Attendees

- Kris McGlinn [ADAPT-TCD]
- Georg Ferdinand Schneider [Fraunhofer Institute for Building Physics IBP]
- Pieter Pauwels [Ghent University]
- Mads [DTU Denmark]
- Mirarchi Claudio [Polimi]
- Walter Terkaj [ITIA-CNR]
- Francisco Forns-Samso
- Matthew Waychoff
- Yongwook Jeong

Date and time

- 04/05/2017
- 17:30 CET

Agenda

1. short introductions and state of affairs (5min. - Kris)
2. short update of each sub-group (10 minutes each, sub-group leader)
    - Subgroup BACS
        - Possible exchange with ASHRAE SSPC 135 “BACnet”
        - Use Case
3. any other items for discussion (open for suggestions**)**

Minutes

Very busy times!!!

Introduction by Claudio Mirarchi - Polimi => Products and Project Management

Introduction by Francisco Forns Samso - Granlund => Facility Management

Subgroups:

Building Topology

Mads: Granlund - installation works. Seppo Törmä wondering about the BOT ontology

BOT ontology status

- What about the aggregation of spaces,
- Links with other ontologies (e.g. FLOW ontology): this can likely easily be done with type links
- Use BOT as a referential structure and make sure that several other domain ontologies can link to it

Mads: Is BOT element too generic? Should we include Walls, Windows, Actuators and so forth.

Pieter: Bringing this into the BOT ontology would potentially overcomplicate BOT (what happens in IFC) -> A whole bunch of property sets and so forth would be introduced, crushing the presence of building topology.

Geometry

https://docs.google.com/document/d/1EqipM52agpk0cgXp1yC1npf93Cz-lQt127BGbV3j70g/edit#

Kris presents the status of the geometry:

- What geometries will usually needed to be available for describing buildings in a web context?
    - …
- Potential ontologies
    - IFC
    - WKT (Well-Known Text in geospatial context)
    - OSi data (Ordnance Survey Ireland)
    - CityGML (GIS data)
- Working on use cases:
    - Starting from a building in a location, one is able to find the different sorts of geometry.
    - Use of geo:hasGeometry predicate that refers to WKT of MULTIPOLIGON (2D)

IFC has much more semantics to describe geometry than is available in geospatial WKT. So, building a WKT version for building data (walls, windows, floors, etc.) will likely require a more elaborate set of WKT values.

Building objects would need a number of links linking to separate kinds of geometry (2D boundary representation in zone; isLocatedIn, …), so that would allow to have both 2D and 3D geometry in different versions.

Automation and Control – devices, control logic etc.

Working Document

1.

Georg:

I talked to ASHRAE people (American Society of Heating, Refrigerating and Air-Conditioning Engineers)

They are working on BACnet: a vendor-free open protocol for information exchange in building automation systems. They are adding semantics (BACnet object model) and they are doing this using Project Haystack.

They could and would like to present their developments to the LBD group.

They have an XML version of their ontology / object model

This is run by Dave Robin as a task leader.

- Very interesting
- Very willing to align forces
- Contribution from industry

2.

Walter: The group is working on the developments and use cases. Not that much to add; everything is going well. A lot of information is in the Working Document. The group tries to link to existing ontologies and models in support of the diverse use cases (SOSA, SSN, IFC, BOT).

Current work: writing sample SPARQL queries to show what information can be retrieved / delivered. This is done in the context of Modelica (Georg).

At the moment we are using a simulated building to test, looking for real demo object to test, if anyone has one to test, that would be great!

Energy Efficiency

<AP Kris follow up group>

Project management

<AP Kris follow up group>

Heating, Ventilation, and Air-Conditioning (HVAC)

Mads: Building flow systems ontology based on SEAS (see above)

Flow Systems Ontology

Products

Need to create a separate product ontology, inspired by the way IFC is structured.

Currently reviewing product data bases. Large number, no standardised approach.

Early stages.

Action items

-

Previous action items

-

Previous minutes

Next Call

18 May 2017