

(Subject line) Semantic technology-what does it really mean for DM professionals?

## **SEMANTIC TECHNOLOGY:**

### **WHAT DOES IT *REALLY* MEAN FOR DATA MANAGEMENT PROFESSIONALS?**

As a data management professional, you've heard the buzz about semantic technology, semantic integration, SOAs, ontologies, and the "Semantic Web" (or Web 3.0). In fact, at this year's DAMA International Symposium and Wilshire Meta-data Conference, many noticed that buzz to be vibrating at an increasingly louder decibel, with experts realizing the enormous impact that semantic technologies are going to have on the field of data management. This realization, however, left many wondering and wanting more: "HOW EXACTLY is this relevant to us? HOW EXACTLY will this impact us? And HOW SOON do we need to find out?"

In other words, those concerned about maintaining their place in the industry and remaining current, the industry's data management *leaders*, are demanding to know: What exactly does the rapidly developing field of semantic technology really mean for our industry and our role within it?

At the 2007 Semantic Technology Conference, May 20-24, in San Jose, California, we have devoted over 20 sessions to answering these questions and equipping you with the knowledge and tools you will need to meet the changing landscape of data management: incredible semantic advances that will bring superior capabilities to your day-to-day functioning.

#### **Semantics and Ontology in IT Data Management**

Tom Johnston explains what semantics and ontology are, in terms familiar to data modelers, DBAs, and IT management, allowing those who have been doing "traditional" IT data management to better respond to the challenge of managing the company's information, no matter what kind of data contains.

#### **Semantics for Service Oriented Architectures**

Dave McComb and Simon Robe elaborate on how, while Service Oriented Architecture (SOA) promises to reduce coupling between components in an enterprise, problems can arise if the semantic issues are not properly addressed. Here, they introduce audiences to the concept of an Enterprise Message Model and show how it is derived from an enterprise ontology, how specific service invocations are defined from the Enterprise Message Model, a methodology for creating and using an Enterprise Message Model (including what to incorporate into the shared ontology) . . . and how this approach has been successfully applied in several client engagements.

#### **Data Modeling and OWL: Two Ways to Structure Data**

With this presentation, David Hay takes steps toward uniting the world of data modeling/database design with semantics/ontologies by describing data modeling in its various forms and using an example to show the relationships

between its concepts and those of the ontology language OWL. He describes the relationships between entity and OWL classes, attributes and datatype properties, and relationships and object properties and leads a discussion of taxonomies and alternative classification approaches, focusing on both the similarities and the fundamental differences between the two.

### **Semantic Requirements for Decision Automation**

Neil Raden explores the need for injecting intelligence into decision automation, and how traditional analytical tools operate with too much latency and too little semantic understanding, then educates attendees on the source of the analytical/operational gap; the magnitude of the problem; how decision automation can have dramatic, positive effects; why semantic technology is crucial to success; and who is implementing these kinds of systems and with what results.

### **Migrations: Moving from a Relational World to a Semantic One**

Barbara McGlamery details Time Inc. Interactive's move from a relational world to a semantic one, evaluating the outcome, advantages, disadvantages, and challenges faced as her organization attempts to migrate a very large, complex relational database into a semantically-meaningful one (building on their creation of a proprietary Semantic Web framework).

### **Database Infrastructure to Build Semantic Applications**

Melliya Annamalai and Xavier Lopez describe the storage, querying, and inference functions of Oracle's scalable and secure infrastructure and how it can be used to build applications for data integration, metadata (knowledge) representation, ontology usage and management, ontology enhanced search, and so on. They also outline several new SQL-based, support features and highlight their resulting advantages.

### **Semantic Exchange Contracts: Service Orientation (SOA) and Data Management Convergence**

Fran Clark delves into the ongoing debate between SOA and data management approaches to enterprise architecture, and explains (via example) how semantic exchange contracts are converging the principals and practices of both orientations and creating a new approach to enterprise integration.

### **What's the Difference between an Enterprise Conceptual Model and an Enterprise Ontology?**

Bonnie O'Neil presents a case study on how a government agency is figuring out the role of semantic technologies and building an enterprise conceptual model by asking (and answering!) the crucial questions: What would they have to do to make it an ontology? Does an ontology necessitate OWL or RDF? If so, how would they implement it? What is the difference between a conceptual model and an ontology, anyway? What are the costs, both direct and indirect? What would an ontology buy them? What benefits would it provide, and would the benefits cover the costs? And finally, what would the infrastructure need to be for them to realize future benefits?

### **The Oracle Field Trip**

Join us onsite at Oracle's Customer Visit Center for a three-hour deep dive into Oracle's vision for semantic technology. As the industry leader in Grid computing, business intelligence, and database and SOA software, Oracle shows attendees how they are applying semantics to deploy next generation tools in these areas, how Oracle views the business drivers for the technology uptake from an enterprise software perspective, and what Oracle is doing to roll-out the technology in real-world scenarios. To conclude the visit, Oracle will host a talkback session where attendees will have a chance to ask questions of Oracle management about the technology, products, and adoption strategies.

These sessions are just a few of the many designed specifically to help data management professionals meet the challenge of managing semantically enabled data in a rapidly advancing environment. Additional organizational presenters include IBM, the CIA, Cleveland Clinic, Business Rule Solutions, LinkSpace, Data-Grid, and BEA Systems among others.

Follow the buzz and fast-forward your learning curve on the biggest development trend, through presentations from over 130 speakers sharing real-world applications and experience with semantic technology.

**[CLICK HERE FOR MORE INFORMATION:](#)**