

Uso común de Git, GitHub y RStudio

Mauro Lepore

Repositorio: <http://bit.ly/git-comun>

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Muchas ideas e imágenes vienen de:

<https://jennybc.github.io/wtf-2019-rsc/>

Aprender a colaborar

Aprender:

- Por que es importante usar Git/GitHub?
- Que es un “commit”?
- Bifurcar un repositorio
- Trabajar en un tiquete
- Solicitar fusión

Apéndice

- Instalación
- Configuraciones globales
- Operaciones comunes
- Demostraciones paso a paso

Por que Git/GitHub?

Como se siente trabajar con y sin Git.



.

Excuse me, do you have a moment to talk about version control?
(Jenny Bryan; Ingles)

Arreglar URLs en README.Rmd

[Tiquete modelo](#)

Motivación

Camino corto (en GitHub)

Bifurcar un repositorio

```
upstream (ell@s) ---> origin (yo)
```

Trabajar en un tiquete

Solicitar fusión

```
upstream (ell@s) <--- origin (yo)
```

—

[Demostrar con usuario fgeocom](#)

Quieres practicar?

Tiquetes abiertos

Repositories0

Code0

Commits0

Issues7

Packages0

Marketplace0

Topics0

Wikis0

Users0

States

Open7

7 issues

! Add full URLs to the website location of Information files #210

See <https://github.com/forestgeo/fgeo.plot/issues/57>

forestgeo/fgeo Opened by maurolepore 19 minutes ago

! Add full URLs to the website location of Information files #98

See <https://github.com/forestgeo/fgeo.plot/issues/57>

forestgeo/fgeo.analyze Opened by maurolepore 20 minutes ago

! Add full URLs to the website location of Information files #36

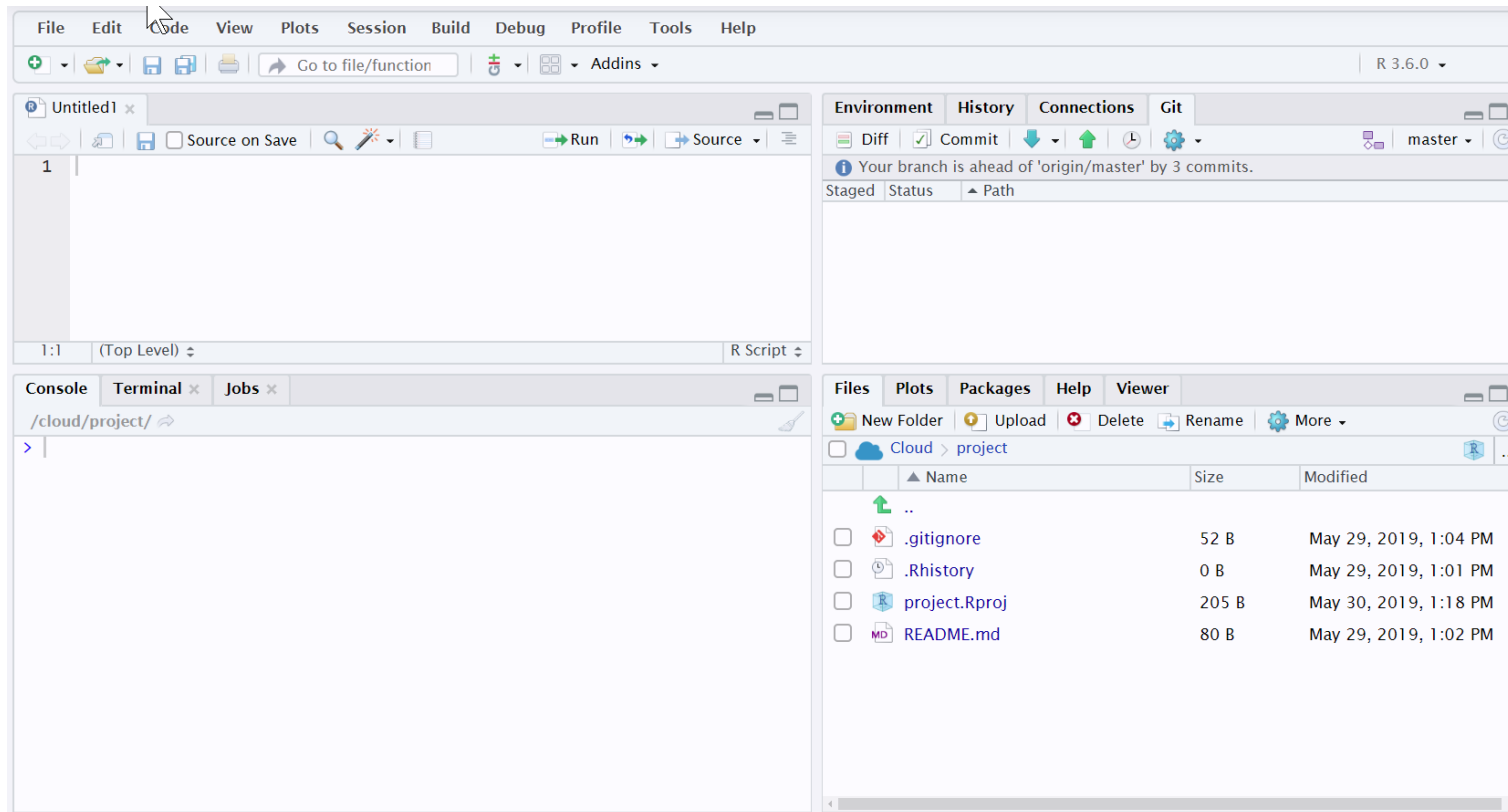
See <https://github.com/forestgeo/fgeo.plot/issues/57>

forestgeo/fgeo.biomass Opened by maurolepore 8 minutes ago

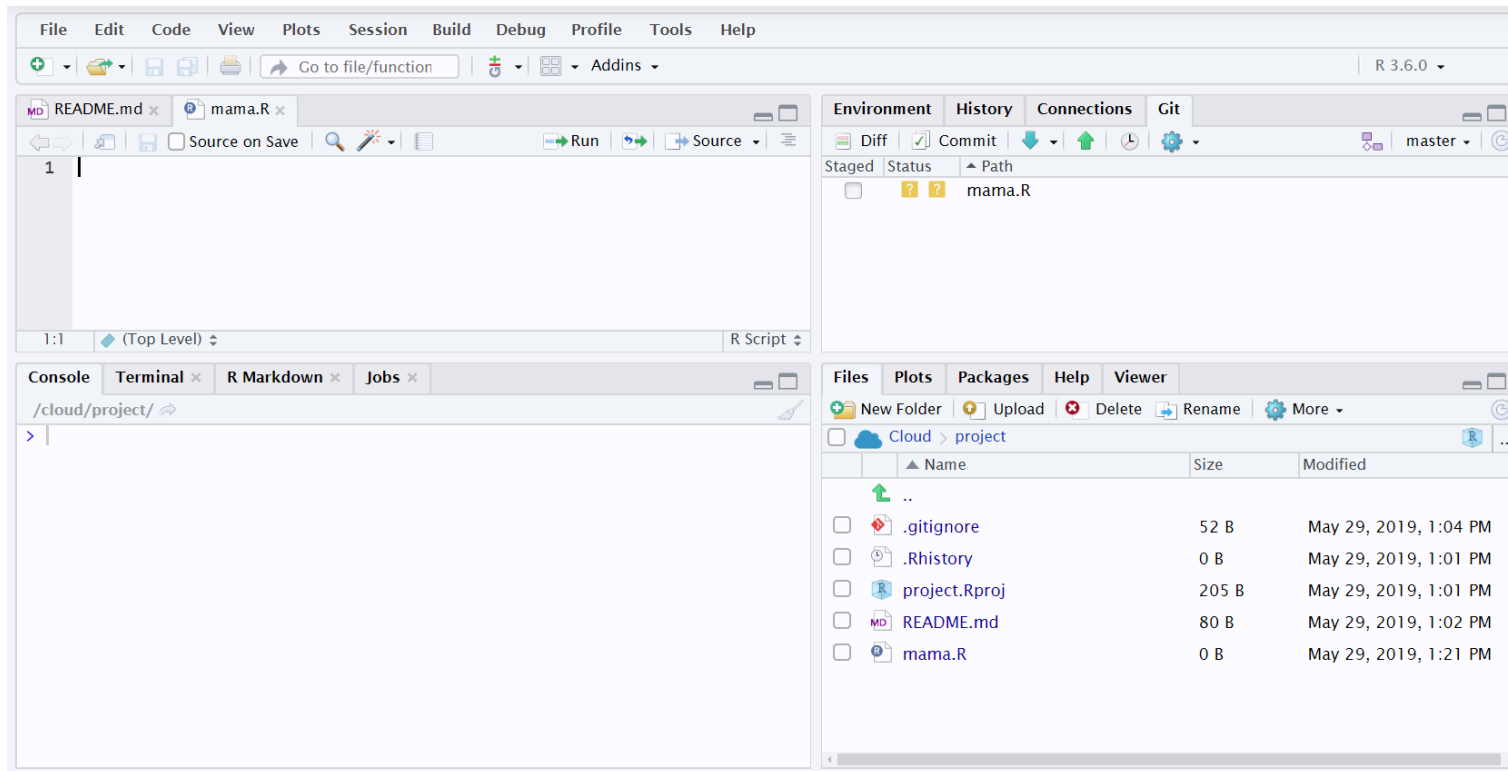
Que es un "commit"?



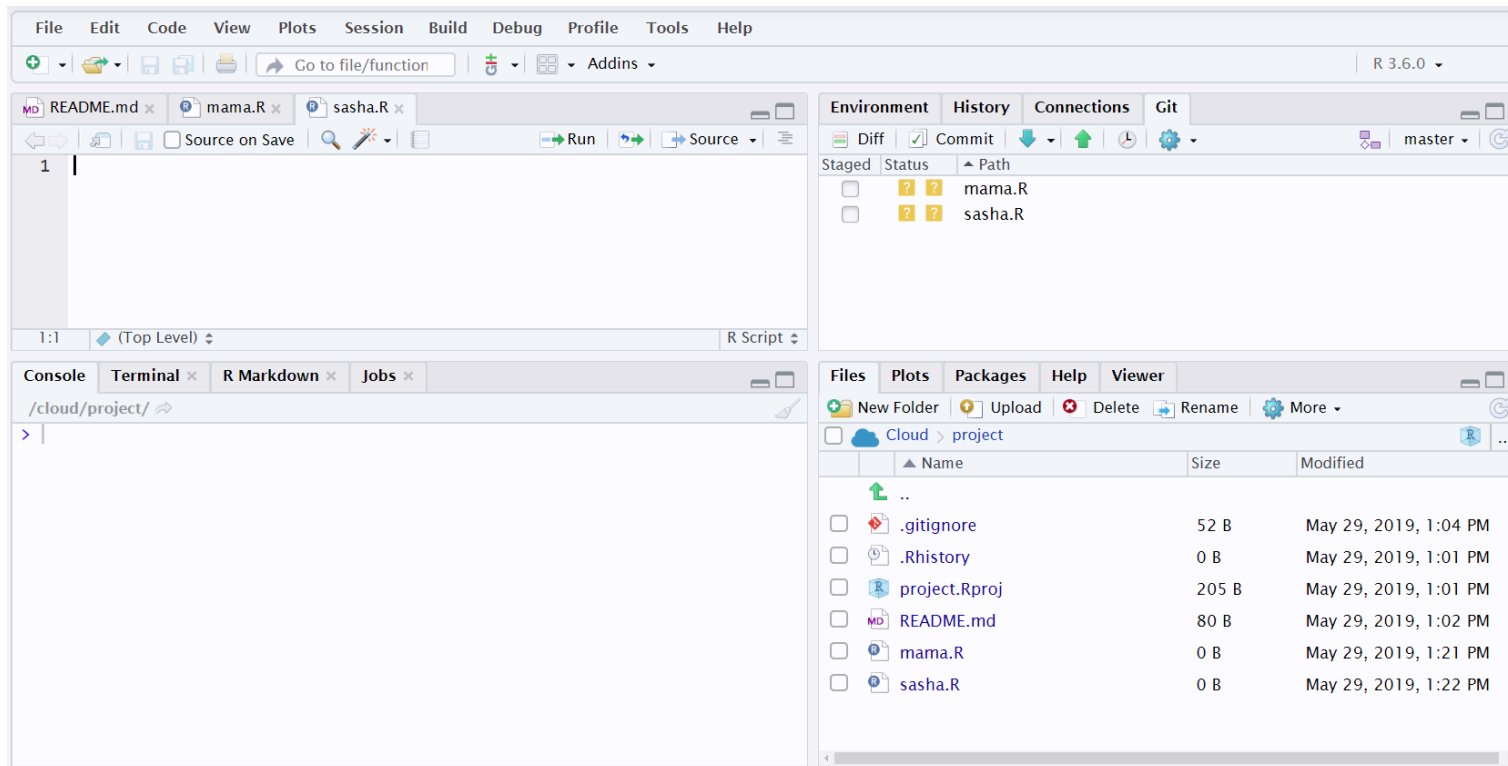
Que es un “commit”?



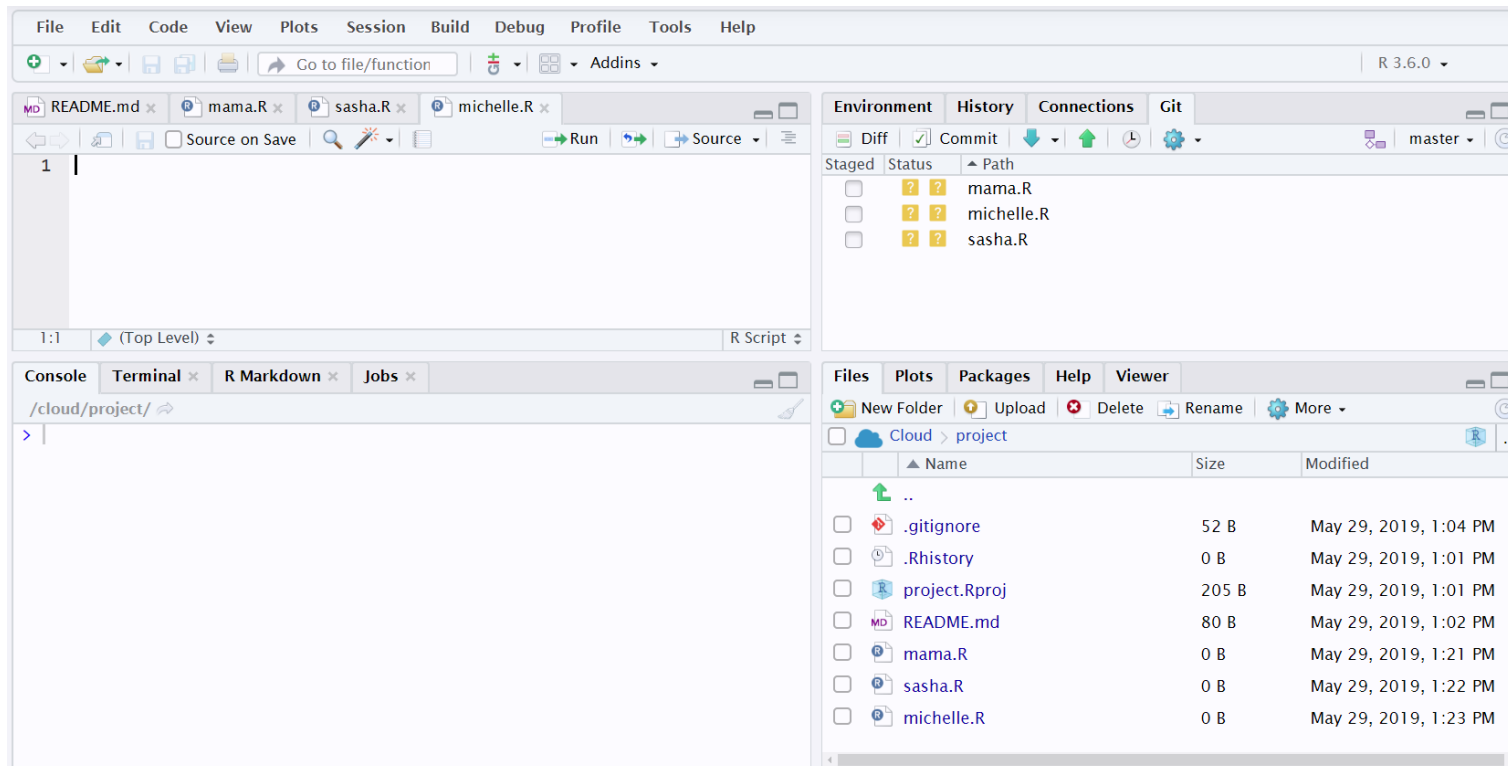
Que es un “commit”?



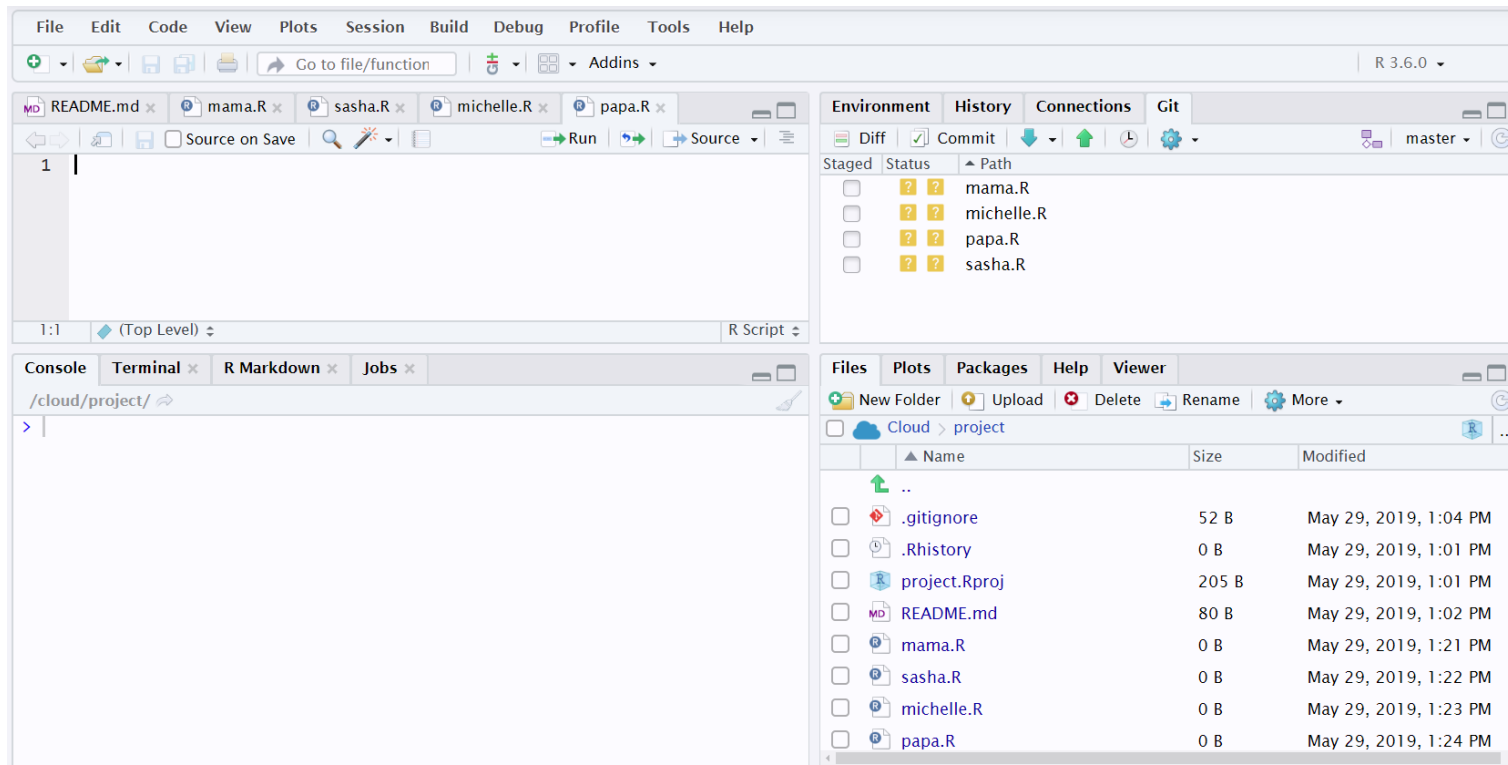
Que es un “commit”?



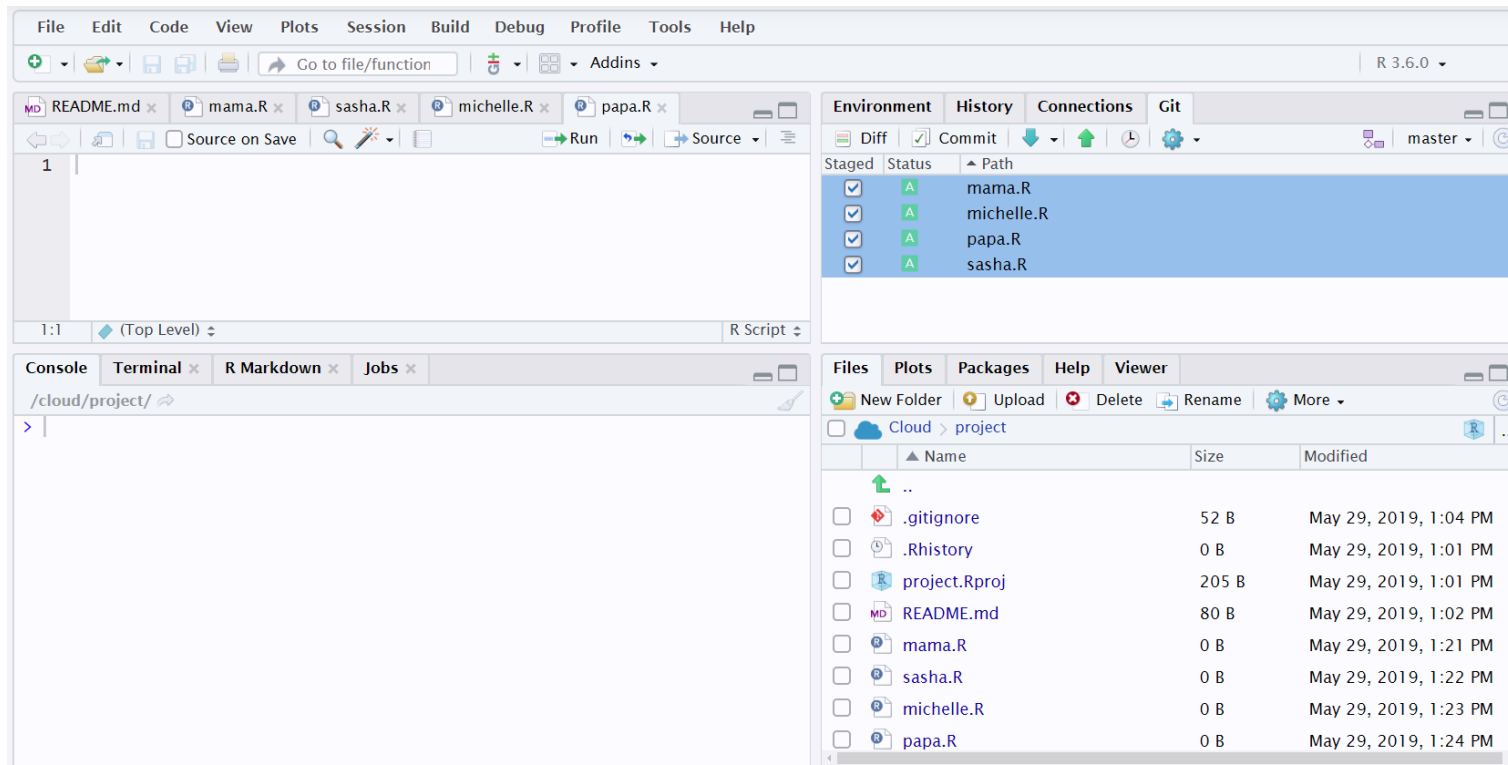
Que es un “commit”?



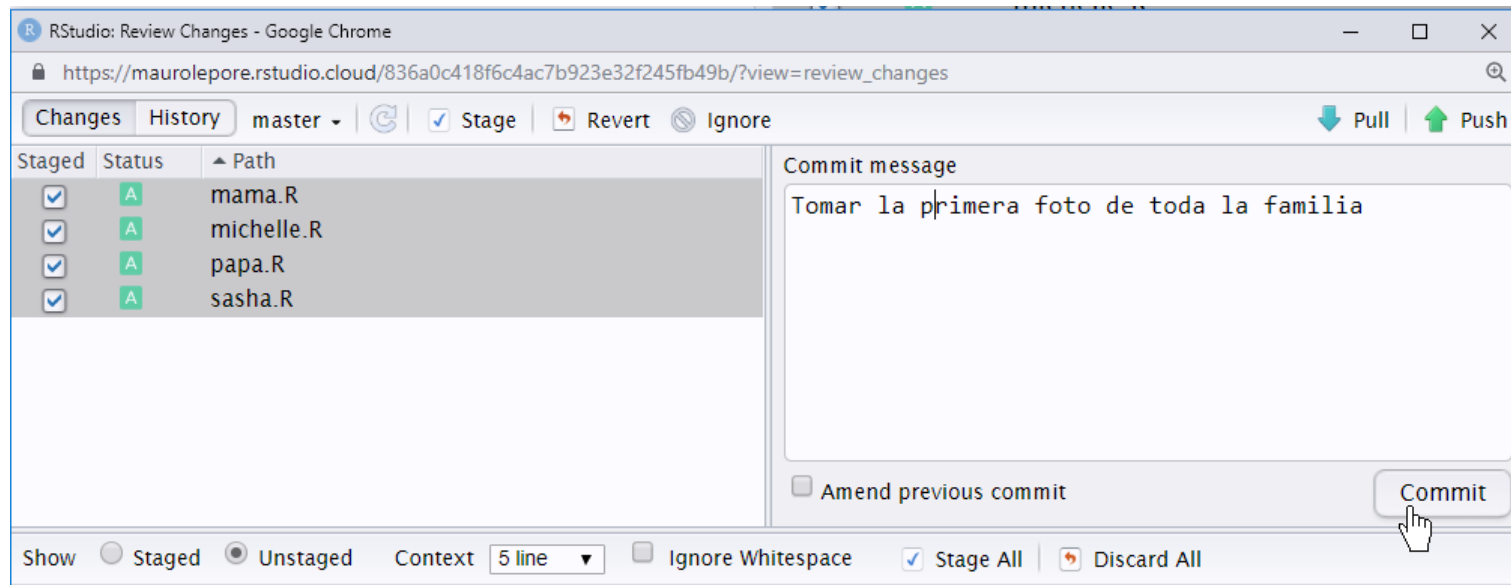
Que es un “commit”?



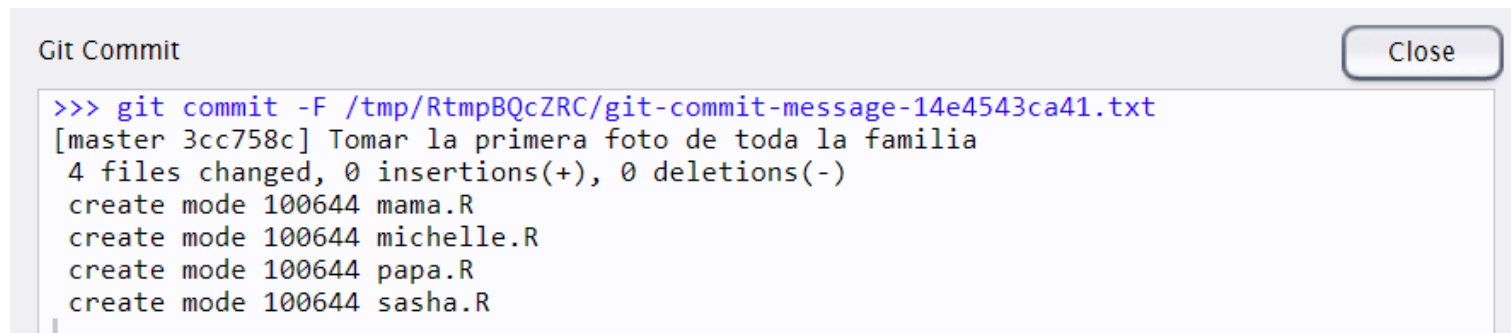
Que es un “commit”?



Que es un “commit”?

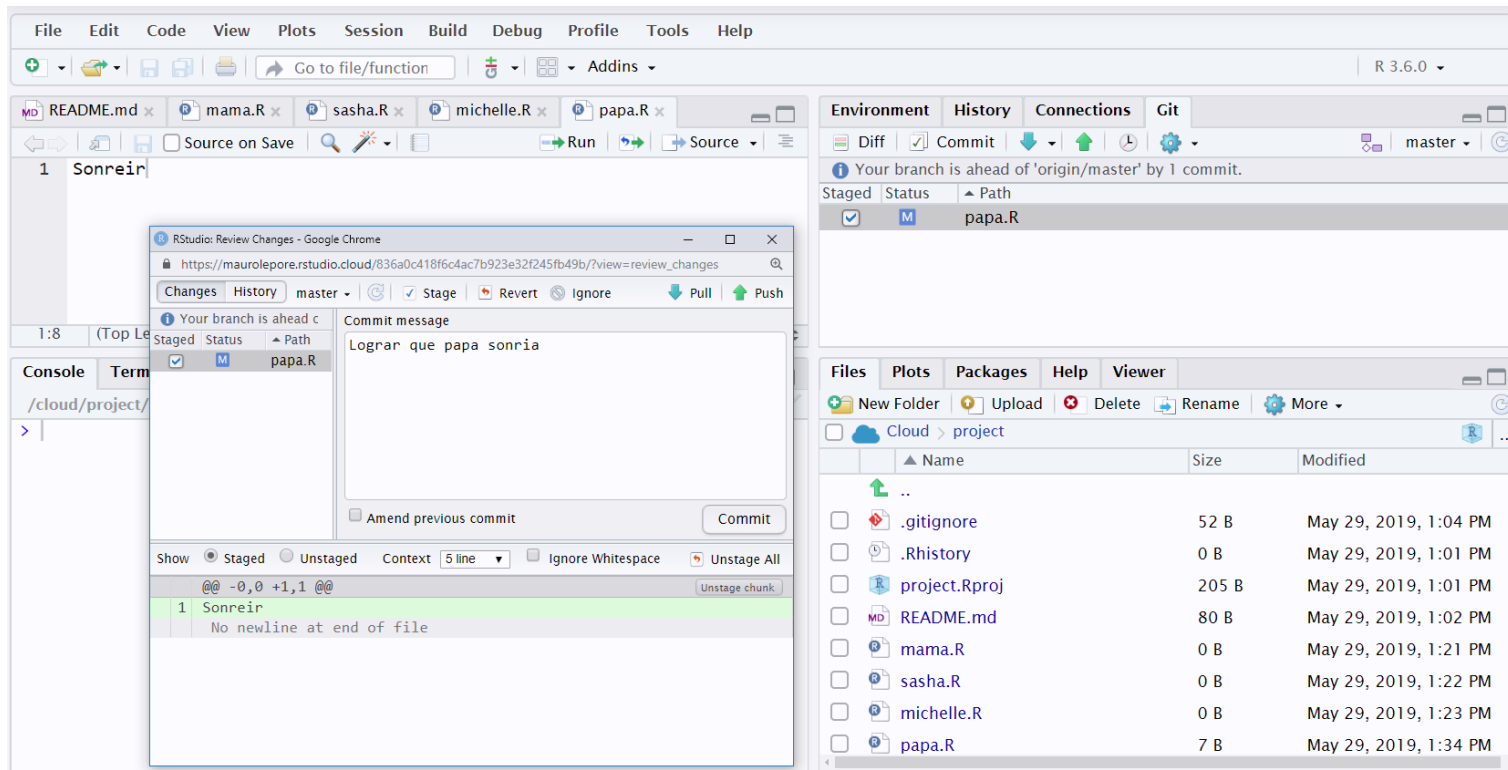


Que es un “commit”?

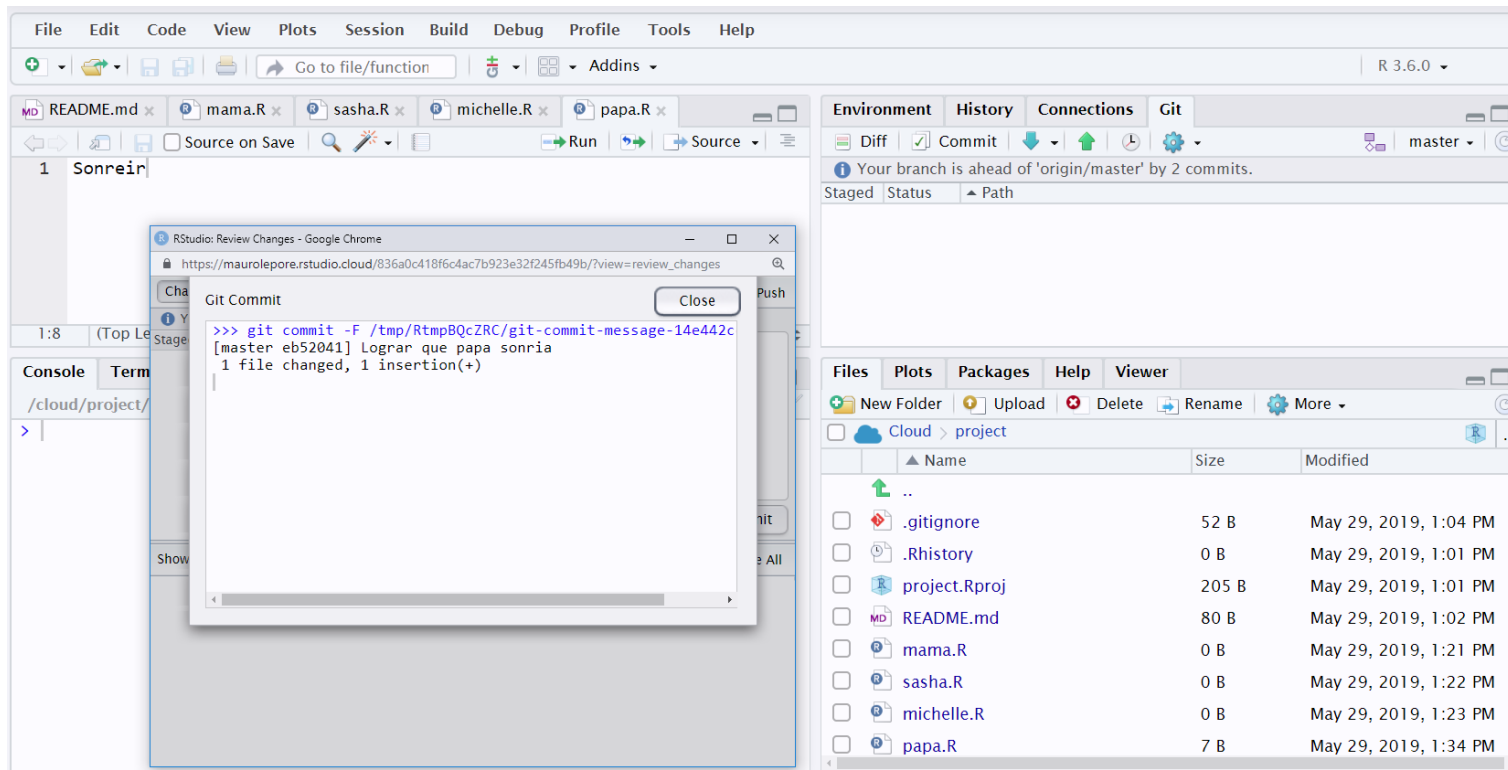
A screenshot of a terminal window titled "Git Commit" with a "Close" button in the top right corner. The terminal displays the output of a git commit command. The first line is the command prompt and the command itself. The second line shows the commit hash and the commit message. The third line shows the number of files changed and the number of insertions and deletions. The following four lines show the details of the files that were added to the commit, including their mode, file name, and the name of the person who added them.

```
Git Commit
Close
>>> git commit -F /tmp/RtmpBQcZRC/git-commit-message-14e4543ca41.txt
[master 3cc758c] Tomar la primera foto de toda la familia
4 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 mama.R
create mode 100644 michelle.R
create mode 100644 papa.R
create mode 100644 sasha.R
```

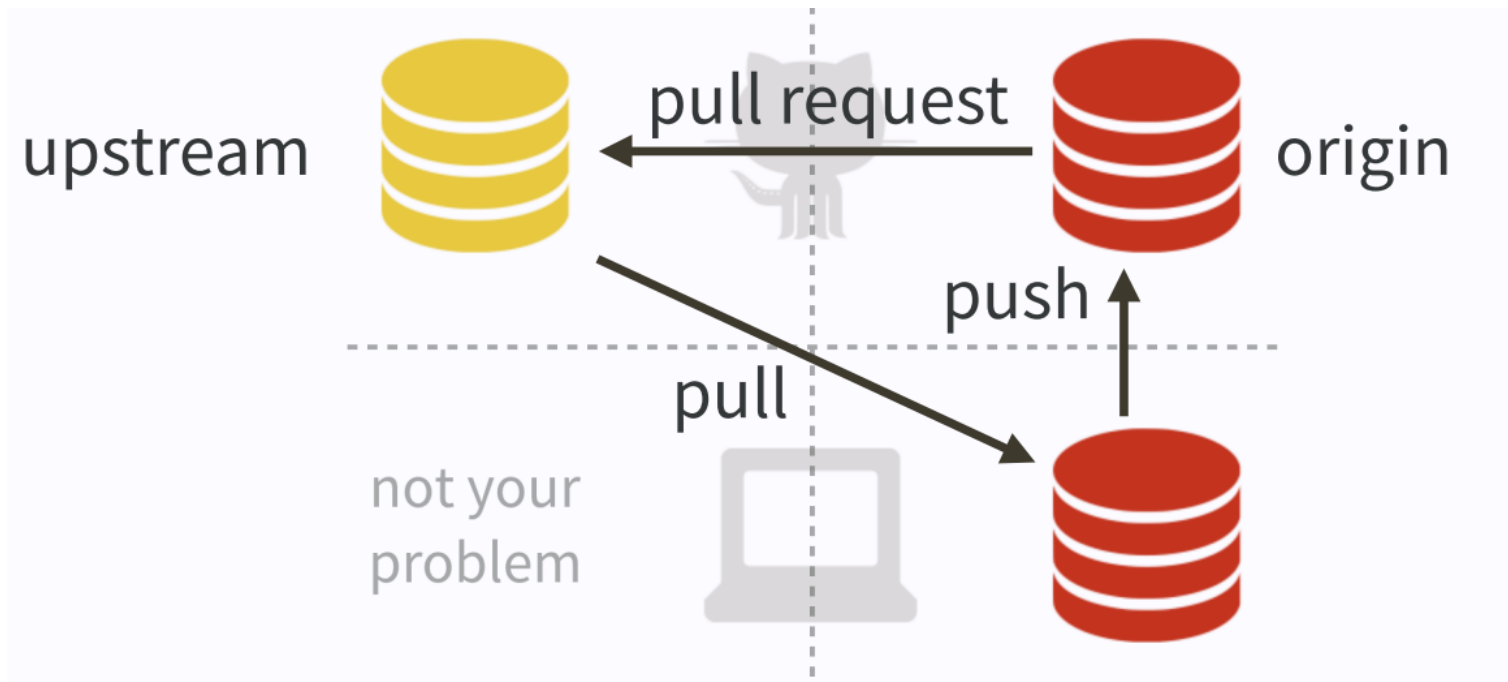
Que es un “commit”?



Que es un “commit”?



Camino Largo



—
[Demostrar](#)

Ya podes contribuir!



Preguntas

Apéndice

Ver [Pre-workshop set-up](#) (Ingles)

Instalación

Configuraciones globales

Ver la lista de configuraciones globales

```
git config --global -l
```

Definir mi email y usuario

```
git config --global user.email "maurolepore@gmail.com"
```

```
git config --global user.name "maurolepore"
```

Configuraciones útiles

Elegir un editor de texto amigable

```
core.editor=notepad
```

Permite empujar cualquier rama directamente con `git push`

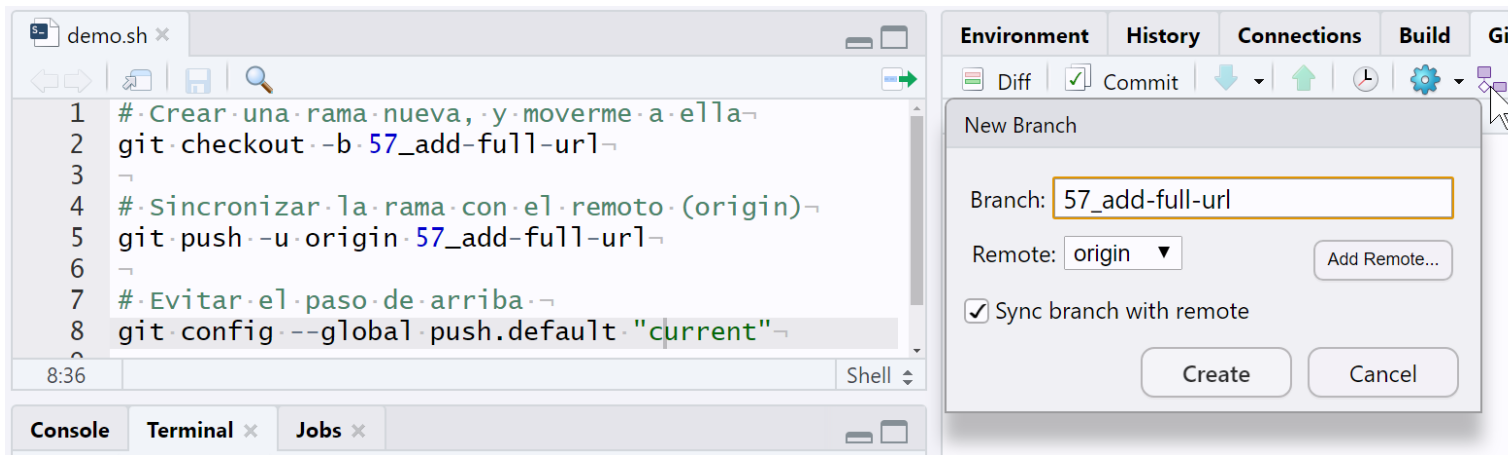
```
push.default=current
```

Reduce las chances de crear conflictos

```
pull.ff=only
```

Operaciones comunes

Crear/checkear/sincronizar una rama



```
git checkout -b 57_add-full-url
```

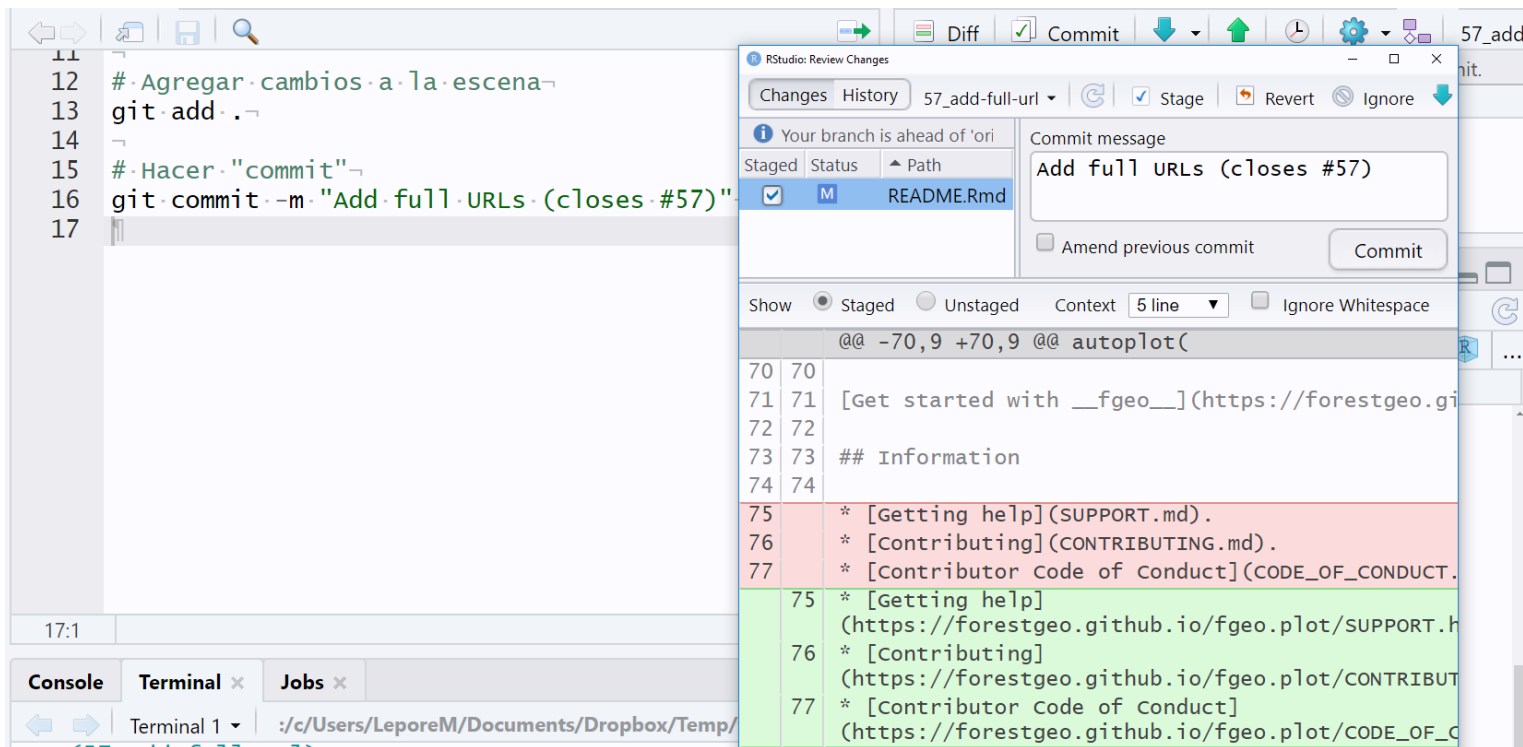
```
git push -u origin 57_add-full-url
```

Mejor aún:

```
git config --global push.default "current"
```

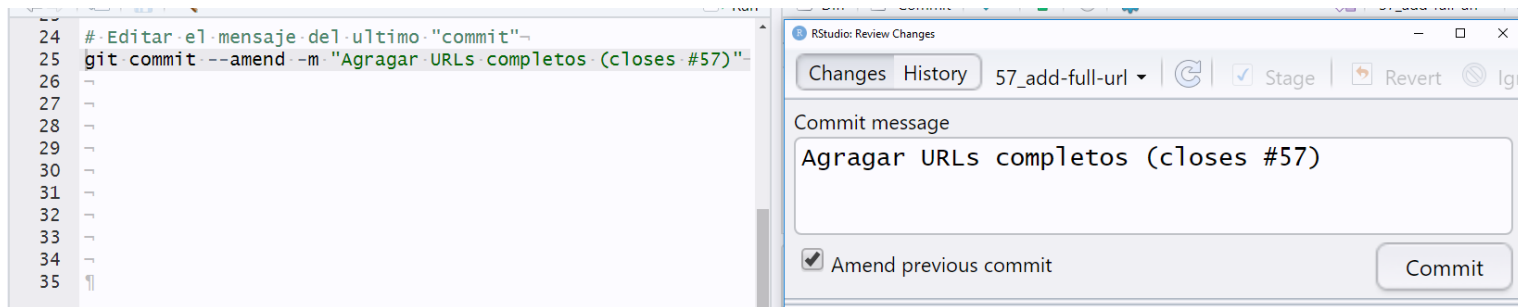
```
git push
```

Hacer "commit"



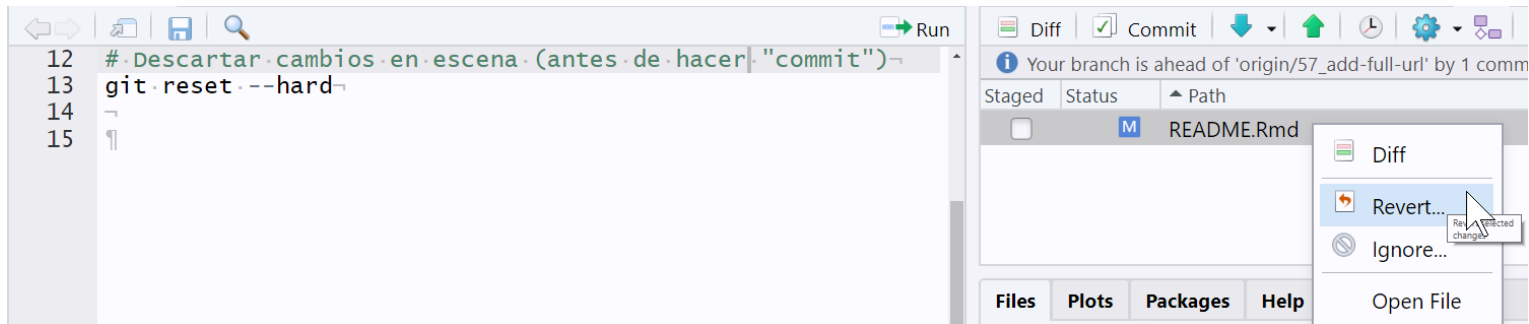
```
git add .  
git commit -m "Add full URLs (closes #57)"
```

Editar el mensaje del ultimo "commit"



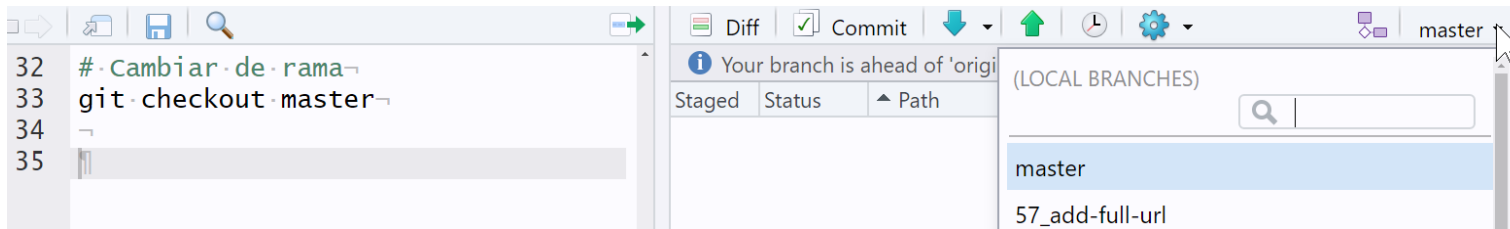
```
git commit --amend -m "Agregar URLs completos (closes #57)"
```

Descartar cambios en escena



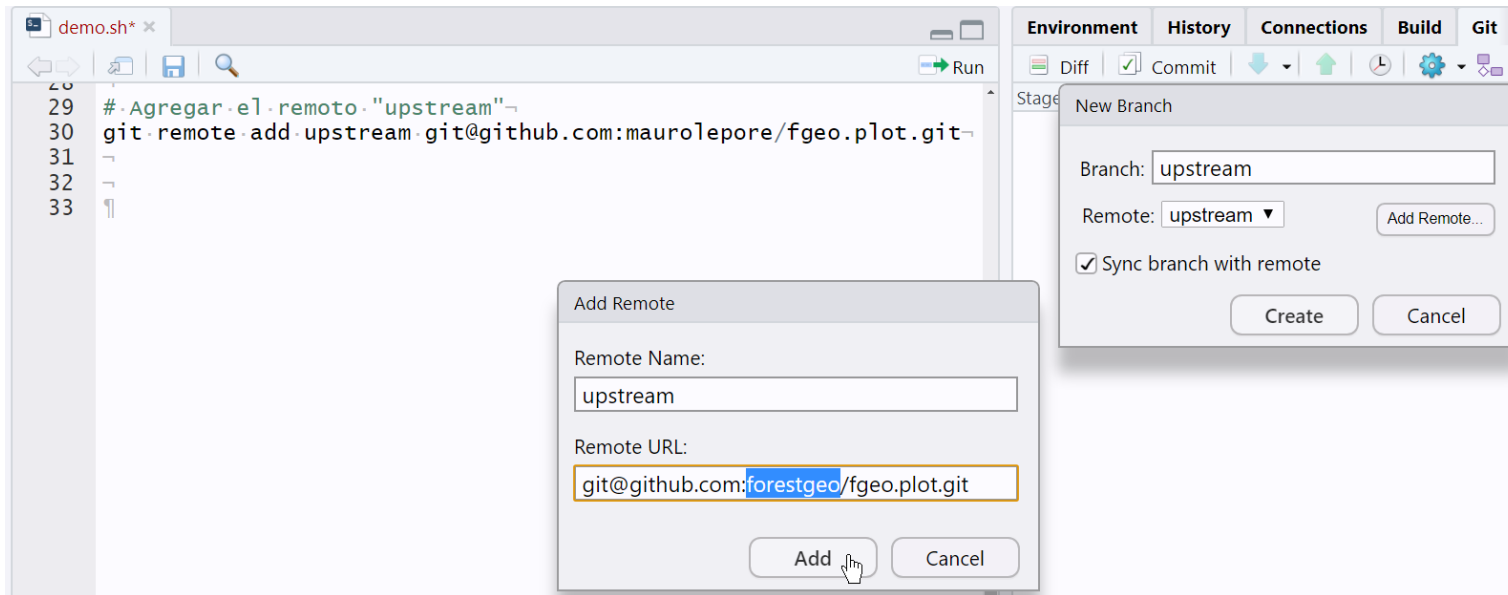
`git reset --hard`

Cambiar de rama



git checkout master

Agregar el remoto "upstream"



Agregar el remoto "upstream"

```
git remote add upstream git@github.com:maurolepore/fgeo.plot.git
```


Solo en la terminal

Actualizar contra el repositorio original

```
git fetch upstream  
git checkout master  
git rebase upstream/master
```

Lo que yo realmente hago esta explicado en
<https://www.atlassian.com/git/tutorials/comparing-workflows/feature-branch-workflow>

Deshacer “commits”; guardar cambios

```
# ~1 deshace ultimo "commit"  
# ~2 deshace ultimos 2 "commits"  
# ~n deshace ultimos n "commits"  
git reset HEAD~1
```

Contrarrestar un “commit”

~1 contrarresta el ultimo "commit"

--no-edit escribe un mensaje automatico

`git revert HEAD~1 --no-edit`

Contrarresta el "commit" con SHA a867f483

`git revert a867f483 --no-edit`

Elegir un commit específico

```
# Elegir el commit 63da5bb3  
git cherry-pick 63da5bb3
```

Eliminar una rama

Localmente

```
git branch -d nombre-de-la-rama
```

Localmente, forzado

```
git branch -D nombre-de-la-rama
```

Remotamente, en el remoto origin

```
git push -d origin nombre-de-la-rama
```

Remotamente, en el remoto upstream

```
git push -d upstream nombre-de-la-rama
```

Manipular la historia interactivamente

~3 manipular la historia de los ultimos 3 "commits"

`git rebase -i HEAD~3`

`# Commands:`

`# p, pick = use commit`

`# e, edit = use commit, but stop for amending`

`# s, squash = use commit, but meld into previous commit`

`# ...`

`#`

`# These lines can be re-ordered; they are executed from top to bottom.`

`#`

`# If you remove a line here THAT COMMIT WILL BE LOST.`

(Traducción en la siguiente pagina)

<https://about.gitlab.com/2018/06/07/keeping-git-commit-history-clean/>

Manipular la historia interactivamente

- Abortar y dejar todo tal como estaba

```
git rebase --abort
```

- s: Colapsar dos o mas “commits” contiguos
- e: Editar el mensaje del “commit”

```
git commit --amend -m "Editar mensaje"
```

```
git rebase --continue
```

- Re-ordenar linear para re-ordenar “commits”
- Borrar una linea para eliminar un “commit” (CUIDADO!)

Preguntas

Mauro Lepore

<http://bit.ly/git-comun>

Demostraciones paso a paso

Camino corto: Auto-bifurcar

"You're editing a file in a project you don't have write access to. Submitting a change to this file will write it to a new branch in your fork fgeocomm/fgeo.plot, so you can send a pull request."

The screenshot shows the GitHub interface for the repository `forestgeo / fgeo.plot`. At the top, there are buttons for `Watch` (1), `Star` (1), and `Fork` (2). Below this is a navigation bar with links for `Code`, `Issues` (7), `Pull requests` (0), `Projects` (0), `Wiki`, `Security`, and `Insights`. The main content area shows the `fgeo.plot / README.Rmd` file. A commit by `maurolepore` is displayed with the message "Update installation instructions" and the hash `3af81e0` from 9 days ago. Below the commit, it says "2 contributors". The file itself is 79 lines (57 sloc) and 1.91 KB. On the right side of the file viewer, there are buttons for `Raw`, `Blame`, `History`, and a `Fork` button. A tooltip above the `Fork` button says "Fork this project and edit the file". The file content is as follows:

```
1 ---
2 output:
3   github_document:
4     html_preview: true
5 ---
6
7 <!-- Don't edit README.md; instead, edit README.Rmd -->
```

Camino corto: Trabajar en un tiquete

73 **## Information**

74

75 * [\[Getting help\]\(https://forestgeo.github.io/fgeo.plot/SUPPORT.html\)](https://forestgeo.github.io/fgeo.plot/SUPPORT.html).

76 * [\[Contributing\]\(https://forestgeo.github.io/fgeo.plot/CONTRIBUTING.html\)](https://forestgeo.github.io/fgeo.plot/CONTRIBUTING.html).

77 * [\[Contributor Code of Conduct\]\(https://forestgeo.github.io/fgeo.plot/CODE_OF_CONDUCT.html\)](https://forestgeo.github.io/fgeo.plot/CODE_OF_CONDUCT.html).

78



Propose file change

Add full URL

Closes #57

Propose file change

Cancel



Camino corto: Solicitar fusión

forestgeo / fgeo.plot

Watch

1

Star

1

Fork

3

<> Code

Issues 7

Pull requests 0

Projects 0

Wiki

Security

Insights

Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#).


base repository: forestgeo/fgeo.plot

base: master

head repository: fgeocomm/fgeo.plot

compare: patch-1

✓ **Able to merge.** These branches can be automatically merged.

FORESTGEO


Add full URL

Write

Preview


AA B i “ <> 🔗 ⋮ ≡ ☑ @ 📌 ↶

Closes #57

Attach files by dragging & dropping, selecting or pasting them. 

☒ Allow edits from maintainers. [Learn more](#)

Create pull request



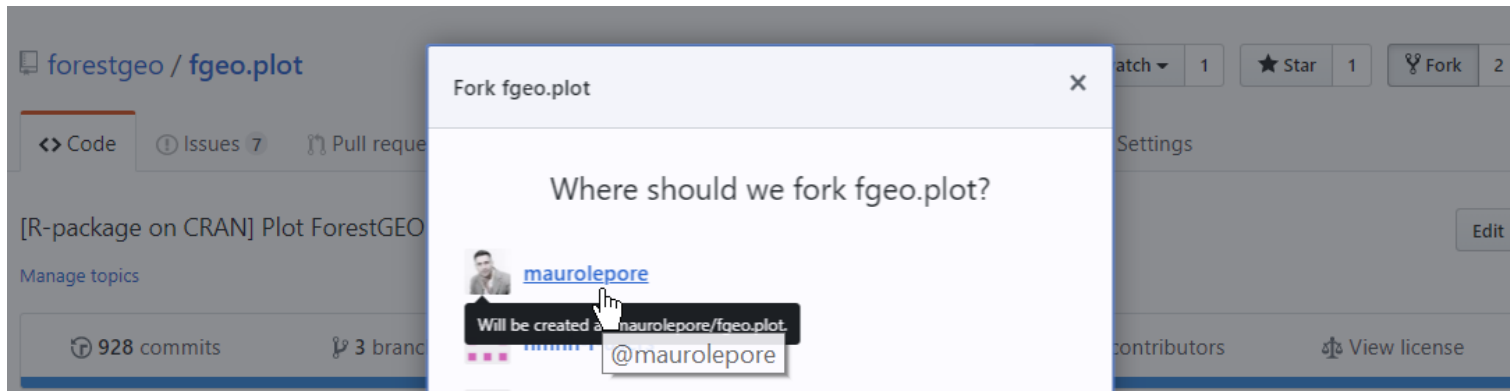
It looks like this is your first time opening a pull request in this project!

Be sure to review the [contributing guidelines](#) and [code of conduct](#).

Looking for help?
Check out the project's [instructions for getting support](#).

46/52

Camino Largo: Bifurcar



Camino Largo: Clonar (GitHub)

The screenshot shows the GitHub interface for the repository 'maurolepore / fgeo.plot', which is a fork of 'forestgeo/fgeo.plot'. The repository has 0 Watchers, 0 Stars, and 3 Forks. The 'Code' tab is selected, showing the repository description: '[R-package on CRAN] Plot ForestGEO data' with a link to 'https://forestgeo.github.io/fgeo.plot/'. Below this, it shows 928 commits, 3 branches, 9 releases, and 3 contributors. A 'Clone or download' button is highlighted in green. A modal window titled 'Clone with SSH' is open, showing the SSH URL 'git@github.com:maurolepore/fgeo.plot.git' and a 'Copy' icon. The modal also includes a 'Use HTTPS' link and instructions to use an SSH key and passphrase.

maurolepore / fgeo.plot
forked from forestgeo/fgeo.plot

Watch 0 Star 0 Fork 3

Code Pull requests 0 Projects 0 Wiki Security Insights Settings

[R-package on CRAN] Plot ForestGEO data <https://forestgeo.github.io/fgeo.plot/> Edit

Manage topics

928 commits 3 branches 9 releases 3 contributors View license

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

This branch is even with forestgeo:master.

maurolepore Simplify news

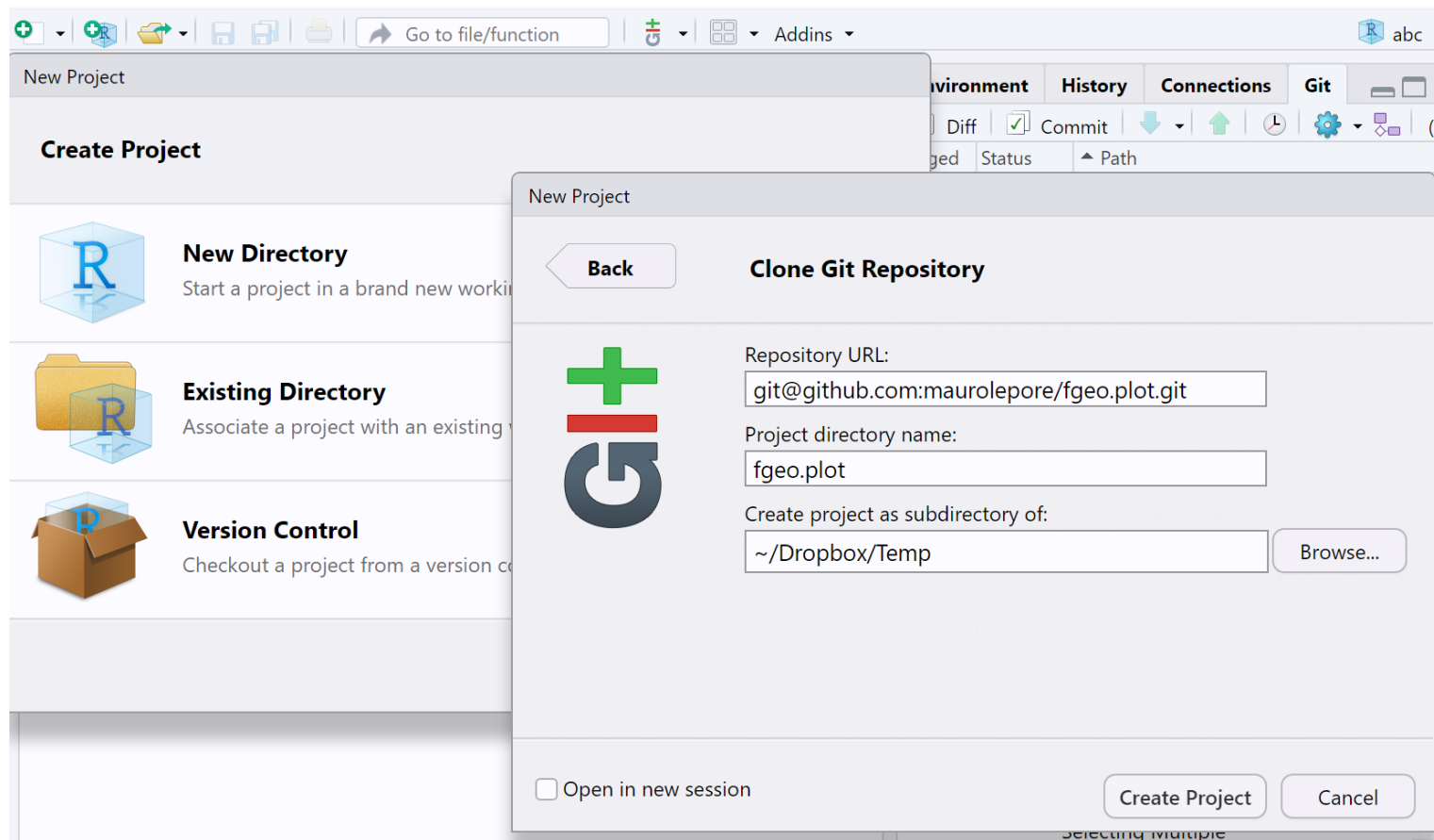
.buildignore Update jobs

Clone with SSH ? Use HTTPS

Use an SSH key and passphrase from account.

git@github.com:maurolepore/fgeo.plot.git Copy

Camino Largo: Clonar (RStudio)



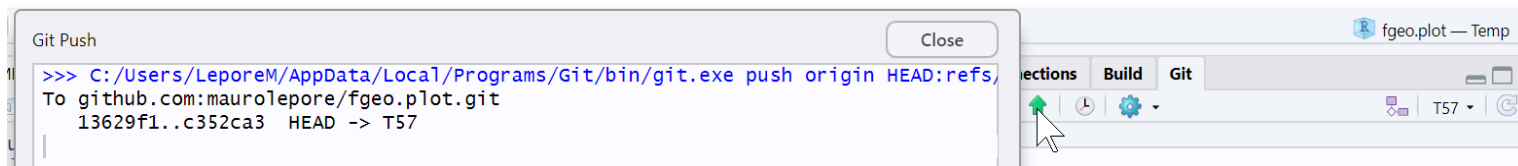
Camino Largo: Trabajar en un tiquete

The screenshot shows the RStudio interface with a commit message dialog box open. The dialog box has tabs for 'Changes' and 'History', and a dropdown menu set to 'T57'. The 'Commit message' field contains the text 'Add full URLs (closes #57)'. Below the dialog box, the code editor shows the following R code:

```
70 70  
71 71 [Get started with __fgeo__](https://forestgeo.github.io/fgeo)  
72 72  
73 73 ## Information  
74 74  
75 * [Getting help](SUPPORT.md).  
76 * [Contributing](CONTRIBUTING.md).  
77 * [Contributor code of conduct](CODE_OF_CONDUCT.md).  
75 * [Getting help]  
(https://forestgeo.github.io/fgeo.plot/SUPPORT.html).  
76 * [Contributing]  
(https://forestgeo.github.io/fgeo.plot/CONTRIBUTING.html).  
77 * [Contributor code of conduct]  
(https://forestgeo.github.io/fgeo.plot/CODE_OF_CONDUCT.html).
```

The console shows the output of the R code, including the URLs for the help, contributing, and code of conduct documents. The file explorer on the right shows the file structure of the project, including the README.Rmd file.

Camino Largo: Hacer “Push”



Camino Largo: Solicitar fusión

forestgeo / fgeo.plot

Unwatch 1 Star 1 Fork 3

Code Issues 7 Pull requests 1 Projects 0 Wiki Security Insights Settings

[R-package on CRAN] Plot ForestGEO data <https://forestgeo.github.io/fgeo.plot/> Edit

Manage topics

928 commits 3 branches 9 releases 1 environment 3 contributors View license

Your recently pushed branches:

maurolepore:T57 (2 minutes ago) Compare & pull request