GreenHouseDT SimulationDriver Manual

December 8, 2023

Contents

1 Setting Up the environment for Demo purpose

The environment is set up be default to use the demo environment. This will result in:

- Writing to the Demo bucket of the InfluxDB
- Use the data from the Demo bucket to display information of the moisture on the graph

2 Setting Up the environment to use with a GreenHouse

To use the environment with a proper greenhouse, two things has to be done

- Set up the proper token for the simulation driver; this can be done from the folder `SimulationDriver` on the Desktop and changing the settings of the `config_local.yml` file

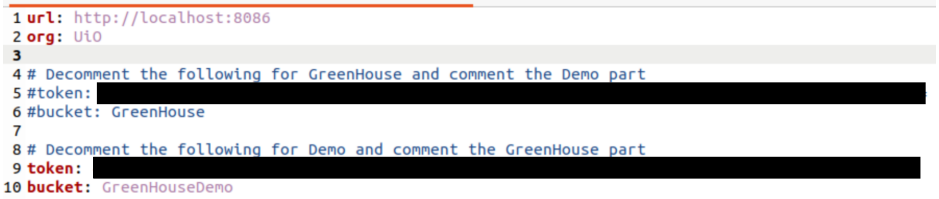

Figure 1: Token configuration

- Change the execution mode for the frontend. This can be done from the terminal with `sudo bash change_parameters.sh` and changing the Operating Mode to either *demo* or *greenhouse*

3 Adding the RDF for the execution

To upload the asset model navigate to the page `http://localhost:3030` and click on **Add Data**, from there click on **Select Files**, navigate to `home`

`-> Desktop -> Simulation Driver` and choose the `greenhouse.ttl` if you want to use our asset model, or upload your own if you have a different one.

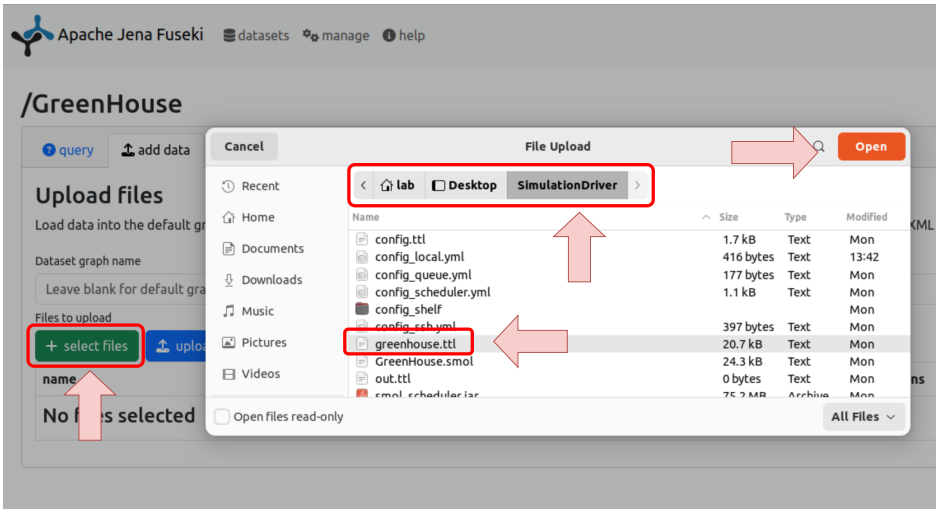

Figure 2: Upload the ttl

4 Executing the project

For the execution the file `execute_simulation.sh` has been added on the Desktop. You just need to execute it with the regular user with

```
./execute_simulation.sh
```

and the various information on the system will be updated over time on the frontend at `http://greentween.local`

5 Extend the GreenHouse

In case of addition of elements the following file has to be modified

- `config_shelf_*`: for each shelf we use a different file and modifications and/or addition has to be added before restarting the system to get the new elements

- The asset model has to be updated with the appropriate query: this can be done on the update seciton on `http://localhost:3030`

List of Figures