

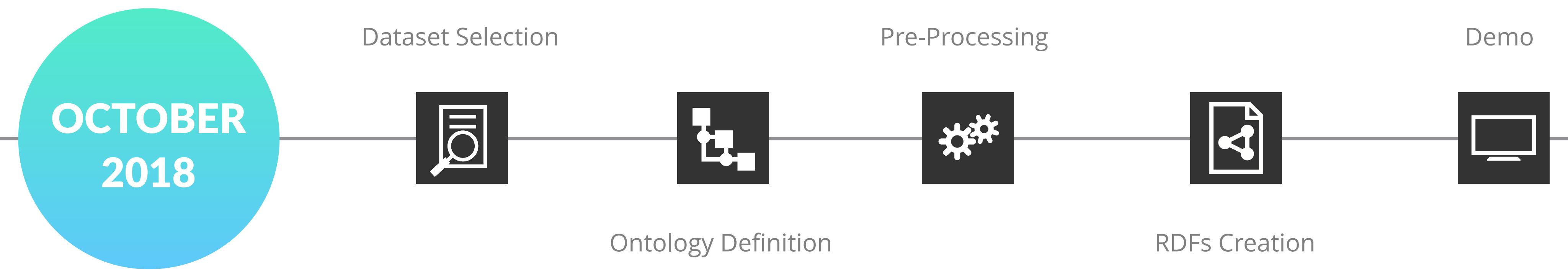
A wide-angle photograph of a city street at dusk or night. In the center background stands the ornate dome of the Metrópolis building, topped with a statue of an angel. The foreground is dominated by a large, circular intersection where light trails from moving vehicles create a dynamic, swirling pattern on the asphalt. The surrounding buildings are classical in style, with many windows and facades. The sky is filled with dramatic, colorful clouds.

SAFEAIR

We care about your breath

Roadmap

All the steps we followed

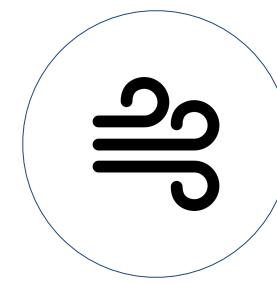


Madrid Open Data

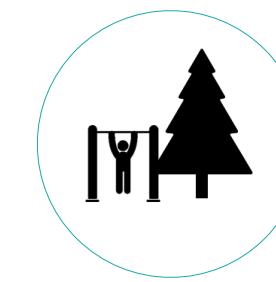
Lifestyle data about Madrid



Dataset Selection



Air Measurements



Elderly Areas



Sport Centers

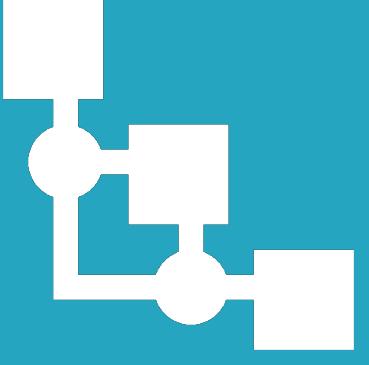


Schools

License

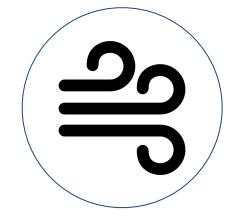
[Open Data Madrid License Link](#)

Ontology Definition



Ontology

Thinking to our Ontology



Air Quality

All the measurements



Stations

Locations and Informations



Sport Centers

Location and Informations



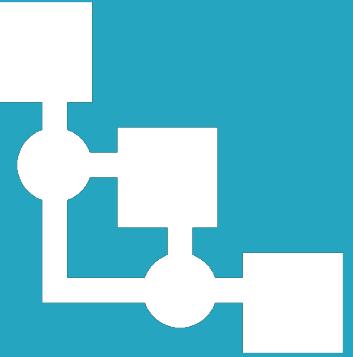
Schools

Location and Informations



Elderly Areas

Location and Informations



Ontology Definition

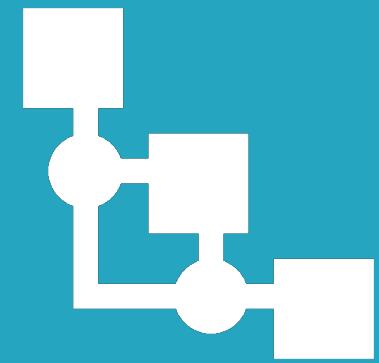
Ontology

Skeleton of our Linked Data

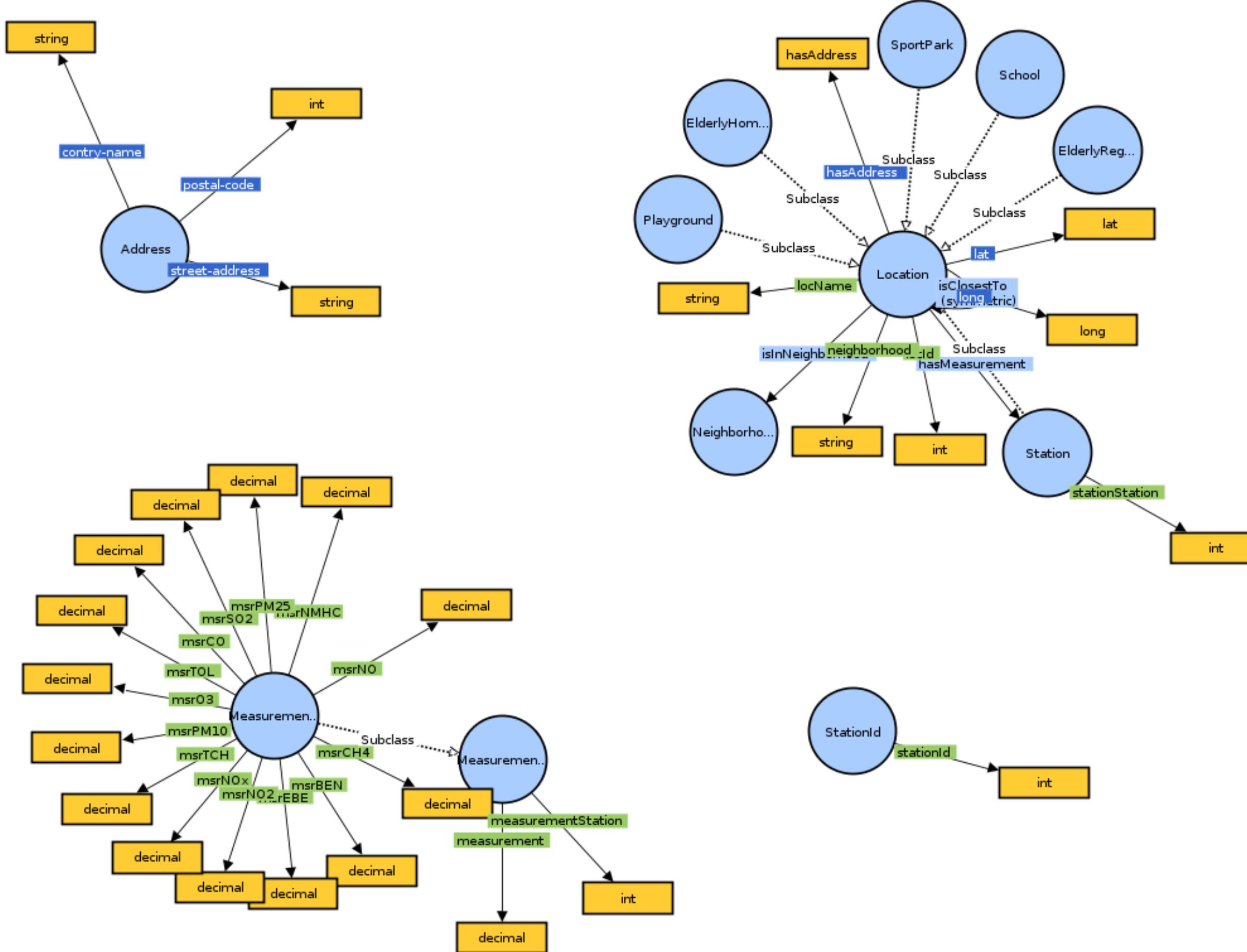
- Ontological terms path:
- <http://safeair.es/project/ontology/safeair#>
- Individuals path:
- <http://safeair.es/project/resources/>
- Ontological terms pattern:
- <http://safeair.es/project/ontology/safeair#>
- Individuals pattern:
- http://safeair.es/project/resources/<resource_type>/<resource_id>

Ontology

First Ontology Version

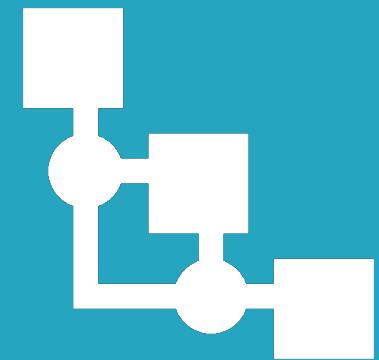


Ontology Definition

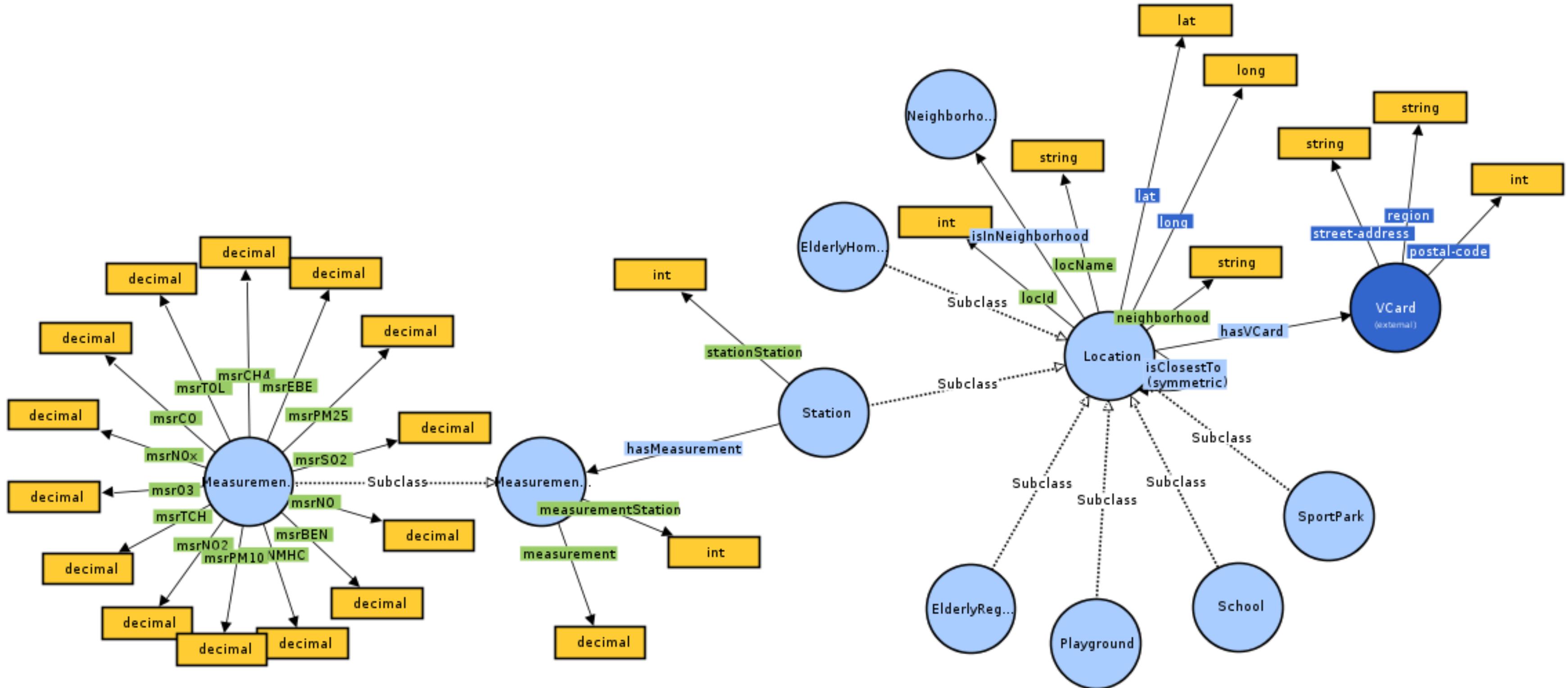


Ontology

Second Ontology Version

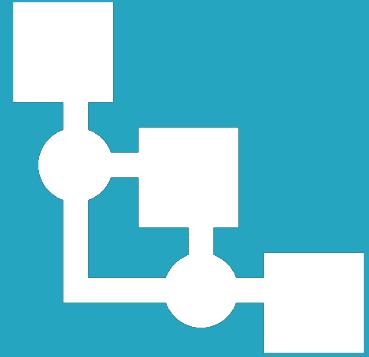


Ontology Definition

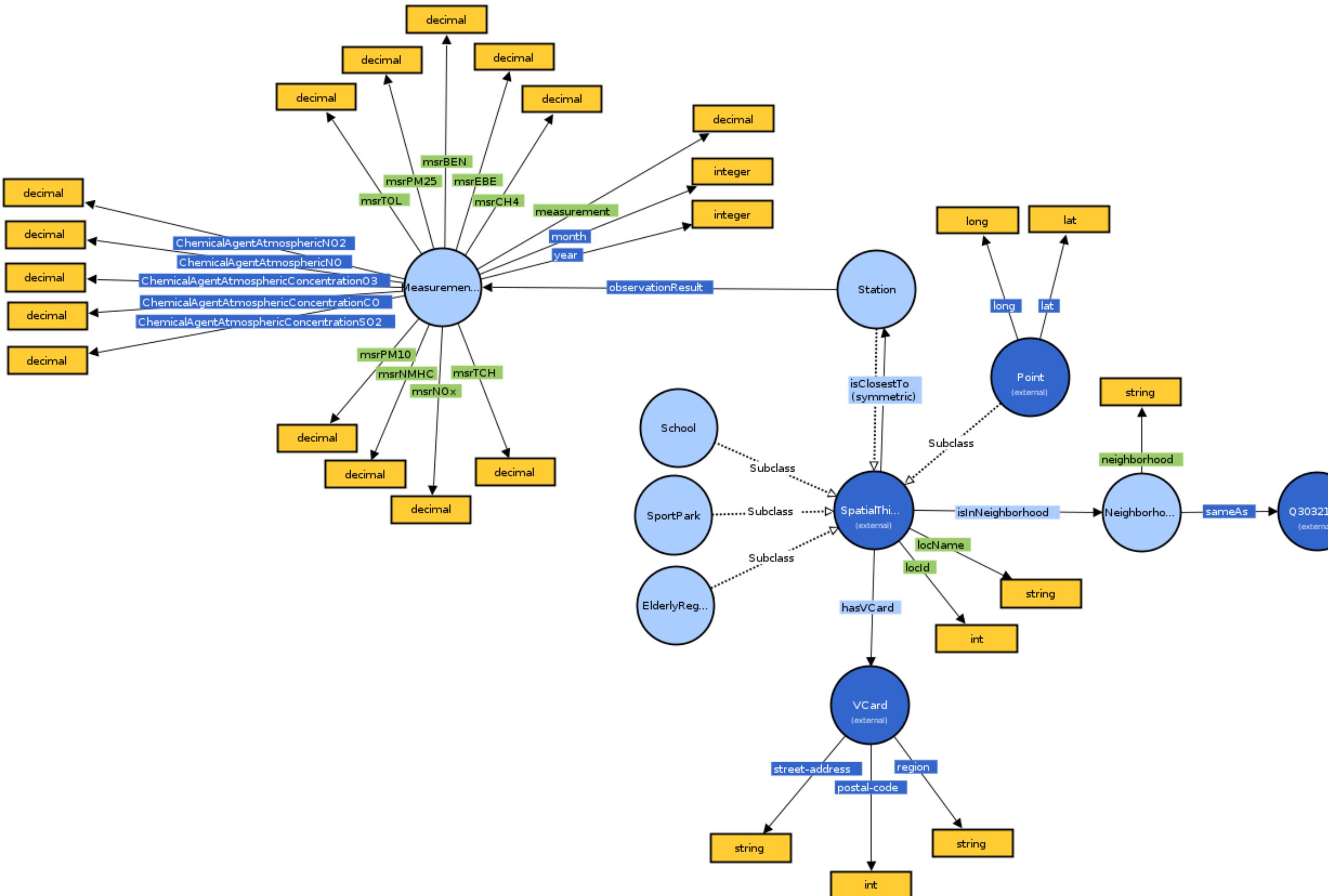


Ontology

Current Ontology Version

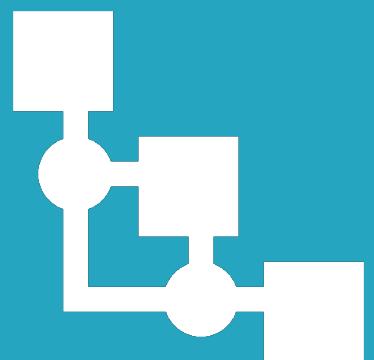


Ontology Definition

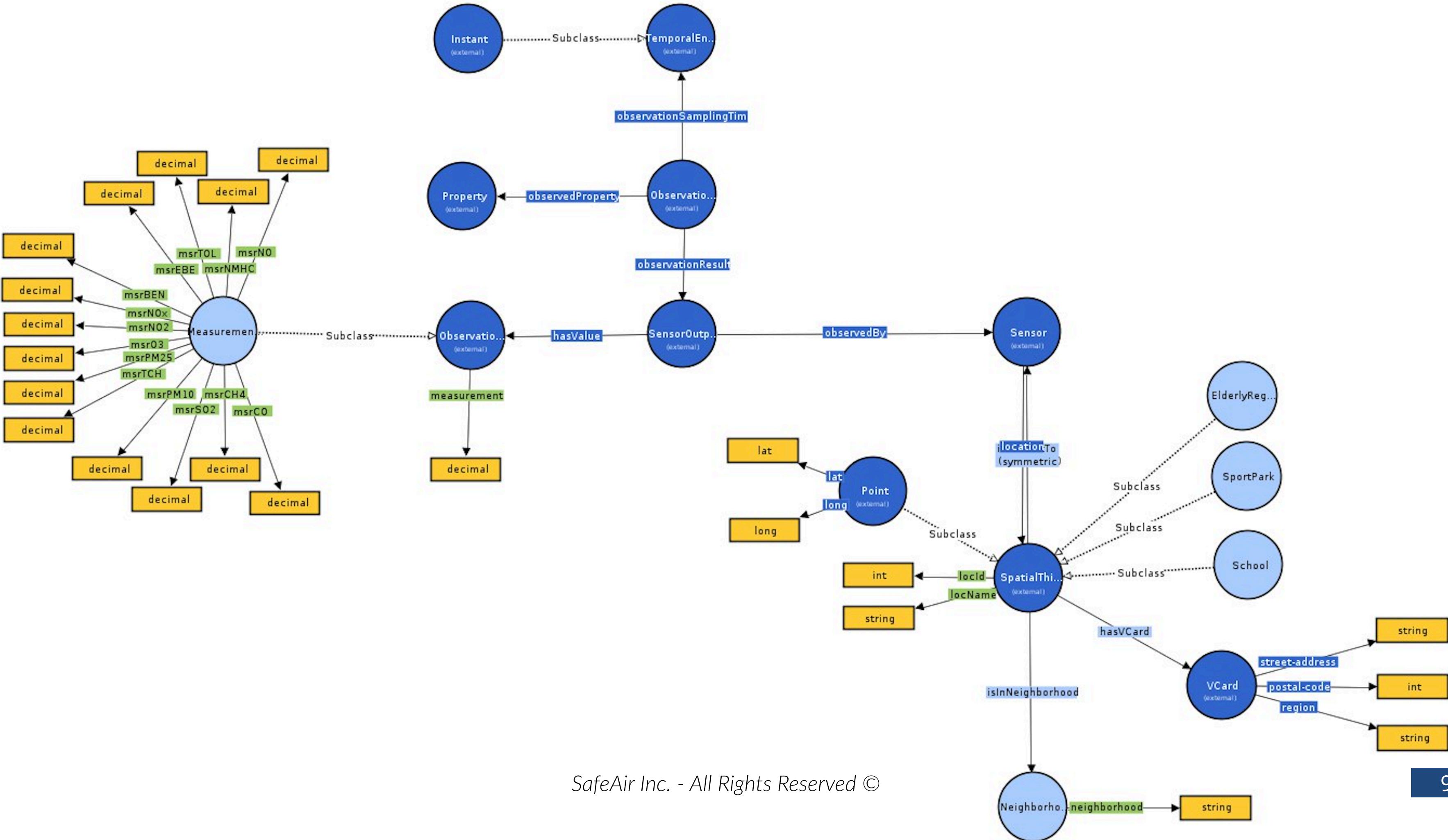


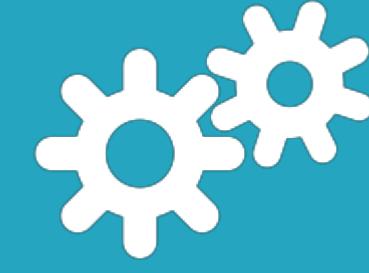
Ontology

Future Changes

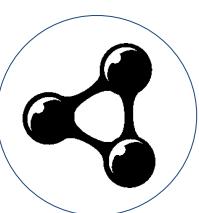


Ontology Definition



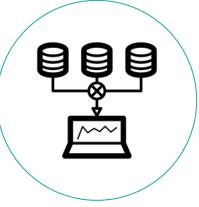


Pre-Processing



Linking

Linking our data to already defined resource



Aggregation

Reducing granularity of data



Removal

Deleting useless features



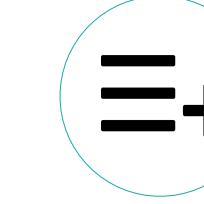
OpenRefine

TOOLS



Python

CLEANING METHODOLOGIES



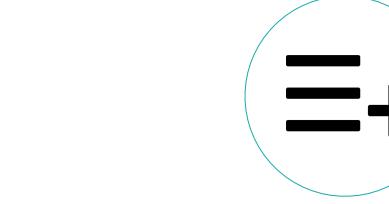
Generation

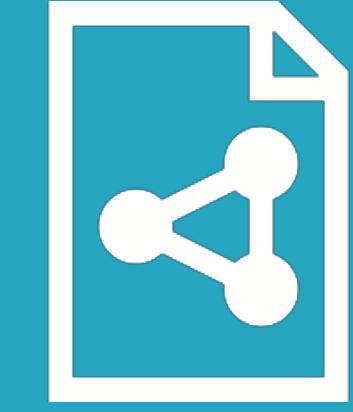
Creating new datasets from those available



Correction

Detection of wrong information

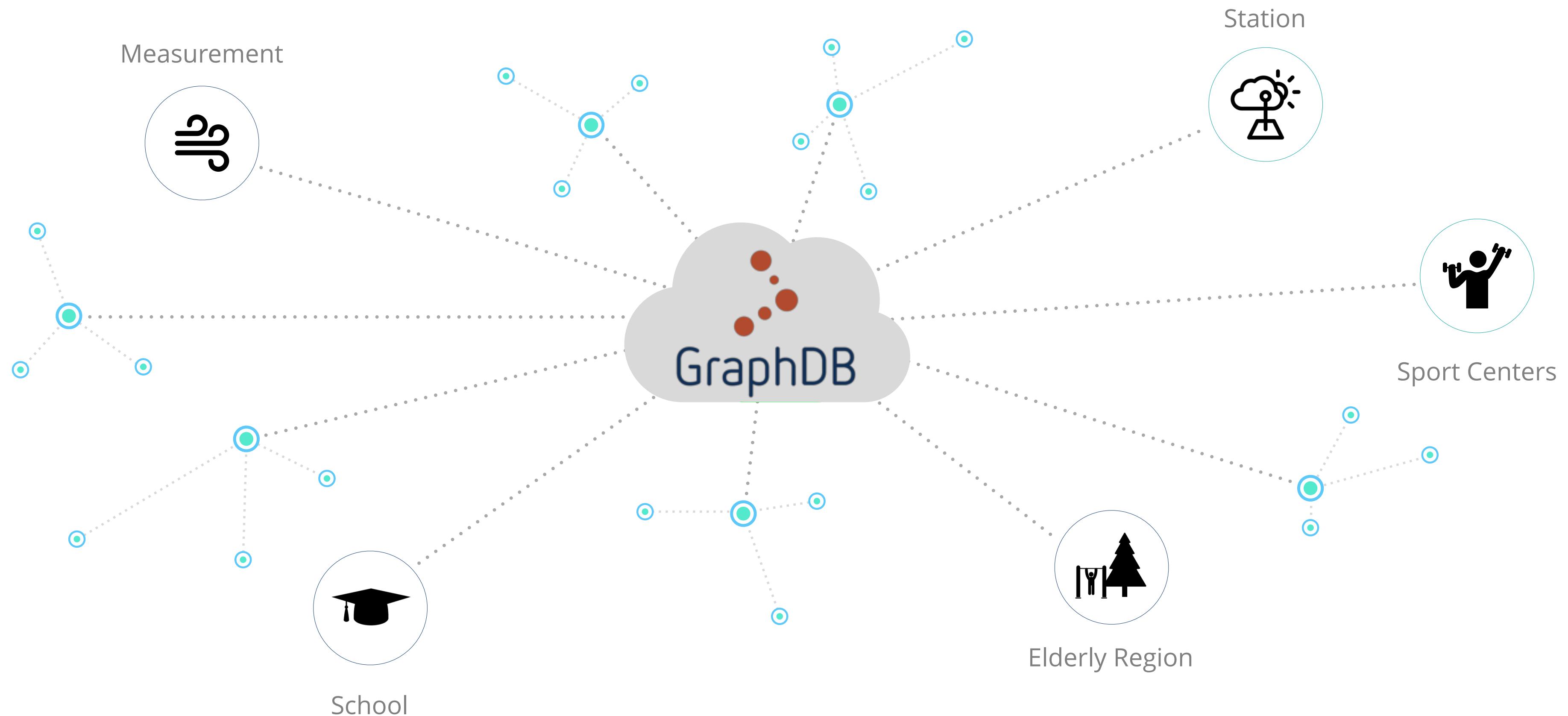




RDFs Creation

A world of RDFs

They are ready to be queried



Let's try our Demo



Demo

The screenshot shows the homepage of the SafeAir website. The header features the word "SAFEAIR" in white on a dark blue background. To the right are navigation links: "ABOUT", "SAFETY VALUES", "DATA SOURCES", and "TEAM". The main title "OPEN LINKED BIG DATA PROJECT" is displayed in large, bold, white capital letters. Below it is a subtitle: "Using Open Linked Big Data to investigate Air Quality for high-risk population groups around Madrid." A "FIND OUT MORE" button is located at the bottom right of the main content area. The background of the page is a photograph of a blue sky with wispy white clouds.

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www.safeair.es and the demo offered are service marks of Safeair Inc.*

Let's try our Demo

We use SPARQL to retrieve our information!



Demo



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www.safeair.es and the demo offered are service marks of Safeair Inc.*

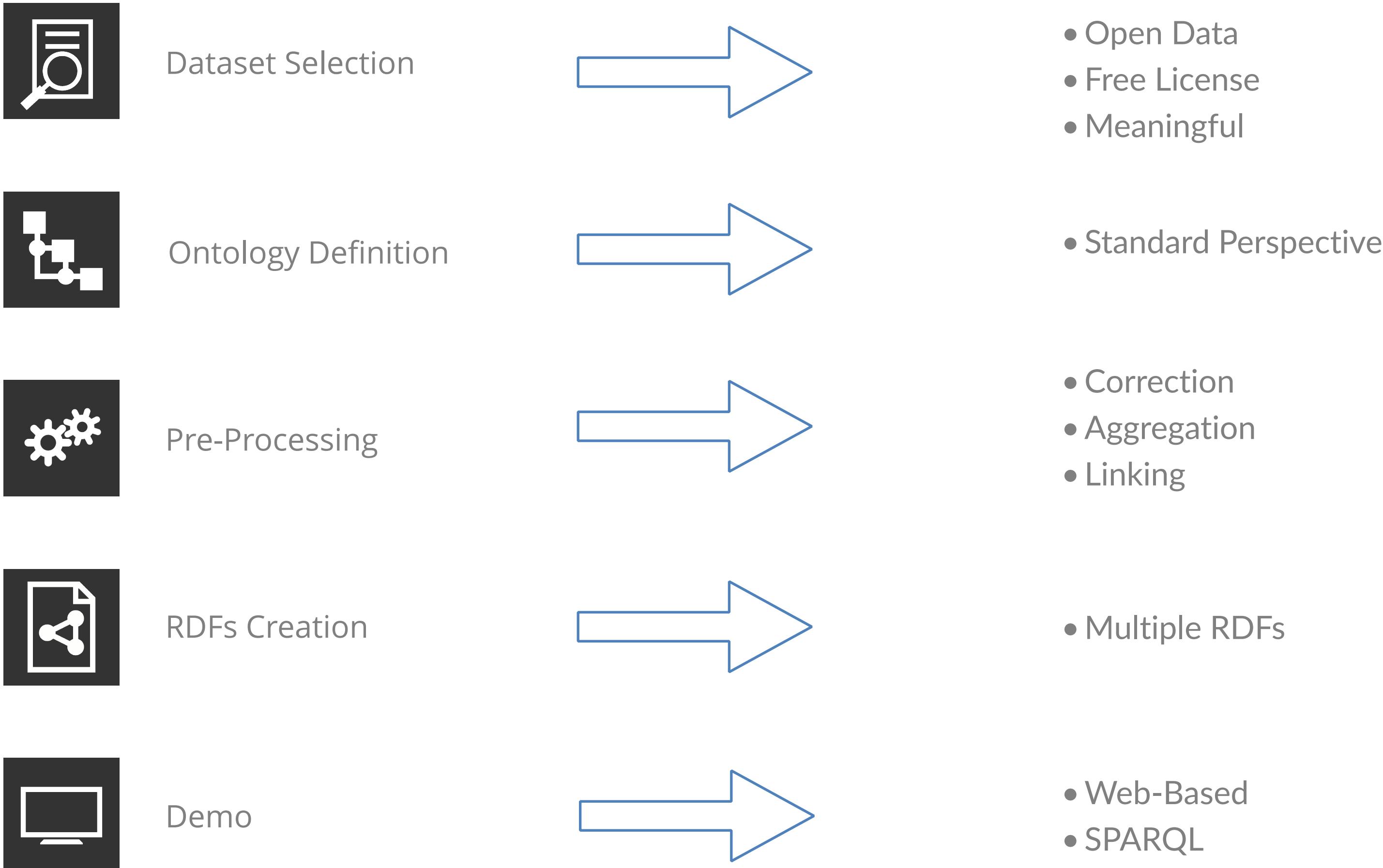


Performance



We care about our process

Recap of phases quality





Team

Our Team



BOY RAAIJMAKERS

Data Scientist



GIOELE BIGINI

Data Scientist

You have just listened to us!

About Open Linked Big Data

Our thoughts

That's all Folks!

Conclusions

- The power of Linked Data
- The relevance of Open Data
- From data to user experience
- Growing context



POLITÉCNICA



SAFEAIR MADRID

#WeAreSafeair