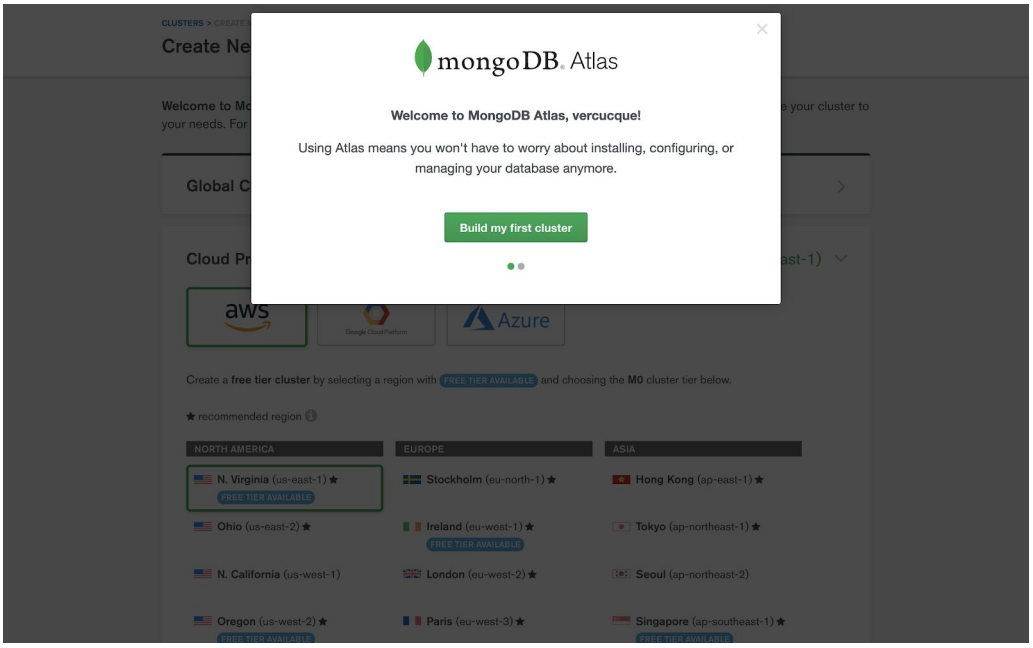
SOMMAIRE

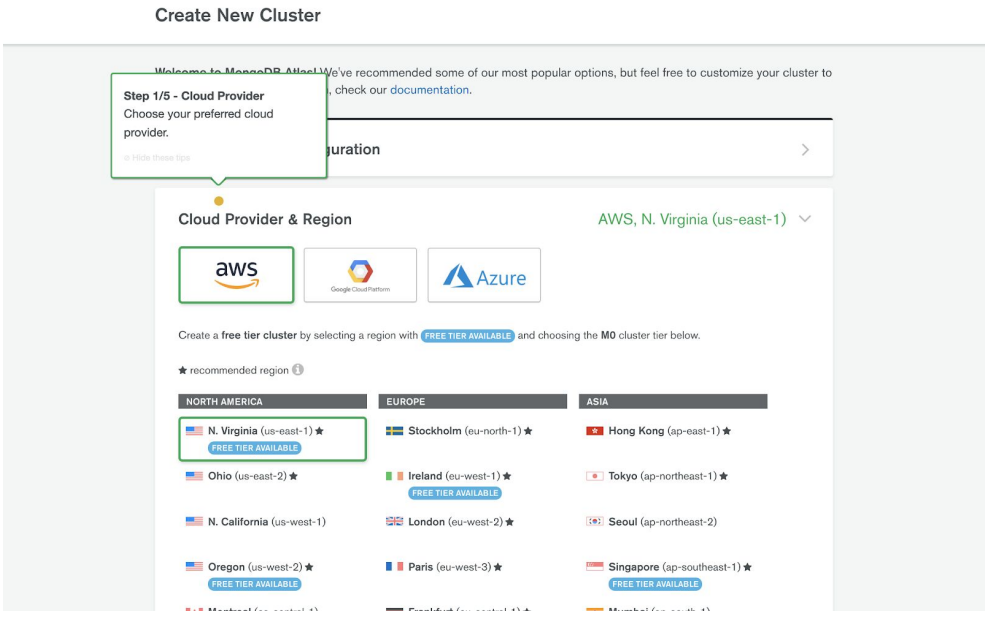
I. Create new MongoDB Cluster

To start, login to MongoDB Atlas (https://cloud.mongodb.com) or register.

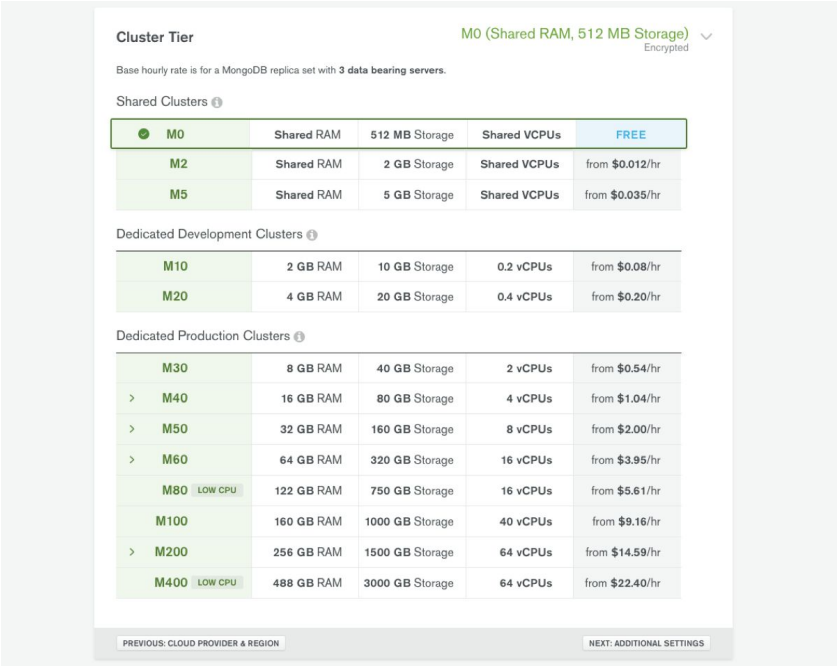
Go to create new cluster (or build my first cluster) :



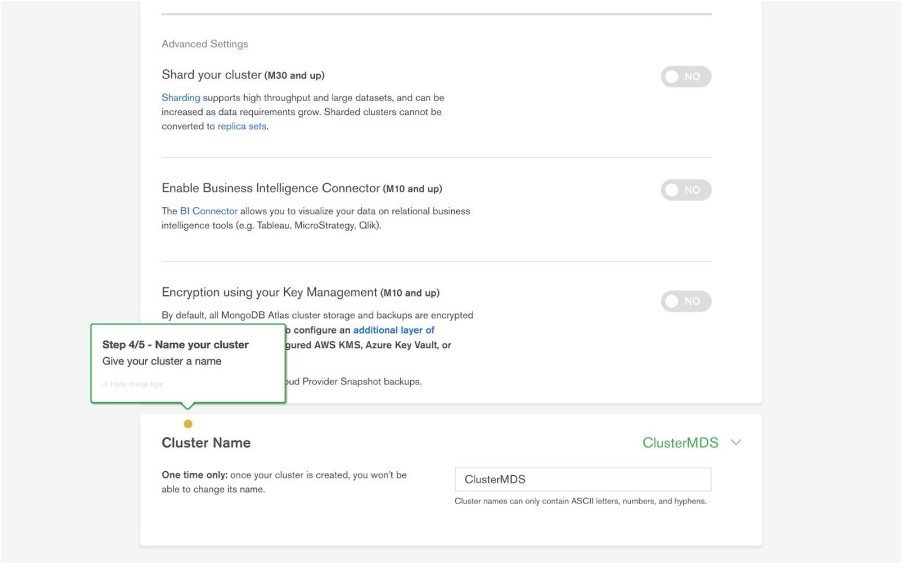
The first step in the deployment process will be to choose a cloud provider and a region.



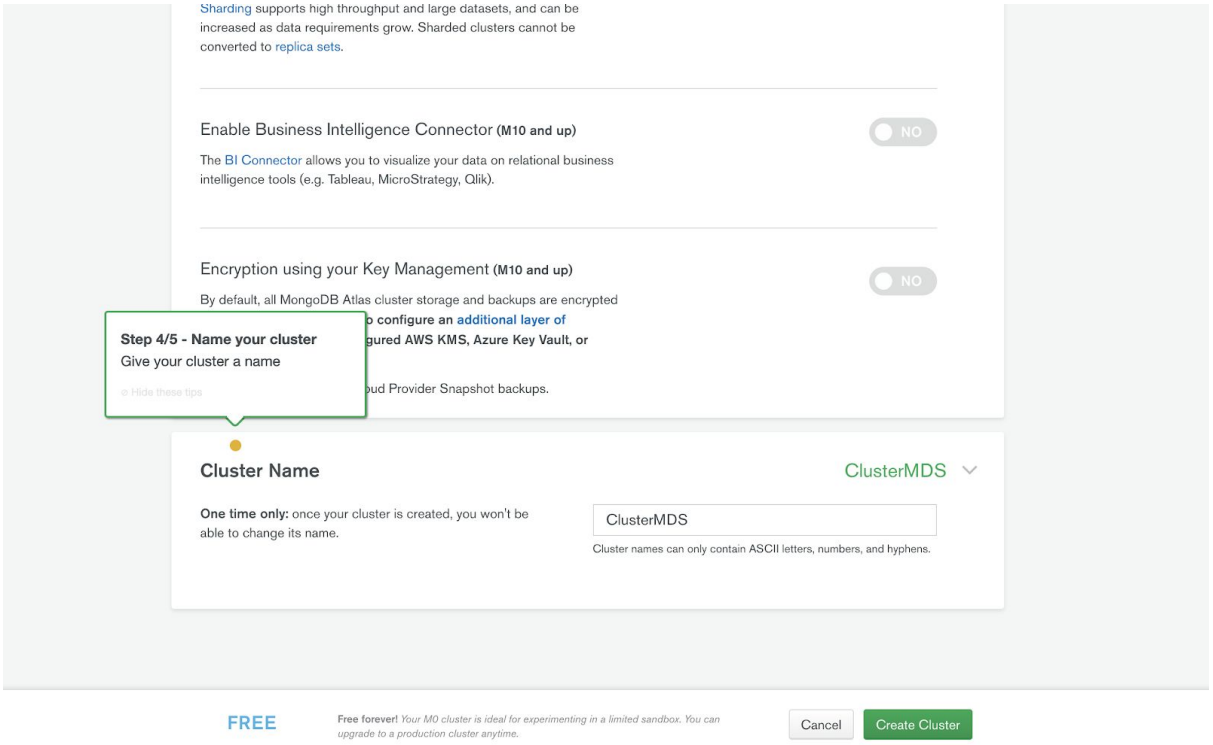
Choosing one of these cloud providers does not mean that you also need an account for the cloud provider. This is where your cluster will be hosted under the control of MongoDB. After determining which cloud provider you want to use, you must define its specifications. For our case, select the free configuration at 512 MB.



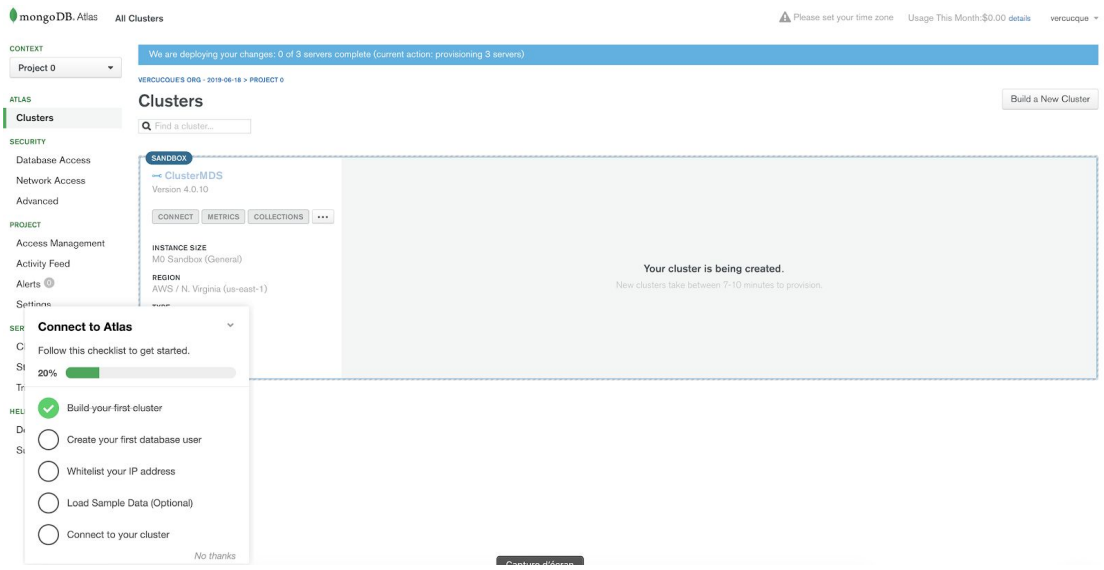
After choosing your cluster specifications, you will be prompted to select the additional features you want. (do not select anything for our case)



Additional features in your cluster include things like backups and data sharing.
The final step in the deployment process is to name your cluster. Here we choose the name: ClusterMDS.
Then click Create Cluster.



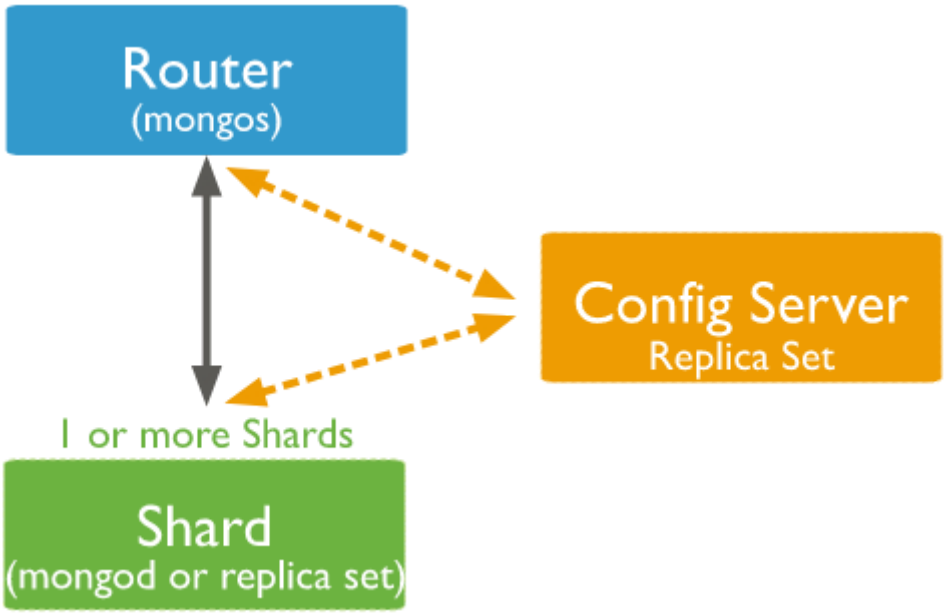
Creating your cluster after the backup may take a few minutes.



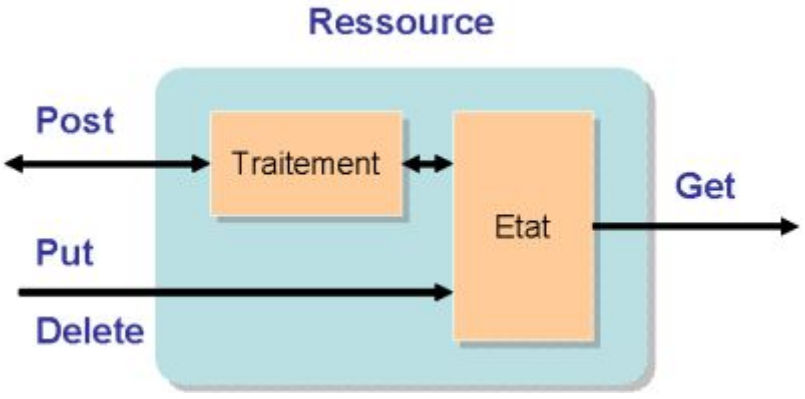
Creation completed.

II. Schématisation :

-Schéma du cluster MongoDB :



-Schéma l'architecture de l'API REST :



III. Application REST API avec Node.js :

a) Assuming you already have Node.js installed on your computer, we can create a project from the command line by doing the following:

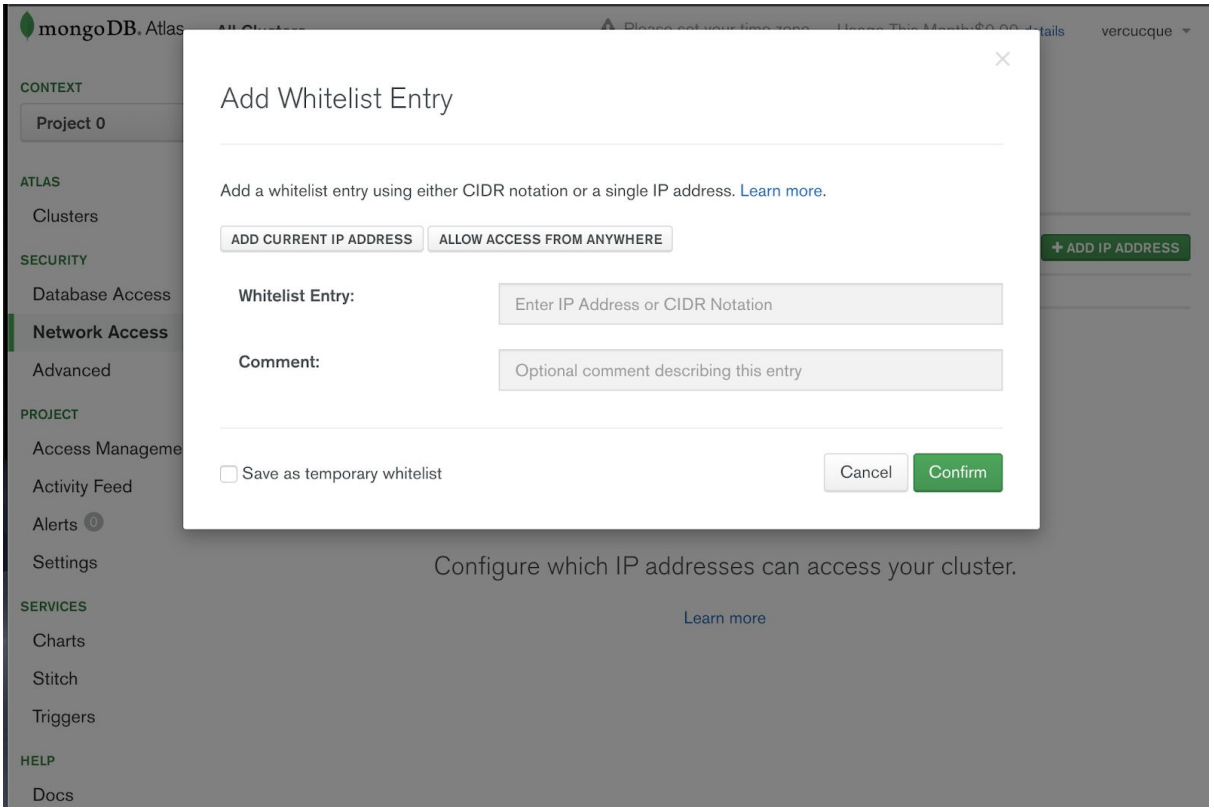
- npm init -y

The command above will create a package.json file. All our code will exist in a different file called app.js, so be sure to create it manually.
There are not many project dependencies to develop an API with MongoDB and Express. To download it, run the following:

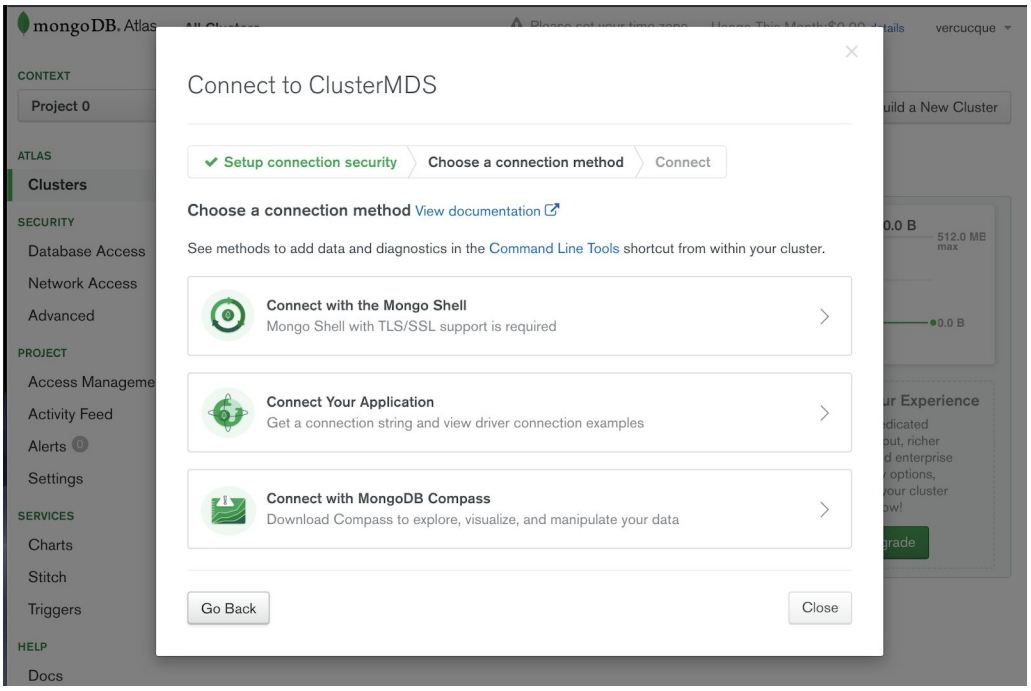
- npm install express --save
- npm install body-parser --save
- npm install nodemon --save
- npm install mongoose --save
- npm install mongodb --save

b) Configure Connect cluster with “Allow access from anywhere”

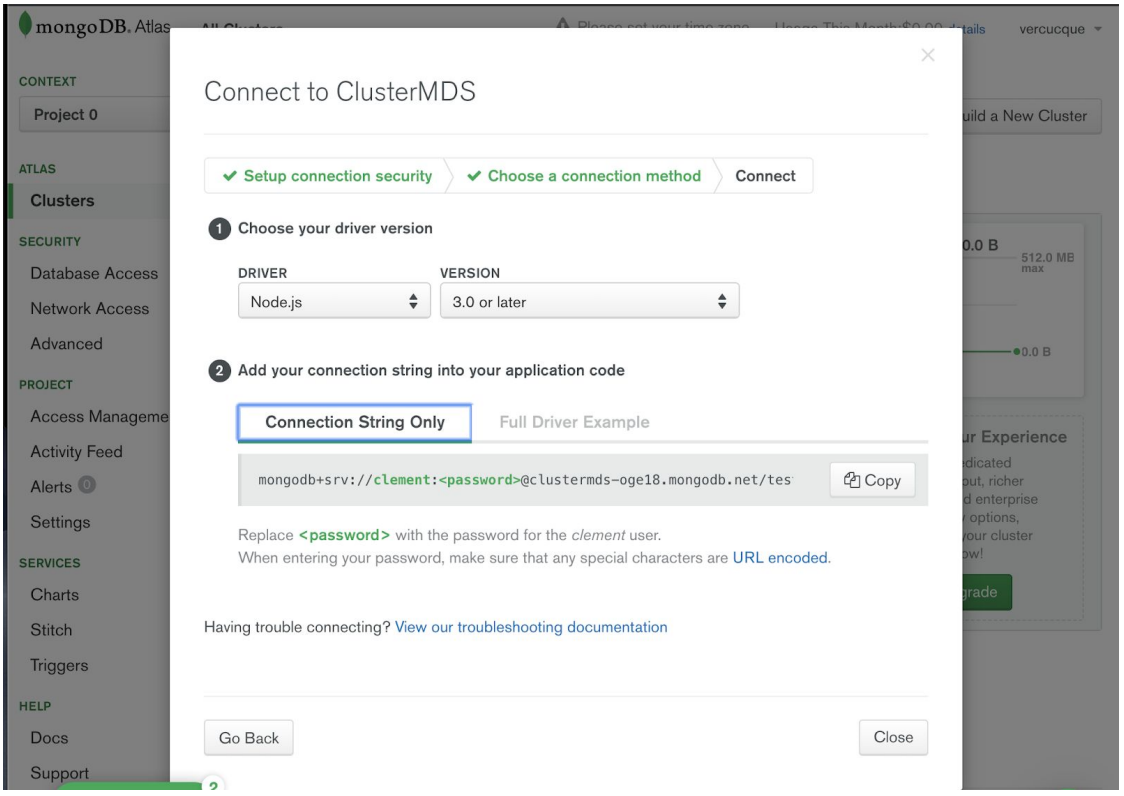
On Atlas, go to the tab : Network Access → Add Ip Adress → Allow access from anywhere → confirm



Then return to your cluster.
Click on connect → Connect your application.



Select the right driver and version (Node.js v3.0 or later).



Copy the cluster link and put it in the db.js file instead of the "YourClusterURL".
Replace "<password>" with the password of the user clement. (replace clement by the right user)