**Localhost test web server for mocking API for local testing.**

As a python developer I need to be able to test against a local web server so that I can more realistically simulate a production environment.

Currently all the integrators have a setting to use mock data instead of making real http requests; this has caused issues as when the integrators are tested against the actual SAP API the code they might not work as expected.

In order to address this, and eventually have integration tests, we need a web server that mocks the SAP APIs.

The first task would be to create a new Python package in rrps\python that starts a web server; this web server should reply to the request /sapmasterdata/1000015/ with the contents of a json file, and should reply with a 404 status for any other request.

The json files returned by the web server should be in a subdirectory of the package, for example data/sapmasterdata/1000015.json ; this way we can easily add more assets if needed.

A good framework to get a web server up and running quickly would be Flask, whose documentation is available at <http://flask.pocoo.org/docs/1.0/quickstart/> .

Once the above server is working it should be possible to test the sapmasterdata integrator with the following configuration:

config:

  sap:

    endpoint: http://localhost:5000/sapmasterdata/{asset\_id}

    timeout: 60

  use\_mock\_data: 0

  loop\_time: 10

The next step would be to enable authentication on the /sapmasterdata endpoint in order to allow testing the following configuration:

config:

  sap:

    endpoint: http://localhost:5000/sapmasterdata/{asset\_id}

    usr: user

    pwd: pass

    timeout: 60

  use\_mock\_data: 1

  loop\_time: 10

Bosch to work with IoTIC and clarity of this user story (Tim)

1. Be able to test integrators locally.
2. Return asset specific data based on parameters in the API.