



Making the web an
exploratory place
for geospatial data

GeoKnow Generator – an open source framework for the Spatial Data Web GeoLD2014 Workshop

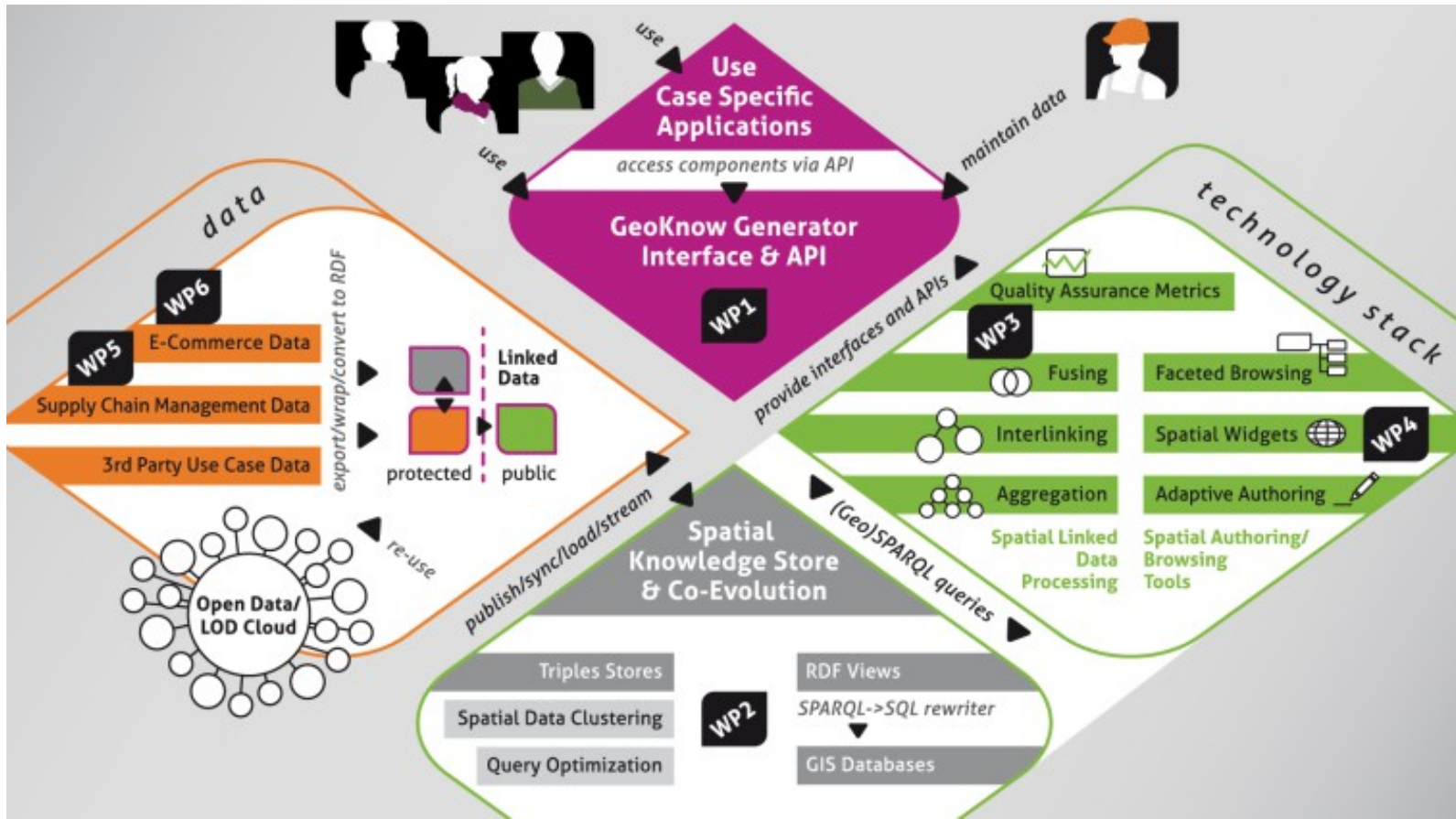
Matthias Wauer, Unister GmbH

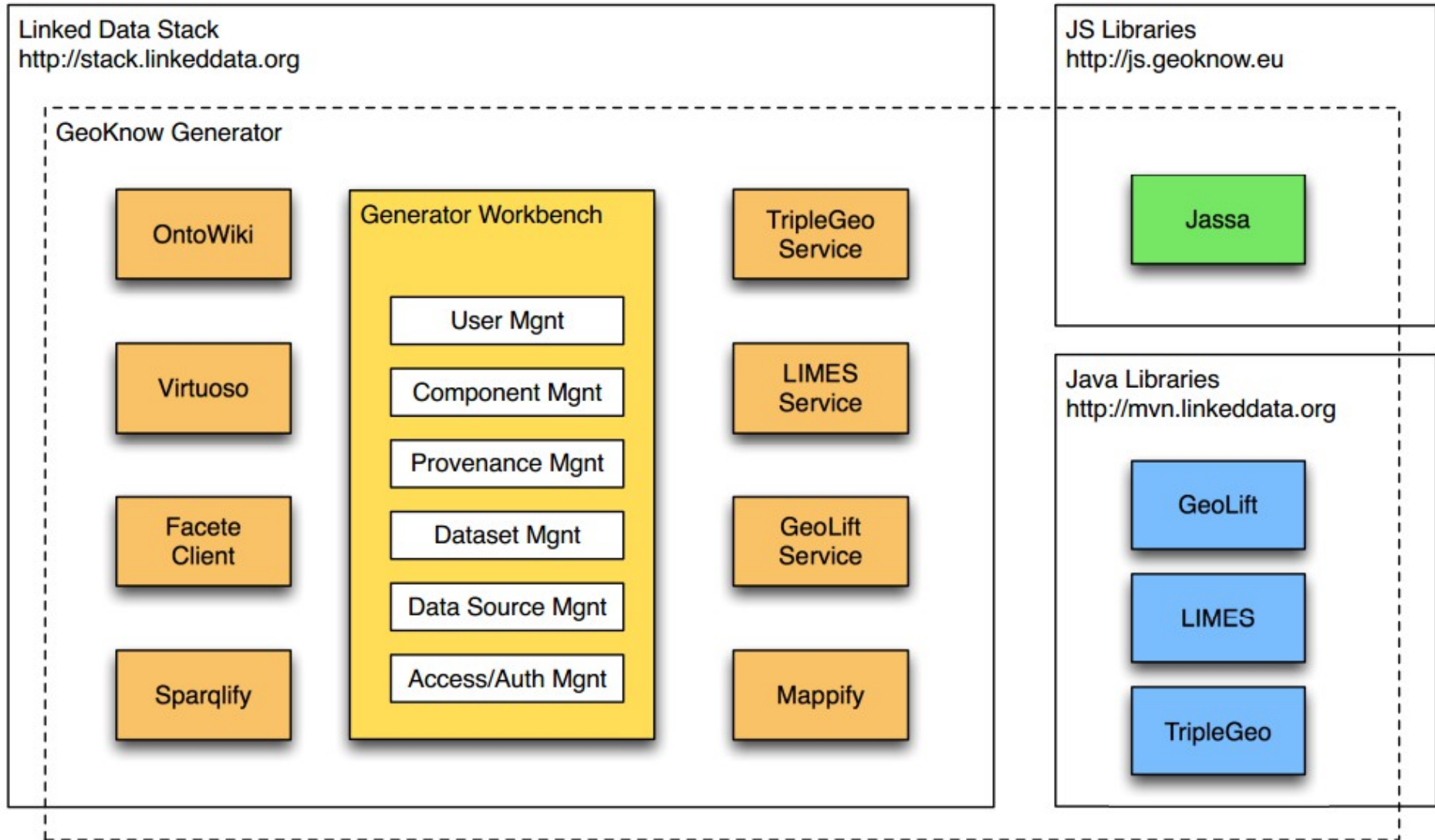


<http://geoknow.eu>

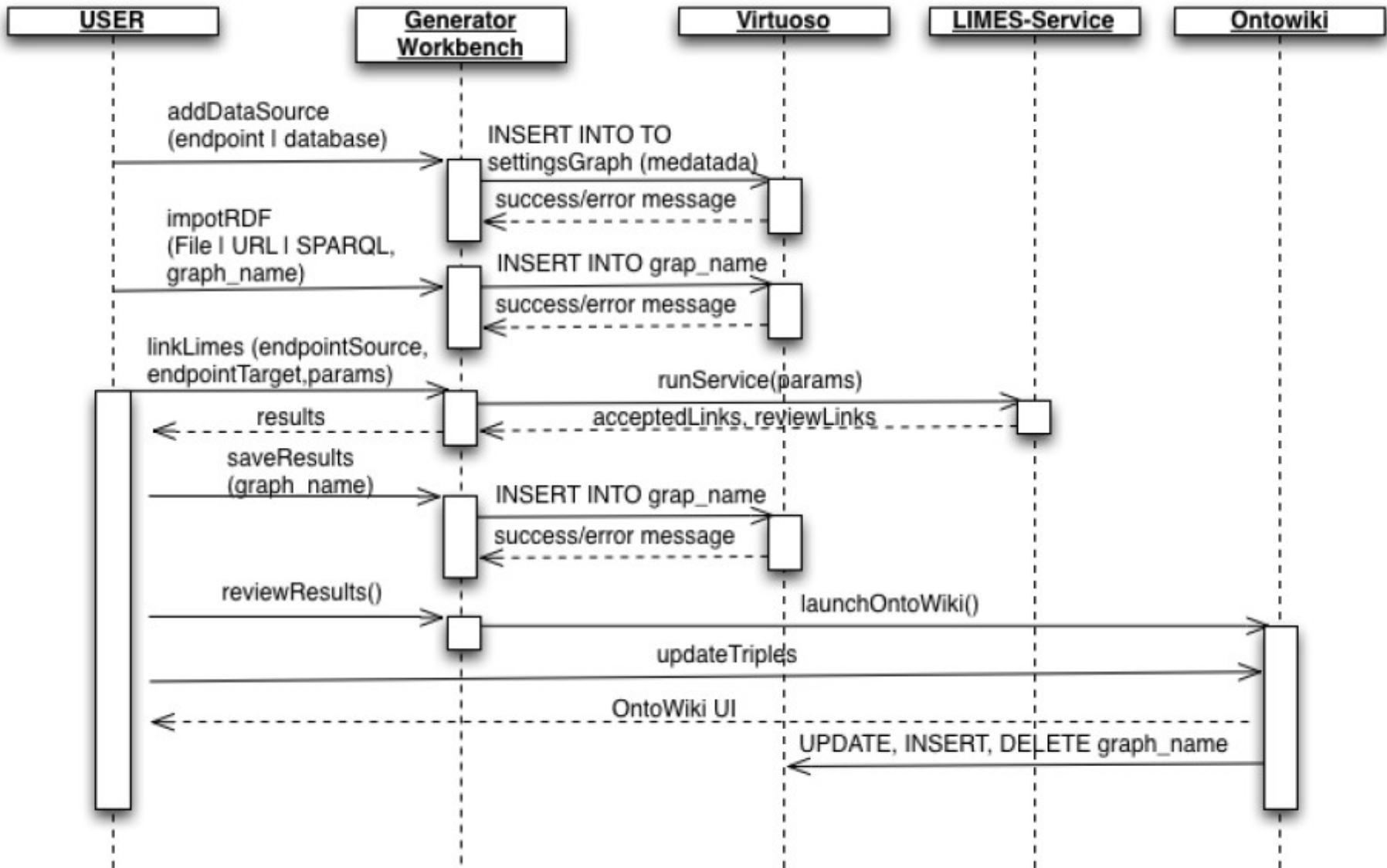
- *GeoKnow context*
- *GeoKnow Generator Architecture*
- *Technical background*
 - *Sample Workflow*
- *Demo scenario*
- *GeoKnow Generator User Interface*
 - *Or screen shots*

- Goal
 - a global, distributed platform for geospatial information integration by combining GIS and semantic technologies

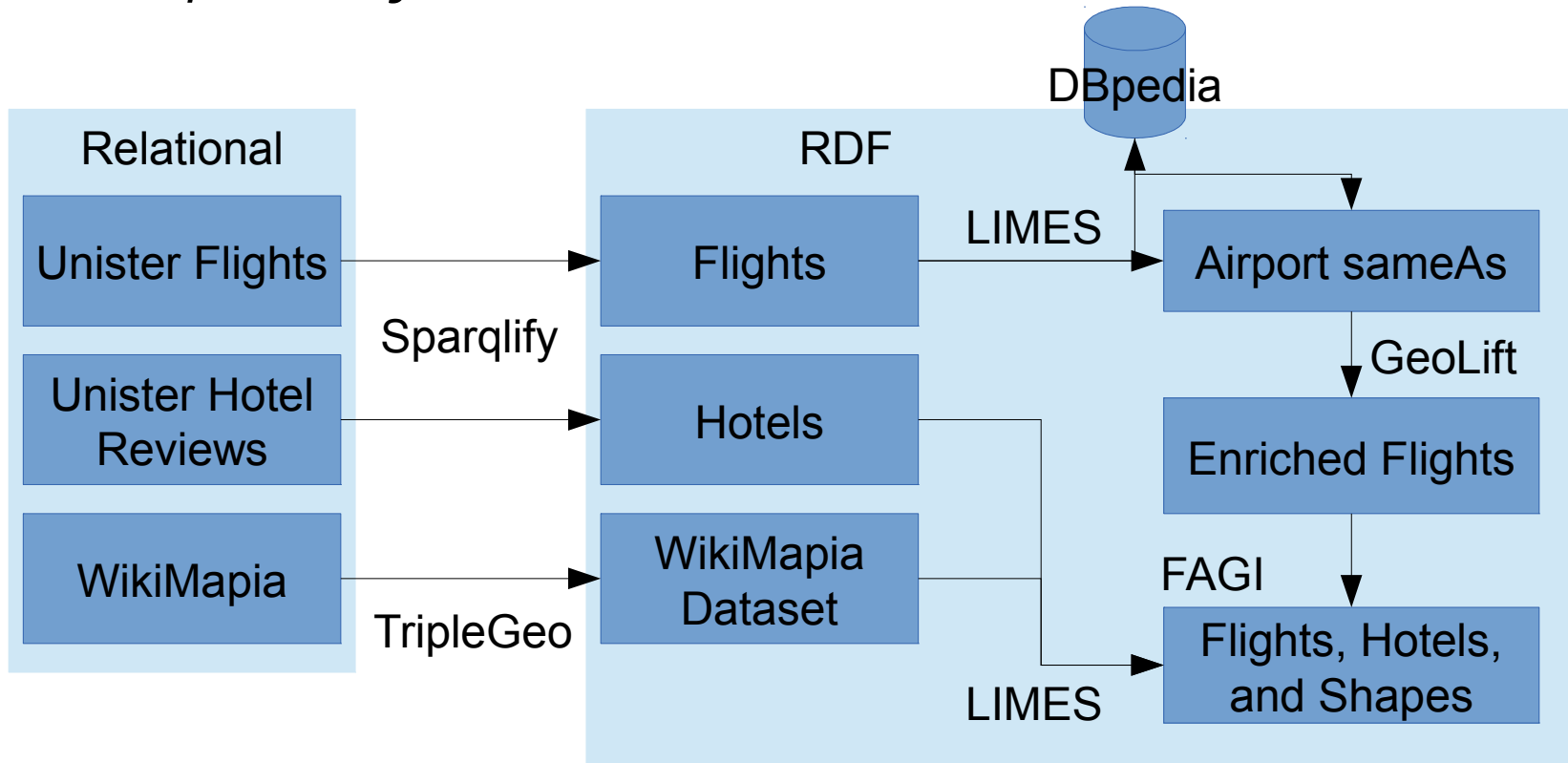




- Service components
 - *Described using Linked Data Stack Ontology*
- *Component distribution*
 - *Debian repository*
 - *Maven*
 - *Source code at Github*
- *GeoKnow Generator Workbench*
 - *Web application for creating data workflows using preconfigured components*
 - *Enables dataset management*



- *Public and private geospatial data sets*
- *GeoKnow tools integrate them*
- *Components for visualisation*





GeoKnow Generator Workbench




- Demo at <http://generator.geoknow.eu>




GeoKnow Generator Workbench



 [Workbench](#)

 [Settings](#)

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[Forgot password?](#)

Extraction and Loading

Storage and Querying

Authoring

Linking and Fusion

Enrichment

Exploration

Welcome to the GeoKnow Generator



Workbench

Settings

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Forgot password?

Data Sources











Datasets

Components

Data Sources

SPARQL Endpoint

Add new Endpoint

Action	Uri	Label	Endpoint	Homepage
 	:Dbpedia	Dbpedia	http://dbpedia.org/sparql	http://dbpedia.org/
 	:GeoLinkedDataEs	Spanish GeoLinkedData	http://geo.linkeddata.es/sparql	http://geo.linkeddata.es/
 	:LinkedGeoData	LinkedGeoData	http://linkedgeodata.org/sparql	http://linkedgeodata.org
 	:osm-semantic-network	OSM Semantic Network	http://spatial.ucd.ie/lod/sparql	http://wiki.openstreetmap.org/wiki/OSM_Semantic_Network
 	:oxpoints	OxPoints (University of Oxford)	https://data.ox.ac.uk/sparql/	https://data.ox.ac.uk/doc/dataset/oxpoints

Relational Databases



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Data Sources







Datasets

Components

Named Graphs Management

Add new dataset

User Graphs

Action	URI	Label	Description	Created	Modified
 	:Wunschzettel	tests	test	2014-0820T14:44:47	2014-0820T14:44:47
 	:mam	mam	mam	2014-0606T14:10:38	2014-0606T14:10:38
 	:settingsGraph	Generator Settings	GeoKnow Generator settings and configurations	2013-09-12	2013-09-12

Accessible Graphs

URI	Label	Description	Created	Modified	Access
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Add new graph group



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Data Sources

Datasets


Components


Components Management


Current workbench configuration has integrated the following components.

URI	Name	Homepage	Services	Version
:D2RQ	D2RQ		<ul style="list-style-type: none"> Ids:ExtractionService http://acc.ontos.com/d2rq/api Ids:ExtractionService http://acc.ontos.com/d2rq/api 	
:Facete	Facete	http://aksw.org/Projects/Facete.html	<ul style="list-style-type: none"> Ids:ExplorationService http://localhost/facete/ Ids:ExplorationService http://localhost/facete/ 	0.1-SNAPSHOT
:GeoKnowGenerator	GeoKnowGeneator			0.1
:GeoLift	GeoLift	https://github.com/AKSW/GeoLift	<ul style="list-style-type: none"> Ids:EnrichmentService http://localhost:8080/GeoLift-Service Ids:EnrichmentService http://localhost:8080/GeoLift-Service 	0.6.4



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Extraction and Loading

Import RDF data

Sparqlify Extraction

TripleGeo Extraction

Storage and Querying

Authoring

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Enrichment

Exploration

Import RDF Data

Import from a

URL

To a dataset

tests

Url input

tests
Generator Settings
mam

Import

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TripleGeo

Utility for Converting Geospatial Data into Triples

To get started choose whether to process a file or database, you can then choose an example or specify your own parameters.

TripleGeo Configuration



Data Source

Shape File

File Examples

Points shape file extraction

Input and Output Parameters

Data Source

points.shp

Output Format

RDF/XML

Target Store Type

GeoSPARQL

Data Parameters ⓘ

Feature

Attribute

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LIMES

Link Discovery Framework for Metric Spaces

To get started either upload a configuration file, choose an example, or fill in the options form.

LIMES Configuration



Upload a LIMES Configuration File (XML)

[Browse](#)

Examples

Geo Data



Options Form

[Show Form](#)

LIMES Configuration

Source Data

Endpoint URL

LinkedGeoData



Graph

Target Data

Endpoint URL

LinkedGeoData



Graph

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Examples

Geo Data



Options Form

[Show Form](#)

LIMES Configuration

Source Data

Endpoint URL

LinkedGeoData



Graph

Target Data

Endpoint URL

LinkedGeoData



Graph

- GeoKnow website
 - <http://geoknow.eu>
- GeoKnow deliverables on GeoKnow Generator
 - *Initial Prototype of the GeoKnow Generator (confidential)*

Contact

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 - jaenicke@uni-leipzig.de
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 - matthias.wauer@unister.de