



RAW Technologies

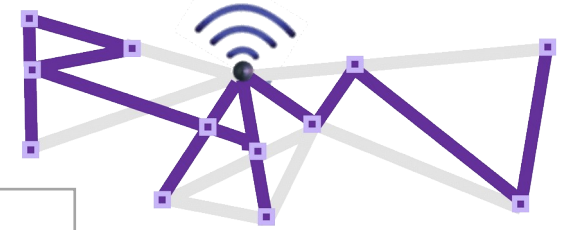
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Authors: multiple

RAW - IETF 109 – Virtual / Bangkok

Why this draft?

RAW needs an L3 abstraction for reliable and available parallel paths



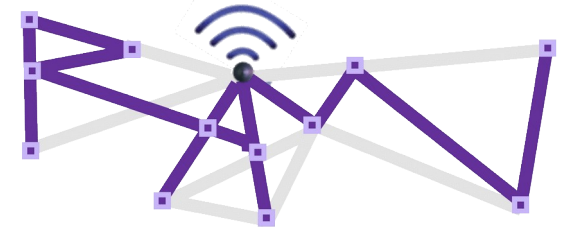
Illustrate Recent Progress in multiple radios

- Parallel evolution towards time/frequency “resource blocks” / “RUs” / Timeslots
- Increasing capabilities to schedule (towards determinism)
- Better throughput and higher reliability for 1 hop, latency bounds

Present Technologies elected by RAW to enable WG work

- Wi-Fi 6 and beyond (IEEE Std 802.11ax / be)
- IEEE Std 802.15.4 TSCH
- 3GPP 5G
- LDACS (Air-to-Ground and Air-to-Air plane communication)

Document Status



Document adopted as WG Doc

- Quite complete already
- Not exactly the same structure for all

Per-Technology Section Structure

X. Tech name

- X.1. Provenance and Documents
- X.2 General Characteristics
- X.3. Applicability to deterministic flows

5G has more; emulate in others?

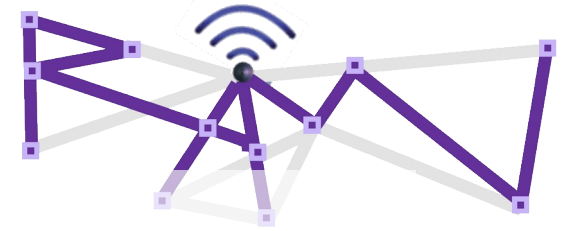


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6.2. General Characteristics

6.3. Deployment and Spectrum

6.4. Applicability to Deterministic Flows

6.4.1. System Architecture

6.4.2. Overview of The Radio Protocol Stack

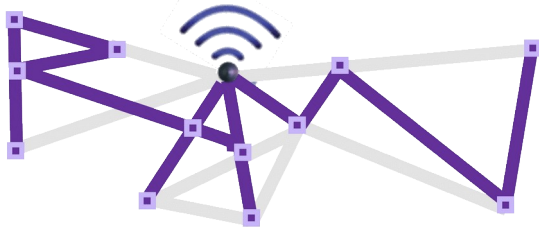
6.4.3. Radio (PHY)

6.4.4. Scheduling and QoS (MAC)

6.4.5. Time-Sensitive Networking (TSN) Integration

6.5. Summary

Open discussion



Additions?

- ▮ Missing topic (see 5G example next slide)?
- ▮ More on RAW problem statement?
 - ▮ Right now we have only a discussion on scheduling:

- [1.](#) Introduction
- [2.](#) Terminology
- [3.](#) On Scheduling
 - [3.1.](#) Benefits of Scheduling on Wires
 - [3.2.](#) Benefits of Scheduling on Wireless
- [4.](#) IEEE 802.11

What Next?

- ▮ Maybe a pre WGLC reviewer (or 2)