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.”

• 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
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)

• 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
• 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\textsuperscript{th}:
  – http://www.gcn.com/online/vol1_no1/44290-1.html

  – 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 20-24th:
  - Metaweb’s semantic data storage infrastructure for the web, and Freebase, an "open, shared database of the world's knowledge".
  - 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.
Some Discussion Topics

• 2007 Semantic Technology Conference, May 20-24\textsuperscript{th} (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!