

RAW + DetNet WG

IETF 117

San Francisco

Chairs:

Eve Schooler

eve.schooler@gmail.com

Rick Taylor

rick@tropicalstormsoftware.com

Lou Berger

lberger@labn.net

János Farkas

janos.farkas@ericsson.com

Online Agenda and Slides at:

<https://datatracker.ietf.org/meeting/117/session/detnet>

WG Information: <https://datatracker.ietf.org/wg/detnet/>



This session is being recorded

IETF 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.

As a reminder:

- By participating in the IETF, you agree to follow IETF processes and policies.
- If you are aware that any IETF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion.
- As a participant in or attendee to any IETF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public.
- Personal information that you provide to IETF will be handled in accordance with the IETF Privacy Statement.
- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (<https://www.ietf.org/contact/ombudsteam>) if you have questions or concerns about this.

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)

Also see: <http://www.ietf.org/about/note-well.html>

IETF Conduct Guidelines

- The IESG has asked all chairs to remind their working groups of the need for appropriate behavior. This is described in more detail in BCP 54. In summary:
 1. IETF participants extend respect and courtesy to their colleagues at all times.
 2. IETF participants have impersonal discussions.
 3. IETF participants devise solutions for the global Internet that meet the needs of diverse technical and operational environments.
 4. Individuals are prepared to contribute to the ongoing work of the group.

IETF 117 Meeting Tips



- **In-person participants**

- Make sure to sign into the session using the Meetecho Onsite Tool from the Datatracker agenda
- Use Meetecho to join the mic queue
- *Keep audio and video off if not using the onsite version*

- **Remote participants**

- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended

Meeting Administrivia

- Meetecho
 - Using meetecho queue control
 - Chat/Jabber available for use
 - Blue sheets
- Note taking
 - <https://notes.ietf.org/notes-ietf-117-detnet?both> (at end)
 - Please help with minute taking (only discussion needs to be captured)
- Online Agenda and Slides at:
<https://datatracker.ietf.org/meeting/117/session/detnet>
- Data tracker: <http://datatracker.ietf.org/wg/detnet/>
- Chat: <https://zulip.ietf.org/#narrow/stream/detnet>

IETF 117 Sessions

- DetNet Session: Wednesday, July 26, 2023 - Session II
 - 13:00-15:00 PT (20:00 – 22:00 UTC)
 - Continental 4
- Joint DetNet - RAW Session: Thursday, July 25, 2023 - Session III
 - 15:30-16:30 PT (22:30 – 23:30 UTC)
 - Continental 6

Agenda -- Session II

- **13 15:30 20 min Title: Intro, WG Status, Draft Status**
 - Presenter: Chairs
- **14 15:50 20 min Title: RAW Architecture**
 - Link: <https://datatracker.ietf.org/doc/draft-ietf-raw-architecture/13/>
 - Presenter: Pascal Thubert
- **15 16:10 10 min Title: DetNet YANG Model Extension for 5GS as a Logical DetNet Node**
 - Draft link: <https://datatracker.ietf.org/doc/draft-jlg-detnet-5gs/00/>
 - Presenter: Tianji Jiang
- **16 16:20 10 min Title: Traffic Engineering Extensions for Enhanced DetNet**
 - Draft link: <https://datatracker.ietf.org/doc/draft-xiong-detnet-teas-te-extensions/00/>
 - Presenter: Quan Xiong

RAW WG + DetNet WG

□ DetNet WG

- As discussed at IETF 116 RAW Session the RAW WG is being re-integrated with the DetNet WG
 - RAW WG was started to get focus on integration of DetNet and wireless
 - It has produced 1 RFC, 4 WG documents, plus more individual drafts
 - Continues to have significant overlap with DetNet WG
- This impacts
 - WG Management
 - Charter
 - Documents

WG Management

- Chairs
 - No change in DetNet WG chairs
- Secretary
 - Eve Schooler will replace Ethan Grossman as WG secretary
 - will also help ensure there is continuity for existing RAW work
 - will continue as Shepherd for the RAW Architecture document
 - **A Big Thank You to Ethan** who served as WG secretary for many years!

Proposed Charter Changes

- DetNet charter was largely sub-network technology agnostic
- 2 proposed changes
 - To incorporate wording from the RAW WG charter
- Change 1: New sentence in 1st paragraph of charter
 - The Deterministic Networking (DetNet) Working Group focuses on deterministic data paths that operate over Layer 2 bridged and Layer 3 routed segments, where such paths can provide bounds on latency, loss, and packet delay variation (jitter), and high reliability. **DetNet solutions apply to both wireless and wired networks.** The Working Group addresses Layer 3 aspects in support of applications requiring deterministic networking. The Working Group collaborates with IEEE802.1 Time-Sensitive Networking (TSN), which is responsible for Layer 2 operations, to define a common architecture for both Layer 2 and Layer 3. Example applications for deterministic networks include professional and home audio/video, multimedia in transportation, engine control systems, and other general industrial and vehicular applications being considered by the IEEE 802.1 TSN Task Group.

Charter Changes (cont)

- Change 2: addition to
“DetNet is chartered to work in the following areas:”
 - DetNets including Wireless: This work will define how DetNet solutions operate over networks that include wired and wireless network technologies. The work may include providing DetNet reliability and availability for scheduled wireless segments and other wireless media, e.g., frequency/time-sharing physical media resources with stochastic traffic: IEEE Std. 802.15.4 timeslotted channel hopping (TSCH), 3GPP 5G ultra-reliable low latency communications (URLLC), IEEE 802.11ax/be, and L-band Digital Aeronautical Communications System (LDACS), etc. This work will stay abstract to the radio layers underneath, addressing the Layer 3 aspects in support of applications requiring high reliability and availability.
- Next steps
 - Please comment on list
 - Our AD will use the change process in IESG

Document Plan

- With IESG
 - [draft-ietf-raw-use-cases-11](#) RFC Ed Queue
- Post LC
 - [draft-ietf-raw-architecture-13](#) Open issues identified as part of LC
 - On agenda; Process will be worked in DetNet WG
- WG Documents -- To replace -raw by -detnet-raw
 - [draft-ietf-raw-technologies-08](#) Near completion
 - [draft-ietf-raw-oam-support-06](#) To be finalized in DetNet WG
 - [draft-ietf-raw-framework-01](#) Expired, to be worked after arch.
- Expired
 - [draft-ietf-raw-industrial-requirements-00](#) Is there interest in working this?
- Individual Documents
 - 4 documents from Carlos
 - Please republish as draft-bernardos-detnet-....
 - Please summarize work on DetNet mail list
 - DetNet WG – Please review and comment on these drafts

Appreciation

- Thank you to all who have contributed to the work in RAW
 - Including those who worked on the:
 - RAW RFCs
 - Working Group documents
 - Individual documents
 - Great sessions and discussion

 - *And Eve and Rick!*
- We look forward to all of your future contributions!