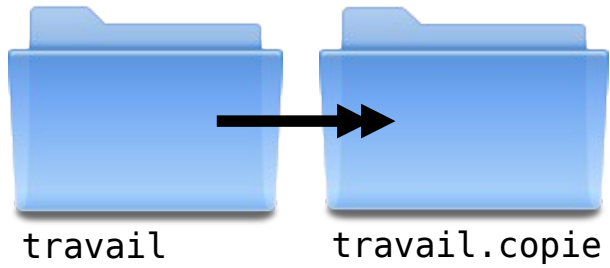
Snapshots



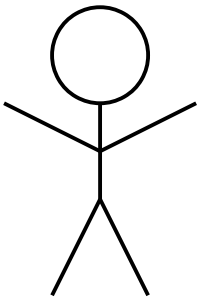
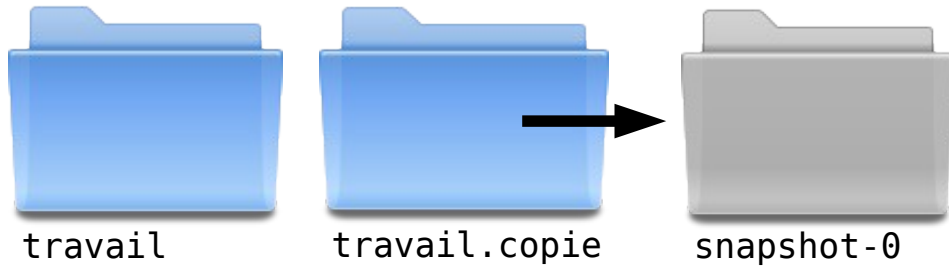
travail



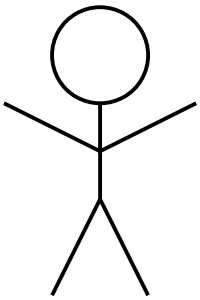
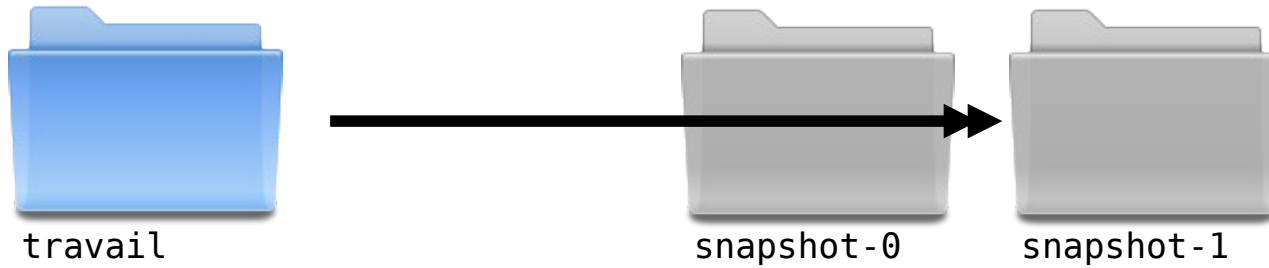
Snapshots



Snapshots



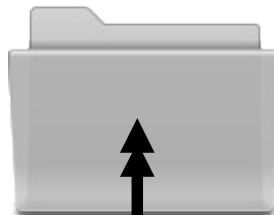
Snapshots



Snapshots



travail



snapshot-0



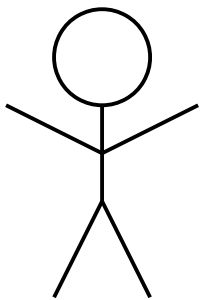
snapshot-1



message



message



2009-05-20 12:34:56

Initial version

2009-05-21 23:45:01

Introduced a new foo,
and reset the bar to
xyzyz.

Branches



travail



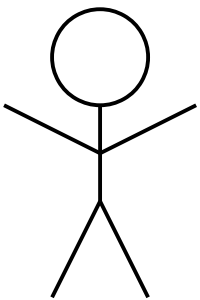
snapshot-0



snapshot-1



snapshot-99



Branches



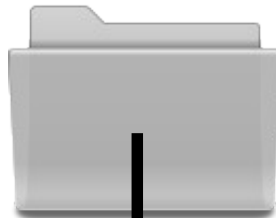
travail



snapshot-0



snapshot-1

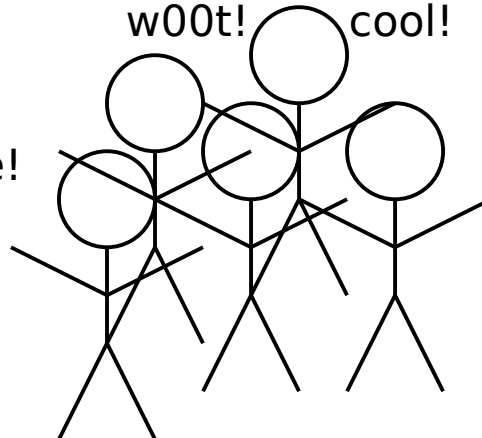
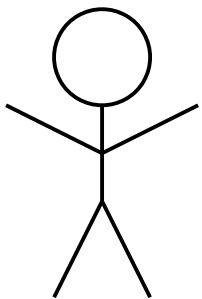


snapshot-99



w00t! cool!

nice!



Branches



travail



snapshot-0



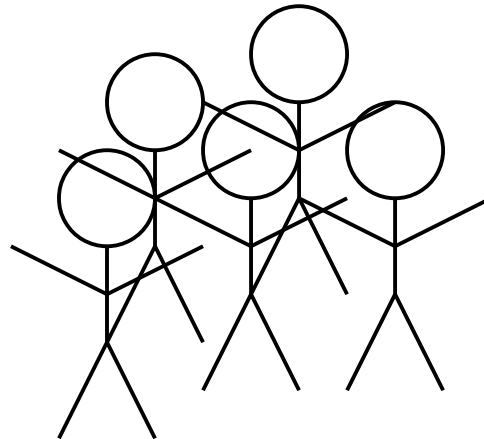
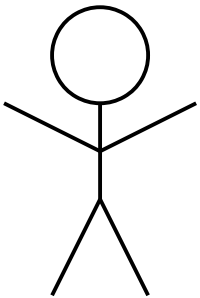
snapshot-1



snapshot-99



snapshot-109



Branches



travail



snapshot-0



snapshot-1

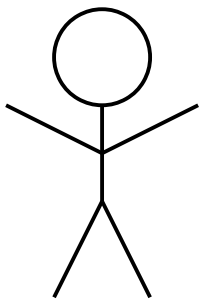


snapshot-99

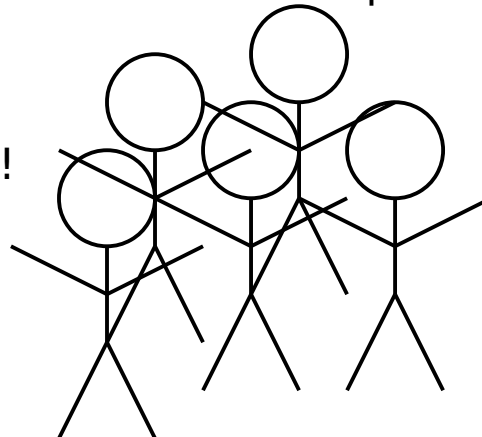


snapshot-109

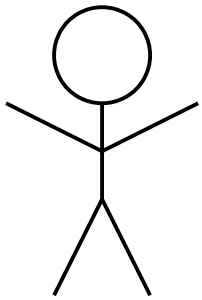
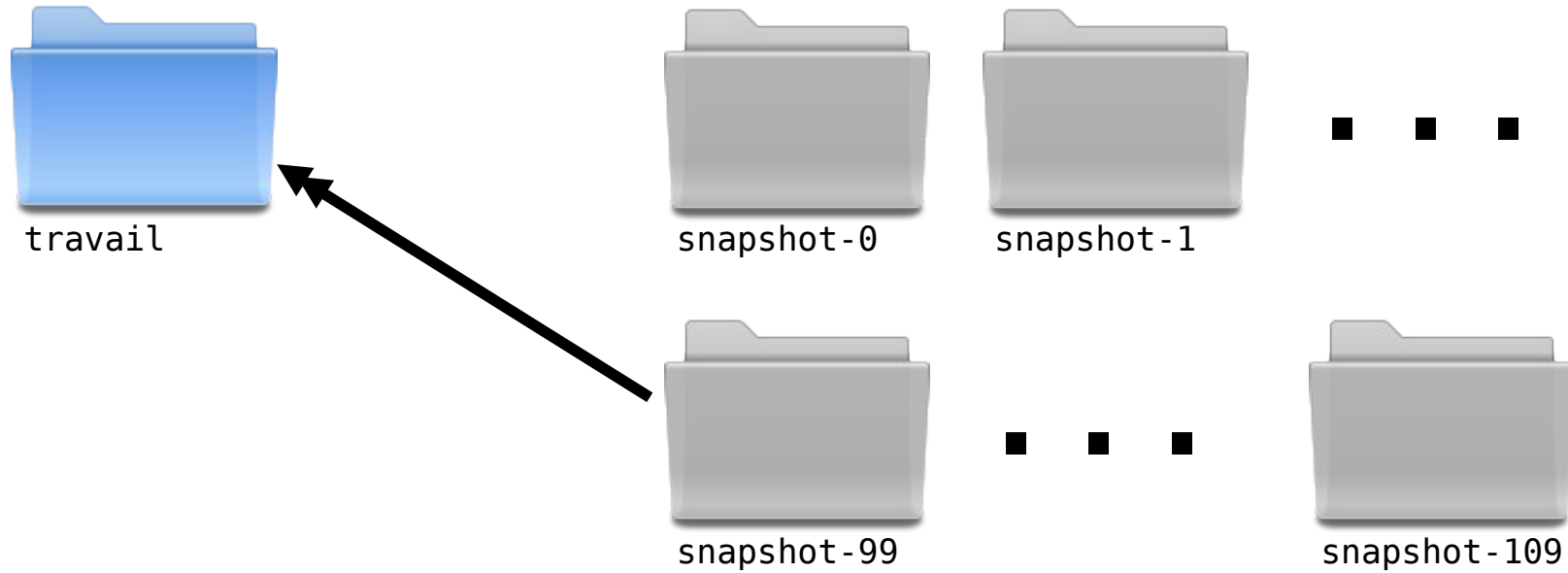
Ca marche pas..



Boo!



Branches



Branches



travail



snapshot-0



snapshot-1

...

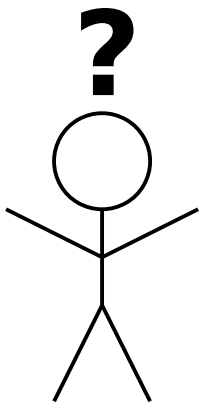


snapshot-99

...



snapshot-109

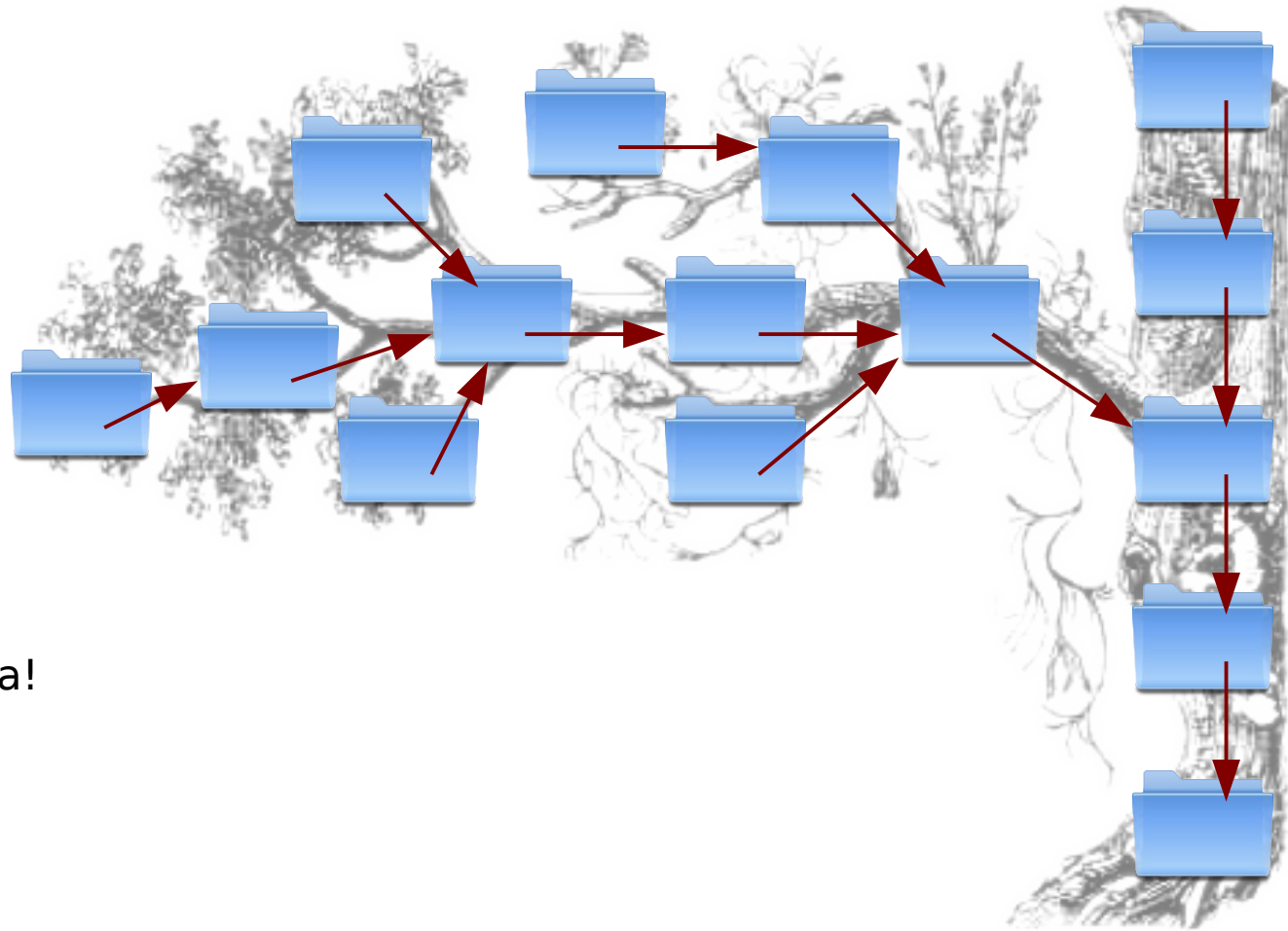


snapshot-110

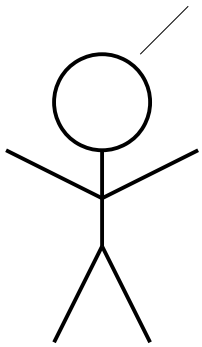
Branches



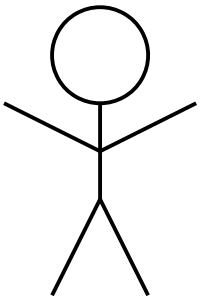
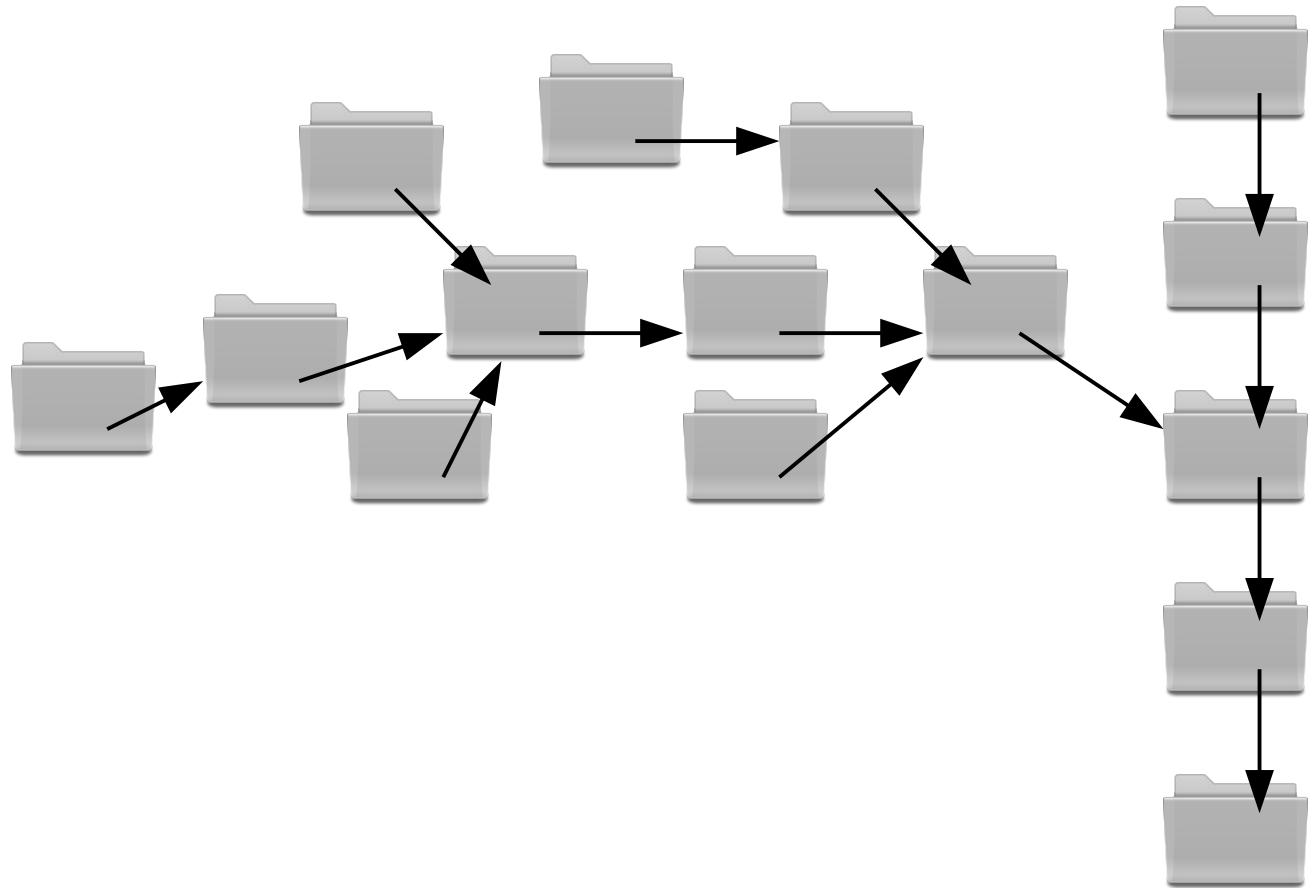
Branches



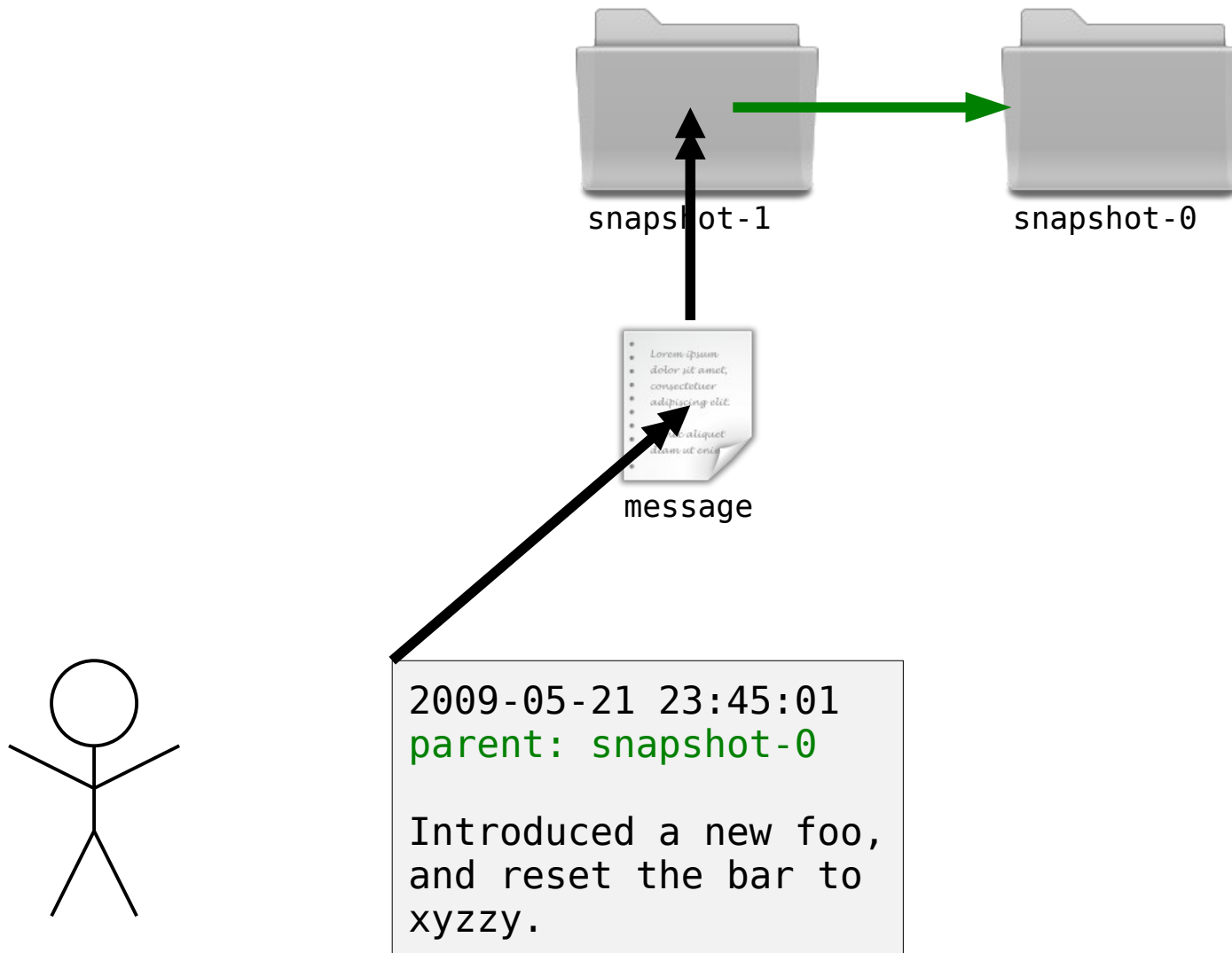
Eureka!



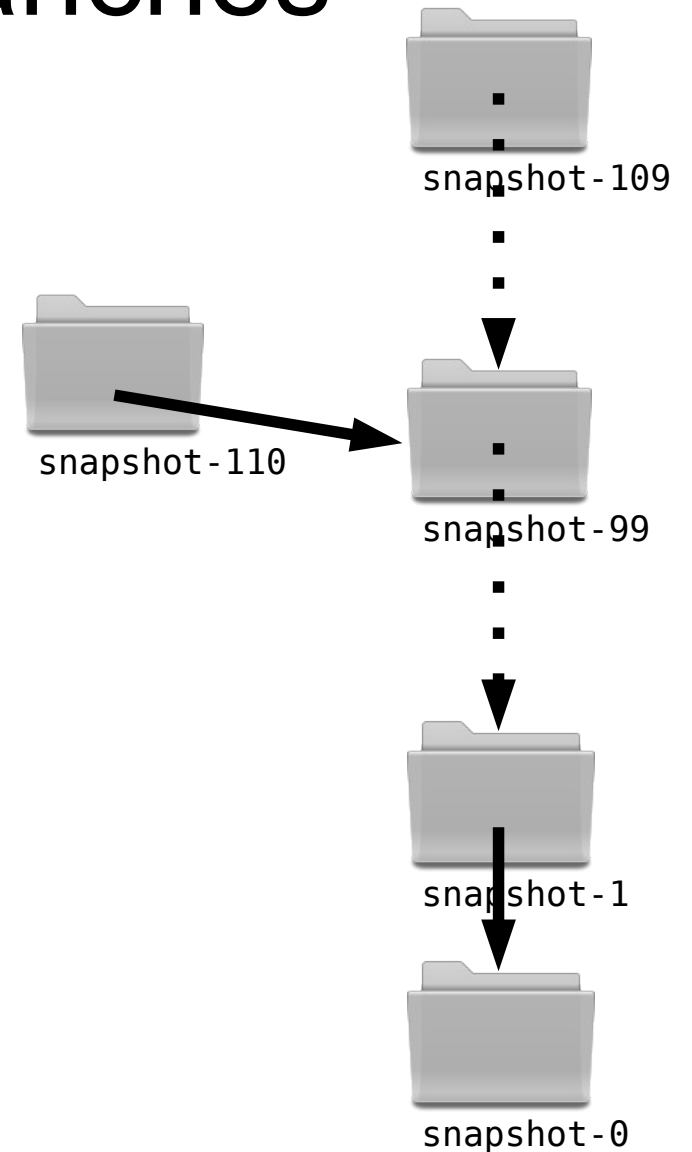
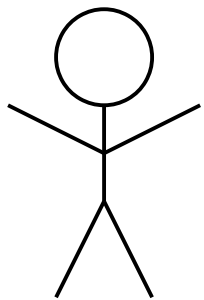
Branches



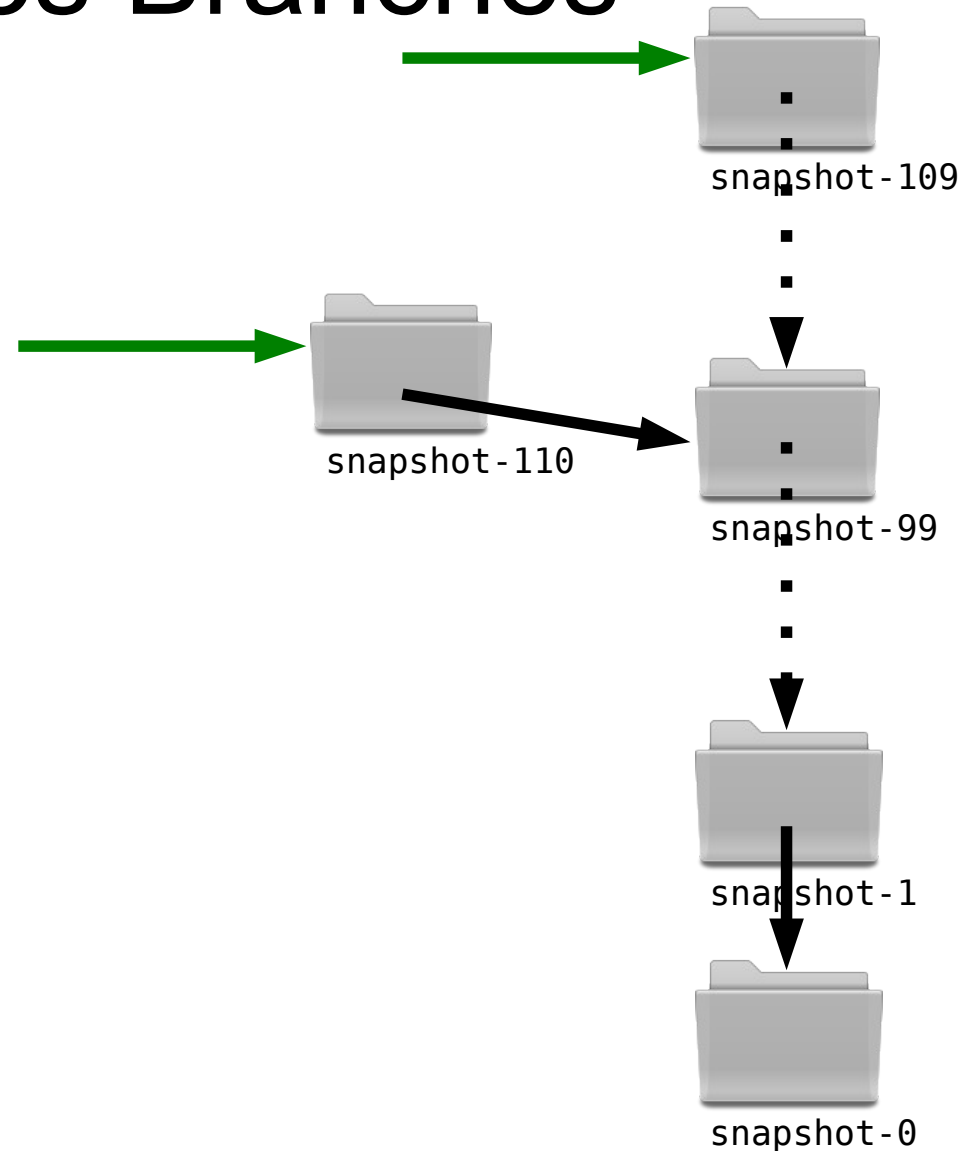
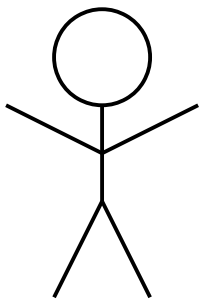
Branches



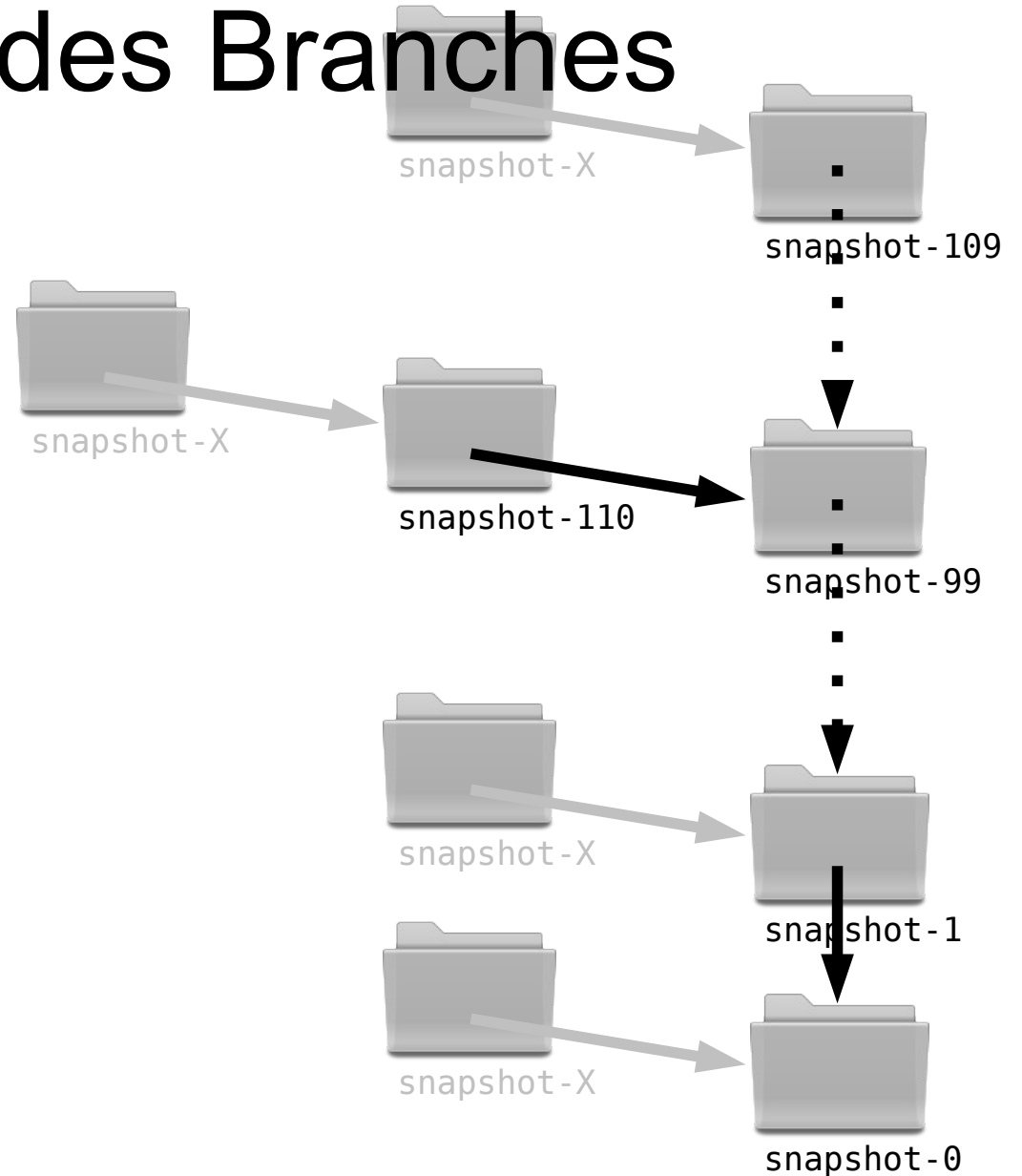
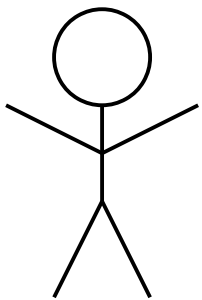
Le nom des Branches



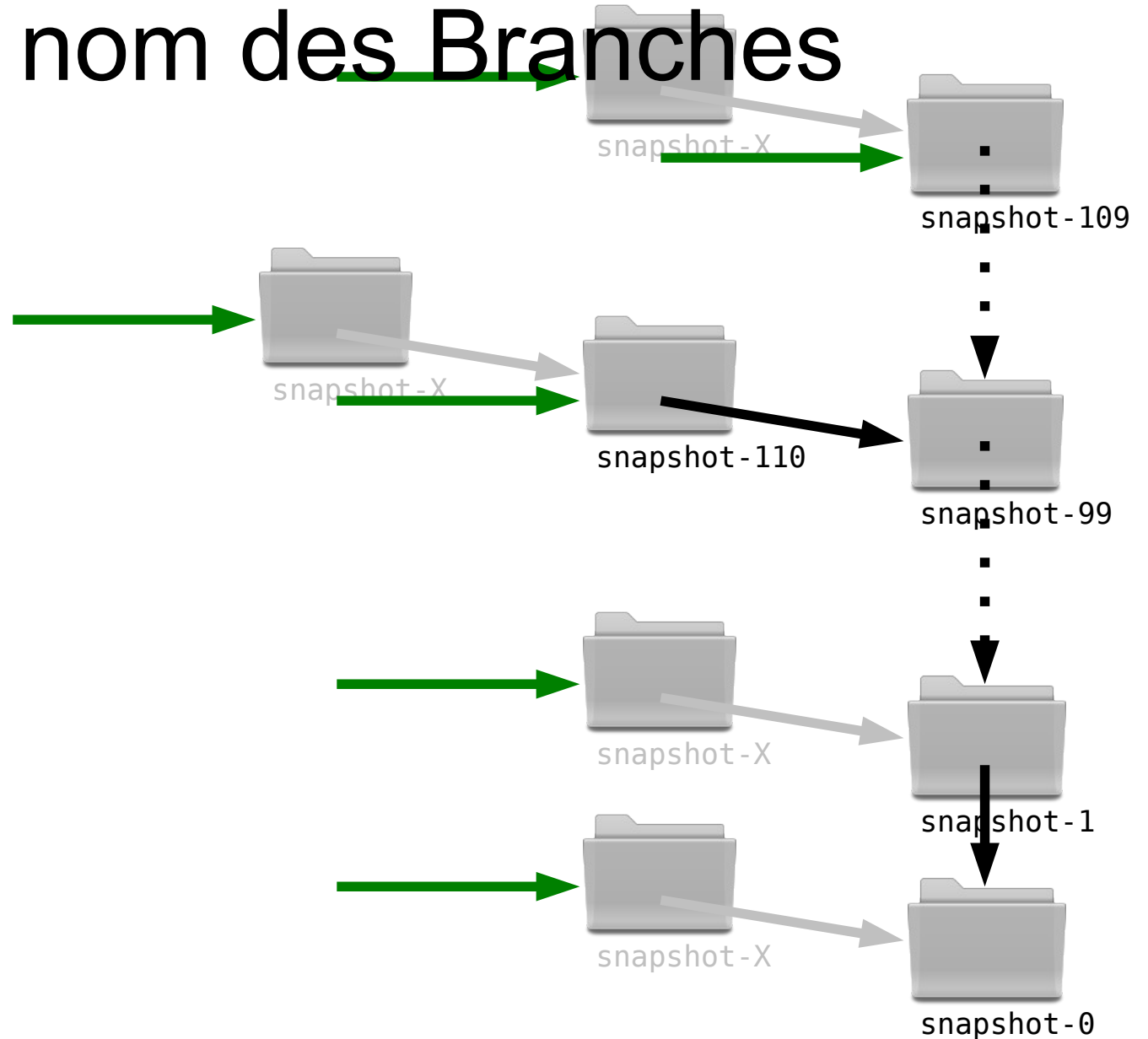
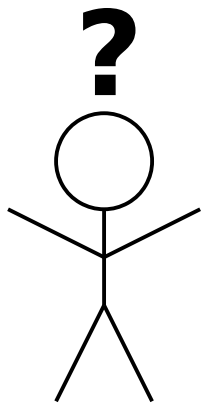
Le nom des Branches



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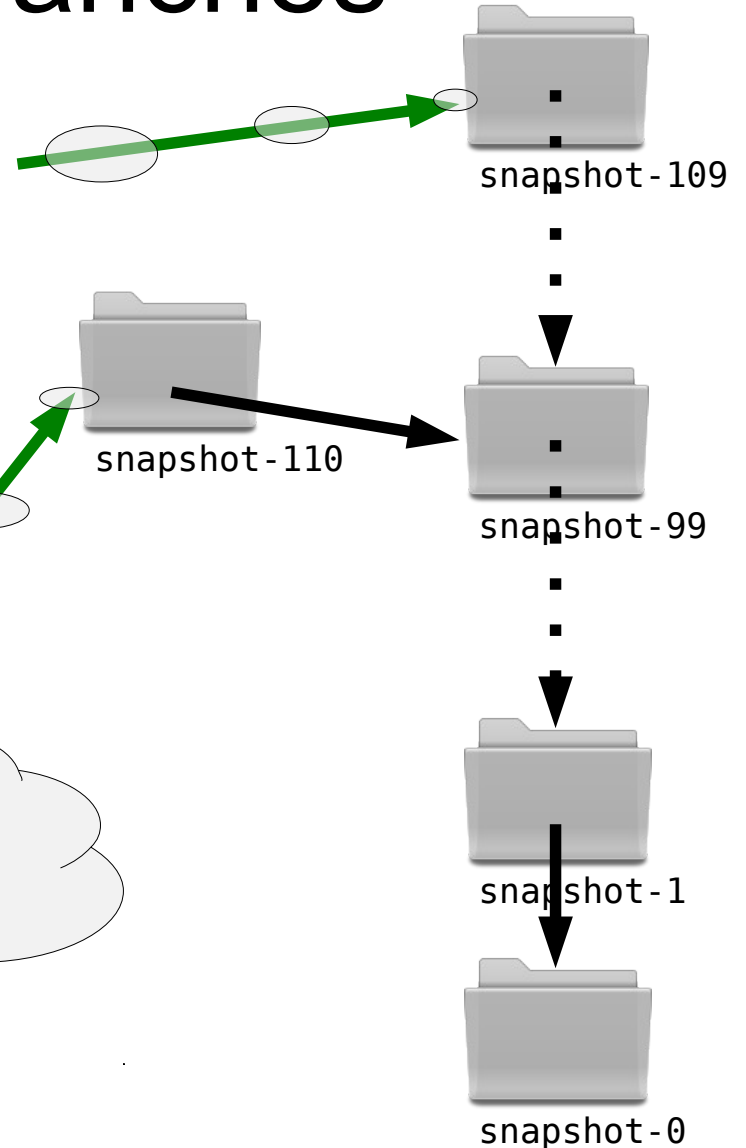
Le nom des Branches



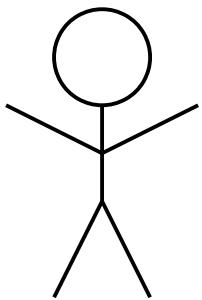
Le nom des Branches



Ceci est la branche
"maitresse" - master



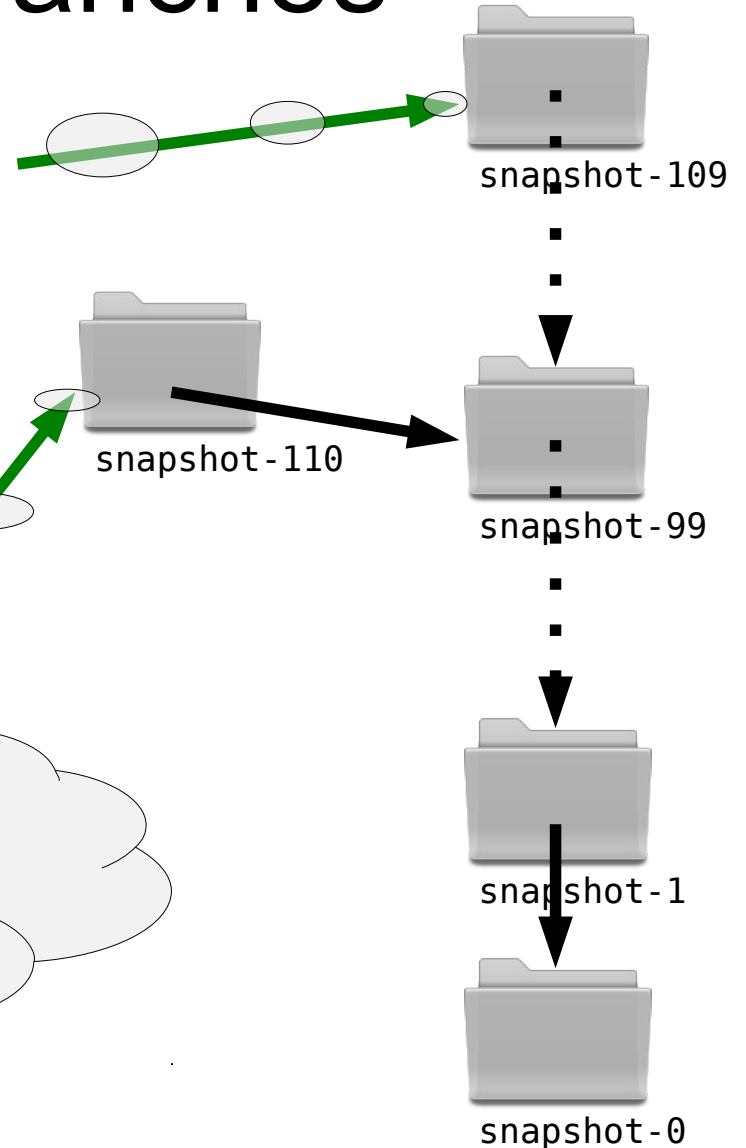
Ce sera la branche
"Version 1.0 Maintenance"



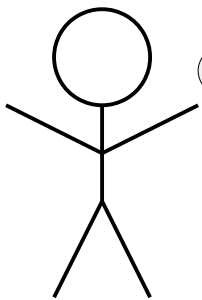
Le nom des Branches



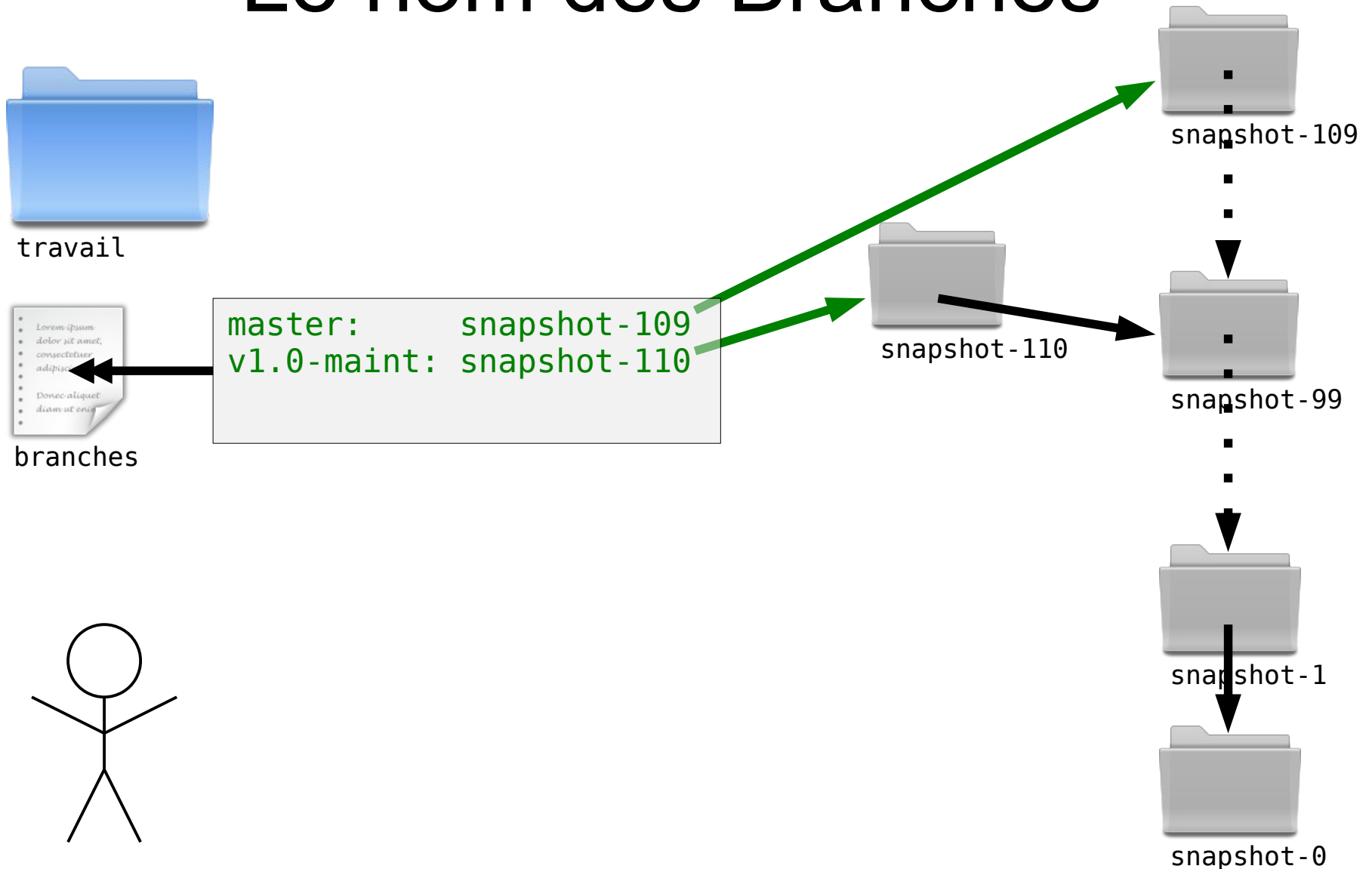
Ceci est la branche
"master".
Elle contient le:
snapshot-109
(et ses ancêtres)



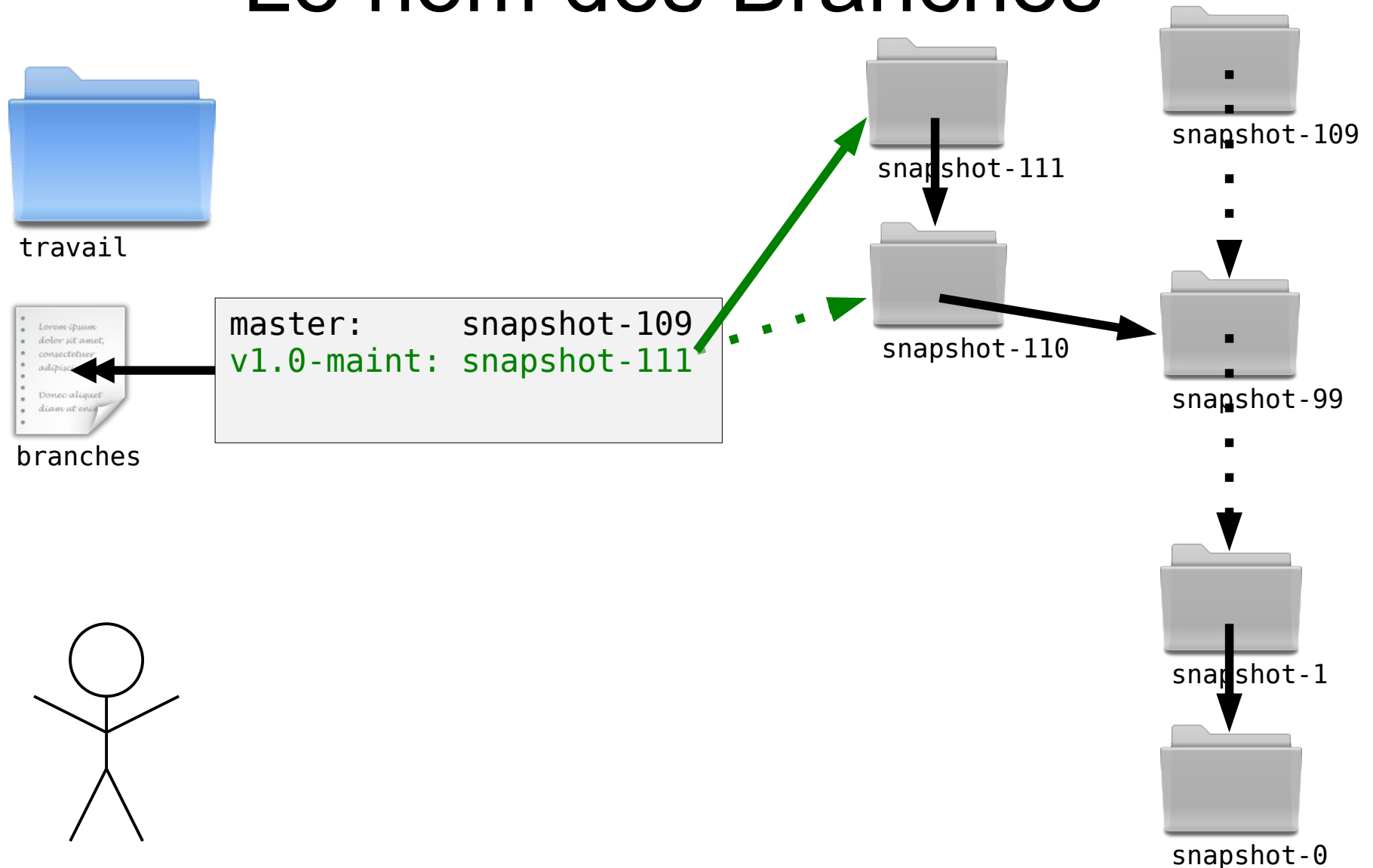
Ceci est la branche
"Version 1.0 Maintenance".
Elle contient:
snapshot-110
(et ses ancêtres)



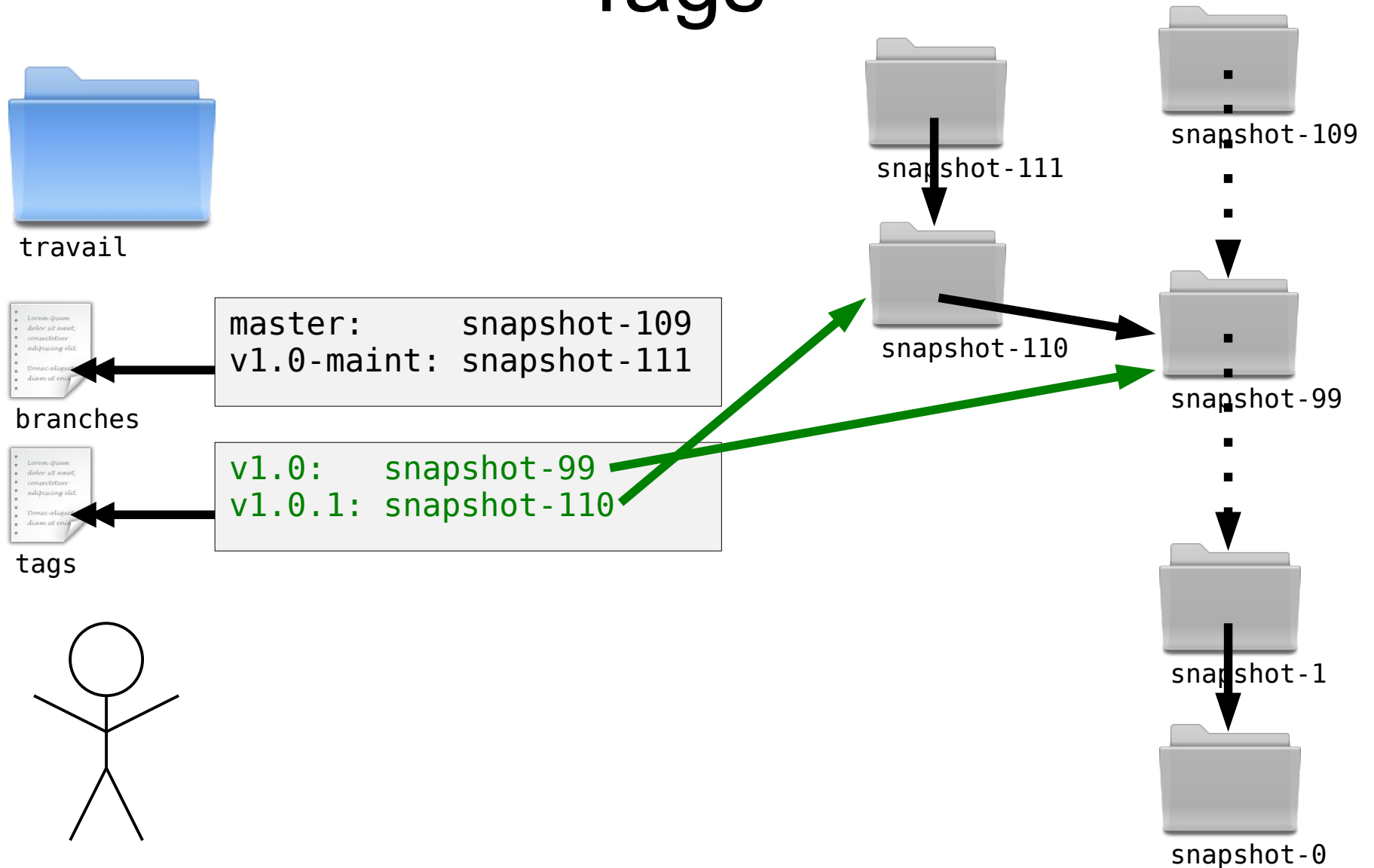
Le nom des Branches



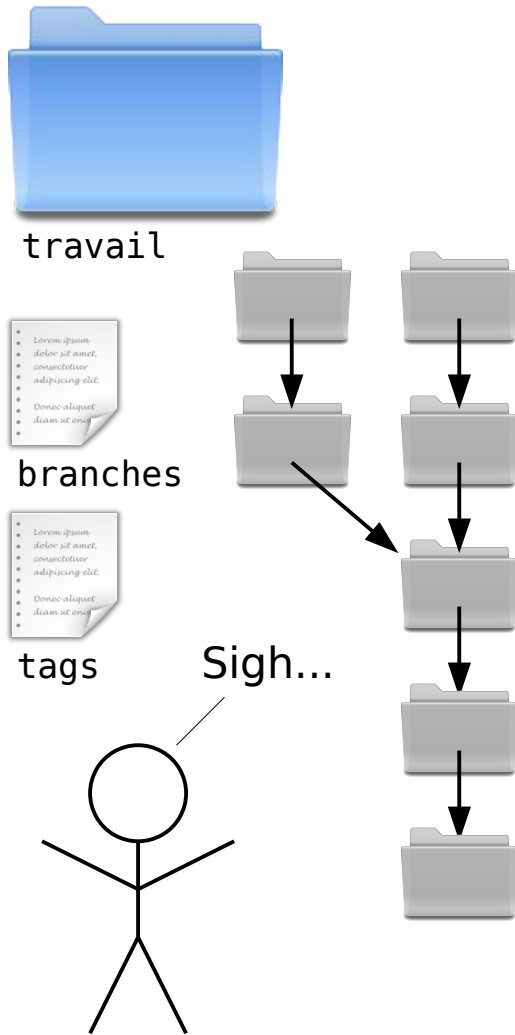
Le nom des Branches



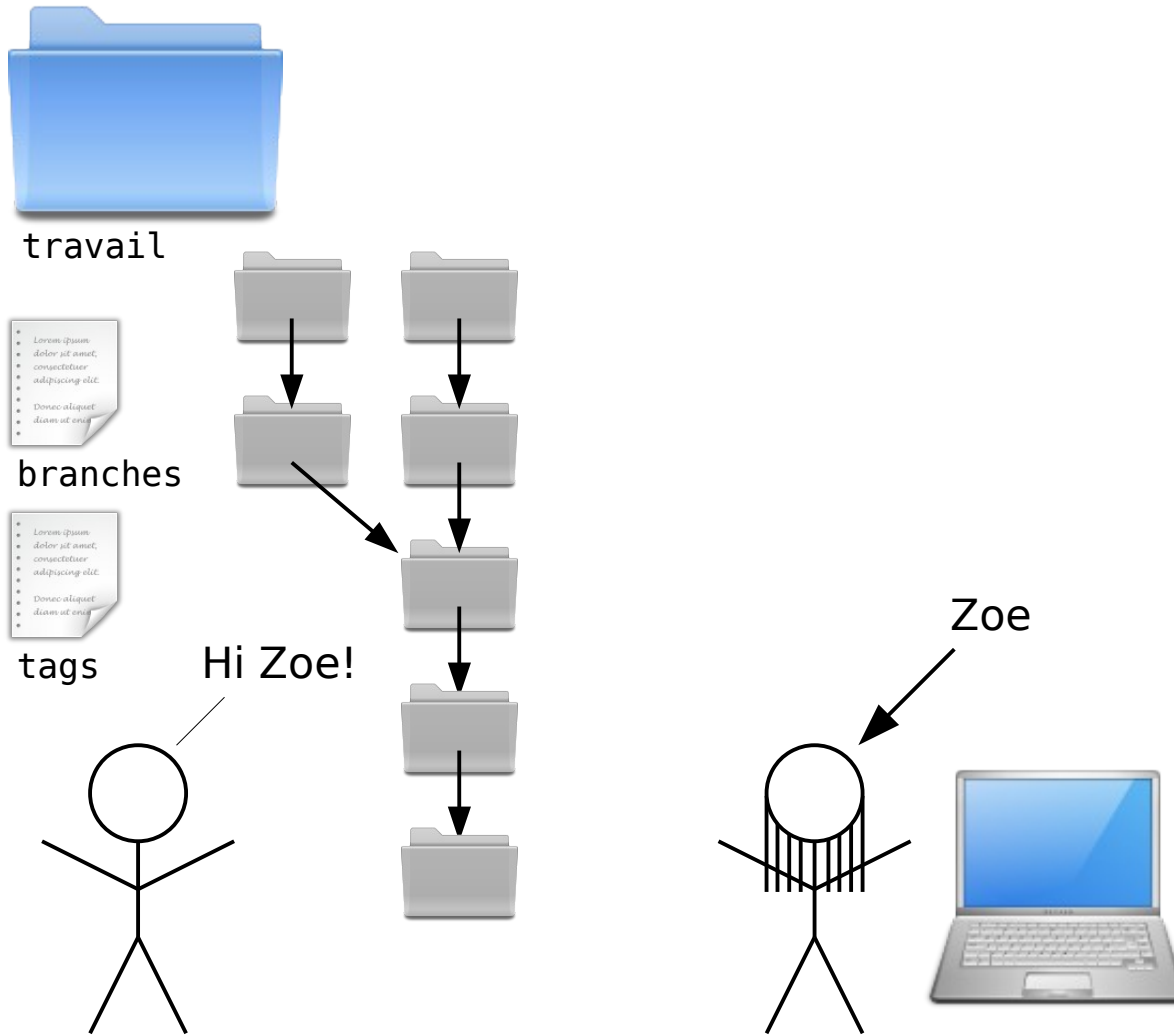
Tags



Distribué



Distribué



Distribué



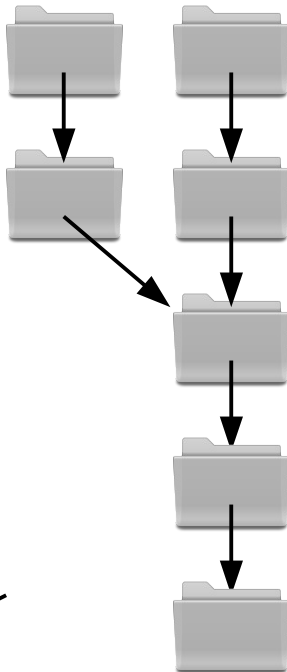
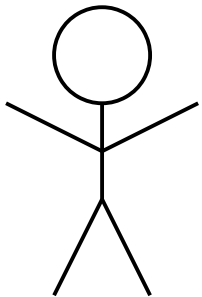
travail



branches



tags



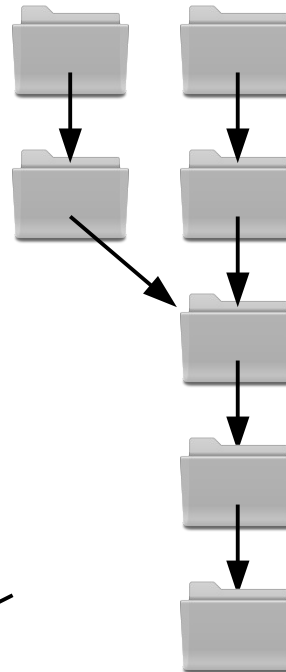
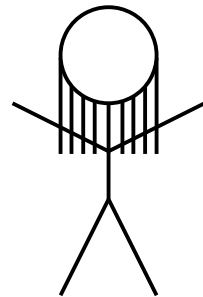
travail



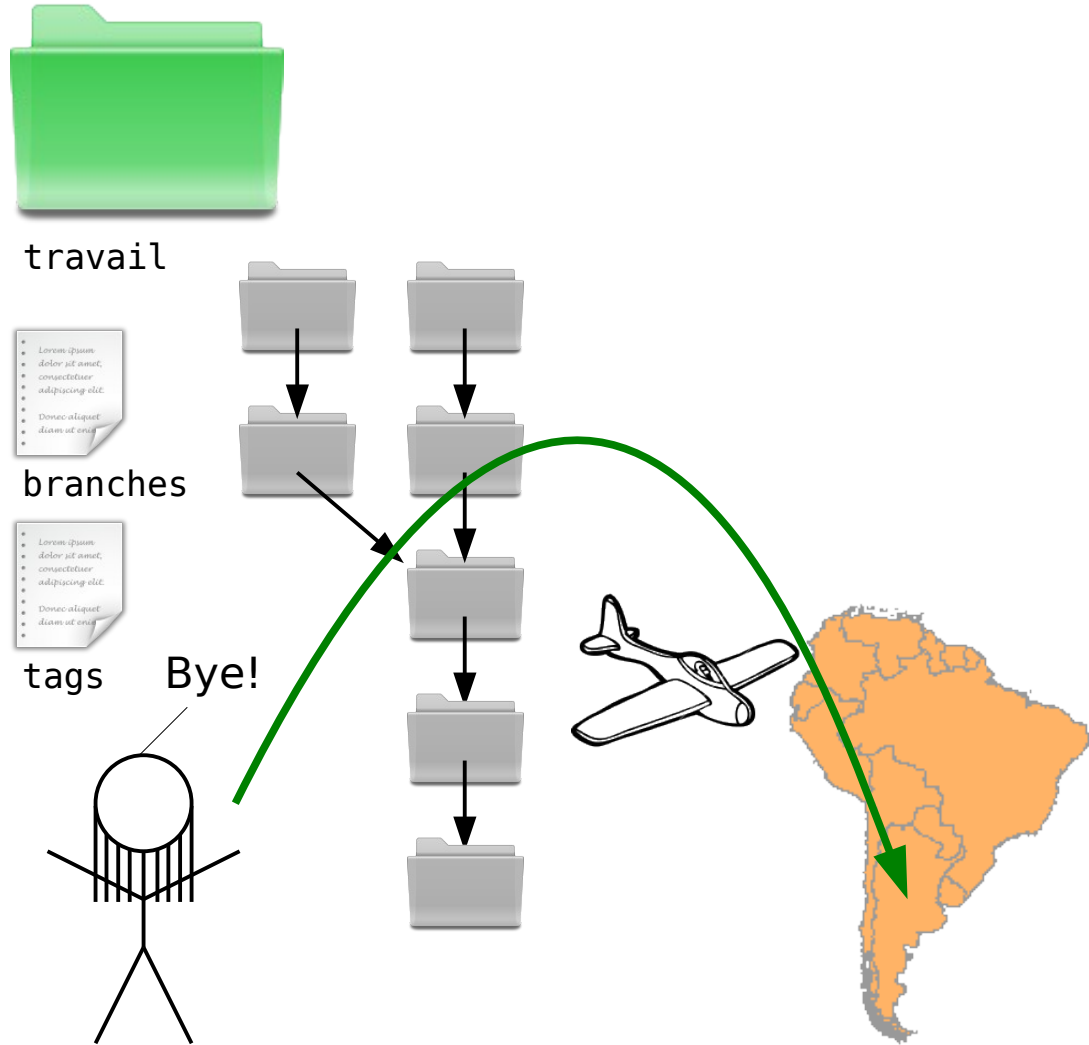
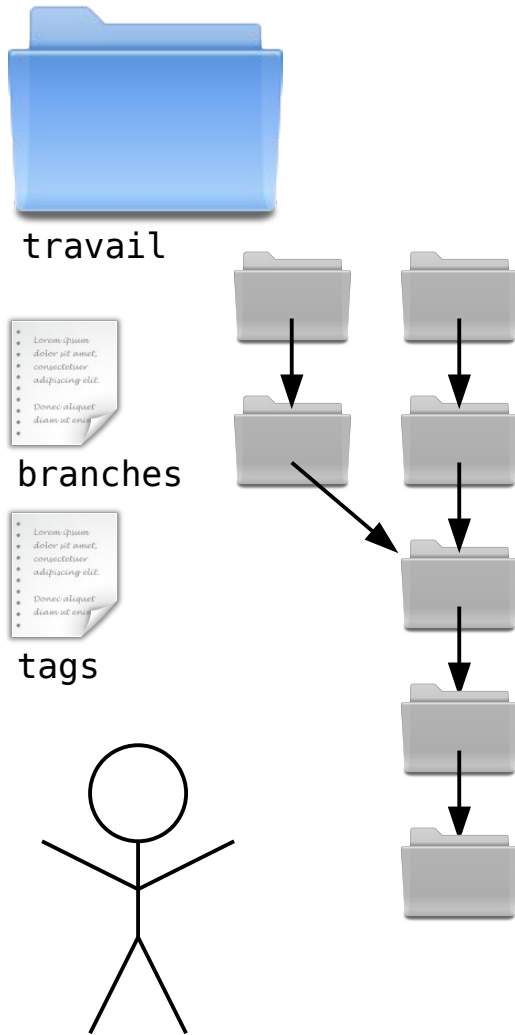
branches



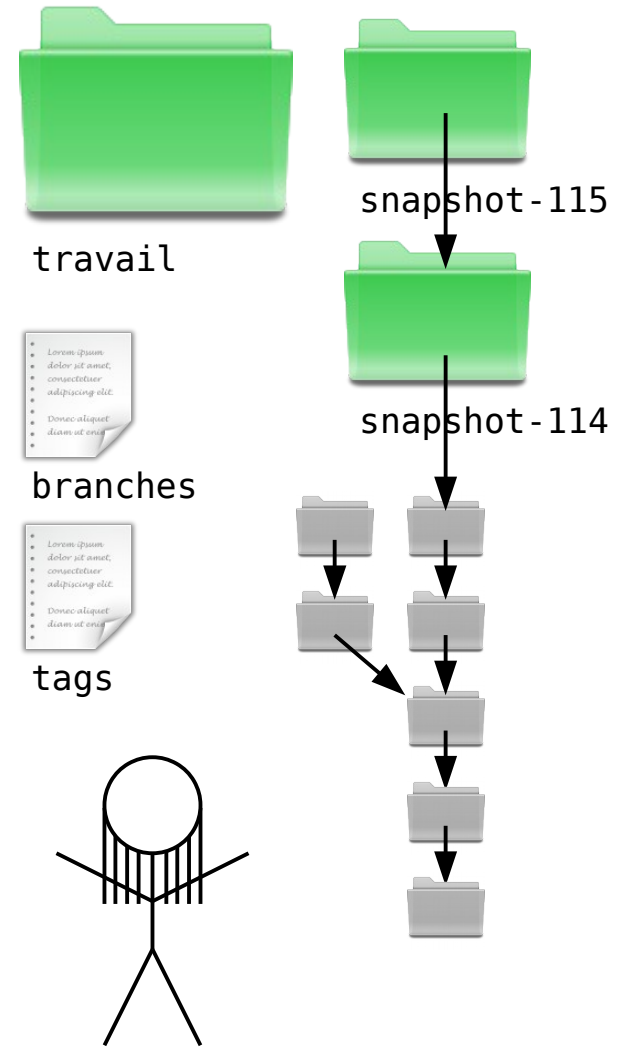
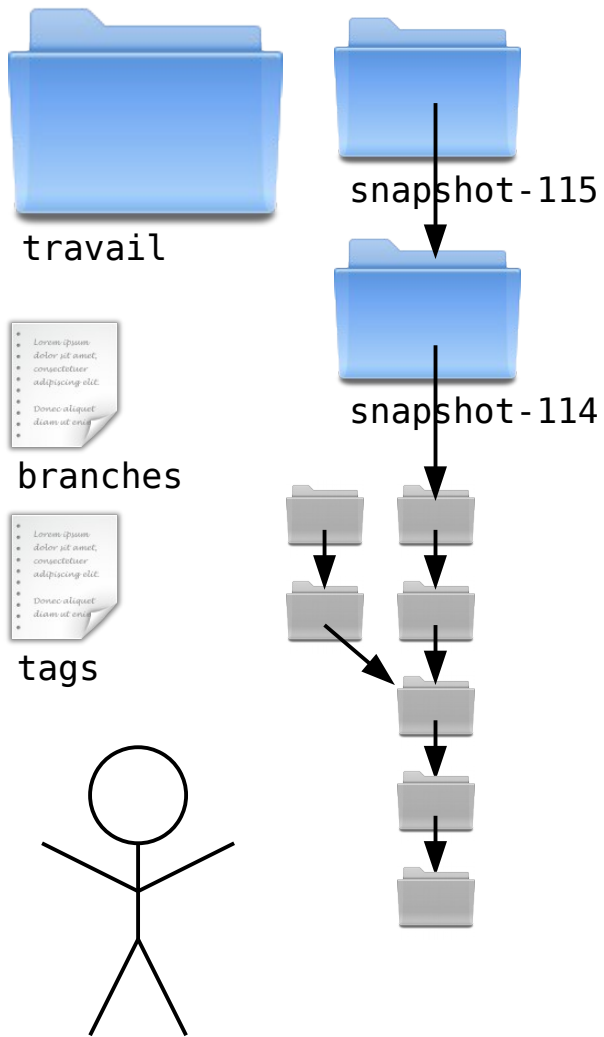
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Distribué



Distribué



Distribué



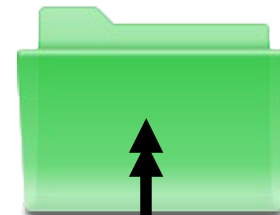
snapshot-114



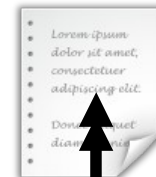
message

2009-05-22 12:12:12
parent: snapshot-113
author: Me <me@me.me>

Blarfle, a cool new
feature; extends the
existing blorg.



snapshot-114



message

2009-05-21 23:45:01
parent: snapshot-113
author: Zoe <zoe@z.oe>

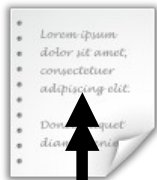
Introduced a new foo,
and reset the bar to
xyzyz.

Distribu  

8ba3441b6b89cad23387ee875f2ae55069291f4b



HASH



message

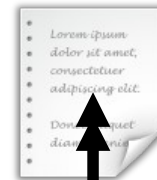
2009-05-22 12:12:12
parent: snapshot-113
author: Me <me@me.me>

Blarfle, a cool new
feature; extends the
existing blorg.

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HASH

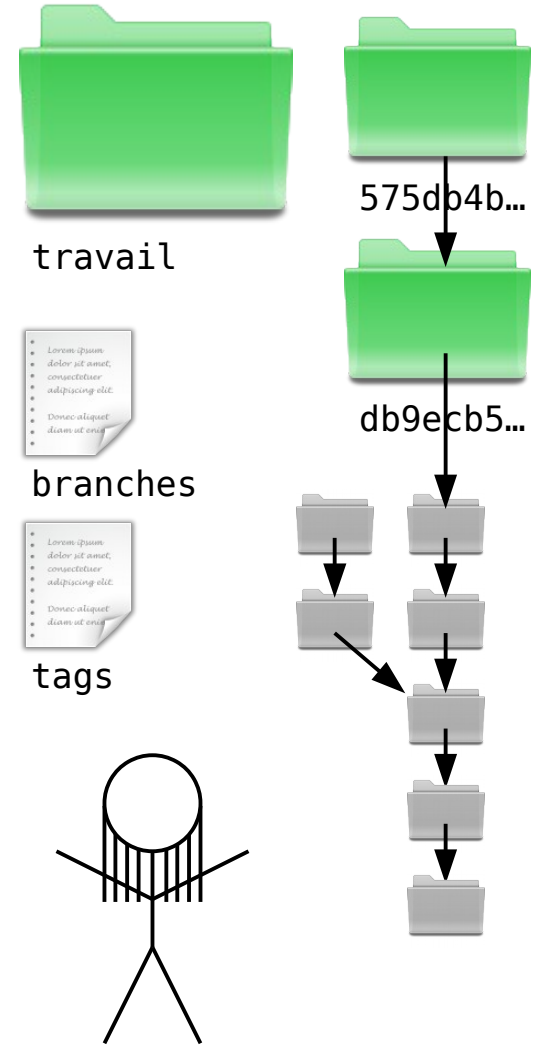
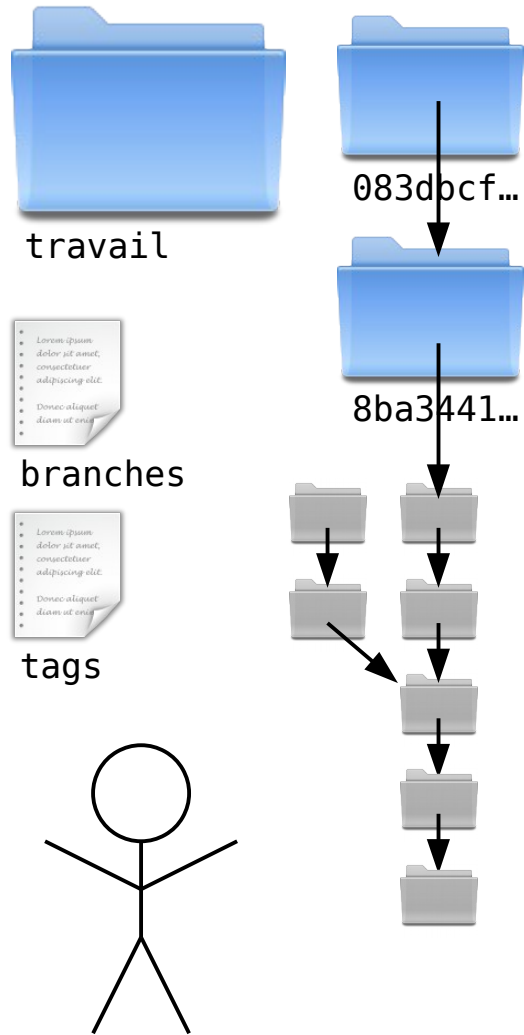


message

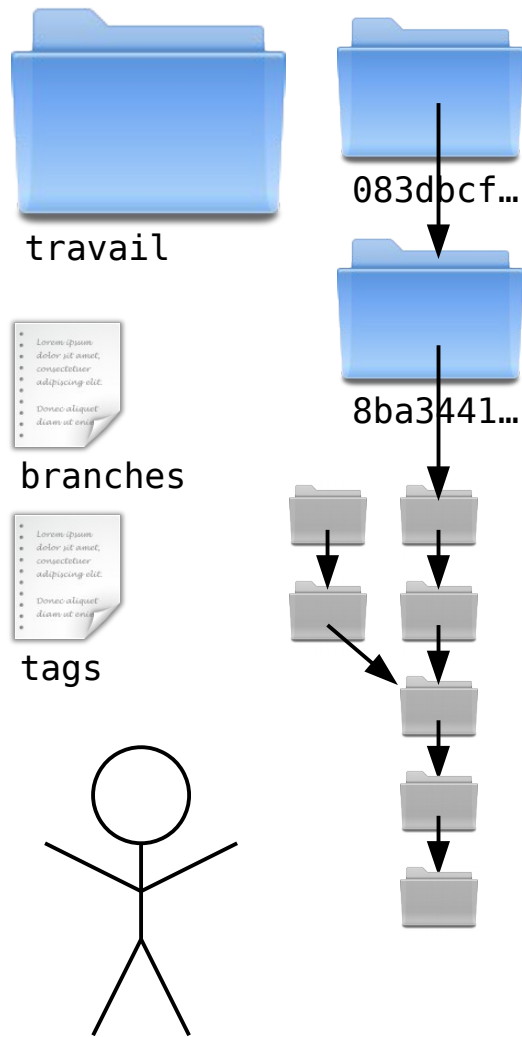
2009-05-21 23:45:01
parent: snapshot-113
author: Zoe <zoe@z.oe>

Introduced a new foo,
and reset the bar to
xyzyz.

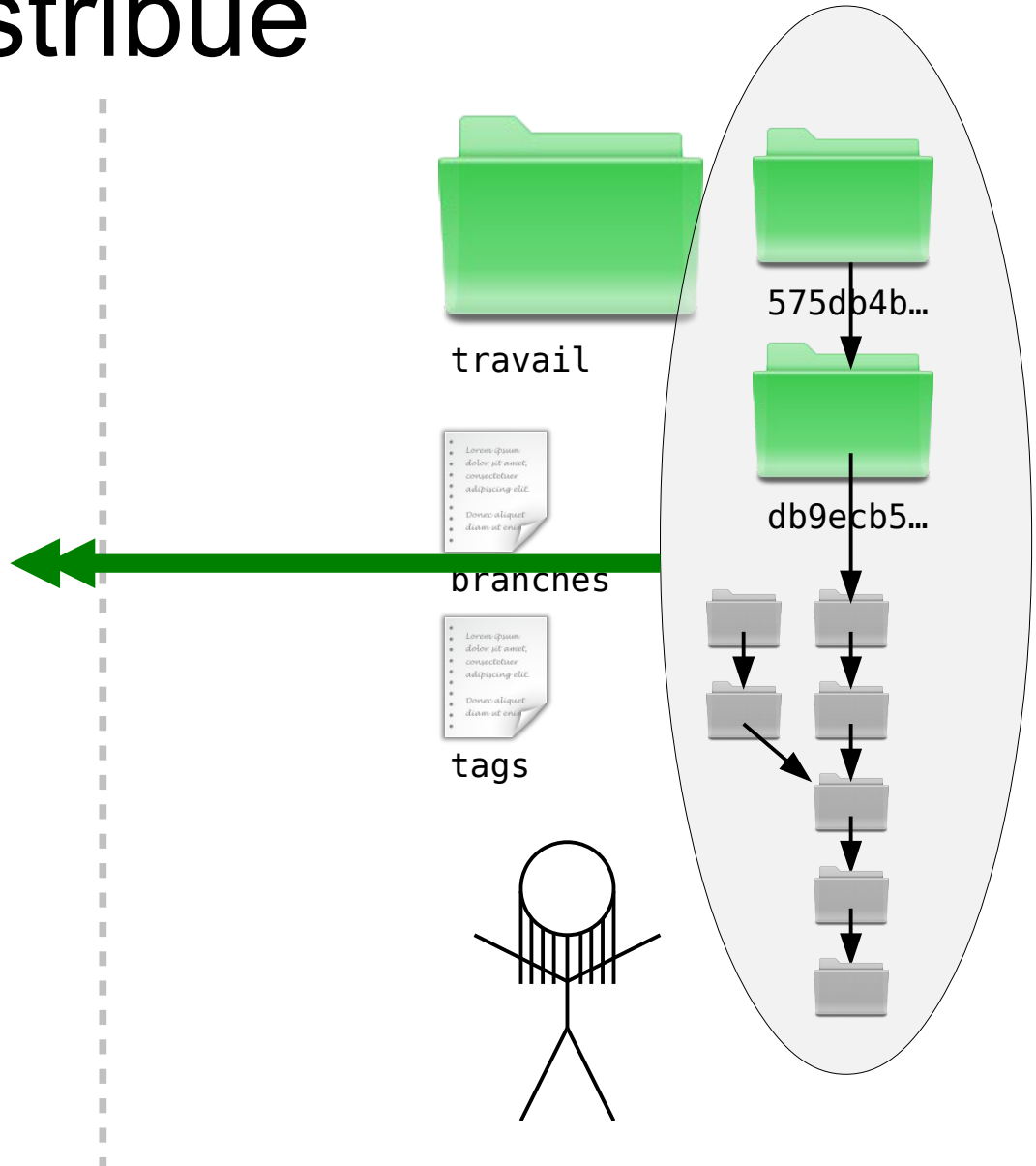
Distribué



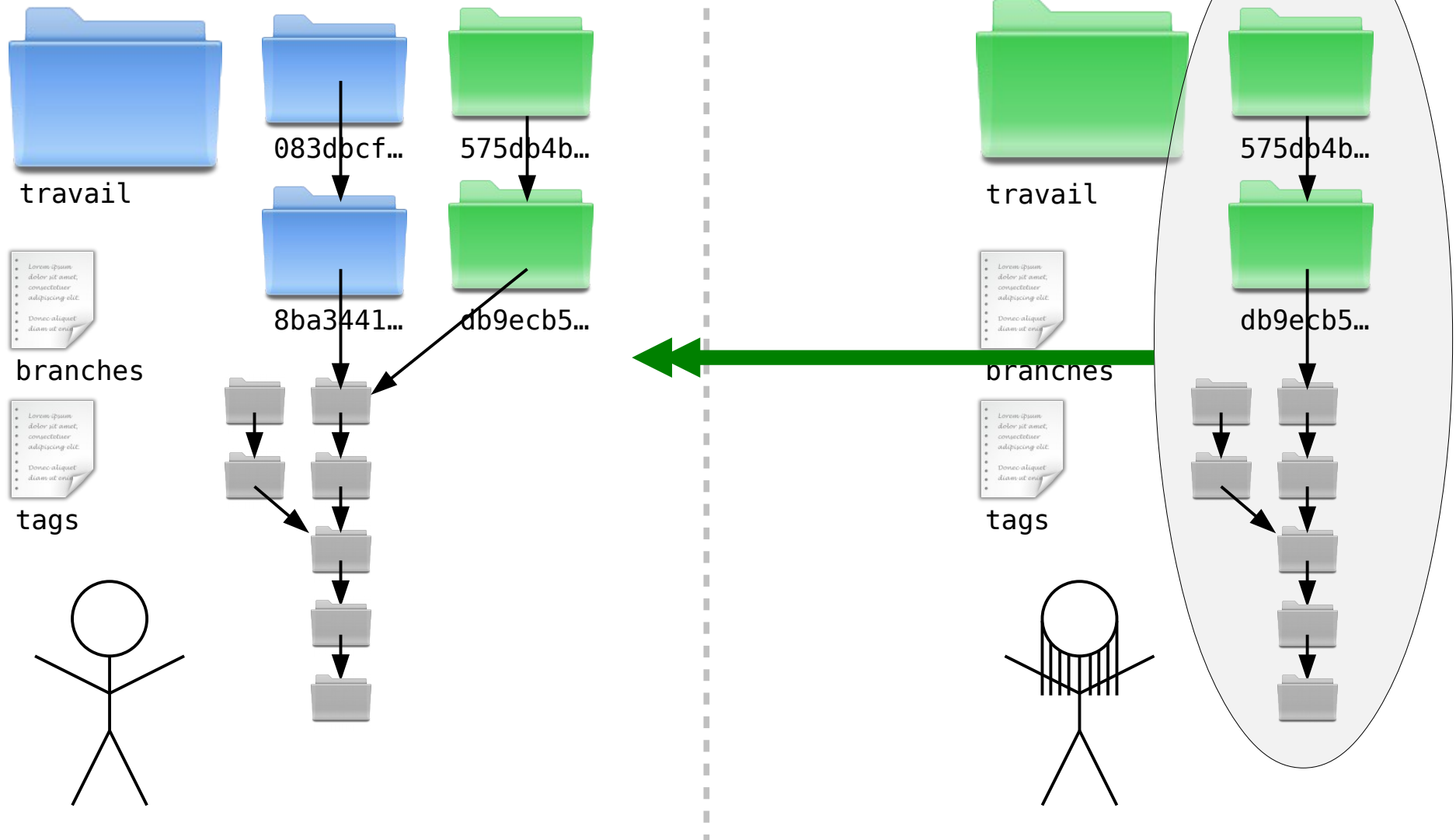
Distribué



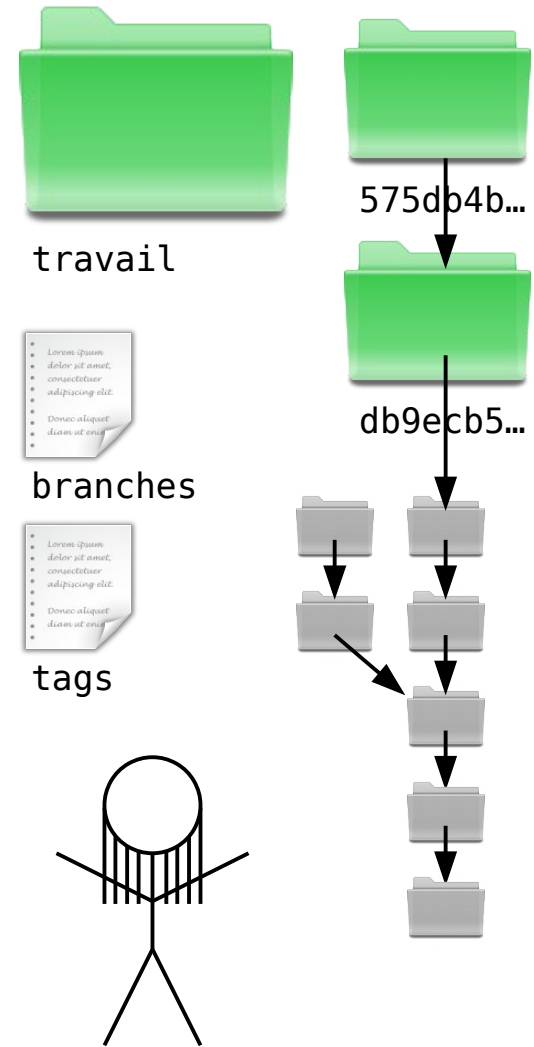
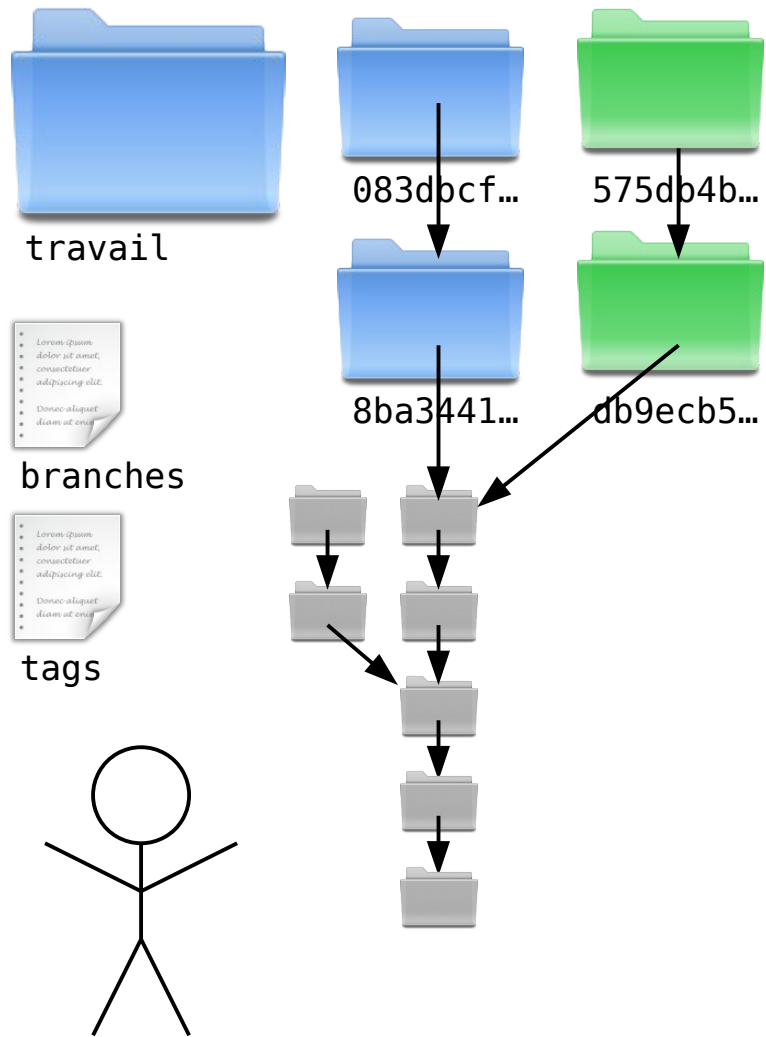
?



Distribué



Distribué



Déconnecté



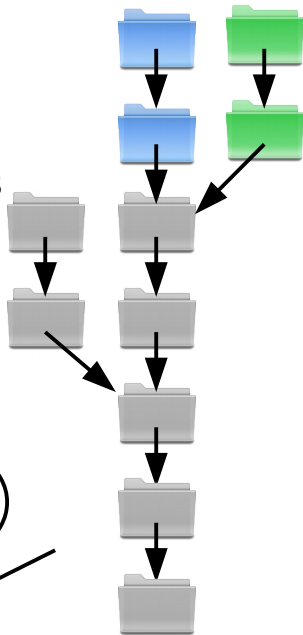
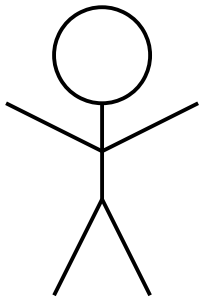
travail



branches



tags



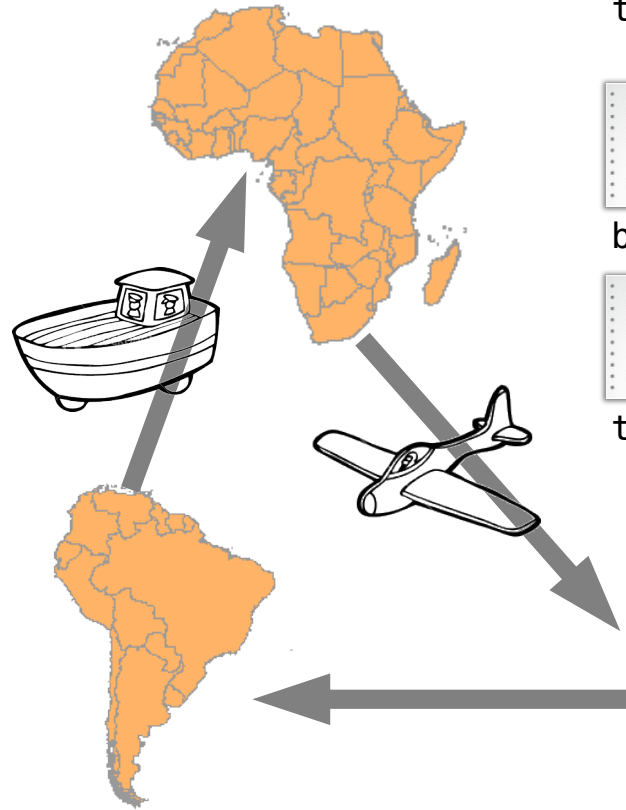
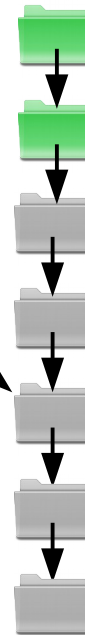
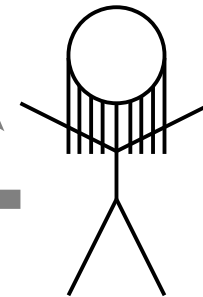
travail



branches



tags



Déconnecté



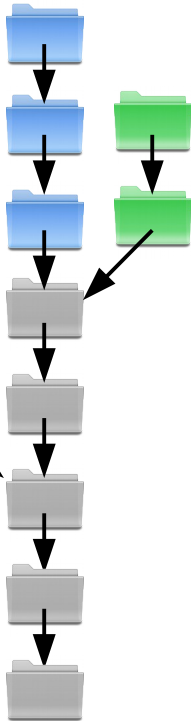
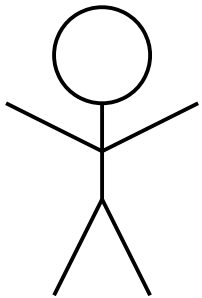
travail



branches



tags



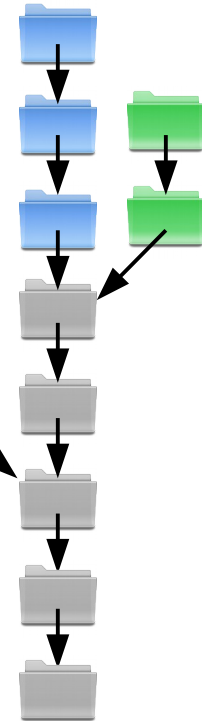
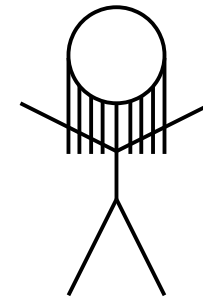
travail



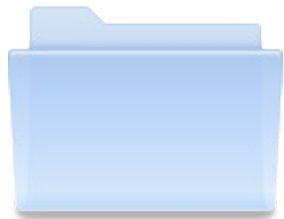
branches



tags



(simplifions la représentation)



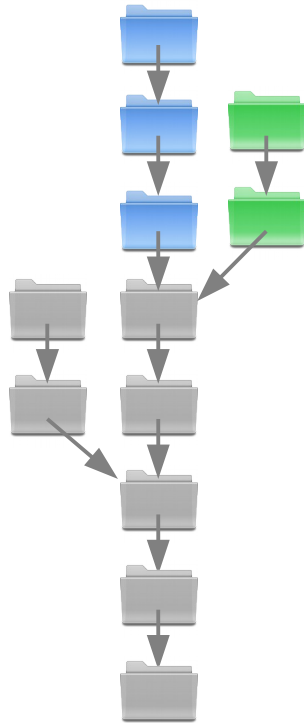
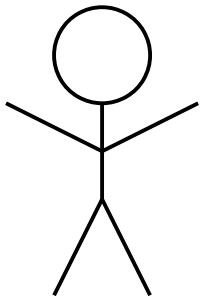
travail



branches



tags



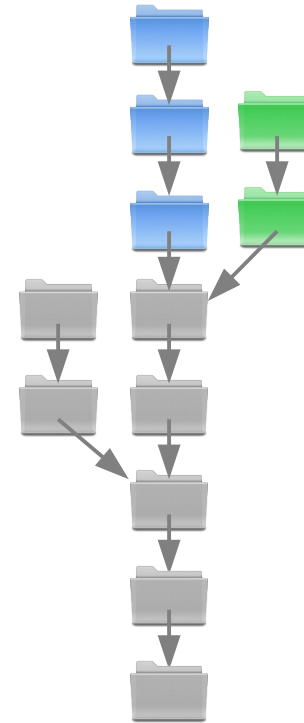
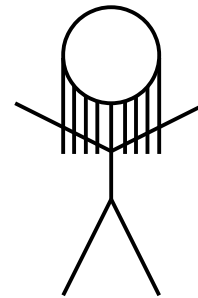
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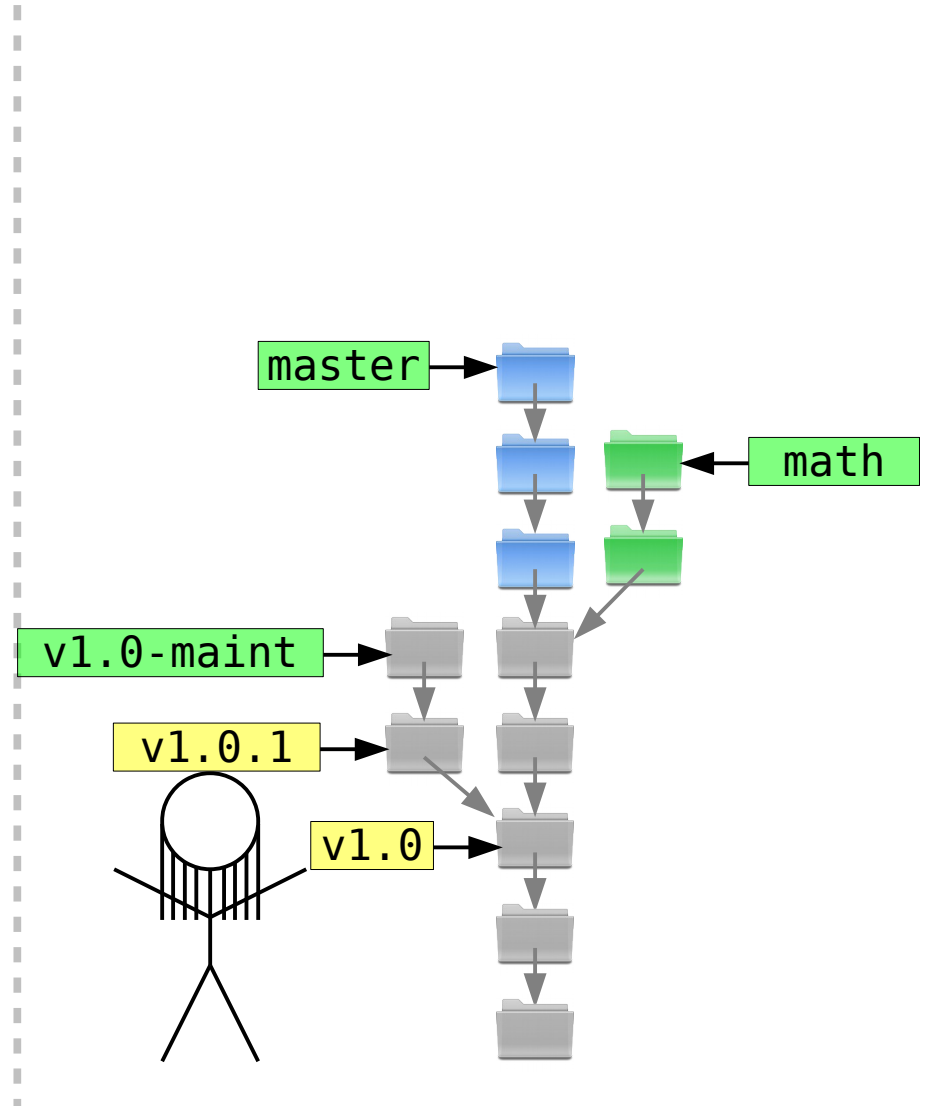
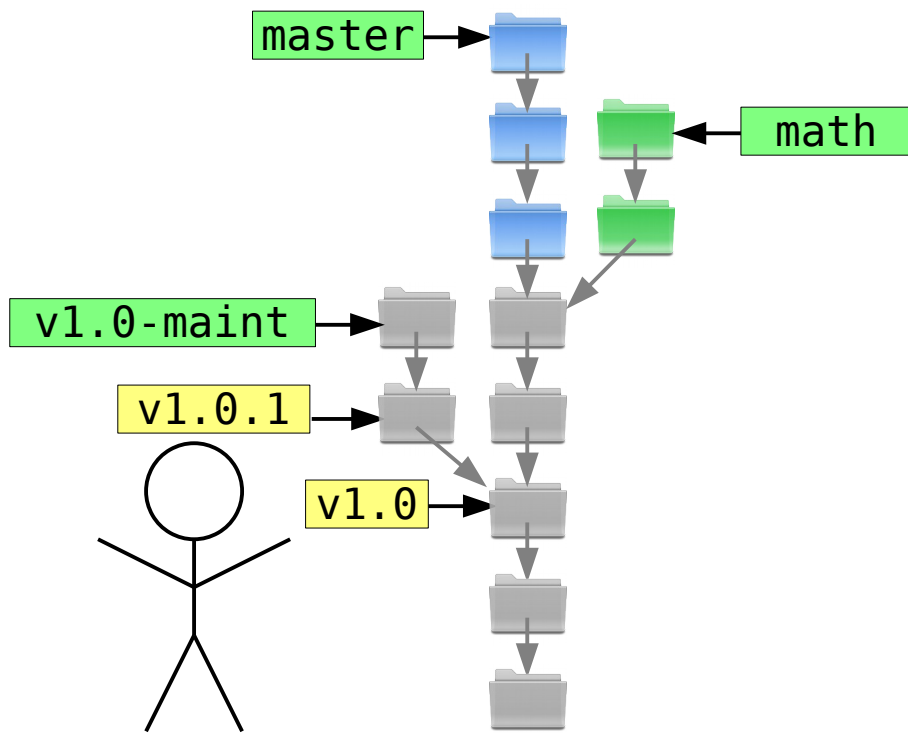
branches



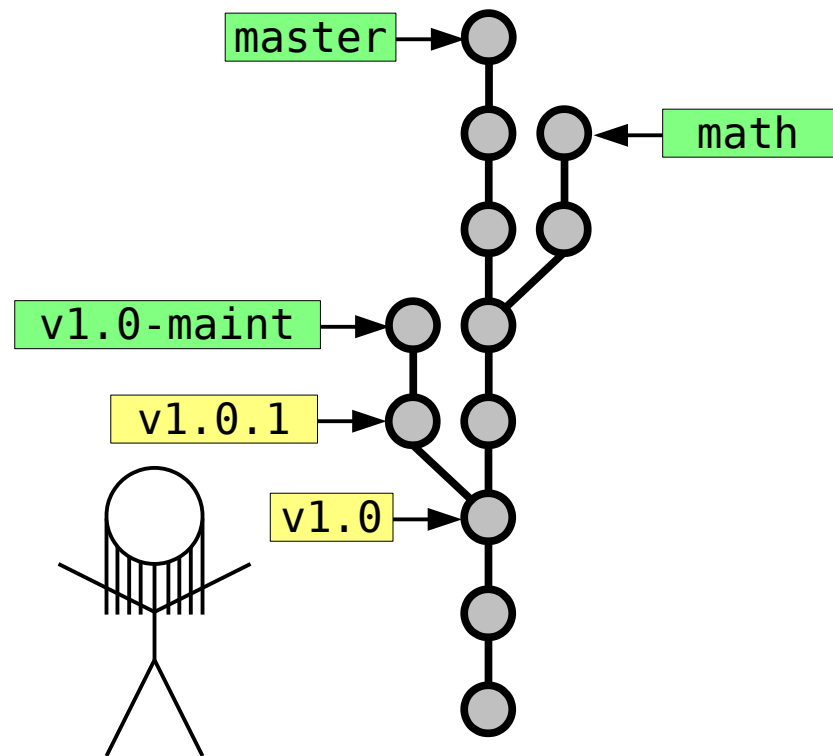
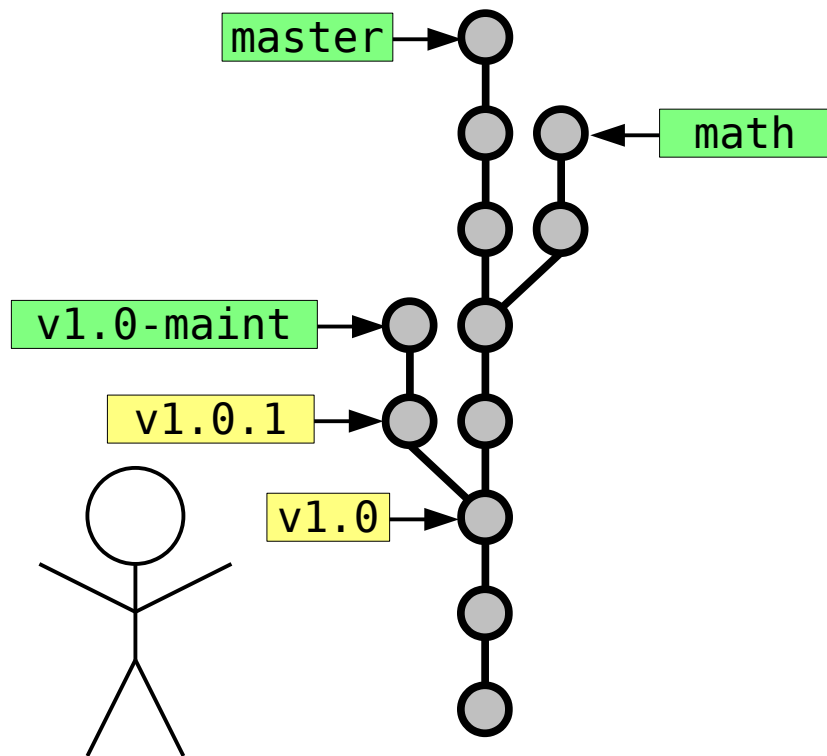
tags



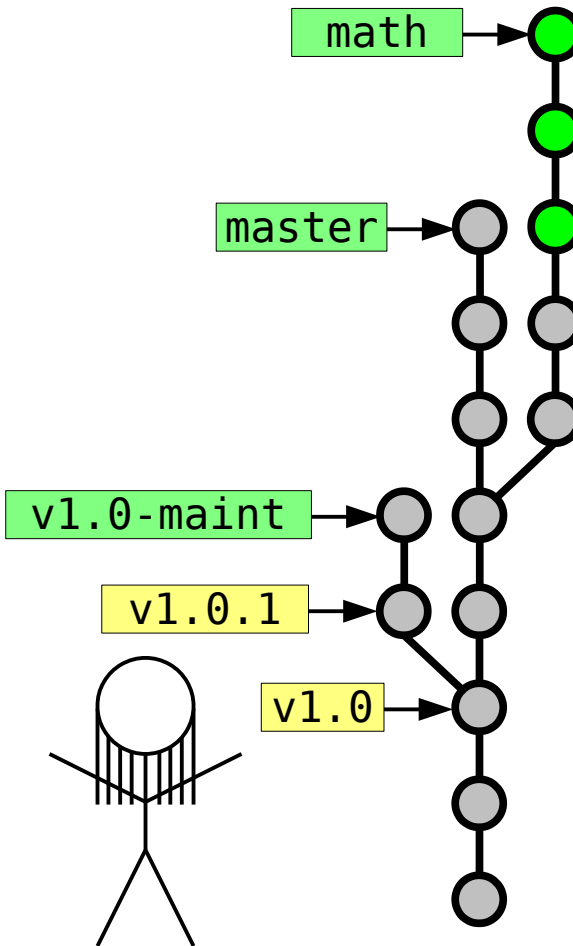
(simplifions la représentation)



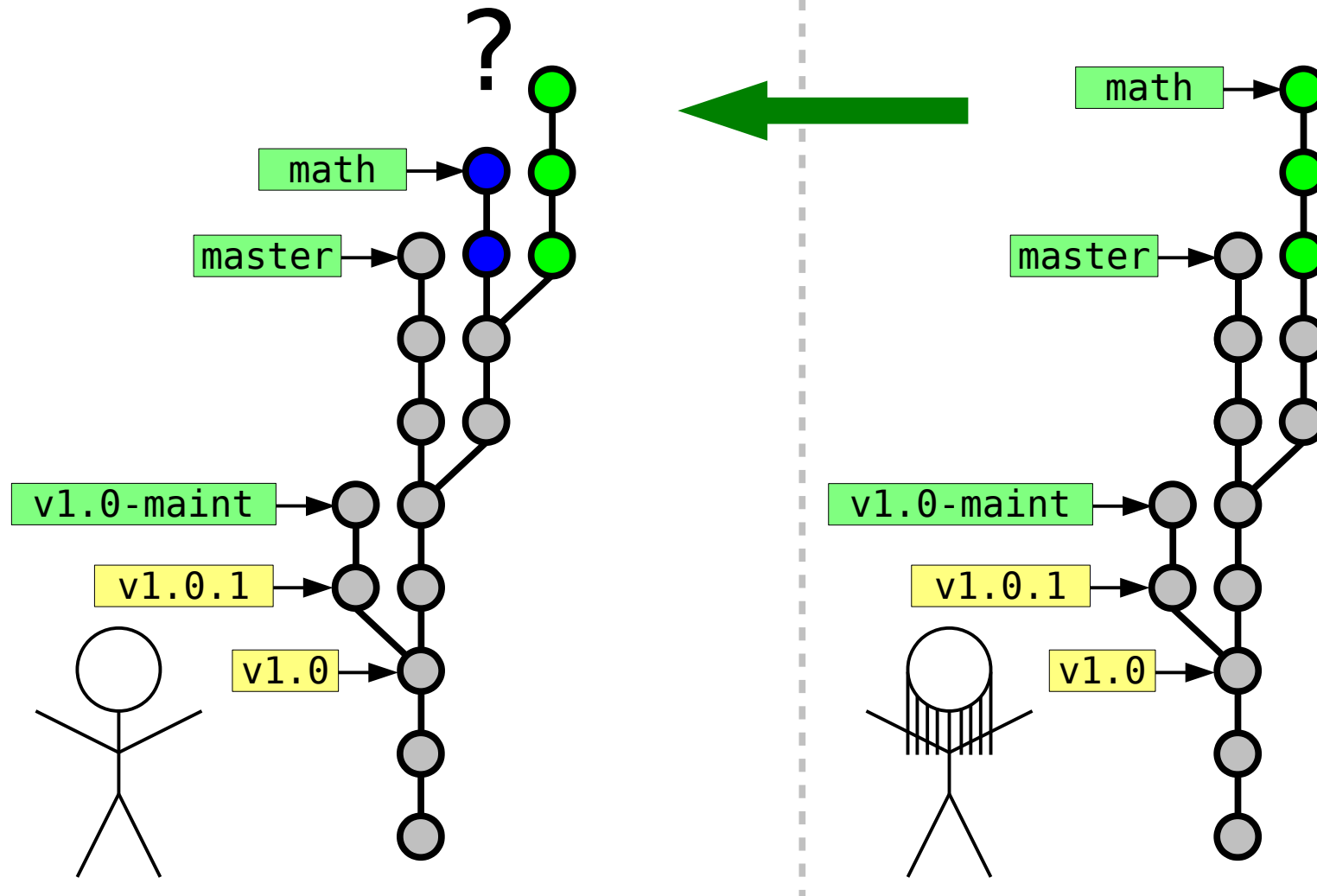
(simplifions la représentation)



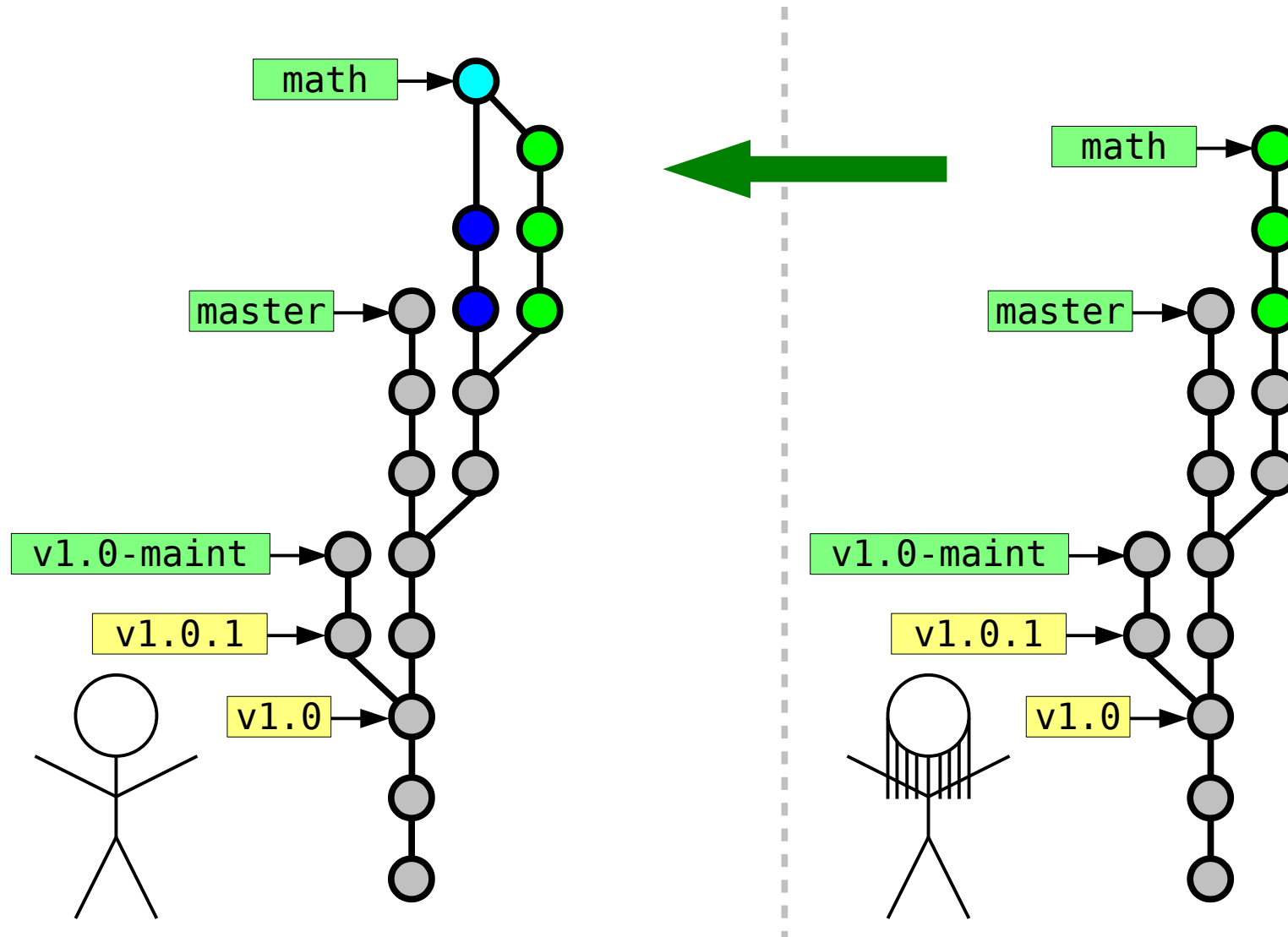
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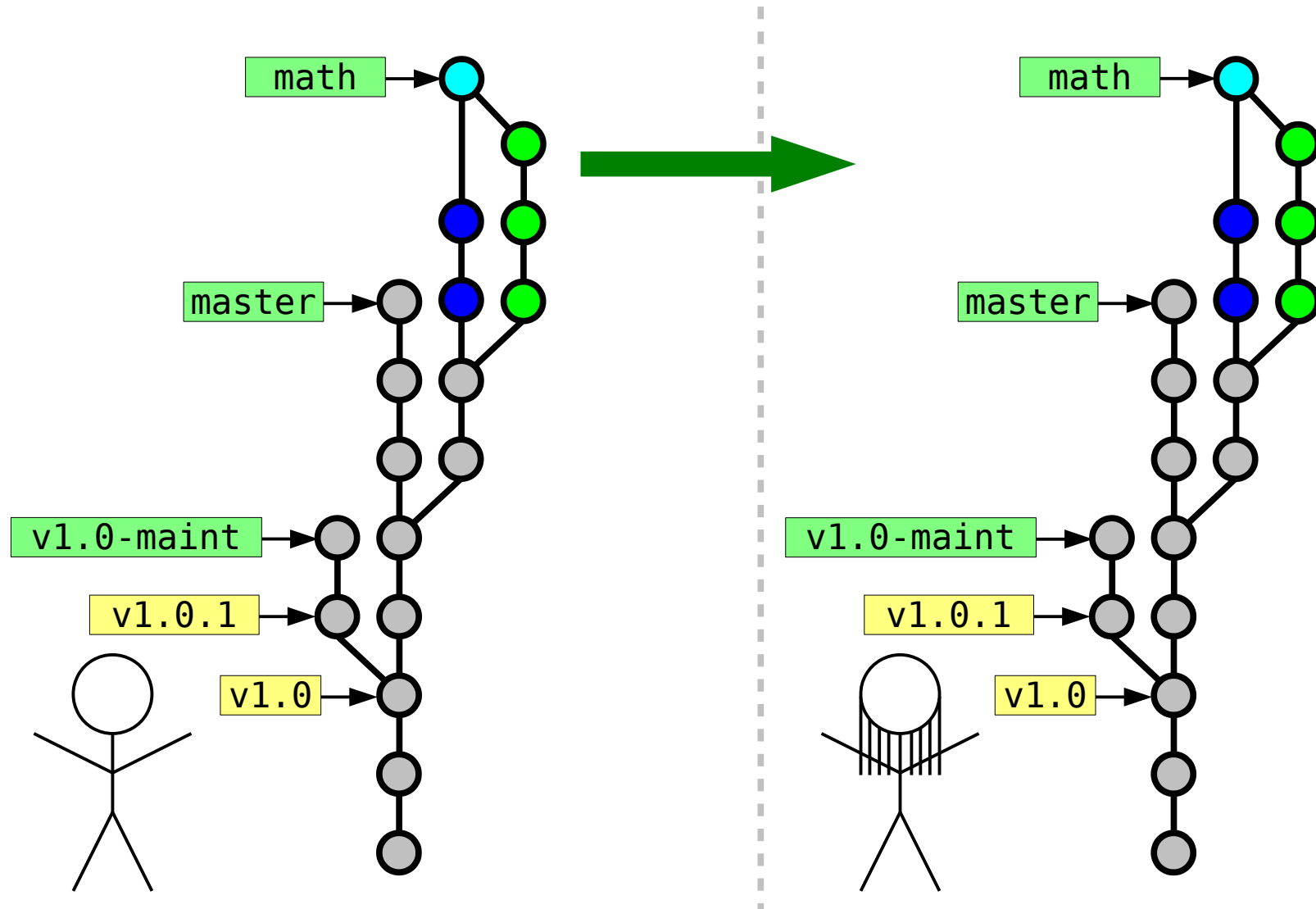
Merges



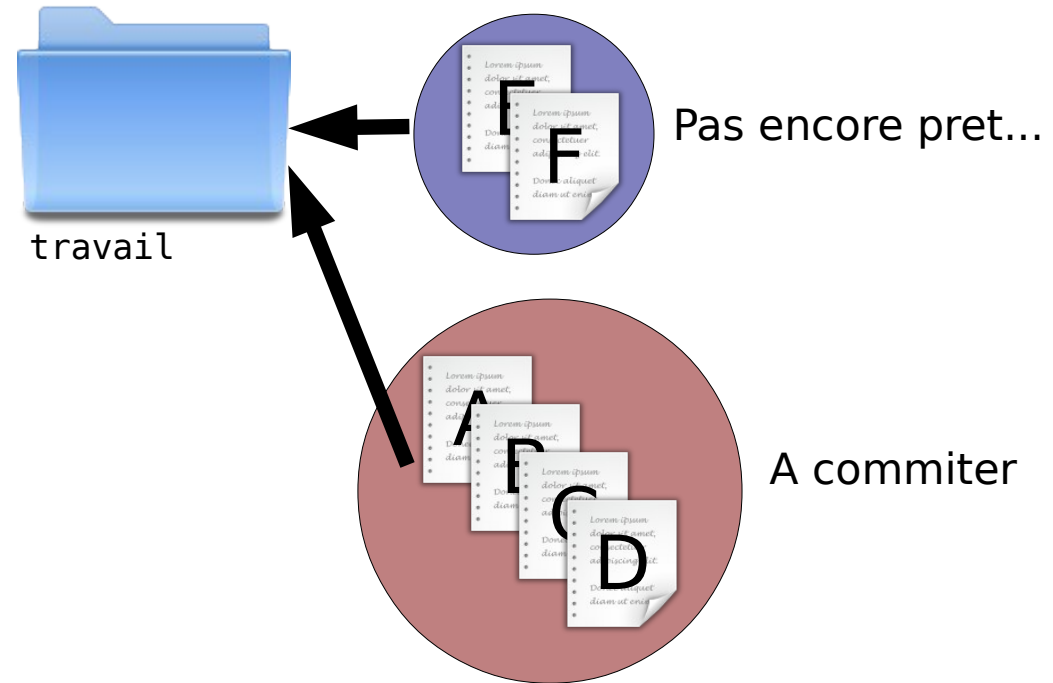
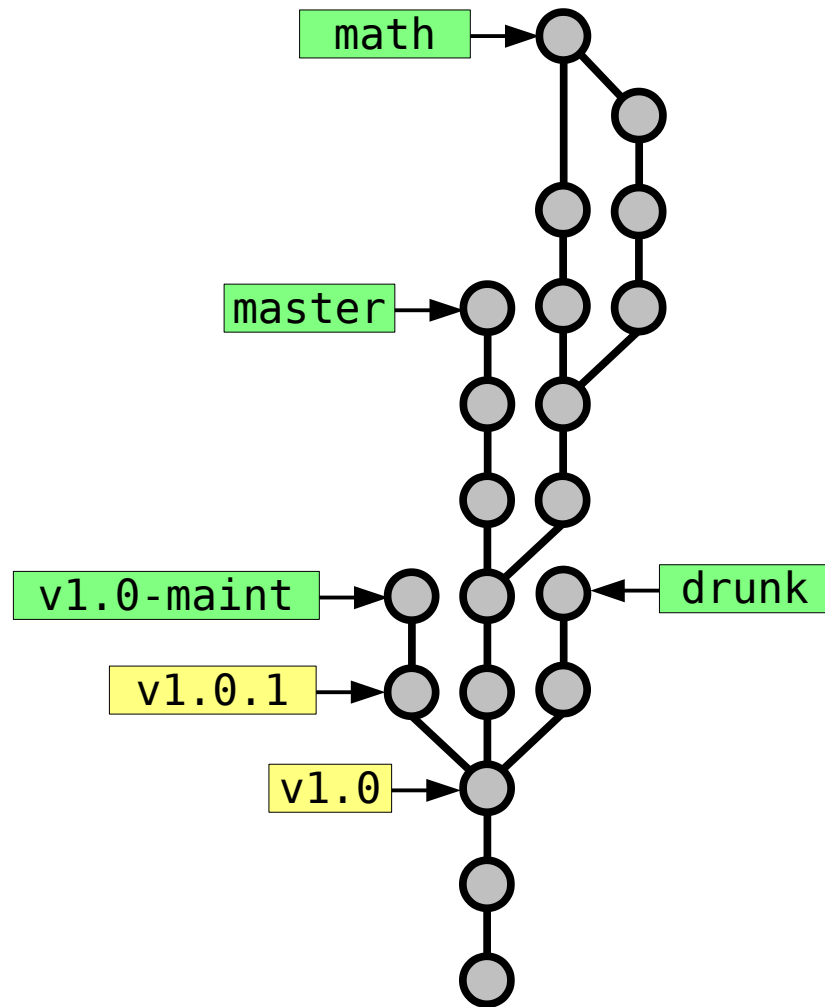
Merges



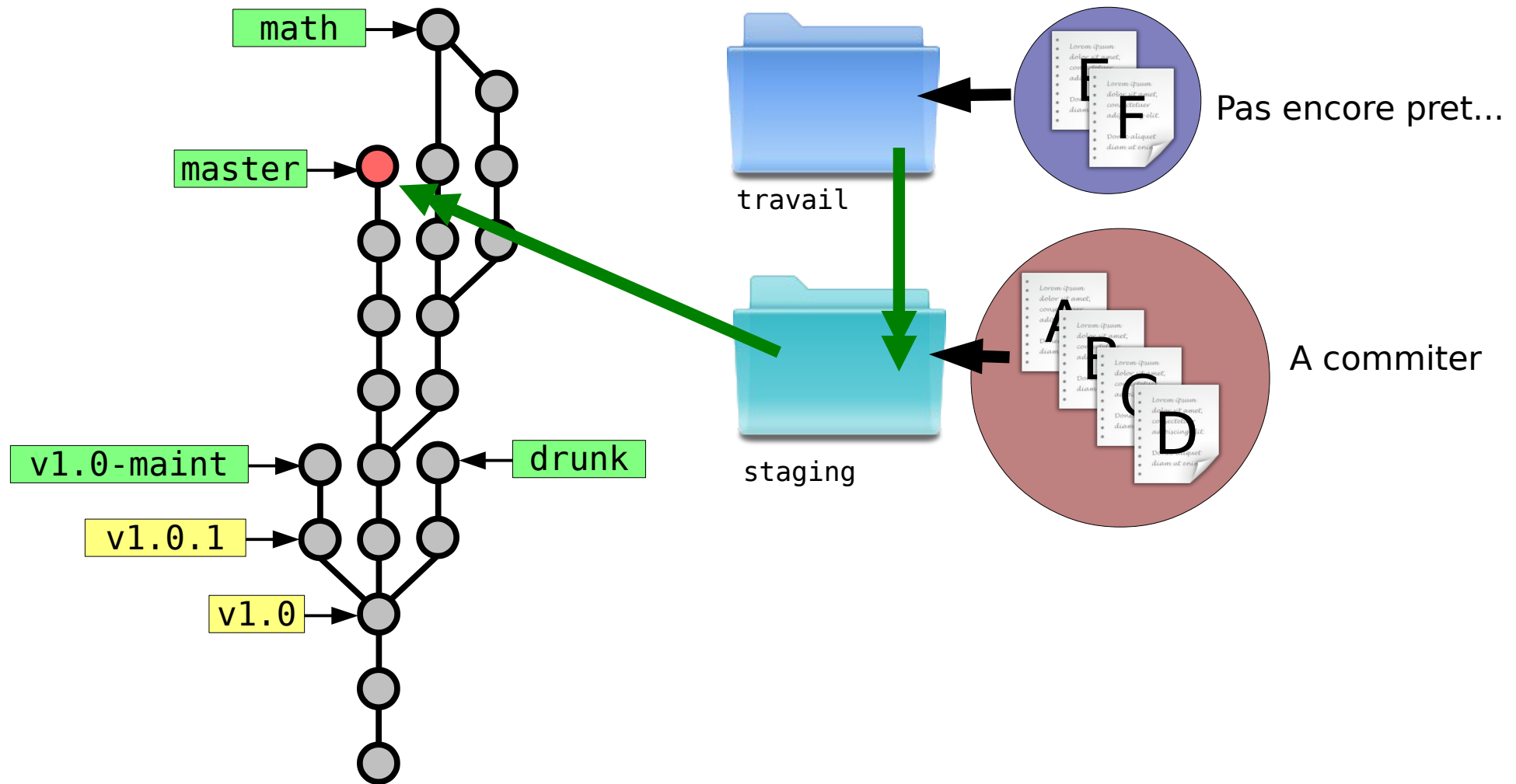
Merges



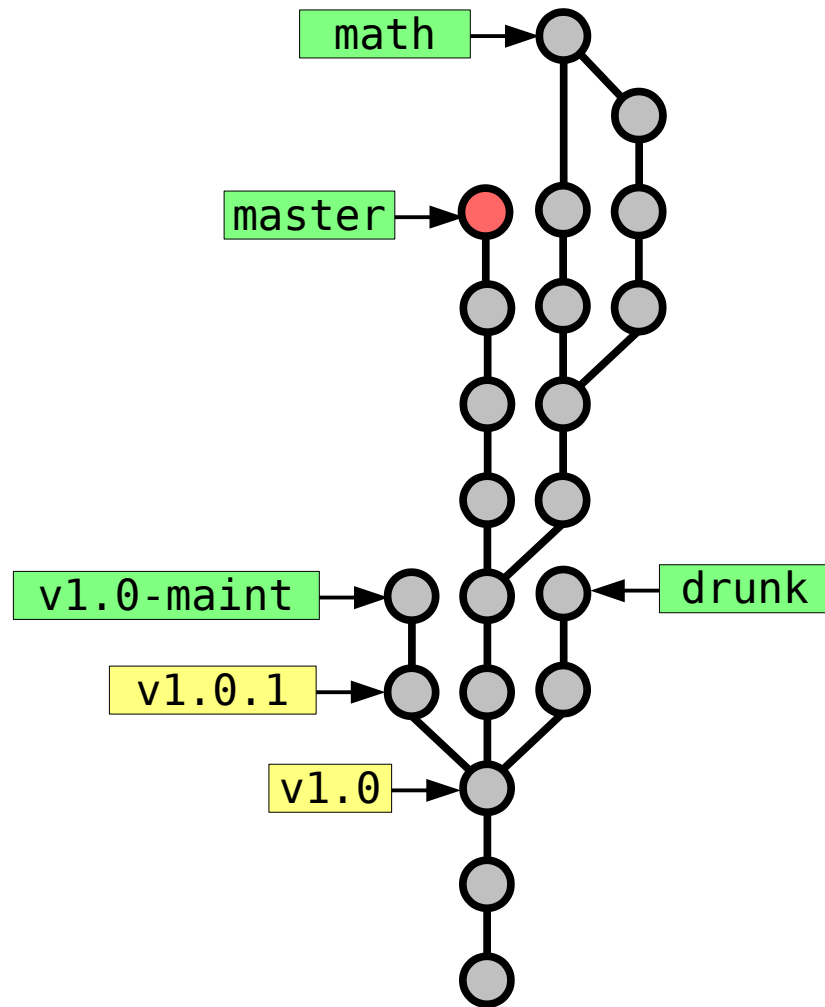
Staging Area



Staging Area



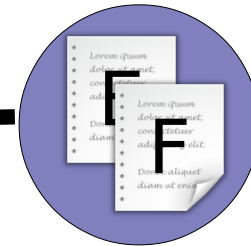
Staging Area



travail

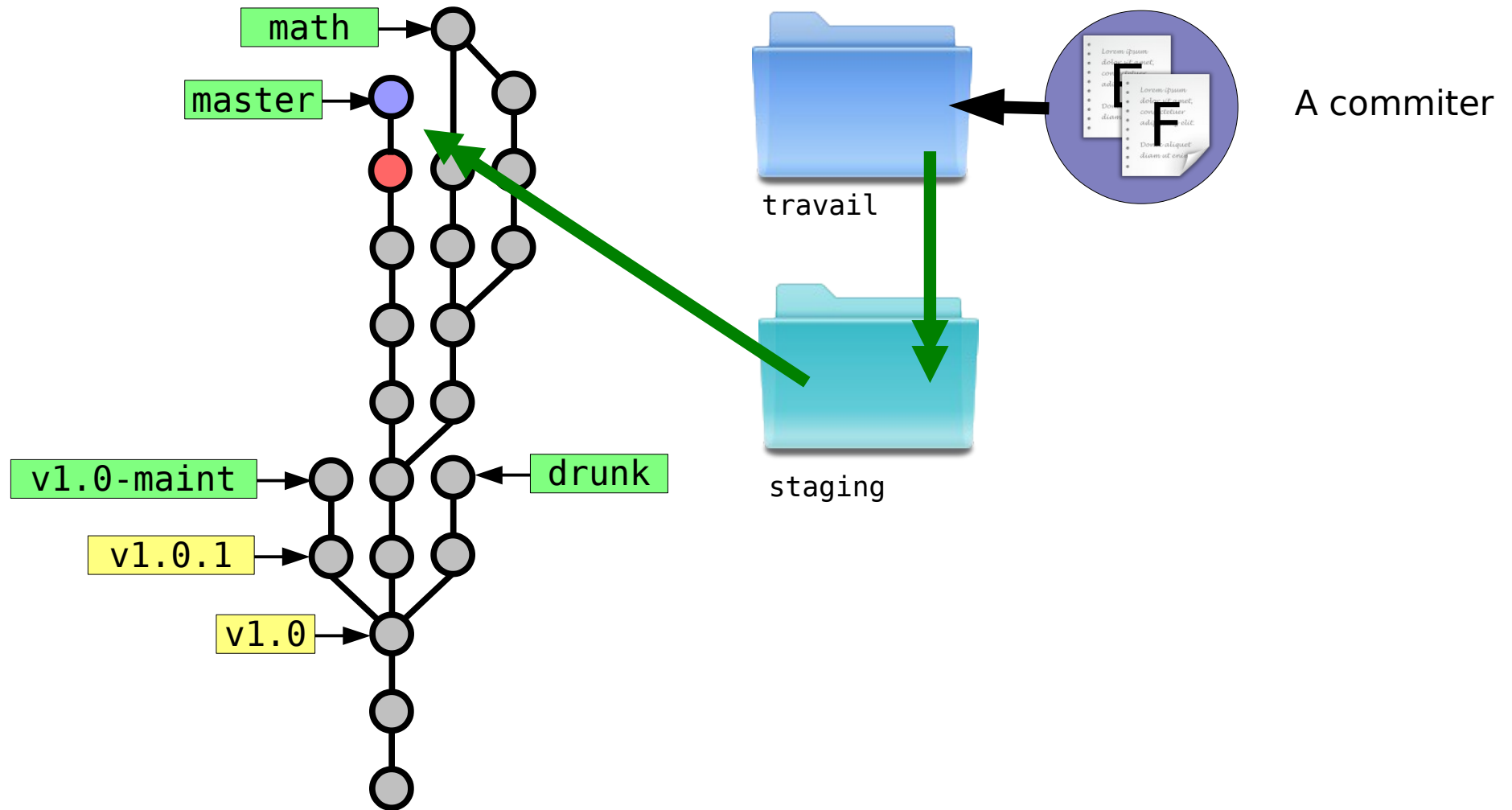


staging

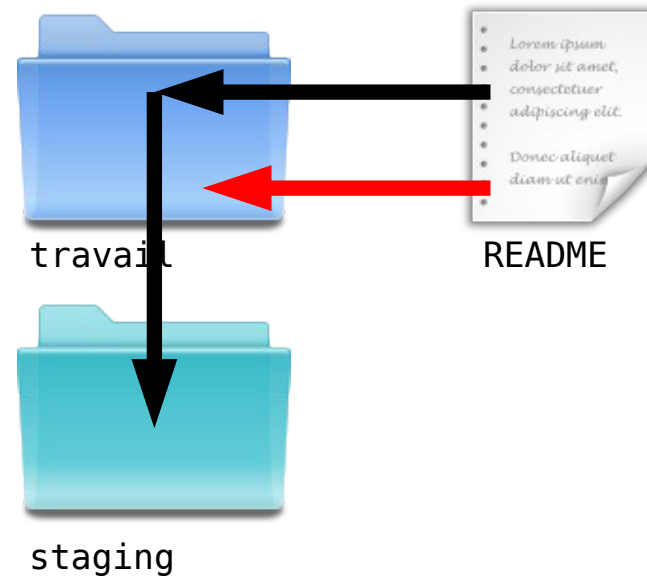
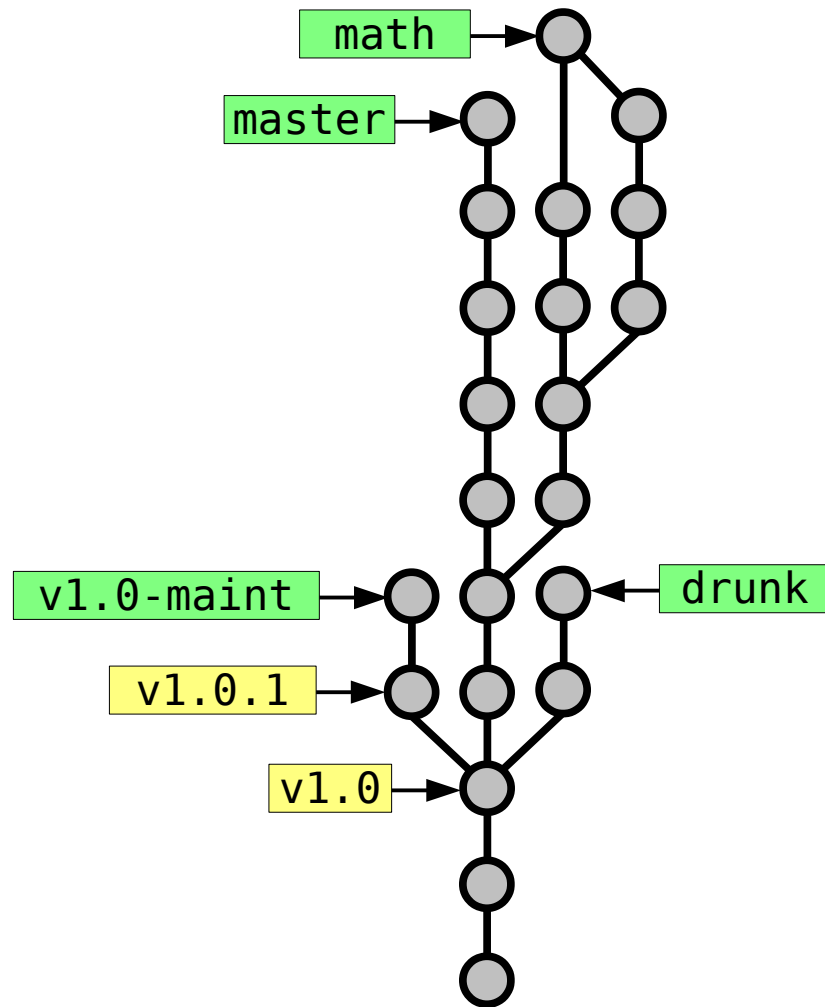


Pas encore pret...

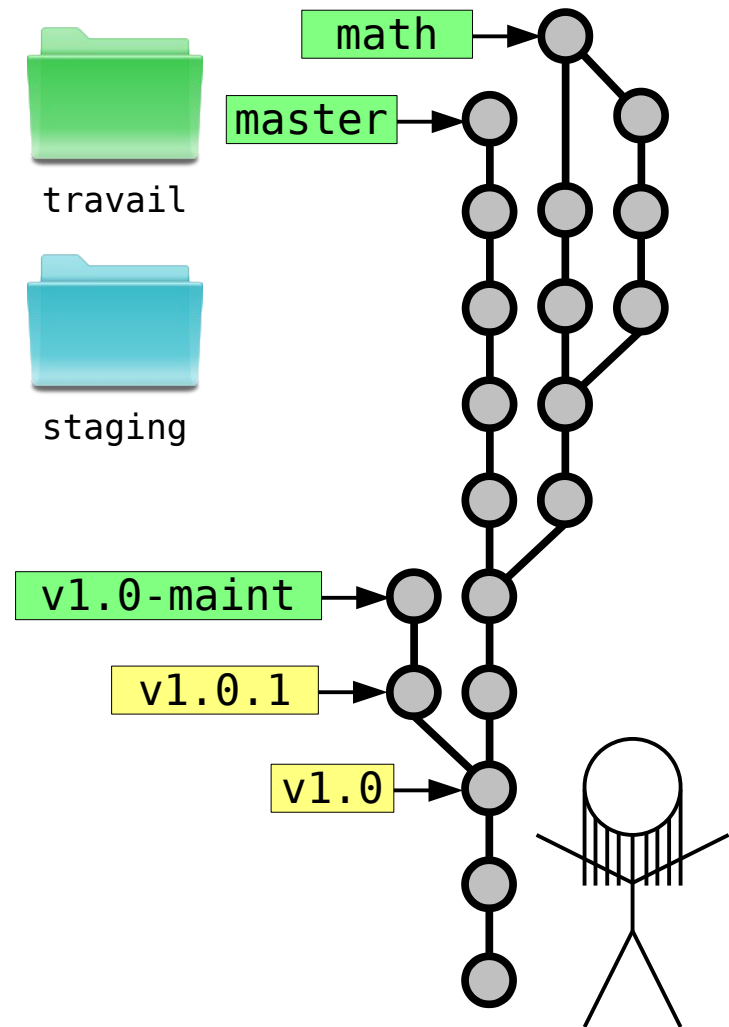
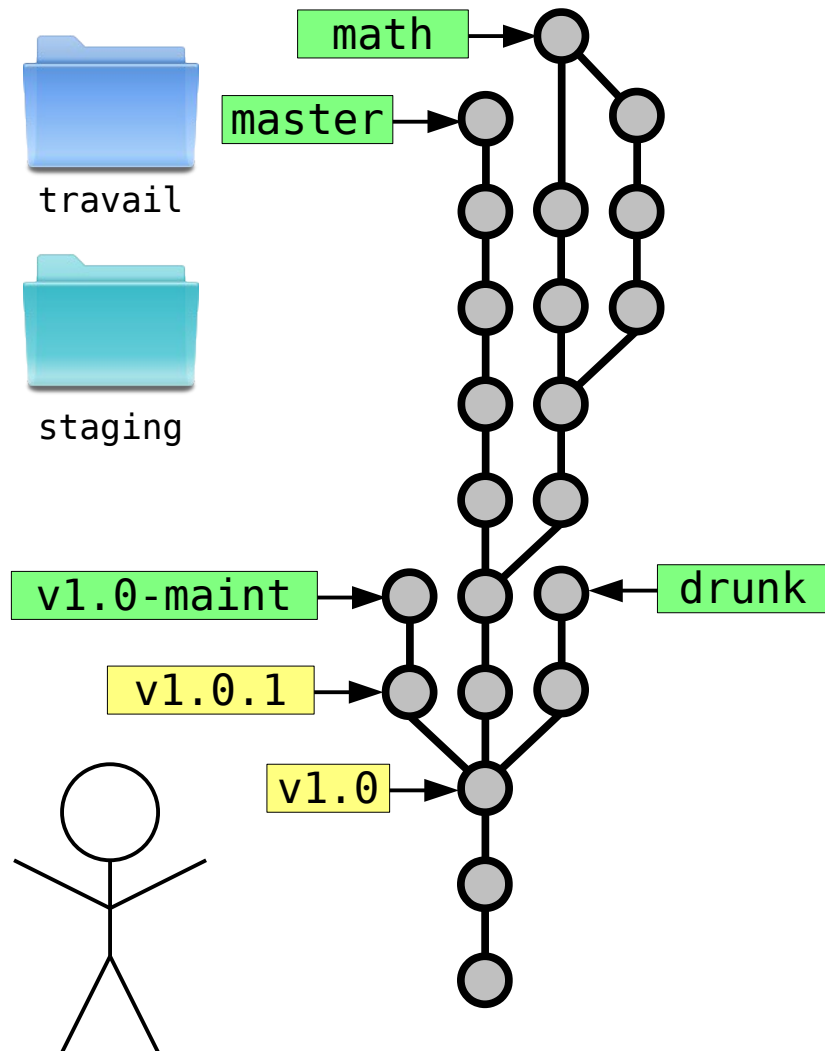
Staging Area



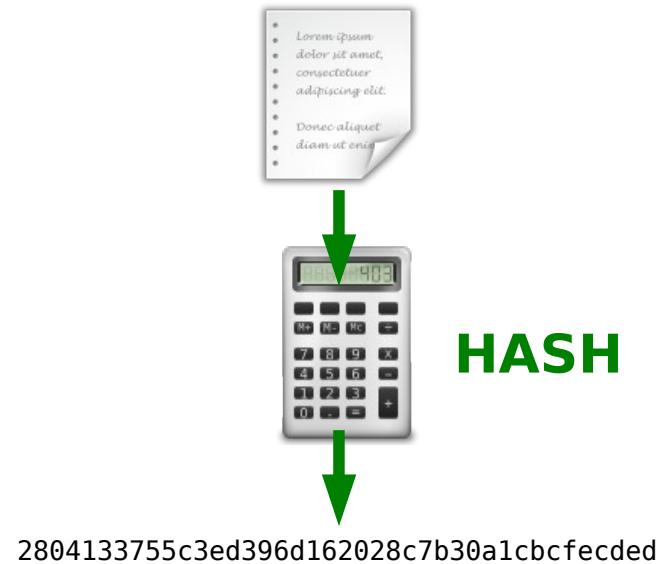
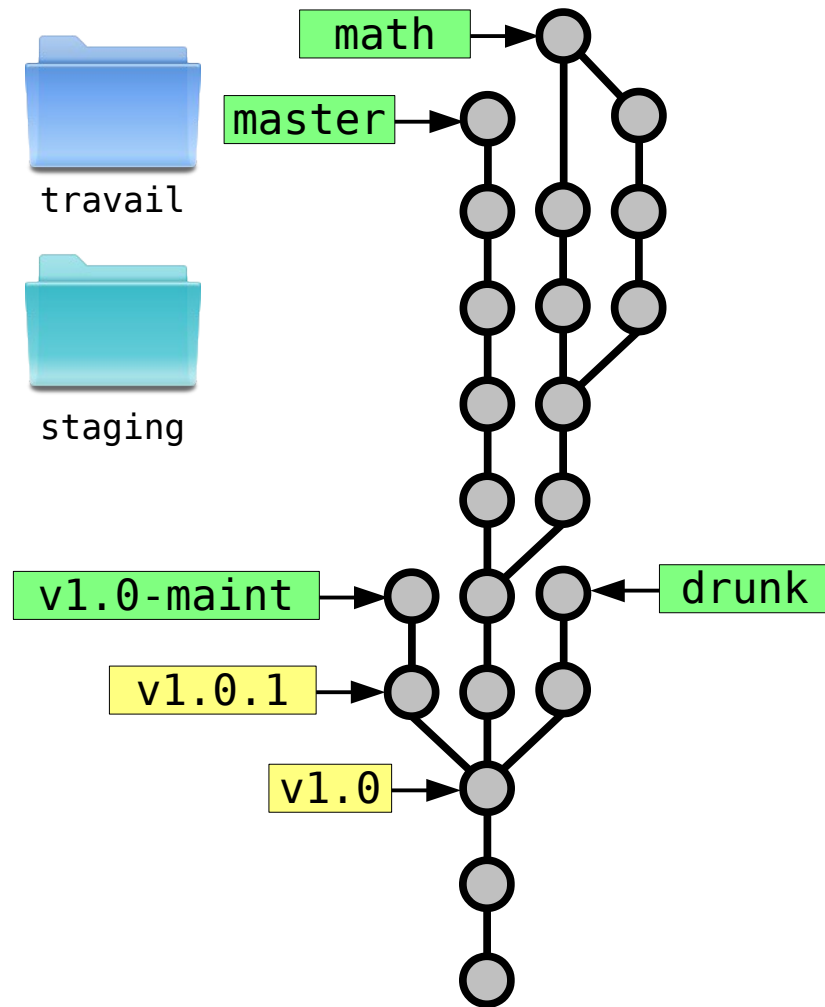
Staging



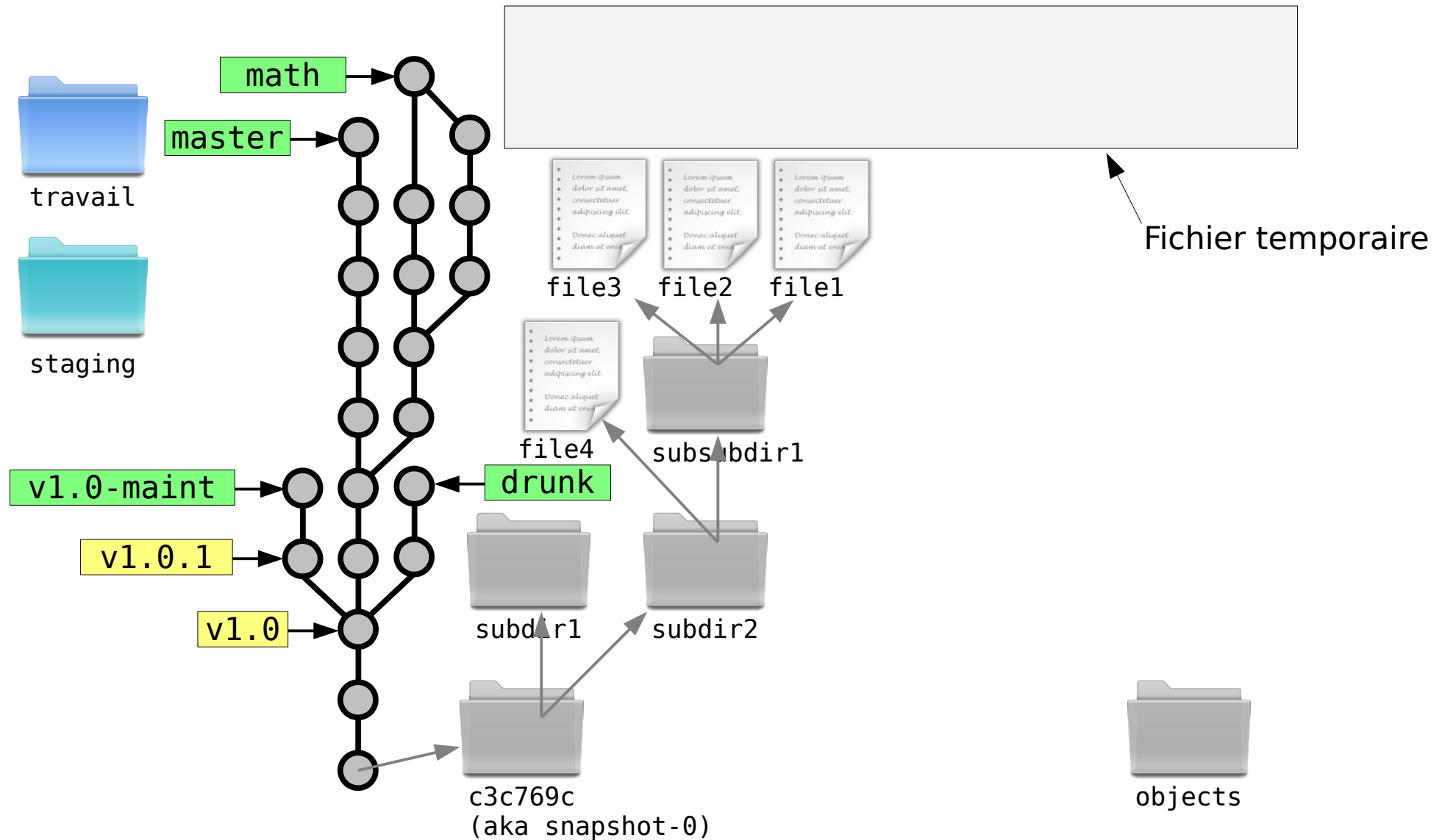
Supprimer les doublons



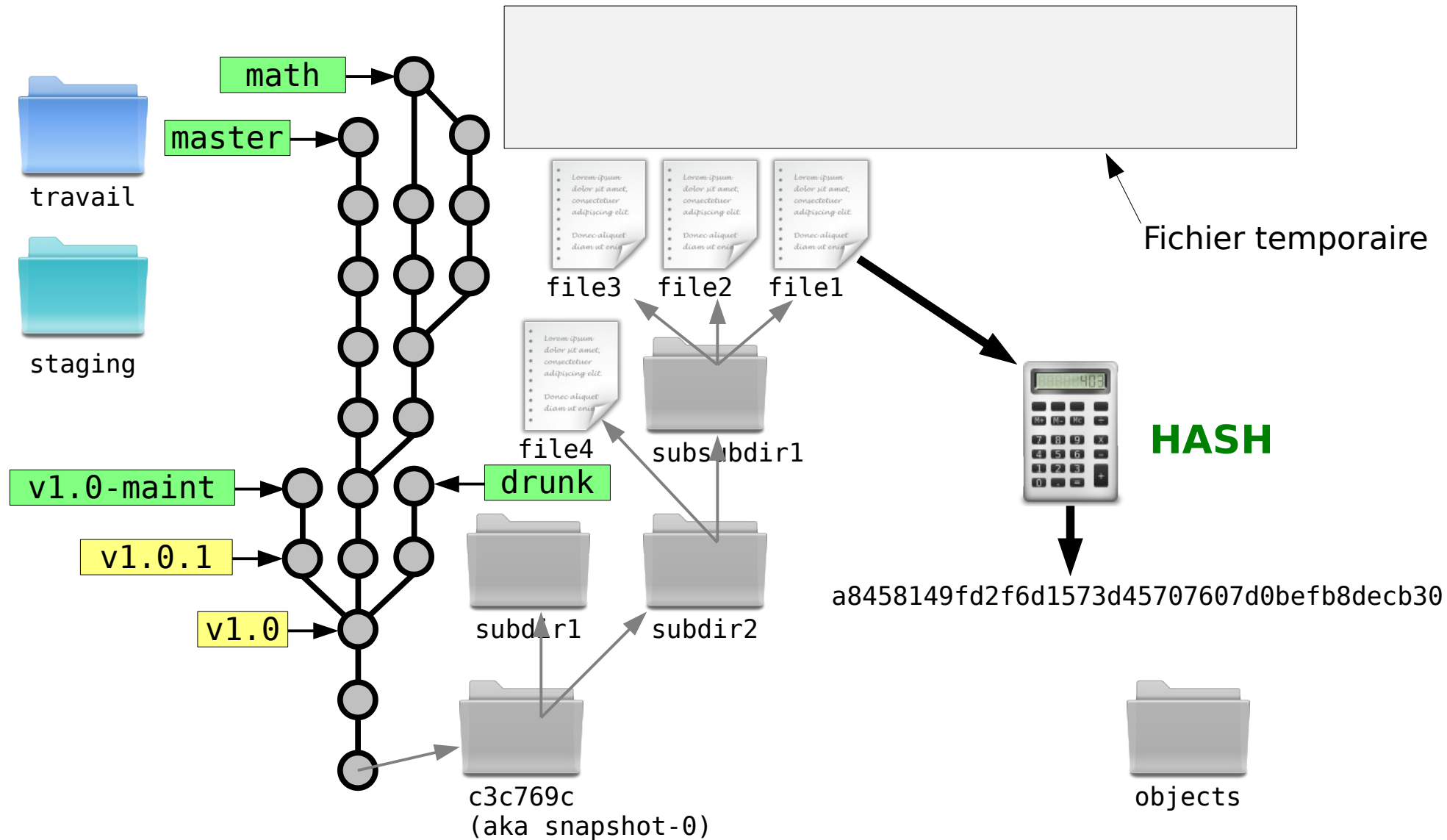
Supprimer les doublons



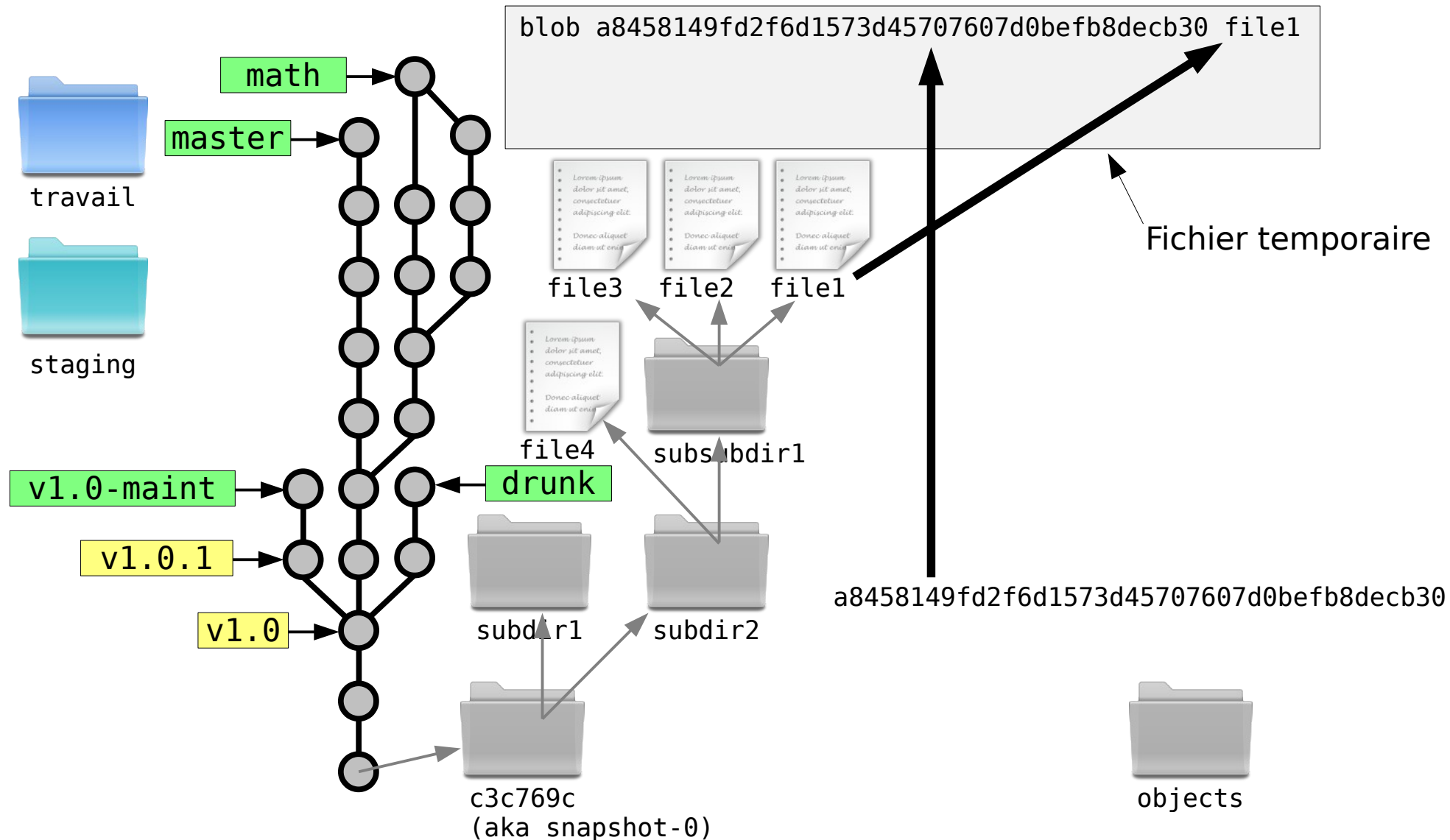
Supprimer les doublons



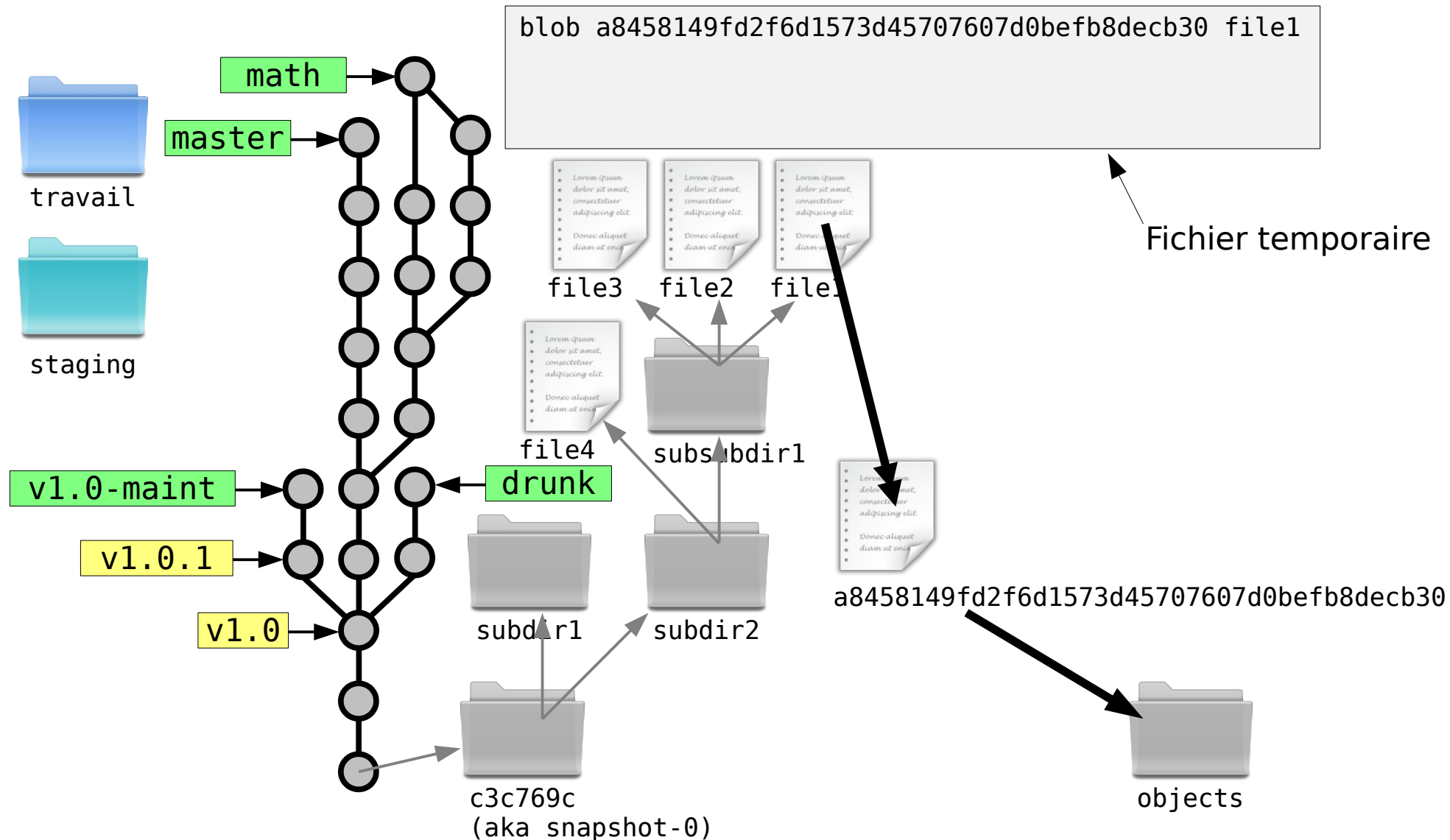
Supprimer les doublons



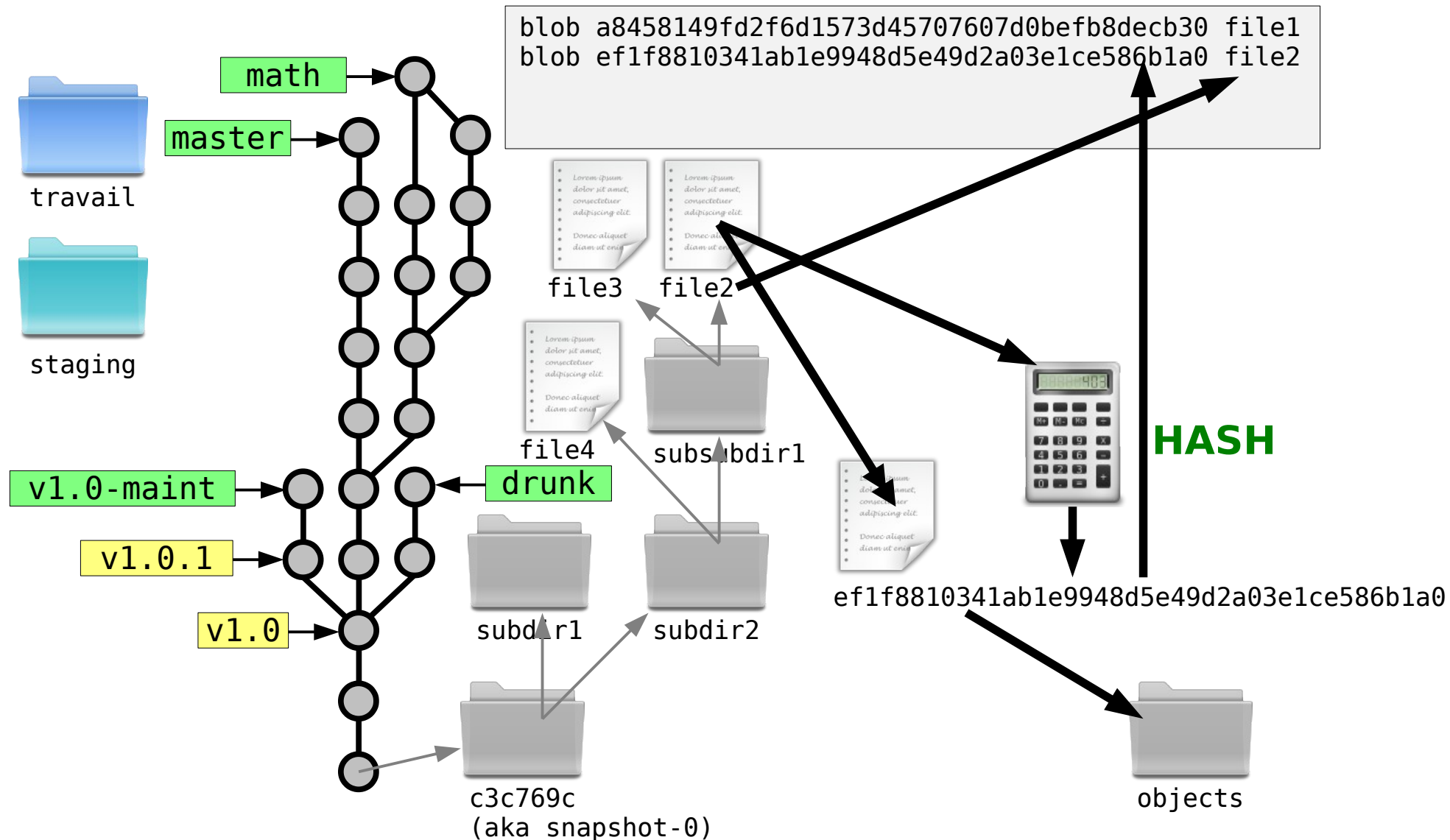
Supprimer les doublons



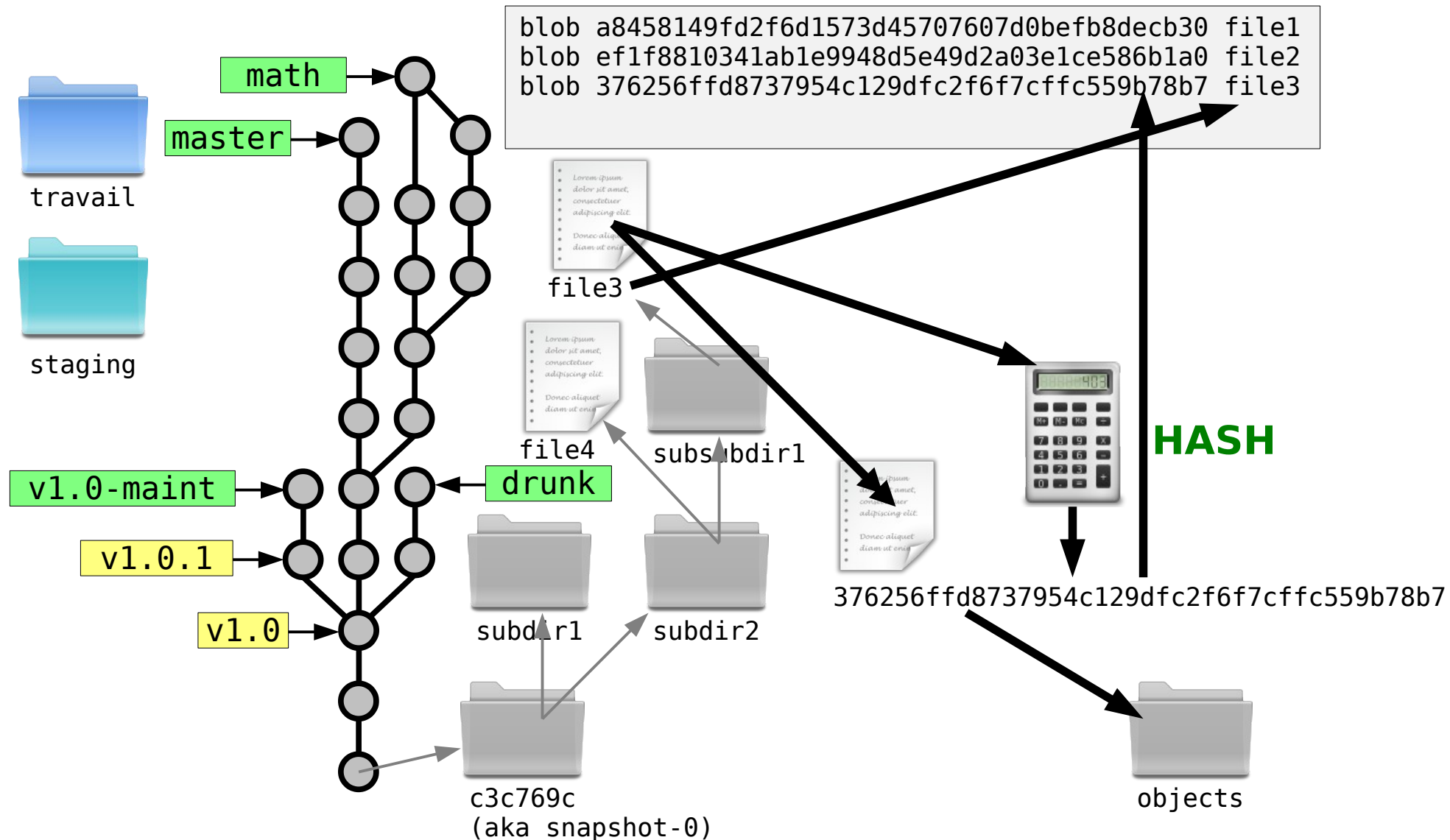
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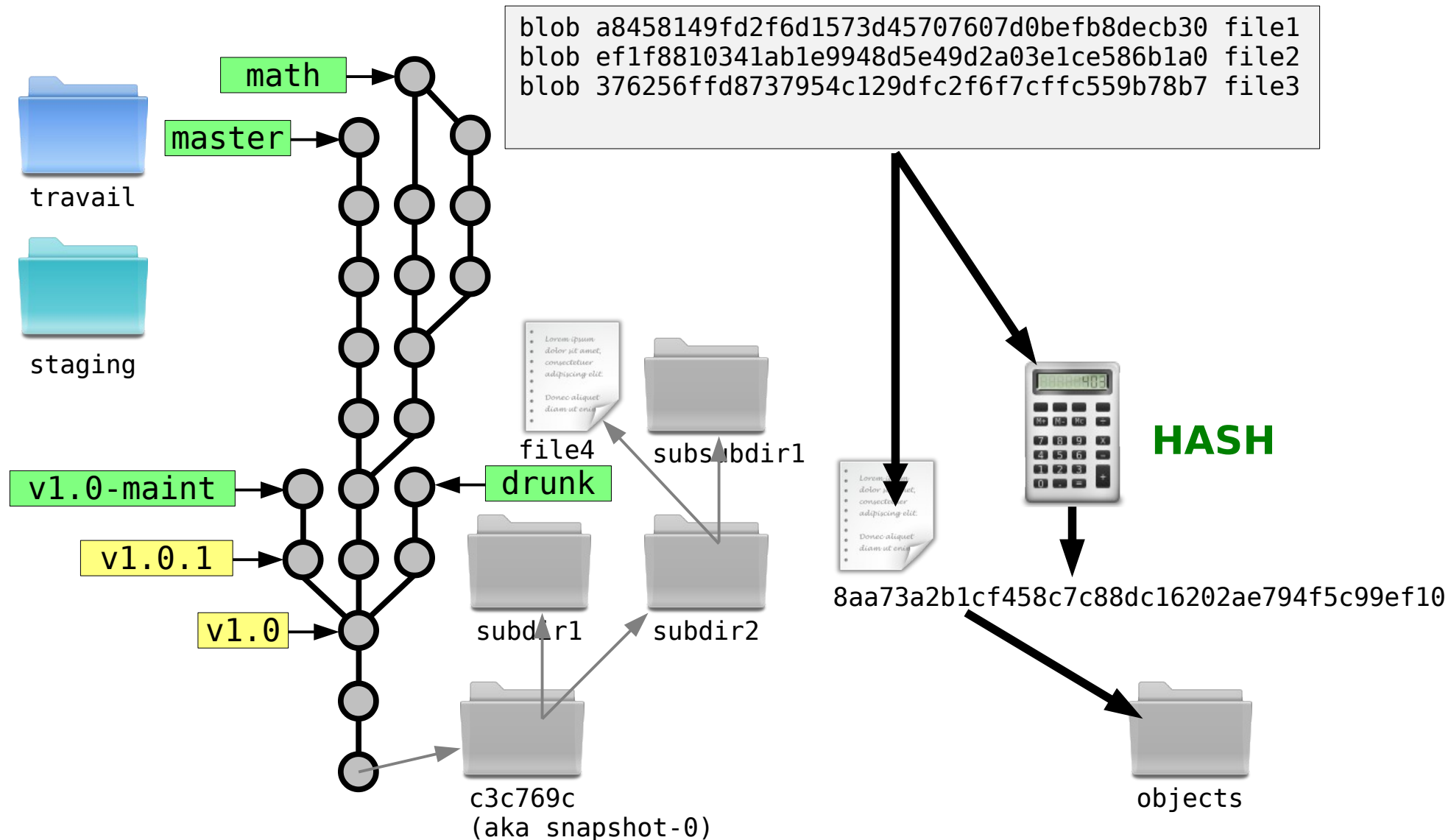
Supprimer les doublons



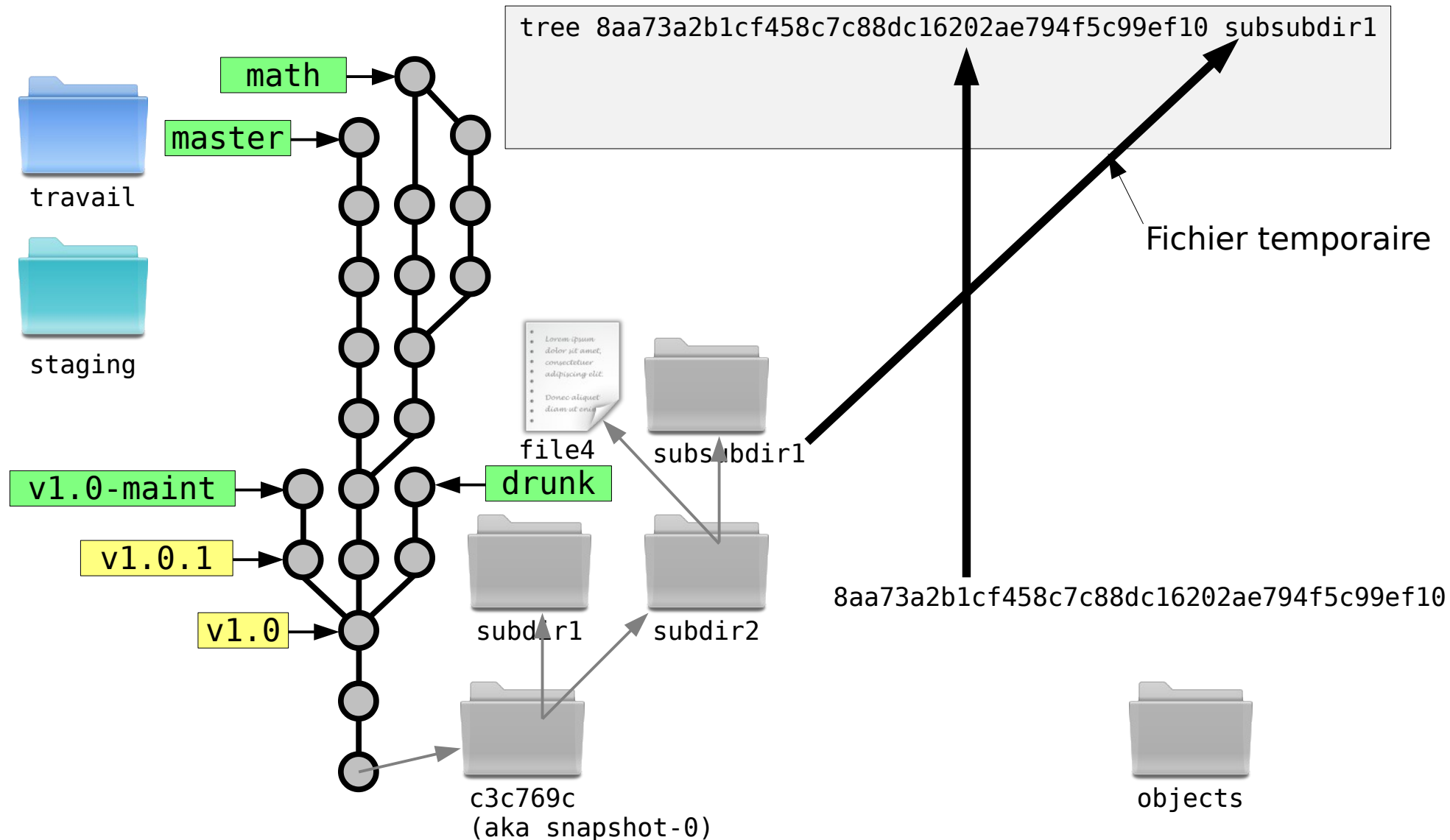
Supprimer les doublons



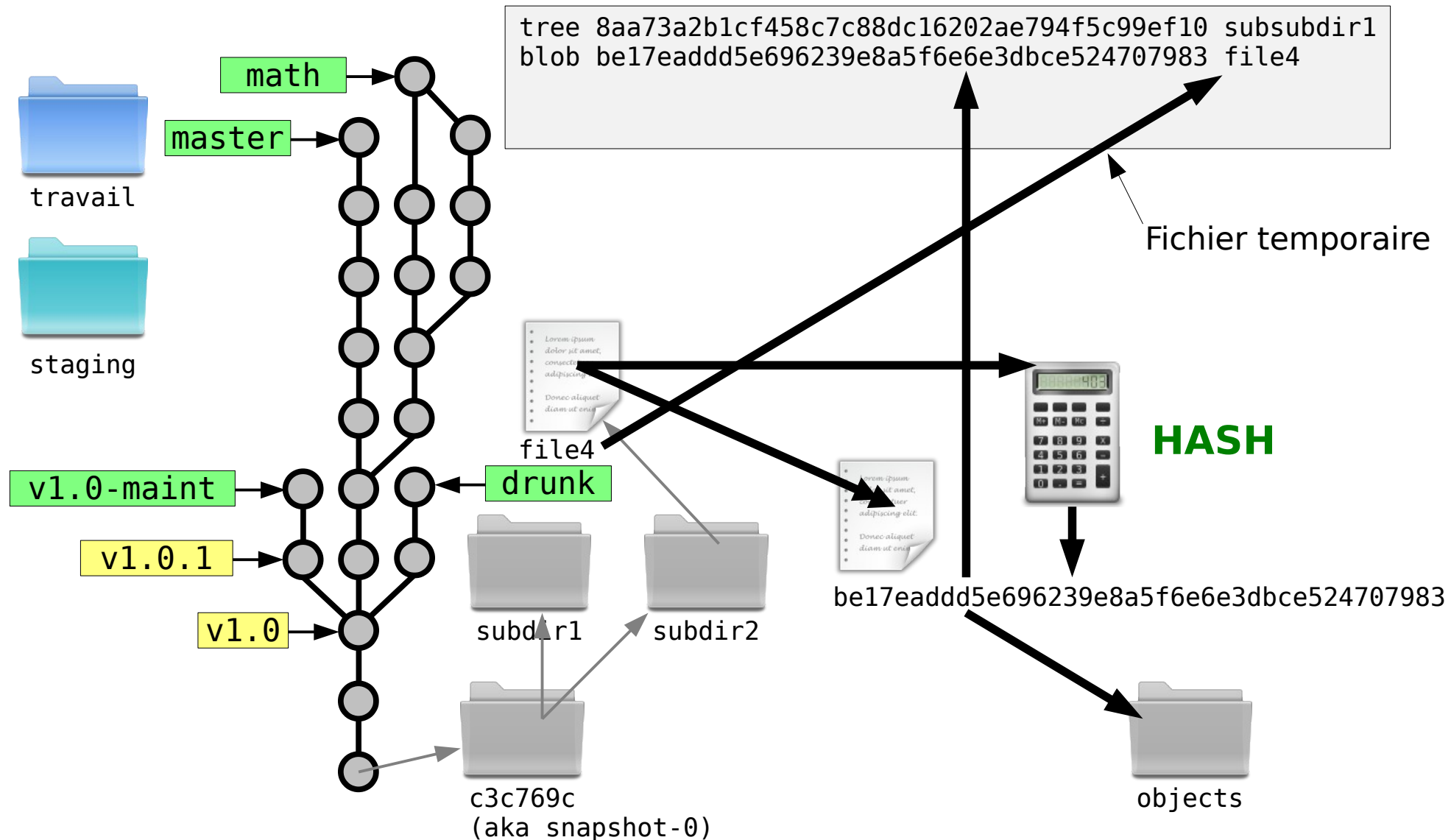
Supprimer les doublons



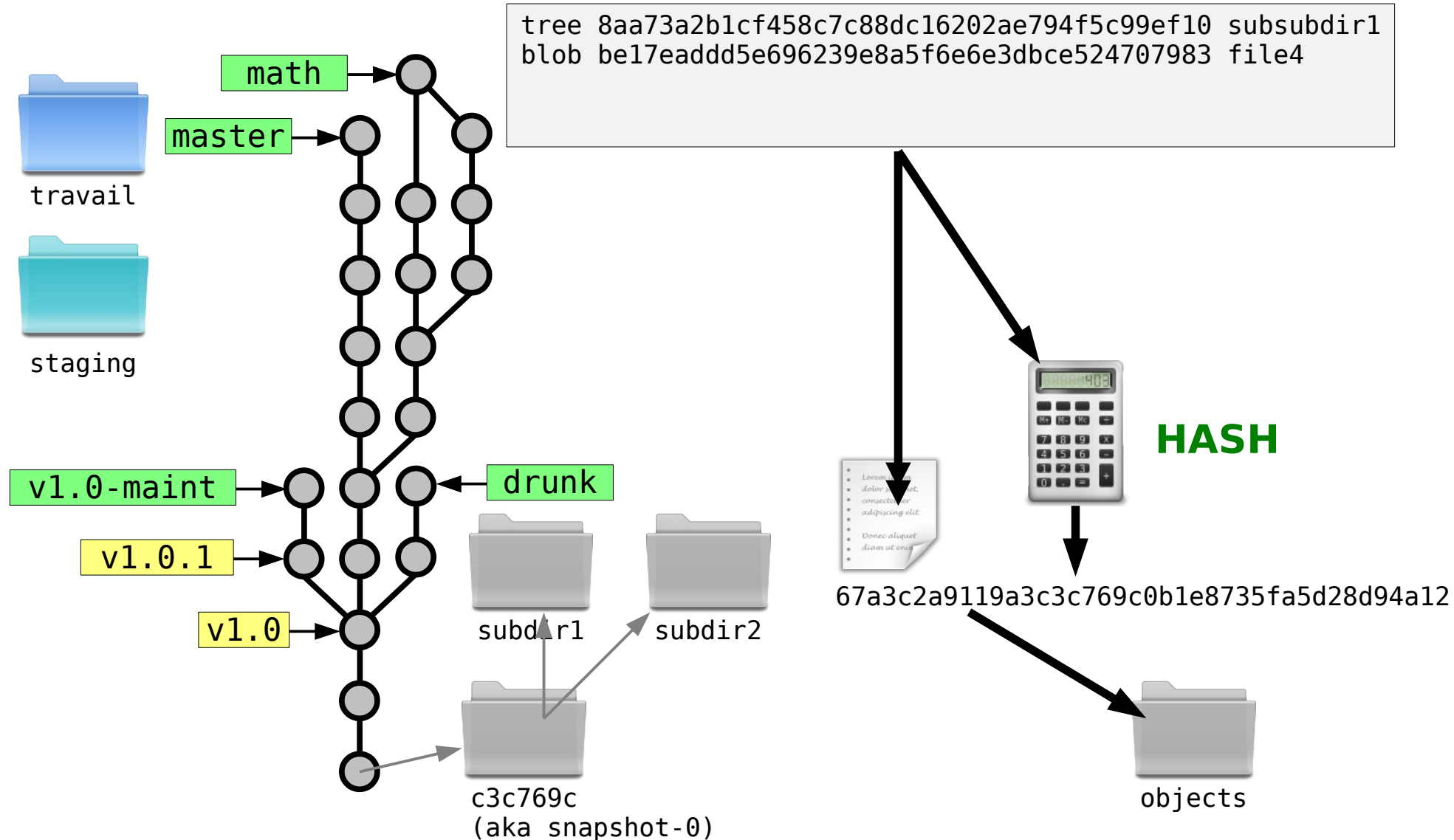
Supprimer les doublons



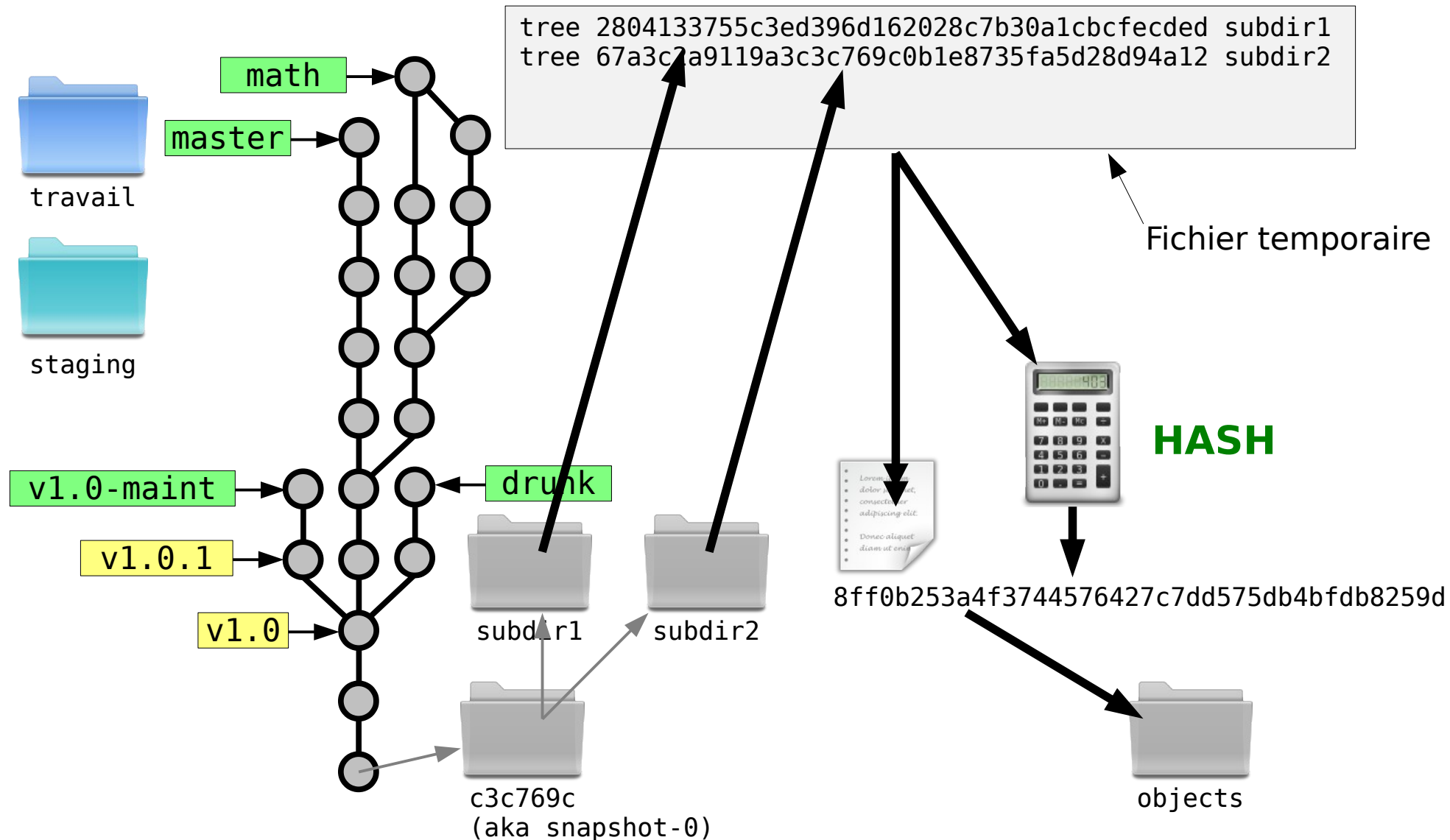
Supprimer les doublons



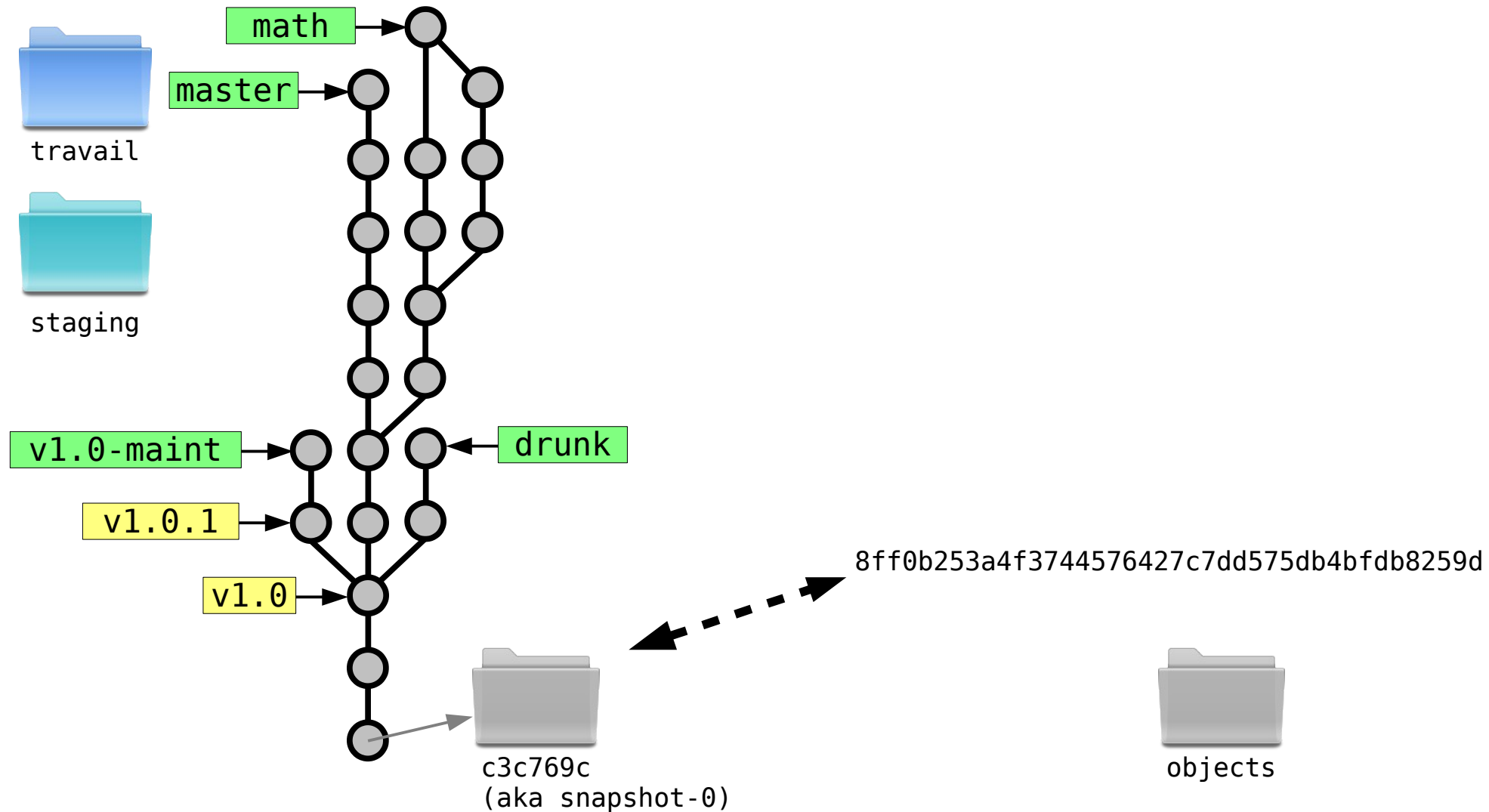
Supprimer les doublons



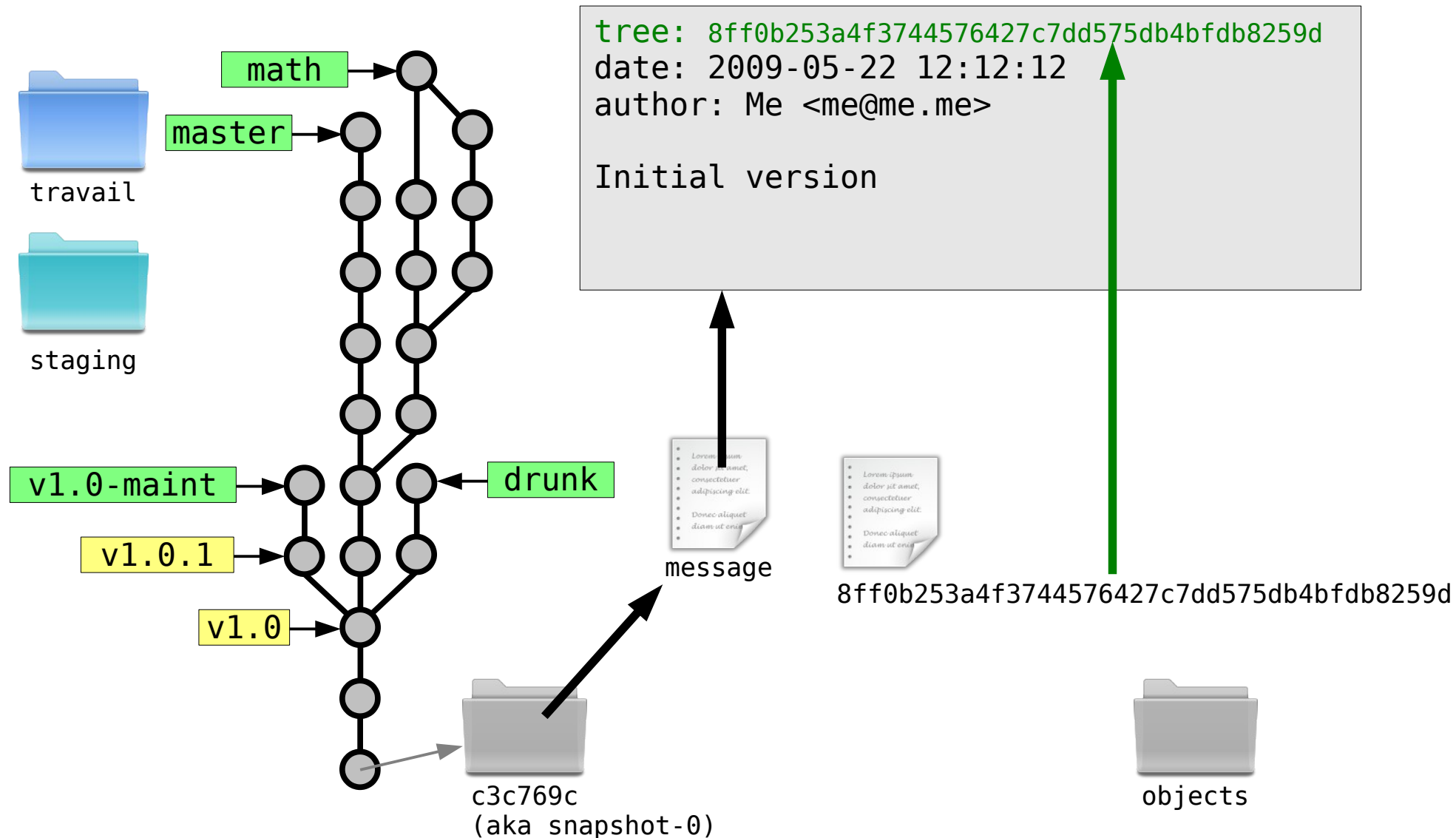
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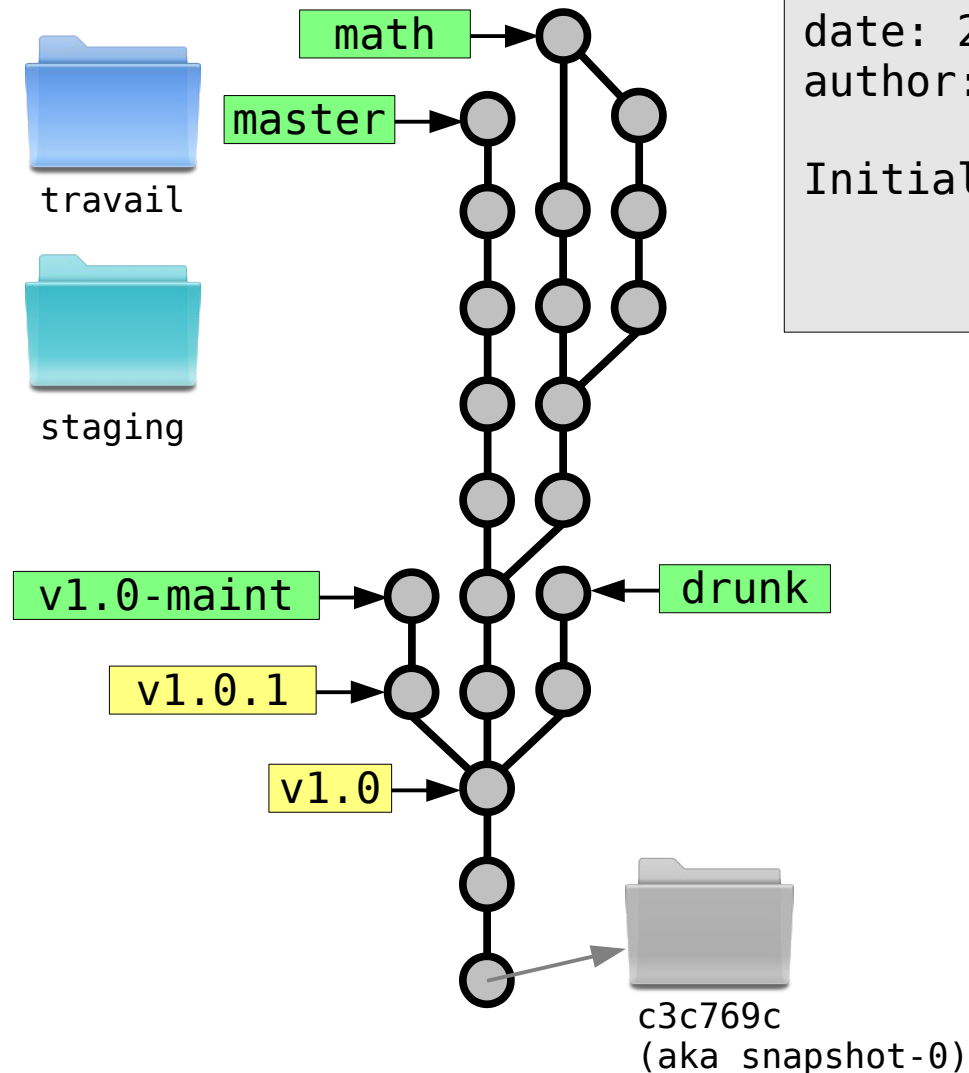
Supprimer les doublons



Supprimer les doublons

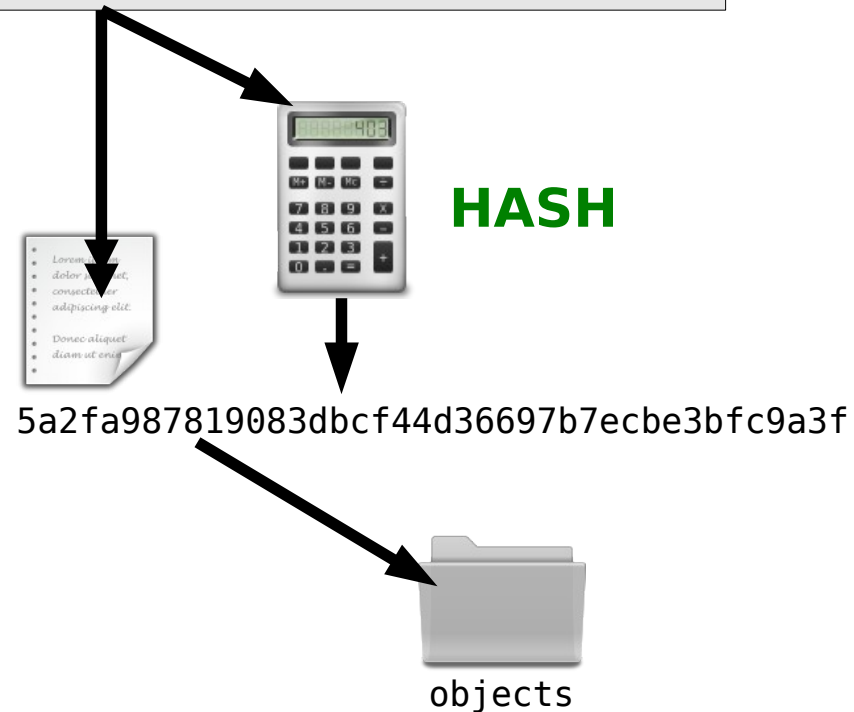


Supprimer les doublons

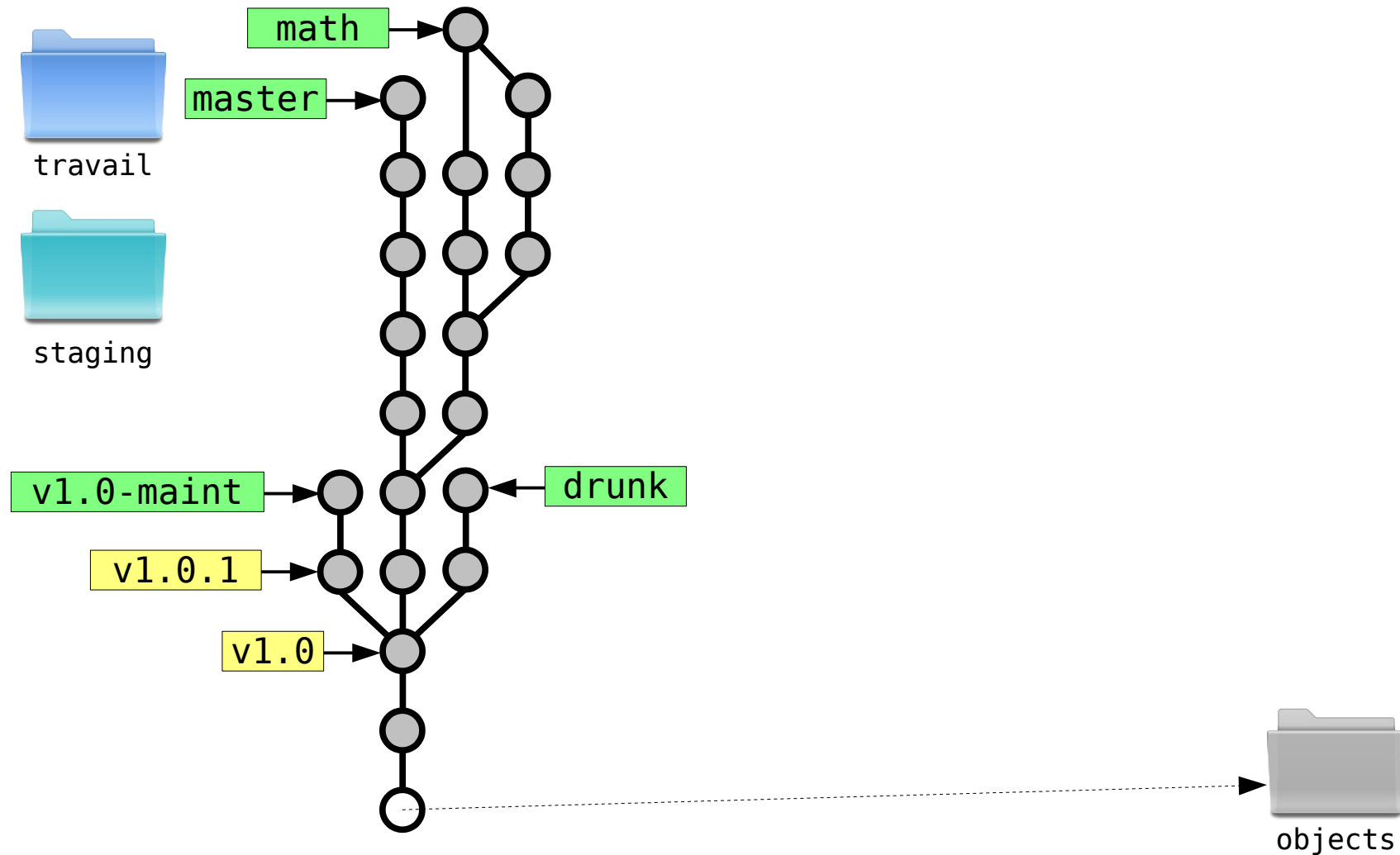


```
tree: 8ff0b253a4f3744576427c7dd575db4bfdb8259d
date: 2009-05-22 12:12:12
author: Me <me@me.me>

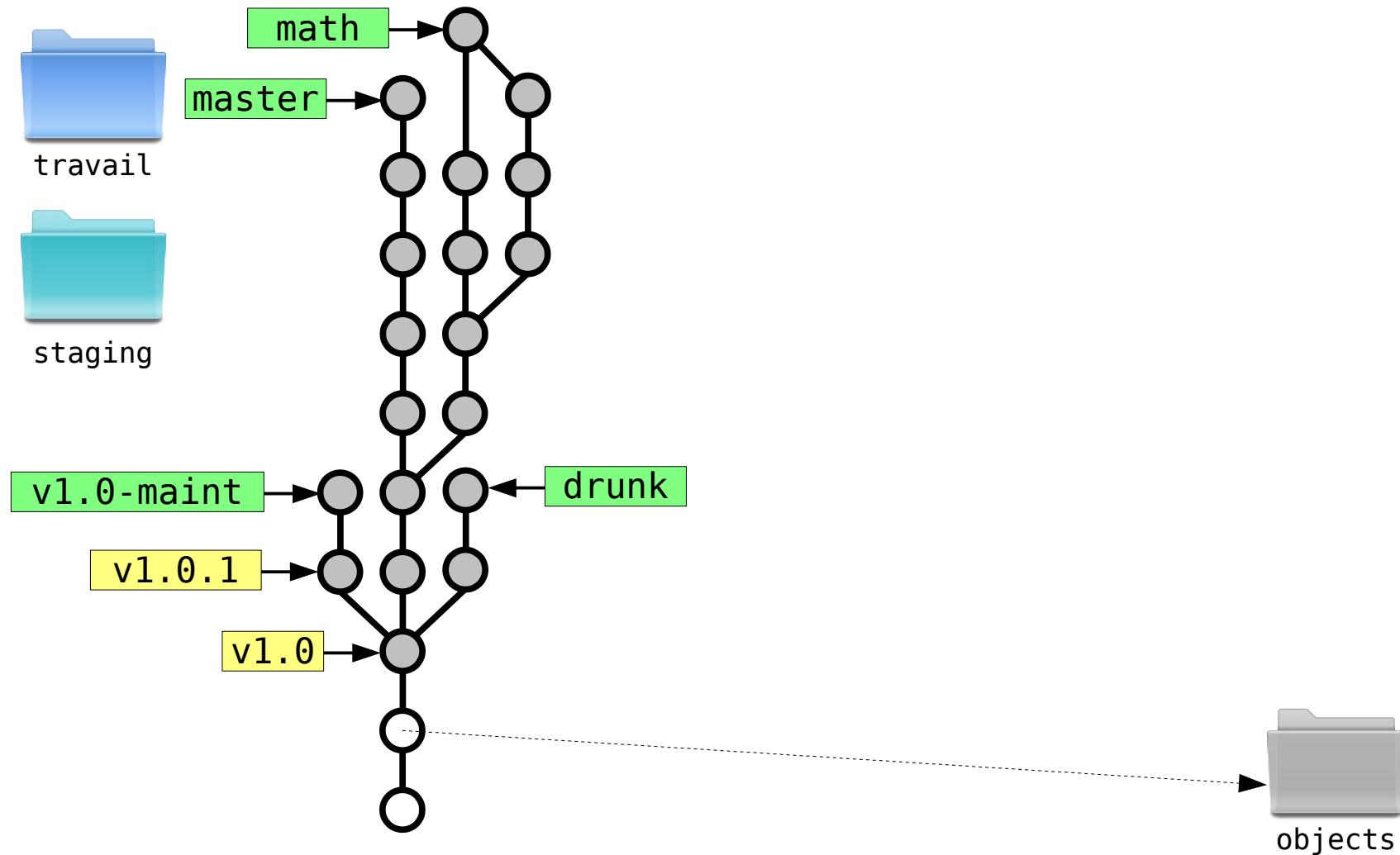
Initial version
```



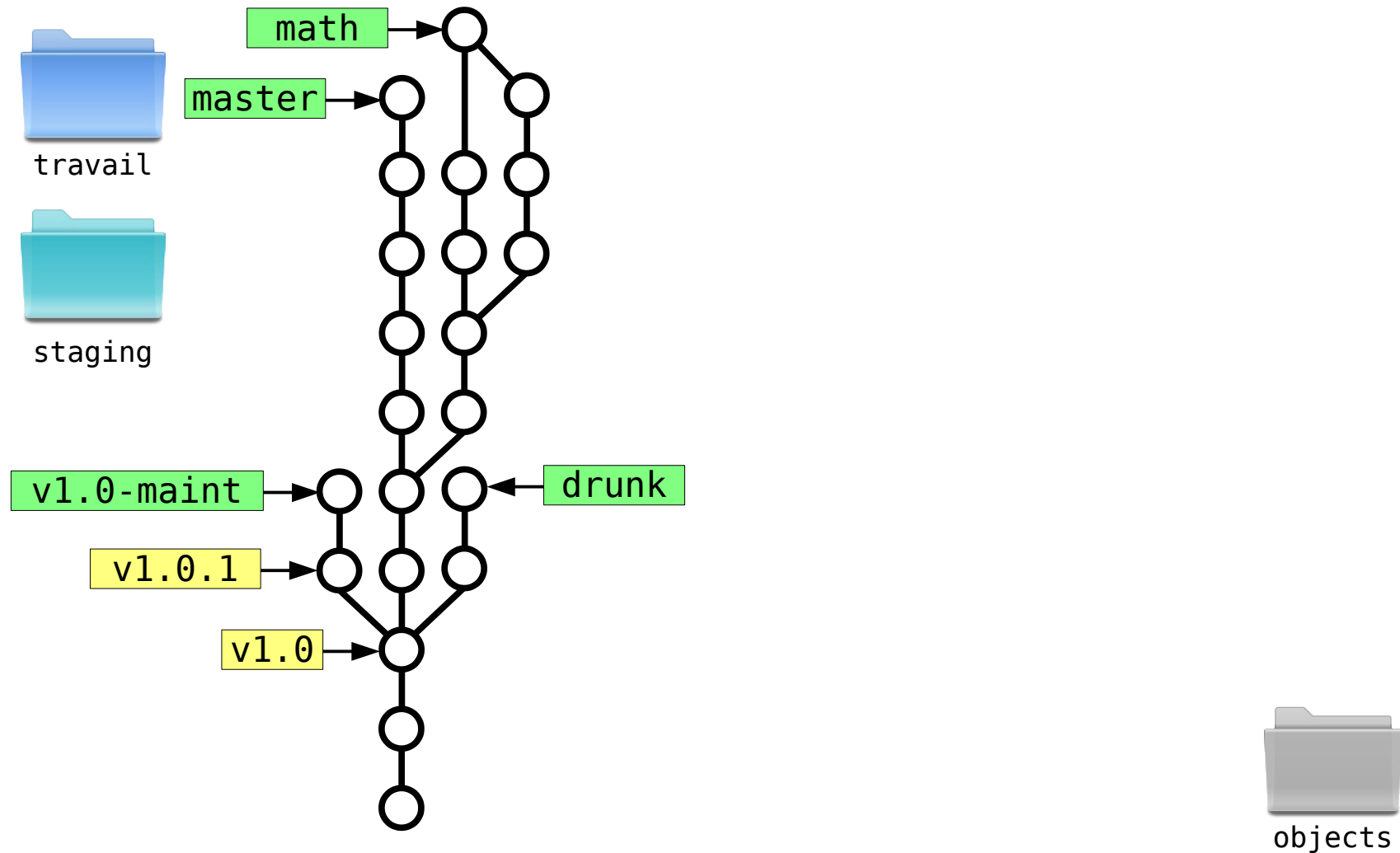
Supprimer les doublons



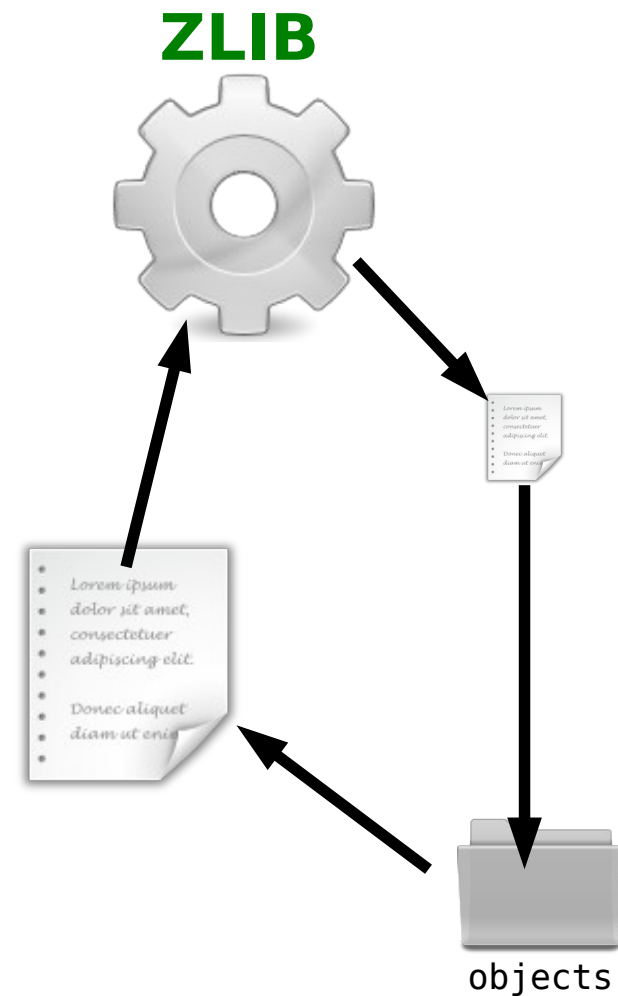
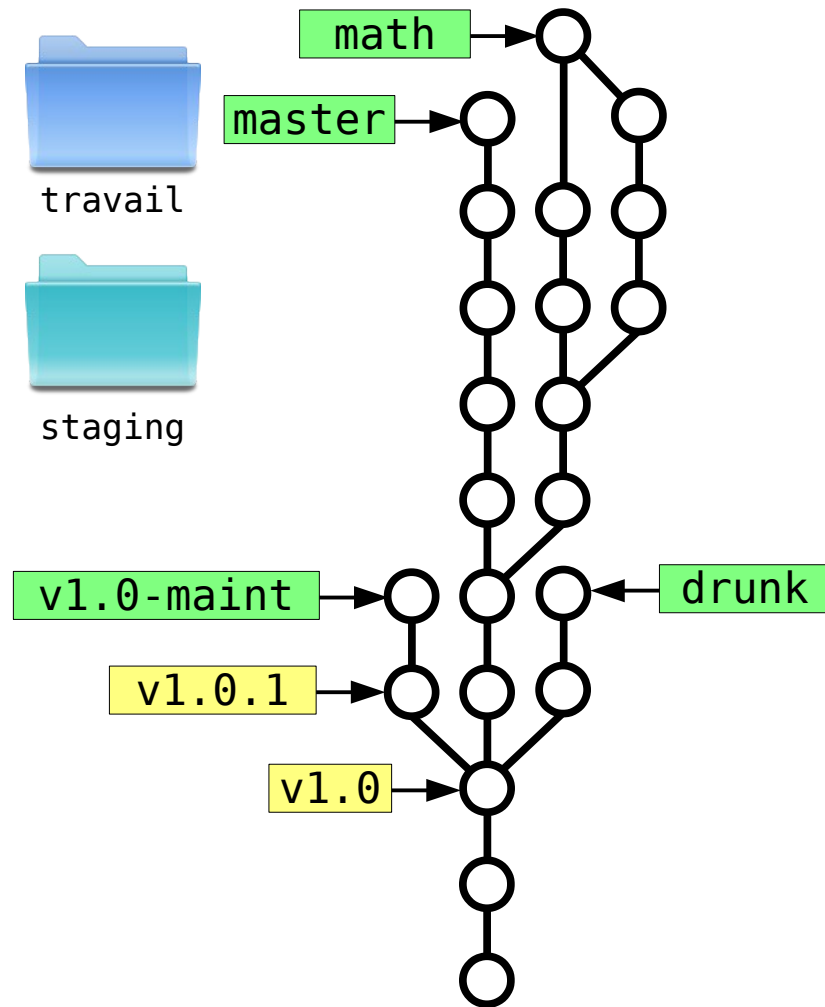
Supprimer les doublons



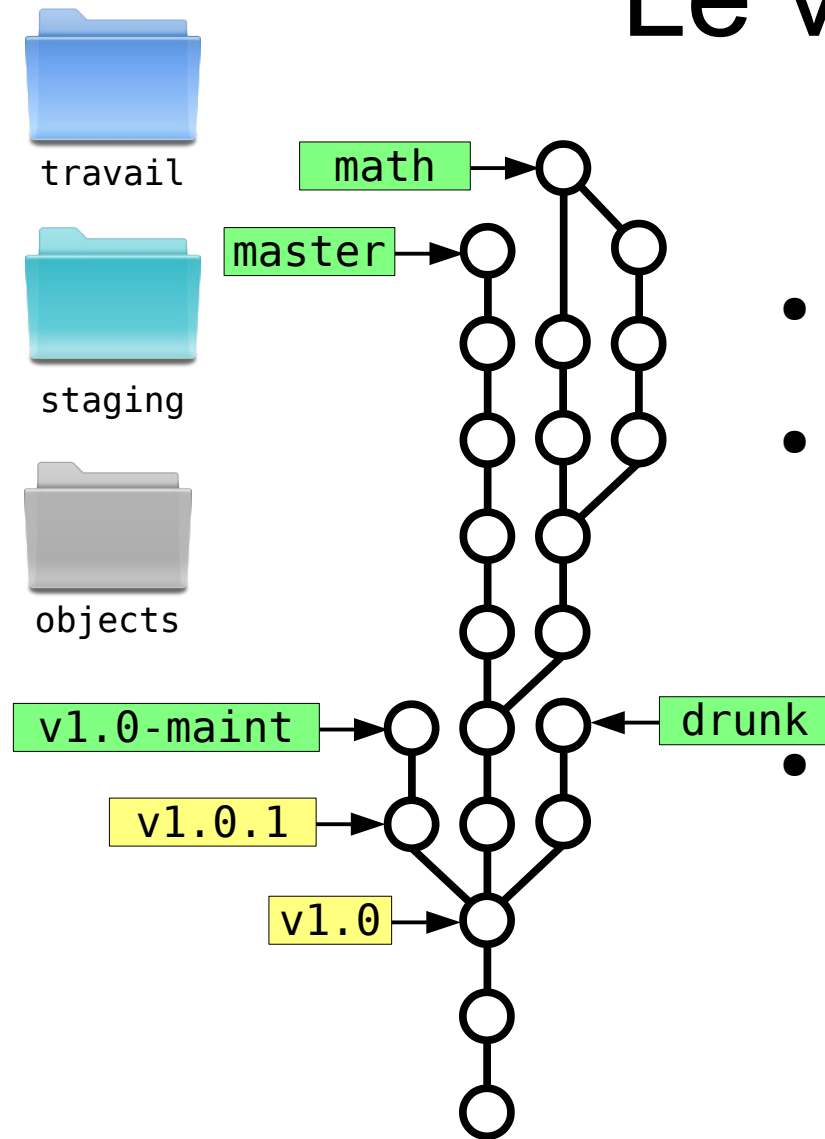
Supprimer les doublons



Compression des objets



Le vrai GIT

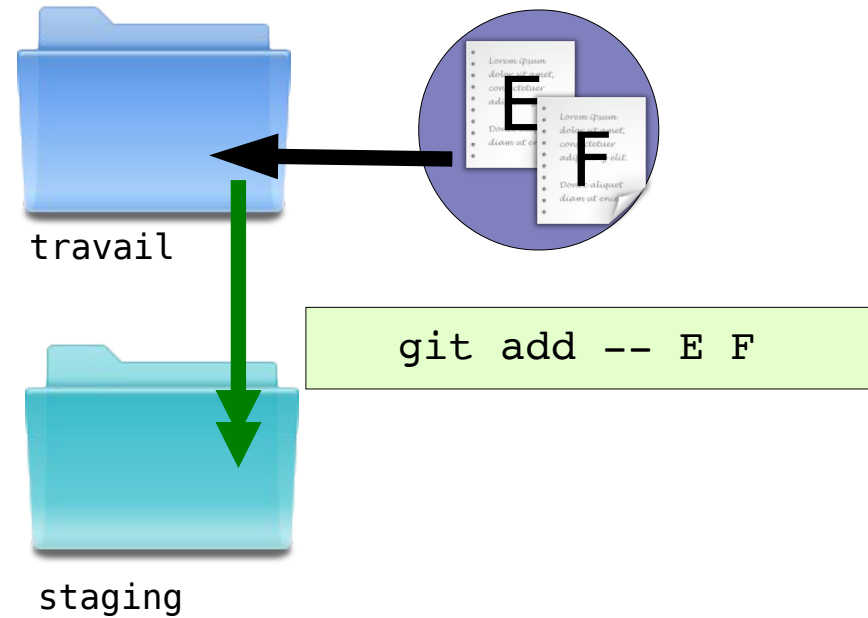
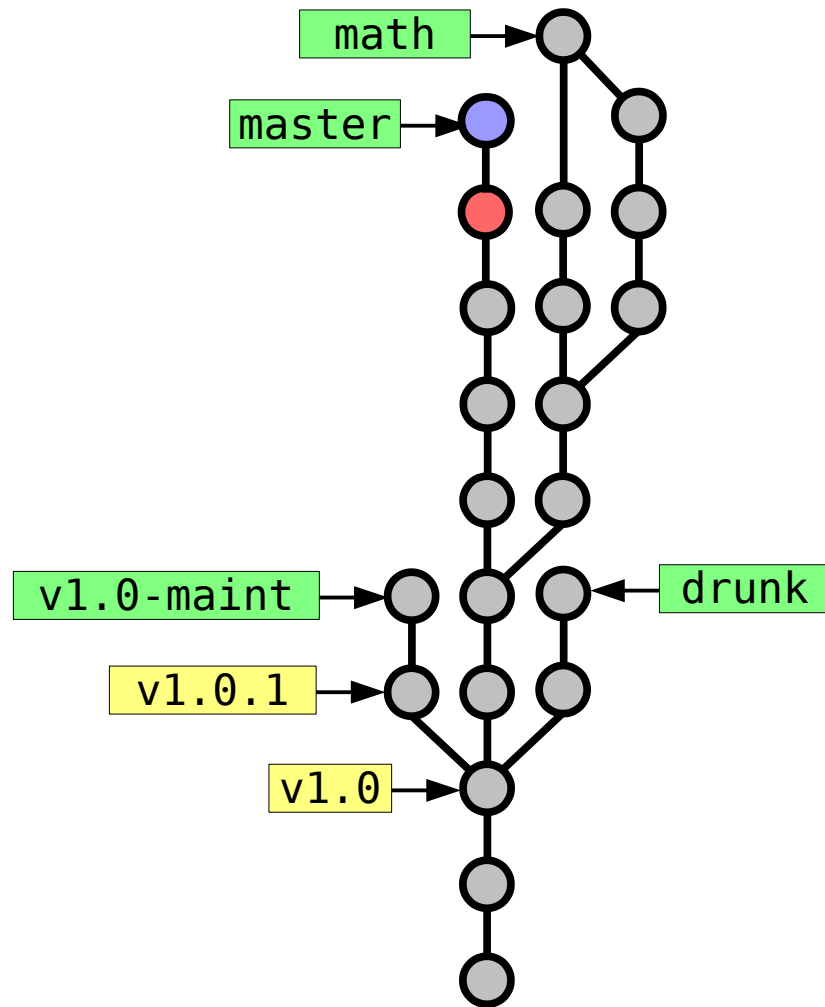


- C'est quasiment GIT...
- Avec de bonnes commandes pour toutes ces opérations
- Et plein (plein!) d'autres outils

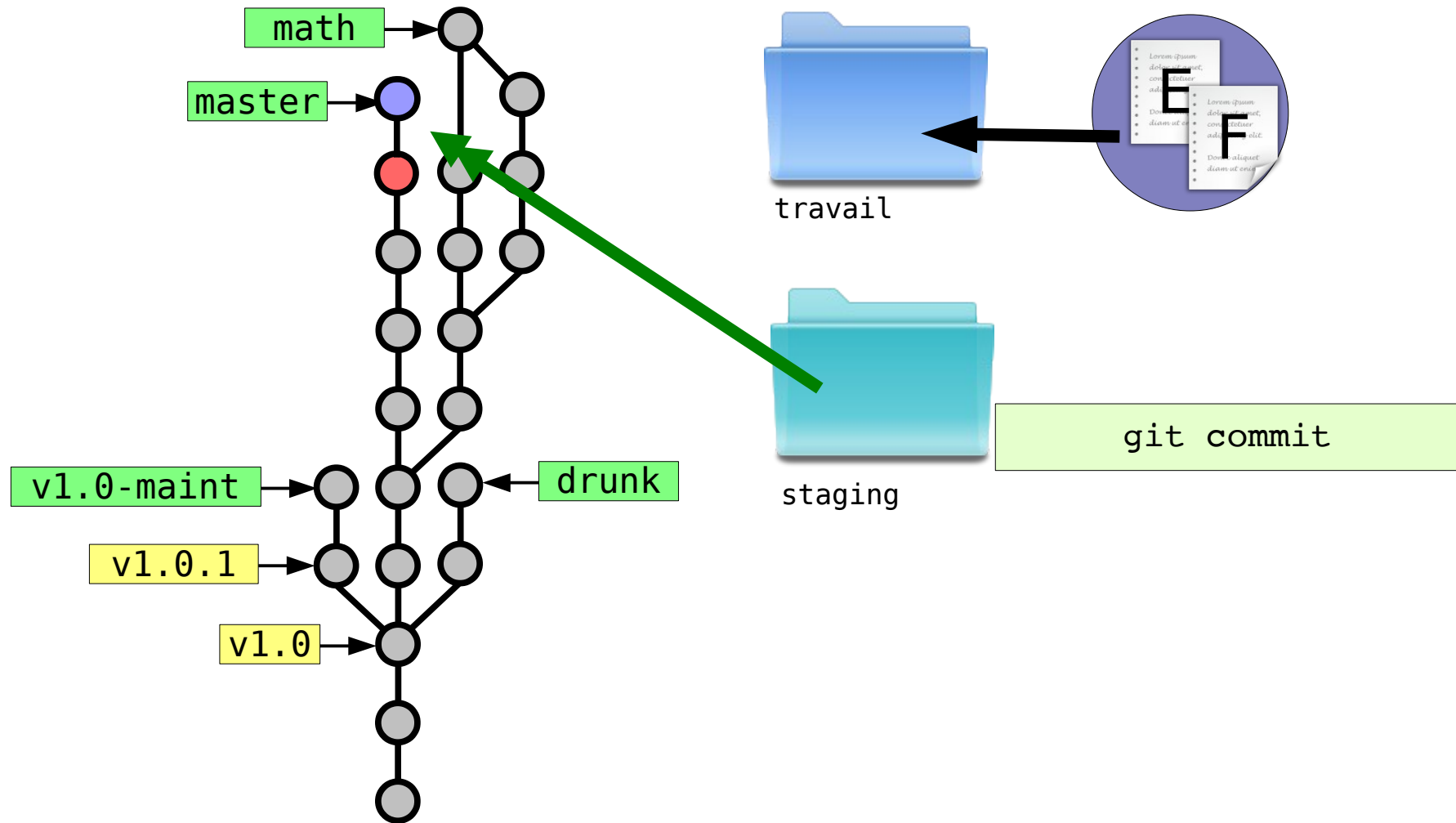
Commands: Configuration

- Premièrement, dire à GIT qui on est:
 - `git config --global user.name "Mon nom"`
 - `git config --global user.email "mon@email.adresse"`
- De l'aide:
 - `git <command> -h`
 - `git help <command>`
- Démarrer un nouveau repo:
 - `git init`
- Copier un repo:
 - `git clone <url_repo>`

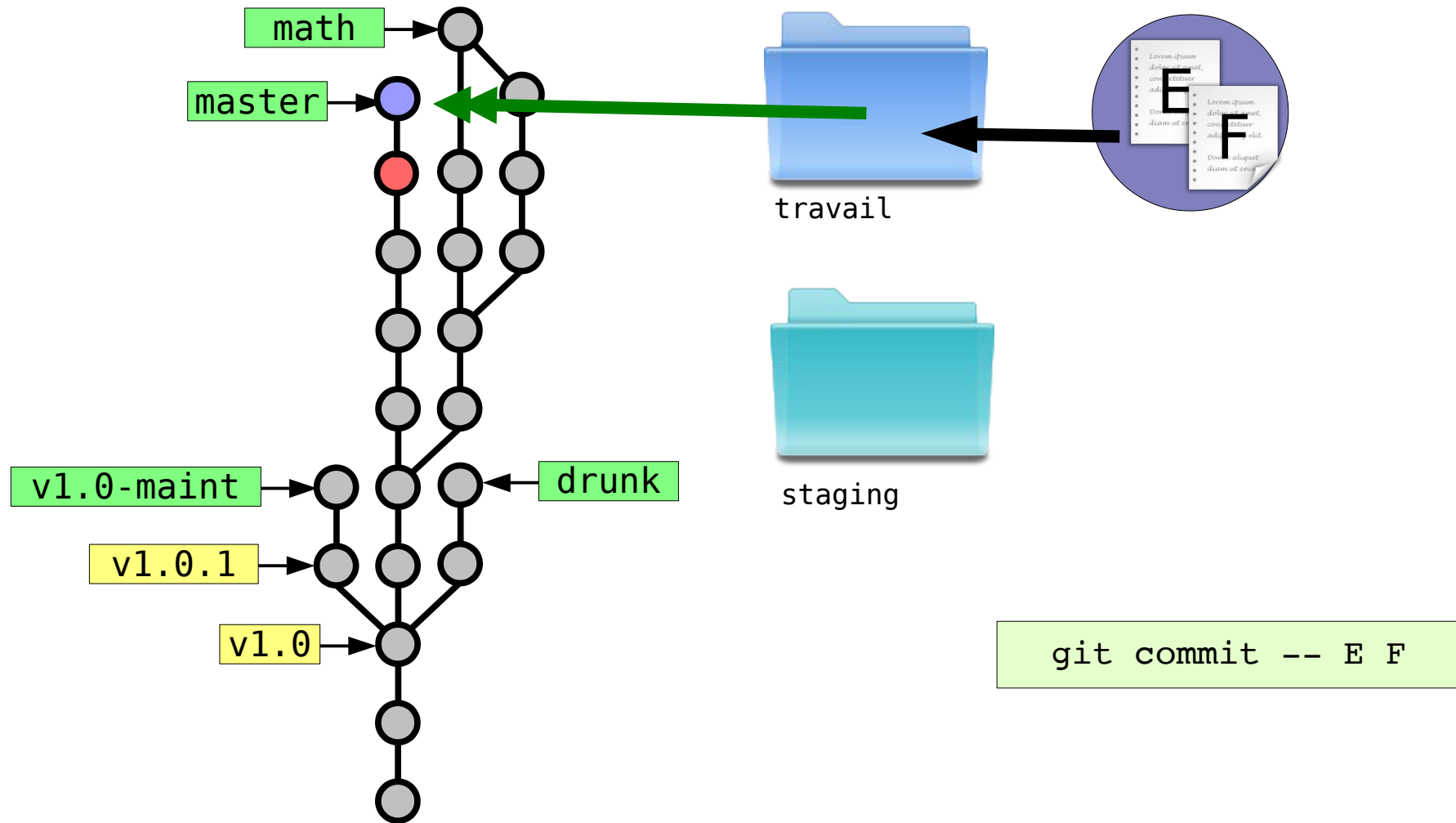
Commandes: add



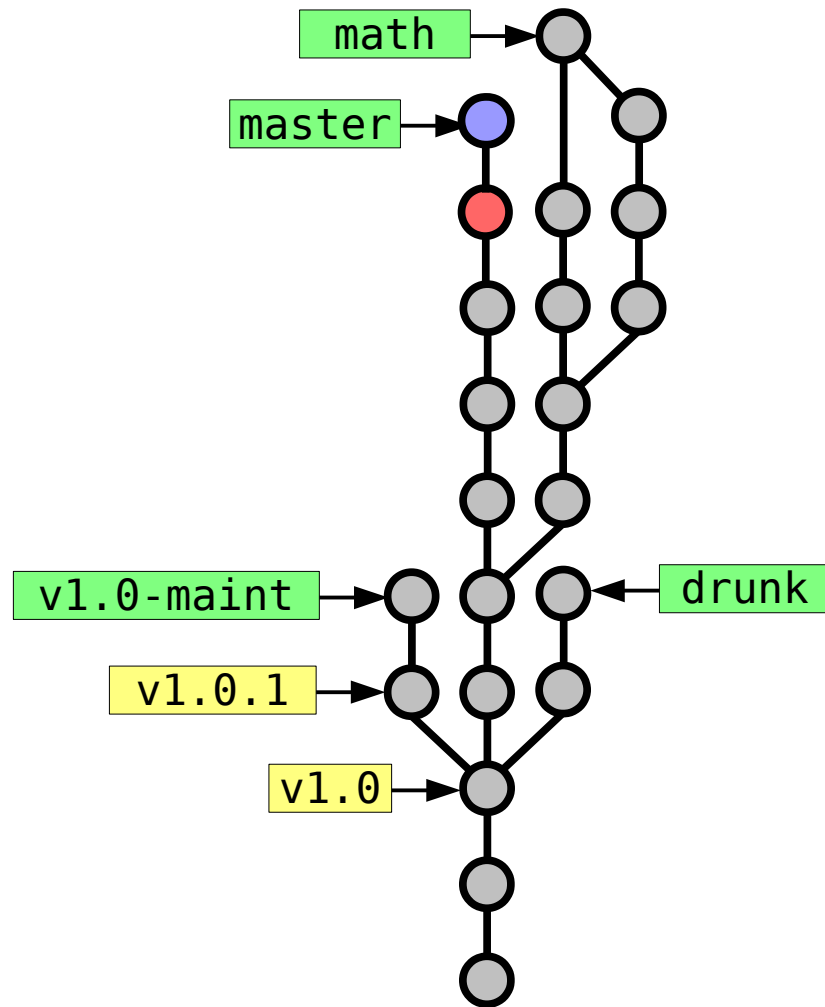
Commandes: commit



Commandes: Faire un Snapshot



Commandes: Etat du staging



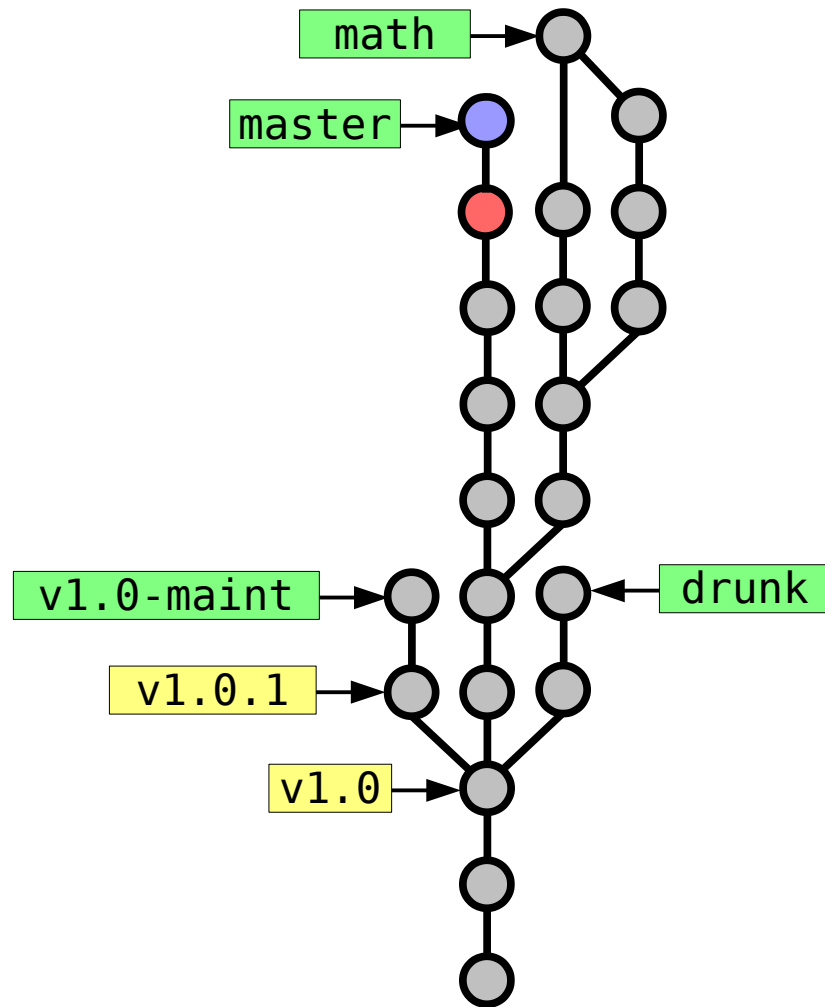
travail



staging

git status

Commandes: historique



travail



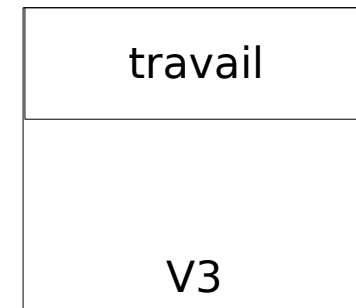
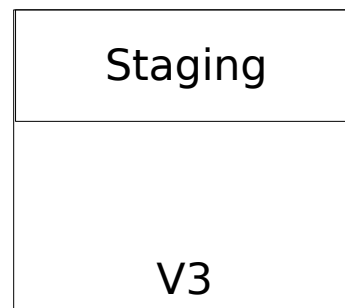
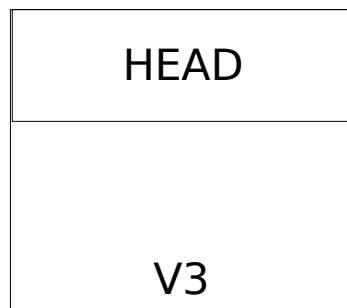
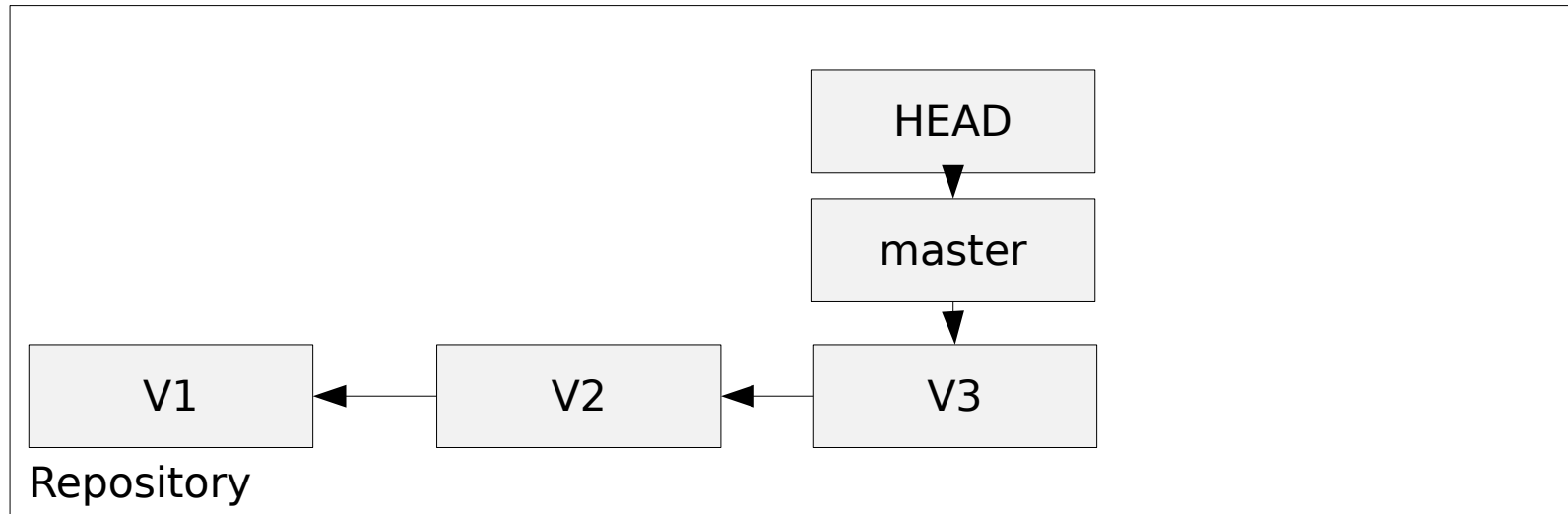
staging

git log

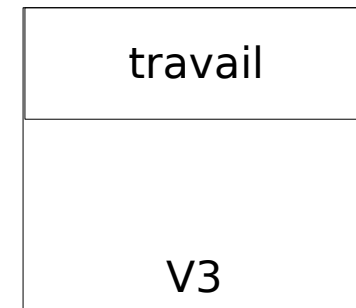
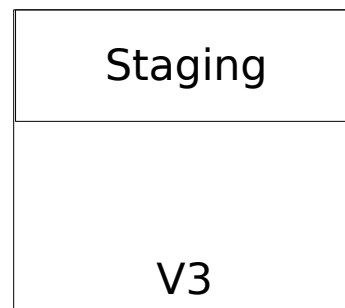
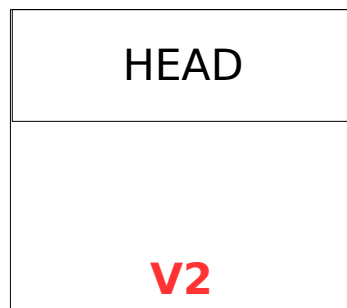
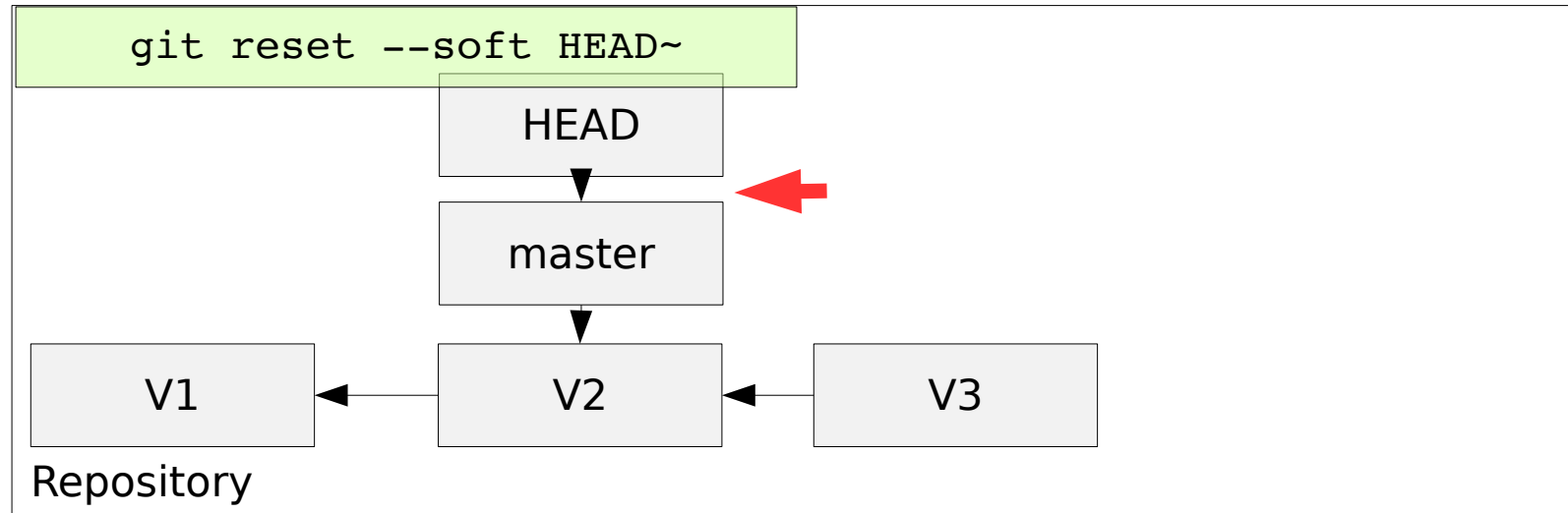
Ex: git log master -2



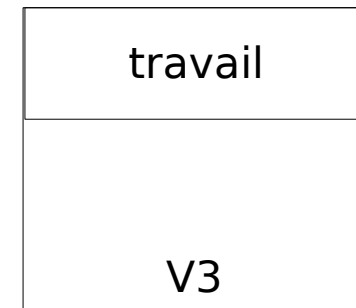
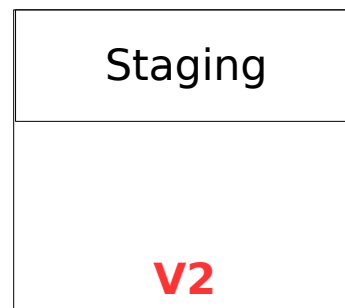
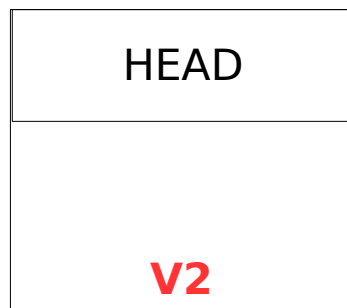
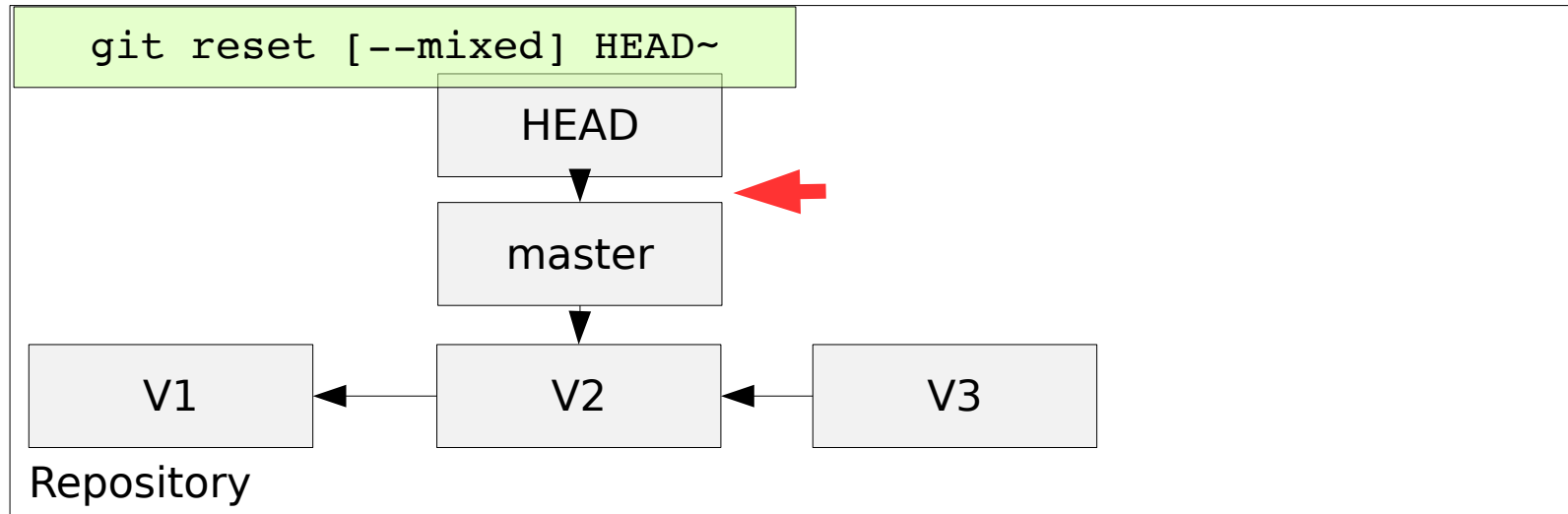
Commande: reset



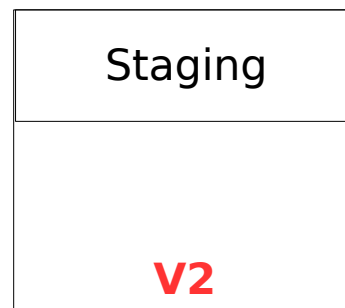
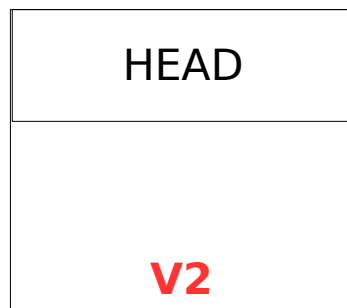
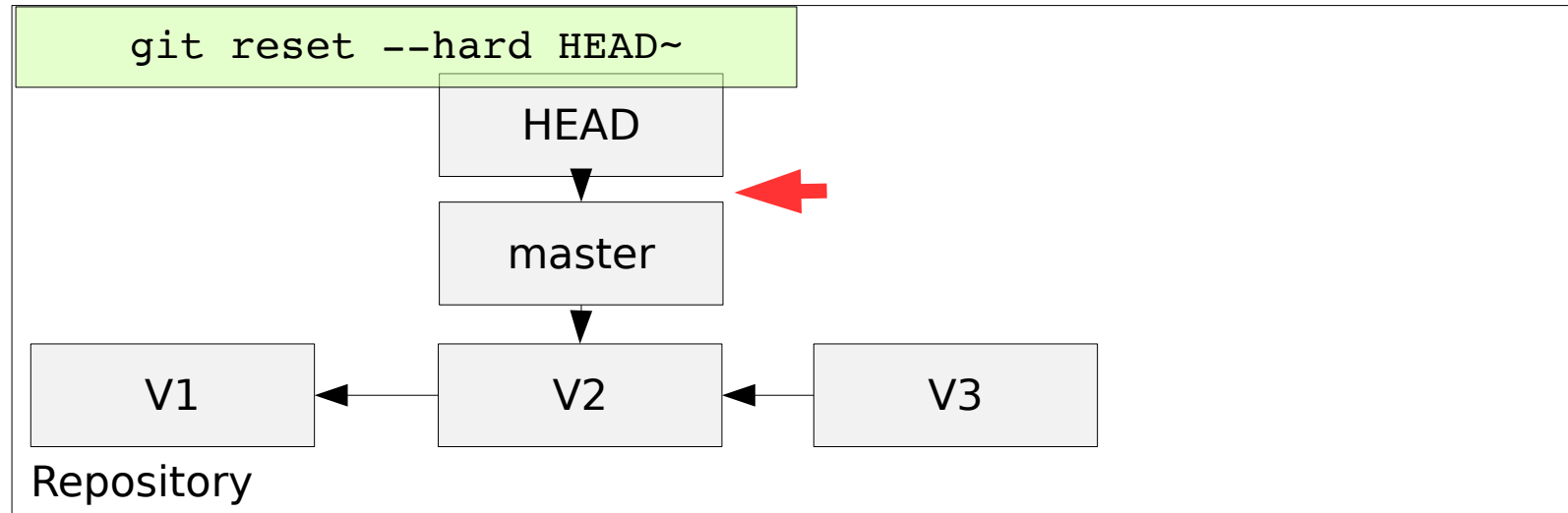
Commande: reset



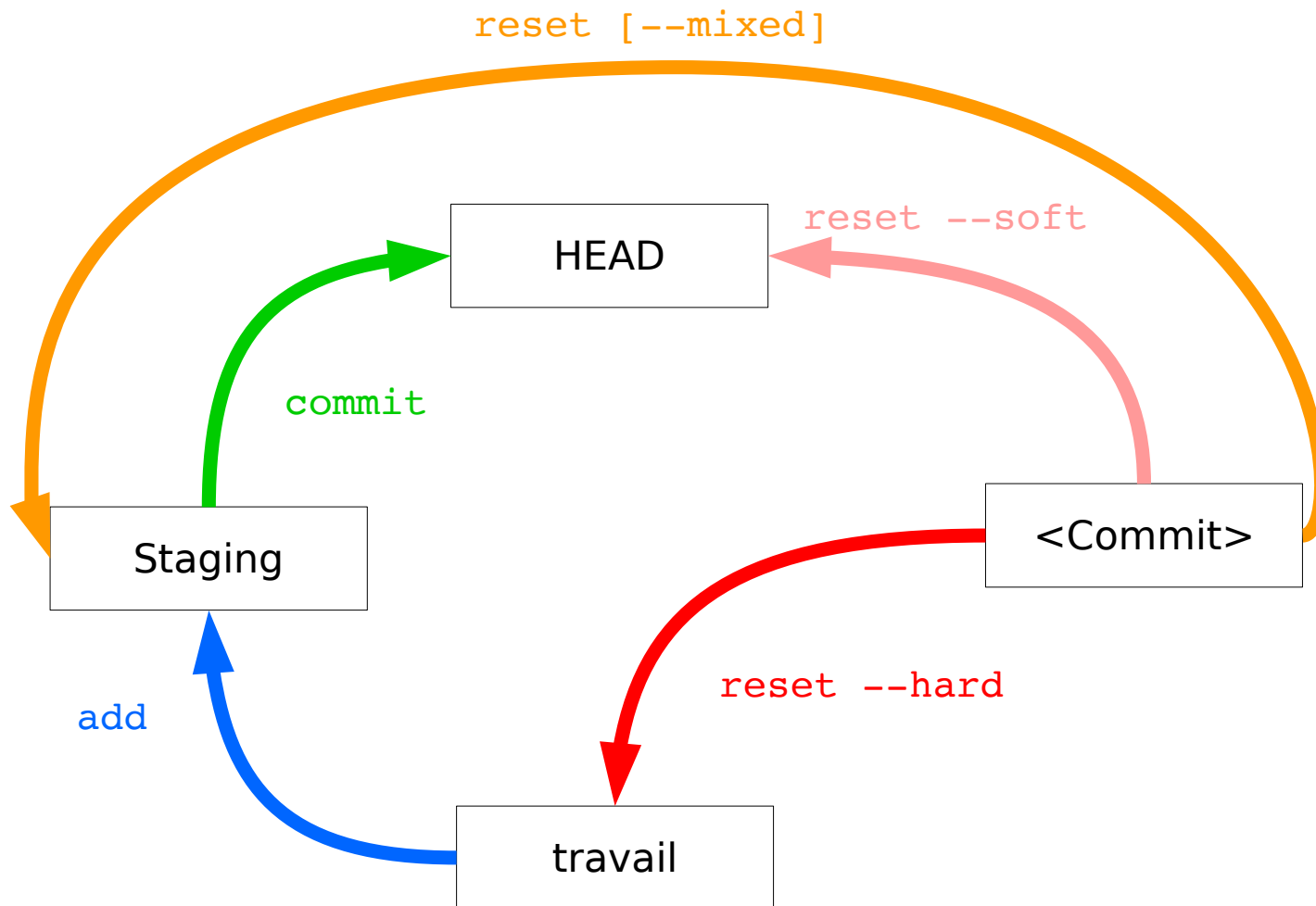
Commande: reset



Commande: reset



Commande: reset/add/commit



Commandes: diff



travail

vs.



staging

- `git diff`



staging

vs.



snapshot

- `git diff --staged`



travail

vs.



snapshot

- `git diff HEAD`



snapshot

vs.

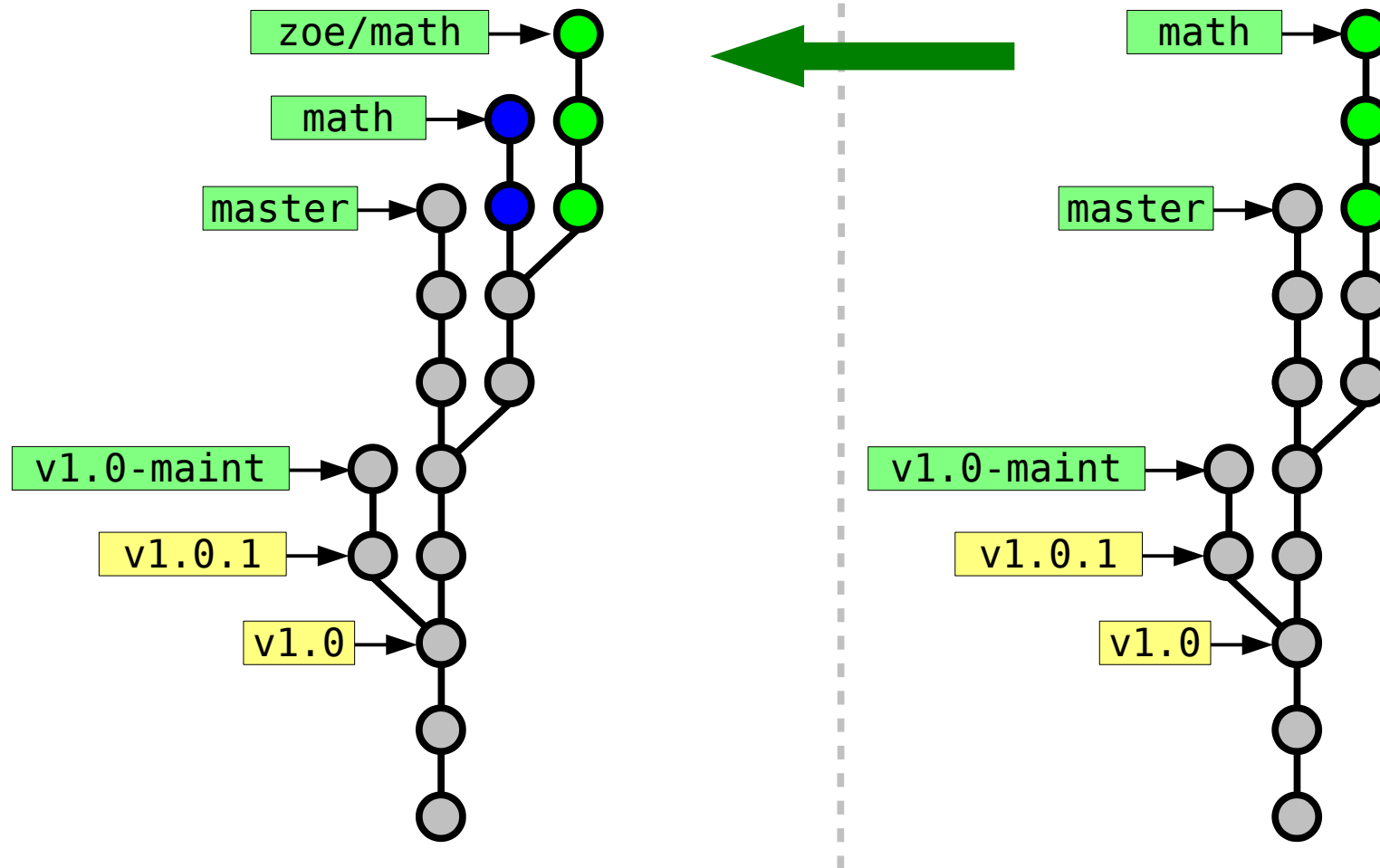


snapshot

- `git diff <from> <to>`

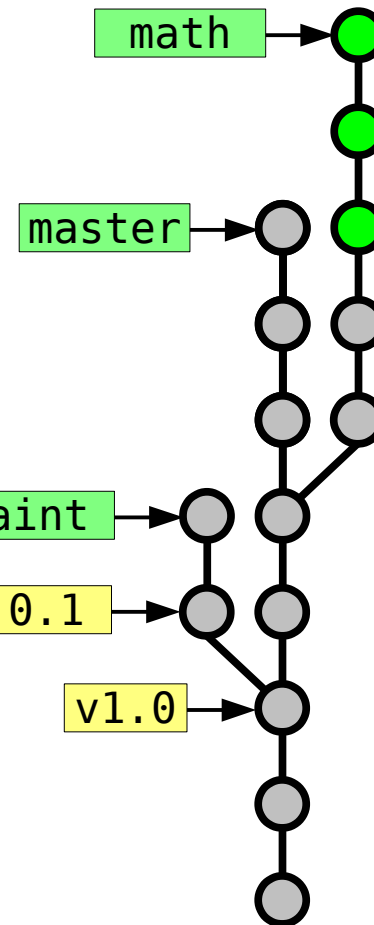
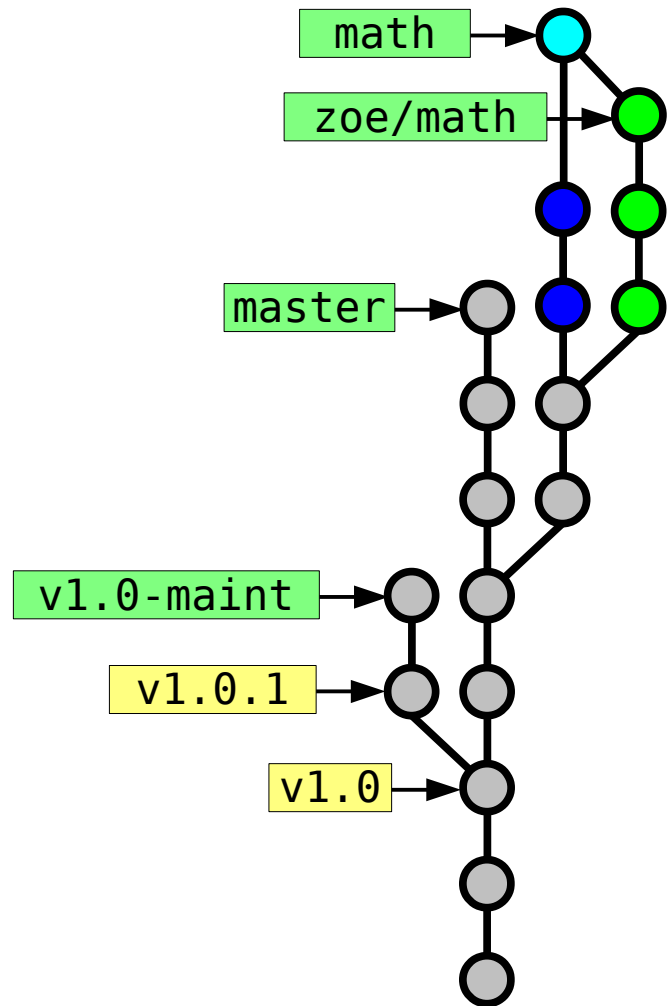
Commandes: Fetch

```
git fetch zoe
```

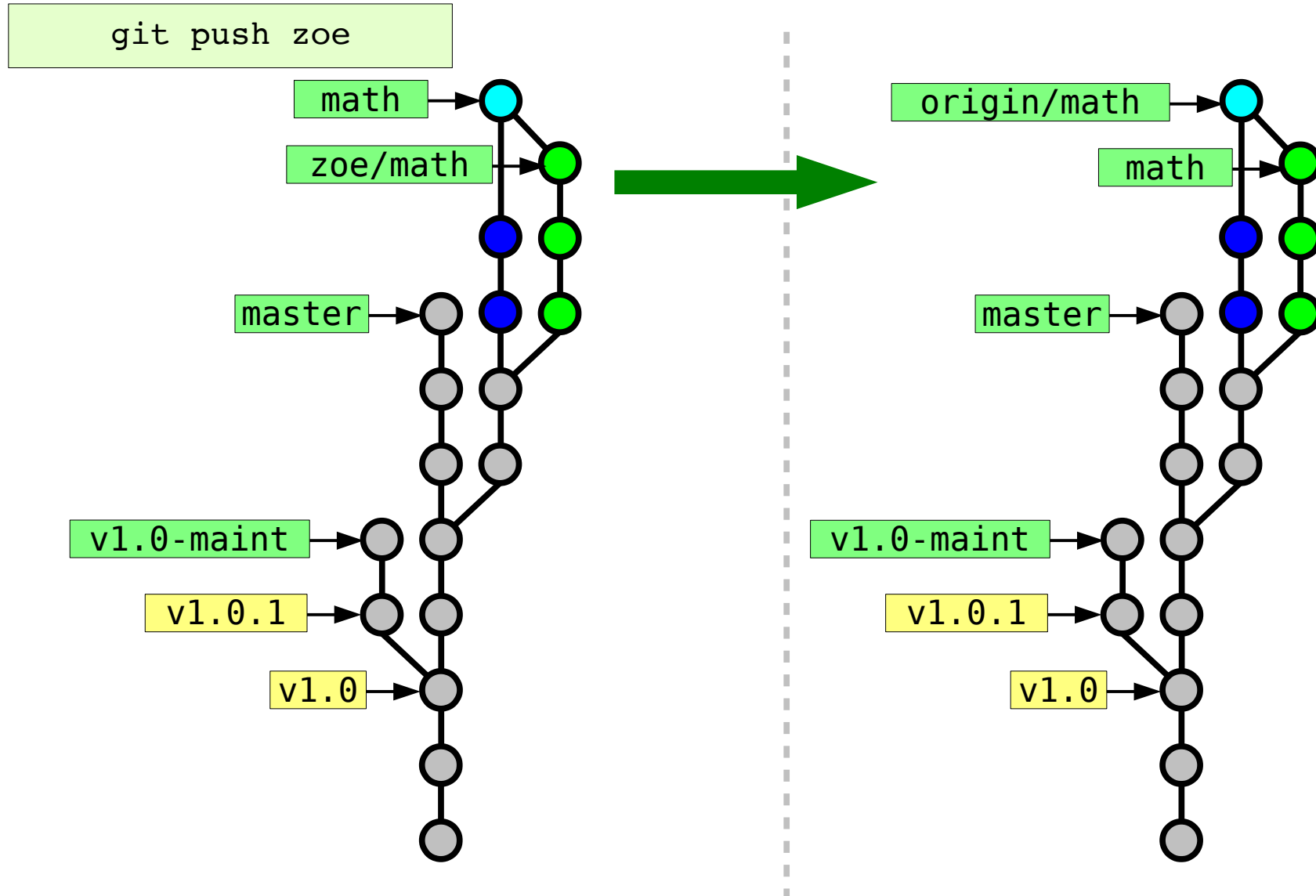


Commandes: merge

```
git merge zoe/math
```



Commandes: push



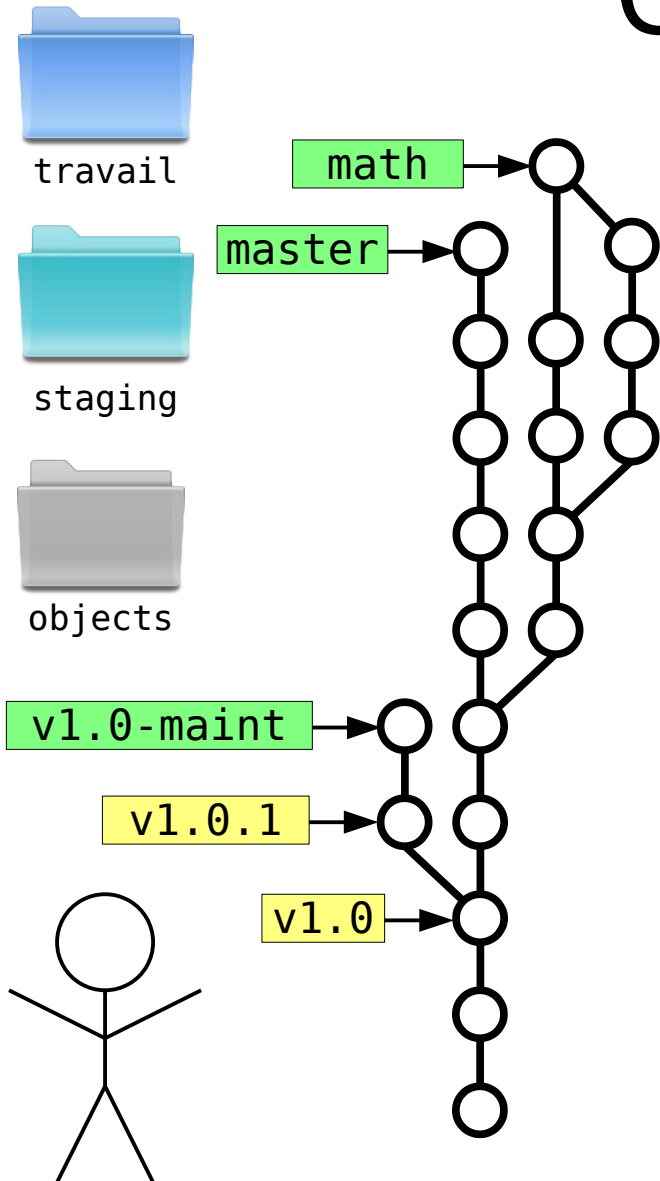
Commandes: Fetching & Merging

- `git remote add <name> <URL>`
 - `git fetch <name>`
 - `git merge <name>/<branch>`
- } `git pull`
- `git push <name> <brch_loc>:<brch_dist>`

Commandes: Branches & Tags

- `git branch <branch>`
 - `git checkout <branch>`
- } `git checkout -b <branch>`
- `git tag -l`
 - `git tag <tag>`

Conclusion



- Garder cette histoire en tête
- Git est simple et très puissant

- Une dernière de chose:

`git reflog`

Ensuite ?

- Git: <http://git-scm.com>
- Pro Git: <http://git-scm.com/book>
- Git Reference: <http://gitref.org>
- GitHub: <http://github.com>
- Gitorious: <http://gitorious.org>
- Gitlab: <http://gitlab.com>

Questions?

- Merci pour votre attention!
- Ces slides sont dispo:
https://github.com/Djabx/git_parable

