RAW Technologies

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RAW - IETF 110 - Virtual / Prague

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
- \Rightarrow 3GPP 5G
- ⇒ LDACS (Air-to-Ground and Air-to-Air plane communication)

Per-Technology Section Structure

Table of Contents

X. Tech name

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

- 6. 5G
 - 6.1. Provenance and Documents
 - 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 Protocc Stack
 - 6.4.3. Radio (PHY)
 - 6.4.4. Scheduling and QoS (MAC)
 - 6.4.5. Time-Sensitive Networking (TSN) Integration
 - 6.5. Summary

Document Status



Document adopted as WG Doc

Last version draft-ietf-raw-technologies-01

Going for WGLC

- ⇒ Quite complete already
- \Rightarrow 5G has more information; emulate in others?
- ⇒ Notes on IPv6 / SRv6 ?
- ⇒ Update for the latest Wi-Fi 7 / TSN ?

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
3.1. Introduction
3.1. Scheduling
4. IEEE 802.11
4. IEEE 802.11
5. IEEE 802.11
6. IEEE
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What Next?

 \Rightarrow Maybe a pre WGLC reviewer (or 2)