

Formation Git Avancée

I - Rappels sur Git et GitHub



Historique de Git



Linus Torvalds



Linux

1991

Patches

Création de Linux, utilisation de patch pour faire évoluer le code

2002

BitKeeper

Passage sous BitKeeper pour la gestion de version du code source

2005

Git

Création de Git par Linus Torvald pour remplacer BitKeeper pour la gestion du code de Linux

2020

12 000 000 d'utilisateurs

Git a plus de 12 Millions d'utilisateurs dans le monde. Il est présent dans les grandes entreprises et projets open source

Installation et configuration



<http://git-scm.com/download>



```
$ apt-get install git-all
```



```
$ dnf install git-all
```

```
$ git config --global user.name <"nom_utilisateur">  
$ git config --global user.email <email_utilisateur>
```

```
$ git config --list
```

Dépôt Git

Dossier classique

Dernière version de mon code

\$ git init

Repository Git

Dernière version de mon code

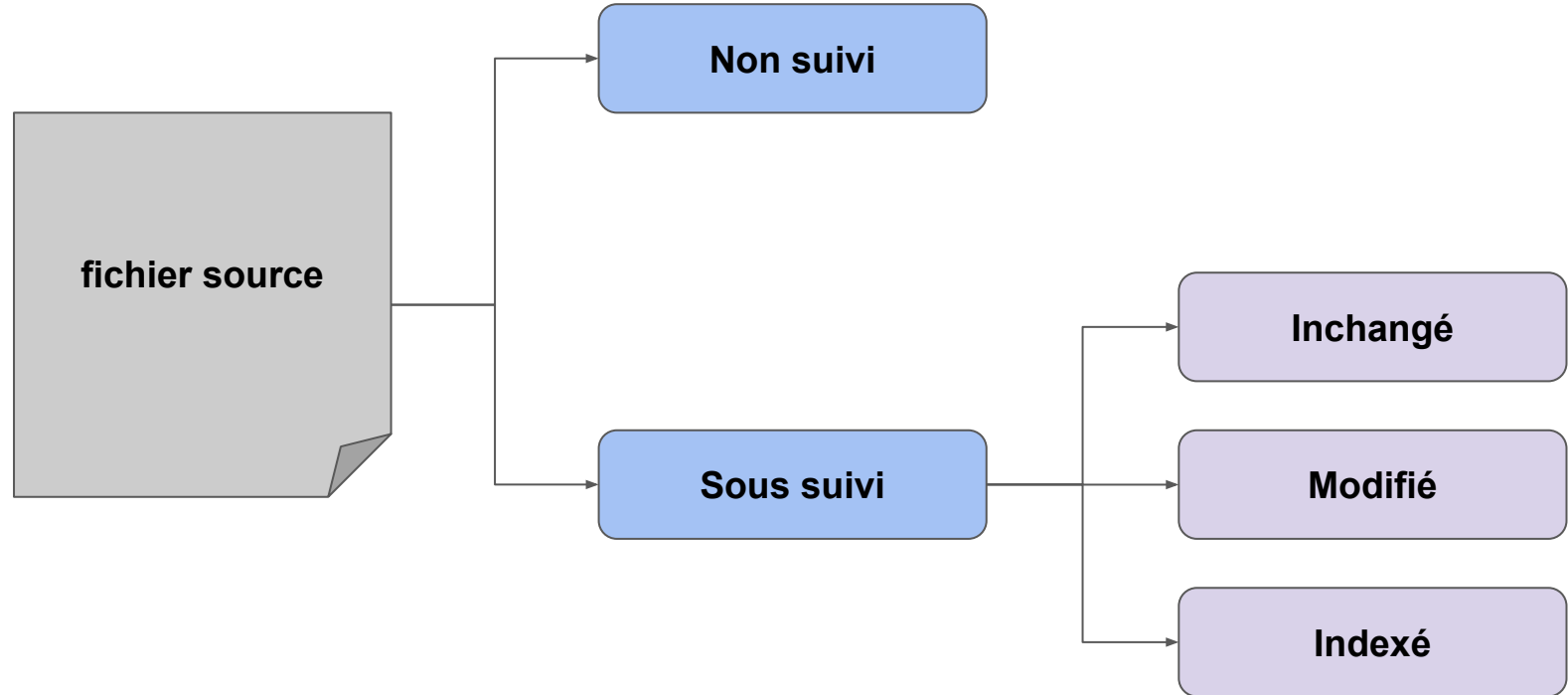
Dossier .git

```
$ git init [nom_dossier] // Créer un dépôt dans le dossier cible
```

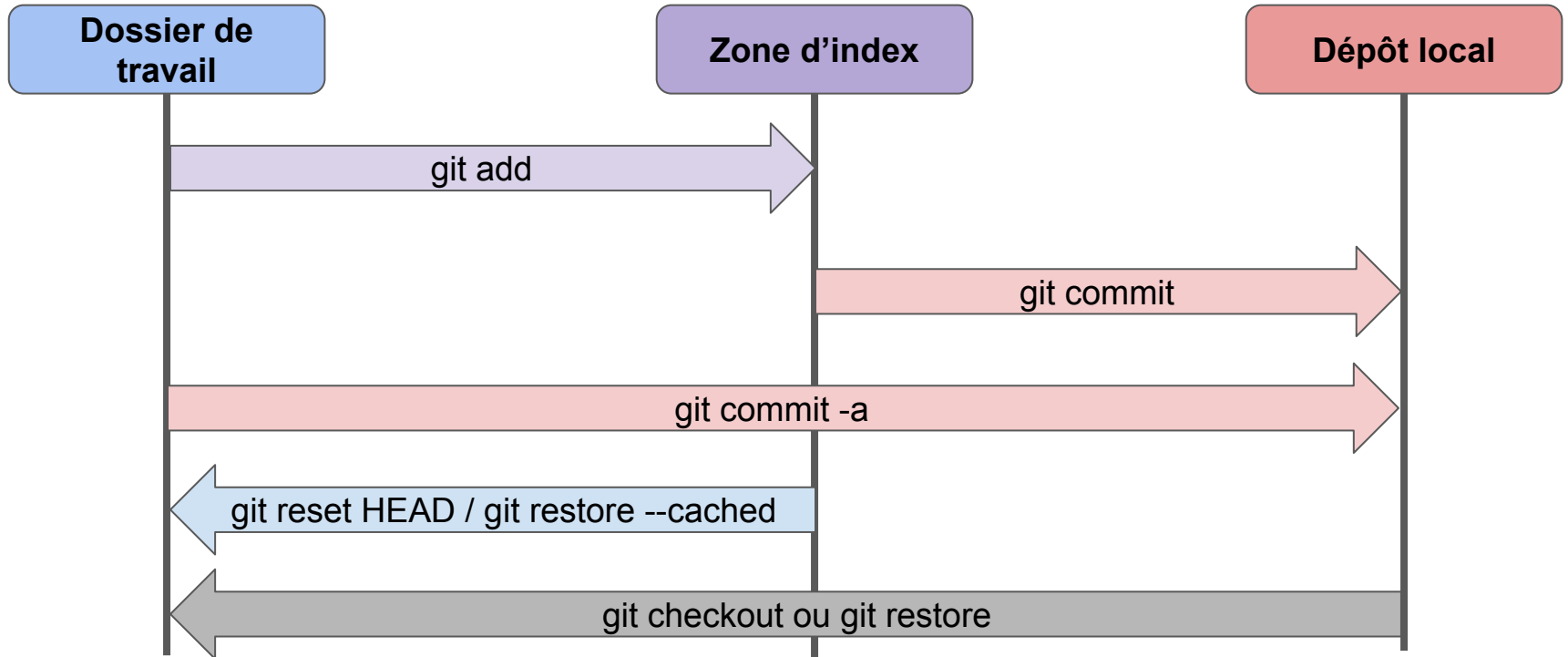


le dossier .git contient l'historique, ne pas le supprimer !

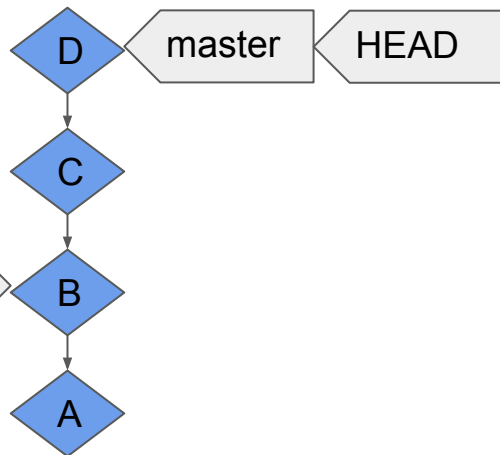
Etats des fichiers



Workflow de base



Les commits



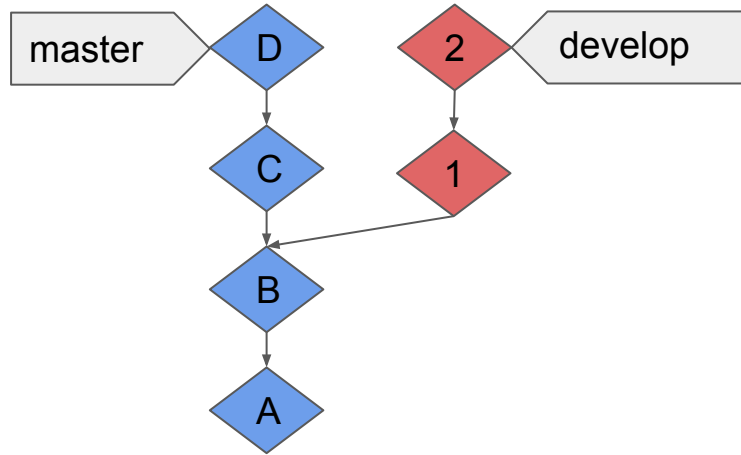
Commit

- SHA-1 (identifiant unique de 40 caractères)
- Un ensemble de modifications
- Commentaire décrivant le commit
- Les informations sur l'auteur (nom et email)
- Une date de création
- Liste (SHA-1) de son ou ses parents

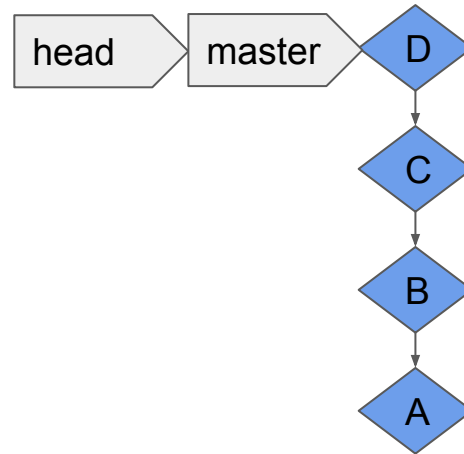
Tag

- Intitulé
- pointeur (SHA-1)

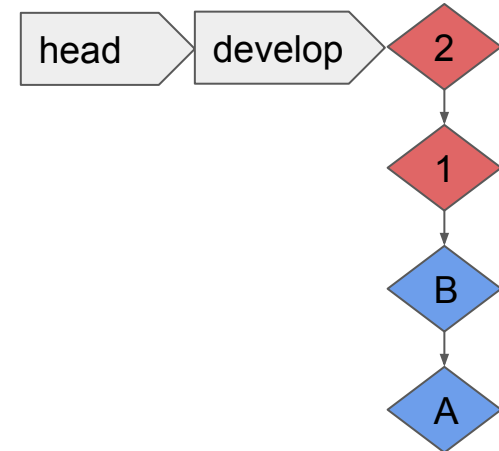
Le système de branches



\$ git branch develop



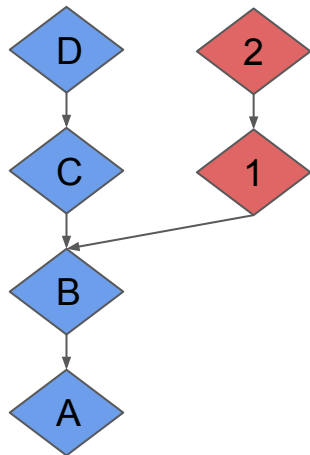
\$ git switch/checkout master



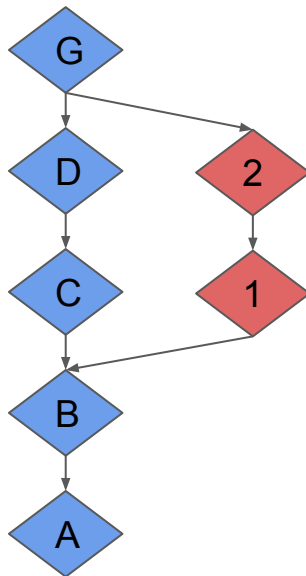
\$ git switch/checkout master

merge vs rebase

Départ

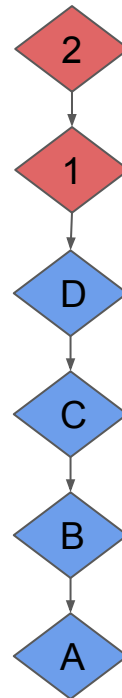


Merge



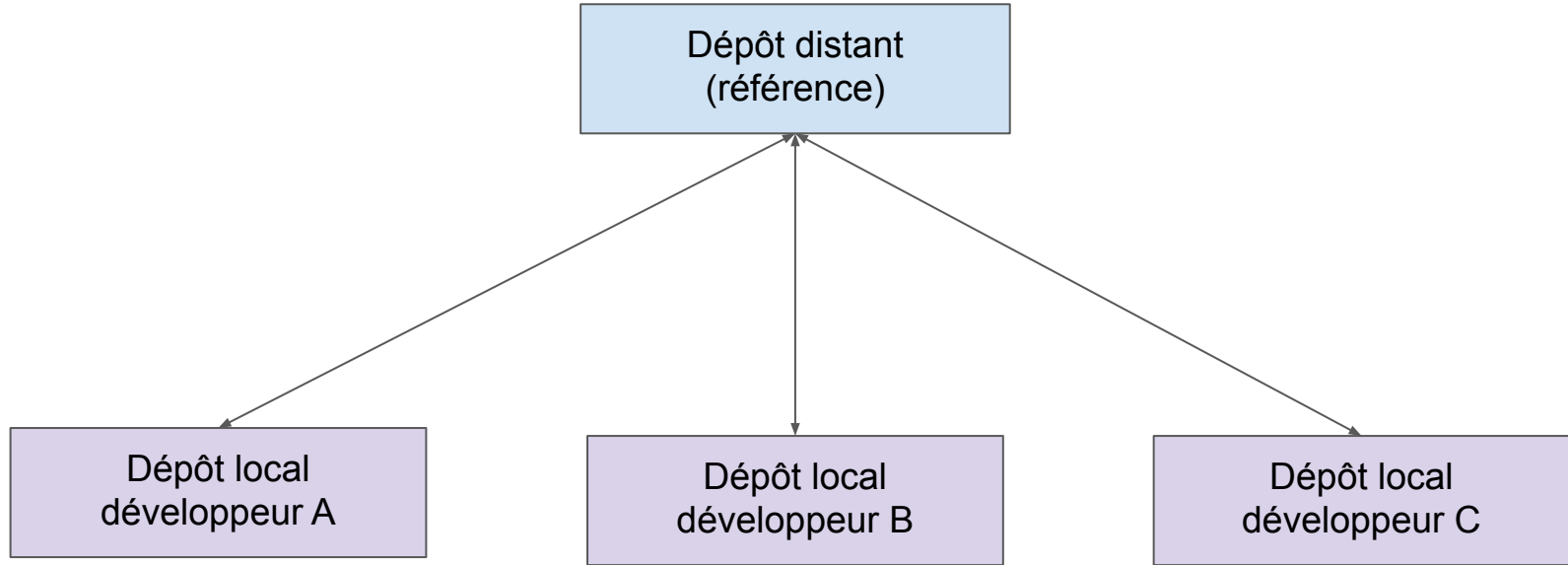
```
$ git checkout <destination_branch>  
$ git merge <branche_a_merge>
```

Rebase



```
$ git checkout <branche_a_rebase>  
$ git rebase <destination_rebase>
```

Modèle distribué



GitHub



<https://github.com>

Search or jump to...

Pull requests Issues Marketplace Explore

vim / vim Watch 706 Unstar 15,812 Fork 2,053

Code Issues 719 Pull requests 148 Projects 0 Insights

The official Vim repository <http://www.vim.org>

vim c text-editor cross-platform

9,500 commits 1 branch 7,944 releases 1 contributor

Branch: master New pull request Create new file Upload files Find File Clone or download

brammool patch 8.1.0998: getcurpos() unexpectedly changes "curswant" Latest commit 19a6685 10 hours ago

README.r	Update runtime files.	5 months ago
ci	patch 8.1.0869: Travis CI script is too complicated	a month ago
nsis	patch 8.1.0955: matchit autoload directory not in installer	16 days ago
pixmaps	patch 7.4.995	3 years ago
runtime	patch 8.1.0994: relative cursor position is not calculated correctly	3 days ago
src	patch 8.1.0998: getcurpos() unexpectedly changes "curswant"	10 hours ago
tools	patch 7.4.2288	3 years ago
.gitignore	Ignore output files from indent tests.	2 months ago
.lgtm.yml	patch 8.0.1764: lgtm considers tutor.es to be EcmaScript	11 months ago
.travis.yml	patch 8.1.0869: Travis CI script is too complicated	a month ago

Dépôt de vim

Dépôts bare

dépôt git de travail

code source

Dossier .git

```
$ git init <repo_name>
```

dépôt git serveur

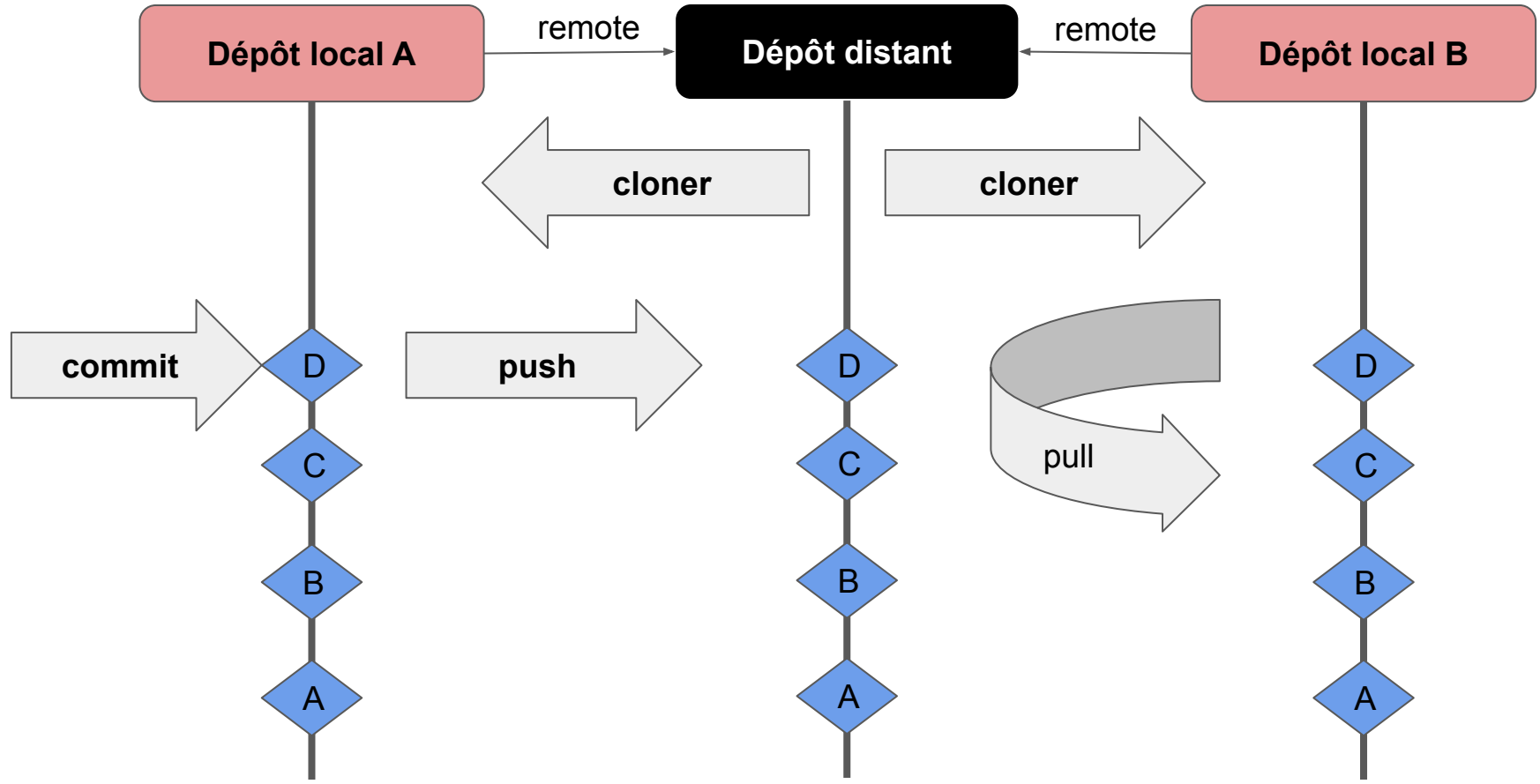
Dossier .git

```
$ git init --bare <repo_name>
```



le dossier .git contient l'historique, ne pas le supprimer !

Modèle distribué



Bilan

