Of interest to:

Knowledge Managers, Data Architects, Planners, Location Services

A World Leading SFI Research Centre

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OSi's Geospatial Data: Accessing, Interconnecting and Publishing

A linked data platform to support a new mapping service: data.geohive.ie

Background

Geospatial data produced by authoritative sources is not usually published on the Web and exists in a static form such as CSV files. This is difficult for non-specialists to access and interpret.

Publishing data on the web creates an opportunity for continuous updates and open access to this valuable dataset. It also enables linking to related datasets and websites, (e.g. Wikipedia, CSO and other Government datasets such as health service data), which enriches the overall value of the content.

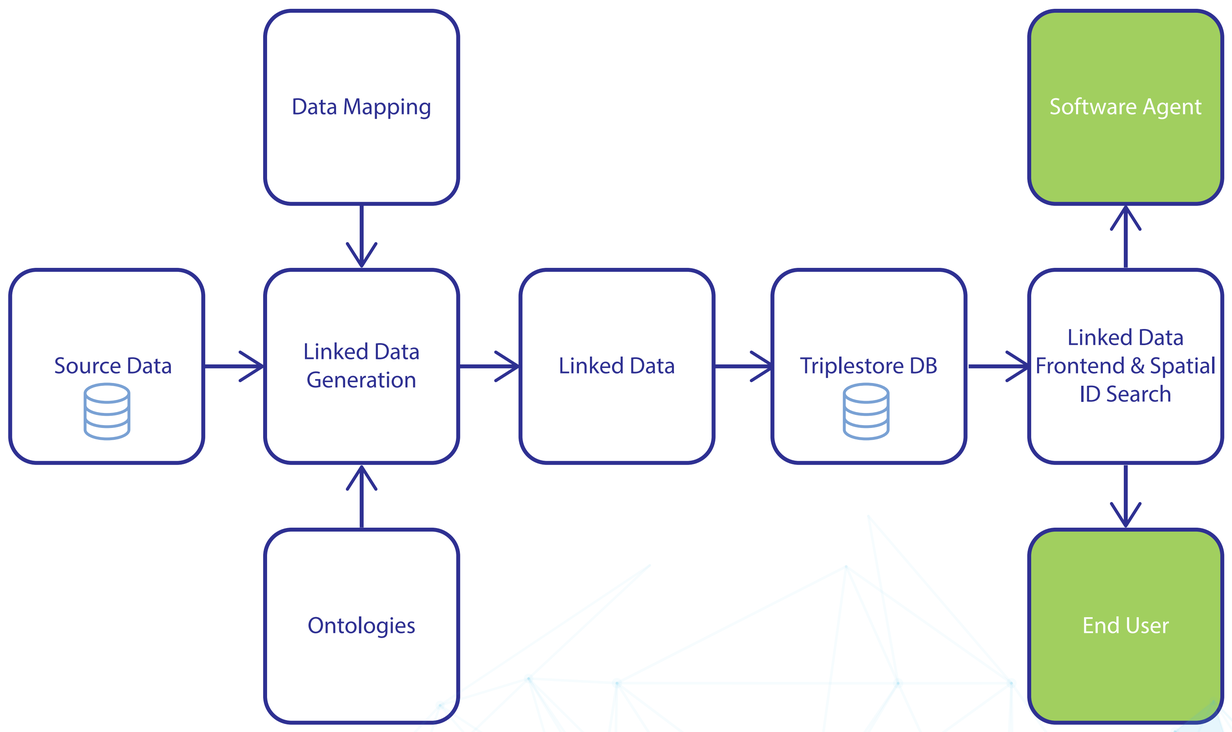
Challenge

- Create an advanced Linked Data platform for the publication of authoritative geospatial data
- Use standardised web technologies
- Enable data availability for 3rd parties to incorporate a geospatial component in their applications
- Provide authoritative references (URIs) for geospatial information within Ireland, such as building ID's and townland boundaries

Solution

The solution involved data conversion from relational data to Linked Data. Semantic meaning was added to the data through the use of ontologies. A database (Triplestore) provides efficient data storage and retrieval.

A new Linked Data API accessible by machines (RDF) and humans (HTML) was created along with a tool for the discovery of specific location based services such as shopping centres or schools.



Results and Benefits

- Prototype available at data.geohive.ie
- Easy availability of authoritative geospatial data for companies
- Ability to search and discover Geospatial features in Ireland
- Reusable approach for uplift of data into an easily accessible format
- Foundation enabling advanced Linked Data applications

Use Cases

- Publication of data using standardised web technologies
- Data transformation and enrichment pipeline
- Geographical information systems
- Socio-economic planning
- Education and health services planning

Dr Alan Meehan, Dr Kris McGlinn, Darragh Blake, Prof Rob Brennan, Prof Declan O'Sullivan

To learn more about innovative ADAPT technologies, contact: collaboration@adaptcentre.ie

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