Attendees

- Pieter Pauwels [Ghent University]
- Sandra Gannon [IBM]
- Kris McGlinn [ADATP-TCD]
- Maxime Lefrançois (Univ. Lyon)
- Walter Terkaj (ITIA-CNR)
- Georg Ferdinand Schneider (Fraunhofer IBP)
- Saeed Karshenas
- Seppo Törmä [Aalto University / VisuaLynk]
- Pouya Zangeneh [University of Toronto]
- Ana Roxin (Univ. Burgundy)

Date and time

- 23/03/2017
- 17:00 CET

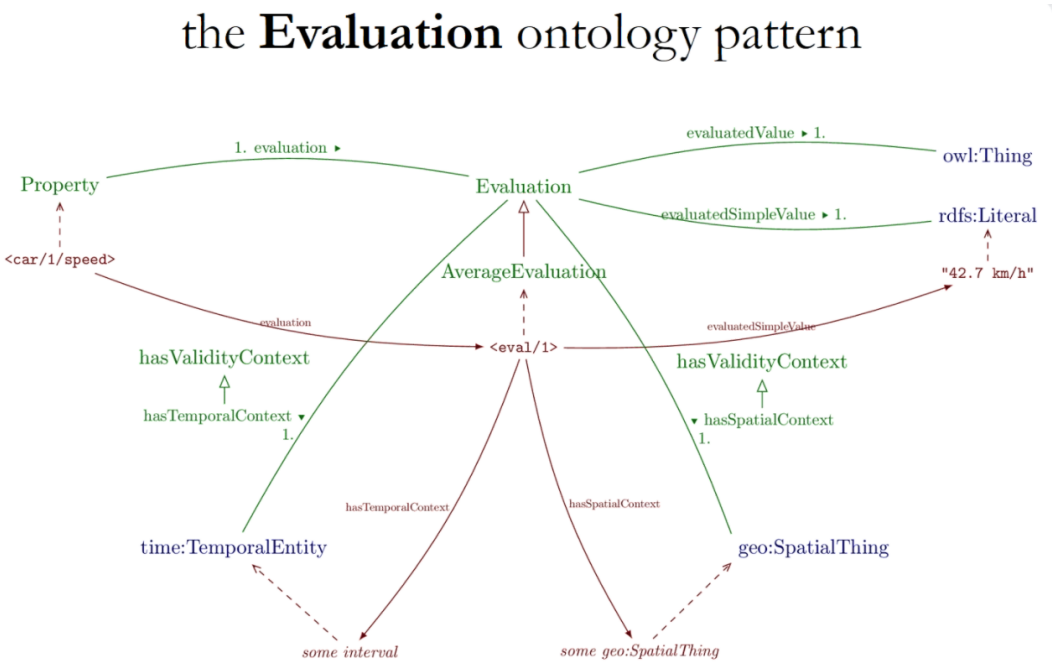
Agenda

1. short introductions and state of affairs (5min. - Pieter)
2. presentation of SEAS ontology (20mins - Maxime)
3. ontology alignment approaches (20mins - Ana)
4. open slot (15 min)

Minutes

5. short introductions and state of affairs (5min. - Pieter)
    - New members introduce themselves, and their interest in the group (Pouya Zangeneh - University of Toronto)
6. presentation of SEAS ontology (20mins - Maxime, link to the slides: www.maxime-lefrancois.info/docs/Lefrancois-201703-SEAS-for-LBDW.pptx)
    - SEAS - ITEA Project outcome (achieved ITA award)
    - http://ci.emse.fr/seas/
    - Presentation focus - knowledge model

        - Large range of domains (demand response, contracting, energy generation/load/storage/etc., see slides for more
    - Partners wanted to use semantic web, but were unaware of OWL and RDF. Mostly using JSON
    - Ontologies like SAREF were not yet available when project started
    - Existing ontologies did not cover the entire targeted domain
    - Needed a simple core that
        - Covers most of partner's needs across all domains
        - Makes use of ‘ontology patterns’
        - Is easily extensible towards new domains (HVAC, automation, SSN, …)
    - Extensions to the core
        - Mads is developing extension for HVAC
        - Extends SSN (and future version, SSN - Sensors, Observations, Sample, Actuators - SOSA), may result in naming of terms change)
    - The core consists of ontology patterns
        - E.g. each property is defines as a subproperty of :hasProperty
        - :Car :hasSpeed 1. => :hasSpeed is subproperty of :hasProperty
        - Link observation to seas:FeatureOfInterest
        - How to account for changes in the value of Speed (in the example of Car)
        - So it is a sort of metalanguage on top of the actual ontologies. Example:



- Also provides models of Systems
  - Qualify systems (building, room, appliance, set of appliances, a business partner)
  - Qualify connection points (wall, window, ceiling, plug socket, offer, demand)
  - Qualify connection flows (Electric, water, coms data)
- Pieter: Sounds like an upper level ontology, so what is the added value
- Maxime: targeting engineers to develop, most existing upper level ontologies (e.g. DOLCE) are designed by philosophers
- Available @ https://w3id.org/seas/ - published according to best practices on the web
- Important: the single URI refers to a number of SEAS ontologies. In our LBD Community Group, we are currently combining a number of namespaces, with each namespace standing for a specific ontology.
- Maxime: How to get experts to contribute to SEAS?
  - automatic pattern instantiation techniques

        - https://github.com/thesmartenergy/seas
    - 2nd SEAS Workshop: Data Interoperability during the Building Life-cycle, 4-5th of May @ Engie, Paris, France (Free and open) http://data.the-smart-energy.com/workshop/2017/05/
    - Walter: What is the relationship between the evaluation module and SSN?
    - Maxime: Evaluation module is out of scope for SSN. The process of assigning observationResult to an observation is outside SSN?
    - Walter: What is the need for ssn:Sensor Output?
    - Maxime: Now there is a property hasResult, or hasSimpleResult which links from an observation to a literally directly
    - Walter: When will this be published?
    - Maxime: End of June
    - Pouya: Are you in line with the experts in the SEAS projects for working knowledge from the different groups.
    - Maxime: These partners were very busy working on their own algorithms, and were not always available
7. ontology alignment approaches (20mins - Ana)
    - Presents the structure for the alignments
    - Several main questions regarding alignment
        - https://docs.google.com/document/d/1wSxpE5O6jntcIuhey7Uv0o0ZAU1Dz-ZSICuuxbwGvCA/edit?ts=58c7c79a#
    - Pieter: The main idea was to have sub-groups develop modules, and link, each module representing certain parts of the data relevant to building
    - Now maybe need to reproduce some data, e.g. ‘Building’
    - The approach taken in the Building Control report is quite good ; Ana: we would like to recommend it: https://docs.google.com/document/d/1wPdWzVW8_NPCu1k77l1AcbGpIjqyzuwqQSyuMZ_eJDw/edit#

For each of the groups defined:

- **Building Topology**
  - Mads Holten Rasmussen, Pieter Pauwels, Walter Terkaj, Hendro Wicaksono
- **Geometry**
  - Kris McGlinn, María Poveda Villalón
- **Automation and Control – devices, control logic etc.**
  - Georg Schneider, Zohreh Pourzolfaghar, María Poveda Villalón, Walter Terkaj
- **Energy Efficiency**
  - Kris McGlinn, Laura Daniele, Matthias Weise, Vladimir Vukovic, Michel Böhms, Odilo Schoch, Hendro Wicaksono
- **Project management**
  - Odilo Schoch, Saeed Karshenas
- **Heating, Ventilation, and Air-Conditioning (HVAC)**
  - Mads Holten Rasmussen, Vladimir Vukovic
- **Products**

1. First step: Choose existing ontologies that need to be compared. Make an exhaustive list of all available vocabularies/ontologies in the considered domain - similar as the "Revision of and relation to existing Ontologies" section in the BACS doc

   http://smartcity.linkeddata.es

   http://lov.okfn.org/dataset/lov/
2. Second step: Extract modelling requirements from them, in terms of competency questions: what questions should I be able to answer if the ontology I use is adapted?
3. Third step: Pick a use case adapted for the considered domain, and model it with the ontologies choosen before - As in "Scenario modeling with and ifcOWL-based ontology" in the BACS doc https://docs.google.com/document/d/1wPdWzVW8_NPCu1k77l1AcbGpIjqyzuwqQSyuMZ_eJDw/edit#heading=h.q3ek0y1gzxg7

8. open slot (15 min): discussing SEAS workshop, LDAC workshop, and other events one may physically meet

Action items

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Previous action items

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Previous minutes

Next Call

- 04/04/2017 11:00 CET @ gotomeeting