

"Open discussion of the impact of  
Semantically-enabled data and  
techniques within eGov projects,  
e.g. Data.gov

Workshop on Improving Access - Financial Data on the Web  
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Invited Expert to the W3C eGovernment Interest Group  
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# Data.gov Concepts of Operations

- Key Excerpt (September 4<sup>th</sup> DRAFT):
  - As semantically enabled data concepts are matured and pilots are successfully executed, the Data.gov team will provide specific guidance to help agencies implement semantic markup within their datasets. Specifically, the Data.gov team will not only leverage semantically enabled techniques within the Data.gov site, but will help agencies implement semantically enabled data within their datasets so that the datasets can be better leveraged not only by Data.gov but also by other end users of the data.
- What is your reaction to this?

# Open Linked Data

- Key Concepts of RDF and OWL:
  - Works for structured, semi-structured, and un-structured information.
  - Metadata and data travel together.
  - Machine - processible.
  - Supports relational – like joins over the network.
  - Inferencing / reasoning (still in development for scalability).

# Federal Segment Architecture

## Methodology Step 4: Principle 5\*

Data (markup)	Business	Presentation
None	Silos	"One-Offs"
XML / XQuery	Collaboration	"Author Once-Use Many"
RDF / SPARQL	Relational-like Joins	Federation
RIF / SPIN	Rules	Logic
OWL	Reasoning	Inferencing

\* Evolution based on September 2009 DRAFT Data.gov CONCOPs

# A Little History of How We Got Here

- [SOA CoP](#) and [SICOP](#) Conferences and Pilots: SOA, Semantic Interoperability, and XBRL , NIEM, etc.
  - Pilots for the 9<sup>th</sup> SOA for eGov Conference, April 5<sup>th</sup>, 2010
- [ISE EA Statement on RDF/OWL](#): Jeremy Warren at EA2009 agreed still the goal!
- [NSF Accounting Ontology Workshop 2008](#): Conceptual Diagram – Semantic Expressiveness Versus Benefit.
- [SemTech 2009](#): Diane and Dave Conversion of XBRL to RDF.
- [W3C eGov SIG](#): Series of Meetings and Notes.
- [SICoP Special Conference February 17<sup>th</sup>](#): Netherlands Demo and TQ - SPIN Demo.
- [DRM CoP Work on DRM 3.0 and Pilots](#):
  - [Google: Federal data population data](#) - two hits illustrate DRM 3.0 concepts - difference from Census hit - real data and reuseable (Web 2.0/3.0). Data Model Ontology for the Government (Hay).
- [Semantic Web Meetups](#):
  - [May 13<sup>th</sup>](#) in Washington, DC
  - 1000s working around the world on Open Linked Data

# Contact Information

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# References for slide 5

Provided here as hyperlinks weren't preserved in export to PDF

- **A CoP** <http://federalsoa.wik.is/>
- **SICOP** <http://semanticcommunity.net/>
- **ISE EA Statement on RDF/OWL** <http://bit.ly/3Ed1u>
- **NSF Accounting Ontology Workshop 2008**  
<http://nsfaccountingontology.wik.is/>
- **SemTech 2009** <http://www.semantic-conference.com/session/1797/>
- **W3C eGov SIG** [http://www.w3.org/2007/eGov/IG/wiki/Main\\_Page](http://www.w3.org/2007/eGov/IG/wiki/Main_Page)
- **SICoP Special Conference February 17th** <http://bit.ly/5sOO>
- **DRM CoP Work on DRM 3.0 and Pilots** <http://bit.ly/S1oYZ>
- **Google: Federal data population data** <http://bit.ly/4C7BuS>
- **Semantic Web Meetups** <http://semweb.meetup.com/31/>
- **May 13th** <http://bit.ly/CbAD7>