General information on Embed API

- -> Principle guide to using the Embed API:
- https://github.com/MastodonC/kixi.hecuba/blob/master/doc/tutorial.md
- -> Link to Embed API docs: https://github.com/MastodonC/kixi.hecuba/blob/master/doc/api.md
- -> Link to the http request for rollups:
- https://github.com/MastodonC/kixi.hecuba/blob/master/doc/api.md#measurements
- -> Link to Python script to use Embed API:
- https://github.com/MastodonC/scripts-embed-api

Retrieve Embed measurements via the API

From the "measurements" paragraph in Embed API documentation you'll see there are three types of measurements you can retrieve:

- raw measurements
- hourly rollups
- daily rollups

Here's what the **example url** for the http GET request is on the docs:

http://:hostname/4/entities/1d3f8fbcd69bdc40aa6f8b0df1323b44100d99c3/devices/5f10b639315 93f90a1a08729889a0842deda818c/daily_rollups/CO2?startDate=2012-07-05%2000:00:00&end Date=2014-06-16%2000:00:00

Here's what you need to edit to make your request:

- entity-id: identifier for the house in Embed
- device-id: identifier for the device in Embed
- sensor-type: type associated with the device in Embed
- start-date: start date for the rollups + start time
- end-date: end date for the rollups + end time

Note:

Here we use "daily_rollups" but it could be replaced by "hourly_rollups" or "measurements" depending on the information you want to retrieve.

How to get the type of a sensor?

Look up the API documentation for devices:

https://github.com/MastodonC/kixi.hecuba/blob/master/doc/api.md#get-device-resource

You need to edit the GET request url with the entity-id of the house and the device-id of the device of interest:

http://:hostname/4/entities/2d7d6785-d3d2-4c98-9de9-b5a92fd27a82/devices/cf62ea45-7cf8-431b-9bdc-265ad5a42d01.

The documentation show you the structure of the response you'll get and how to access the "type".

Embed conversions

See details on the conversions:

https://github.com/MastodonC/kixi.hecuba/blob/master/doc/documentation.md#conversion-factors-for-calculated-datasets

- The measurements of unit specified as "m^3" or "ft^3" are converted to "kwh"
- The measurements of unit specified as "kwh" are converted to CO2

Synthetic sensors contain additional info

The conversion and tariff calculations like the difference series are available for a device as an additional sensor with the parameters "synthetic" "yes" and a type specific to them

Here's an example

Sensors				
Туре	Synthetic?	Header Rows	Unit	Period
electricityConsumption_differenceSeries_co2	Yes		co2	PULSE
waterConsumption_differenceSeries	Yes		L	PULSE
electricityConsumption_differenceSeries	Yes		kWh	PULSE
electricityConsumption	No		kWh	CUMULATIVE
gasAsHeatingFuel	No		m^3	INSTANT
waterConsumption	No		L	CUMULATIVE

You can access sensors information on a device using Embed API in the same way we previously looked for type of a sensor.

Note:

To retrieved measurements for different sensors (after conversions...) use the http GET request detailed above in the paragraph "Retrieve Embed measurements via the API" and add the relevant sensor type.