

TopBraid Capabilities

Customers and partners worldwide are using the TopBraid Suite™ platform to build high-value solutions. One example of a complete solution is TopQuadrant's TopBraid Enterprise Vocabulary Net, which manages interconnected business vocabularies using many of the TopBraid platform's "building block" capabilities. Key TopBraid capabilities include:



TopQuadrant is a recognized leader in Semantic Web software, solution services and training.

For more information visit www.topquadrant.com, or contact us at info@topquadrant.com or by phone at +1 703 299 9330.

Contact us to discuss how we can help you to get more out of data by linking disparate sources and capturing the business meaning of your data.

- Semantic Data Services and Integration
- Semantic ETL
- Converting Diverse Data into RDF (aka 'RDFizers')
- Faceted Search
- Versioning and Change Management
- Visual Query Creation and Query Reuse
- Business Rules and Data Quality Constraints
- Ontology-driven Applications

Semantic Data Services and Integration

Rapidly creates flexible data services drawing from private and public sources. Uses semantic definitions to bring together data in different formats (RDF, XML, JSON, Excel, CSV and RDBMS). Provisions aggregated, enriched and transformed information as RESTful web services.

Benefits:

- Data on Demand - deliver data you need to answer business questions when you need it and in a format you can use
- Rich standard-based metadata – ability to fully describe characteristics of the data sources and services using industry standards for capturing semantics

Semantic ETL

Creates RDF-based data flows that can run on a scheduled basis or in response to business events.

Includes in the transformation pipelines model-based mapping rules needed to perform inferences.

Benefits:

- Automation of repetitive transformation processes
- Model driven transformations that are easy to maintain and visualize

RDFizers

Automatically generate RDF representations of legacy data capturing and explicitly representing their underlying semantics.

Benefits:

- Use of existing legacy datasets as part of the Semantic Web solution
- Visibility and re-use of ontologies embedded in the existing data structures
- Ability to annotate existing data in a more semantic way

Faceted Search

Dynamically clusters items into categories based on the property values. The categories are facets that show the number of hits within searches that match each category. End users can select any available values in any of the facets. They can also add and remove different facets. The default HTML user interface is available “out of the box” and can be customized through stylesheets. REST API is included for integration of the faceted search package into customers’ applications.

Benefits:

- Helps users to find information they are interested in quickly and easily
- Users get hints about related content they might not have thought of looking for

Versioning and Change Management

A framework that captures each change as it occurs and automatically stamps it with the author and date information. Change records are stored in a specialized RDF repository.

Benefits:

- Audit trail showing who and when made each change
- Ability to reverse updates back to the original version
- Generation of analytical data, by capturing temporal user actions, at fine granularity

Visual Query Generation and Query Reuse

Visual query components help users to graphically explore data. Unlike complex database structures, semantic standards make it easy to present information in a business oriented way. Components auto-generate queries at a click of a button to find relevant data. Queries can be named, saved and shared as dynamic reports across different users.

Benefits:

- End-users can pull data they need without help from IT and without having to understand complex database languages and underlying structures

Business Rules and Data Quality Constraints

Business rules are stored as RDF triples and connected to models and data. W3C standard query language is used to describe and run rich rules and constraints. Semantic models drive rule execution. Capability supports incremental and non-monotonic reasoning, calculations, string manipulation and other advanced operations. A library of functions and templates for commonly used patterns is provided.

Benefits:

- Decision logic is easily accessible and re-useable. Now business rules and business terms can have URIs and be shared across the organization
- Consistency in implementation of business policies across all systems. Rules can be queried, compared and analyzed along with the data
- Resilient and flexible applications - by managing rules outside of applications, the code base becomes more stable and less likely to be affected by change

Ontology-Driven Applications

Ontology-driven applications (ODA) extend the use of ontologies beyond the information level. In ODA, ontologies specify user interface components and their behavior, data constraints and business rules, process and workflow orchestration as well as overall application configurations for user-specific needs.

Benefits:

- Rapid prototyping using pre-built components and application templates
- Reliability through the use of modular library components that can be readily explored, tailored and managed
- Dynamic changes to applications are possible by simply changing the ontology models