Reportnet – a Case Study

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What is Reportnet?

- 14 year old system to receive data from countries
  - About 400 reporting obligations
  - Is also an archive with persistent URLs
- Countries upload (mainly) XML files with a web browser to a repository
  - http://cdr.eionet.europa.eu/
- Online web questionnaire using XForms for small data amounts
  - Field validation

Automatic QA

- Countries can run automatic QA on XML files before final delivery
  - Uses the XQuery language
  - Rules selected by the schema identifier in the XML file
  - Feedback is HTML
- Very popular
  - Improves quality of deliveries
  - Decreases mundane work for humans
  - Clients very imaginative in devising new rules

Automatic QA popularity problem

- Need for checking against large code lists
- Need for comparison with previous delivery
- Not necessarily same schema
- XQuery and XForms can load code lists in XML format into memory
- But not on this scale
- Idea: Load the data into a database and implement a ReST web service
- Very heterogeneous data

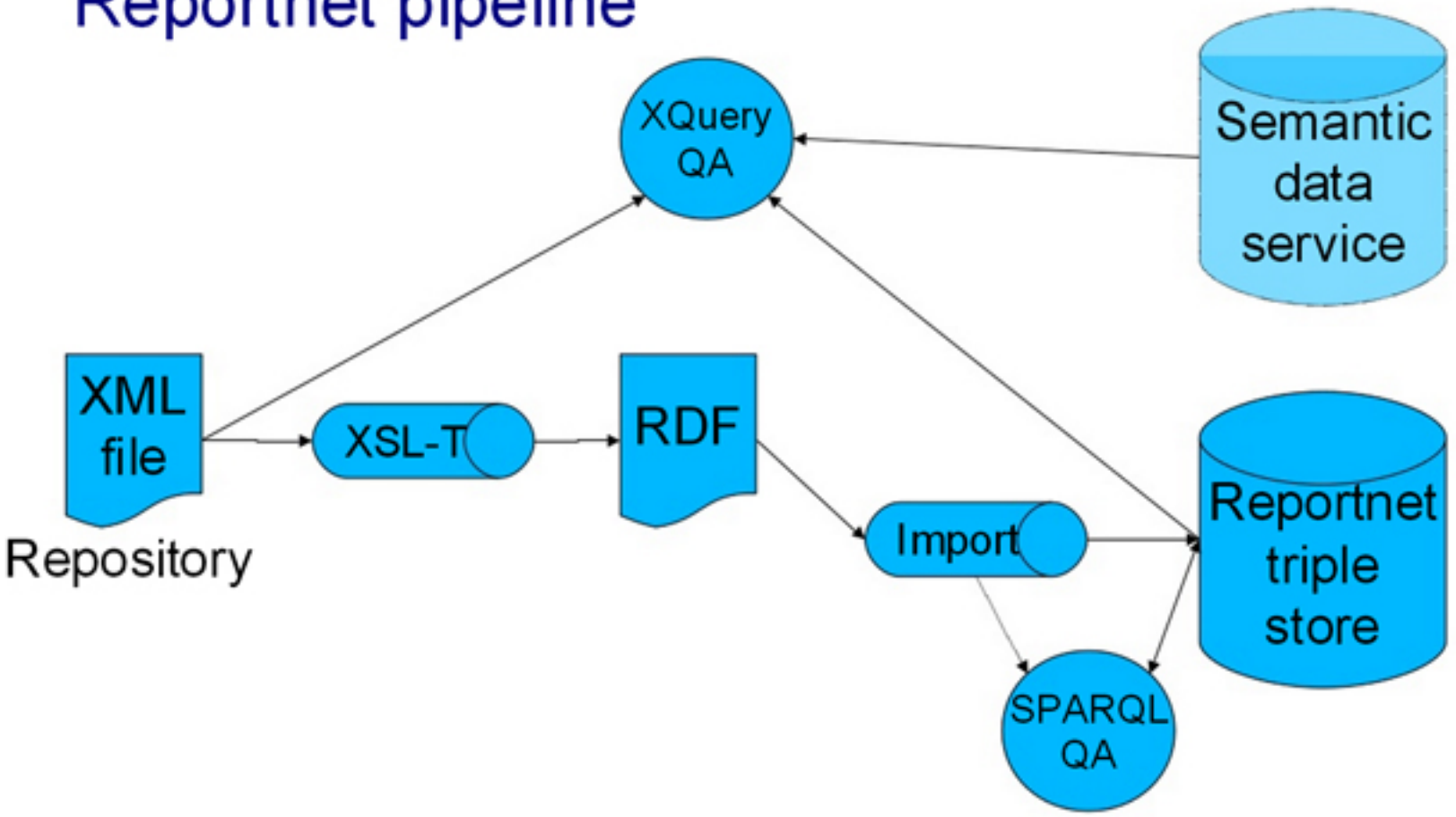
Solution: Conversion to RDF and import

- Very easy for code lists
- When a delivery is made it is automatically converted to RDF and imported into the triple store
  - Can be done with XSL-T
- SPARQL is the ReST web service
- New problem: RDF modelling
- New problem: Small code lists
- New opportunity: linking of vocabularies

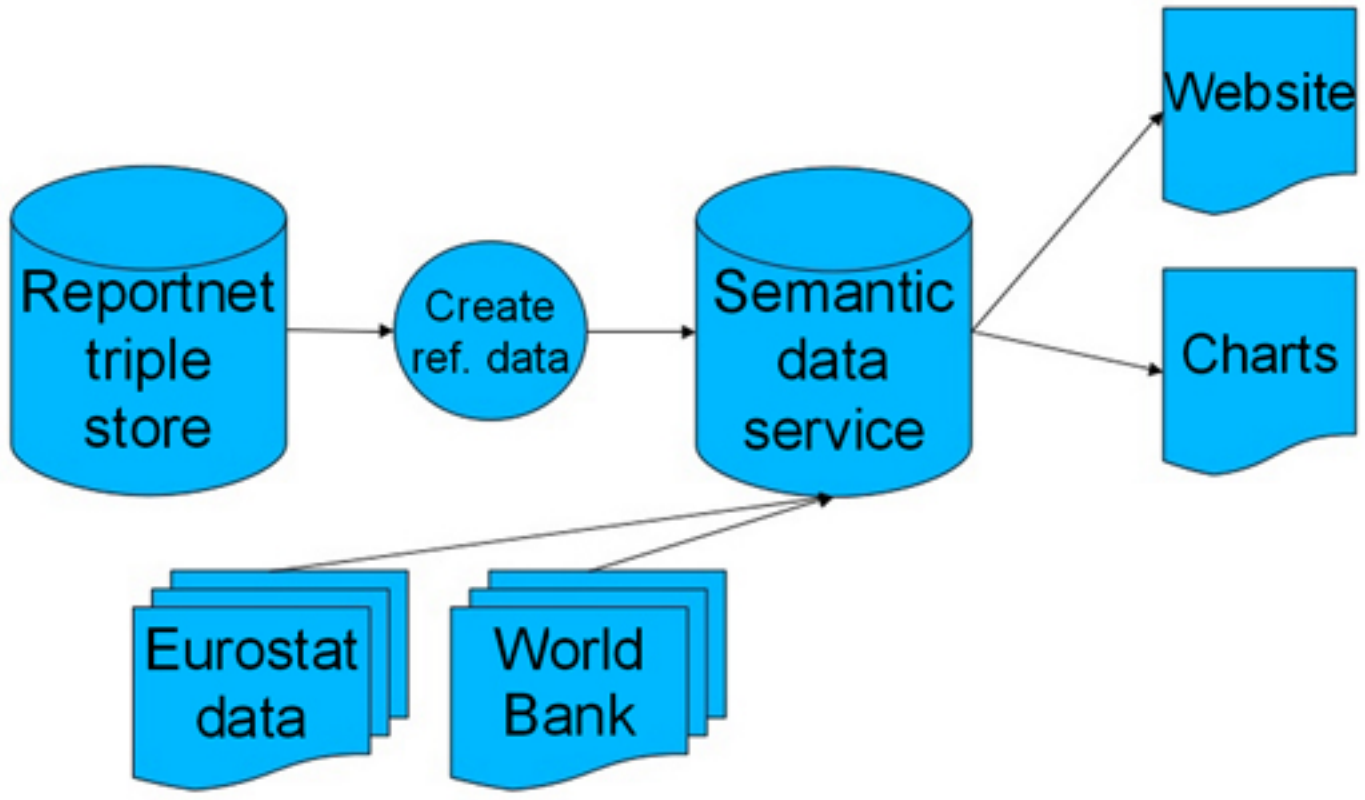
New possibilities – new ideas

- What can we do when the deliveries are in the triple store?
  - More QA?
  - Auto-correction?
  - Linking the data?
  - Extract a reference dataset?
  - Inference?
- Post-harvest SPARQL scripts to insert, replace or delete triples

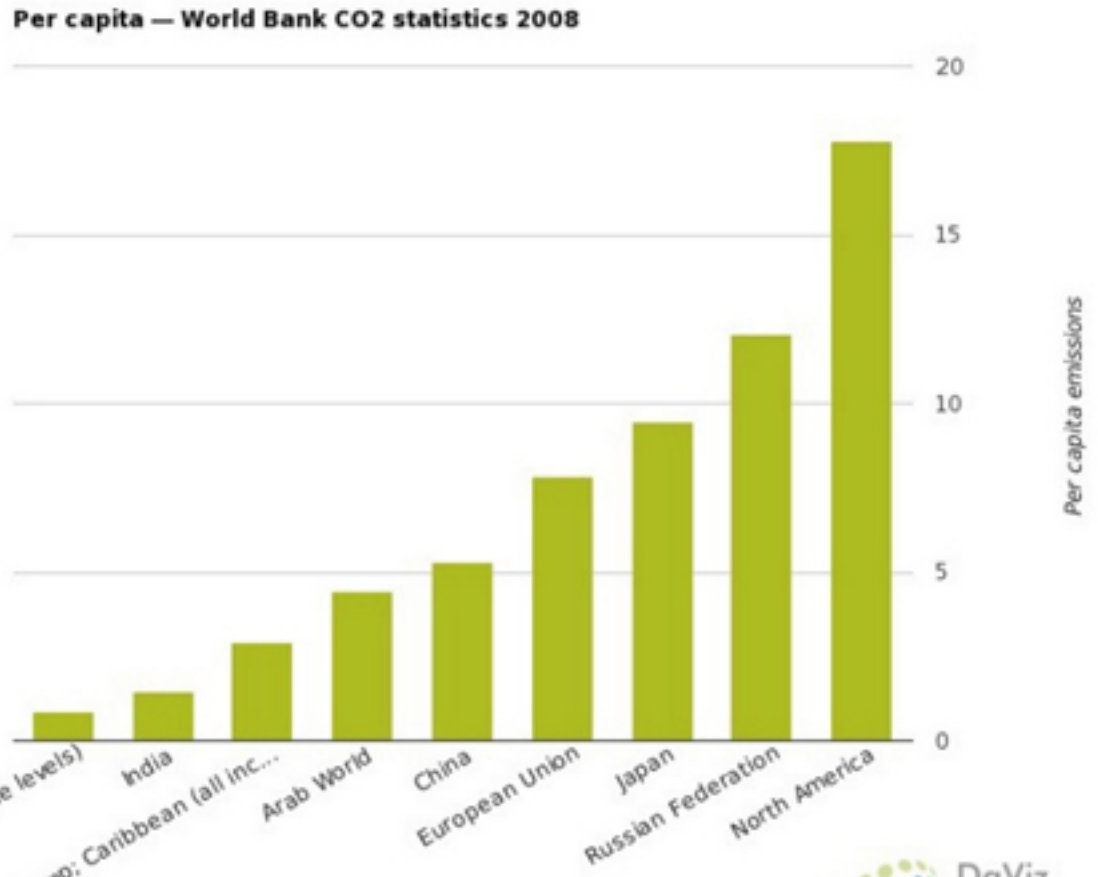
Reportnet pipeline



Post delivery pipeline



Visualisation



DaViz
Visualise your data

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