

# Going Live with Enterprise Solutions



**Deep Dives into TopBraid EVN, Part 2:**

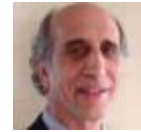
**Collaborative Ontology Management**

**February 25, 2016**



## Today's Program

***I. What can TopBraid EVN's Ontology Management Capabilities do for You?***



**Jack Spivak**

***II. Ontology Management in Action***



**Irene Polikoff**

***III. Questions and Answers***

# TOPQUADRANT COMPANY

## FOCUS

- TopQuadrant was founded in 2001
- Our focus is to harness emerging technology to build practical but innovative business applications.

## FOUNDATION

- Strong commitment to standards-based approaches to data semantics

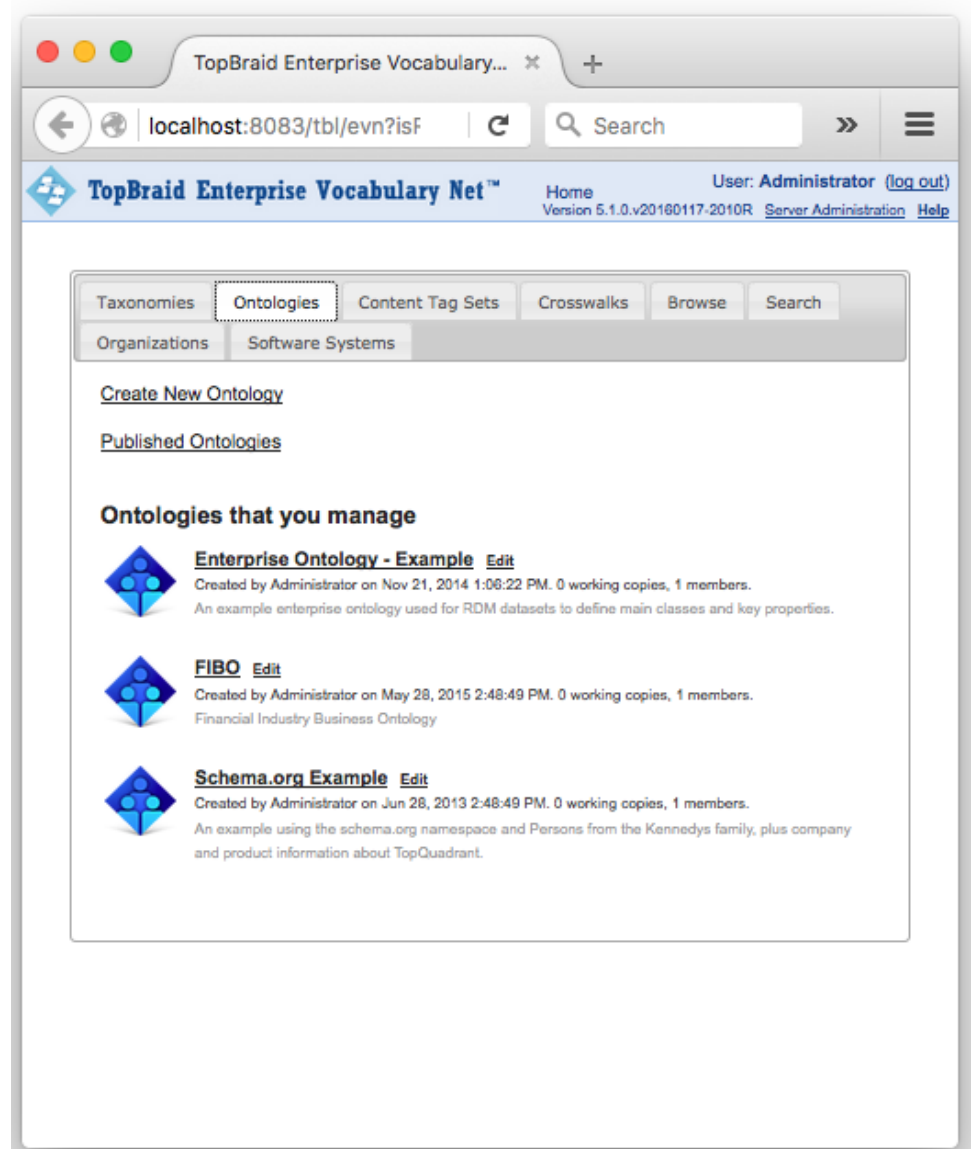
## MISSION

- Empower people — by making enterprise information meaningful

## TopBraid EVN:

A flexible, multi-user web-based solution for collaboratively managing different types of models:

- ✓ Ontologies
- ✓ Taxonomies
- ✓ Business Glossaries
- ✓ Crosswalks
- ✓ Tagsets
- ✓ ...



The screenshot shows a web browser window titled "TopBraid Enterprise Vocabulary Net". The address bar displays "localhost:8083/tbl/evn?isF". The page header includes the application name, version "5.1.0.v20160117-2010R", and user information "User: Administrator (log out)". A navigation menu contains "Taxonomies", "Ontologies", "Content Tag Sets", "Crosswalks", "Browse", and "Search". Below this, there are sub-menus for "Organizations" and "Software Systems". The main content area features a "Create New Ontology" link and a "Published Ontologies" section. Under "Ontologies that you manage", three entries are listed: "Enterprise Ontology - Example", "FIBO", and "Schema.org Example". Each entry includes a description, creation date, and number of working copies and members.

✓ ***Collaboration support for many kinds of models with***

- Working Copies – (create, freeze, report on, and commit)
- Import and export
- Manager, editor, viewer roles
- Data quality constraints
- Show history, show affected working copies
- Rich search
- Ontology publication with Explorer

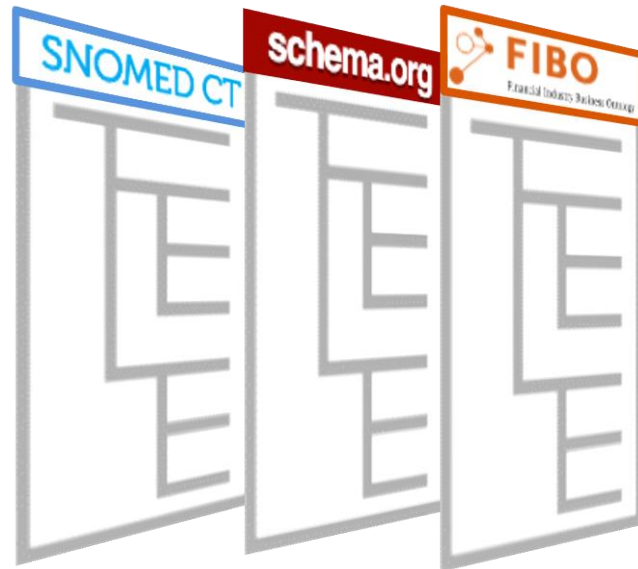
## *Taxonomies*

- Organize controlled vocabulary terms or concepts into a hierarchy of “broader” or “narrower”
- Relationships often “standardized” by SKOS ontology

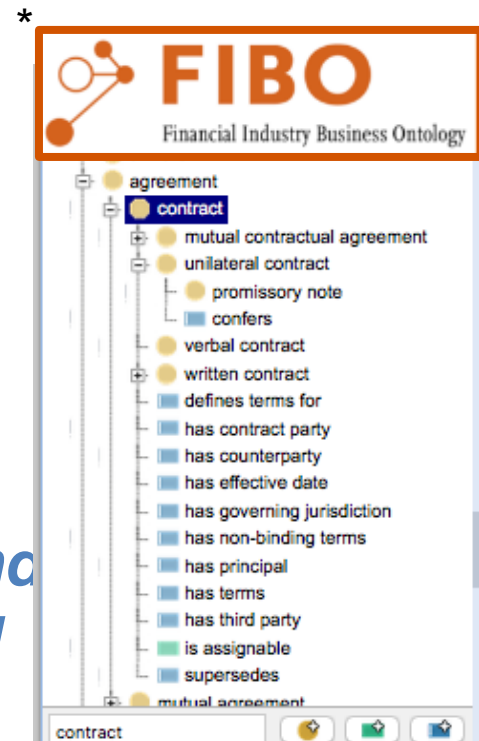
## *Ontologies*

- Organize/describe classes, data instances with relationships, attributes, metadata and rules
  - Schema-only
  - Schema + Instances (data)
- Model a knowledge domain or a specific business area

*Ontologies are becoming important in many different industries and key to enabling critical business capabilities.*



*These ontologies describe things and relationships in healthcare, financial services or search.*



\*FIBO is a project of the Enterprise Data Management Council. See <http://www.edmcouncil.org/financialbusiness>

## *Why?*

*Meaning and metadata captured in ontologies helps:*

✓ ***Understanding***

Enables people and the systems they use to understand the things and relationships needed for effective action

✓ ***Communication***

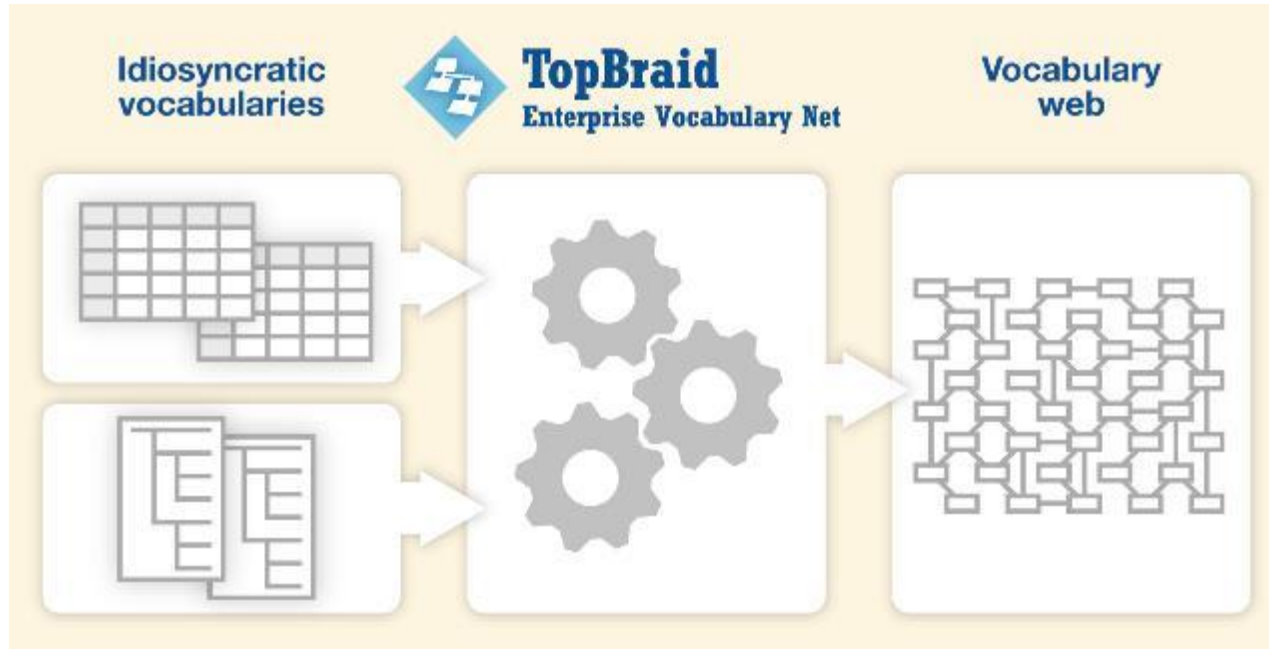
Information producers and information consumers organize, share and exchange any type of data and content, anytime, anywhere.

✓ ***Use***

Supports flexible data integration, data sharing, interoperability



## *EVN Enables a Web of Ontologies*



- Enables the incremental growth / evolution of a ‘Dynamic Web of Terminology’
- Creates links between terminology elements that were un-connectable
- Supports different perspectives and versions

## *Govern*

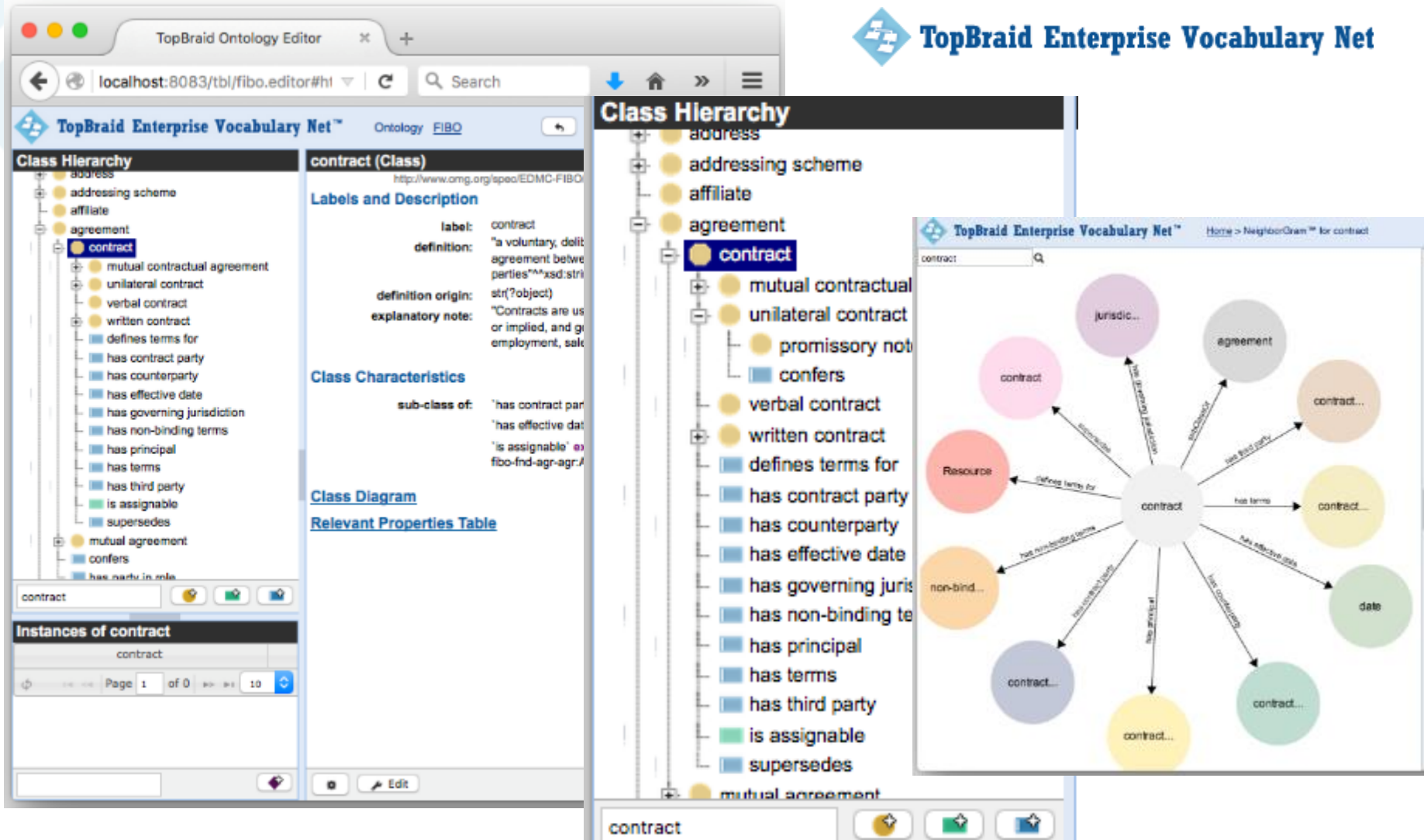
Define, review, and manage ontologies with a streamlined interface that is well-suited for business users

## *Connect*

Build meaningful relationships across different domain models and systems that use them

## *Use*

Publish models for human and automated consumption to support flexible reporting, business intelligence, operational agility, efficiency and effectiveness



The screenshot displays the TopBraid Ontology Editor interface for the 'TopBraid Enterprise Vocabulary Net' ontology. The main window is titled 'contract (Class)' and shows the following details:

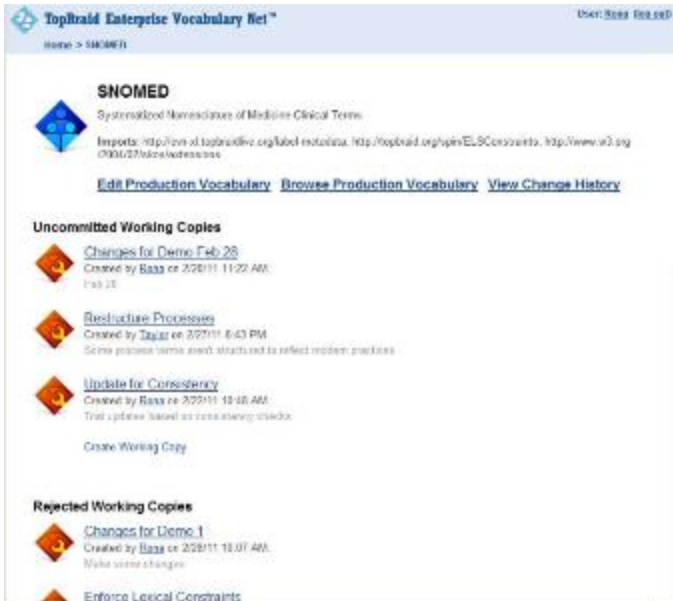
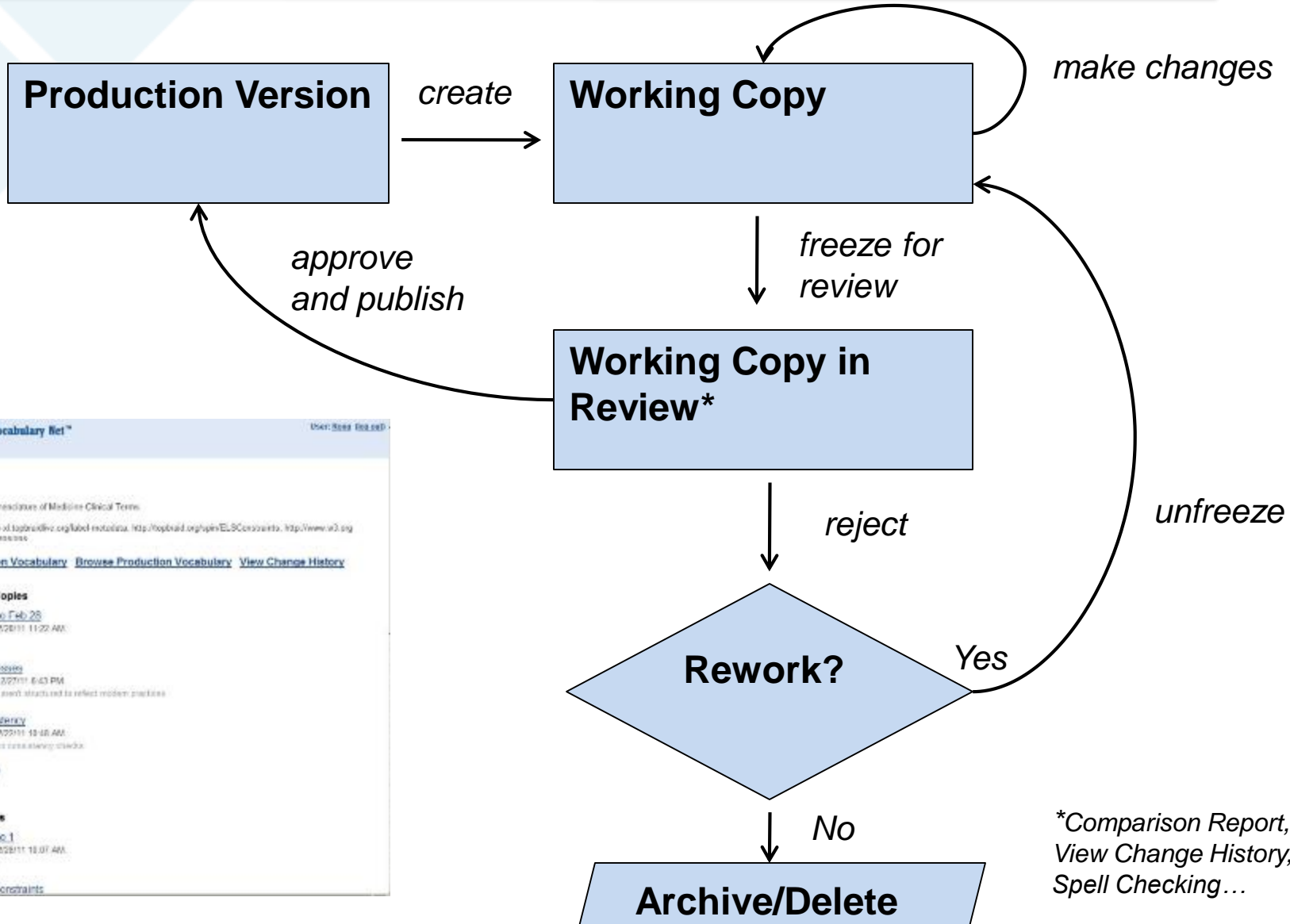
- Class Hierarchy:** A tree view showing the class 'contract' as a subclass of 'agreement', which is a subclass of 'contract' (parent class).
- Labels and Description:**
  - label:** contract
  - definition:** "a voluntary, delit agreement betwe parties""xsd:stri str(?object)
  - definition origin:** "Contracts are us or implied, and g employment, sale
  - explanatory note:**
- Class Characteristics:**
  - sub-class of:** 'has contract par', 'has effective dat', 'is assignable' ex fibo-fnd-agr-agr
- Class Diagram:** A diagram showing the class 'contract' and its relationships with other classes.
- Relevant Properties Table:** A table listing properties such as 'defines terms for', 'has contract party', 'has counterparty', 'has effective date', 'has governing juris', 'has non-binding te', 'has principal', 'has terms', 'has third party', 'is assignable', and 'supersedes'.

On the right side, a 'NeighborGram' diagram for the 'contract' class is shown, illustrating its relationships with other classes in the ontology. The central node is 'contract', and it is connected to various other nodes including 'juridic...', 'agreement', 'contract...', 'Resource', 'non-bind...', 'contract...', 'date', and 'contract...'. The relationships are labeled with properties like 'has contract party', 'has terms', 'has effective date', 'has principal', 'has third party', 'is assignable', and 'supersedes'.

**Demo:**  
**Capabilities for Collaborative Ontology  
Management in TopBraid EVN**

- **Support for collaboration**
  - for defining, linking and reviewing enterprise ontologies and taxonomies
  - role-based access control
  - RACI and notifications of change events
  - audit trails, reports and change management
- **Business-friendly UI** for creating rich definitions and business rules
- **Automated delivery of ontologies to enterprise applications**
  - combined with the ability to track their usage across the enterprise
- **Configurability and flexibility** to best fit the needs of your organization

# Built-in Workflow Support



*\*Comparison Report, View Change History, Spell Checking...*

# Integration with other systems

## Import formats

- Spreadsheet hierarchies (xls, csv, tsv)
- RDF/XML
- MultiTees



EVN

edit vocab

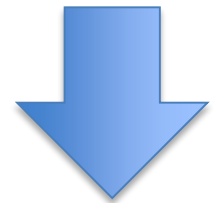


manage vocab

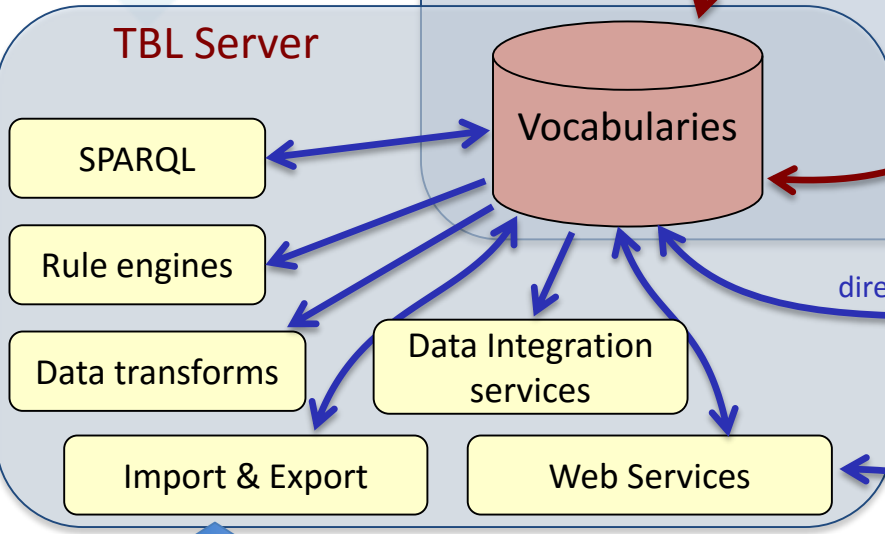


## Export formats

- HTML
- tab-delimited files
- RDF/XML
- Sharepoint



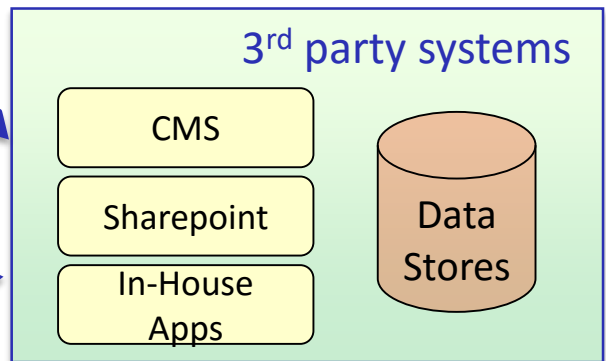
## TBL Server



direct RDF/SPARQL access

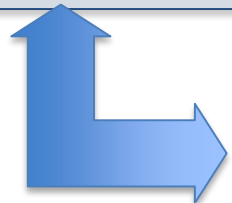
Web services

## 3<sup>rd</sup> party systems



## Import/Export formats

- RDF (Turtle, RDF/XML, NT)
- relational databases
- XML, XMLS
- RSS
- Excel 2003 spreadsheets
- delimited text (.csv, tsv)
- Web pages (RDFa, Microformats, GRDDL)



# TopBraid EVN Capabilities include:

---

- **Ontology Editing:** Create and edit models using Classes, Attributes, Relationships, Instances and Rules
- **Easy Customization:** Easy customization of user interfaces, custom validation rules and processing via SPARQL Rules and SPARQLMotion
- **Unlimited Work-in-Progress Copies:** Virtual work-in-progress copies of vocabularies enable controlled publishing, review and approval
- **Reporting:** Built-in reports as well as advanced query-building tools and reporting through graphical interfaces
- **Merging, Importing, and Exporting:** From and to RDBMs, spreadsheets (CSV & Excel), XML, RSS feeds, SPARQL endpoints, RDF and OWL
- **Systems Integration:** Integrates with existing enterprise or vocabulary management systems via Web Services interfaces and APIs
- **Enterprise-ready:** Scalable architecture offers a choice of relational and RDF database repositories with LDAP integration for access control



# Thank you!



evn\_demo@topquadrant.com

Request EVN evaluation demo server:

[www.topquadrant.com/evn](http://www.topquadrant.com/evn)

FIBO Browser ... coming soon !!

