

Namada Indexer

In collaboration with [Zondax\(opens in a new tab\)](#) , an indexer for the Namada blockchain has been born.

The Namada indexer (a.k.a. `namadexer`) constantly queries the Namada blockchain, and together with the [SDK](#) , is able to map blocks, transactions, along with other valuable information into a relational database (postgres).

This is especially useful for performing analytics over the blockchain, including storing historical data in a way that could be easily queried.

Setting up

The namada indexer's source code can be found [here\(opens in a new tab\)](#) and is simple to set up.

The `namadexer` works best together with [Docker\(opens in a new tab\)](#)

```
git
```

```
clone
```

```
https://github.com/Zondax/namadexer.git cd
```

```
namadexer make
```

```
compose
```

Running the server and db

Once the DockerFile has run, it is straightforward to both set up the postgres database as well as the server that will query the database.

Make sure that postgres [is installed\(opens in a new tab\)](#) on the local machine.

```
Run postgres in docker
```

```
make
```

```
postgres
```

or run (and change arguments, e.g port):

```
docker run --name postgres -e  
POSTGRES_PASSWORD=wow -e  
POSTGRES_DB=blockchain -p 5432:5432 -d postgres
```

Once the postgres server is up and running, it is time to set up the server that will query the postgres db.

Execute the following command in order to set up the server

```
make run_server
```

If successful, the server should be running as a daemon on the localhost at port 30303 .

Run the indexer

First, ensure that the `Settings.toml` within `config/Settings.toml` is configured correctly.

log_level

```
"info" network =
```

```
"public-testnet-14"
```

```
[database] host =
```

```
"0.0.0.0:5435" user =  
"postgres" password =  
"wow" dbname =  
"blockchain"
```

Optional field to configure a timeout if database connection fails.

connection_timeout

```
20  
[server] serve_at =  
"0.0.0.0" port =  
30303  
[indexer] tendermint_addr =  
"0.0.0.0" port =  
26657  
[jaeger] enable =  
false host =  
"localhost" port =  
6831  
[prometheus] host =  
"0.0.0.0" port =  
9000 Expand ð Interpreting the toml
```

It is important to change the following parameters:

1. indexer.tendermint_addr
2.
 - This should be the address and corresponding port of a synced Namada full node
3. database.host
4.
 - This should be the tcp address (with port) where the postgres database is running. Once the setup is complete, it is possible to start the indexer

```
make
```

```
run_indexer
```

Querying the database

The pre-defined endpoints to query the database are described in the documentation [here \(opens in a new tab\)](#).

[Examples Networks](#)