

Going Live with Enterprise Solutions



Exploring TopBraid Enterprise Vocabulary Net

March 3, 2011

TopBraid Suite™ *Supporting the Complete Semantic Application Lifecycle*

TopQuadrant Overview and Offerings

- Company Formed in 2001
- Products
 - TopBraid Enterprise Vocabulary Net (EVN)
 - TopBraid Suite
- Solution Services
- Semantic Web Training: Next Classes
 - Intro Class – May 2-5, Wash DC
 - Advanced Class – April 4-7, Wash DC
 - Onsite classes available on request

TQ- Alexandria, VA



TQ-Mountain View, CA

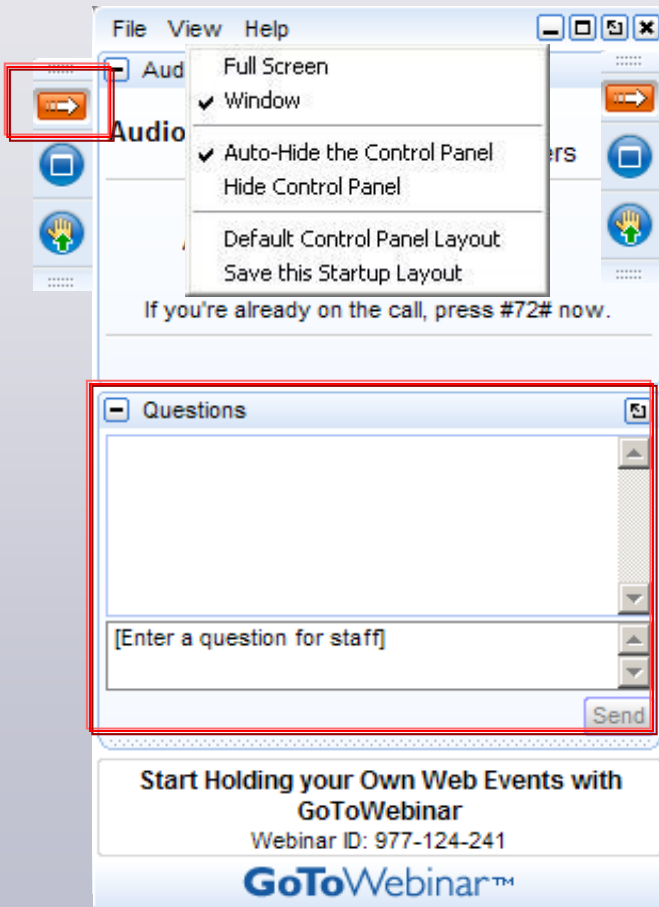


TQ-London, UK

Agenda

- Welcome and orientation to GoToWebinar
- TopBraid Enterprise Vocabulary Net - Introduction
- Demo: Managing vocabularies with EVN
- Questions and Answers

How to Participate Today



- Open and close your Panel
- Screen and Audio settings
- Submit text questions
- Q&A addressed at the end of today's session
- Everyone will receive an email with a link to view a recorded version of today's session and answers to all of the questions asked.

Introductions

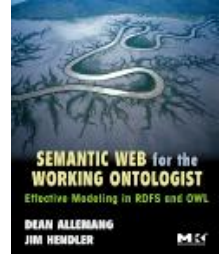


Dean Allemang

Chief Scientist
and Trainer

Dr. Dean Allemang

- Internationally recognized Semantic Web expert
- Leads TQ's semantic technology training series
- Keynote speaker at RuleML-2006 and SemTech 2010
- Co-author of "Semantic Web for the Working Ontologist"



Bob DuCharme

Semantic Solutions
Architect

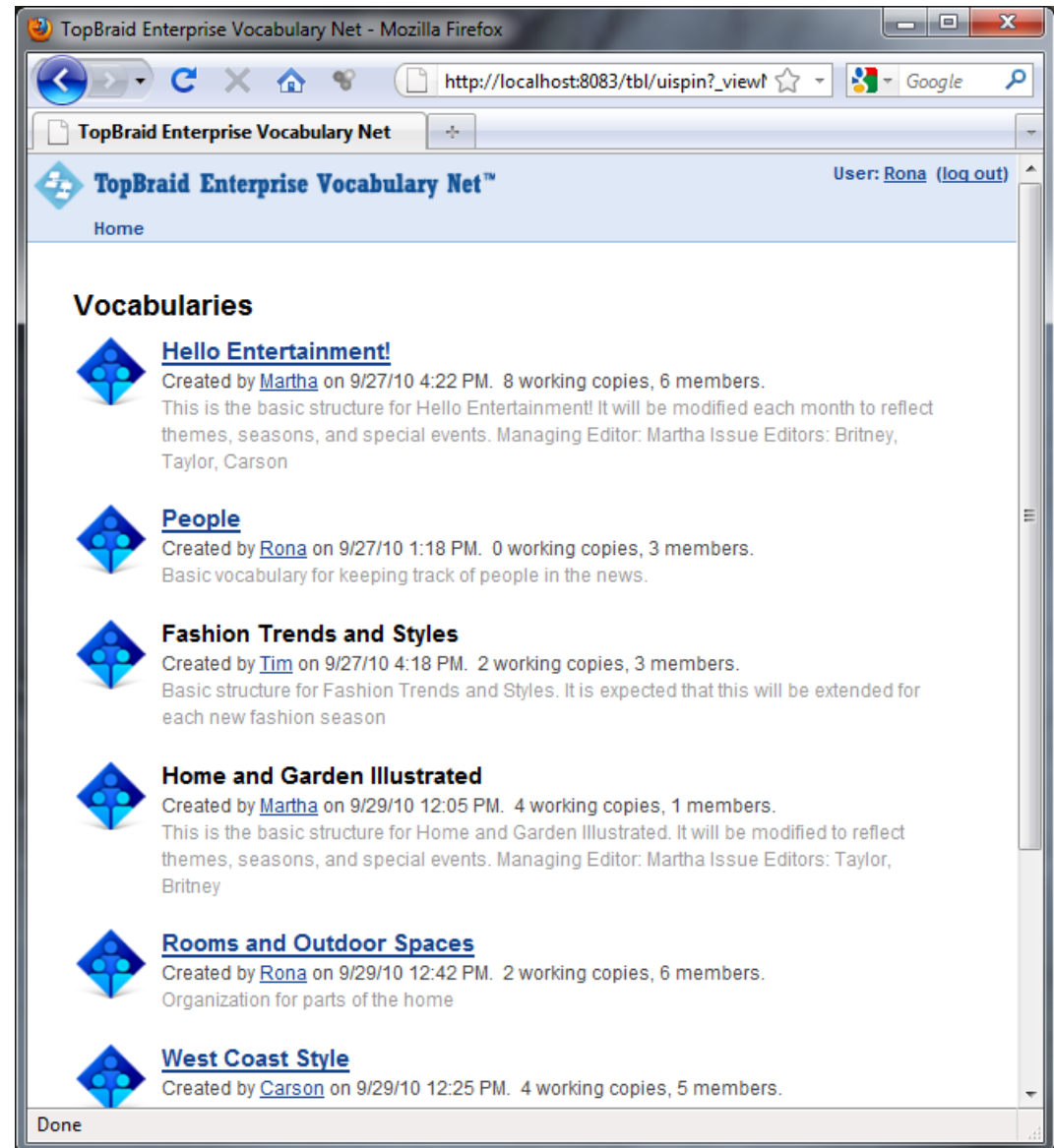
Bob DuCharme

- Formerly of Innodata Isogen, LexisNexis, Moody's
- Extensive experience with standards-based publishing technology
- Co-chaired 2008 Linked Data Planet conference in New York City
- Author of Prentice-Hall and Manning books on XML

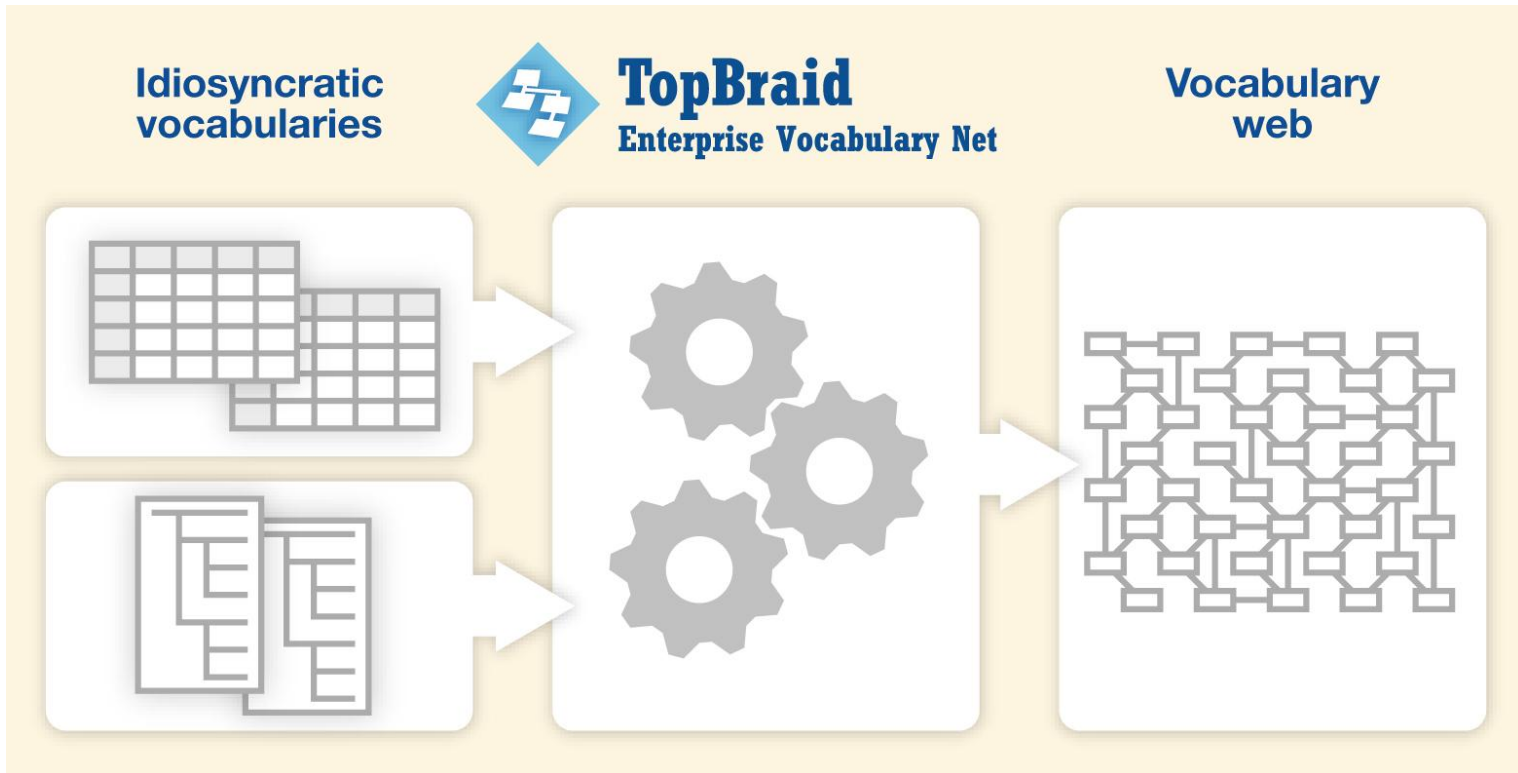
TopBraid EVN:

A flexible web-based solution for managing taxonomies and business vocabularies in support of business objectives for:

- Content delivery
- Search
- Navigation
- Data integration
- Disambiguation of terms



TopBraid EVN enables a web of vocabularies



- 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

EVN is based on standards

- SKOS: Simple Knowledge Organization System
- SKOS-XL: SKOS Extension for Labels
- RDF: Resource Description Framework
- SPARQL: Protocol and RDF Query Language



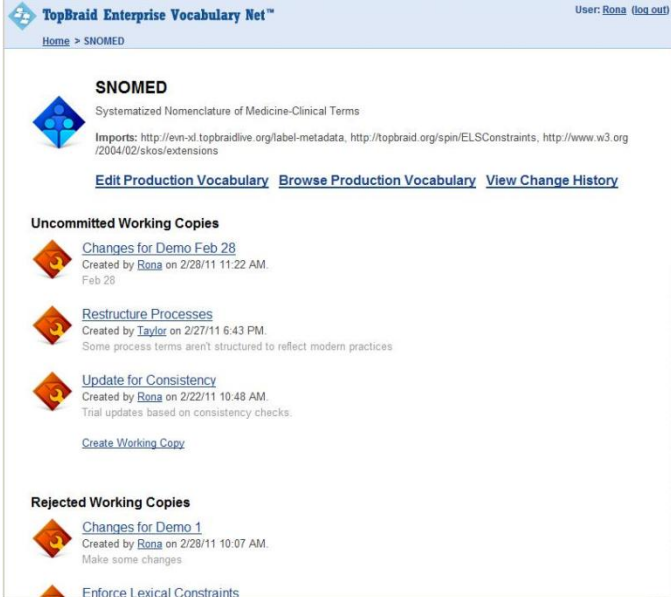
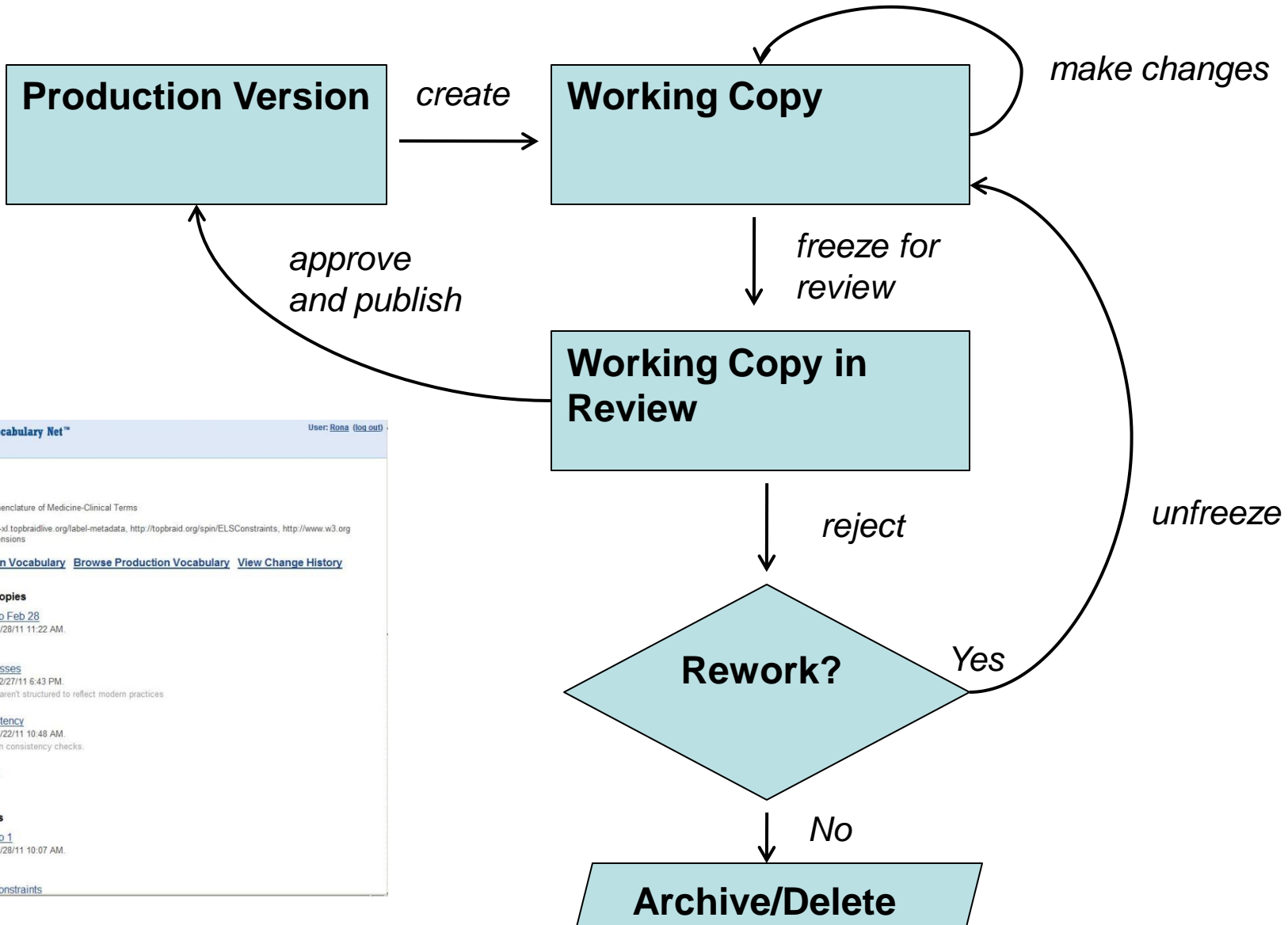


Data quality rules: warn about

- Use of special characters? (é, ü, €...)
- Siblings with same name?
- Same term used as both preferred label and alternative label?
- Terms that don't begin with upper-case letter?

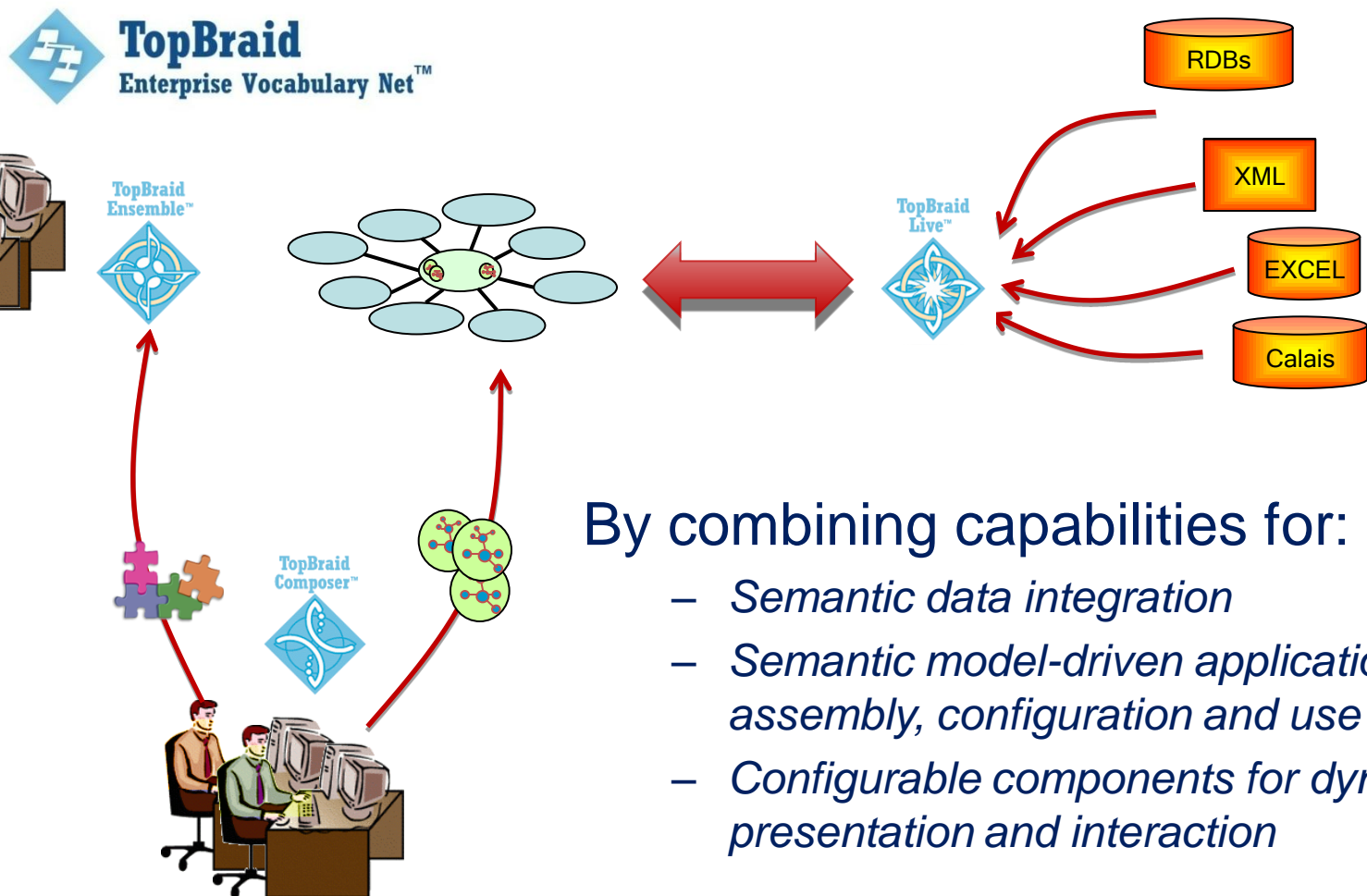
Standard SKOS rules, your customized rules.

Built-in Workflow



EVN is a Customizable Solution

EVN is a Semantic Model-driven Application
built on the TopBraid Suite Platform



By combining capabilities for:

- *Semantic data integration*
- *Semantic model-driven application assembly, configuration and use*
- *Configurable components for dynamic presentation and interaction*



What are vocabularies used for?

- ecommerce
- Data integration
- Aligning data records from different sources
- Managing content
- Improving search
- Improving communications



SNOMED Vocabulary

- Systematized Nomenclature of Medicine
- “Periodical table of medicine”
- Anatomy, drugs, symptoms, treatments...
- From tab-delimited file on UMLS website
- Demo only—no medical records expert involved
- Also used in demo: National Cancer Institute thesaurus

SPARQL rules and AGROVOC

- United Nations Food and Agriculture Organization
- AGROVOC thesaurus: agriculture, forestry, fisheries, food and related domains
- 29,000 concepts
- “Buds”: 14 preferred labels, 24 alternative ones
- SKOS constraint S13: broken over 1600 times



EVN Review

- Built-in and custom rules
- Intuitive graphical user interface
- Multi-user support
- Editing and review of multiple working copies
- Controlled role-based access
- Change tracking
- Support of all relevant W3C standards
- Import/Export and web services integration
- Easy extensibility of features



EVN Benefits

- Quickly edit vocabularies in a standard way (SKOS)
- Support collaboration
- Manage change
- Share vocabularies between projects
- Cross-connect content silos



Questions?

info@topquadrant.com



Thank you!

Idiosyncratic
vocabularies



TopBraid
Enterprise Vocabulary Net™

Vocabulary
web



*“A wonderful harmony is created when we
join together the seemingly unconnected.”*

- Heraclitus

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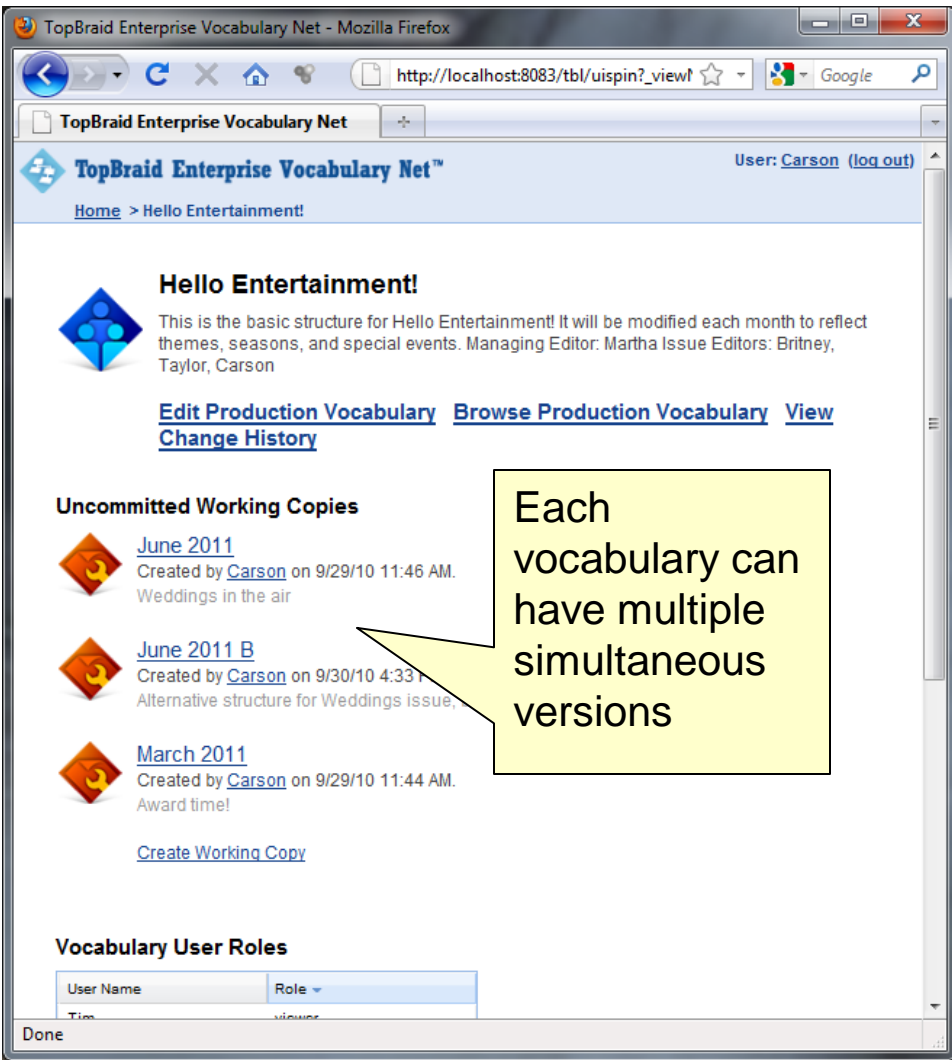
TopBraid EVN Additional Slides



TopBraid EVN Capabilities include:

- **Vocabulary Editing:** Cloning, merging, repositioning and re-numbering of concepts; global edit operations for selected groups of concepts
- **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

Production Vocabularies and Working Copies



The screenshot shows a web browser window titled "TopBraid Enterprise Vocabulary Net - Mozilla Firefox". The address bar shows "http://localhost:8083/tbl/uispin?_viewf". The page header includes "TopBraid Enterprise Vocabulary Net" and "User: Carson (log out)". The main content area has a "Hello Entertainment!" section with a blue diamond icon and text: "This is the basic structure for Hello Entertainment! It will be modified each month to reflect themes, seasons, and special events. Managing Editor: Martha Issue Editors: Britney, Taylor, Carson". Below this are links for "Edit Production Vocabulary", "Browse Production Vocabulary", and "View Change History".

The "Uncommitted Working Copies" section lists three items:

- June 2011**: Created by Carson on 9/29/10 11:46 AM. Weddings in the air
- June 2011 B**: Created by Carson on 9/30/10 4:33 PM. Alternative structure for Weddings issue.
- March 2011**: Created by Carson on 9/29/10 11:44 AM. Award time!

Below the list is a "Create Working Copy" link. At the bottom, there is a "Vocabulary User Roles" section with a table:

| User Name | Role |
|-----------|--------|
| Tim | viewer |

Each vocabulary can have multiple simultaneous versions

Each item has a separate audit trail from multiple users

Role-based Access Control

- Assign users different roles for using the system at various levels of authority:
 - Vocabulary Manager
 - Vocabulary Editor
 - Vocabulary Viewer



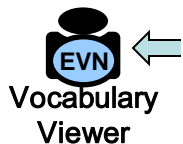
TopBraid EVN Role Descriptions



Creates a vocabulary and grants access privileges to other users in roles to work with it. Can import data into a vocabulary, add custom constraints and remove a vocabulary.



Makes changes to a production vocabulary including direct edit and publishing changes from any working copy. Can reject changes submitted in a working copy.



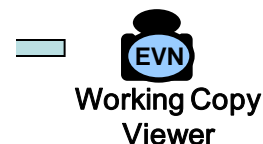
Can view and browse a vocabulary, view a history of changes, display various reports and export the vocabulary in various formats. Can also create a working copy of a production vocabulary to make changes which will not be applied to a vocabulary until they are reviewed and published by a Vocabulary Editor.



Manages a working copy of a production vocabulary and grants manages access to it. Can freeze a working copy for review, and allow further changes to it.



Makes changes to a working copy of a vocabulary including editing concepts, their attributes, relationships and types.



Can browse and view a vocabulary, view changes in a working copy of the vocabulary, view what other working copies will be impacted by those changes, and compare a working copy to its production vocabulary.



Means inherits use cases from

**Use Cases Supported by
TopBraid EVN:
Listing by Functional Areas**

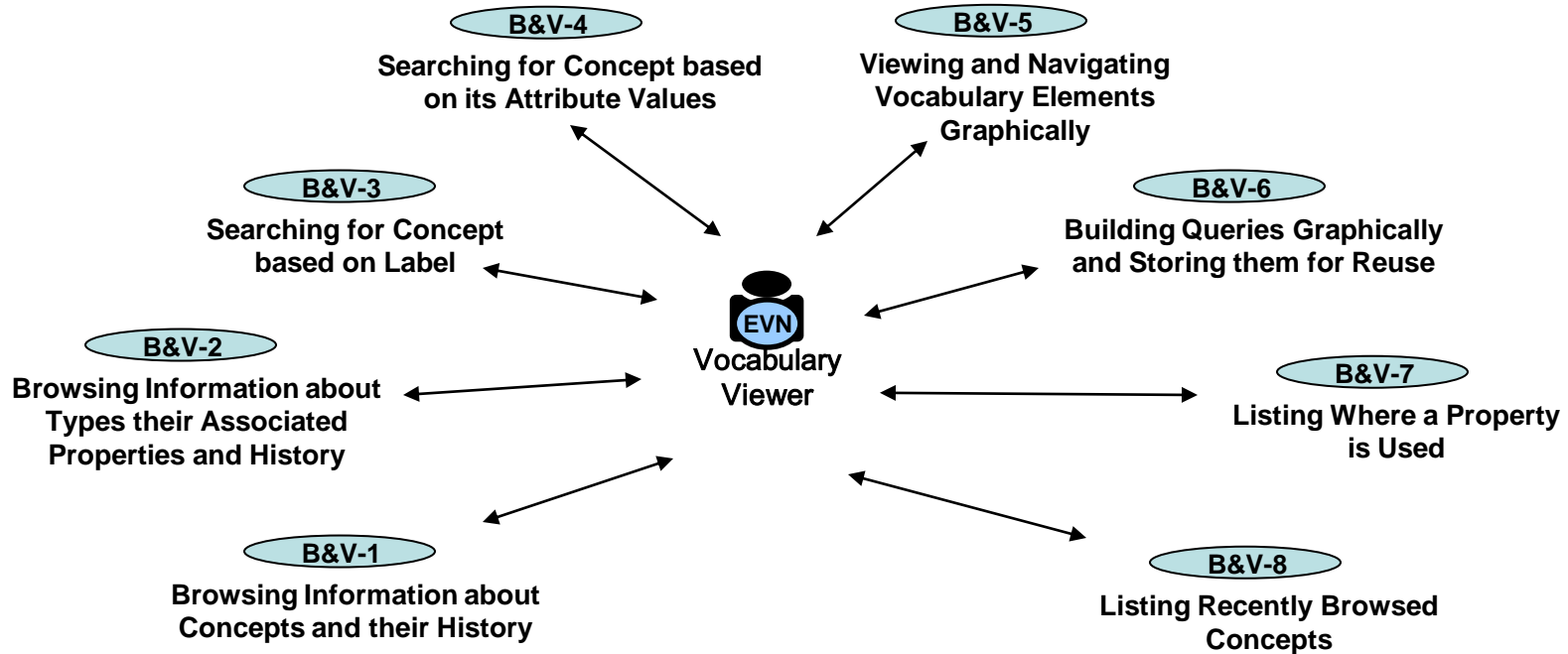


Functional areas of EVN Capabilities – Shown as use cases supported for the different roles

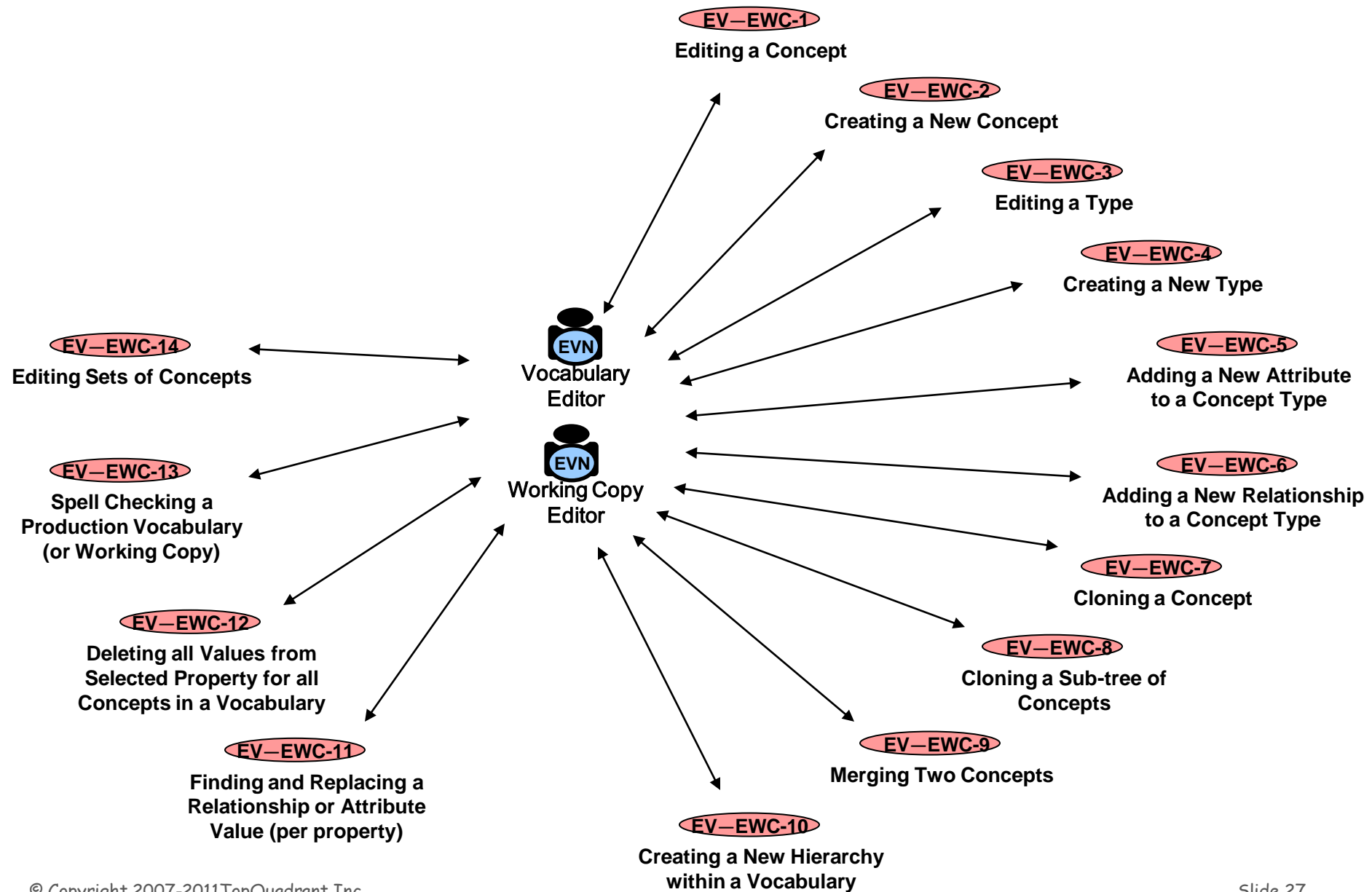
- Browsing & Viewing
- Editing
- Vocabulary Change Management
- Reporting/Exporting
- Vocabulary System Management



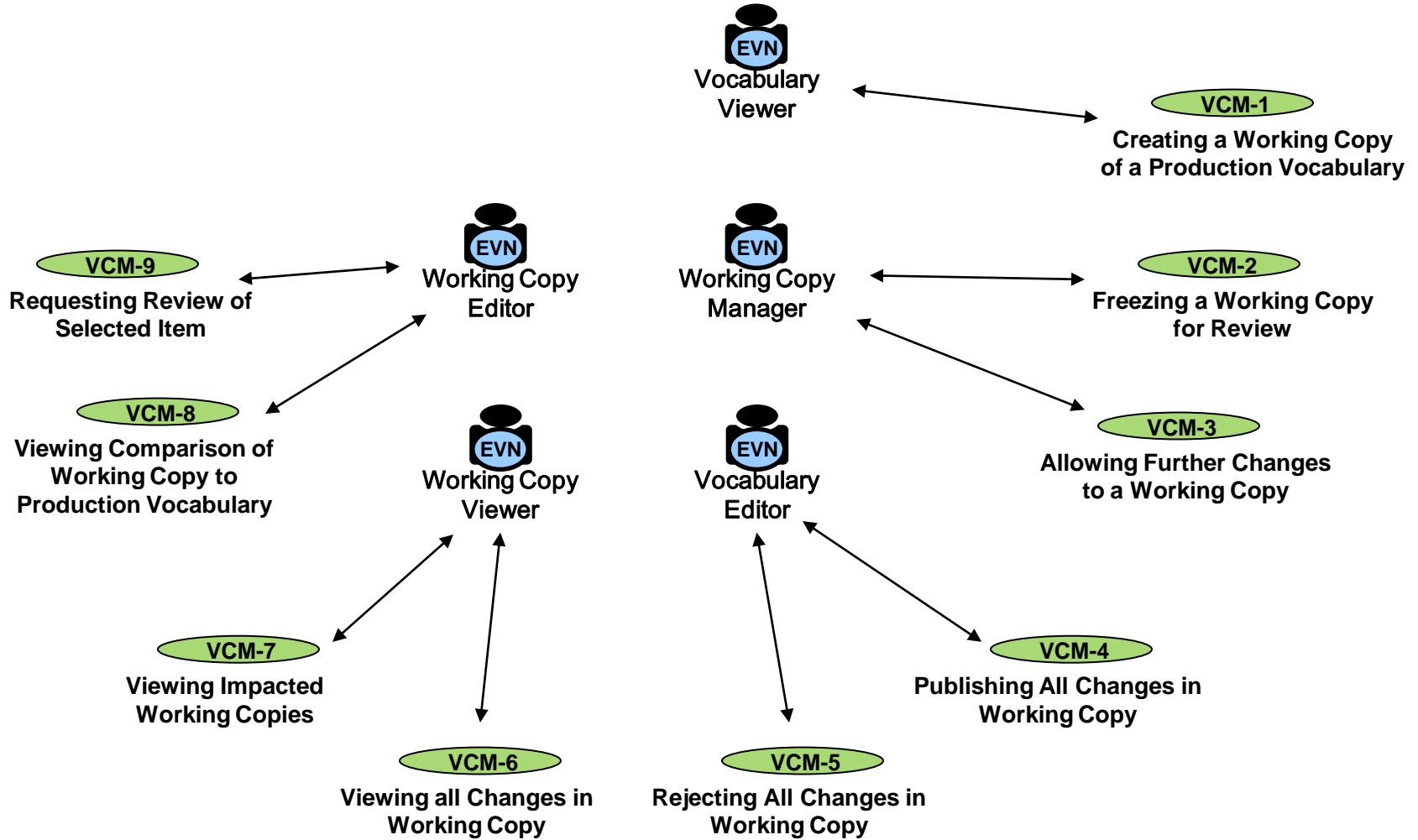
Browsing & Viewing (B&V) Use cases



Editing Vocabulary (EV) and Editing Working Copy (EWC) Use Cases

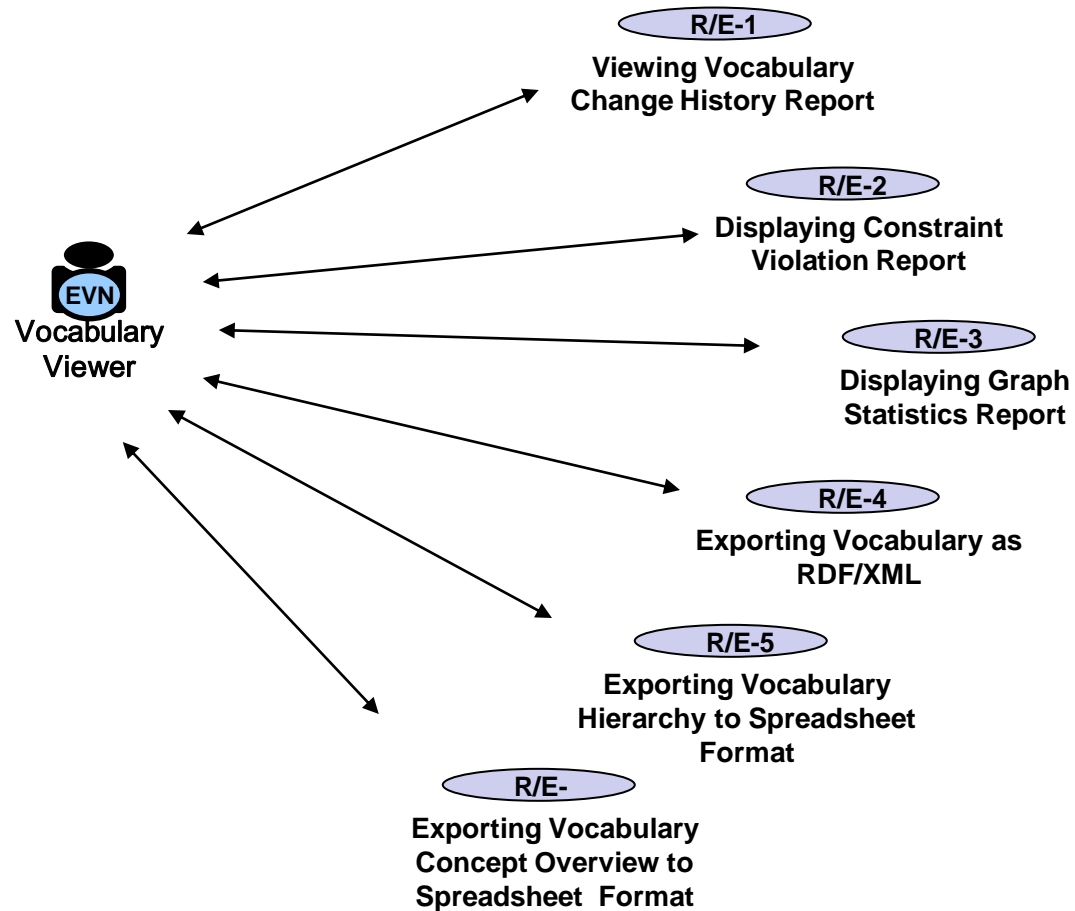


Vocabulary Change Management (VCM) Use Cases

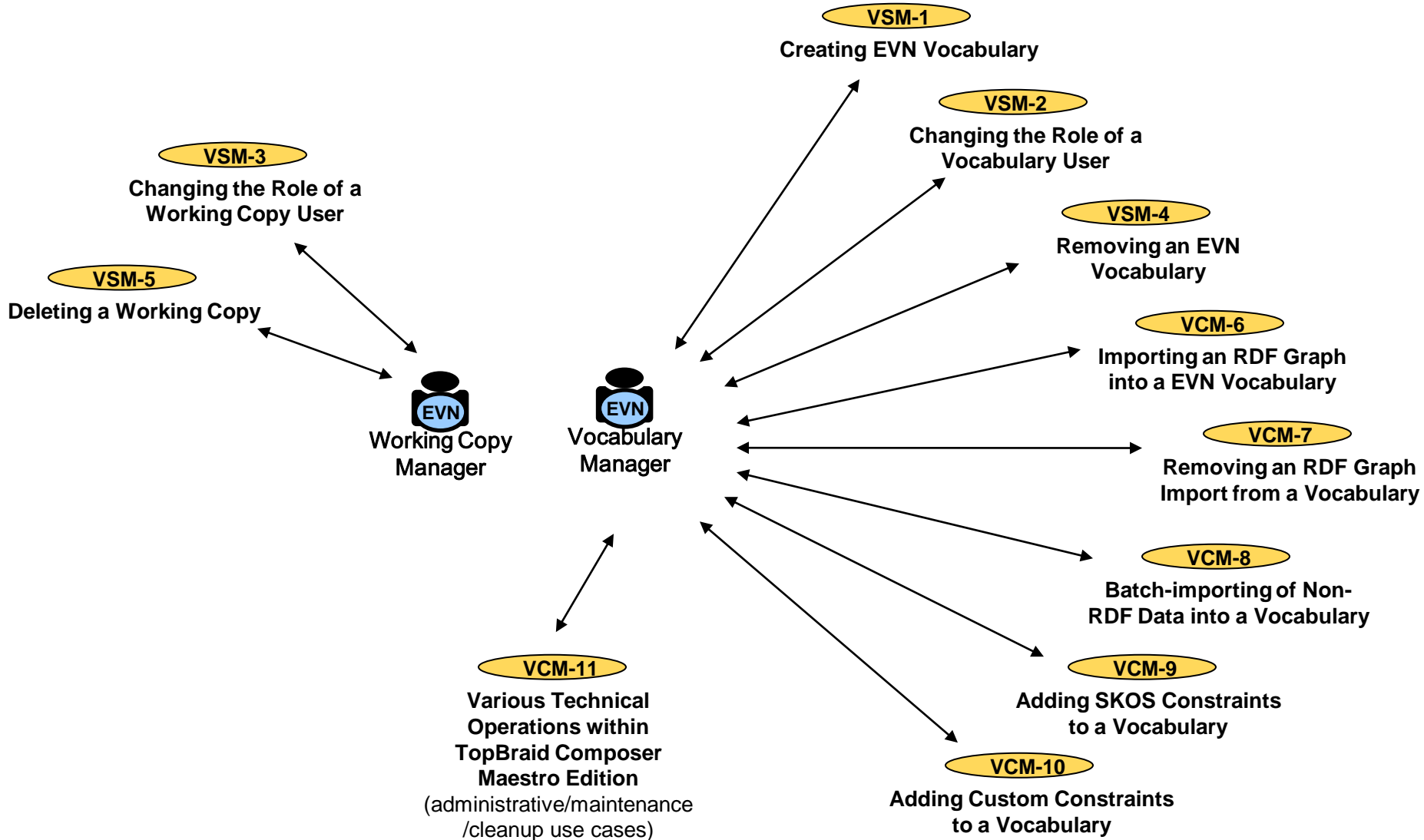




Reporting/Exporting (R/E) Use Cases

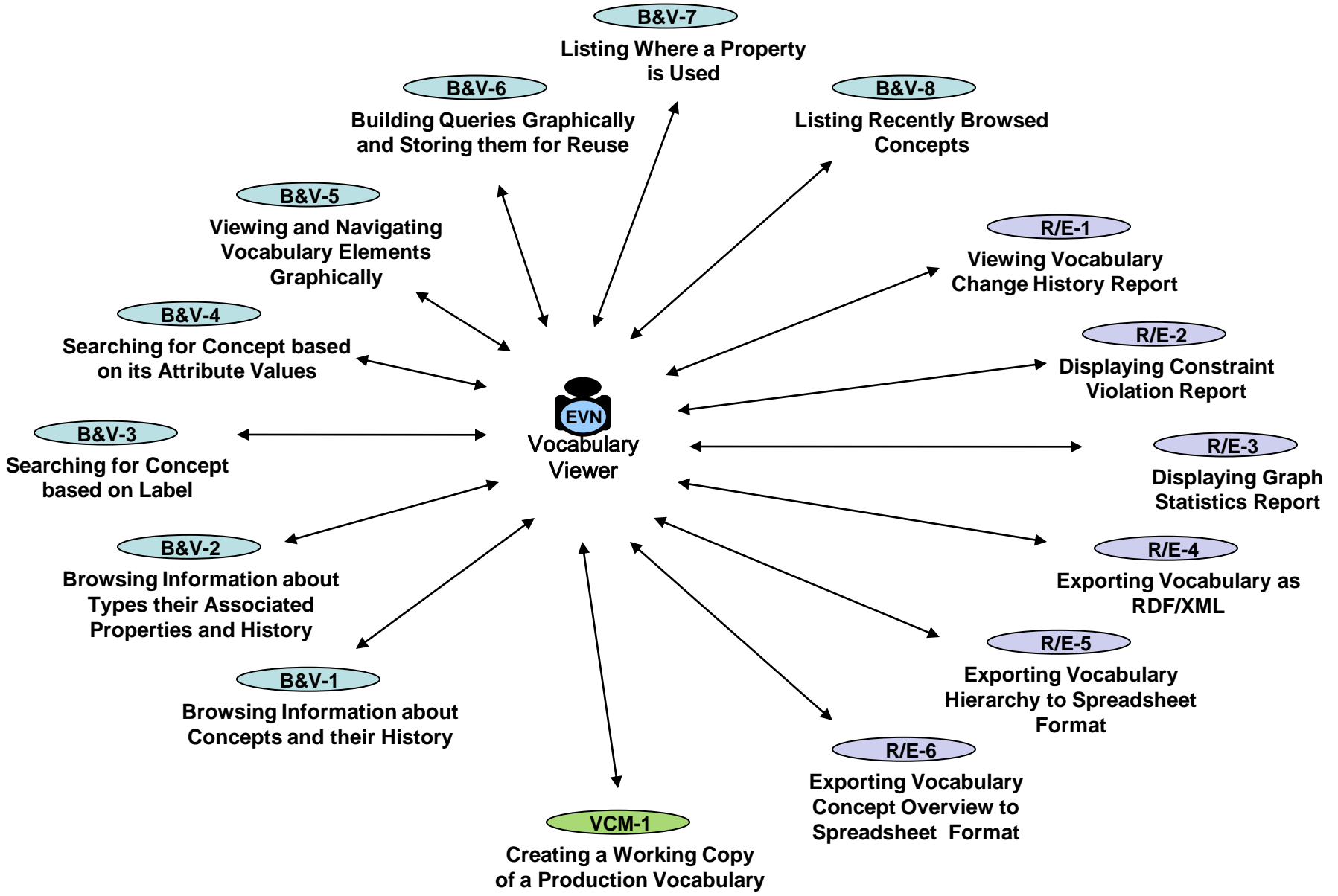


Vocabulary System Management (VSM) Use Cases



Use Case Listing by Each Role

Vocabulary Viewer Use cases

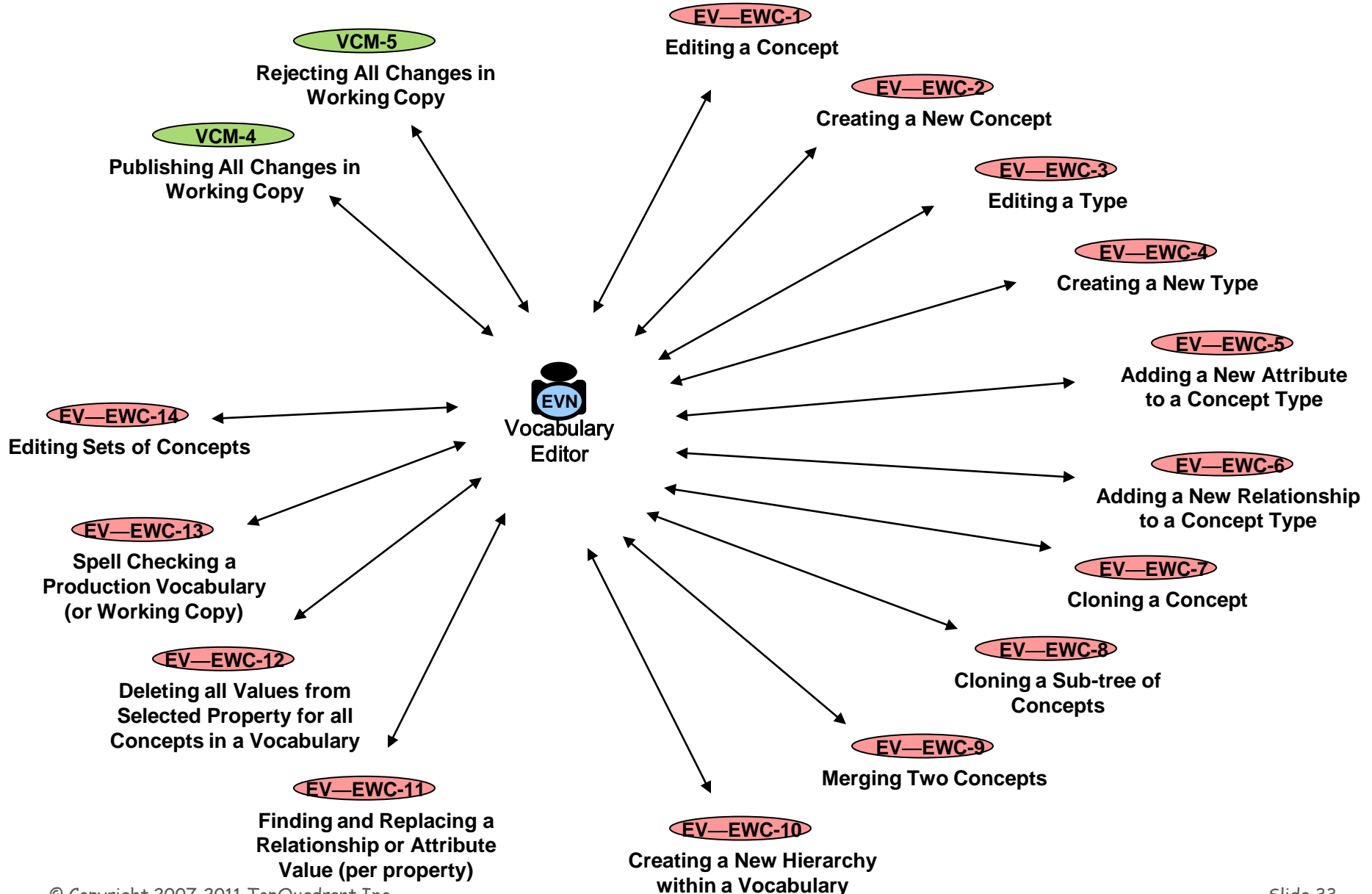




Vocabulary Editor

Use Cases

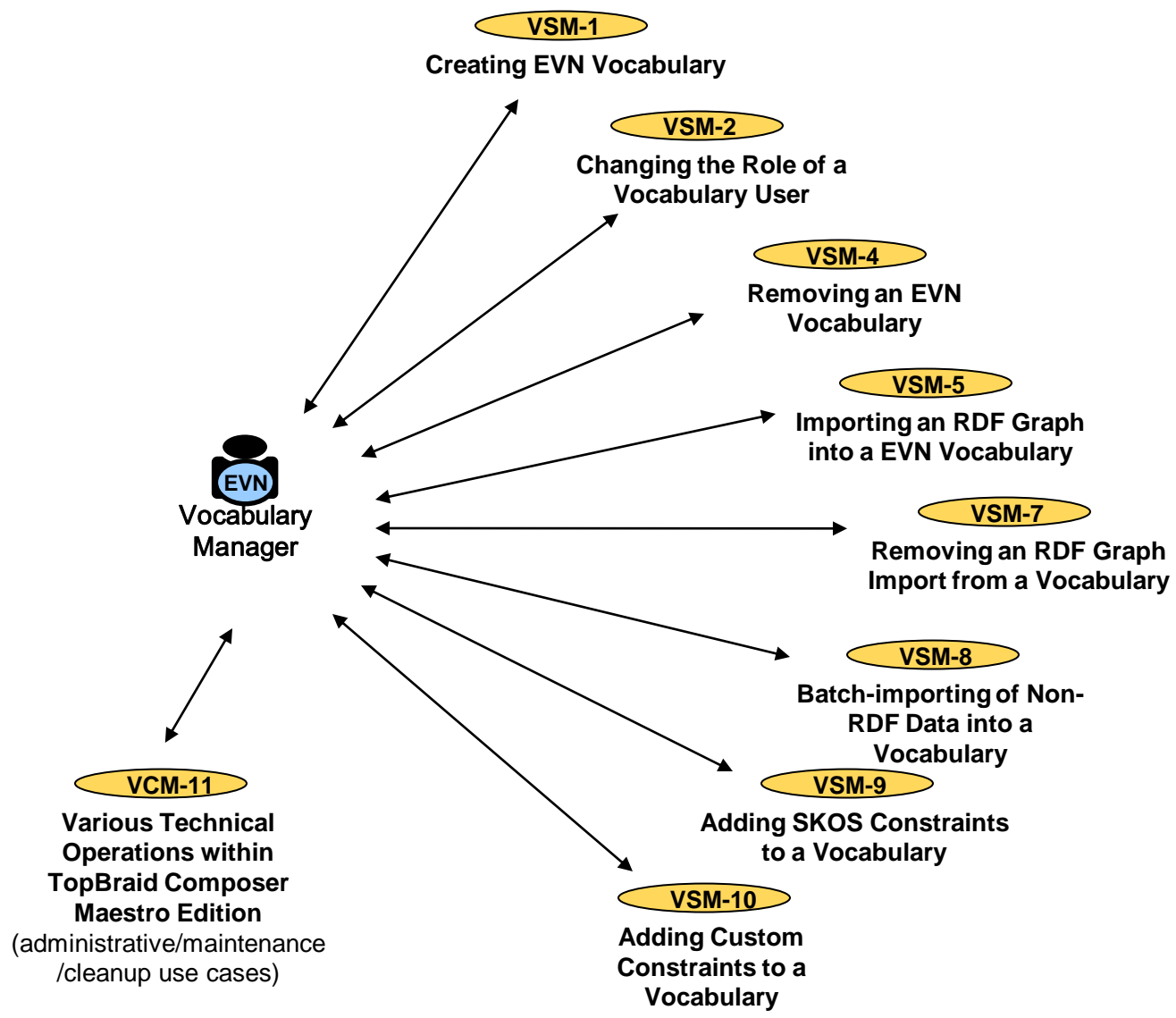
Vocabulary Editor can execute all of the use cases that **Vocabulary Viewer** can execute, plus the following use cases:



Vocabulary Manager

Use cases

Vocabulary Manager can execute all of the use cases that Vocabulary Editor and Vocabulary Viewer can execute, plus the following use cases:

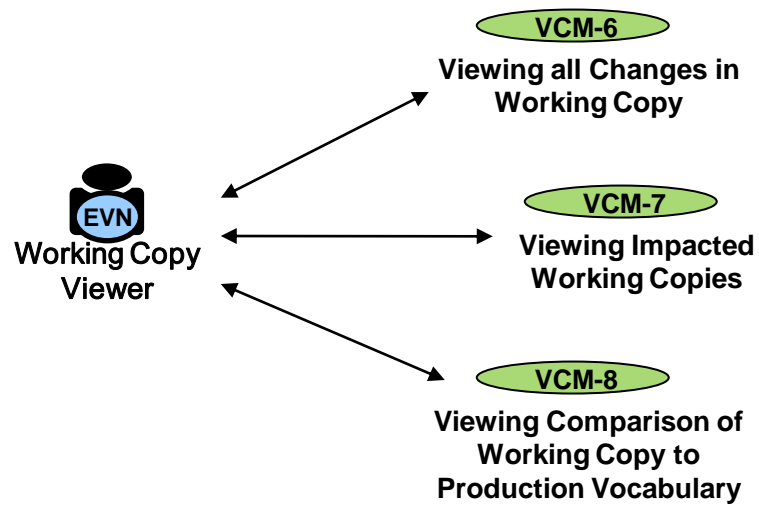




Working Copy Viewer

Use cases

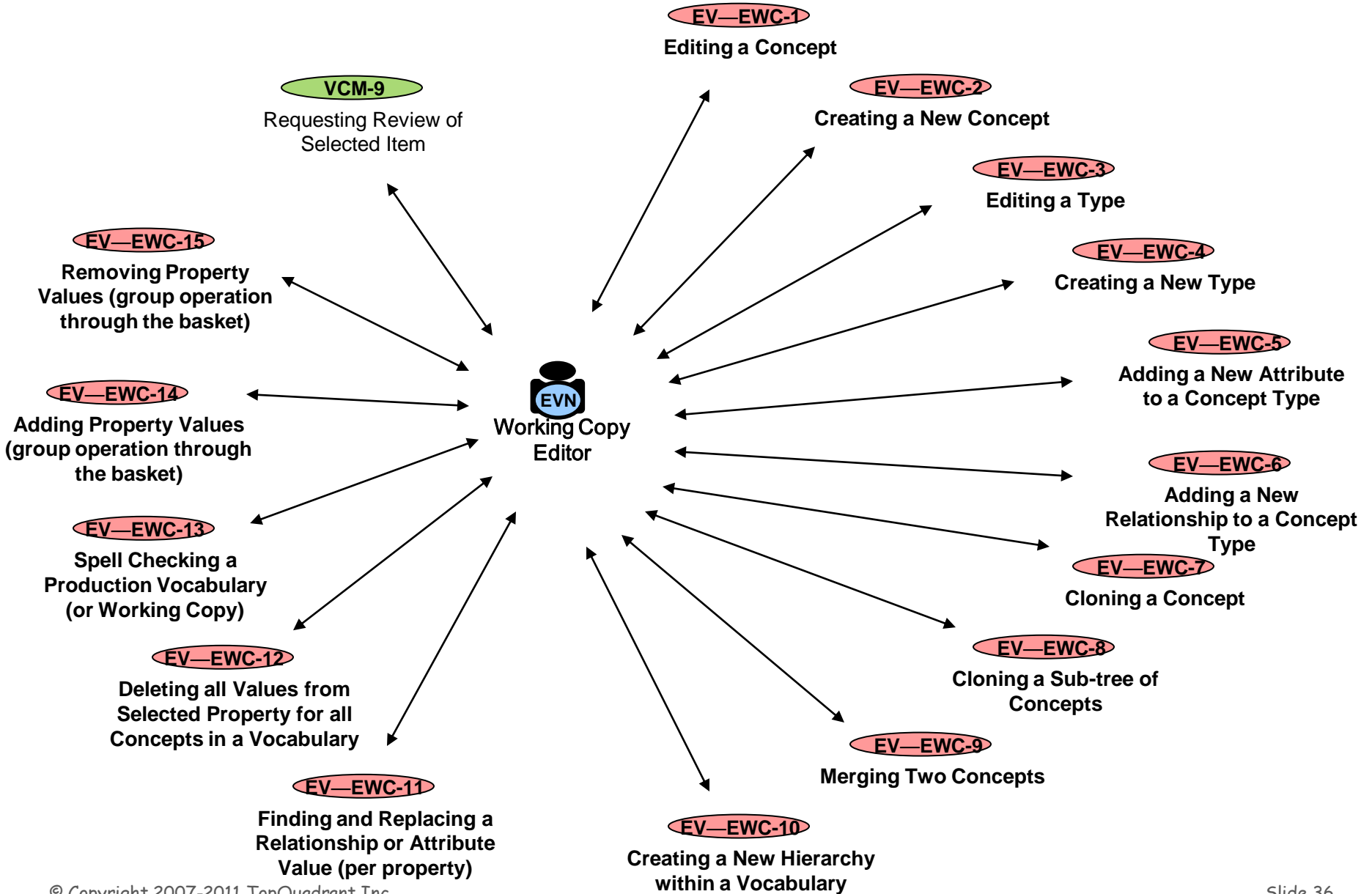
Working Copy Viewer can execute all of the use cases that **Vocabulary Viewer** can execute, plus the following use cases:



Working Copy Editor

Use cases

Working Copy Editor can execute all of the use cases that **Working Copy Viewer** can execute, plus the following use cases:





Working Copy Manager Use cases

Working Copy Manager can execute all of the use cases that **Working Copy Editor** and **Working Copy Viewer** can execute, plus the following use cases:

