Attendees

- Kris McGlinn (TCD)
- Sandra Gannon (IBM)
- Georg Schneider (Fraunhofer IBP)
- Hendro Wicaksono (KIT)
- Maxime Lefrancois
- Walter Terkaj (ITIA-CNR)
- Seppo Torma
- Mads Holten Rasmussen
- Maria Poveda (UPM)
- Ana Roxin
- Markus Helfert (DCU)
- Matthew Waychoff
- Maria Poveda
- Saeed Karshenas
- Jakob Beetz

Date and time

- 16/02/2017
- 17:00 CET

Agenda

1. Update on use case development (5 minutes - Sandra):
   who has provided use cases, who is developing applications, etc.
2. Presentation of use cases for domains (30 minutes - 15 mins Energy Efficiency (Hendro Wicaksono), compliance checking (Ana Roxin), Others - open)
   short presentation of implementation of actual use case + discussion
3. Open slot - feedback on SWIMing overview (10 min)
4. Update on github changes (5 mins Maxime)

Minutes

1. Update on use case development (5 minutes - Sandra):

who has provided use cases, who is developing applications, etc.

Sandra - Build on use cases that Ana has been developed. Have somebody from industry perspective to give input on those use cases, to ensure credibility beyond the group.

Also need input from the sub groups to identify any subcases not currently covered.

Maxime - Aked input on the use cases and requirements from ENGIE-Cofely, ENGIE-Axima, GA-MM

Ana - Would like not to re-define use cases, examine what was previously defined until now. Wiki page with all use cases for SAREF, etc.

→ https://www.w3.org/community/lbd/wiki/Seed_Use_Cases

→ http://phaedrus.scss.tcd.ie/buildviz/SWIMing/u_c_overview/

Sandra - each subgroup checks the available use cases and selects those that are most pertaining for their specific context ? The scope is to define a priority among use cases, and treat them accordingly. **Deadline Tuesday, March the 2nd 2017**.

2. Presentation of use cases for domains (30 minutes - 15 mins Energy Efficiency (Hendro Wicaksono), compliance checking (Ana Roxin), Others - open)

short presentation of implementation of actual use case + discussion

a) **Hendro presentation - DAREED Project**

Architecture of DAREED - Presentation Layer, Service Layer, Data Layer

Data - metering, 3rd party, simulation

Use cases - Analyze and compare energy consumption, monitor and analyze district efficiency (https://www.w3.org/community/lbd/wiki/Forecast_energy_consumption_and_production_on_district_level), support definition of new tariffs and programmes (https://www.w3.org/community/lbd/wiki/Identification_of_the_best_practices_to_optimize_energy_profile_for_a_building)

List of models as organised by domains - product, device, building data, energy, geo&weather

Domain	Specific data requirements for each domain	Reused/linked RDF based vocab
Product	• Representation of **whole building level** • **Standard typology** of buildings: library, restaurant, etc. • **Widely-used** properties:address, phone, geo, place, event • Description of shapes • Support **simulation (energy plus)**	Schema.org Simulation: E+ ontology
Device	• Observation properties, sensing methods, output description (**SSO pattern**) and link to buiding data and energy plus model • Deployment and placement	Semantic Sensor Network (SSN)
Building data	• Flexible representation of different **metrics**, **KPIs** and **metering data** • **Data set** representation • Link to both device (sensor) and simulation models	OM Ontology RDF data cube vocabulary Intervals ontology
Energy	• Representation of different energy types e.g. useful energy, final energy	Energy resource ontology (ero)
Geo and weather	• Geo-Representation of countries, cities, districts • Simple geo shapes (polygon) • Basic representation about spatially-located things, latitude, longitude	Geonames, schema.org Basic Geo (WGS84 lat/long) Vocabulary

Link to DAREED LD - https://imi-dareed.scc.kit.edu/graph/

DAREED Platform - http://demo.dareed.eu

Questions

(Kris) - how is building data linked ? usage of schema.org ?

- Own ontology developed (allows linking a building to a district then to schema.org) ?

(Maxime) the Spatial Data on the Web Working Group working on the next version of SSN is looking for current uses of SSN - this application is interesting for them, Maxime can make the contact

Ana - Scenario - compliance checking, e.g. checking to see if fire regulations are being met (stair is close to fire exit)

Stardog - provides rule syntax

Finding - having files as ifcOWL and expressing rule son top of those, allows you to reason and deduce facts which can be used for compliance checking

Georg - purpose is that each approach has the same outcome

Can you compare approaches, is one better?

Ana - Yes, with N3 rules are straightforward to write, but relies on implementation to hard code. Stardog is already available as is (commercial licence), has a web interface.

Cost/benefit?

Automatic building of rules could be useful?

Georg - should we have a use case for this? No use case now, we should add one.

b) Presentations (Ana)

- compliance checking - http://www.slideshare.net/anaroxin/reasoning-with-rules-application-to-n3eye-and-stardog
- extracting IFC subsets and adaptating MVDs as rules - http://www.slideshare.net/anaroxin/a-semantic-web-approach-for-defining-building-views-66452092
- implementing alignments between models (IFC & COBie mainly) by means of logical rules and optimizing queries addressed over such alignments - http://www.slideshare.net/anaroxin/federated-approach-for-interoperating-aecfm-ontologies
- proposal of ifcWOD - adapating ifcOWL with respect to the LD principles - http://www.slideshare.net/anaroxin/ifcwod-web-of-data-semantically-adapting-ifc-model-relations-into-owl-properties
- Linked Data perspective for BIM - http://www.slideshare.net/anaroxin/a-linked-data-perspective-for-bim

3. Open slot - feedback on SWIMing overview (10 min)

Sandra - I have some comments, especially related to the use of the word BIM as opposed to Data. I will pass these on to Kris.

4. Update on github changes (5 mins Maxime)

- ensure branch 'gh-pages' is the main/default branch

    - everything that's in there can be accessed via the Web page

    - protected, only admins can push modifications there (other people have to create new branches and ask for pull requests to admins), thus changes are tracked

- deleted branch 'master'

- protect branch 'gh-pages'. Meaning: Disables force-pushes to this branch and prevents it from being deleted.

- upated the description of the repository at https://github.com/w3c-lbd-cg/lbdw

-> The source of the W3C Linked Building Data Community Group website https://w3c-lbd-cg.github.io/lbdw/

https://www.w3.org/community/lbd/

- udpated the main readme.md document, visible at https://github.com/w3c-lbd-cg/lbdw

Georg - AGENDA Item - Could we address the need to identify more industry members

Action items

- All Sub-groups take Wiki Use Cases and Identify Use Cases which are relevant (All Group Leaders - 2nd March)

Previous action items

- Update Linked Building Data site <AP - Kris, Pieter> (ONGOING)
- Provide use cases <AP - All> (ONGOING)
- Review geometry models to support BOT <AP - Maria, Kris> (ONGOING)
- Review the BLC stages and data domains <Michel - Ongoing> (ONGOING)
- Provide a list of competency questions for BOT <Mads> (ONGOING)
- Coordinate efforts on GitHub <Kris, Maxime> (ONGOING)
- Generate overview and external facing document/slides <Ana> (ONGOING) - published on the w3C website
- Manage iterations of ontology (BOT) <Mads, Maxime> (ONGOING)

Previous minutes

Next Call

- 24/01/2016 11:00 CET @ gotomeeting