Interconnecting Smart Objects with the Internet Workshop

Hannes Tschofenig

Style

- Informal Dinner (Thursday, 24th March)
- Workshop (Friday, 25th March)
  - http://www.iab.org/about/workshops/smartobjects/
  - Position paper requirement for workshop participation
- Tutorial (Saturday, 26th March)
  - Open to everyone (with registration deadline for planning purposes)
  - http://www.iab.org/about/workshops/smartobjects/tutorial.html
  - You are invited to attend the workshop. Same room!
- IETF#80 meeting (starting on 27th March)
  - http://www.ietf.org/meeting/80/index.html

Sponsoring

ERICSSON

Nokia Siemens Networks

Cisco Systems ®

Workshop Organizers

- Jari Arkko (Internet Area Director)

- Hannes Tschofenig (IAB)

- Bernard Aboba (IAB)

- Carsten Bormann (CoRE and 6LoWPAN WG Chair)

- David Culler (ROLL WG Chair)

- Lars Eggert (Transport Area Director, and upcoming IRTF Chair)

- JP Vasseur (ROLL WG Chair)

- Stewart Bryant (Routing Area Director)

- Adrian Farrel (Routing Area Director)

- Ralph Droms (Internet Area Director)

- Geoffrey Mulligan (6LoWPAN WG Chair)

- Alexey Melnikov (Applications Area Director)

- Peter Saint-Andre (Applications Area Director)

- Marcelo Bagnulo (IAB)

- Zach Shelby (Member of the IETF Smart Power Directorate)

- Isidro Ballesteros Laso (European Commission)

- Fred Baker (Member of the Smart Power Directorate and liaison to the US Smart Grid Interoperability Panel - SGIP)

- Cullen Jennings (CoRE WG Chair)

- Manfred Hauswirth (Member of the Future Internet Architecture Group of the EC Future Internet Architecture)

- Lukas Kencl (Local Arrangements Chair, Czech Technical University in Prague)

Goals

- Identify issues where
  - implementers do not yet have solutions
    (e.g., "Don't know how to do autonomous operation."),
    or
  - researchers predict we'll have issues
    (e.g., "We can't scale this protocol for the energy
    requirements we see.").
- Discover common interests that may turn into new
  work or into changes in direction of already
  ongoing work at the IETF/IRTF.
  - Some of you had submitted your position papers as
    Internet drafts as input to the IETF standards process
    already. Thanks!

IPR Policy

- This workshop is not considered to be part of the "IETF Standards Process", as defined in RFC 5378 and RFC 3979.

Workshop Outputs

- Position Papers
  - Already published on
    http://www.iab.org/about/workshops/smartobjects/papers/
- Slides
  - http://www.iab.org/about/workshops/smartobjects/agenda.html
- IAB Meeting Report
  - Will be published as an Internet draft first (and distributed to
    smartobject-participants@lists.i1b.org).
- Meeting Minutes
  - Scribe: Spencer Dawkins
  - Audio recording (for correcting meeting minutes): OK?
  - Will be distributed (for review to participants) after the meeting to
    smartobject-participants@lists.i1b.org

Agenda

8:30 - 9:00 Last minute check (audio/beamer). Arrival of Participants

9:00 - 9:15 **Opening Remarks and Logistics**

9:15 - 12:00 **Architectural Issues**

Application Requirements:
. Interoperability Challenges - Arkko
. Application Communications Requirements for 'The Internet of Things' - Baker
. Requirements for Building Networks – Nordman
. Discussion

Data Driven Architectures:
. Pub Sub based Naming – Burke
. Information Centric Networking – Kutscher
. Discussion
12:00 - 13:00 Lunch Break

13:00 - 14:00 **Lightweight Implementations, Sleep Modes, Data Formats**
. Sleep Compatible Protocols – Wasserman
. Caching for Sleeping Nodes - Brandt
. Discussion
14:00 - 15:00 **Security**
. Security Challenges For the Internet Of Things - Polk
. IKEv2 and Smart Objects - Kivinen
. Discussion
15:00 - 15:30 Coffee Break

15:30 - 16:30 **Routing**
. IP (RPL) vs. Link Layer Routing – Vasseur
. RPL Changes – Clausen
. Discussion
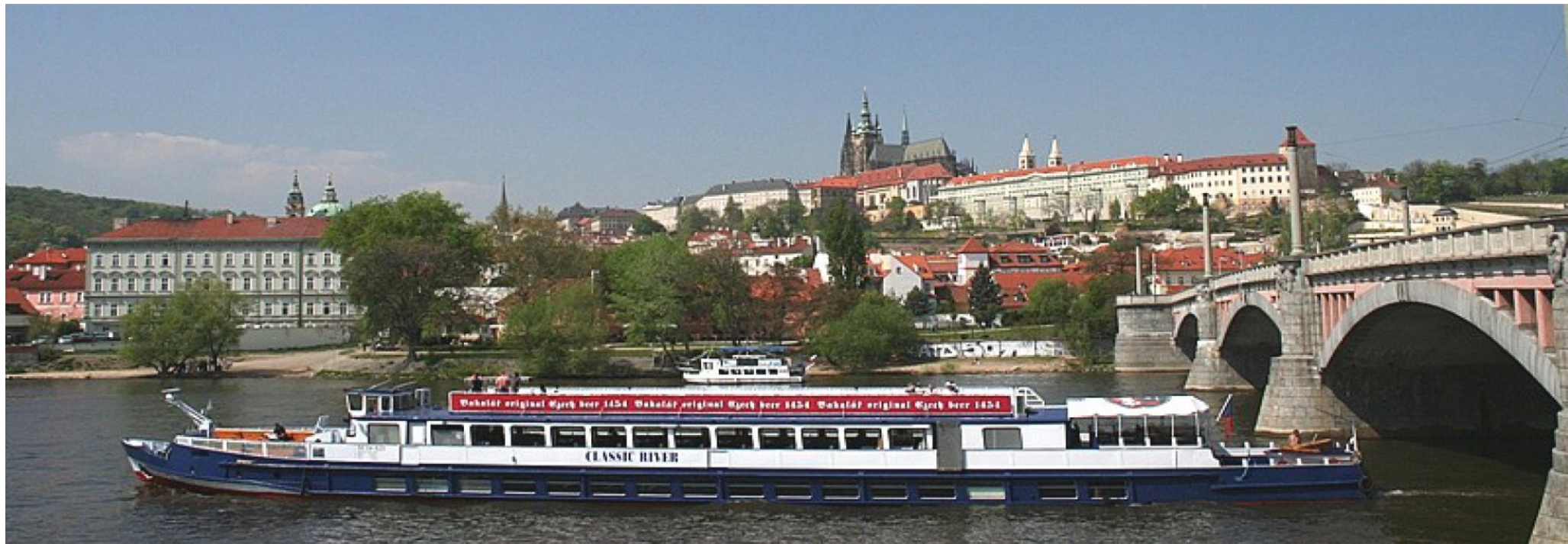16:30 - 17:30 **Take-away, Conclusions**
. Discussion
20:00 **Social Event**

Social Event

- Social will be on the "Classic River" ship
- 20:00 - 23:00 (sharp! no exit!)
- Address to be given later today
- Buffet-style dinner and drinks served
- Sponsors for the social event and refreshments in the workshop

The Ship

Social Event Details

- Date and time: 25/03/2011 8:00PM
- Duration: 180 min
- Boarding: Dvorákovo nábreží (embankment) next to St. Agnes' Convent
- End point: Dvorákovo nábreží (embankment) next to St. Agnes' Conven

- Map: http://bit.ly/gKcsXt

Special dietary requirements?

Cold buffet: *Cold plate*
Salami (ham, mortadela, wurst, salami, sausage)
Cheese plate (Edamer cheese, smoked edam, Camembert, blue cheese, Feta cheese) buns and rolls, butter

Salads: Fresh vegetables
Coleslaw
Pasta salad with ham potatoe salad
Potatoe salad
Pickled fishes

Warm buffet: Grilled chicken
Natural fish fillet
Goulash on Prague style
Small chicken steaks

Side orders: Potatoe pancake
French fries
Rice
Boiled vegetable
Bread

Desserts: Homemade apple pie
Minidesserts

Choice of fresh fruits: apples, oranges, bananas, kiwi, mandarins, grapes, etc.

Discussion Mailing List

- http://lists.i1b.org/listinfo.cgi/smartobject-participants-i1b.org

  – Currently, only for workshop participants.
  – Used for sharing information about the workshop, and for discussion about the position papers.