

Missing(?) Building Blocks for a Linked Data Ecosystem

Axel Polleres
Siemens AG Österreich

State of LOD affairs:

- Is Linked Data the “Silver Bullet” for data integration?
 - We’ve come up with a nice interoperable data format (RDF) & a bunch of publishing principles
 - Enables lightweight data integration in a bottom-up, schema-less fashion
- LOD Cloud and table of datasets 339 datasets

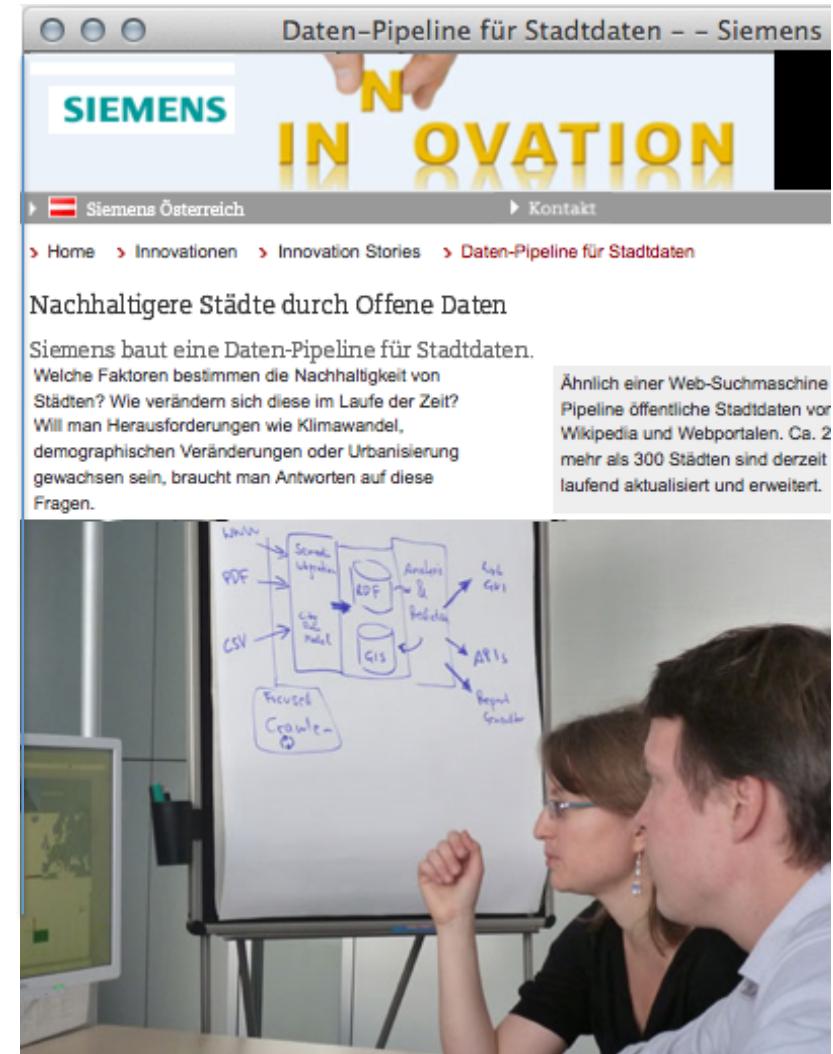
# of LOD Datasets on CKAN	
Jun-13	339(+44)
...	
Sep-11	295(+92)
Sep-10	203(+108)
Jul-09	95

- ... slower growth rate or people too busy to let us know?
- More worrying or even harmful: Stale datasets...

{ [] http://data.nytimes.com/elements/latest_use ?Y }
→ “2010-06-14”

Use case...

- Can we collect and use relevant open Data for a concrete domain (in our case: indicators that determine sustainability aspects of cities) in an automated fashion?



Suspicion/Experience/Lessons learnt

- Openness may raise eyebrows... API keys, different license models, etc. Different implications on reuse, e.g.
 - republication
 - aggregation

→ How to implement pricing models? access control mechanisms? provenance tracking?
- Dynamicity vs. stale Datasets makes LOD idea hard to sell in an industry context:
 - e.g. NYT dataset (not even speaking of stream-data and the like here)
- OWL+RDFS are not enough for integration
 - Numerical data within implicit information

Missing(?) Building Blocks for a Linked Data Ecosystem:

- Not all Linked Data is open, needs mechanisms to declare & *compose* licenses.
- Linked Data needs standard mechanisms to deal with Dynamicity & Evolution.
- Linked Data Quality needs standard mechanisms to deal with Provenance (& Trust)
- Linked Data needs more (and less) than OWL
- and BTW: not all Linked data is RDF (JSON, CSV)...

Goal:

My expectation on the seminar is a road-map outlining

- 1. how these building blocks can implemented in terms of industry-strength standards & best practices that can interplay and scale on the Web
- 2. where further fundamental research is necessary