Ontology Summit 2012

Track 4: Large-Scale Domain Applications

Part 1: Energy, Government, and Geography

Co-Champions

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Mission Statement

- This track will help to ground the discussions in the other tracks and bring key challenges to light by **describing current large-scale systems** and systems of systems that either use, or could use, ontologies in their deployment. "Large-scale" can mean either very large data sets, very complex data sets, federated systems, highly distributed systems, or real-time, continuous data systems.
- Examples of large data sets might include scientific observations and studies; complex data sets could be technical data packages for manufactured products, or electronic health records; federated systems could include information sharing to combat terrorism, highly distributed systems includes items such as the smart electrical grid (aka Smart Grid), and real-time systems include network management systems. Of course, some big systems might include all five aspects.

Today's examples

- Smart electrical grid (UML to OWL)
- Geography
- DoD system building (using OntoUML)
- Civilian government applications

Speakers

- Dr. <u>Andrew Crapo</u> (General Electric)
 - "Overcoming Challenges Using the CIM as a Semantic Model for Energy Applications"
- Dr. Krzysztof Janowicz (UCSB)
 - "Data-Intensive Geospatial Semantics"
- Mr. <u>Bruce Bauman</u> (<u>DoD</u>)
 - "Separating Semantics and Implementation: From a Single Ontologically Sound Conceptual Model to Multiple Physical Schema Languages"
- Mr. Mills Davis (Project10X)
 - "What if Everything You Know about System Engineering is Wrong?"