



6TiSCH



IETF 101 - London

Chairs:

Pascal Thubert

Thomas Watteyne

Etherpad: <https://etherpad.tools.ietf.org/p/notes-ietf-101-6tisch>

IPv6 over the TSCH mode of IEEE 802.15.4

Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

[BCP 9](#) (Internet Standards Process)

[BCP 25](#) (Working Group processes)

[BCP 25](#) (Anti-Harassment Procedures)

[BCP 54](#) (Code of Conduct)

[BCP 78](#) (Copyright)

[BCP 79](#) (Patents, Participation)

<https://www.ietf.org/privacy-policy/> (Privacy Policy)



Reminder:

Minutes are taken *

This meeting is recorded **

Presence is logged ***

* Contribute online to the minutes at: <https://etherpad.tools.ietf.org/p/notes-ietf-100-6tisch>

** Recordings and Minutes are public and may be subject to discovery in the event of litigation

*** Sign the blue sheets!

Administrivia



- Minutes
 - Etherpad: <https://etherpad.tools.ietf.org/p/notes-ietf-101-6tisch>
- Remote participation
 - Meetecho: <http://www.meetecho.com/ietf101/6tisch>
 - Jabber: 6tisch@jabber.ietf.org
- Mailing list
 - 6tisch@ietf.org
 - To subscribe: <https://www.ietf.org/mailman/listinfo/6tisch>
- Meeting materials:
 - <https://datatracker.ietf.org/meeting/101/materials.html/#6tisch>
 - One set of slides per presentation

- Dominique Barthel
- Jonathan Munoz

- Ines Robles

Agenda

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Intro and Status

- * Note-Well, Blue Sheets, Scribes, Agenda Bashing [5min]
- * Status of the work, link with other WGs [5min]
- * next 6TiSCH Interop event (chairs)



Chartered items

- * **draft-ietf-6tisch-6top-protocol-10** [10min]
(Xavi Vilajosana)
goal: **in IESG LC**, inform about reviews and revision
- * **draft-ietf-6tisch-minimal-security-05** [10min]
(Malisa Vucinic)
goal: **prepare for WGLC**, ask for 2 reviewers, liaise with CORE
- * **draft-ietf-6tisch-terminology-10** [2min]
(Maria Rita Palattella)
goal: inform about update
- * **draft-ietf-6tisch-6top-sfx-01** [8min]
(Diego Dujovne)
goal: present editorial updates, discuss readiness for WGLC
- * **draft-chang-6tisch-msf-01** [10min]
(Tengfei Chang)
goal: in "Candidate for WG Adoption", **prepare for WG adoption**
- * **draft-duquennoy-6tisch-asf-01** [10min]
(Simon Duquennoy)
goal: identify components, **discuss** how to best integrate

Agenda

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Unchartered items, time permitting

- * **draft-vilajosana-6tisch-globaltime-00** [10min]
(Xavi Vilajosana)
goal: assess importance of problem, validity of solution

- * **draft-richardson-6tisch-enrollment-enhanced-beacon-00** [5min]
(Michael Richardson)
goal: discuss the 4 priority fields

- * **draft-richardson-6tisch-roll-enrollment-priority-00** [5min]
(Michael Richardson)
goal: prepare for call for consensus



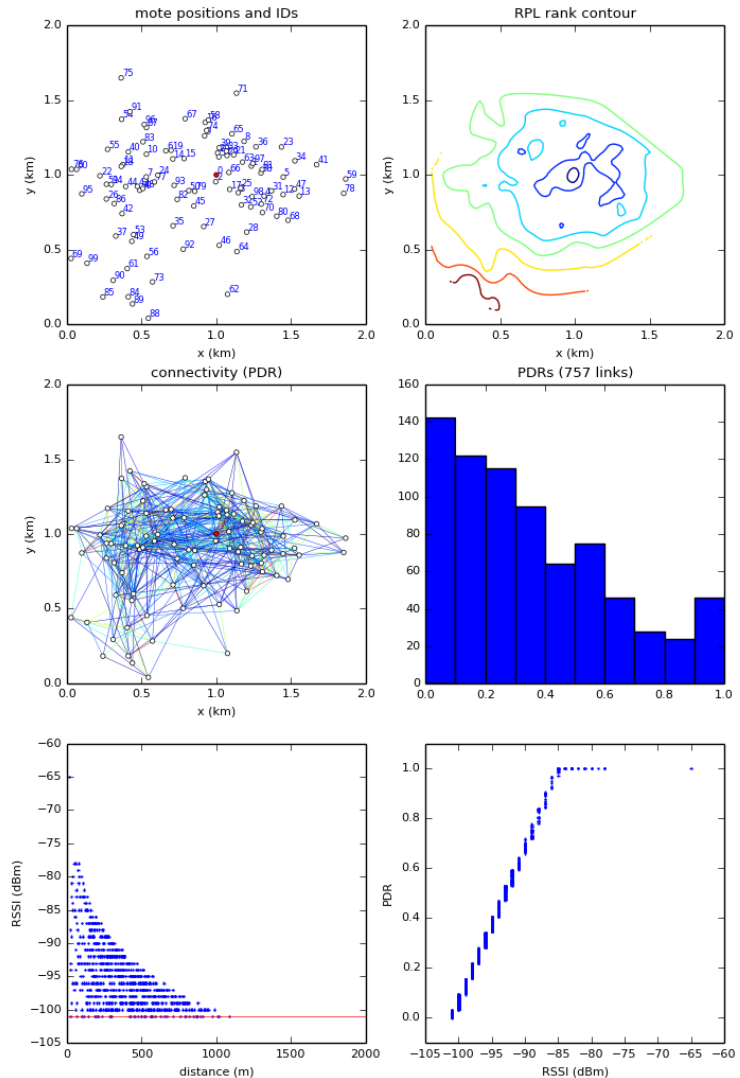
Links with other WGs

- 6lo
 - 6lo fragmentation DT
 - `draft-wattheyne-6lo-minimal-fragment`
 - `draft-thubert-6lo-fragment-recovery`
 - *40-min section during 6lo@IETF101*
 - `draft-ietf-6lo-deadline-time`
 - *6TiSCH-specific ASN used as option for timestamp*
- ROLL
 - `draft-richardson-6tisch-roll-enrollment-priority`
 - *use RPL DIO to propagate configuration for*
`draft-richardson-6tisch-enrollment-enhanced-beacon`
- CoRE
 - liaison issued about `draft-ietf-6tisch-minimal-security`
 - *defines "Stateless-Proxy CoAP Option"*

6TiSCH Simulator – release 1.0.0

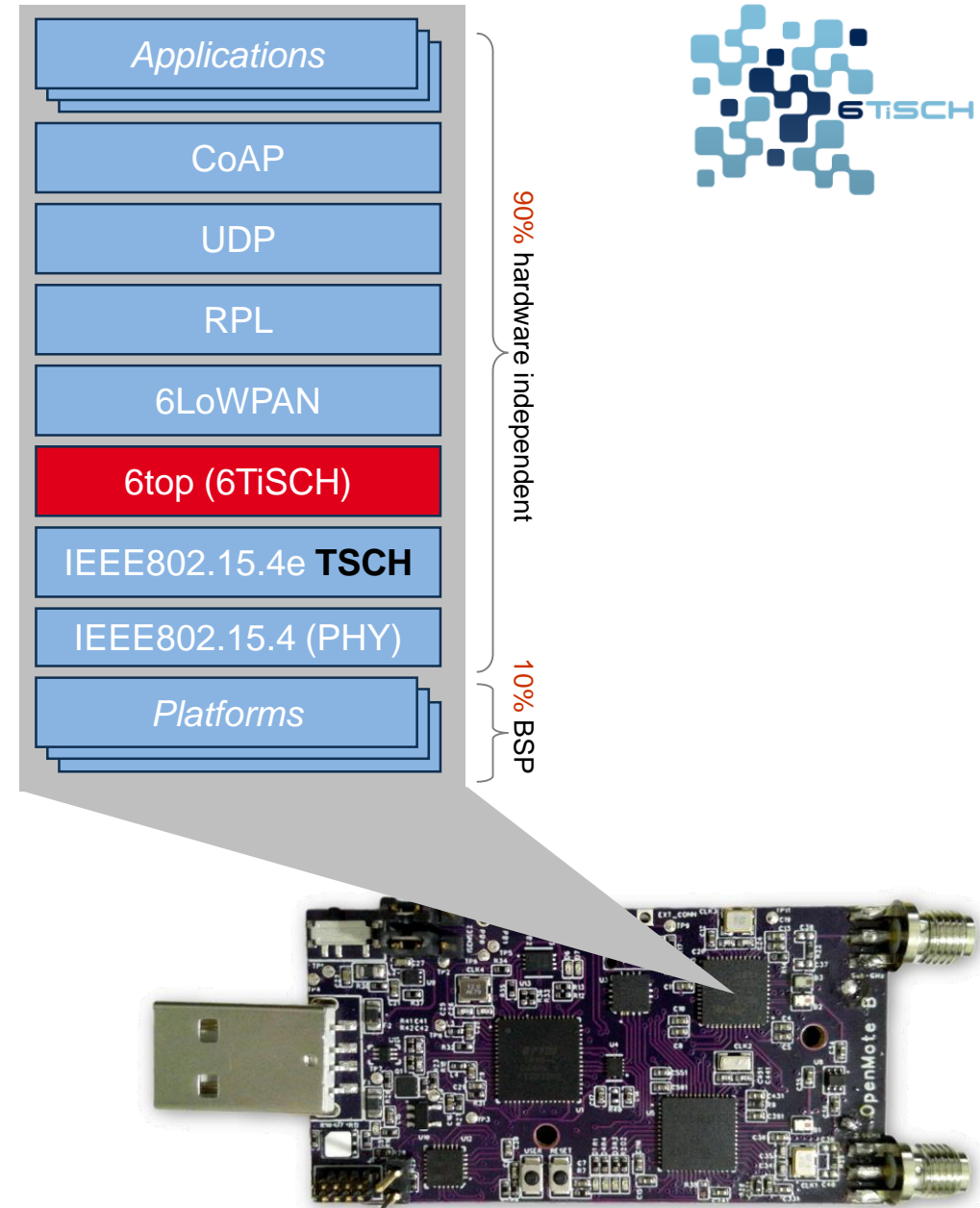


- <https://bitbucket.org/6tisch/simulator/>
- High-level simulator:
 - Answers “what-if” questions
 - Provides performance estimation of 6TiSCH
- pure Python
- Full 6TiSCH behavior
 - IEEE802.15.4 TSCH
 - minimal-security
 - RPL
 - 6P
 - MSF
- Can run on multiple CPU cores
- Extensive logging and plotting capabilities
- Can replay real-world connectivity traces (WIP)
- Core team: Mališa Vučinić, Yasuyuki Tanaka, Keoma Brun-Laguna



OpenWSN – release 1.12.0

- www.openwsn.org
- Open-source implementation of the 6TiSCH protocol stack. Full support of latest drafts:
 - IEEE802.15.4 TSCH (with link-layer security)
 - draft-ietf-6tisch-minimal-security-03
 - draft-ietf-6tisch-6top-protocol-10
 - draft-chang-6tisch-msf-01
- Running on 11 platforms, include the OpenMote B **[NEW!]**
- Over 60 direct contributors, catalyst for R&D around TSCH networks
- Open-source (BSD license)
- Reference implementation for ETSI 6TiSCH interop events
- Core team: Tengfei Chang, Xavi Vilajosana



Wireshark dissectors

- Protocols supported by latest official Wireshark release (<https://www.wireshark.org/download.html>):
 - IEEE 802.15.4
 - RPL (RFC6550)
 - **draft-ietf-6tisch-6top-protocol-10**
 - 6LoWPAN Paging Dispatch (RFC 8025)
 - 6LoWPAN Routing Header (RFC 8138)
 - **draft-ietf-core-object-security-07**
 - CBOR (RFC 7049)
 - CoAP (RFC 7252)
- Nightly builds of Wireshark:
 - <https://www.wireshark.org/download/automated/>
 - Nightly builds of code approved by Wireshark
 - https://openwsn-builder.paris.inria.fr/job/6TiSCH_Wireshark/
 - Full Wireshark installer, including on Windows
 - Includes features or updates not yet integrated into the official Wireshark



6TiSCH-related events @IETF101

- <https://trac.ietf.org/trac/ietf/meeting/wiki/101codelounge>
- 6TiSCH/roll discussion, 4-6pm today, code-lounge
 - Scope and useage about draft-richardson-6tisch-enrollment-enhanced-beacon and draft-richardson-6tisch-roll-enrollment-priority (lead:Michael)
- F-Interop event, 6-8pm today, code lounge
 - Prepare for next F-Interop event: scope, TD, implementation (lead: Tengfei, Maria Rita)
 - Side discussions related to testing OSCORE, 6LoWPAN, etc. (lead: Malisa)
- OpenWSN & friends, 8-10pm today, code lounge
 - OpenMote B platform (lead: Xavi)
 - Multiple interfaces support (lead: Jonathan)
 - Changing interface to PPP (lead: Michael)
 - 6TiSCH simulator (lead: Yatch)
- OpenWSN/RIOT, 10-2 tomorrow
 - Integration (leads: Peter, Tengfei)
- *populate wishlist at bottom on minutes*

2nd F-Interop 6TiSCH Interoperability Event



- **Mark your calendars!**
- 26-27 June 2018, Paris
- Organized by:
 - LIST (Maria Rita Palattella)
 - Inria (Tengfei Chang)
 - ETSI (Miguel Reina Ortega)
- With support of the H2020 F-Interop project
- *Scope to be discussed 6-8pm today, code lounge*

