ICSC 2013 Tutorial: Semantic Computing in the Financial Industry

Title: The Financial Industry Business Ontology: A Transformational Step for the Financial Industry

The Financial Industry Business Ontology (FIBO) initiative is a collaborative effort engaging participants from the financial industry, the regulatory community, academic institutions and semantic technology vendors to model and build a set of open standard ontologies that will deliver transformational benefits to the financial system. The Enterprise Data Management Council (EDMC) and the Object Management Group (OMG) are partnering to lead this effort. Following the 2008 global financial crisis it became clear that the absence of certain data standards led to a lack of awareness of the magnitude of risk that the industry was exposed to. The goal of FIBO is to introduce semantic capabilities that will better enable: common terminology for business entities, financial contracts and instruments, improve data transparency, improve data integration and linkage, and improve financial reporting and analytics, so that greater "data" quality and health can be introduced into the financial system. This presentation will provide:

- a briefing on the mission and key objectives of FIBO
- a description of some of the critical financial use cases that can be fulfilled by FIBO
- an overview of conceptual and operational ontologies
- an introduction to business semantics modeling
- a review of the first set of standards targeted for publication
- an introduction to the FIBO Foundations and Business Entities conceptual ontologies
- an overview of the FIBO prototype operational ontologies
- a live demonstration of the FIBO operational ontologies for Business Entities and Derivatives, demonstrating inference capabilities and classification, including execution of SPARQL queries and visualizations that fulfill various use cases for financial risk analysis

David Newman is Senior Vice President and Strategic Planning Manager of Enterprise Architecture at Wells Fargo Bank. David also chairs the Semantic Technology Program for the Enterprise Data Management Council and is leading a collaborative effort with the Object Management Group to develop and implement operational ontologies for Business Entities, Derivatives, Mortgage Backed Securities, Loans and other financial instruments as part of the Financial Industry Business Ontology (FIBO) effort. David is also a frequent speaker on semantic technology at industry, academic and financial regulatory conferences and has authored several articles on the subject.

Mike is the semantics expert and ontologist for the EDM Council. He is the architect and editor of the Financial Industry Business Ontology (FIBO) and represents the Council within the Object Management Group and on ISO technical standards committees. He has over 15 years of financial industry experience with investment management software, data management systems design, messaging standards, product testing and project management. Mike is well-regarded as both a resource and frequent speaker within the semantics community.