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

This is a reminder of IETF policies in effect on various topics such as patents or code of conduct. It is only meant to point you in the right direction. Exceptions may apply. The IETF’s patent policy and the definition of an IETF "contribution" and "participation" are set forth in BCP 79; please read it carefully.

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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)

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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!
Administriivia

- 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

Intro and Status
* Note—Well, Blue Sheets, Scribes, Agenda Bashing
* Status of the work, link with other WGs [ 5min]
* next 6TiSCH Interop event [ 5min]

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
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-watteyne-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/](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](http://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](https://trac.ietf.org/trac/ietf/meeting/wiki/101codelounge)

• 6TiSCH/roll discussion, 4-6pm today, code-lounge
  • Scope and usage 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**