Implementation of OGC TJS for the health statistics application

91st OGC Technical Committee
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5. Euroboundarymap
6. Upcoming work
7. TJS software (Geoserver) repository
1. Introduction of the OGC Table Joining Service

applications

boundary data

tabulair data

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Tabellen joinen met gebiedsindeling

applications

boundary data

tabulair data

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Table joining (service) and unique id’s (keys)

Tabular data

Unique id’s (keys)

Geographic data – Source A

Joined data

OGC TJS

OGC TJS

boundary data
TJS and the GDAS (XML) data format

**tabular data**

- Input attribute data e.g. CSV, MS Excel, SDMX, SPSS, DBF
- Table Joining Service Data Access
  - GDAS encoded Attribute data

**data transformation**

- Input geographic data e.g. Spatial Database, GML, Shapefiles
- Geo data

**OGC TJS**

- Map or data, e.g. WMS or WFS
Client application and TJS operations

**tabular data**

![Diagram showing data access and join processes]
OGC TJS operations

**Service Discovery**
- GetCapabilities

**Data Access**
- DescribeFrameworks
- DescribeDatasets
- DescribeData
- GetData

**Data Joining**
- DescribeJoinAbilities
- DescribeKey
- JoinData
As an example of the ELF in action, this part of the project, led by the Geodetic Institute of Slovenia and Kadaster of Netherlands will develop an application for visualising geo-statistics and providing the basis of a geo-statistical reference framework, dealing specifically with the INSPIRE theme of Human Health and Safety.

Human health analysis starts with information on the geographical distribution of such areas as allergies, cancers, and respiratory diseases. For this purpose, health data from environmental, health or statistical agencies will be linked to administrative and/or statistical units using the ELF platform as the authoritative reference of geo-information.
Eurostat’s health statistics (>300 tables)
Input and output formats of TJS

- **Tabular data**
  - Regional health statistics (EuroStat)
  - Input: SDMX REST API

- **Spatial framework data**
  - Euroboundarymap (EuroGeographics)
  - Input: WFS

- **TJS-based joined data Output**
  - WMS, WFS (GeoJSON, GML), Geopackage, JSONLD, RDF
TJS Webclient demo

Framework-key
GEMEENTE CODE

Select a tile
Browse... No file selected.

Select Framework
CBS Gemeente 2012
Submit

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4. Architecture and final deployment

Architecture for development (and demo client)
4. Architecture and final deployment

Architecture final deployment

- Casper (GINST)
- Other clients
- TJS demonstrator (Kadaster)

- Geopackage, jsonLD, RDF
- TJS
- WMS (GeoJSON, GML)

Health statistics
- data tables (SDMX)
- SDMX REST
- Download Service

SDMX to GDAS
-Transformation Service

Cached data
- Geographic data

Euroboundarymap

E.L.F. - Oskari Platform
We are using EuroBoundaryMap. However, I did not yet have informed if EuroBoundaryMap is available for E.L.F. or that that have to use the administrative boundaries from the EuroGlobalMap are not compatible with the Euros (because of missing NUTS codes) which is available as open data. (see mail d.d. 7-4-2014 MG -> JH)
6. Upcoming work

1. Finalizing data transformation Eurostat data
2. Develop data transformation for ODATA format (CBS)
3. Implementation output formats: Geopackage, jsonLD, RDF
4. Testing TJS with CASPER client
5. Deployment OSKARI platform
6. Documentation
TJS en GeoServer implementation

Open source project: GeoServer TJS plugin

Code public available on GitHub: https://github.com/thijsbrentjens/geoserver/tree/tjs_2.2.x/
Questions?

Blijf op de hoogte via:

http://www.geonovum.nl/onderwerpen/services/table-joining-services

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