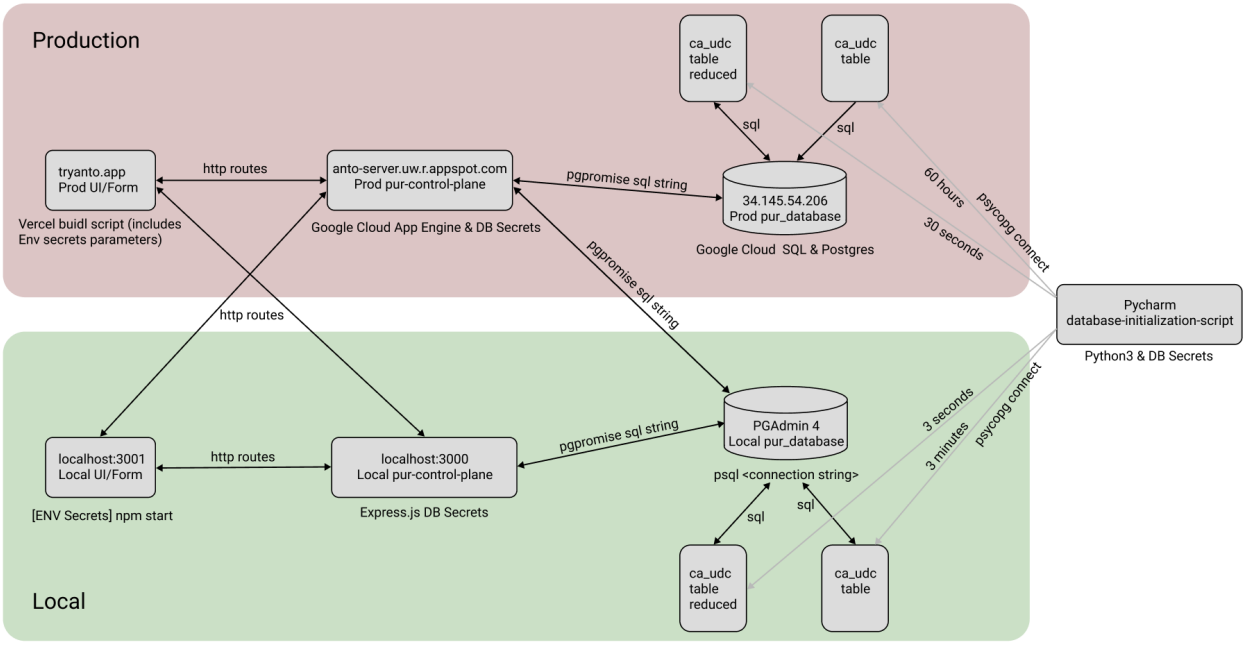
## Anto Documentation

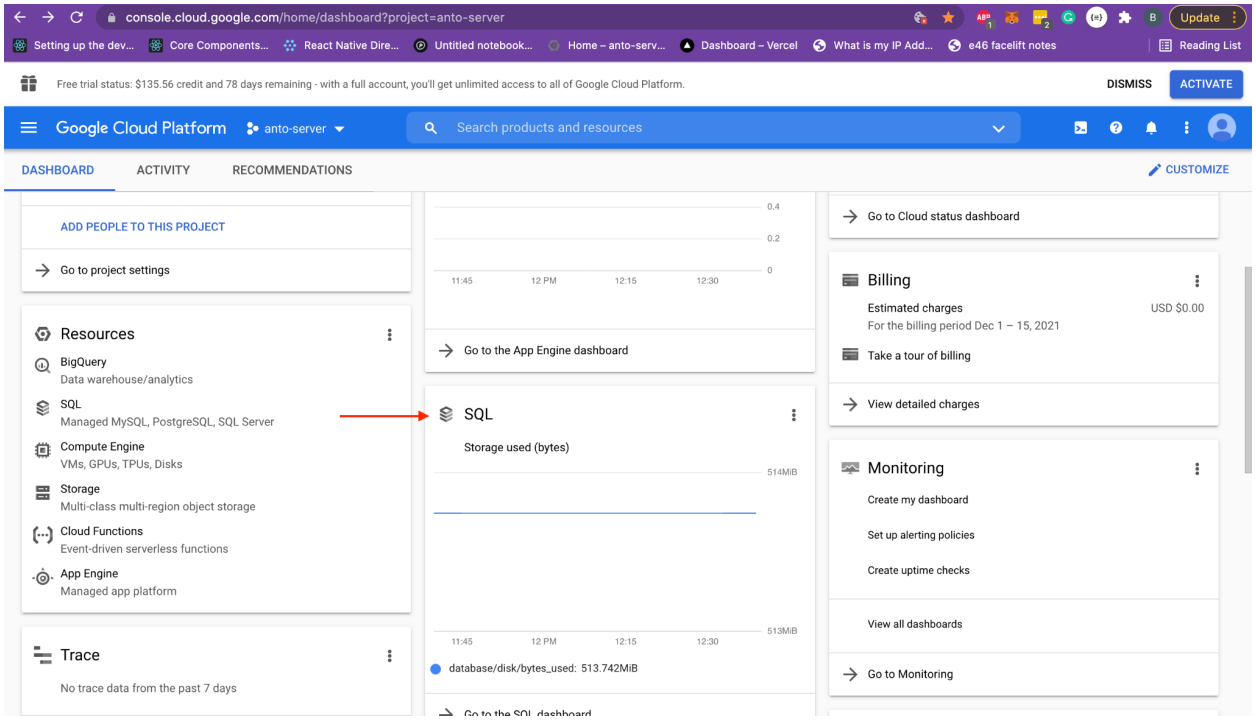
## Anto Subsystems



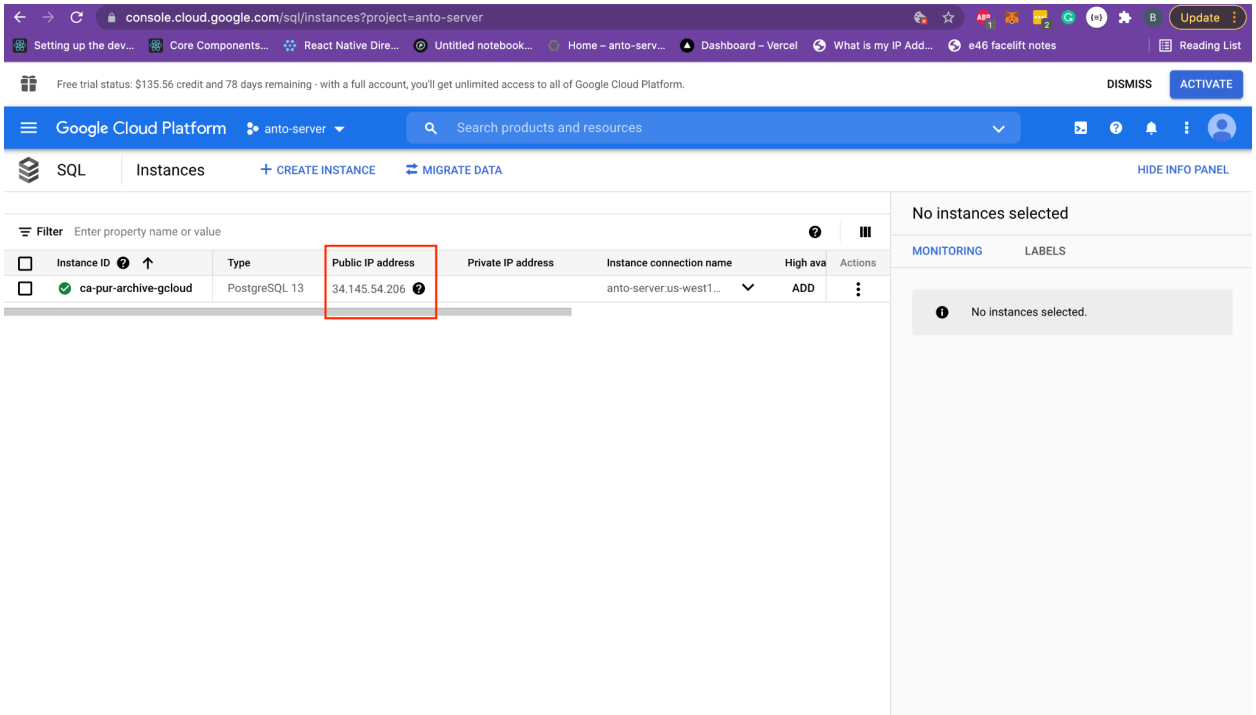

Each subsystem should have its documentation described from the first file to start-up and commits.

### Connecting to the Production Database

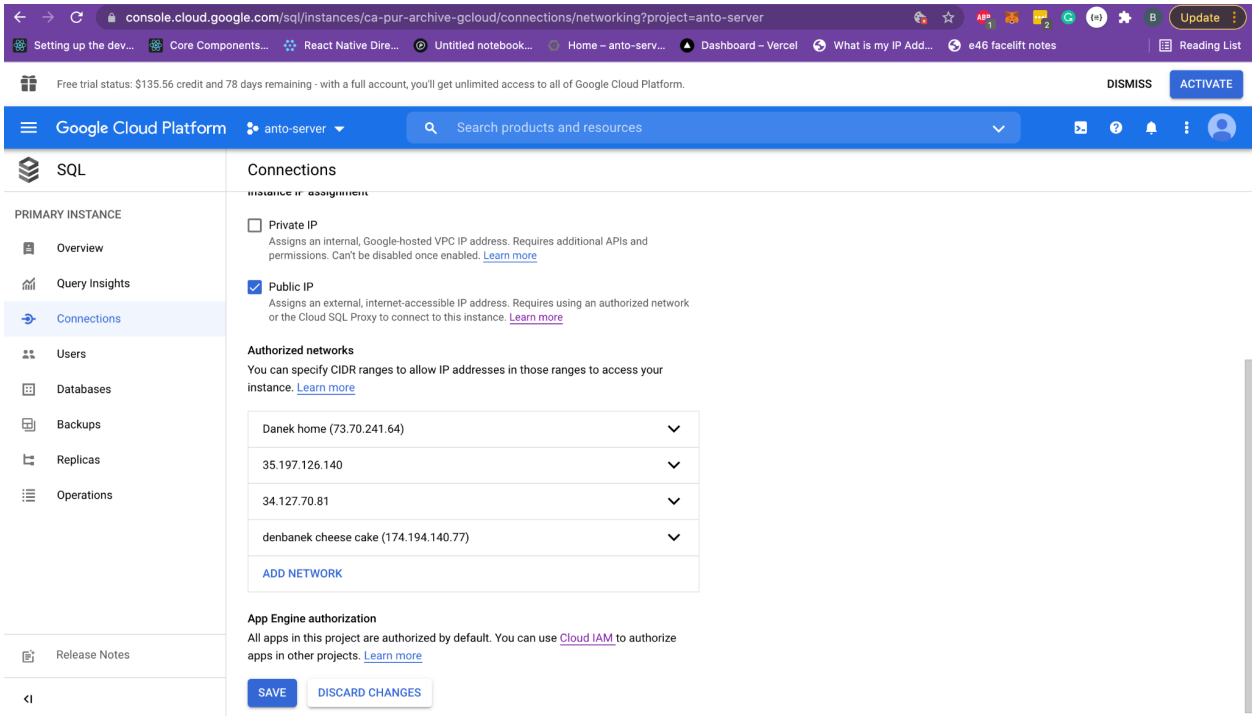
- Log into Google Cloud Platform
- Go to the Anto Project
- Find the “SQL” section and select “go to the SQL dashboard”



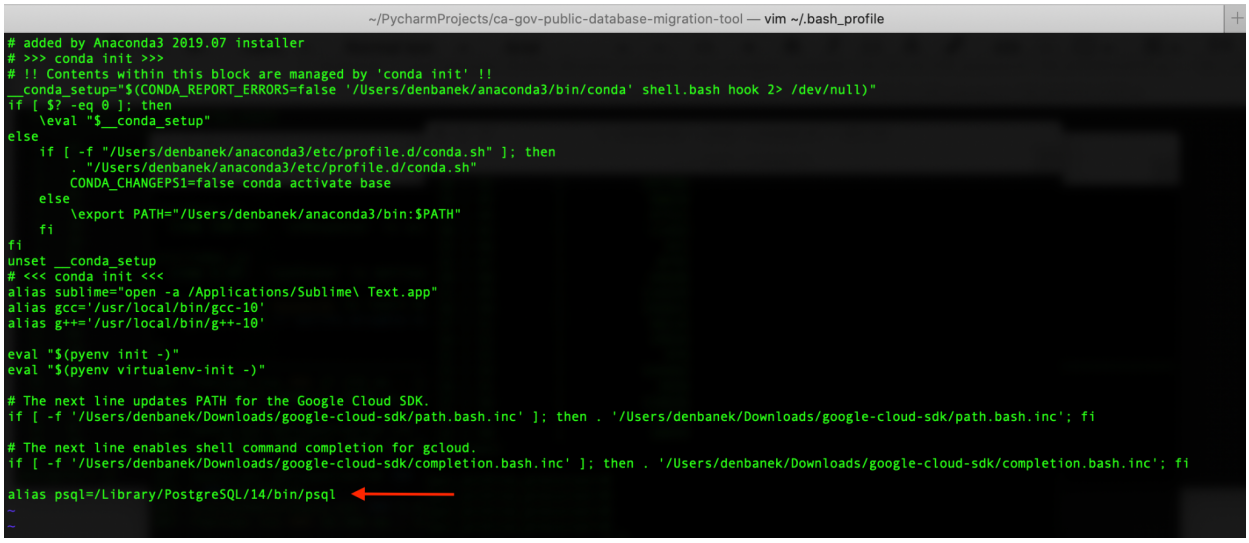

- Note the public ip address for the DB. It should be reserved and immutable for this service to run (we will use this field to connect to the DB remotely in the future)



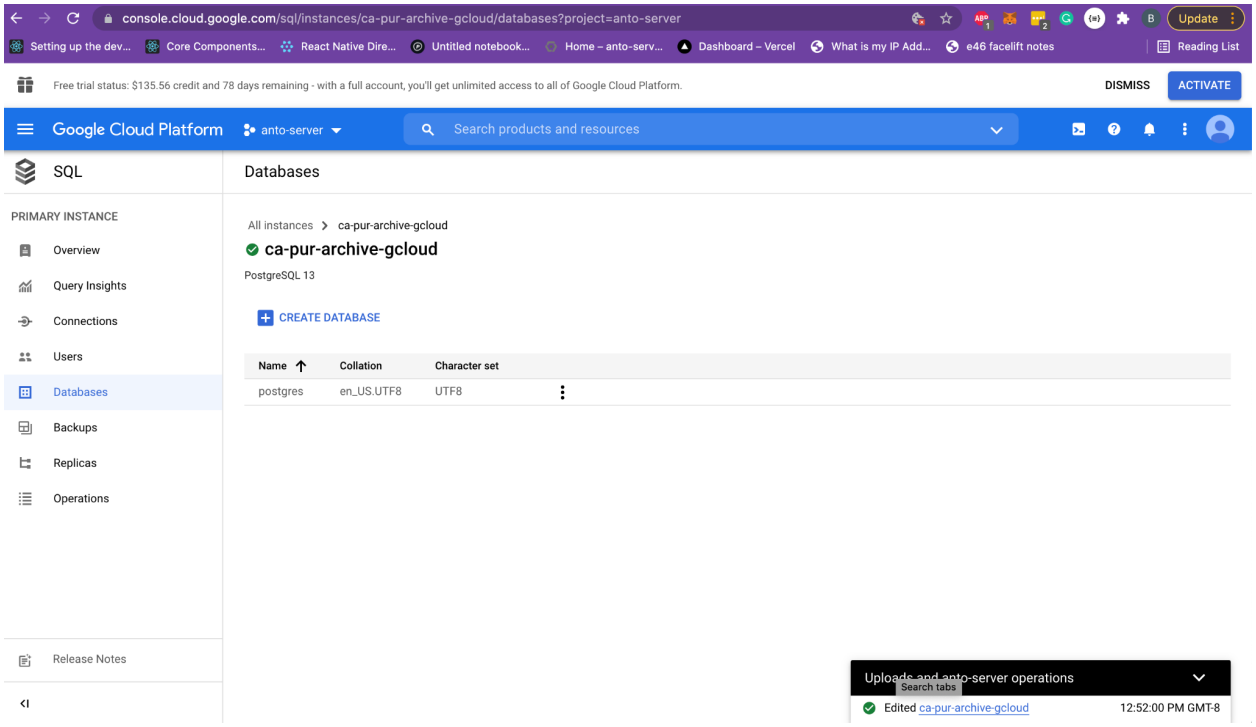

- Select the actions (horizontal ellipses …) button and select edit
- Select the “Connections” section on the left column. Scroll until you see “Authorized Networks”




- Add your IP address to the whitelist.
    - **Do not add public networks like coffee shops or airports to this field. Anybody on this network with the credentials would have permission to augment our database if this were the case.**
    - If you need to figure out the network you're on visit: http://ipv4.whatismyv6.com/
- Hit save.
    - Now that inbound connections from your IP address are permitted, all you need is the credentials to connect to the database remotely.
- Make sure you have the `psql` bash command available.
    - it was kind of a pain to get this to work, you need to download it
    - I went to this site: https://www.postgresql.org/download/macosx/ and downloaded the installer, which gave me the binary
    - of course the binary wasn't added to my $PATH in bash, so I just made an alias in my bash profile
    - On your terminal/linux command line edit `~/.bash_profile` and add this as the last line `alias psql=/Library/PostgreSQL/14/bin/psql`
    -

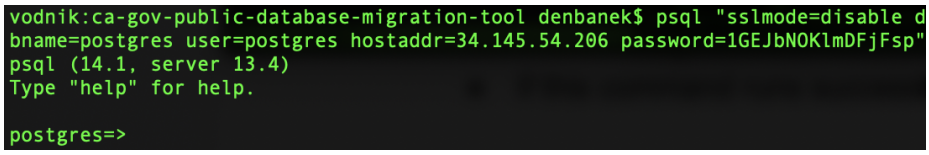



- Using the psql command will open a connection with the database where you can execute SQL in the context of the publicly available database. The database parameters are visible on the Google Cloud Platform dashboard and settings. Note that a GCP SQL instance may have multiple databases, and you are only remotely connecting to a single one.




- `psql "sslmode=disable dbname=postgres user=postgres hostaddr=34.145.54.206 password=<KEY>"`
  - We already noted the hostaddr of the database, it's the public IP of the DB
  - dbname is visible on the "Databases" tab of the SQL instance settings (see the above screenshot)

    - The password (<KEY>) is a string only visible during the configuration of the database, and I've written it down for future use (but not here, somewhere very safe).
- If this command runs successfully, you should see something like this.




- You can now execute SQL in the context of the postgres database on the ca-pur-archive-gcloud Google Cloud Platform SQL instance.

Useful Commands on the sql instance

| | |
|---|---|
| \dt | list all tables |
| SELECT COUNT(*) FROM <TABLE> | count the number of rows in the table |
| DROP TABLE <TABLE> | delete a table (probably don't do this for fun, could be costly) |
| | |