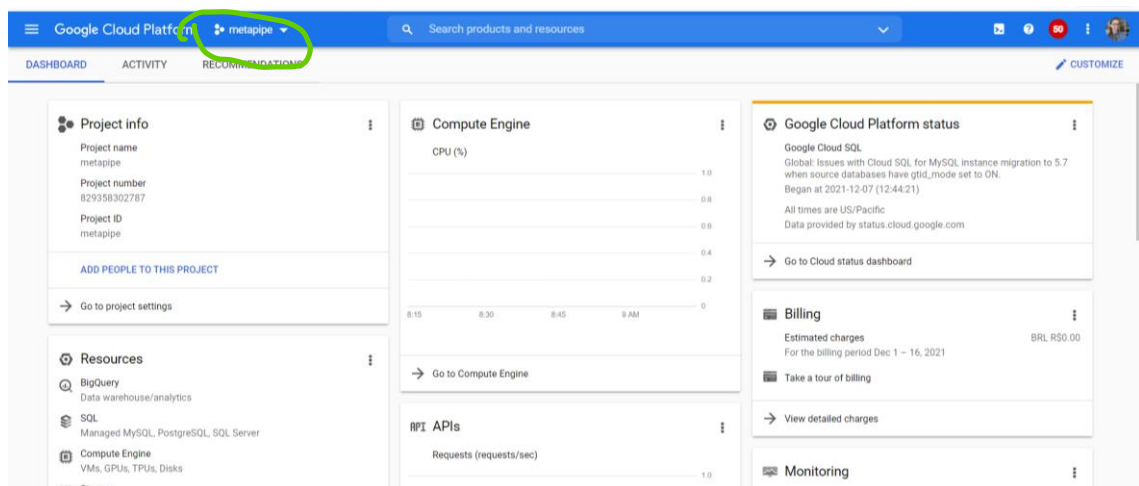
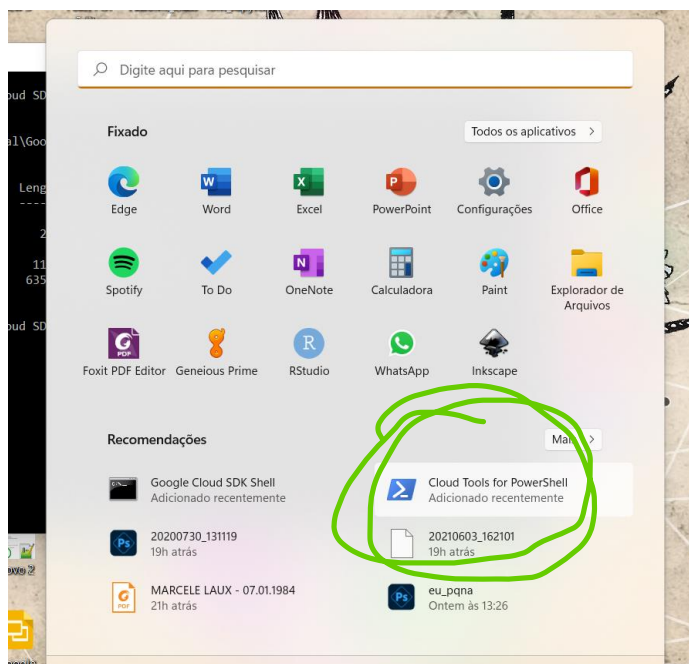


HOW TO TRANSFER FILES BETWEEN YOUR COMPUTER AND GCP

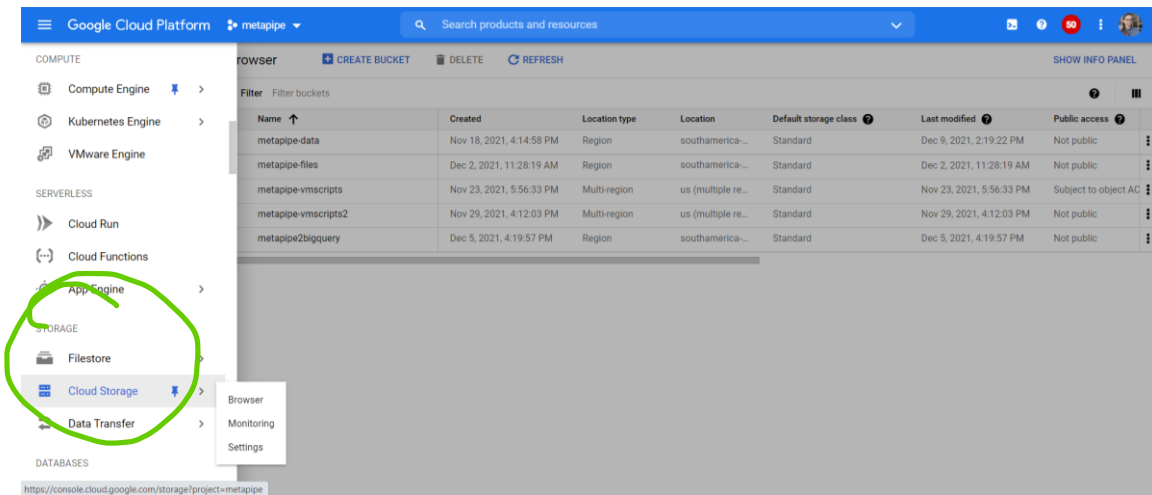
1. Install GCP. Go to this page: https://cloud.google.com/storage/docs/gsutil_install
2. Scroll down a little bit, until you see “Installing gsutil as part of the Cloud SDK”
3. For Windows users, click on “Download the [Cloud SDK installer](#).”
4. After the download is complete, follow the installer instructions.
5. After clicking on “Next”, a prompt will open, asking you if you would like to sign in, then you type “Y”
6. Sign in with the google account you are using to run GCP
7. Then, in the prompt, it asks you which project to use. The project is found in your GCP console:



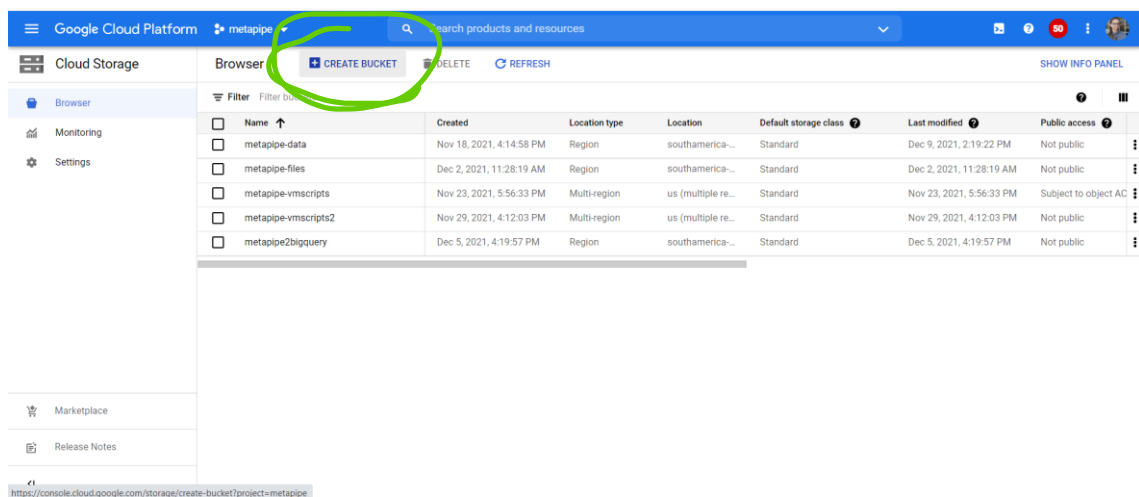
8. In the prompt, it will also ask for the geographic region, you can type “Y” to select your region, or “n” to use any server available.
9. After finishing the installation, you will see this icon among your installed programs:



10. You can close the prompt, and then click on this “Cloud Tools for PowerShell”
11. A new prompt will open, pointing to the “Cloud Tools for PowerShell” installation folder.
12. Using linux commands, go to the folder where you have your files to upload.
 - a. Type `cd ../../../../` to get to your user folder
 - b. Type `ls`
 - c. Type `cd` to enter in your desired folder
13. Before we type the command to upload a file to GCP, we have to create a “bucket”, which is the name used by GCP to call your data storage folder. Go back to GCP console, and in the hamburger menu at top left, scroll down until you see “Storage”, then click on it:



14. Then, in the top options, click on “CREATE BUCKET”:



15. A new page will appear, just type a name for your bucket and click on “CREATE” at the bottom of the page:

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Cloud Storage Create a bucket

Name your bucket
Pick a globally unique, permanent name. [Naming guidelines](#)
Ex. 'example', 'example_bucket-1', or 'example.com'
Tip: Don't include any sensitive information
LABELS (OPTIONAL)
[CONTINUE](#)

Choose where to store your data
Location: us (multiple regions in United States)
Location type: Multi-region

Choose a default storage class for your data
Default storage class: Standard

Choose how to control access to objects
Public access prevention: Off
Access control: Uniform

Choose how to protect object data
Protection profile: None
Data encryption: Google-managed key
[CREATE](#) [CANCEL](#)

Monthly cost estimate
Enter values below to check this bucket's monthly cost. For guidance only. [Pricing details](#)

Storage and retrieval
Storage size: GB
\$0.026 per GB-month
Data retrieval size: GB
Free

Object versioning: Off
If you enable versioning, note that noncurrent versions are billed at the same rate as live objects.

Operations
Class A operations: per-month
\$0.005 per 1,000 ops
Class B operations: per-month
\$0.0004 per 1,000 ops

16. This new page will appear, showing your newly created bucket. Click on “Configuration”:

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Cloud Storage Bucket details REFRESH LEARN

new-bucket-marcele

Location: us (multiple regions in United States) Storage class: Standard Public access: Not public Protection: None

OBJECTS **CONFIGURATION** PERMISSIONS PROTECTION LIFECYCLE

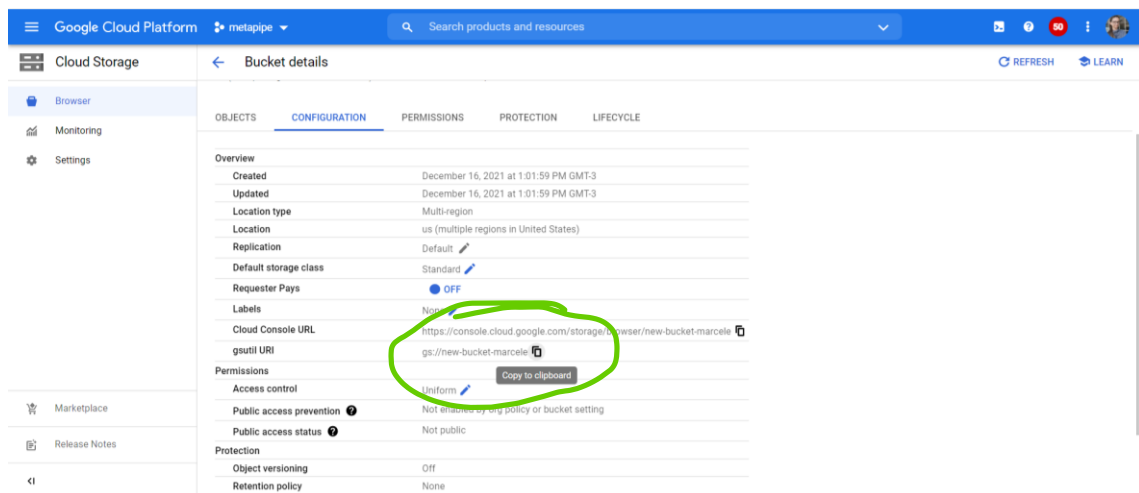
Buckets > new-bucket-marcele

[UPLOAD FILES](#) [UPLOAD FOLDER](#) [CREATE FOLDER](#) [MANAGE HOLDS](#) [DOWNLOAD](#) [DELETE](#)

Filter by name prefix only Filter objects and folders Show deleted data

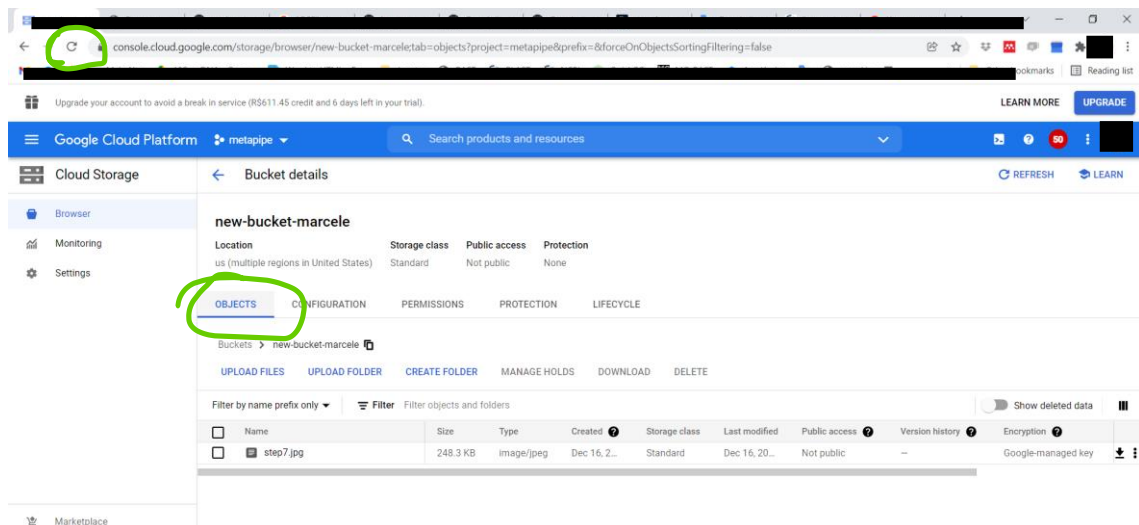
<input type="checkbox"/>	Name	Size	Type	Created	Storage class	Last modified	Public access	Version history	Encryption	Retention expiration date	Holds
No rows to display											

17. Here is the address to upload or download data to or from the bucket:



18. Now you go back to your prompt, where you are at your folder with the files you'd like to upload, and type the following command:
`gsutil cp file_to_upload.fastq gs://new-bucket-name`

19. Go back to your bucket page, click on "OBJECTS" and type refresh page in your browser:



20. Now your file is there. To download it to your machine, type the following:
`gsutil -m cp gs://new-bucket-name/file_to_download.txt .`

21. To load your uploaded file into your Jupyter Notebook VM (virtual machine), type the following in a new cell:
`!gsutil cp gs://new-bucket-name/ file_to_work.fastq .`
Do not forget the '!' exclamation point before the command in the Jupyter Notebook cell.

22. To save a file from your Notebook to your bucket, in order to download it to your computer, type:
23. `!gsutil cp file_to_save.fastq gs://new-bucket-name/`

That's it, you are ready to upload and run your data 😊