



# GIT

*Equipo de Explotación y  
Plataforma de Datos.*





*¿Qué es?*

“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.”

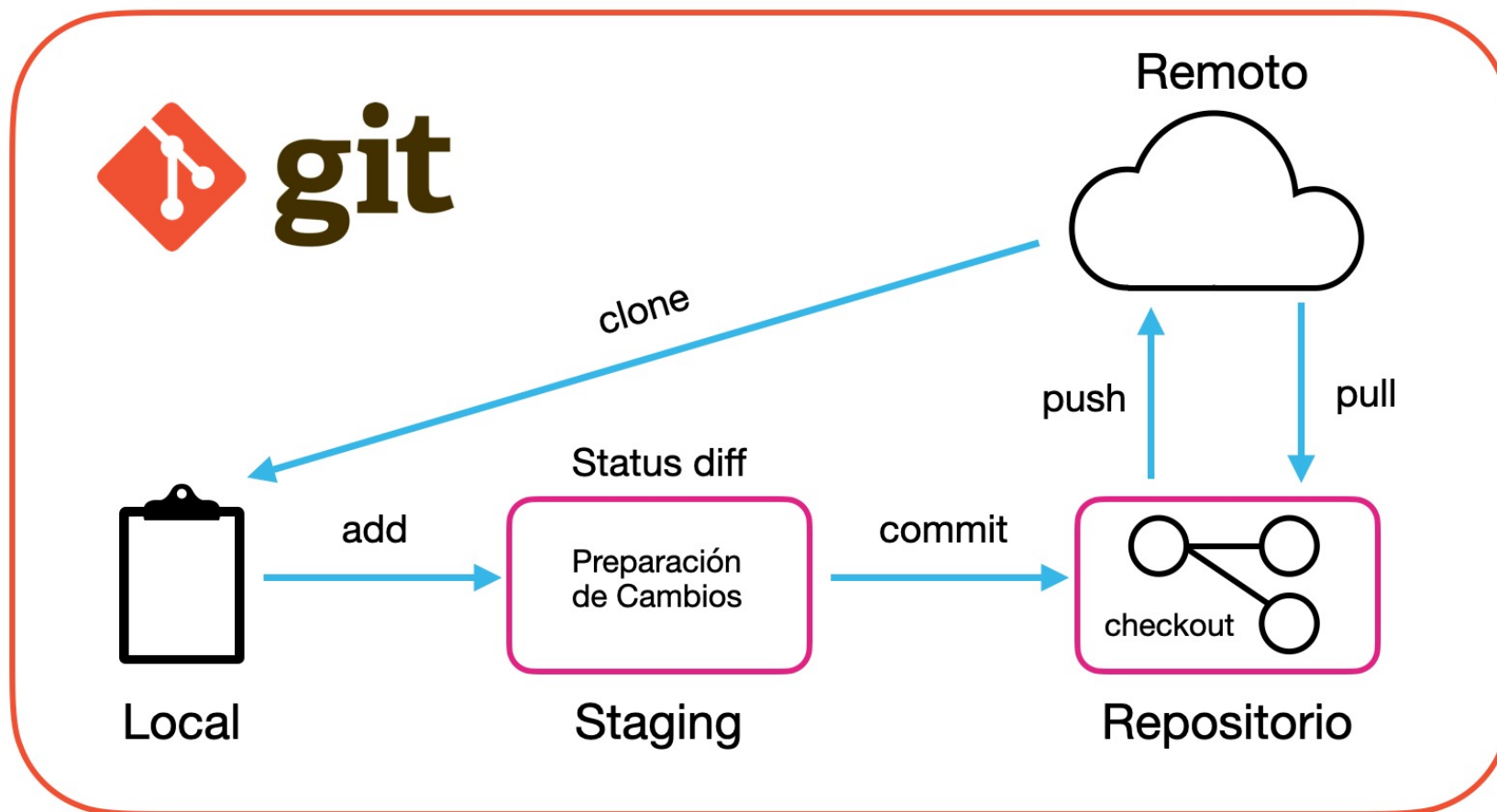
- Git

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es el  
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# Flujo de Trabajo de Git





# Comandos Principales

Clonar un repositorio ya existente

ProjectsWikiSecurityInsightsSettings

main1 branch0 tags

Clone

HTTPSSSHGitHub CLI

https://gecgithub01.walmart.com/Walma

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

dockerAdded docker placeholder directo

gcp-utilsCreated bq and gcs notebooks

git-workshopAdd git-workshop

imgCreated folder for README resou

.gitignoreAdded gitignore file

README.mdAdded general info and workbench instructions2 days ago

README.md





# Comandos Principales

Clonar un repositorio ya existente: `git clone <repo>`

Terminal 1

```
(base) jupyter@lore-test:~$ git clone https://gecgithub01.walmart.com/Walmart-Tech-Chile/mlops-sessions.git
Cloning into 'mlops-sessions'...
Username for 'https://gecgithub01.walmart.com': 10g06iy
Password for 'https://10g06iy@gecgithub01.walmart.com':
remote: Enumerating objects: 38, done.
remote: Counting objects: 100% (22/22), done.
remote: Compressing objects: 100% (15/15), done.
remote: Total 38 (delta 6), reused 15 (delta 3), pack-reused 16
Unpacking objects: 100% (38/38), done.
```

/

Name	Last Modified
git_examples	3 days ago
mlops-sessions	6 minutes ago
src	6 days ago
tutorials	6 days ago



# Comandos Principales

Revisar el estado de tus archivos: `git status`

```
Terminal 2 X
(base) jupyter@lore-test:~/mlops-sessions$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```



# Comandos Principales



Revisar el estado de tus archivos: git status

/ mlops-sessions /	
Name	Last Modified
docker	21 minutes ago
gcp-utils	21 minutes ago
git-workshop	21 minutes ago
img	21 minutes ago
README.md	21 minutes ago
new_file.txt	seconds ago

```
Terminal 1
(base) jupyter@lore-test:~/mlops-sessions$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)

    new_file.txt

nothing added to commit but untracked files present (use "git add" to track)
(base) jupyter@lore-test:~/mlops-sessions$
```



# Comandos Principales

Rastrear archivos nuevos: `git add <file_name>`

Terminal 2



```
(base) jupyter@lore-test:~/mlops-sessions$ git add new_file.txt
```

```
(base) jupyter@lore-test:~/mlops-sessions$ git status
```

On branch main

Your branch is up to date with 'origin/main'.

Changes to be committed:

(use "git reset HEAD <file>..." to unstage)

```
new file:   new_file.txt
```





# Comandos Principales

Ignorar archivos o carpetas: .gitignore

```
Terminal 2 ×  
  
(base) jupyter@lore-test:~/mlops-sessions$ nano .gitignore
```

```
Terminal 2 ×  
  
# ignora los archivos terminados en .a                               .gitignore  
*.a  
# pero no lib.a, aun cuando había ignorado los archivos terminados en .a en la línea anterior  
!lib.a  
# ignora todos los archivos del directorio build/  
build/  
# ignora doc/notes.txt, pero no este: doc/server/arch.txt  
doc/*.txt  
# ignora todos los archivos .txt del directorio doc/  
doc/**/*.txt  
# ignora todo el directorio y sus subcarpetas  
datasets/
```



# Comandos Principales

Confirmar cambios: git commit

Terminal 2



```
(base) jupyter@lore-test:~/mlops-sessions$ git commit -m "add new_file.txt"
```

```
*** Please tell me who you are.
```

Run

```
git config --global user.email "you@example.com"  
git config --global user.name "Your Name"
```

to set your account's default identity.

Omit --global to set the identity only in this repository.

```
fatal: empty ident name (for <jupyter@lore-test.us-centrall-1-a.c.wmt-85ala8730f37ee927d27e2fde8.internal>) not allowed
```

```
(base) jupyter@lore-test:~/mlops-sessions$ git config --global user.email "lorena.gonzalez1@walmart.com"
```

```
(base) jupyter@lore-test:~/mlops-sessions$ git config --global user.name "Lorena Gonzalez"
```

```
(base) jupyter@lore-test:~/mlops-sessions$ git commit -m "add new_file.txt"
```

```
[main 764b775] add new_file.txt
```

```
1 file changed, 0 insertions(+), 0 deletions(-)
```

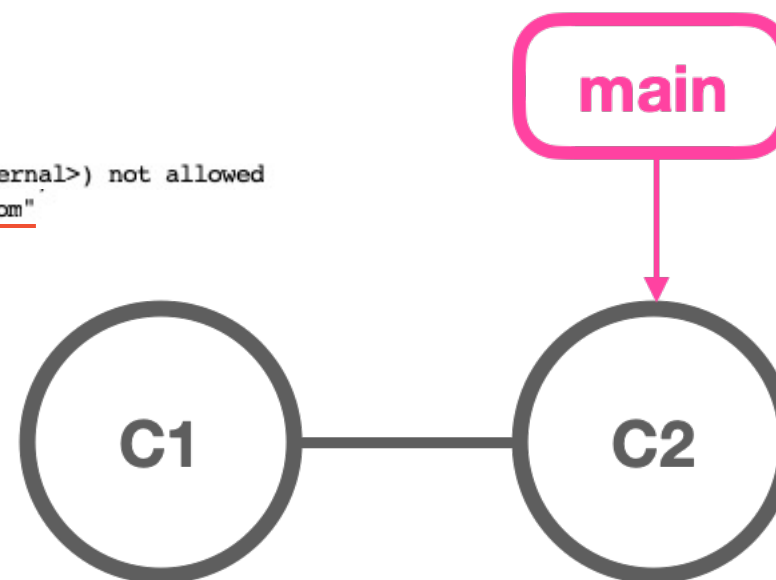
```
create mode 100644 new_file.txt
```

```
(base) jupyter@lore-test:~/mlops-sessions$ git status
```

```
On branch main
```

```
Your branch is ahead of 'origin/main' by 1 commit.
```

```
(use "git push" to publish your local commits)
```





# Comandos Principales

Actualizar repositorio en Github: `git push origin <branch_name>`

Terminal 2

```
(base) jupyter@lore-test:~/mlops-sessions$ git push origin main
Username for 'https://gecgithub01.walmart.com': 10g06iy
Password for 'https://10g06iy@gecgithub01.walmart.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 278 bytes | 278.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://gecgithub01.walmart.com/Walmart-Tech-Chile/mlops-sessions.
0291f06..764b775 main -> main
```

main 1 branch 0 tags Go to file Add file Code

10g06iy add new\_file.txt 764b775 11 minutes ago 8 commits

docker	Added docker placeholder directory	2 days ago
gcp-utils	Created bq and gcs notebooks	2 days ago
git-workshop	Add git-workshop	6 days ago
img	Created folder for README resources	2 days ago
.gitignore	Added gitignore file	2 days ago
README.md	Added general info and workbench instructions	2 days ago
new_file.txt	add new_file.txt	11 minutes ago



# Comandos Principales

Actualizar repositorio local con actualizaciones de Github: git pull

**\$git pull → \$ git fetch + \$ git merge**

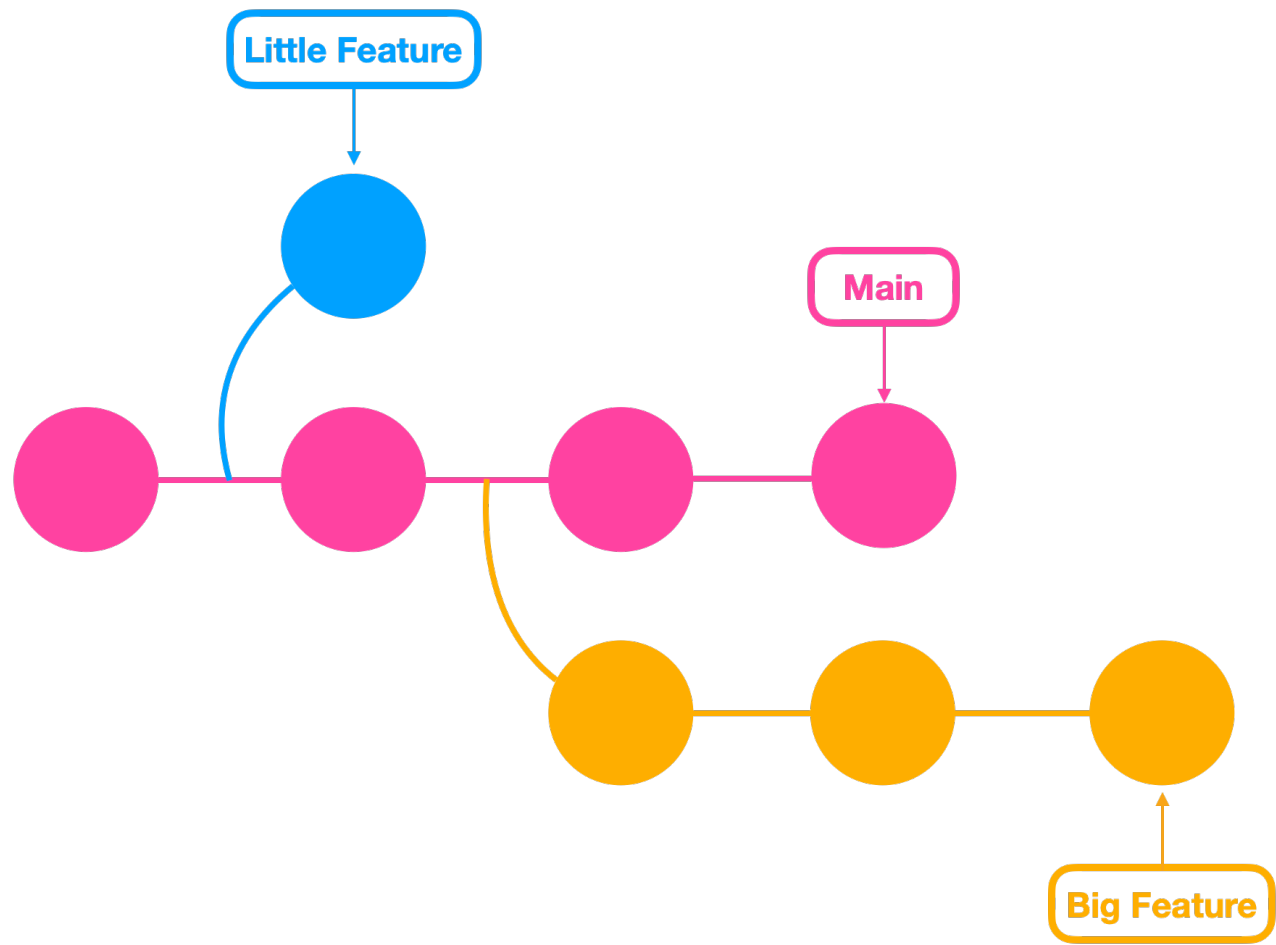
Muestra cambios: git diff

git diff HEAD

git diff --cached



# Ramificaciones en Git



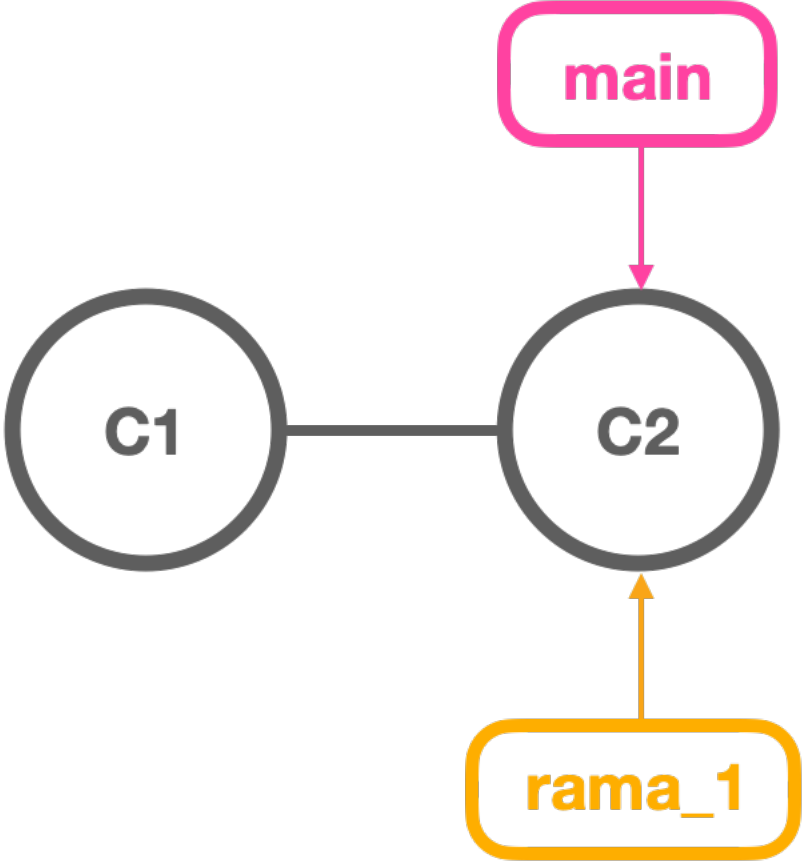


# Ramificaciones en Git

Crear una rama: `git branch <new_branch>`

```
Terminal 2
(base) jupyter@lore-test:~/mlops-sessions$ git branch rama_1
(base) jupyter@lore-test:~/mlops-sessions$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
(base) jupyter@lore-test:~/mlops-sessions$
```





# Ramificaciones en Git

Cambiarse de rama: `git checkout <new_branch>`

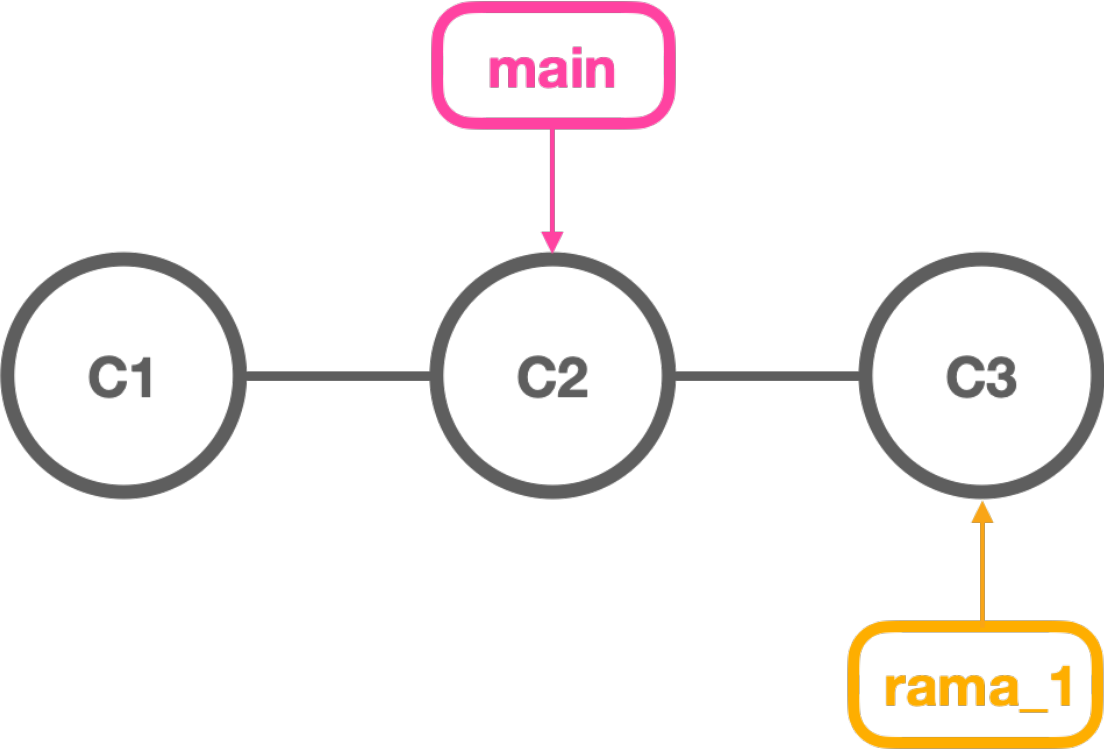
```
Terminal 2
(base) jupyter@lore-test:~/mlops-sessions$ git checkout rama_1
Switched to branch 'rama_1'
```

**Opcional:**

**\$ git checkout -b rama\_1**



# Ramificaciones en Git

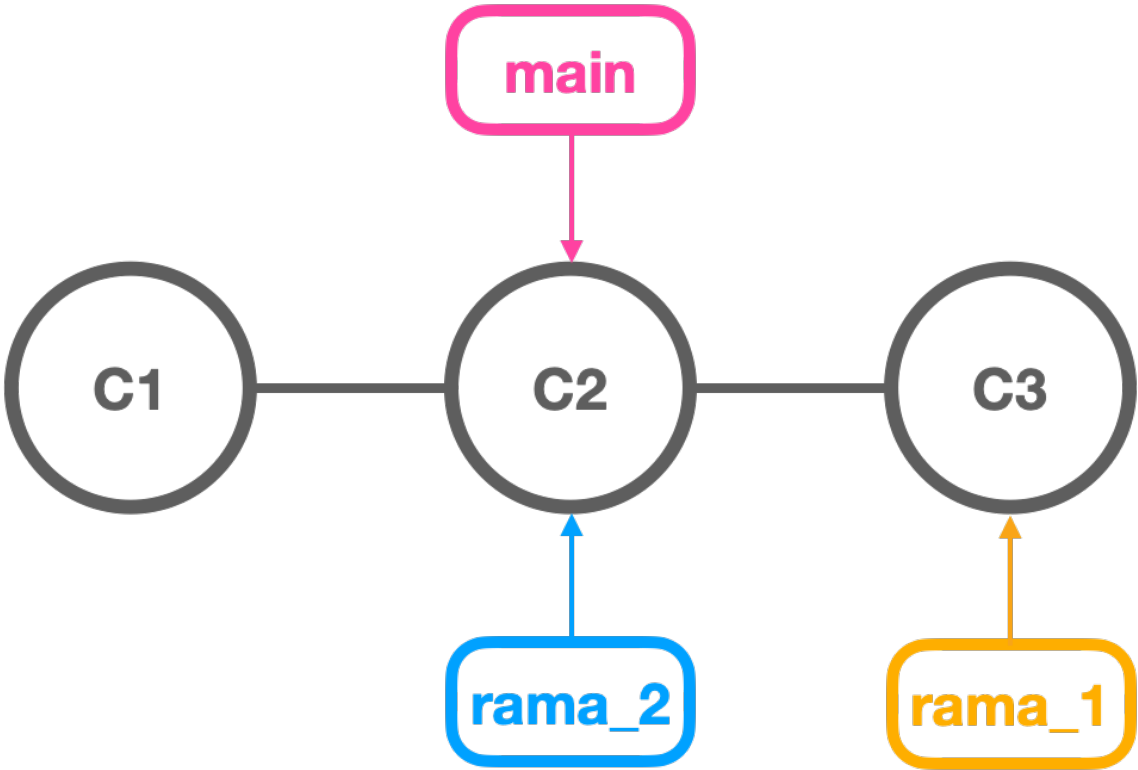


```
Terminal 2  
  
(base) jupyter@lore-test:~/mlops-sessions$ git checkout main  
Switched to branch 'main'  
Your branch is up to date with 'origin/main'.  
(base) jupyter@lore-test:~/mlops-sessions$ git checkout -b rama_2  
Switched to a new branch 'rama_2'
```



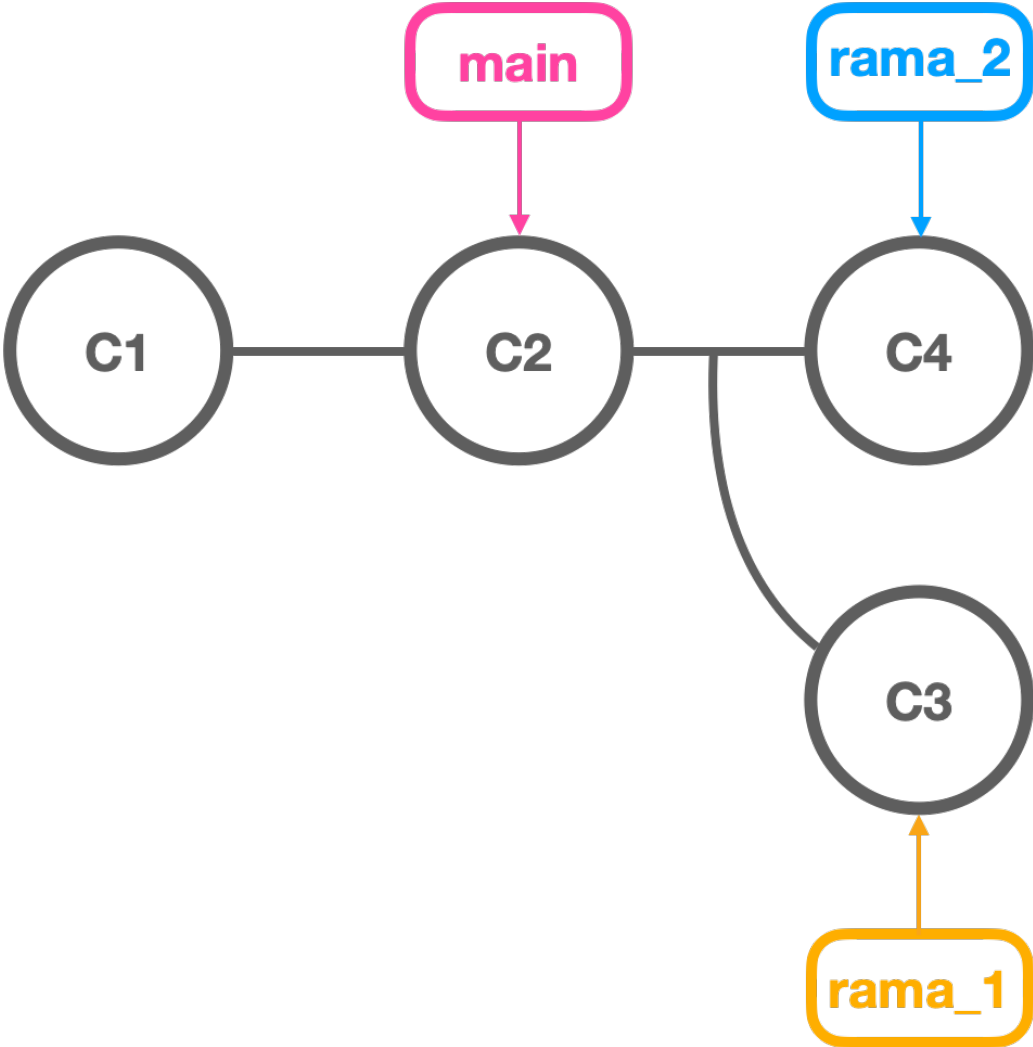


# Ramificaciones en Git





# Ramificaciones en Git





# Ramificaciones en Git

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Fusionar ramas: `git merge <new_branch>`

Terminal 2

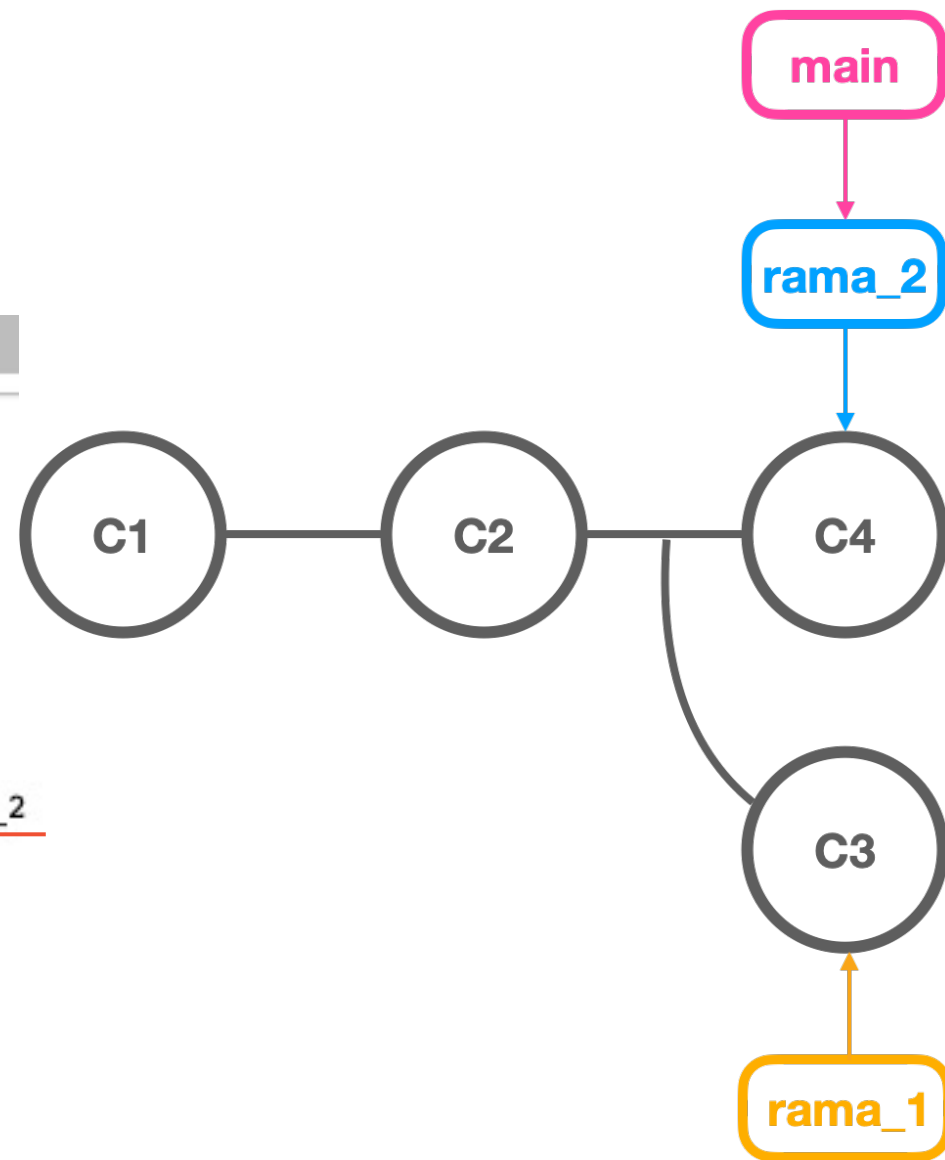


```
(base) jupyter@lore-test:~/mlops-sessions$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
(base) jupyter@lore-test:~/mlops-sessions$ 
(base) jupyter@lore-test:~/mlops-sessions$ git merge rama_2
Updating 764b775..1448c12
Fast-forward
 new_file.txt | 1 +
 1 file changed, 1 insertion(+)
(base) jupyter@lore-test:~/mlops-sessions$ git branch -d rama_2
Deleted branch rama 2 (was 1448c12).
```

**Borrar rama:**

**\$ `git branch -d <branch>`**

Walmart  
Chile

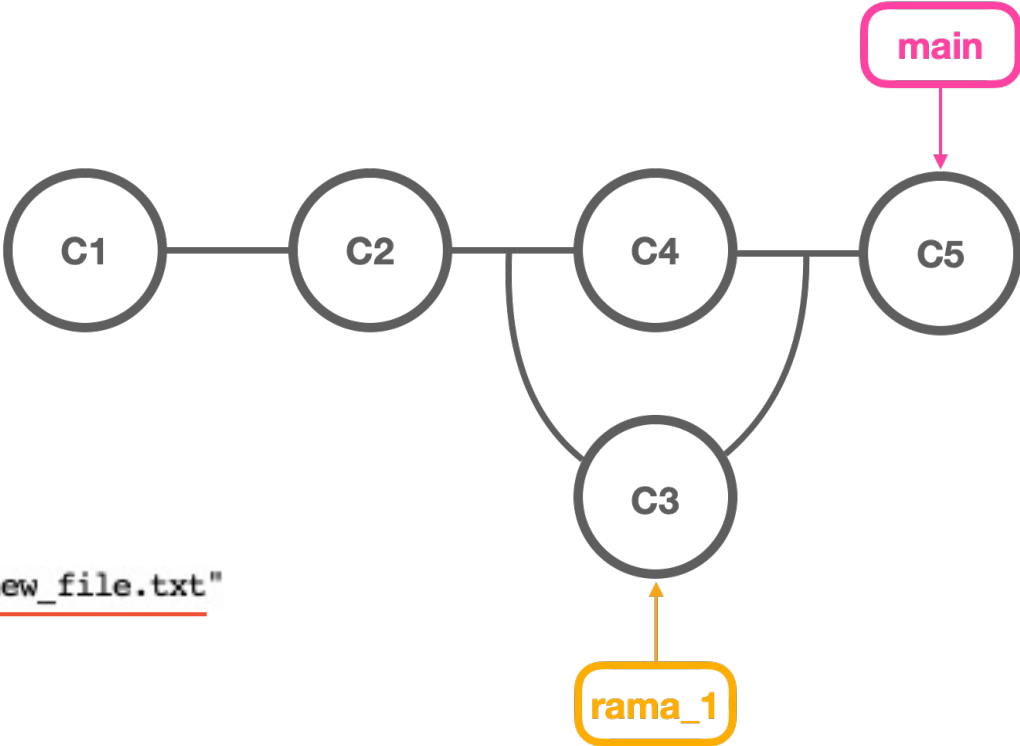




# Ramificaciones en Git

```
Terminal 2
(base) jupyter@lore-test:~/mlops-sessions$ git checkout main
Already on 'main'
Your branch is ahead of 'origin/main' by 1 commit.
(use "git push" to publish your local commits)
(base) jupyter@lore-test:~/mlops-sessions$ git merge rama_1
Auto-merging new_file.txt
CONFLICT (content): Merge conflict in new_file.txt
Automatic merge failed; fix conflicts and then commit the result.

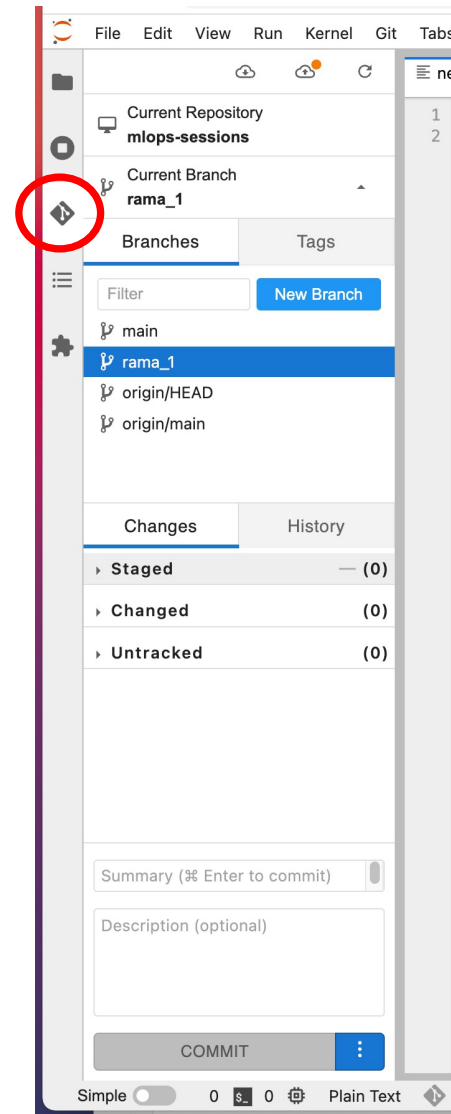
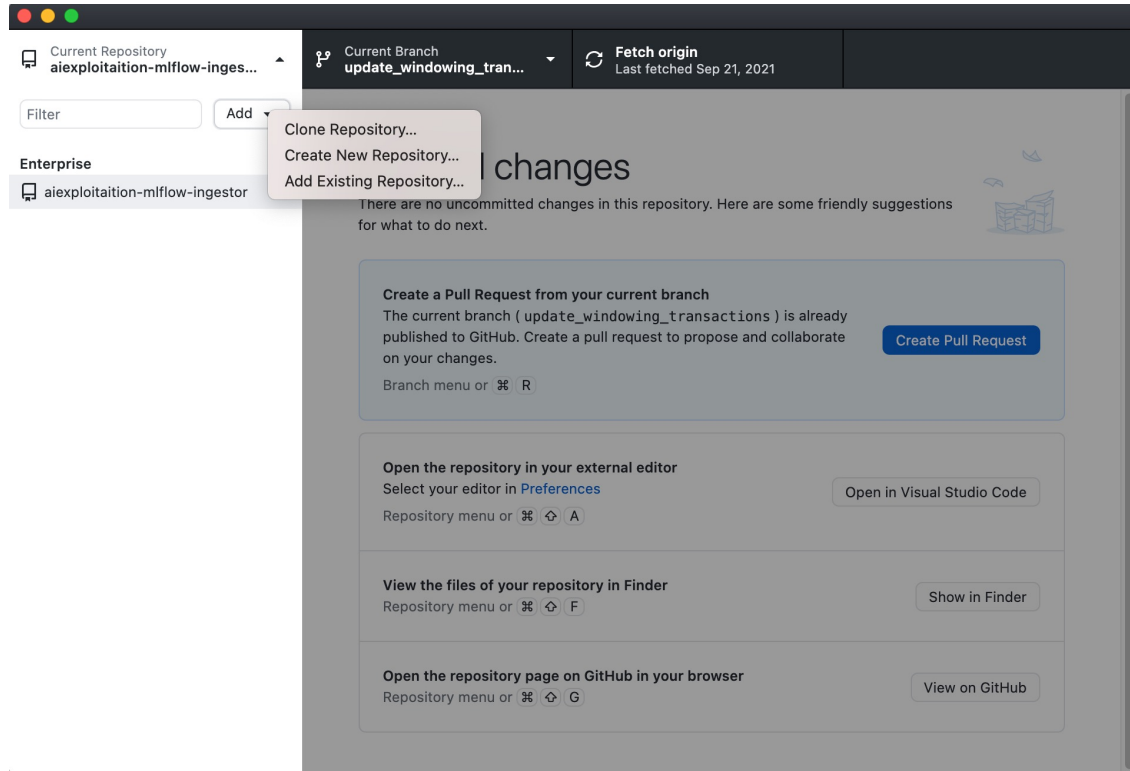
(base) jupyter@lore-test:~/mlops-sessions$ git add new_file.txt
(base) jupyter@lore-test:~/mlops-sessions$ git commit -m "changes in new_file.txt"
[main e6cae9f] changes in new_file.txt
(base) jupyter@lore-test:~/mlops-sessions$ git merge rama_1
Merge made by the 'recursive' strategy.
 new_file2.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 new_file2.txt
```





# Aplicaciones basadas en Git

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# Buenas practicas de Git

No pushees datasets

No pushees secretos

No pushees las salidas de notebooks

Has commits pequeños con descripciones claras

Ramas y Pull Requests (PR)





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Gracias 😊

Walmart  
Chile





# Referencias

- <https://git-scm.com/book/es/v2/Inicio---Sobre-el-Control-de-Versiones-Acerca-del-Control-de-Versiones>
- <https://www.atlassian.com/git/tutorials/what-is-git>
- <https://medium.com/@hengfeng/a-review-of-git-workflow-management-7f9fbabd9370>
- <https://zhauniarovich.com/post/2020/2020-06-clearing-jupyter-output/>
- <https://valohai.com/blog/git-for-data-science/>
- <https://equisd.com/comandos-git-control-version/>