

Installing TICKTOCK on PI 2 Model B running Bullseye (9/25/2023)

Note: this was run on a fresh install of Bullseye

`2023-05-03-raspbian-bullseye-armhf.img` and running :

```
sudo apt upgrade
sudo apt full-upgrade -y
```

1) Download to the Pi's home folder, the TICKTOCK source code package. It can be found at:
<https://github.com/ylin30/ticktock-wiki/blob/master/binaries/ticktock.0.12.1.tar.gz>

2) Unzip the file (two steps) by running:

```
gunzip ticktock.0.12.1.tar.gz
```

then:

```
tar xvf ticktock.0.12.1.tar
```

3) Check the files:

```
ls ticktock.0.12.1
```

and you should see:

```
admin          bin  docker  include  Makefile      Makefile.docker  objs
api-examples  conf docs    LICENSE  Makefile.centos  Makefile.ubuntu  README
```

4) change to the ticktock folder:

```
cd ticktock.0.12.1
```

5) startup TICKTOCK

```
./bin/tt -c conf/tt.conf &
```

and you should see:

```
[1] 5070
pi@ticktockpi:~/ticktock.0.12.1 $ TickTockDB v0.12.1, Maintained by
Yongtao You (yongtao.you@gmail.com) and Yi Lin (ylin30@gmail.com).
This program comes with ABSOLUTELY NO WARRANTY. It is free software,
and you are welcome to redistribute it under certain conditions.
For details, see <https://www.gnu.org/licenses/>.
Writing to log file: /home/pmw/ticktock.0.12.1/log/ticktock.log
```

Press 'return' to get the command prompt.

6) verify it is running by pressing return to get a prompt and run:

```
./admin/ping.sh
```

and you should see **pong**

```
pi@ticktockpi:~/ticktock.0.12.1 $ ./admin/ping.sh
pong
pi@ticktockpi:~/ticktock.0.12.1 $
```

7) Write a data point to ticktock. In a terminal run:

```
curl -v -POST 'http://localhost:6182/api/put' -d 'put testM1 1633412175 123'
```

and you should see:

```
* Trying ::1:6182...
* Connected to localhost (::1) port 6182 (#0)
> POST /api/put HTTP/1.1
> Host: localhost:6182
> User-Agent: curl/7.74.0
> Accept: */*
> Content-Length: 34
> Content-Type: application/x-www-form-urlencoded
>
* upload completely sent off: 34 out of 34 bytes
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Content-Length: 0
< Content-Type: text/plain
<
* Connection #0 to host localhost left intact
```

8) Read the data point from ticktock. In a terminal run:

```
curl -v 'http://localhost:6182/api/query?start=1600000000&m=avg:testM1'
```

and you should see:

```
* Trying ::1:6182...
* Connected to localhost (::1) port 6182 (#0)
> GET /api/query?start=1600000000&m=avg:testM1 HTTP/1.1
> Host: localhost:6182
> User-Agent: curl/7.74.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Content-Type: application/json
< Content-Length: 89
<
* Connection #0 to host localhost left intact
[{"metric":"testM1","tags":{"host":"foo"},"aggregateTags":[],"dps":{"163341
```

Congradulations, you have TICKTOCK installed and running on your Pi.

9) if you want to gracefully shutdown TICKTOCK run

```
./admin/stop.sh
```