ELG Pilot Project: MKS as Linguistic Linked Open Data
To access and publish Coreon Multilingual Knowledge Systems with methods established in the Semantic Web (LLOD – RDF – SPARQL)

- Multilingual terminology for the Semantic Web: By publishing all linguistic, descriptive and semantic values as LLOD
- Familiar access: By providing a native SPARQL endpoint
- Up-to-date in real-time: By running the knowledge graph as a complementary RDF-“index” to the Coreon data store
From Coreon JSON / TBX-like Data to a Knowledge Graph

JSON structure

```
{
  "admin": {},
  "tag_path": [],
  "lang": "en",
  "value": "Interchange",
  "updated_at": "2020-04-06T10:22:52.538Z",
  "created_at": "2020-04-02T16:02:46Z",
  "properties": [],
  "id": "5e860c1c10aa8f2cda73b717",
  "concept_id": "5e860c1c10aa8f2cda73b714",
  "created_by": {
    "email": "michael@coreon.com",
    "name": "Michael Wetzel",
    "roles": [
      "user",
      "maintainer",
      "manager",
      "admin"
    ],
    "state": "confirmed",
    "id": "51c2c678035ee5c5e1000002"
  }
}
```

Modelled as a knowledge graph

Serialised as RDF triples

```xml
<concept#5e> <has-term> <term#15-34> <term#15-68> <term#15-55> <term#15-34> <has-language> "en" <term#15-34> <has-value> "Interchange" <term#15-34> <has-usage> "preferred" <term#15-68> <has-language> "en" <term#15-68> <has-value> "Exchange" <term#15-55> <has-language> "de" <term#15-55> <has-value> "Austausch" <term#15-55> <has-gender> "male"
```
How it Works

Browser

JS App

Ruby middleware

Restful Web API

Search Index

Apache Solr

Coreon Data

Mongodb

ELG Proxy / Gateway

ELG SPARQL Query Host

RDF-Engine

SPARQL endpoint

RDF-Knowledge Graph

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