

How to set mongoDB public to everyone

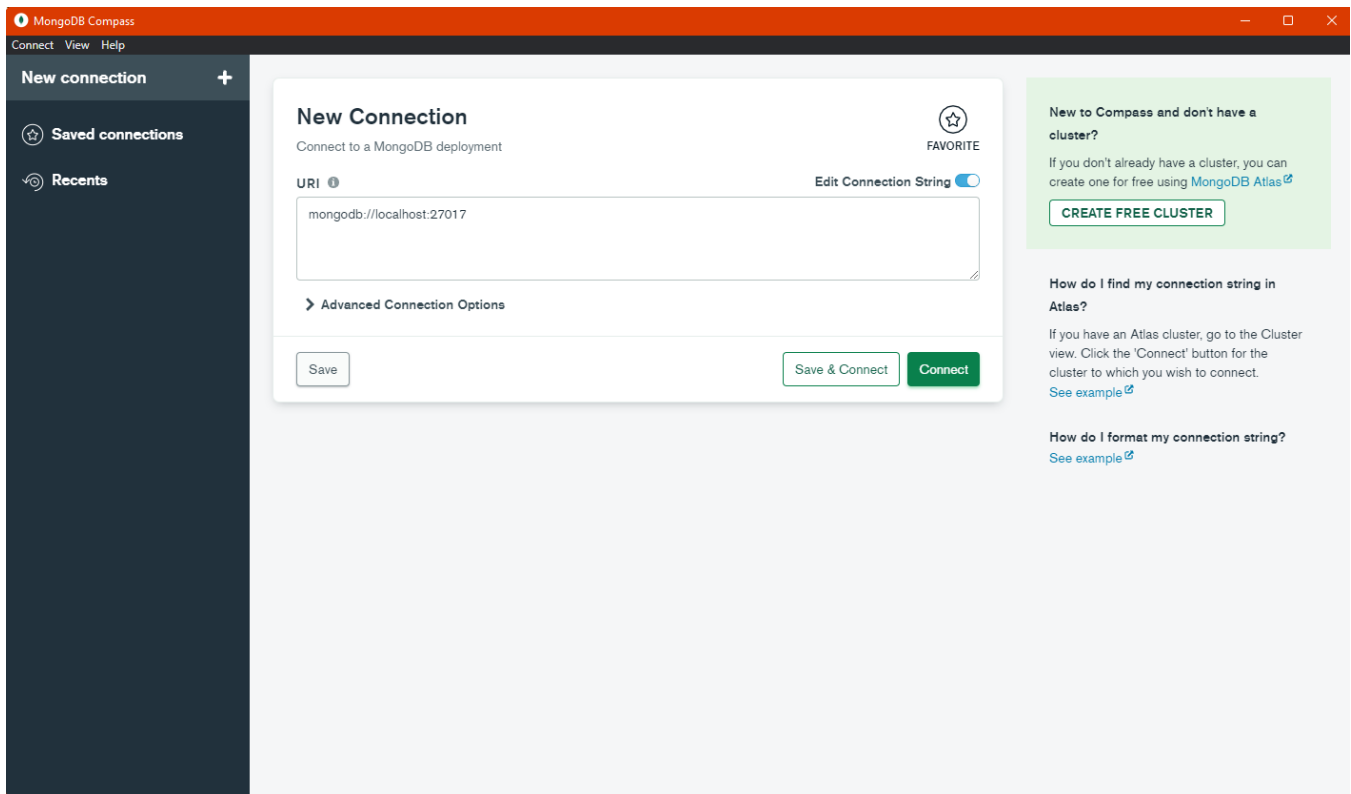
Programs needed :

- mongoDB compass → <https://www.mongodb.com/products/compass>
- Ngrok → <https://ngrok.com>

Ngrok is a global distributed reverse proxy fronting your web services running in any cloud or private network on your machine.

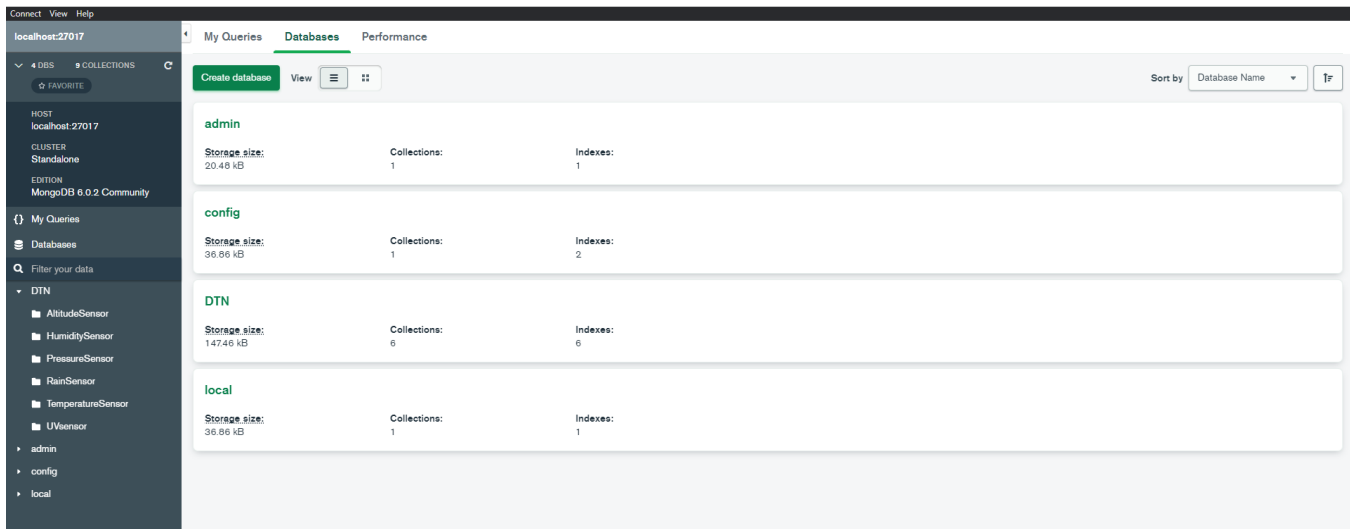
Setting up mongo:

after downloading mongo db compass it will show you something like this



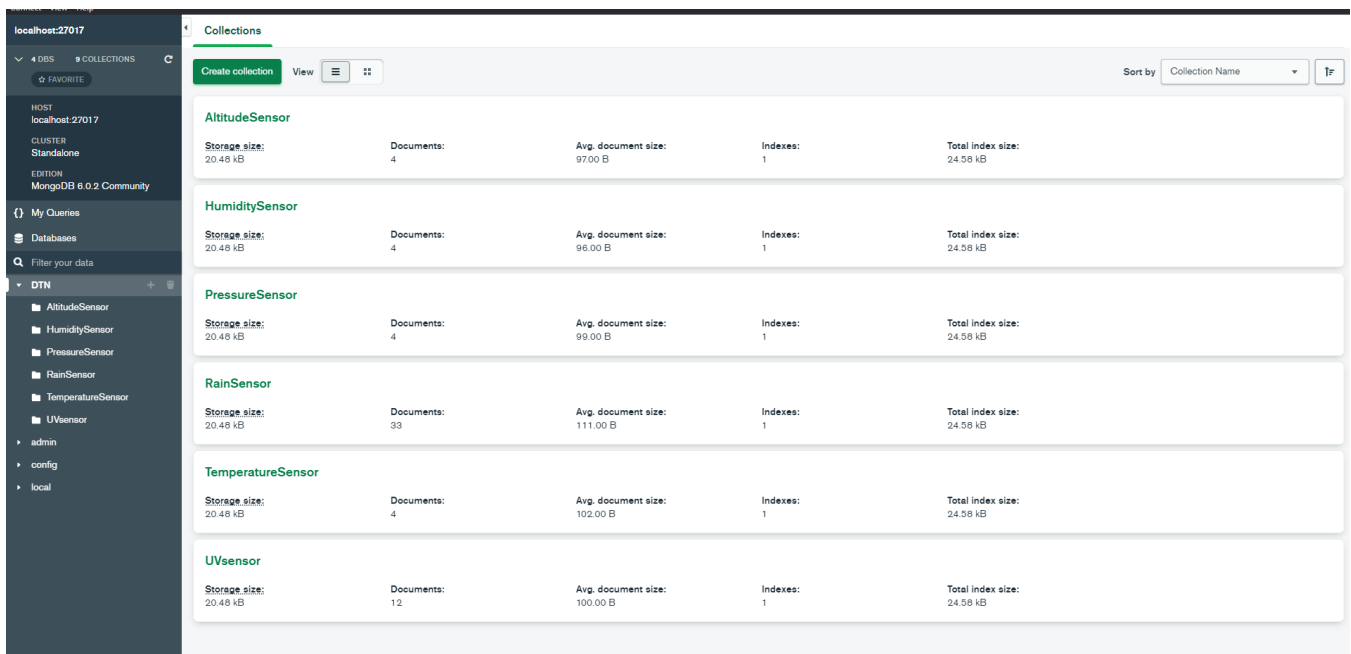
This will open the DB on port 27017 on the local host.

Once you connect to mongo on localhost:27017 we create a new Database named **“DTN”**



The other 3 databases showing up are there by default.

Select the DTN database and created the following collections.



If we want to connect to the Database form an “external” network, we need ngrok that is the one in charge of creating the TCP tunnel between our local host and the external actor trying to send data to it.

Stablishing connection with mongoddb and Ngrok:

Once you open ngrok it will show this

```
F:\descargas\ngrok-v3\ngrok.exe
ngrok http foo.dev:80      # tunnel to host:port instead of localhost
ngrok http https://localhost # expose a local https server
ngrok tcp 22              # tunnel arbitrary TCP traffic to port 22
ngrok tls --hostname=foo.com 443 # TLS traffic for foo.com to port 443
ngrok start foo bar baz    # start tunnels from the configuration file

COMMANDS:
api          use ngrok agent as an api client
completion  generates shell completion code for bash or zsh
config       update or migrate ngrok's configuration file
credits      prints author and licensing information
diagnose     diagnose connection issues
help         Help about any command
http         start an HTTP tunnel
service      run and control an ngrok service on a target operating system
start        start tunnels by name from the configuration file
tcp          start a TCP tunnel
tls          start a TLS tunnel
tunnel       start a tunnel for use with a tunnel-group backend
update       update ngrok to the latest version
version      print the version string

OPTIONS:
--config strings  path to config files; they are merged if multiple
-h, --help        help for ngrok
-v, --version     version for ngrok

ngrok is a command line application, try typing 'ngrok.exe http 80'
at this terminal prompt to expose port 80.
F:\descargas\ngrok-v3>
```

to set port 27017 (mongoDB localhost:27017) use the following command:

- Nrgok.exe tcp 27017

You will now that you set up everything correctly when the programs shows this:

```
F:\descargas\ngrok-v3\ngrok.exe - ngrok.exe tcp 27017
ngrok (Ctrl+C to quit)
Add Okta or Azure to protect your ngrok dashboard with SSO: https://ngrok.com/dashSSO

Session Status      online
Account             moralesriky97@gmail.com (Plan: Free)
Version             3.1.0
Region              United States (us)
Latency             98ms
Web Interface        http://127.0.0.1:4040
Forwarding           tcp://8.tcp.ngrok.io:19163 -> localhost:27017

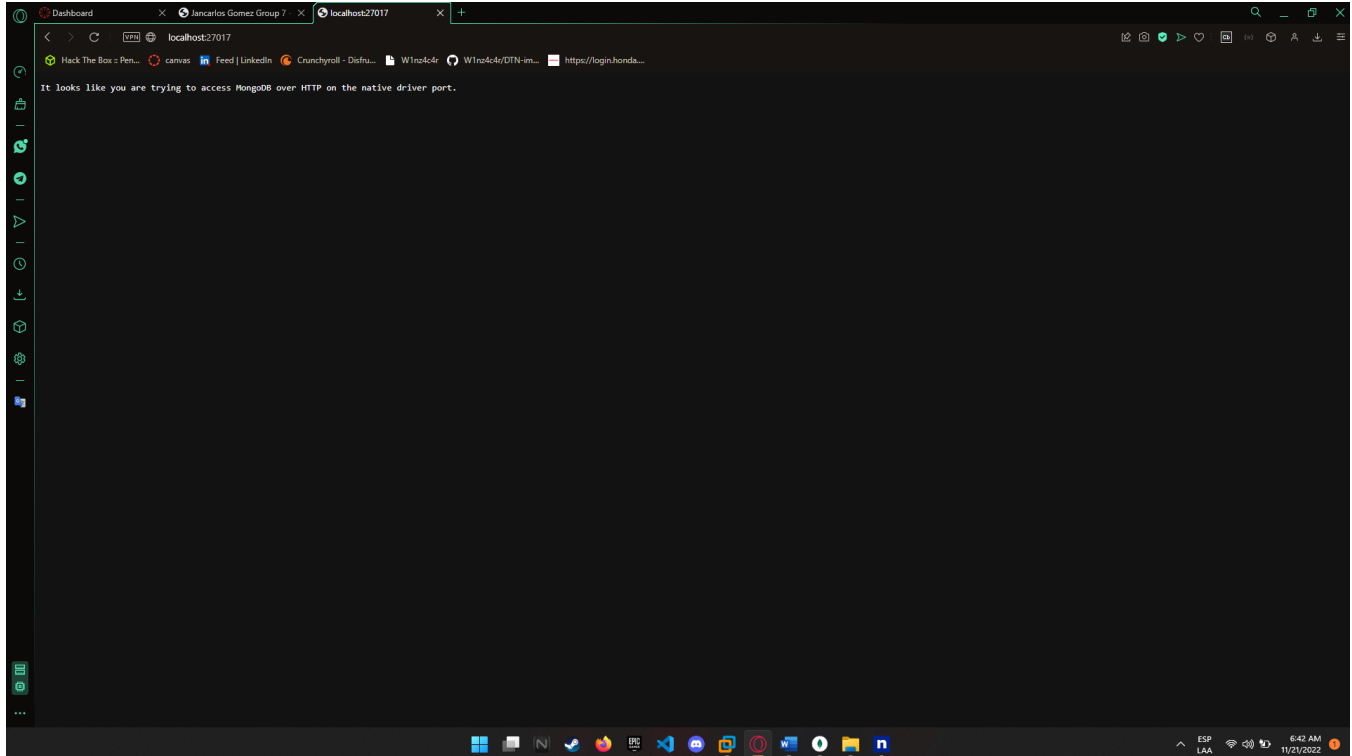
Connections
ttl    opn    rt1    rt5    p50    p90
0      0      0.00  0.00  0.00  0.00
```

It is basically saying that if you want to reach localhost:27017 from an external network you should use the following link **tcp://8.tcp.ngrok.io:19163**

To test connection there are multiple ways

1. Simple check (easy to check, not much feedback from software)

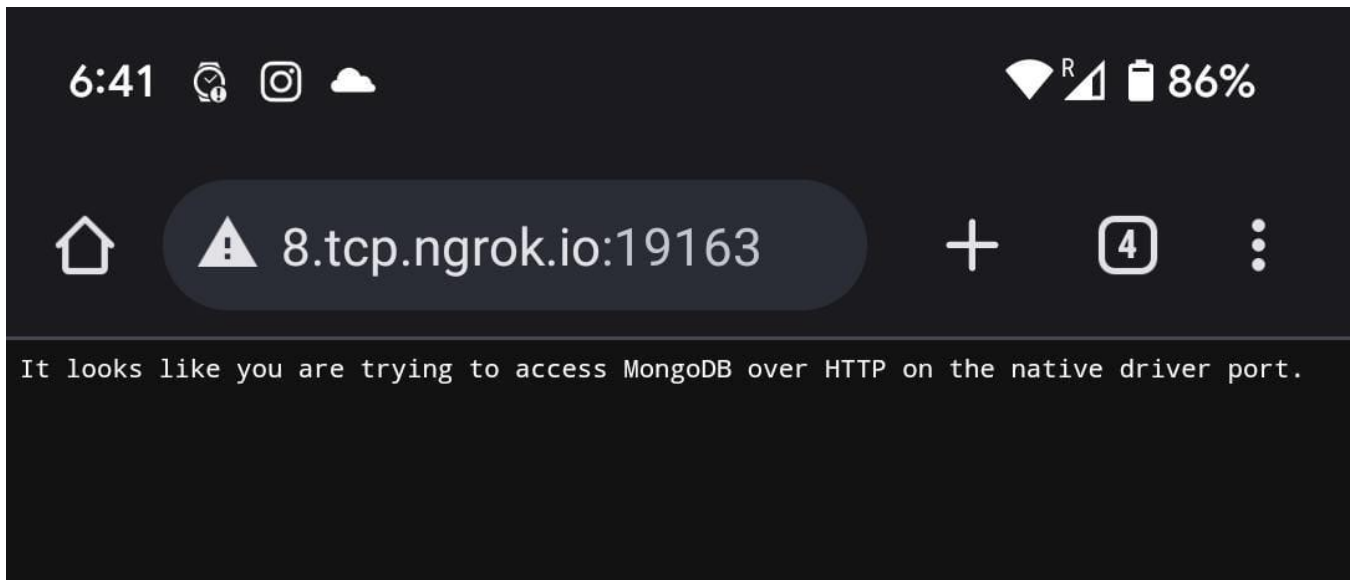
Go to localhost in the machine that is hosting the database base and in your web browser type "localhost:27017"



It will "connect" but it's not render any more feedback about the content in the database

Then go to the link provided by ngrok, in another computer or your phone (in may case the link is **tcp://8.tcp.ngrok.io:19163**)

It should show up the same "content" on the two different links



2. Connect and fetch the database (100 % sure connection is working)

As I have been using Linux environment throughout the entire project I will **only** explain how to connect and fetch the database from a Linux console.

You will need to download mongosh to test this way

The command to connect to the database from Linux will be:

- `mongosh --host 8.tcp.ngrok.io:19163`

the host address needs to be changed for the link provided by Ngrok

After connecting you can fetch/transverse the database.

```
[winz4c4r@winz4c4r-DTN2 ~]$ mongosh --host 8.tcp.ngrok.io:19163
Current Mongosh Log ID: 637b6774bd8614788f82b24e
Connecting to:      mongodb://8.tcp.ngrok.io:19163/?directConnection=true&appName=mongosh+1.6.0
Using MongoDB:     6.0.2
Using Mongosh:     1.6.0

For mongosh info see: https://docs.mongodb.com/mongodbs-shell/

-----
The server generated these startup warnings when booting
2022-11-17T09:19:45.739-05:00: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted
-----

To help improve performance, you can turn off the MongoDB diagnostic
collection. To do this, run the following command:
> db.setDiagnosticCollectionEnabled(0)

To enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()
-----

test> show databases
DTN      288.00 KiB
admin    40.00 KiB
config   60.00 KiB
local    72.00 KiB
test> use DTN
switched to db DTN
DTN> show collections
AltitudeSensor
HumiditySensor
PressureSensor
RainSensor
TemperatureSensor
UVsensor
DTN>
```

Finally, if you compare the database and collections in the host computer with the computer connection from an external network the information is the same.