



Schweizerische Eidgenossenschaft  
Confédération suisse  
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wissen wohin  
savoir où  
sapere dove  
knowing where



# FSDI and Linked Data

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# Agenda

- What is the FSDI
- Project “FSDI SPARQL Endpoint & LD Frontend”
- Challenges
  - URI Strategy → Get rid of the HTTP14-Range issue
  - Vocabularies / Ontologies → GeoSPARQL
  - GeoSPARQL support in Triple Stores / SPARQL Endpoint

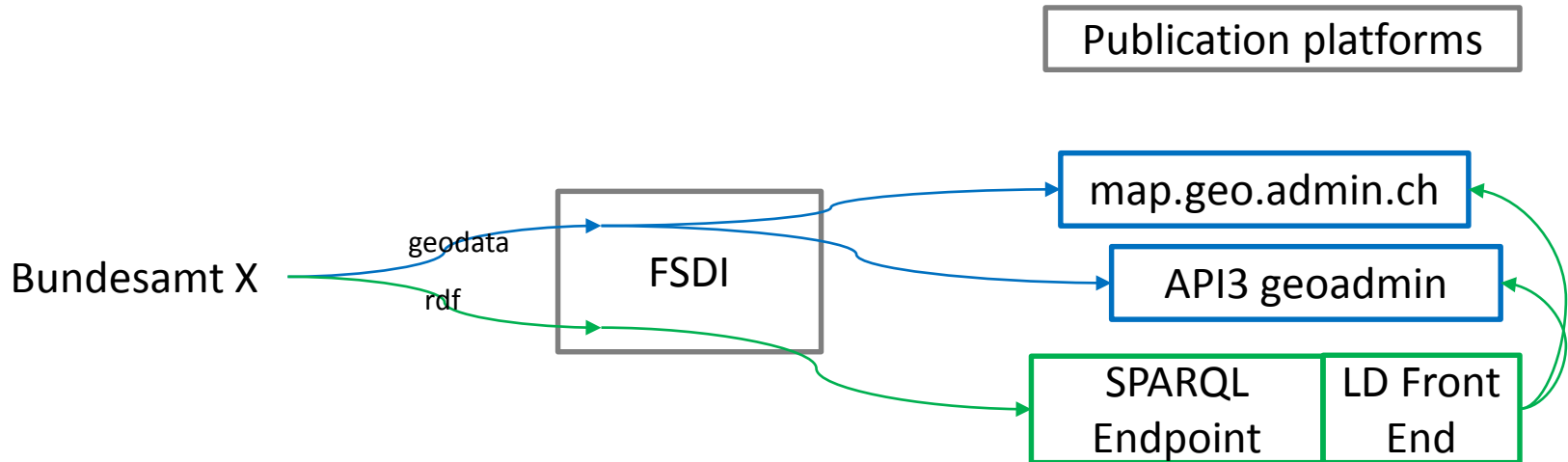


# FSDI

- The FSDI is the Federal Spatial Data Infrastructure of Switzerland
  - Geodata under federal legislation made available to authorities, private and public sector
- Legal Framework:
  - Federal Act on Geoinformation (2007)
  - Ordinance on Geoinformation (2008)
  - swisstopo Ordinance on Geoinformation (2008)
- Results:
  - Portal: [geo.admin.ch](http://geo.admin.ch)
  - Map viewer: [map.geo.admin.ch](http://map.geo.admin.ch)
  - Geoservices: [api3.geo.admin.ch](http://api3.geo.admin.ch)



# FSDI SPARQL Endpoint & LD Frontend



- LD as a new publication platform
- Link with existing components of the FSDI (e.g. via conneg)
- FSDI Endpoint as the reference SPARQL Endpoint for GI at federal level (geodata publication is synchronized on all publication platforms)
- Provide geometries via direct linking of via federated SPARQL queries
- Currently in test environment



# Challenges

- URI Strategy:
  - [https://ld.geo.admin.ch/ech0166\\_geocategory/dataset/id](https://ld.geo.admin.ch/ech0166_geocategory/dataset/id)
    - <https://ld.geo.admin.ch/boundaries/cantons/12>
  - No 303 redirect
- Vocabularies: reuse existing as much as possible
  - schema.org for discoverability
  - dbpedia.org
  - Dublin Core
  - Geonames
- Vocabulary for geometries:
  - Many existing, most of them with limitations
  - GeoSPARQL is so far the LD standard for GI:
    - Not fully supported in mainstream Triple Stores