Abstract - *The topic of this event is why and how to use the Web of Data technologies for building information management. The interest to this question arises from the expected benefits such as the ability to easily link building information models to and from external data sources, to open the models to new use cases and applications, to enable truly decentralized publication of models, to support loosely coupled interoperation through cross-model linking, and to utilize reasoning and other services developed in Semantic Web research. The topic is studied from two different perspectives: The VoCamp will focus on use cases and vocabularies for the Web of Building Data, and the LDAC workshop will study the technical solutions.*

Content - The workshop is motivated by the following questions:

(1) *What use cases could benefit from the Web of Data technologies*, such as decentralized publication, access over the Web, ontologies, and linking across datasets?
(2) *What functionalities do the Web of Data technologies provide* to practical needs of building information management? What functionalities are missing and are there major challenges?
(3) *How should the Web of Data technologies be combined with BIM in detail*? For instance:
   - When the IFC schema is converted to OWL, what is the appropriate OWL profile, representation of collections, mapping of datatypes, or handling of property name clashes?
   - What information is lost in the conversion process and how can/should ifcOWL be enriched?
   - How should datasets and linksets be organized, described, hosted, accessed, and managed?
   - What ontologies besides IFC are useful or necessary for relevant use cases?

The workshop is a practically oriented research meeting. In the first day the participants will split into a *Use Case track* and a *Platform track*. The Use Case track is organized as VoCamp (Vocabulary camp) that should identify a set of use case scenarios and related technical requirements. The use cases are expected to cover the publication and access to models, linking of models to external data (such as geography, infrastructure, building products/materials, and sensors), versioning, change management, knowledge acquisition, and reasoning. The Platform track will study the capabilities and options of a Web-based BIM platform, including the details of ifcOWL and the existing converters.

The tracks will come together in the second day to map the technical requirements with the capabilities of the platform. The goal is to promote shared understanding within participants about the application of Web of Data to building information management, and the gaps to address by future research.

Preliminary program

Monday, May 26th 2014	
10:00-13:00	Welcome and introduction (Tekla and Aalto) Overview on buildingSMART position (AEC3) Position presentations Discussion on objectives/focus of use cases Motivation for the afternoon
	(Lunch)
14:00-18:00	Parallel tracks: 1. Use cases – Development/refinement of detailed requirements; where do Web of Data technologies fit – benefits/challenges 2. Platform – Analysis of ontology options, required platform functionalities, and challenges of the framework
Tuesday, May 27th 2014	
9:00-12:00	Processing the results of both workshops – reflecting the requirements of use cases against the options and functionalities of the platform; discussion and conclusions
	(Lunch)
13:00-15:00	Identification of open issues Continuation of work - future activities/events Closure

Venue

The event will be held at the headquaters of Tekla (next to the campus of Aalto University). The address is: Metsänpojankuja 1, 02130 Espoo, Finland.

Position statements

The modus operandi of the meeting will be a workshop and intensive discussion forum on the two themes: *Use cases for linked data in architecture and construction* and *Functionality of an ontology platform*. However, participants of the workshop are invited to submit position statements addressing these themes prior to the meeting. They will be circulated to all participants by the organizers. Position statements can be sent by May 19, 2014 to seppo.torma@aalto.fi.

Registration

The workshop is open to all practitioners and researchers interested in the application of Web of Data technologies to building information management. This is a low bureaucracy meeting with no registration fees. Participants should register to the meeting through:

https://aaltouniversity.doodle.com/49kfqtf9za2rap3w

The deadline for registrations is May 11, 2014.

Important dates

- Registration: May 11, 2014
- Position statements: May 19, 2014

Organizing committee

- Seppo Törmä (Aalto University – Department of Computer Science and Engineering)
- Pieter Pauwels (Ghent University - Department of Architecture and Urban Planning)
- Jakob Beetz (Eindhoven University of Technology - Department of the Built Environment)
- Matthias Weise (AEC3 Deutschland GmbH)

Contact

Seppo Törmä, seppo.torma@aalto.fi

Practical information

There are no hotels within a short walking distance from Tekla. *Radisson Blu Espoo* is at the opposite side of Aalto University campus, 2 km from Tekla. (*Tapiola Garden Hotel* is not currently recommended due to the ongoing construction works).

A good compromise from the perspectives of access to the venue and sightseeing/dining is to book hotels from the center of Helsinki, near the *Kamppi Shopping Center/Bus Station*. Kamppi is about 10 km from Tekla which is 15 min by taxi or 30 min by bus (bus numbers 103 or 103T leaving from Kamppi).