

Serving Ireland's Geospatial Information as Linked Data

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Motivation

In 2014, the Ordnance Survey Ireland (OSi) delivered a newly developed spatial data storage model known as Prime2. With Prime2, OSi moved from a traditional map-centric model towards an object-oriented model from which various types of mapping and data services can be produced. At the same time, the OSi aims to adopt Linked Data to enable third parties to explore and consume some of OSi's *authoritative* datasets.

Research Question

How can we take the Prime2 model as a basis for publishing OSi's authoritative geospatial data as Linked Data on the Web whilst adhering to best practices in the domain of geospatial information?

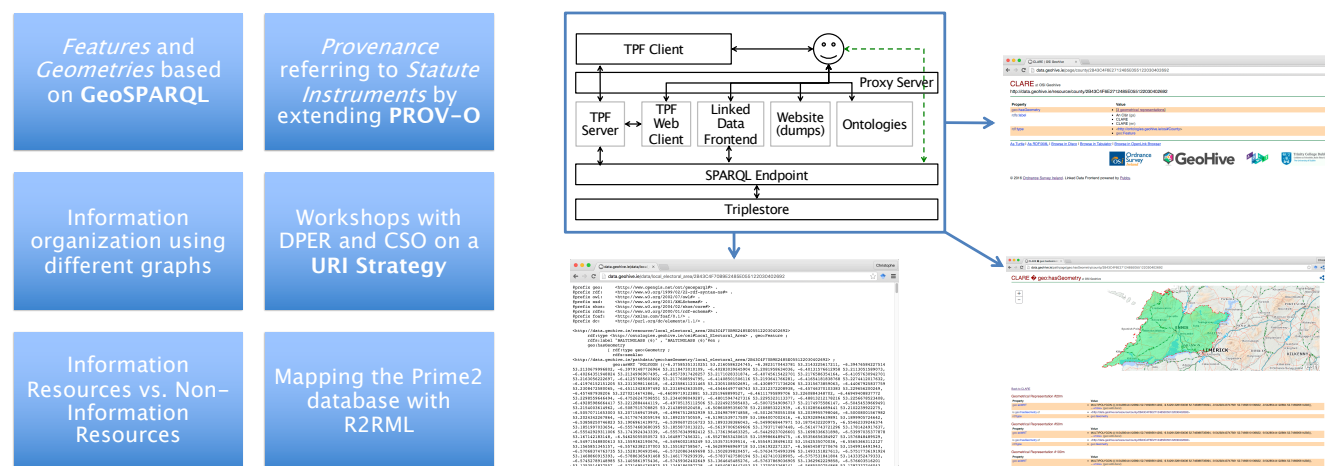
Goal

To lay the foundations of a semantic architecture and Linked Data platform for the OSi. Starting from publicly available boundary data, we support 2 use cases:

1. Provide different generalizations of the boundaries
2. Capture evolution of boundaries, e.g. as ordered by statute instruments.

Potential Impact

- Availability of public data via standardized technologies.
- Allowing third parties to develop novel applications.
- Adding spatial information to external datasets with OSí's authoritative information and OSí's Linked Data endpoint as an information integration hub for Ireland through locations.



Results and Discussion

- Deployment of the Linked Data Platform at <http://data.geohive.ie/>
- An approach to organize the geospatial information and to capture the evolution thereof.

Future Work

- Inclusion of “closed” geospatial information such as the geometries of buildings and investigate access control mechanisms to cope with different licenses and policies
- Inclusion of other administrative boundaries; e.g., of the 2011 CENSUS and link those with <http://data.cso.ie/>

References

Prime2: Data Concepts and Data Model Overview. Tech. rep., Ordnance Survey Ireland (2014), <http://www.osi.ie/wp-content/uploads/2015/04/Prime2-V-2.pdf>