The IAB Internet of Things Semantic Interoperability Workshop

Santa Clara, California, March 2016

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RULES OF THE WORKSHOP

- There are no particular IPR rules
- The IETF IPR rules are NOT in effect
- The workshop is open, and its results public
- A report will be published later

- In some workshops (not all) it has been useful to employ Chatham House rules. Are they needed here?

AGENDA (DAY 1)

Time	Topic (Moderator)
09:00-10:00	**Introduction & Logistics** (Jimenez & Thaler)
10:00-10:30	**Terminology** (Claise)
10:30-11:30	**What problems are we trying to solve?** (Tschofenig)
11:30-11:45	Break
11:45-12:15	**Architecture** (Hardie)
12:30-13:30	Lunch

AGENDA (DAY 1, CONTINUED)

13:30-14:30	**Mapping information and data models** (Bormann & Koster)
14:30-15:30	**Run-time discovery of meta-data** (Kovatsch)
15:30-16:00	Break
16:00-17:00	**Developer support with code-generation** (Thaler)
17:00-18:00	**What can be done to enable re-use and sharing?** (Raggett)
19:30-	Social event

AGENDA (DAY 2)

10:00-10:30	**Summary of day 1** (Koster & Jimenez)
10:30-12:00	**Parking lot**
12:00-12:30	Coffee break
12:30-14:00	**What should we do next?** (TBD)
14:00-	Lunch

OUR HOST

PRACTICALITIES

- Please send slides to slides to jaime.jimenez@ericsson.com
- Accepted papers: https://www.iab.org/activities/workshops/iotsi/
- Mailing List: iotsi@iab.org
- WiFi logins on pieces of paper.
- Call for Notetakers: https://goo.gl/vzIu0y
  - Planning to record audio just for notes, not available afterwards
- Please return your badges at the end of the day.
- **Social event**: 7:30pm
  Santa Clara Pedro's Restaurant & Cantina
  3935 Freedom Circle

CONTEXT AND TOPIC

- Growth of the smart objects market
- Great alignment across the market in using Internet technology to build these systems
- Significant improvements in interoperability across layers from physical to transport and application frameworks
- But work remains in interoperability at the application layer

WHY IS THIS IMPORTANT?

- Consumers and other users want systems where they can acquire components from different manufacturers

- Ability to build larger systems out of components built by different companies and for different purposes will drive innovation

WHY IAB?

- IAB previously held "Interconnecting Smart Objects with the Internet Workshop 2011"
  - RFC 6574
- IAB RFC 7452 on "Architectural Considerations in Smart Object Networking"
  - Hannes Tschofenig, Jari Arkko, Dave Thaler, Danny McPherson
  - Dave & Hannes presented in IETF 92 plenary last year
  - But much of the issue is *out of scope for IETF*

OUR GOALS FOR THIS WORKSHOP

- Facilitate introductions between relevant organizations
- Generate a report on what we discussed
- Identify opportunities for cross-organization collaboration
- Have some lasting impact after this one-time event is over

IN SCOPE

- Data formats
- Schemas
- Schema languages
- Semantics
- Semantic description languages
- Security for the above
- Interoperability for the above
- Standards and gaps thereof

OUT OF SCOPE

- Pushing particular choices of languages
- L1-L4
- Security for the network connectivity
- Transport layer security

WHO ARE WE

Program committee:

- Dave Thaler
- Jari Arkko
- Ralph Droms
- Hannes Tschofenig
- Jaime Jimenez
- Michael Koster

WHO ARE WE

66 position papers submitted – great interest!

NN people present here – thank you!

Many organisations working in this space present here

WHO ARE WE

Standards organizations and consortiums:

   AllSeen Alliance, IPSO Alliance, ETSI, IETF, IAB, W3C, OCF (OIC, UPnP), NIST, OGC, OpenDOF, CableLabs, OMA, ZigBee Alliance, even the EC

And vendors, operators, research organizations

Please introduce yourself

- Name

- Affliations (company, positions in relevant SDOs or alliances)

- Which position paper was yours (e.g., title or one-liner) so people can recognize you

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AGENDA (DAY 2)

9:30-10:00	Atoms
10:00-10:30	**Summary of day 1** (Koster & Jimenez)
10:30-11:30	Security
11:30-12:00	Demos
12:00-12:30	Coffee break
12:30-14:00	**What should we do next?**
	Future communication channels
	Common repository
14:00-	Lunch on own