

Hackathon Project Proposal

Semantic Annotation of the Ontolog Community Environment

Ken Baclawski
Northeastern University

Background

- The Ontolog collaborative work environment (of which its wiki is an integral part) has always served as the community's dynamic knowledge repository.
- The migration of Ontolog Community wiki content (in particular, the entire body of knowledge from previous OntologySummit seasons) from the OntologWiki (purple wiki) to the new OntologPSMW (purple semantic mediawiki) is an ongoing effort with these goals:
 - Organization of the Ontolog Community wiki content in a way that encourages and facilitates access to and (re)use of the material
 - Use of the ICOM ontology to semantically annotate the Ontolog Community wiki content using a standard ontology
 - Use of these semantic annotations to provide and enable new functionality and views of the content

Proposal for a Hackathon

- Continuation of the successful “Content Hack” in 2013 but with a new theme and objectives
- The following are the specific objectives:
 - Development of code to extract calendar and related scheduling data from the Ontolog Community wiki pages and convert this data to ICOM-compatible annotations
 - Development of code, constructs, queries, user-interfaces, etc. that will present the semantically annotated Ontology Summit and Ontology Community content in interesting ways
 - Development of code and constructs for interoperation of the Ontolog Community wiki with calendar tools

Ontolog Community Environment

- Website platform is Purple Semantic MediaWiki
- The Ontolog Community website is being migrated to a semantically annotated wiki based on PSMW.
- So far the pages have been categorized, but other data has yet to be extracted.
 - Date, starting time, duration
 - Session chairs, speakers, participants
 - Links to slides, audio recording

Example of a Ontolog Wiki page

ConferenceCall 2014 02 20

[WikiHomePage](#) | [RecentChanges](#) | [Page Index](#)

Kenne

OntologySummit2014 session-06: Synthesis-I & Communique Discussion-I - Thu 2014-02-20 (45M6)

- Summit Theme: **OntologySummit2014: "Big Data and Semantic Web Meet Applied Ontology"** (45M7)
- Session Topic: **OntologySummit2014 Synthesis-I & Communique Outline Discussion** (46PC)
- Session Co-chairs: **Dr. LeoObrst** and **Dr. ToddSchneider** (46PD)

Program: (46PE)

- **Dr. LeoObrst**, Professor **MichaelGruninger** (*in absentia*) & **Dr. ToddSchneider** - "Opening, General Assessment & Fine-tuning of **OntologySummit2014** Direction & Approach" ... [slides](#) (46PF)
- **Ms. AndreaWesterinen**, **Dr. GaryBergCross**, **Mr. MikeBennett** - Track A: Common Reusable Semantic Content - Synthesis-I ... [slides](#) (46PG)
- **Dr. ChristophLange**, Professor **AlanRector** - Track B: Making use of Ontologies: Tools, Services, and Techniques - Synthesis-I ... [slides](#) (46PH)
- **Dr. MatthewWest**, Professor **PascalHitzler**, Professor **KrzysztofJanowicz** - Track C: Overcoming Ontology Engineering Bottlenecks - Synthesis-I ... [slides](#) (46PI)
- Professor **KenBaclawski**, Professor **AnneThessen** (*in absentia*) - Track D: Tackling the Variety Problem in Big Data - Synthesis-I ... [slides](#) (46PJ)
- The Track Syntheses is followed by an **Open Discussion** on what are the key take home messages, and positions we want to assume, as the Summit community (46PK)
- **Dr. LeoObrst** & Professor **MichaelGruninger** (*in absentia*) - Approach to the **OntologySummit2014** Communique and Proposed Draft Outline ... [slides](#) (46PL)
- The Draft Communique Outline presentation is followed by an **Open Discussion** towards finalizing the 2014 Communique Outline (46PM)

Example of a Ontolog Wiki page

The time and duration of the meeting appear much later on the page:

Conference Call Details (45M9)

- Date: **Thursday, 20-Feb-2014** (45MA)
- Start Time: 9:30am PST / 12:30pm EST / 6:30pm CET / 17:30 GMT/UTC (45MB)
 - ref: World Clock (45MC)
- Expected Call Duration: ~2.0 hours (45MD)

Even for a person, it takes a while to find this information on the page.

Ontology for Collaborative Work

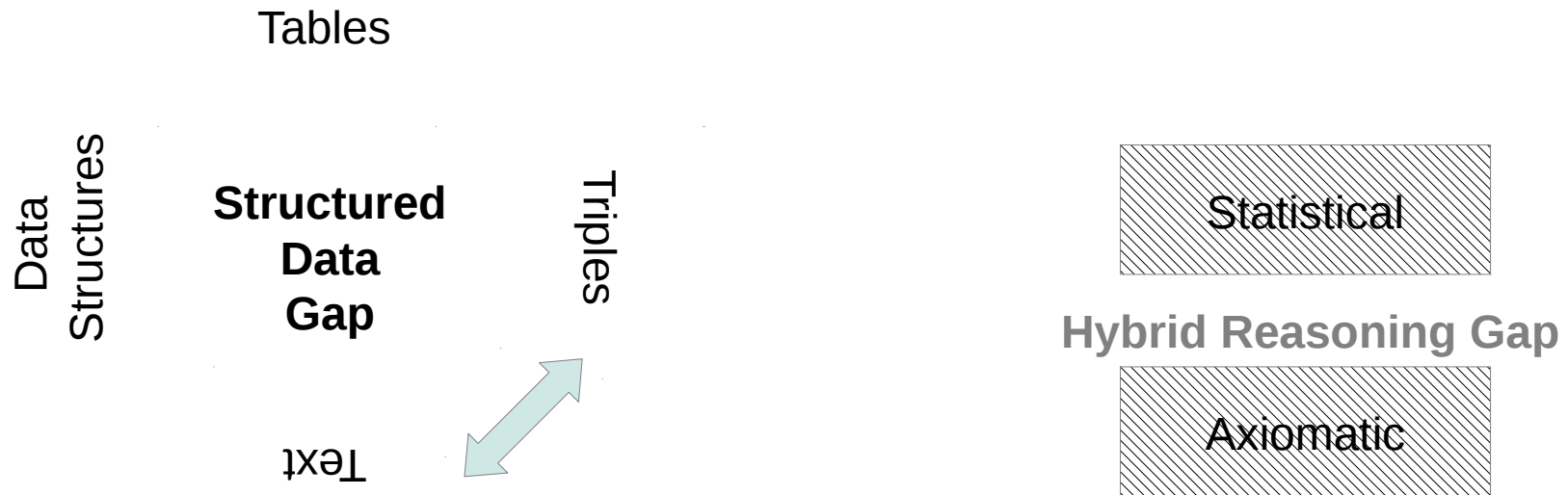
- The Integrated Collaboration Object Model (ICOM)
 - OASIS Committee Specification
 - Standardizes calendars, event scheduling, conference organization, and related collaboration objects
 - Formalizes workspaces, collaboration activities, messages, web conferences, forums, presence, tasks, social networks, etc.
- ICOM will be used as the ontology for the Ontolog Community environment
 - The mapping of ICOM to the wiki is an ongoing effort.

Purple Semantic MediaWiki

- MediaWiki is the technology of Wikipedia and related web sites.
- **Semantic Media Wiki** is a large EU project based in Karlsruhe.
- Purple numbers provide fine-grained access via the **PMWX** project developed by Northeastern University and CIM3.

Ontolog Content Migration

- Ontolog Collaborative Work Environment
 - Dynamic knowledge repository for the Ontolog community since its establishment 12 years ago
 - The Ontolog wiki is an integral and highly visible part of the Ontolog environment.
 - Includes the entire body of knowledge from previous Ontology Summits
 - Currently based on Purple Wiki
- Migration to PSMW will add many new features
 - Ongoing volunteer effort



This hackathon deals with the structured data gap (text versus triples) and the schema reusability gap (ICOM ontology).

