

Documentation for ThingsBoard

0. Pre-requisites

- [Set up Ubuntu Environment](#)

```
sudo add-apt-repository ppa:webupd8team/java
sudo apt-get update
sudo apt-get install oracle-java8-installer
```

- Set up PostgreSQL

```
sudo apt-get update
sudo apt-get install postgresql postgresql-contrib
sudo service postgresql enable
sudo service postgresql start
```

- Add ThingsBoard DB to PostgreSQL

Run this command in Terminal: `psql -U postgres -d postgres -h 127.0.0.1 -W`

And then,

```
CREATE DATABASE thingsboard;
\q
```

- [Also, change the username and password of the default Postgres user](#)

1. Download ThingsBoard

- Run this command in Terminal :

```
wget
https://github.com/thingsboard/thingsboard/releases/download/v2.0.3/thingsboard-2.0.3.deb
```

2. Install ThingsBoard

```
sudo dpkg -i thingsboard*.deb
```

3. Configure database in Thingsboard

- First, enter in terminal:

```
sudo gedit /etc/thingsboard/conf/thingsboard.yml
```

- Find the block of code which says `HSQLDB DAO Configuration`

It will look like this.

```
# HSQLDB DAO Configuration
#spring:
#  data:
#    jpa:
#      repositories:
#        enabled: "true"
#    jpa:
#      hibernate:
#        ddl-auto: "validate"
#      database-platform: "org.hibernate.dialect.HSQLDialect"
#  datasource:
#    driverClassName: "${SPRING_DRIVER_CLASS_NAME:org.hsqldb.jdbc.JDBCDriver}"
#    url:
"${SPRING_DATASOURCE_URL:jdbc:hsqldb:file:${SQL_DATA_FOLDER:/tmp}/thingsboardDb;sql
.enforce_size=false}"
#    username: "${SPRING_DATASOURCE_USERNAME:sa}"
#    password: "${SPRING_DATASOURCE_PASSWORD:}"
```

- Make sure that it is commented by placing a # character before each line

This ensures that the inbuilt HSQL instance is disabled.

- Now we need to enable the PostgreSQL instance. For this, find `PostgreSQL DAO Configuration` block

Uncomment all the lines so that it looks similar to this

```
# PostgreSQL DAO Configuration
spring:
  data:
    jpa:
      repositories:
        enabled: "true"
    jpa:
      hibernate:
        ddl-auto: "validate"
        database-platform: "org.hibernate.dialect.PostgreSQLDialect"
  datasource:
    driverClassName: "${SPRING_DRIVER_CLASS_NAME:org.postgresql.Driver}"
    url: "${SPRING_DATASOURCE_URL:jdbc:postgresql://localhost:5432/thingsboard}"
    username: "${SPRING_DATASOURCE_USERNAME:postgres}"
    password: "${SPRING_DATASOURCE_PASSWORD:postgres}"
```

NOTE Remember to change the password of the `postgres` user to the one that you changed to in Step 0

4. Finally, we are ready to Install thingsboard:

```
# --loadDemo option will load demo data: users, devices, assets, rules, widgets.  
sudo /usr/share/thingsboard/bin/install/install.sh --loadDemo
```

Disable the loadDemo option if you do not want the demo data!

5. It is ready! Start the ThingsBoard service!

```
sudo service thingsboard start
```

If you want ThingsBoard to start automatically upon a reboot, you must enable it:

```
sudo service thingsboard enable
```

Congratulations! You have successfully set up the ThingsBoard server. You can now see the web ui on (within 5 minutes)

```
http://localhost:8080
```