

Perspektiven des Einsatzes von Linked Data im e-Government



Linked Data

- Web - a global, distributed platform for data, information and knowledge integration
- exposing, sharing, and connecting pieces of data, information, and knowledge on the Semantic Web using URIs and RDF

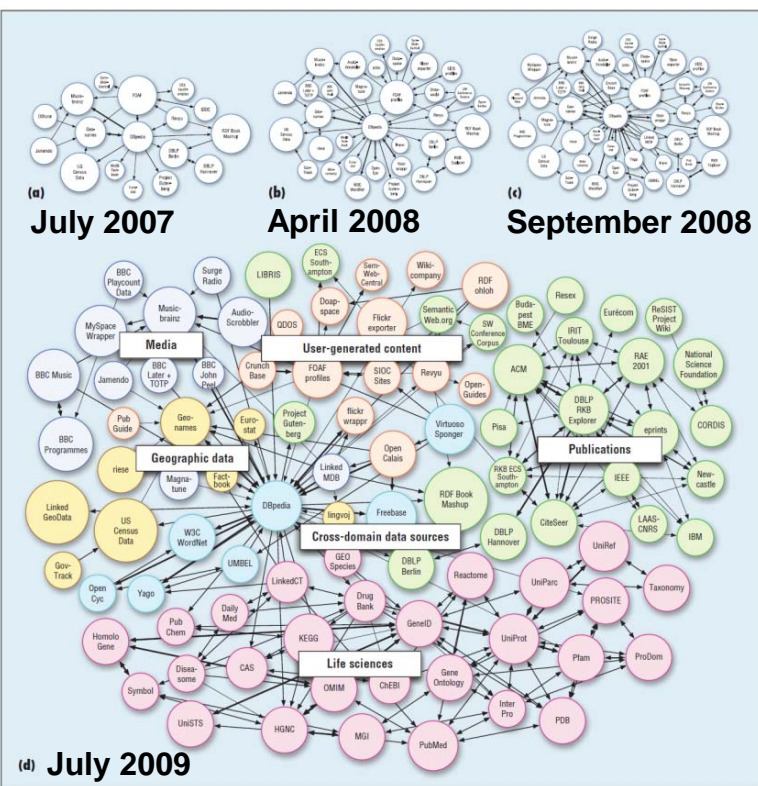
Achievements

1. Extension of the Web with a **data commons** (13.1 B facts)
2. vibrant, global **RTD community**
3. **Industrial uptake** begins (e.g. BBC, Thomson Reuters, Eli Lilly)
4. Emerging **governmental adoption** in sight
5. Establishing Linked Data as **THE vision** for the future of the Web.

Challenges

1. **Coherence:** Relatively few, expensively maintained links
2. **Quality:** partly low quality data and inconsistencies
3. **Performance:** Still substantial penalties compared to relational
4. **Data consumption:** large-scale processing, schema mapping and data fusion still in its infancy
5. **Usability:** Missing direct end-user tools and **network effect**

These issues are closely related and need to be treated in an integrated, holistic fashion.



Einsatzperspektiven

1. **Veröffentlichung** von e-Government-Daten als Linked Data
2. **Integration** von e-Government-Daten mittels Linked Data



Veröffentlichung von e-Government-Daten als Linked Data

- Transparenz
- Bürgernähe
- Nutzung des kreativen Potentials von Bürgern
- Neue Dienstleistungen / Value Added Services

Ideales Anwendungsszenario für Linked Data

- Öffentlicher Sektor extrem fragmentiert (EU, Nationale Regierungen, Bundesländer, Städte/Gemeinden)
- Etablierung gemeinsamer Vokabulare is essentiell



Beispiele öffentlicher Daten

Data Set	Topic	Description	Data Provider
EU Directory	People, Inst.	Directory on persons and organizations in the EU.	Publications Office
Eurostat	Statistics	Wide range of statistics about the EU.	Statistical Office of the EC
Electronic Tenders	Tenders	Public tenders above specific contract value.	Publications Office
CORDIS	Research	Research projects financed from the budget.	Publications Office
European Careers	Jobs	Job offers at European Union Institutions.	EU Pers. Sel. Office (EPSO)
Job Mobility Portal	Jobs	750 000 job offers from throughout Europe.	EURES
MEP Directory	Politics	Directory of European Parliament Members (MEPs).	European Parliament
Election Results	Politics	Archive for European Parliament Election results.	European Parliament
Public Opinion	Politics	Surveys and public opinion polls within the EU	DG Communication
Rapid	Press Releases	Press releases on current topics in EU affairs.	DG Communication
IATE	Linguistic	Interactive Terminology with 8.7 million terms.	Translation Centre
ECICS	Life Sciences	European Customs Inventory of Chemical Substances.	DG Taxation and Customs

Beispiel: EU Financial Transparency

The screenshot displays the OntoWiki Map Component interface. On the left, the OntoWiki navigation pane includes a search bar, a 'Knowledge Bases' section with 'Beneficiaries of the European Commission' selected, and a 'Classes' list with 'Beneficiary' highlighted. The main area features a map of Europe with several markers. The 'Map' tab is active, and the 'indirect property' panel on the right shows 'Beneficiary' as the selected property. The map is powered by Google and includes a copyright notice for Europa Technologies.

OntoWiki

User Extras Help Debug

Search for Resources

POWERED BY VIRTUOSO

Knowledge Bases

Beneficiaries of the European Commission

Classes

- downloadable Documents
- Country
- Part of the EU budget
- City
- Programm
- Beneficiary**
- Responsible EU Department
- Project

OntoWiki Map Component

Instances Map History Community Source

detail map

marker information

No marker selected.

indirect property

Beneficiary

POWERED BY Google

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Beispiel

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MURITANIYAH*REPUBLIQUE ISLAMIQUE DE MAURITANIE ISLAMIC REPUBLIC
OF MAURITANIA]]></name>
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ToDos

- Vokabulare zur Beschreibung von E-Government-Daten
- Netzwerk Europäischer eGov-Daten Registries (CKAN)
- Browsing und Visualisierung
- Personalisierung



Hindernisse

- Fokus in Deutschland auf Data Privacy / Security
- Datenschutz (Papier, PDF, CSV, LOD)
- Begrenzte personelle und finanzielle Ressourcen
- Direkter Nutzen für öffentliche Verwaltungen



Integration von e-Government-Daten mittels Linked Data

Web-orientierte Architektur auf Basis von Linked Data

- Einstieg in eine Service-orientierte e-Government Architektur
- Leichtgewichtige Integrator von e-Government-Daten zwischen verschiedenen öffentlichen Verwaltungen

