### **Ontology Summit 2013:**

Ontology Evaluation Across the Ontology Lifecycle

virtual session-06: Synthesis - I

#### Approach to "Hackathon" & "Clinics"

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(v 1.50)

## Background: something new ...

- the OntologySummit organizing committee had overwhelming consensus that we should not spend the symposium wordsmithing (the Communique)
- Instead, do something that extends from the insights we have gained through the summit sessions, discourse, and the development of the communique
- we also want to have summit participants collaborate intensively to create something 'real' and 'useful' (relevant to this OntologySummit and/or the "Ontology Evaluation" theme)
- something that can be demonstrated during the face-toface Symposium (May 2 & 3, 2013)
  - ... and possibly spin-off into meaningful projects that can be continued after this Ontology Summit is over

#### Three forms of collaborative activities

We have had numerous email exchanges, phone conversations in the background, and two open meetings[1], and this is what we've got to, so far ... Given enough participants, we will run three forms of collaborative activities

- "Hackathon" [2]
- "Ontology Evaluation Clinic" (abbrev. "Ontology Clinic")[3]
- "Ontology-based Application Evaluation Clinic" (abbrev. "Application Clinic")[3]
- [1] Fri 2013.01.25 & Tue 2013.02.05 see: http://ontolog.cim3.net/cgi-bin/wiki.pl?OntologySummit2013 Software Environments For Evaluating Ontologies CommunityInput
- [2] "Hackathon" ref.: http://en.wikipedia.org/wiki/Hackathon
- [3] "Clinic" ref.: http://www.merriam-webster.com/dictionary/clinic ... (applicable word sense 2 & 4)
  - 2: a group meeting devoted to the analysis and solution of concrete problems or to the acquiring of specific skills or knowledge <writing clinics> <golf clinics>
  - 4: a facility that offers professional services or consultation usually at discounted rates
     <a legal clinic>

## "Hackathon": what do we plan to do?

- we get small teams hopefully distributed and collaborating team, although a "team of one" is acceptable - to work intensely together
- over a weekend or two
- to create some new code, new API, or new ontology, that are relevant to this OntologySummit and/or this year's "Ontology Evaluation" theme
- which the teams will demonstrate at the Summit Symposium (in early May, 2013)

... we encourage the teams to continue the work beyond the Ontology Summit, and spin them off into meaningful and useful products and services.

## "Hackathon": candidate projects (players)

- develop/align OOR, Ontohub and OOPS! webservices/API, so that OOPS! capabilities can be used on ontologies that are hosted on the OOR or Ontohub ontology repository (MariaPovedaVillalon, MariCarmenSuarezFigueroa, KenBaclawski, TillMossakowski, OliverKutz, et al.)
- develop/integrate "gatekeeper" functionality and API into OOR workflow module to support verification, validation and other policies (KenBaclawski, MaximoGurmendex, et al.)
- develop an ontology-driven OntologySummit2013 "website" on OntologPSMW (MarcelaVegetti, KenBaclawski, AliHashemi, PeterYim et al.)
- develop tools (psmw templates) to slice-and-dice the collected OntologySoftware-Capabilities inventory data (KenBaclawski, MichaelDenny, SimonSpero, AmandaVizedom et al.)
- implementing the "General Ontology Evaluation Framework (GEOF)" as SADI compiant web services (JoanneLuciano et al.)
- developing an app that will deliver Ontology Summit content to mobile devices (YuriyMilov)
- developing "ontology evaluation" enhancements on the .15926 editor (VictorAgroskin, AnatolyLevenchuk et al.)
  - developing of extensions (plug-ins) to support different ontology verification checks and evaluation quality metrics measurement
  - providing support of new actual verification checks and quality metrics measurement for already developed ontologies with exploratory programming (our software support this style of programming) and brainstorming about new types of checks and metrics study of ways to integrate verification checks and evaluation metrics into our
  - study of ways to integrate verification checks and evaluation metrics into our development methodology as a special focus during execution of a sample ontology development full life cycle

## "Ontology Clinic": what do we plan to do?

with the "ontology clinic," we send ...

- (a) ontologies to be evaluated through the "evaluation tool," study the results, diagnose problems with the ontology, and see how the ontology may be improved, and
- (b) gold standard ontology through the "evaluation tool," study the results, diagnose problems with the "tool," and see how the "tool" (the ontology too, possibly) may be improved

## "Ontology Clinic": candidate projects (players)

- evaluate some FIBO ontology (MikeBennett et al.)
- evaluate some eGov ontologies, like those at: (JeanneHolm et al.)
  - http://oegov.org/
  - http://www.w3.org/TR/vocab-org/
  - http://lov.okfn.org/dataset/lov/details/vocabulary\_cgov.html
- sending BFO, DOLCE, PSL, SUMO and/or CYC through Ontology Evaluation tools (like OOPS!, OQuaRE, etc.)
- develop, evaluate and refine an ontology of "ontology evaluation" based on what has transpired in Ontology Summit 2013 (MichaelDenny, KenBaclawski, et al.)

## "Application Clinic": what do we plan to do?

with the "application clinic" we ...

- assemble a small team of ontologists and ontologyevaluation-tool developers, to work with a user community team (of subject matter experts and application developers) that has a real ontology-driven application that needs to be designed, implemented and deployed
- the clinic exercise helps the users evaluate whether ontologies the users already had in mind are fit for the intended purpose
- and whether the quality of those ontologies are satisfactory

... and provide appropriate recommendations

## "Application Clinic": candidate projects (players)

- Finance Industry Applications EDMCouncil (MikeBennett)
- Earth Science Applications ESIP (PeterFox/RPI),
   EarthCube (?), SOCoP (?)
- Manufacturing / Process Industry Applications (DavidLeal)
- Biomedical Applications (?)

#### Call for Project Proposals & Sponsored Challenges

What you will need to do ...

- come up with meaningful project(s)
- find your collaborating partner(s), and form a team
- determine what needs to go into the proposal
- submission the proposal before the deadline
- tweak and align proposals and team
- provide help & support (among all of us)

#### What needs to go into a "Project Proposal" ...

the proposal needs to be succinct (1 page, at most 2 will do) and should include ...

- a Title of proposed project
- an Abstract describing the project work
- Collaborators involved ... name of persons, affiliations, each of their roles in project, their tasks, etc.
- Objectives / Goals ... especially as they relate to the Summit and the "Ontology Evaluation" theme
- expected **Deliverable**(s)
- Remarks ... say whatever you like, anything pertinent
- Resource / References

#### This is how we plan to execute ...

- carefully plan and stage prior to the hackathon-clinics weekend(s)
- we will decide to either have 1 or 2 events,
   also decide whether they will be 1 day or 2 days each
- create a augmented distributed (virtual) work environment to support the intensive collaboration when work is in session (voice, chat, wiki, cloud storage, screen-capture/exchange, etc. support available continuously during session time)
- time for preparation of presentation/demo after hackathonclinics weekend and before F2F Symposium
- Presentation / Demo at OntologySummit2013 Symposium
- Award ceremony(?)

#### Planned Timeline ...

- Announcement of the call for proposals: Thu 2013.02.21 (today)
- Deadline for proposal submission: Thu 2013.03.08 (3 weeks to prepare proposal)
- Alignment of projects and teams: 2013.03.09~03.19 (10 days to tweak proposals/projects)
- Announcement of selected projects: Thu 2013.03.21
- Hackathon-Clinics project plan debut: session-11 Thu 2013.03.28
- Staging of projects: Fri 2013.03.22 to hackathon-clincis weekend (see below; 1 week+)
- Hackathon-Clinics Weekends:
  - Candidate-1: Fri-Sat 2013.03.30~31
  - Candidate-2: Fri-Sat 2013.04.06~07
  - Candidate-3: Fri-Sat 2013.04.13~14
- preparation of writeup/presentation/demo 2013.04.15~29 (2 weeks+)
- writeup/presentation/demo material due 2013.04.30 (2 days before event)
- Presentation/Demo: Thu 2013.05.02 (Symposium Day-1)
- (?)Award Ceremony: Fri 2013.05.03 (Symposium Day-2)

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- ... et al.

# Questions?

... discussion