



For more information, contact:

Irene Polikoff, Co-founder & CEO
TopQuadrant
Irene@topquadrant.com or 703.299.9330

Media contact:

Barbara Reichert
Reichert Communications, LLC
barbara@reichertcom.com or 415-248-0230 ext. 7012

FOR IMMEDIATE RELEASE

TopQuadrant Creates First Object-oriented Semantic Web Language that Applies Business Logic to Data

RDF-based SPARQL Inferencing Notation (SPIN) Available as Open Source

EnterpriseDataWorld 2009 - TAMPA FL., – April 6, 2009 - TopQuadrant™, the global leader in Semantic Web application development technology, solution services and training programs, today announced SPIN (SPARQL Inferencing Notation), the first Semantic Web language with an explicit object-oriented rule model that can link business logic and domain models. SPIN includes a collection of RDF vocabularies that allow the use of SPARQL (W3C standard RDF query language) to define business rules for Semantic Web applications. SPIN allows users to express rules and constraints with a richer language and better control over runtime performance than possible with OWL or other rule languages.

"TopQuadrant has done it again," said Joe Eberle, Chief Architect - Ontology Business Solutions, CTG. "Releasing SPIN is a huge advance in the Semantic Web and ontology space. SPIN offers a simple and easy way to encapsulate business rules and constraints right inside the domain. Having the ability to establish a modeling vocabulary within a sub domain gives us semantic consistency and the power to better reuse and repurpose our solutions."

Instead of relying on the textual representation of SPARQL expressions, SPIN offers an RDF schema for SPARQL. As a result, SPARQL queries can be stored as RDF triples together with any RDF domain model. This enables the linkage of RDF resources with the associated queries as well as sharing and reuse of queries as part of Semantic Web models. In particular SPIN makes it possible to attach executable business logic with RDF/OWL classes. For example, this enables sharing of a units ontology that also contains the business logic for tasks such as unit conversion.

"We are committed to doing our part to ease the adoption of Semantic Web applications," said Dr. Holger Knublauch, VP of product development, TopQuadrant. "Business rules are a key component of any software application. Our hope is that the creation of an open source language for defining business rules within Semantic Web applications will facilitate standardization within the community and therefore further simplify the development process."

In addition to the SPIN RDF vocabularies, TopQuadrant is releasing the TopBraid SPIN API, an open source Java API distributed under AGPL and commercial licenses. TopQuadrant's Semantic Web application development platform, TopBraid 3.0, supports SPIN. (See *separate press release: TopQuadrant Dramatically Accelerates Semantic Web Application Development with TopBraid 3.0 – 4/6/09.*) The SPIN API is built on HP Lab's Jena API and includes the following functionality:

- **SPIN Inference Rules** – Can be attached to classes and are used to derive new RDF statements from existing RDF statements at the instances of those classes.



- **SPIN Constructors** – Special inference rules that can be used to initialize resources with default values at creation time
- **SPIN Constraints** – Used to specify conditions that all members of the classes must fulfill.
- **SPIN Meta-modeling** – With this capability, users can define their own SPARQL functions and query templates.
- **SPIN Standard Modules Library** – An out-of-the-box library of frequently needed modeling patterns with functions and templates to constrain cardinalities and value ranges.

About TopBraid Suite

TopBraid Suite™ supports the complete semantic application development lifecycle. Users can rapidly assemble, deploy and manage dynamic ontology-driven applications built with the W3C SemanticWeb standards, including RDF/S, OWL and SPARQL. The suite includes TopBraid Composer, a Semantic Web modeling and application development environment; TopBraid Composer Maestro Edition™, an extended version of Composer with additional capabilities such as SPARQLMotion for editing and executing visual data processing scripts; TopBraid Live™, an enterprise Semantic Web application platform; and TopBraid Ensemble™, a Semantic Web application assembly toolkit.

About TopQuadrant

TopQuadrant is the global leader in Semantic Web application development technology, solution services and training programs. Established in 2001 with the mission to enable enterprises to be agile through practical application of Semantic Web technologies, TopQuadrant offers TopBraid Suite, the only Semantic Web platform with a graphical application assembly toolkit and end-user customizable tools to discover, explore and visualize relevant data without programming. TopQuadrant's Semantic Web applications enable enterprises to master the challenges of the global marketplace by becoming more agile, reducing costs and creating competitive business processes that easily adapt to change. The company's customers include Fortune 1000 corporations in retail, pharmaceutical, financial services, medical/healthcare, manufacturing, and energy industries as well as government agencies in the areas of defense, intelligence and airspace. For more information, visit www.topquadrant.com.

###

TopQuadrant, TopBraid, TopBraid Suite, TopBraid Ensemble, TopBraid Live, TopBraid Composer, TopBraid Composer Maestro Edition, SPARQLMotion, the TopQuadrant logo, and "Composing the Semantic Web" are trademarks of TopQuadrant Inc. All other trademarks are the property of their respective owners.