Attendees:

- Georg Ferdinand Schneider (Individual CLA but affiliated with Schaeffler)
- María Poveda-Villalón (Ontology Engineering Group - Universidad Politécnica de Madrid)
- Mads Holten Rasmussen (Niras)
- Michel Böhms (TNO)
- Maxime Lefrançois (MINES Saint-Étienne)
- Ana Roxin (UBFC)
- Erik Wallin (RealEstateCore, Idun Real Estate Solutions AB)
- Jan Voskuil ()
- Bart van Leeuwen ()
- Joel Bender (Cornell University)
- David Bucher (Chair of Innovative and Industrial Construction - ETH Zurich)
- Odilo Schoch (ETH Zürich)
- Claudio Mirarchi (Postdoc researcher at Politecnico di Milano)
- Katja Breitenfelder (Fraunhofer IBP/ researcher TU Munich)

Date and time

- 24/03/2020
- 16:00 CET/ 17:30 CET

Agenda (tentative)

1. Introduction
2. Organisational:
    - Reorganisation of group chairs
    - Proposal for next meetings:
        - <mark>Apr 07th 2020 4:00pm - 5:30pm@CEST</mark>
        - Apr 23th 2020 4:00pm - 5:30pm@CEST

3. Michel: Update on CEN TC442/WG4/TG3 NWI "SMLS" Property Modelling pattern
    - Maxime : (slide 6) use owl:DatatypePropery for modelling enumerations ?
        - OWLFull because the usage of xsd:decimal and rdf:value
            - Joel Bender - "rdf:value has no meaning on its own … Despite the lack of formal specification of the meaning of this property, there is value in defining it to encourage the use of a common idiom in examples of this kind. "
            - Maxime : this only pertains to RDFS
        - How to determine the language level of an ontology - https://github.com/stain/profilechecker
        - From [https://www.w3.org/TR/owl2-syntax/] IRIs from the reserved vocabulary other than owl:topObjectProperty and owl:bottomObjectProperty must not be used to identify object properties in an OWL 2 DL ontology. IRIs

from the reserved vocabulary other than owl:topObjectProperty and owl:bottomObjectProperty must not be used to identify object properties in an OWL 2 DL ontology.

- From [https://www.w3.org/TR/owl2-syntax/]IRIs from the reserved vocabulary other than owl:topDataProperty and owl:bottomDataProperty must not be used to identify data properties in an OWL 2 DL ontology. IRIs from the reserved vocabulary other than owl:topDataProperty and owl:bottomDataProperty must not be used to identify data properties in an OWL 2 DL ontology.

Please try to validate the following document with the profile checker:
> java -jar profilechecker.jar test.ttl OWL2_DL # where test.ttl contains:
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>.
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#>.
@prefix owl: <http://www.w3.org/2002/07/owl#>.
@prefix ex: <http://example.org/>.
<http://example.org/> a owl:Ontology .
rdf:value a owl:ObjectProperty .
ex:Boy rdf:value "12" .

- Maria : (slide 7) ex:height is a property, then it becomes an instance -> OWL Full
- Maria : (slide 7) quantityTypeLength - is it a class or an instance ? consider using owl:allValuesfrom ?
- Maxime : the simpler the design the better - could one consider a simpler ontology shrinking to only 3% of the envisioned test cases but that 95% of the people could understand / the level of complexity associated with the work presented here could discourage even Semantic Web experts
  - Michel : always a balancing btw how simple one can make it and how simple it should be
- Maxime : verify that the proposal works on specific examples
  - Michel : we have some examples in CEN (cobuilder ?)

4. Update on action items of meeting 12/03/2020
   - [Georg Schneider] Check communication options (IRC, Github MD)

   - 4. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/52 Redirect issue from to bot.ttl should be resolved

   - 5. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/48 BOT in the LOV (Linked Open Vocabulary) repository should be updated from v0.2.0 to newest version

   - 6. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/43 and https://github.com/w3c-lbd-cg/bot/issues/41 Align BOT to journal paper (v0.3.0)

   - 7. [Mads ?] Issue https://github.com/w3c-lbd-cg/bot/issues/39

Loading problems using Protégé: should be solved by now if issue
https://github.com/w3c-lbd-cg/bot/issues/52 is resolved
https://github.com/protegeproject/protege/issues/890

Minutes

2. Organisational:
   ○ Reorganisation of group chairs
   ○ Proposal for next meetings:
      i. Apr 07th 2020 4:00pm - 5:30pm@CEST
      ii. Apr 23th 2020 4:00pm - 5:30pm@CEST

3. Michel: Update on CEN TG3 property modelling [SLIDES PDF, SLIDES PPT, SMLS Turtle Code]
   ○ Additional presentation on property modelling
   ○ Conceptual Meta Model defined

CEN SMLS
› Various Topics
   › Conceptual Meta Model (CMM)
      › Language-bindings to RDF + (SKOS, RDFS+OWL & RDFS+SHACL)
         › OPM Level 1-based by default
      › Identification/naming/annotation conventions
      › Enumeration Datatypes (as classes)
      › Decomposition
      › Quantity kinds & Units > QUDT version 2.1
      › **Quantities** OPM Level 2/3 based (via relations having range smls:QuantityValue)
      › Grouping (RDFS-based)
   › Conceptual Modelling (CM) Patterns
      › Top Level taxonomy
   › Linking approaches for data and ontology level

Slide by (c) Michel Böhms
- Define level of capabilities with different expressivity (Slide 4)
- Take different inputs and come up with SMLS proposal
   - Attribute -> owl:AnnotationProperty
   - Quality (non-enum) -> owl:DatatypeProperty
   - Quality (enum) -> owl:ObjectProperty with rdfs:range
   - Quantity -> owl:ObjectProperty with rdfs:range smls:QuantityValue
- Q Maxime: Some of the statements (owl:onProperty rdf:value) lead to OWL Full. You can check your ontology with this tool to ensure its in a decidable fragment of OWL:
https://github.com/stain/profilechecker
   ● The reserved vocabulary of OWL/ RDFS … must not be used

see https://www.w3.org/TR/owl2-syntax/

Comment Maxime: IRIs with prefixes rdf:, rdfs:, xsd:, and owl: constitute the reserved vocabulary of OWL 2. As described in the following sections, the IRIs from the reserved vocabulary that are listed in Table 3 have special treatment in OWL 2.

- Q Georg/ Max: SAREF development framework might be available in future, which supports to avoid this kind of issues
- Comment Joel: rdf:value has no meaning on its own … Despite the lack of formal specification of the meaning of this property, there is value in defining it to encourage the use of a common idiom in examples of this kind.
- Answer Maxime to Joel: that's only true in RDF/S
- Maria : Comment to slide 7. Being in OWL Full is not a question of consistency but whether your ontology is decidable. In other words it is not guaranteed that a reasoner will finish in finite time.
- Q Georg: Is there a web repository where the ontology files are open for public review?
- A Michel: There is not a public one but it can be shared in the group
- Q Max: How is the development team organised; is there a revision process by semantic web experts?
- A Michel: Review planned in May 2020; following CEN working group process
- Q Maria: Which working group is it?
- A Michel: CEN TC442/WG4/TG3

- Issues:
    - How to connect to effort on Product data modelling?
    - How to even reuse more QUDT ontology
    - How to cover more complex properties
- Relationship with IFD proposed
    - **BuildingSMART Data Dictionary (bSDD, earlier IFD)**
- Michel can hand out ontology files and tools -> figure out with Georg
- Q Max: How do you handle the difficulty that complex technologies are slowly adopted by practitioners
- Michel: We plan examples based on use case to explain the approach
- Q Georg: The current approach IP is owned by CEN?
- A Michel: Yes

4. Update on action items of meeting 12/03/2020
    ○ [Georg Schneider] Check communication options (IRC, Github MD)
        i. → Need to follow up until next meeting

    ○ 4. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/52 Redirect issue from to bot.ttl should be resolved
        i. Works in browser
        ii. Still problems with some versions of protege
        iii. Works with Accept text/turtle at http://w3id.org/bot

- - - iv. https://github.com/protegeproject/protege/issues/890
      - v. CLOSED

  - ○ 5. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/48 BOT in the LOV (Linked Open Vocabulary) repository should be updated from v0.2.0 to newest version
  - ○ -> Can be done by Maria as soon as fixes are made to bot
  - ○ On hold

  - ○ 6. [Maxime] Issue https://github.com/w3c-lbd-cg/bot/issues/43
      - i. Closed

  - ○ and https://github.com/w3c-lbd-cg/bot/issues/41 Align BOT to journal paper (v0.3.0)
      - i. Closed [DONE]
      - ii. Notify changes in mailing list
      - iii. Instead revision indicate in comments potential other ontologies

  - ○ 7. [Mads ?] Issue https://github.com/w3c-lbd-cg/bot/issues/39
    Loading problems using Protégé: should be solved by now if issue https://github.com/w3c-lbd-cg/bot/issues/52 is resolved
        -> Seem to work from browser
        -> Problem when accessing through protege 4.3.0. OK for version 5.5
    - > Problem known to protégé →
    https://github.com/protegeproject/protege/issues/890

Resolutions:
- - ○ Closed https://github.com/w3c-lbd-cg/bot/issues/52
  - ○ Closed https://github.com/w3c-lbd-cg/bot/issues/43
  - ○ Closed https://github.com/w3c-lbd-cg/bot/issues/41
  - ○ Closed https://github.com/w3c-lbd-cg/bot/issues/39

ACTIONS:

-> Georg update comments of "hasZeroPoint"
-> Maxime to update to v0.3.2 after #41 and #43 are closed

-> Apr 23th 2020 Call on RealEstateCore

Next Call

- Apr 7th 2020 4:00pm - 5:30 pm CET

We are interested in getting suggestions from the community about potential agenda items for the following calls. Please send your suggestions to public-lbd@w3.org, whether you have a short presentation to bootstrap the discussion, and an approximate duration you think the discussion will last.

Previous minutes

https://docs.google.com/document/d/1L1yZkhpSw5c_8rH_NZh4_mI8qomftDJDoRjN4Hr4RQQ/edit#