WoT IG and WG Next Steps

WoT IG/WG F2F Meeting
Santa Clara, February, 2017
WoT Task Forces

• **WG**
  – **Architecture**
  – **Thing Description**
    • Type System (JSON Schema Extensions)
    • Hypermedia (Actions, error handling, ...)
  – **Scripting API**
  – **Binding Templates**
  – **Security & Privacy**

• **IG**
  – **Current Practices**
  – Testing (PlugFest scenarios)
  – Thing Lifecycle
  – Synchronization of Servients
  – Linked Data and Semantic Processing
  – Demonstrators
WG Architecture Task Force

• Has WG deliverable
• Editors
  – Kajimoto-san
  – Frank?
• Topics
  – Overall architecture (Thing, gateway, cloud)
    • Where to place Things and building blocks
  – Servient architecture
    • How to combine building blocks, what do they offer
WG Thing Description Task Force

• Has WG deliverable
• Editors
  – Sebastian
  – Taki
• Topics
  – Overall model
    • Prototype ➔ graphical ➔ RDF ➔ serialization ➔ ...
  – Framework to annotate vertical semantics
  – Type System (based on sub-team input)
  – Hypermedia (based on sub-team input)
WG Type System Team

• Sub-team to help TD

• Team
  – Daniel
  – Taki
  – Victor
  – Henry? (check Invited Expert status)
  – Gregg? (check Invited Expert status)

• Topics
  – JSON Schema extensions for semantics
  – Alignment with JSON-LD
WG Hypermedia Team

• Sub-team to help TD
• Team
  – Matthias
  – Henry? (check Invited Expert status)
  – ?
• Topics
  – Define model for complex Actions
  – Define error handling model
  – Align with Binding Templates
WG Scripting API Task Force

• Has WG deliverable
• Editors
  – Johannes
  – Zoltan
  – Nimura-san
• Topics
  – Language-independent API definition
  – Informational document on rationale
  – Ensure implementable in embedded runtimes and the Web browser
  – Part of the test suite
WG Binding Templates

• Has WG informal deliverable
• Editors
  – Matthias
  – Uday?
• Topics
  – Pull input from IG liaisons
  – Coordinate with TD Task Force
WG Security Task Force

- Needs to support other deliverables
- Lead
  - McCool (temp., Intel is checking for permanent lead, McAfee?)
  - Please make suggestions
- Topics
  - Outreach with good TF charter
  - Reach out to IETF sec area through I-Ds
  - Work with liaisons for platform security models
IG Current Practices

• Has IG deliverable

• Editors
  – Daniel
  – Matthias

• Topics
  – Document for implementers
  – Coordination of PlugFest
IG Testing Task Force

• Help WG with test suite
• Lead
  – Matthias (temp.)
  – McCool
• Topics
  – Prepare tests for PlugFest
  – Define “Test Thing” TD Template (to be backed by each implementation)
  – Create input for WG test suite
IG Thing Lifecycle Task Force

- Prepare proposal as input for WG
- Lead
  - Kajimoto-san
- Topics
  - Handle different lifecycle stages of Things
  - Thing Description Templates
  - Deriving more specific templates and actual TDs
IG “Synchronization” Task Force

• Prepare proposal as input for WG Architecture
• Find a descriptive name :)
• Lead
  – Matsukura-san
• Topics
  – Mechanisms for instantiating cloud mirrors
  – Mechanisms for synchronizing data
  – Prepare input for WG arch Task Force
IG Linked Data and Semantic Processing Task Force

• Lead
  – Dave (temp.)
  – Darko?
  – Danh? (wrap up Invited Expert procedure)

• Topics
  – Agree on charter
IG Demonstrators Task Force

• Lead
  — ?
WOT LIAISONS
OCF Liaison

• Joint meeting with OCF and T2TRG
  – Amsterdam, Netherlands, 6–10 March 2017

• Goals until next F2F
  – Demonstrate interop at PlugFest
    (OIC if OCF spec is not published in time)
  – Compile input for TD Task Force
  – Compile input for Binding Templates Task Force
oneM2M Liaison

• Joint WebConf with oneM2M MAS WG (31 Aug 2016)
  – Common interest identified on device modeling, semantics

• Liaison received from oneM2M (14 Nov 2016)
  https://lists.w3.org/Archives/Public/public-wot-ig/2017Jan/att-0004/TP-2016-0294R01-LS_to_W3C_WoT.pdf
  – Latest update of oneM2M & proposing further collaboration

• oneM2M-W3C WoT Interworking created (Feb 2017)

• Goals until next F2F
  – Compile input for TD Task Force
  – Compile input for Binding Templates Task Force
OPC Foundation Liaison

- Presentation at OPC March meeting
  - Salzburg, Austria, 20–23 March 2017
- Goals until next F2F
  - Agree on strategy
  - Share example UA models
  - Roadmap for PlugFest contributions
Plattform Industrie 4.0 Liaison

• Negotiations for formal liaison

• Goals until next F2F
  – Define demonstrator

• Long term goals
  – Map W3C WoT to Asset Administration Shell
  – Bring PI4.0 demonstrator to PlugFest
IETF/T2TRG Liaison

• Next joint meeting
  – F2F July 2017, Düsseldorf, Germany
  – (also see T2TRG meeting with OCF in March 2017)

• Goals until next F2F
  – Harmonize hypermedia approach
  – Help with security Internet-Drafts
OpenFog Liaison

- Negotiations
- Goals
  - Make OpenFog aware of W3C WoT
  - Work on joint concept (deadline ~July 2017)
UPCOMING F2F MEETINGS
F2F Meeting May 2017, Osaka, Japan

- Hosted by Panasonic
- 15–19 May 2017
- 3 Months to work
- Todos
  - Populate wiki: Provide hotel list, collect topics, ...
  - Open registration (talk to Kaz about questionnaire)
  - Specify PlugFest requirements
F2F Meeting July 2017, Düsseldorf, Germany

• Hosted by RWE / Lemonbeat
• 9–13 July (+14 for T2TRG?)
• 2 months to work
• Todos
  – Arrange T2TRG co-location
  – Provide airport options for IETF goers
F2F Meeting November 2017, Burlingame, CA, USA

- At TPAC – might get new location
- 6–10 November 2017
- 4 months to work

Todos
  - Request slots beginning of the week
  - PlugFest Preparation: Open space or room on Sunday (wired Ethernet uplink, power strips!)
  - PlugFest: Request full-day room or at least 3 hours on Wednesday
  - Plan observers/groups to meet (inbound + outbound)
F2F Meeting Feb/March? 2018, ?, ?

- Co-locate with security conference?
  - https://www.internetsociety.org/events/ndss-symposium/ndss-symposium-2017 (San Diego)

- Co-locate with IETF?
  - March 2018 - IETF 101
  - March 18-23, 2018
    Location: London, UK
    Venue: Hilton Metropole

- Hosted by ?
  - Reach out to local companies

- Todos
  - Coordinate with IETF?
  - Organize academic conference workshop?
F2F Meeting May? 2018, ?, ?

• Co-locate with security conference
  – http://www.ieee-security.org/TC/SP2017/index.html (San Jose)

• Hosted by ?

• Look at calendars

• x months to work

• Todos
  – Organize academic conference workshop
F2F Meeting July 2018, ?, China?

• China?
• Hosted by Huawei? (→ Yongjing)
• Look at calendars
  – IETF: July 22-27, 2018 (San Francisco)
• x months to work
• Todos
F2F Meeting Sep? 2018, ?, Aisa?

- At TPAC

- Look at calendars
  - IETF: November 4-9, 2018 (tbd)

- x months to work

- Todos
WG Roadmap

• 2017-02 (Santa Clara F2F)
  – Create GitHub repos
• 2017-05 (Osaka F2F)
  – Graphical and RDF model of TD
  – Editor’s Drafts
  – RC for WoT Architecture First Public Working Draft (FPWD)
  – Start security review for WoT Architecture
• 2017-07 (Düsseldorf F2F)
  – Finish security review for WoT Arch. with Internet Drafts (“security concepts”) for internal security review and IETF outreach
  – Draft for test suite (Servient emulator with automatic checks)
  – Release First Public Working Draft (FPWD) of WoT Architecture
• 2017-11 (TPAC)
  – RCs for First Public Working Drafts
  – RC Implementations and Test Suite
  – Start security review
• 2018-03 (London? F2F)
  – Finish security review
  – Release First Public Working Drafts (FPWDs)
• 2018-05 (F2F at sec conf)
  – Aggressive testing / adverse security testing?
• 2018-07 (China? F2F)
• 2018-10
  – RCs for Candidate Recommendations
  – Start security review
• 2018-11 (TPAC)
  – Start release process
• 2018-12
  – Release Candidate Recommendations (CRs)