

An Open Data adapter with semantic output

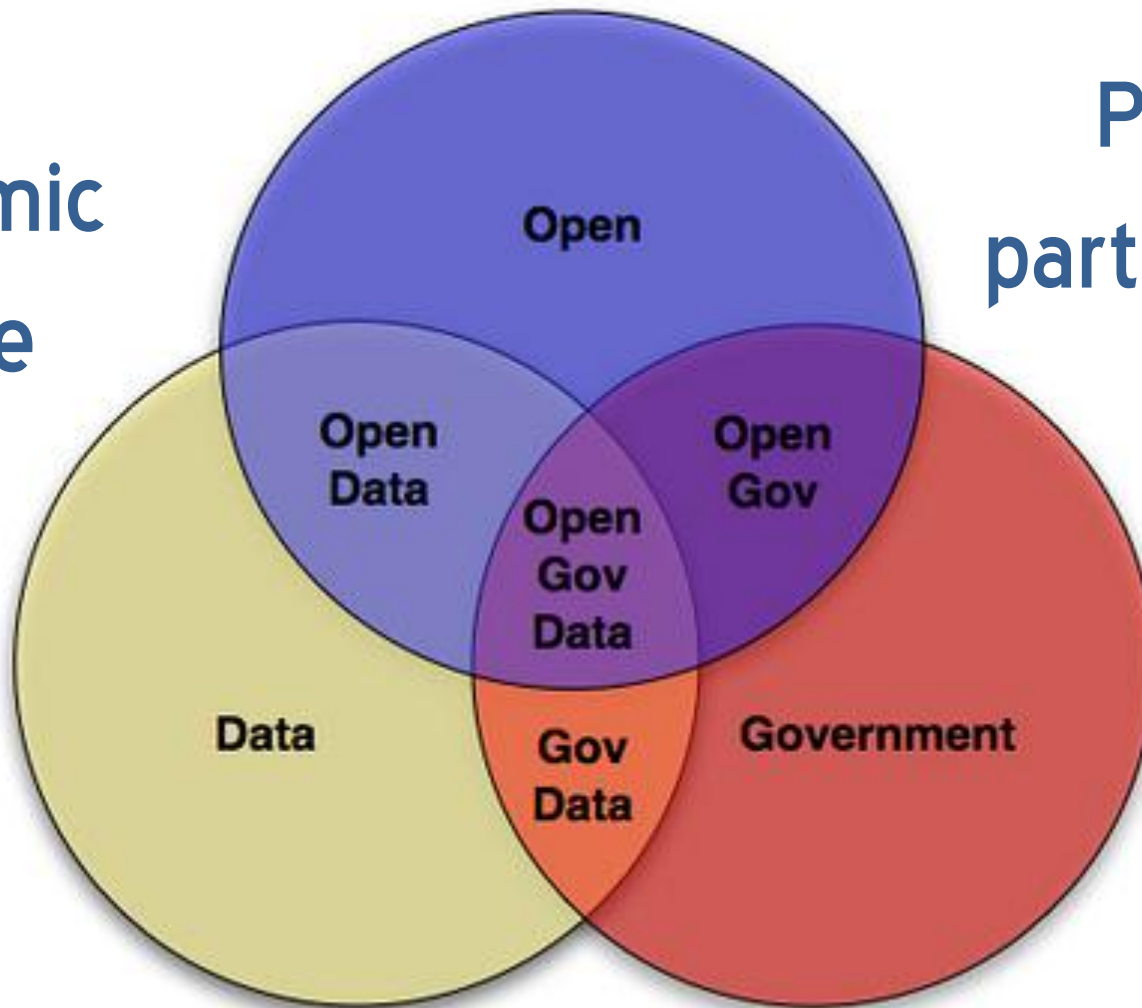
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Free
economic
value

Public
participation



Transparency

Open Data...



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Open Data...

It's like me
in the
morning



More caffeine
more value

Photograph: © www.cafepress.com

Open Data...

It's like a
cup of coffee



Best when it
is **still hot**

Photograph: © www.cafepress.com

Taking the first sips

The first time opening data



It usually is...

with little experience

careful

simple and fast

limited

Keep the bar low

Taking the first sips

The data
mostly
reaches
**second or
third star**



Low caffeine level

Plain format

Quite cold

Not dynamic

Photograph: © www.cafepress.com

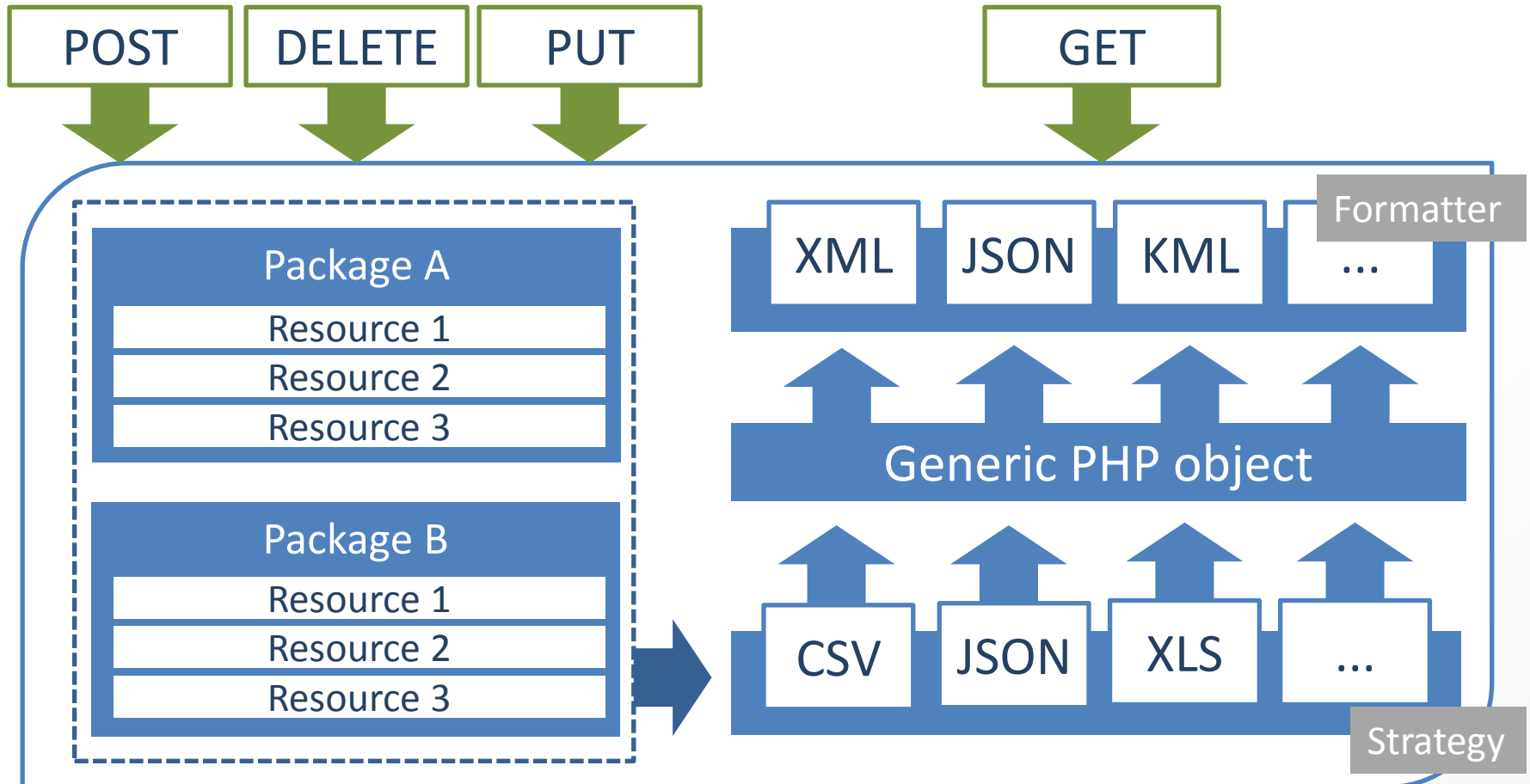


iRail.be



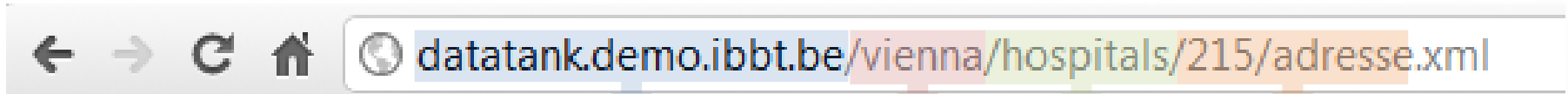
The 5 minute API

RESTful



RESTful

FID	SHAPE	BEZEICHNUNG	ADRESSE	BEZIRK	LANGTEXT
KRANKENHAUSOGD.215	POINT (16.325947568...	Kaiserin Elisabe...	15., Huglgasse 1-3 (ELISABETH-SPITAL)		Krankenhäuser öffentli
KRANKENHAUSOGD.189	POINT (16.390836795...	Krankenanstalt R...	3., Juchgasse 25	3	Krankenhäuser öffentli
KRANKENHAUSOGD.1157	POINT (16.344339343...	Allgemeines Kran...	9., Währinger ...	9	Krankenhäuser öffentli
KRANKENHAUSOGD.883	POINT (16.278682990...	Krankenhaus Hiet...	13., Wolkersbe...	13	Krankenhäuser öffentli
KRANKENHAUSOGD.884	POINT (16.281123811...	Krankenhaus Hiet...	13., Riedelgas...	13	Krankenhäuser öffentli
KRANKENHAUSOGD.1118	POINT (16.278573016...	Sozialmedizinisc...	14., Baumgartn...	14	Krankenhäuser öffentli



Hostname

Package

Resource

Filter



```
<hospitals version="1.0" timestamp="1334309626">
  <adresse>15., Huglgasse 1-3 (ELISABETH-SPITAL)</adresse>
</hospitals>
```

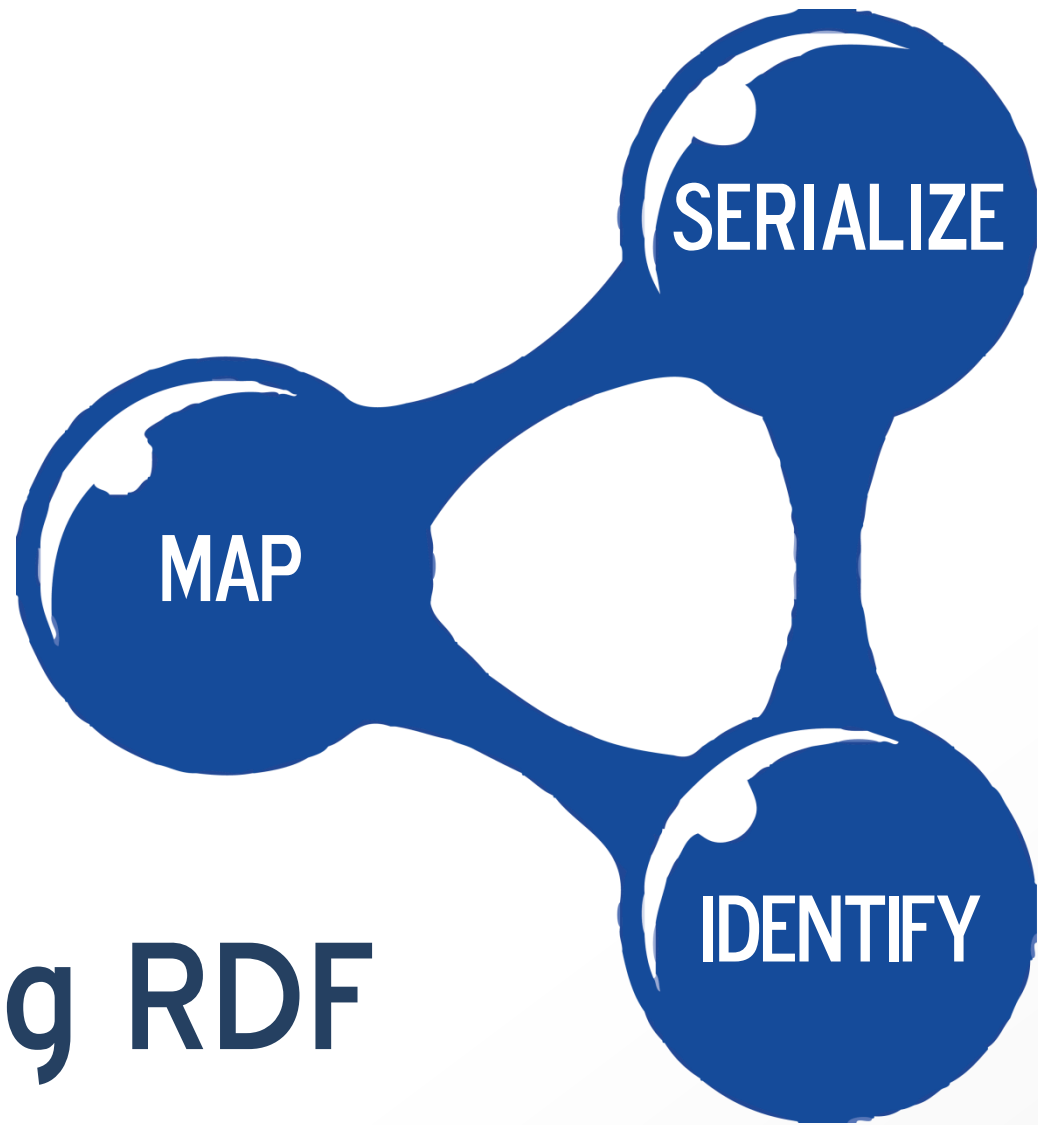
Advanced drinker

Output
four star data



While sticking to the
philosophy

Photograph: © www.cafepress.com



Producing RDF



IDENTIFY

Identifying things,

not only representations



UNIV
IDENTIFY

HTTP Range-14

Non Information Resource

GET http://host/package/resource

303 Redirect

http://host/package/resource.about

Information Resource

GET http://host/package/resource.about

200 OK

Mapping data object to ontology members



```
name; lastname; email
```

```
Miel; VanderSande; miel@irail.be
```

```
Pieter; Colpaert; pieter@irail.be
```

<http://local/TDT/irail/developers/0>

name

lastname

email

"Miel"

"VanderSande"

"miel@irail.be"

ONTOLOGY MAPPING

rdf:type

"foaf:Person"

<http://local/TDT/irail/developers/0>

foaf:name

foaf:family_name

foaf:mbox

"Miel"

"VanderSande"

"miel@irail.be"

An own Ontology, to describe data structure and mapping



```
@prefix owl:<http://www.w3.org/2002/07/owl\#>.
@prefix rdf:<http://www.w3.org/1999/02/22-rdf-syntax-ns\#>.
@prefix foaf:<http://xmlns.com/foaf/0.1/>.
@base <http://datatank.demo.ibbt.be/TDTInfo/Ontology/>.
<developers> a owl:Class .
```

```
<developers/stdClass> a owl:Class;
owl:equivalentClass foaf:Person .
```

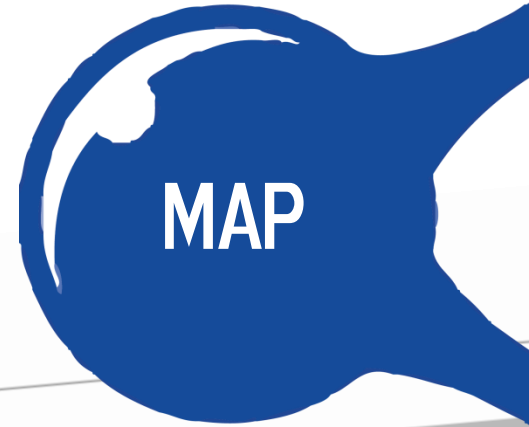
```
<developers/stdClass/name> a rdf:Property;
owl:equivalentProperty foaf:name .
```

```
<developers/stdClass/lastname> a rdf:Property;
owl:equivalentProperty foaf:lastname .
```

```
<developers/stdClass/email> a rdf:Property;
owl:equivalentProperty foaf:mbox .
```



Collaborative mapping, making the ontology accesible through API



DATA TANK THE **SEMANTIFIER**
ONTOLOGY MAPPING AND AUTHORIZING TOOL

Available resources

- vienna
 - libraries
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - kindergarten
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - musicschools
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - schools
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - universities
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - adultschools
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - bathingplaces
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - campings
Preview: HTML | XML | JSON | RDF/XML | RDF/N3
 - citybike
Preview: HTML | XML | JSON | RDF/XML | RDF/N3

Ontology of vienna/musicschools

musicschools

Add new member...

stdClass

schema:School x v:Work x

Add new member...

id

POST

DELETE

PUT

GET

[http://\[host\]/TDTInfo/Ontology/\[package\]/\[resource\]](http://[host]/TDTInfo/Ontology/[package]/[resource])

Educational

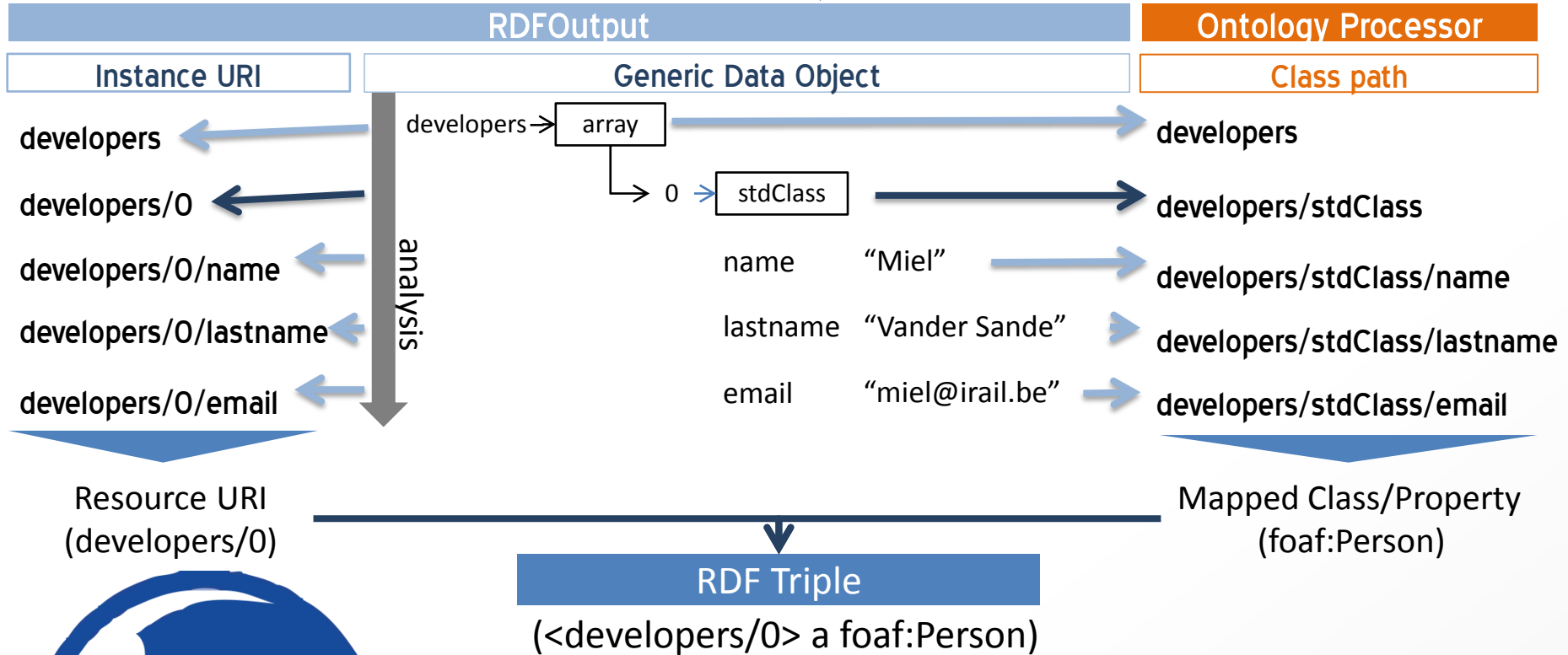
long

wgs84:long x v:longitude x

Add new member...

Recursive analysis

to derive URIs and assemble triples





- Anwendungen
- Datenkatalog**
 - Basiskarten
 - Bevölkerung
 - Bildung
 - Budget
 - Freizeit
 - Gesundheit
 - Kultur
 - Öffentliche Einrichtungen

Krankenhäuser – Standorte

Beschreibung	Krankenhäuser, Standorte, Wien
Datensatz	<p>Daten- und Kartendienste im Koordinatensystem <u>WGS84 (EPSG:4326)</u>:</p> <ul style="list-style-type: none"> ▶ GML (WFS) ▶ JSON (WFS) ▶ KML (WMS – GeoServer) ▶ GeoRSS (WMS – GeoServer) ▶ CSV (WFS) ▶ ESRI Shapefile (WFS)

Bedienungshinweise

Suche im Da

Kommunika



@ogdwien

On-the-fly publishing of OGDWien data as RDF

Demo

- Formate
- Neuigkeiten
 - Changelog
 - Presse
- Nutzungsbedingungen
- Veranstaltungen

	<ul style="list-style-type: none"> ▶ ADRESSE: Adresse (Bezirksnummer, ...) ▶ BEZIRK: Wiener Gemeindebezirksnummer ▶ LANGTEXT: Krankenhäuser öffentlich/privat
Zeitraum	aktuell
Aktualisierung	laufend
Datenqualität	Verortung auf Basis der topografischen Grundkarte der Stadt Wien (Mehrzweckkarte)

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Thank you!
QUESTIONS?

datatank.demo.ibbt.be
www.thedatatank.com