OpenParlData.ch
Public Meeting #5

10.06.2025

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This project is made possible by the
Mercator Foundation Switzerland.

Stiftung
Mercator
Schweiz

Agenda

- Update: eCH Fachgruppe
- Status Crawlers/Dataimport
- API Draft

5 Governance and Sustainability Model

1 Data Import (CH/Cantons/Cities)

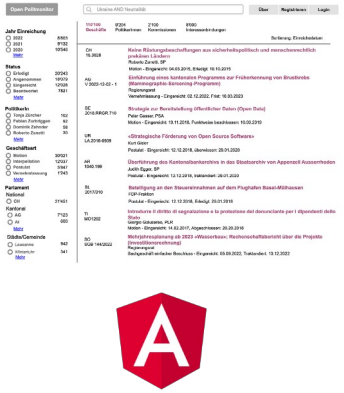


2 Interface (Public API)

REST-API

JSON-Output

3 Minimal GUI



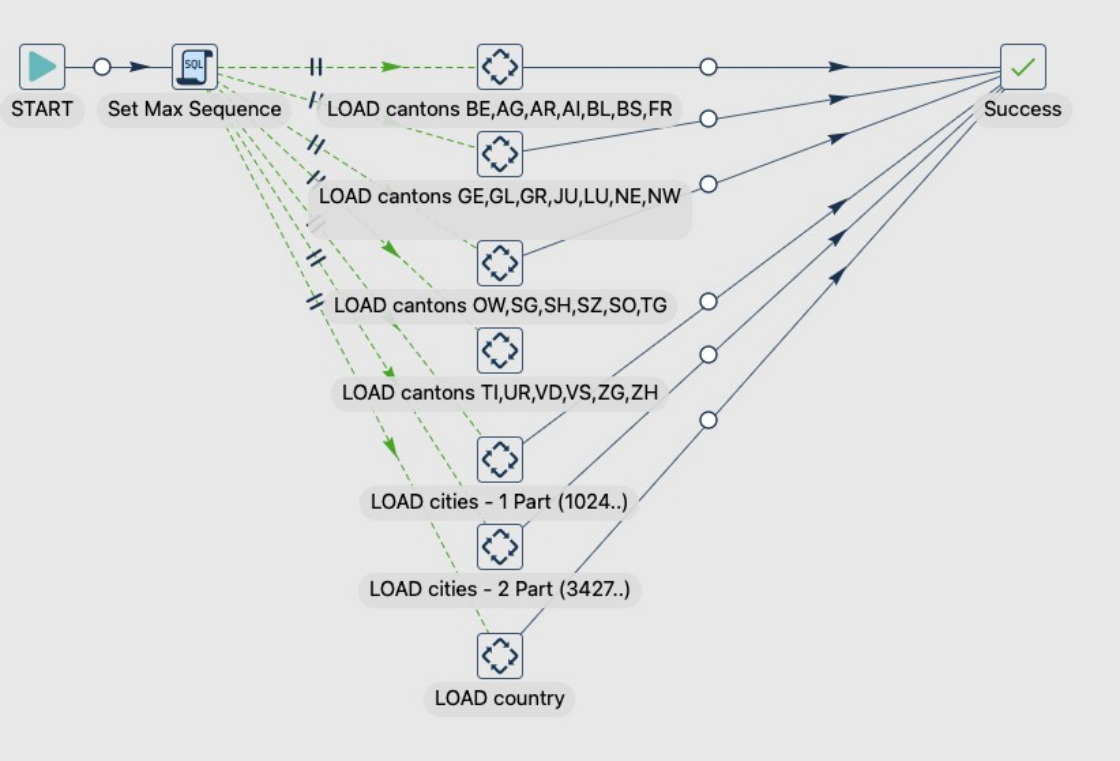
4 Optimization OGD / Harmonization / Standardization

eCH Specialist Group - Political Affairs

- 6 Subgroups:
  - Public council operations (Speeches, Voting, Agenda)
  - Legislative texts
  - Political actors (interests, parties, memberships etc.)
  - Meta (events, timeline, documents, stats)
  - Affairs (Affair Types, Status, topics, contributions)
  - Consultations

https://www.ech.ch/de/der-verein/fachgruppen/politische-geschaefte

Data Import - Parallelization



- Current mode: 7 pipelines running parallel
- Still takes hours (further monitoring and optimization ongoing)

API

- Tech Decision
- Experiments with
  - PostgREST
  - Hasura
  - Supabase
  - Directus
  - FastAPI

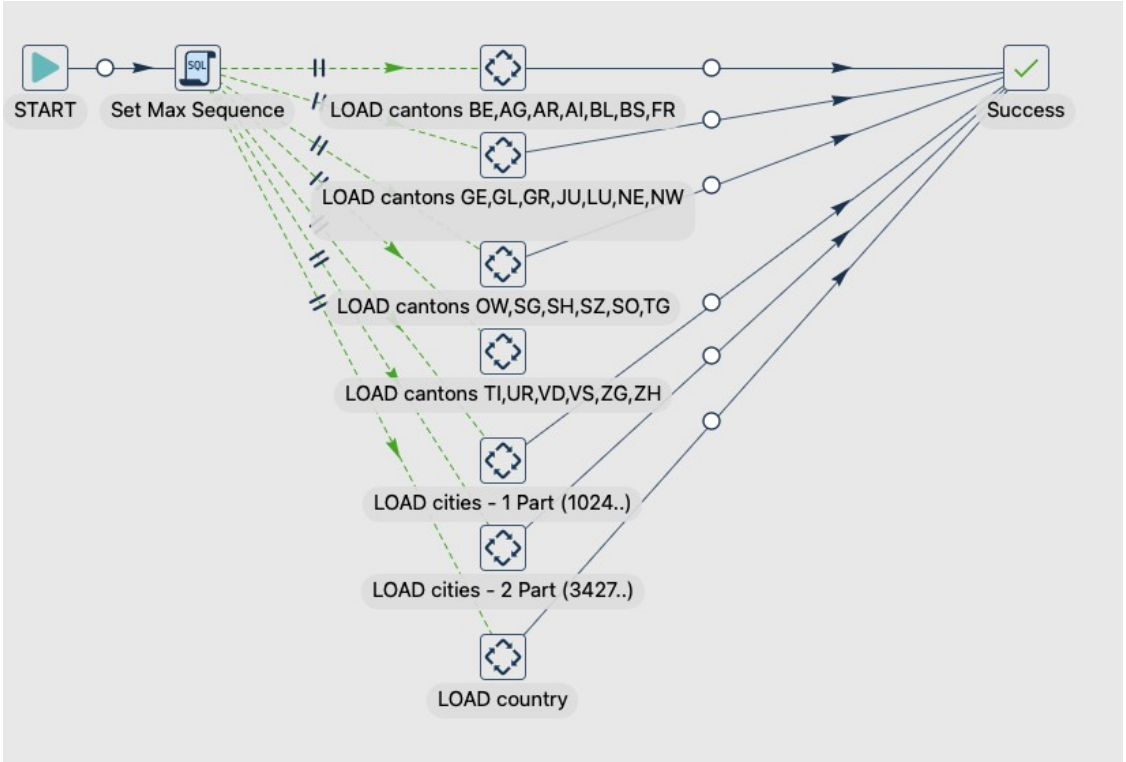
Decision: FastAPI!

API Technology Comparison Matrix

Requirement	PostgREST	Hasura	Spring Boot	Flask
License	MIT	Apache 2.0	Apache 2.0	BSD-3-Clause
Business Model	Open Source, self-hosted	Open Core, paid Cloud & Enterprise plans	Open Source, used in enterprise dev	Open Source, community-based
REST Support	✅ Yes	✅ Yes	✅ Yes	✅ Yes
GraphQL Support	❌ No	✅ Yes (native)	🛠️ Possible via libraries	🛠️ Possible via libraries
API Versioning	None built-in (indirect via new tables/views or reverse proxy)	❌ None built-in	✅ Yes (e.g. via Spring Data REST)	🛠️ Custom needed
Support Request Limits	✅ Yes (via config)	✅ Yes (but Enterprise only)	✅ Yes (Spring filters, etc.)	✅ Yes (Flask extensions/middleware)

- https://gitlab.com/opendata.ch/openparldatach/data-infrastructure/-/wikis/API-Technology-Decision

Data import


START
Set Max Sequence
LOAD cantons BE,AG,AR,AI,BL,BS,FR
LOAD cantons GE,GL,GR,JU,LU,NE,NW
LOAD cantons OW,SG,SH,SZ,SO,TG
LOAD cantons TI,UR,VD,VS,ZG,ZH
LOAD cities - 1 Part (1024..)
LOAD cities - 2 Part (3427..)
LOAD country
Success

Data Import - Next Steps

- Establish monitoring of health of imports
- Fixing Errors

- Connect Smart Vote Person Identifier

API

- Experiments with:
  - PostgREST
  - Hasura
  - Supabase
  - Directus
  - FastAPI

Decision: Let's go further it with **FastAPI**

Priority on REST (GraphQL if feasible)

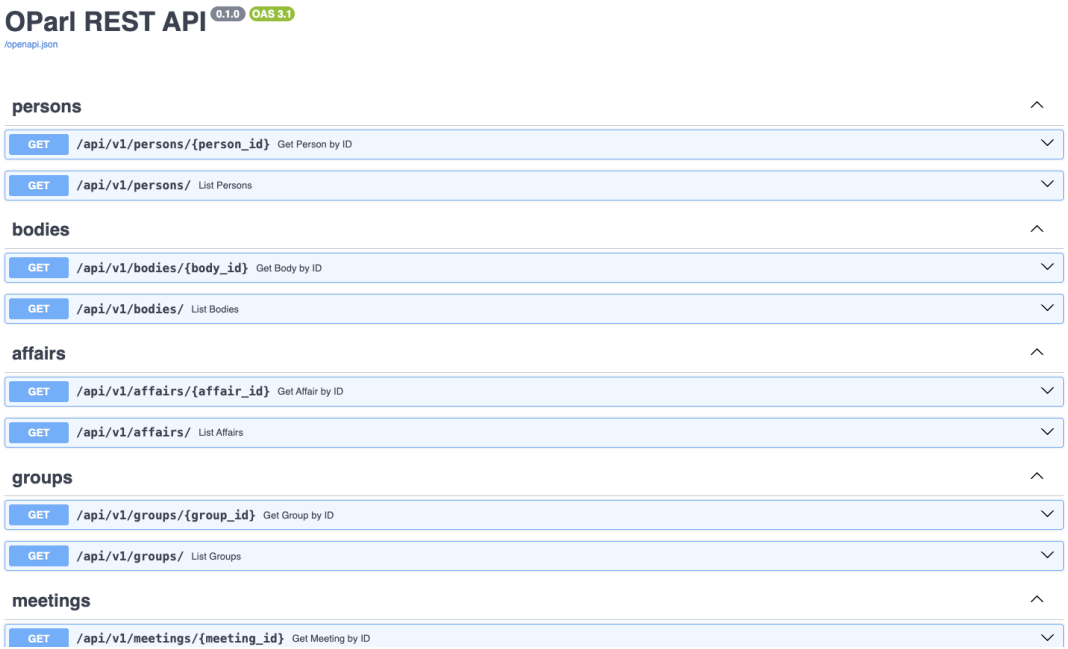
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Open Data .ch

API - Preview



http://78.46.72.157:18283/documentation

%D Open Data .ch

Get entities with paging

- http://78.46.72.157:18283/api/v1/affairs
- http://78.46.72.157:18283/api/v1/persons
- http://78.46.72.157:18283/api/v1/groups
- …


```
  "meta":
{    "offset": 0,
               "limit": 100,
               "total_records": 22182,
               "total_pages": 222,
               "current_page": 1,
               "next_page": "http://78.46.72.157:18283/api/v1/persons/?offset=100&limit=100",
               "prev_page": null,
               "last_page": "http://78.46.72.157:18283/api/v1/persons/?offset=22100&limit=100",
               "first_page": "http://78.46.72.157:18283/api/v1/persons/?offset=0&limit=100"
  },
```

Get individual record

- http://78.46.72.157:18283/api/v1/persons/**1245**


```
{  "id": 1245,
      "url_api": "http://78.46.72.157:18283/api/v1/persons/1245",
      "body_key": "1058",
      "external_id": "alt_10029",
      "fullname": "Jasmin Ziegler-Hüppi",
      "firstname": "Jasmin",
      "lastname": "Ziegler-Hüppi",
      "party_external_id": null,
      "party_harmonized_wikidata_id": "Q385258",
      "external_alternative_id": null,
      "image_url_external": null,
      "image_url_oparl": null,
      "email": null,
      "phone": null,
      "birthday": null,
      "deathday": null,
      "street": null
```

Functional Parameter: hide_null

- http://78.46.72.157:18283/api/v1/persons/1245?**hide_null=true**


```
{"id": 1245,
  "url_api": "http://78.46.72.157:18283/api/v1/persons/1245",
  "body_key": "1058",
  "external_id": "alt_10029",
  "fullname": "Jasmin Ziegler-Hüppi",
  "firstname": "Jasmin",
  "lastname": "Ziegler-Hüppi",
  "party_harmonized_wikidata_id": "Q385258",
  "gender": "f",
  "language": "de",
  "created_local": "2025-01-22T00:32:01",
  "memberships":
[
```

Functional Parameter: lang_format

- http://78.46.72.157:18283/api/v1/bodies/AG/?**lang_format=nested**


```
{ "id": 10,
  "url_api": "http://localhost:8283/api/v1/bodies/AG",
  "body_key": "AG",
  "wikidata_id": "Q11972",
  "name":
{
              "de": "Aargau",
              "en": "Aargau",
              "fr": "Argovie",
              "it": "Argovia"
  },
```

Functional Parameter: lang_format

- http://78.46.72.157:18283/api/v1/bodies/AG/?**lang_format=flat**


```
"id": 10,
"url_api": "http://localhost:8283/api/v1/bodies/AG",
"body_key": "AG",
"wikidata_id": "Q11972",
"name_de": "Aargau",
"name_en": "Aargau",
"name_fr": "Argovie",
"name_it": "Argovia",
```

Functional Parameter: lang and lang_backfall

- http://78.46.72.157:18283/api/v1/groups/2


```
  "type_external":
{
              "de": "Untersuchungskommissionen",
              "fr": "Commissions d'enquête"
  },
  "name":
{
              "de": "Parlamentarische Untersuchungskommission «Massnahme Siders-Chippis und Sicherung
             der Rhone» (PUK-SCR)",
              "fr": "Commission d'enquête parlementaire «mesure Sierre-Chippis et sécurisation du
             Rhône» (CEP-SCR)"
  },
  "abbreviation":
{
              "de": "7.1 PUK-SCR",
              "fr": "7.1 CEP-SCR"
  }
```

Functional Parameter: lang and lang_fallback

- http://78.46.72.157:18283/api/v1/groups/2?**lang=fr&lang_fallback=de,it**


```
"url_external": "https://parlement.vs.ch/app/de/link/260452",
"type_external": "Commissions d'enquête",
"name": "Commission d'enquête parlementaire «mesure Sierre-Chippis et sécurisation du Rhône»
 (CEP-SCR)",
"abbreviation": "7.1 CEP-SCR"
```


- http://78.46.72.157:18283/api/v1/groups/2?**lang=en&lang_fallback=de,fr,it**


```
"url_external": "https://parlement.vs.ch/app/de/link/260452",
"type_external": "Untersuchungskommissionen",
"name": "Parlamentarische Untersuchungskommission «Massnahme Siders-Chippis und Sicherung der
 Rhone» (PUK-SCR)",
"abbreviation": "7.1 PUK-SCR"
```

Functional Parameter: expand

- Only Persons; No relationships
  - http://78.46.72.157:18283/api/v1/persons
- Persons + all relationships
  - http://78.46.72.157:18283/api/v1/persons/?**expand=***
- Person + specific relationship
  - http://78.46.72.157:18283/api/v1/persons/?**expand=memberships**
- Persons + specific relationships
  - http://78.46.72.157:18283/api/v1/persons/?**expand=memberships,interests**

Filter with parameters

- Female Persons from City of Bern
  - http://78.46.72.157:18283/api/v1/persons/?body_key=351&gender=f
- Affair parlament.ch with technical id 2022441
  - http://78.46.72.157:18283/api/v1/affairs/?body_key=CHE&external_id=20224411
- Affair parlament.ch with Number = 22.4411
  - http://78.46.72.157:18283/api/v1/affairs/?body_key=CHE&number=22.4411
- Consultations JU
  - http://78.46.72.157:18283/api/v1/affairs/?body_key=JU&type_name_fr=Consultation
- Current Consultations (CHE + German speaking cantons)
  - http://78.46.72.157:18283/api/v1/affairs/?type_name_de=Vernehmlassung&state_name_de=laufend

Search with parameters

- Groups of which name contain “Geschäftsprüfungkommission”
  - http://78.46.72.157:18283/api/v1/groups/?group_name_de=Geschäftsprüfungskommission
- All Persons with lastname Dittli
  - http://localhost:8283/api/v1/persons/?lastname=Dittli&expand=*

To Do - Handling Docs

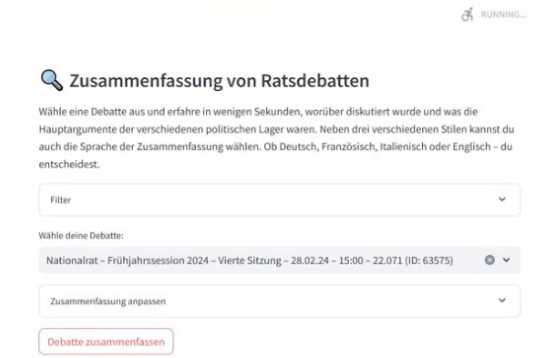
Local Workflow download & index 520k doc

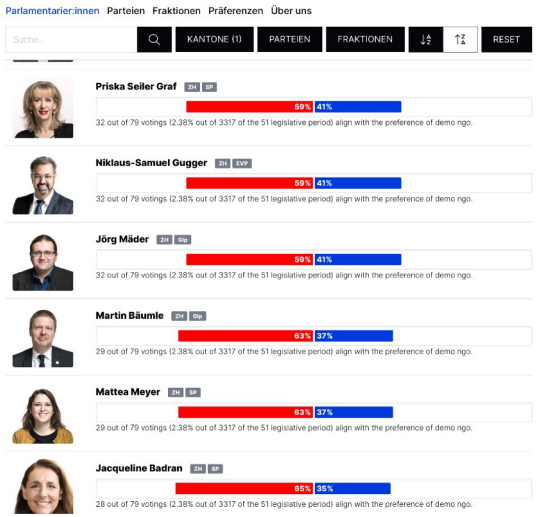
- http://78.46.72.157:18283/api/v1/docs/362818

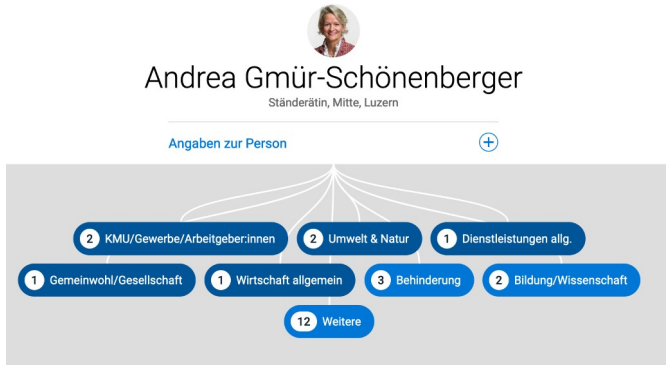
Provide Text search

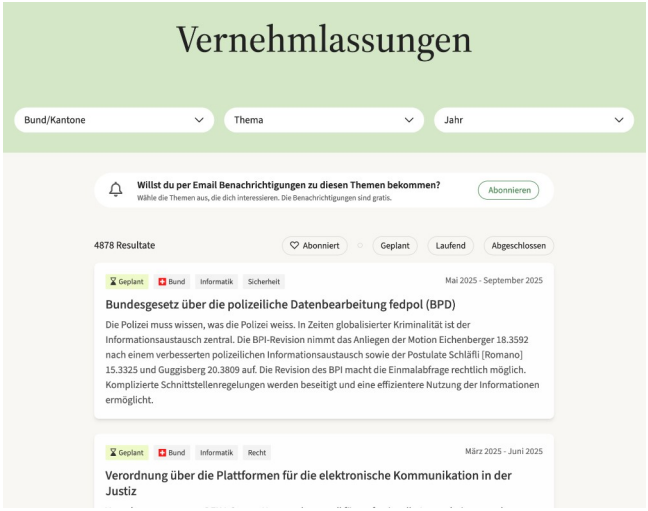
To Do - Dates & Update Timestamp

- Source often has now timestamp (when modified)
- Some pipelines only fetch incremental updates
- Challenge: Bring true change date for entity and relation to API
- Enable search by Time date

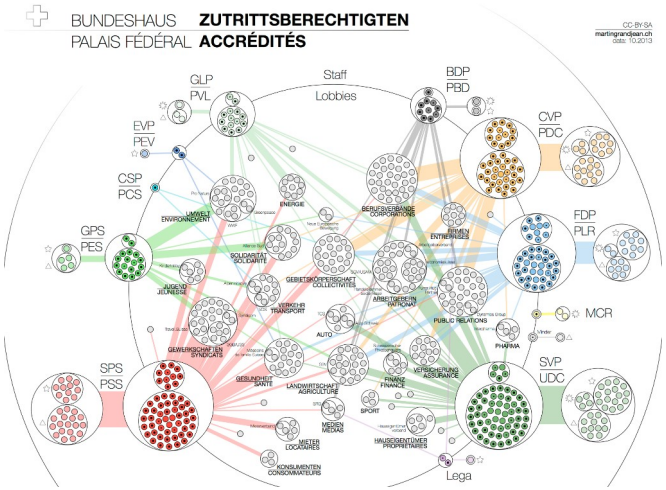












Images (f.l.t.r): LegisLense (GFZB), VoteLog, Lobbywatch, demokratis.ch, smartmonitor, Martin Grandjean

API - Your Use Cases / Needs ?

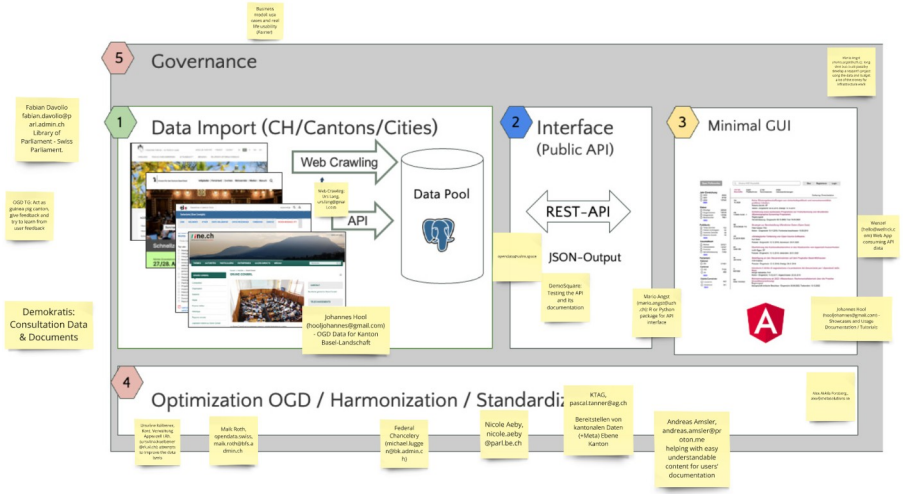
- Boolean Search with parameters beyond AND filters?

Next Open Parl Data Public Meeting

13 August

11:00 – 12:00

Contribute



We are working on this project **openly** and **collaboratively**.

Follow the progress and contribute on GitLab!

This infrastructure is made possible by the Mercator Foundation Switzerland ❤️

Questions?
Ideas?

