

# Semantic Interoperability of Information on the Web

Day 2: Tuesday, 19 June 2007

14:15 - 16:00 Session 3 from position papers

Chair: Brand Niemann (EPA/SICoP)

Toward More Transparent Government

Workshop on eGovernment and the Web

18 - 19 June 2007

United States National Academy of Sciences

Washington DC, USA

# Relationships

- “The Semantic Web isn’t inherently complex. The Semantic Web Language, at its heart, is very, very simple. It’s just about the relationships between things.”
  - Q&A with Tim Berners-Lee, Business Week, April 9, 2007.
- Presentations 1, 3, and 5 are related to Federal CIO Council’s Semantic Interoperability Community of Practice (SICoP):
  - 1. Mills Davis is the SICoP Co-chair and White Paper 2 author.
    - <http://colab.cim3.net/cgi-bin/wiki.pl?SICoP>
  - 3. Gary Berg-Cross is the Secretariat of the Spatial Ontology Community of Practice (SOCoP) and participates in the SICoP.
    - <http://www.visualknowledge.com/wiki/socop>
  - 5. Rick Murphy is a significant contributor to SICoP (e.g. White Paper 1, Federal Enterprise Architecture Reference Model Ontologies, and Special Conference 3 Co-organizers).
    - [http://colab.cim3.net/cgi-bin/wiki.pl?SICoPSpecialConference2\\_2007](http://colab.cim3.net/cgi-bin/wiki.pl?SICoPSpecialConference2_2007)

# Relationships

- Day 1 - Case studies in data integration from government information:
  - Mike Lang (Revelytix/SICoP)
    - See SICoP Vocabulary Management WG at <http://knoodl.com> and SICoP Semantic Wikis for Information Management (SWIM) at <http://www.visualknowledge.com>
- Day 1 - Third party intermediary services for citizens:
  - J.L. Needham (Google)
    - See SICoP/XML CoP Federal Sitemaps Initiative at <http://colab.cim3.net/cgi-bin/wiki.pl?FederalSitemaps>
- Day 2 - Session 4 from position papers: Web Services and Architectures:
  - Brad J. Cox (Binary Group), Paving the Bare Spots: Towards an Enterprise-wide Defense Service Bus (and amplification) and Cory Casanave (Model Driven Solutions), The Architecture of Services: Achieving Business Value with SOA in the Government
    - See SOA CoP at <http://colab.cim3.net/cgi-in/wiki.pl?SOACoPDemo4>

# Relationships

- Semantic Interoperability of Information on the Web:
  - Metadata:
    - Full text of documents, database documentation, etc.
  - Harmonization
    - Different ways in which the same words are used.
  - Enhanced Search:
    - Across all documents and showing context (e.g. words around the term or concepts)
      - Presentation 2.
  - Mashups:
    - A website or application that combines content from more than one source into an integrated experience (repurposing).
      - Presentation 4.

# Order of Presentations

- 1. Mills Davis (Project10X/SICoP), Position Paper from the Federal CIO Council's Semantic Interoperability Community of Practice (SICoP)
- 2. Chris Testa, Mary Ambrosio (Library of Congress), Improving Search for Government Resources: Open Standards and Government, Industry Collaboration
- 3. Gary Berg-Cross (Engineering Management & Integration (EM&I)), Exploring eGov Cooperation and Knowledge Sharing using Geospatial Ontologies in a Semantic Wiki
- 4. James Bryce Clark (OASIS), Practical lurches towards semantic interoperability, and standards mash-ups in public sector data
- 5. Richard C. Murphy (General Services Administration), Information Flow in the Federal Enterprise Redux: Governing Federations, Sharing Information and Ensuring Privacy

# Some Discussion Topics

- Google 2.0 embraces Semantic Web, May 18<sup>th</sup>:
  - [http://www.gcn.com/online/vol1\\_no1/44290-1.html](http://www.gcn.com/online/vol1_no1/44290-1.html)
    - Google's Semantic Web: the Radical Change Coming to Search and the Profound Implications to Yahoo! & Microsoft, Bear, Stearns & Co. Inc. – U.S. Equity Research, May 16, 2007, 13pp.
- Net-centric Operations Industry Consortium's Semantic Interoperability Framework Project (<http://www.ncoic.org>):
  - NATO Multilateral Interoperability Program (MIP):
    - <http://www.mip-site.org/>
- The Semantic Bridge Project: Creation of the “Semantic Knowledge Repository” - the nexus for managing ontologies (including microformats) and the official “hall of records” for the collaborative efforts made by virtual ontology groups:
  - <http://www.semanticbridgetechnologies.com>

# Some Discussion Topics

- 2007 Semantic Technology Conference, May 20-24<sup>th</sup>:
  - Metaweb's semantic data storage infrastructure for the web, and Freebase, an "open, shared database of the world's knowledge".
    - <http://www.metaweb.com/> and <http://www.freebase.com/>
  - D2RQ V0.5 - Treating Non-RDF Databases as Virtual RDF Graphs:
    - <http://sites.wiwiss.fu-berlin.de/suhl/bizer/D2RQ/>
    - Apply this to?: The Federal Funding Accountability and Transparency Act (FFATA) requires agencies to report data about federal spending that can be compiled and made available to the public on a single website.
      - <http://www.usa.gov/images/fgbuzz/ffata-memo-2007.pdf>

# Some Discussion Topics

- 2007 Semantic Technology Conference, May 20-24<sup>th</sup> (continued):
  - Alice in Metaland – A Semantic Ecosystem for Web 3.0 and Semantic Technologies.
    - <http://metaland.visualknowledge.com/>
  - SICoP White Paper 3: Advanced Intelligence Community R&D Meets the Semantic Web!
    - <http://colab.cim3.net/file/work/SICoP/2007-05-22/LF>