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# **Balancer**

*Release 1.0.0*

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Welcome to Balancer documentation, here you can see at the source code as page in your browser and find an answers for your questions.

Code overview may be easier if check it on modindex



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### 1.1 Quick start

For run the balancer you should have a Python 3.10 and higher on your machine and that's enough ... or not ?

Is the best way to run balancer is to use a [Poetry](#) (here it's v1.2.2) But for quick set up and run the balancer you can use requirements.txt file

- *Installation*
- *Configuration*
- *Simple start*
- *Start with the Poetry*

#### 1.1.1 Installation

##### On Linux

Change directory to the folder where the balancer will be.

And then use `wget` utility to download:

```
sudo wget https://github.com/AlexandrChikur/balancer/archive/refs/tags/v.1.0.0.tar.gz
```

Then unarchive it with:

```
sudo tar -xvf balancer-v.1.0.0.tar.gz
```

##### On Windows

Simple way is to download source code from [releases page](#)

Unarchive it more comfortable way for you.

## 1.1.2 Configuration

Config structure looks pretty simple:

```
# Config values related to balancer
balancer:
  targets: # List of targets between those load will be distributed.
    target_1: # Target name. Doesn't really matter. It can be used for debugging,
↳convenience, for example
      host: localhost # Target host
      port: 4001      # Target host
  # target_2:
  #   host: target_2
  #   port: 4002
  # ...
  # and go on
  balance_algorithm: 'round-robin' # Algorithm that balancer should to use. Able to:
↳'random', 'round-robin'
```

Create `.yaml` settings file following structure above whatever you want (you will able to provide absolute path to it, or leave it in balancer folder if you dont want to use it as option when run balancer)

## 1.1.3 Simple start

Move to balancer folder and ...

First, create virtual environment and install dependencies:

```
python -m venv .venv
python -m pip install -r requirements.txt
```

Activate venv using:

Listing 1: Linux

```
source .venv/bin/activate
```

Listing 2: Windows PowerShell

```
.venv\Scripts\activate.ps1
```

Listing 3: Windows CMD

```
.venv\Scripts\activate.bat
```

About active virtual environment will indicate it's name on each line of your CLI.

So, here you ready to start the balancer:

You can use `python .balancer.py --help` to see more information about options.

You will see:

```
Usage: balancer.py [OPTIONS]
```

(continues on next page)







## LINKS

- `genindex`
- `modindex`
- `search`
- Releases: <https://github.com/AlexandrChikur/balancer/releases>