

T2TRG: Thing-to-Thing Research Group

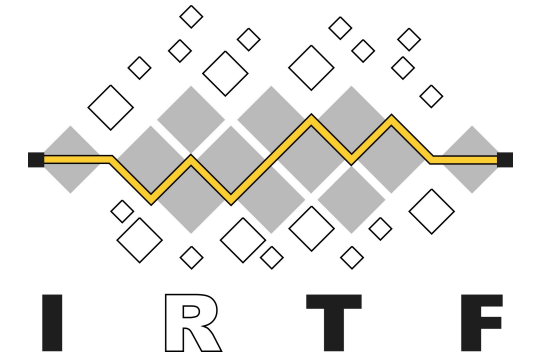
pre-IETF 112 “Fall” Summary Meeting, October 26, 2021

Chairs: Carsten Bormann & Ari Keränen

Note Well

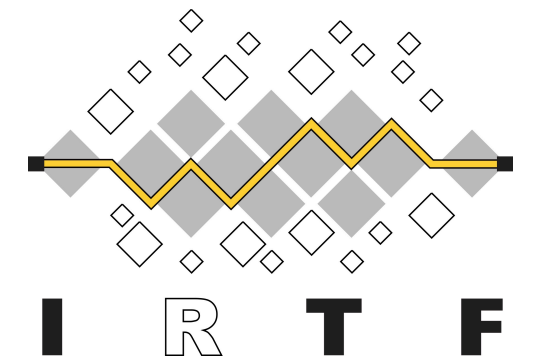
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- Be nice
- The IPR guidelines of the IETF apply:
see <http://irtf.org/ipr> for details.

Note Well – Intellectual Property



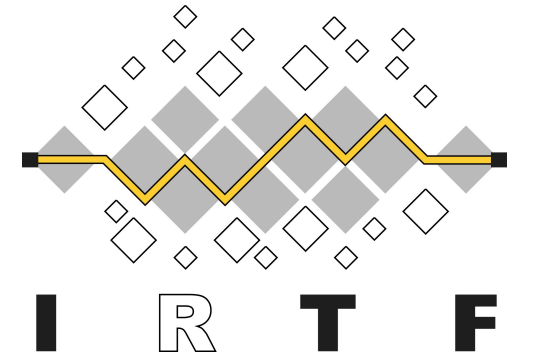
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Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- **The IRTF conducts research; it is not a standards development organisation**
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See “An IRTF Primer for IETF Participants” – [RFC 7418](#)

Administrivia (I)

- (Blue sheets maintained by meetecho)
- Note-takers: <https://notes.ietf.org/notes-ietf-interim-2021-t2trg-02-t2trg>
- Jabber (= Meetecho chat)
 - <xmpp:t2trg@jabber.ietf.org?join>
- Mailing List: t2trg@irtf.org — subscribe at:
<https://www.ietf.org/mailman/listinfo/t2trg>
- Repo: <https://github.com/t2trg/2021-10-summary>

Agenda

Time (UTC)	Who	Subject	Docs
15:00	Chairs	Intro, RG status, upcoming meetings and activities	t2trg-rest-iot , t2trg-iot-edge , t2trg-secure-bootstrapping
15:15	Cenk Gündogan	A Data-centric CoAP Transport (CoRE and ICN research talk)	
15:45	Steve Hanna	Matter Security & Privacy for Security & Privacy Experts (CSA/"CHIP")	
16:15	Chairs	Reports from WISHI and other activities	
16:25	Michael McCool	W3C WoT update	
16:35	Michael Koster	OneDM update, iotschema.org	
16:45		flex-time	
16:55	Chairs	Wrap-up	
17:00	Chairs	end of meeting	

Next meetings

- Regular WISHI calls (~ monthly, next right before Thanksgiving?)
- (No T2TRG meeting at IETF 112, but:)
 - Some WISHI-related activities at Hackathon week Nov 1–5
- Online meetings with OCF / OMA SpecWorks (LwM2M&IPSO) / W3C WoT?
- “Online co-locating” with academic conferences:
 - [DAI-SNAC21.hotcrp.com](https://www.hotcrp.com/DAI-SNAC21), Dec. 7
 - do this more!
- Physical meeting in 2022?

RG Doc Status

- “RESTful Design for IoT” (improved terminology and discussed affordances) 2021ish
- Edge & IoT (discuss today, getting ready for RG last-call) 2021ish?
- Secure Bootstrapping for IoT (discuss today) 2022ish
- Ramping up: IoT Information-Model Standards Description and related work on Semantic Landscape/Nutrition Labels in WISHI
- Also: WISHI notes (see [WISHI wiki](#), e.g. terminology rosetta stone)

“IoT Edge Challenges and Functions” (draft-irtf-t2trg-iot-edge-03)

- New revision -03 published in August
 - Reflected feedback received from oneM2M community members: referred new use cases in 2.4, mentioned oneM2M service layer in section 4.1, added text related to some functions in section 4.
- Last week, Roberto Morabito provided a detailed review of the draft.
 - To the authors’ knowledge, those are the only outstanding comments. We plan to address them shortly after the interim meeting.
 - Should we proceed to last call (pending resolution of the comments)

"Terminology and processes for initial security setup of IoT devices" (draft-irtf-t2trg-secure-bootstrapping-01)

- Major revision (-01) submitted recently
- New title and structure (secure bootstrapping → initial security setup)
- Description of initial security setup in Bluetooth mesh complete
- Terminology used by each standard protocol identified and listed
- Next version to identify initial assumptions and knowledge imparted to devices after setup
- Authors looking for feedback. In particular: is your favorite protocol/standard missing?

A Data-centric CoAP Transport

(CoRE and ICN research talk)

Matter Security & Privacy for Security & Privacy Experts (CSA/"CHIP" standards report)

Recent Work on IoT Semantic/Hypermedia Interoperability (WISHI)

- SDF relationship & instance information
- Follow-up on Azure Digital Twins Definition Language (DTDLD) and IETF SDF
 - SDF & DTDLD enhancements for improved expressiveness and interwork
 - Using external ontologies with SDF & DTDLD
 - Further alignment on use of units
 - SDF↔DTDLD conversion implementations
- Sharing, converting, and publishing models
- Hacking plan: connecting SDF-described (e.g., IPSO) devices to Azure Digital Twins system using conversion to DTDLD models

W3C Update

OneDM Update