VOCBENCH 2.0

A Collaborative Environment Web Application for the
Development of Large Scale Thesauri and Concept Schemes

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LOD2014 Linked Open Data: where are we?

Roma, 20th - 21st Feb 2014
Why was it built?

AGROVOC (big agriculture vocabulary developed by FAO)

- In 2004: >32 000 concepts in up to 22 languages
- A global group of terminologists.
- No tool to support their work
- No existing tool that met FAO’s needs
• Google Web Toolkit
• Lucene
• Protégé API
• OWLART API
• MySQL
• Custom OWL model
V1 Problems

- Couldn’t support other triple stores (Glued to Protégé API)
- Custom OWL model
- No support for emerging standards, e.g. SKOS
- No import
- No support for alignments
  - AGROVOC aligned to a dozen other vocabularies
- Complicated export
- No SPARQL endpoint
Objectives for VB2.0...

- A completely rebuilt backing framework for the service and data layers, based on an already existing open source project: Semantic Turkey\(^1\)
  - Based on OSGi Open Services Gateway
  - Open Connectivity to most notable RDF middleware and triple storing technologies (Sesame2, Jena, Allegrograph...)
  - Native support for SKOS and SKOSXL over RDF (no more conversions from internal legacy models), other than OWL

- VB1.0 User Interface remains mostly unchanged in the first release of VB2.0

\(^1\) [http://semanticturkey.uniroma2.it/](http://semanticturkey.uniroma2.it/)
Three layered extensible architecture

Presentation Layer
- GWT (Google Web Toolkit)
  Vocbench User Interface (*Mozilla apps in the original framework*)

Services Layer
- Enables communication between the client (Vocbench UI) and the ontology persistence layer.
- HTTP based Services accessed through the Ajax paradigm
- OSGi Extensible Servicing System

Persistence Layer
- Access to ontological knowledge.
- Based on dedicated ontology API, which can be implemented through use of different technologies.
...and here we are!!
Strange Cases from the Files of Astronomical Sociology

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Abstract:

What astronomer could not use his own observatory worth $5 billion in today’s market, to predict the next astronomical event? Who had one of his astrophysicists write on the anti-correlation between scientific output and marriage? How do people spend their honeymoons? Who wrote the most apocryphal story of the opening of King Tutankhamen’s tomb among his colleagues? What is the strangest abstract you have ever heard? Is there a well-known bad tempered astronomer whose first name is Ulia and who has been living in Sofia, Bulgaria, which all astrologers recognize as the place from which this person might embark on a sea voyage to London? In that case, the question of who he might be would be a little easier.”

WebLinks:

http://purl.org/astroonomy/uat

Web documents in topic:
Strange Cases from the Files of Astronomical Sociology
V2 Interested Partners

• VocBench is ready!!!

• Here is a list of interested partners adopting, or willing to adopt, VB2.0:
  – EU Documentation Office (EUROVOC)
  – Italian Senate (Teseo)
  – European Environment Agency (GEMET)
  – Harvard (UAT: Unified Astronomy Thesaurus)
  – Netherland Fire Brigade
  – INSEE, France
  – Arizona Geological Survey
  – EC Parliament Library
  – …and others more

• And people willing to collaborate on it
  – Temis
  – NetAge
  – Reto Bachmann-Gmür (Apache Community)
  – possible liaison with Ontotext (we have been invited by them to participate the next LDBC/TUC workshop and present VB as a success story of integrating real triple stores into end user RDF development systems)
...and a look further beyond!

Maize weevil

From Wikipedia, the free encyclopedia

The maize weevil (Sitophilus zeamais), known in the United States as the greater rice weevil, is a species of beetle in the family Curculionidae. The maize weevil can be found in numerous tropical areas around the world, and in the United States, and is a major pest of maize. The species attacks both standing crops and stored cereal products, including wheat, rice, sorghum, oats, barley, rye, buckwheat, peas, and cottonseed. The maize weevil also infests other types of stored, processed cereal products such as pasta, cassava, and various coarse, mixed grains. It has even been known to attack fruit while in storage, such as apples.

Select triples to Add

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<th>Subject</th>
<th>Predicate</th>
<th>Object</th>
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<td>barley</td>
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<tr>
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</tbody>
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ART (KE Unit) LOD Production Technology Asset

Semantic Turkey / VocBench*

OntoLing

ALE

Linguistic Watermark

Flagship KM&A Platform

Ontology Linguistic Enrichment Tool

CODA

Computer-aided Ontology Development Architecture

Semantic Turkey extensions for Knowledge Acquisition

Library and Ontologies for Accessing Heterogeneous Linguistic Resources

Wrappers for different LRs

Java Multi WordNet Library

Come talk to us at our poster to know more about all of this :-)

* Vocbench In collaboration with FAO