

IETF Hackathon: SWiF Codec

IETF 104
23-24 March, 2019
Prague



A codec for what?

- recover from **packet losses** thanks to FEC
- **reduce added latency** compared to “traditional” block FEC codes (e.g., Reed-Solomon)
 - key asset of sliding encoding window codes
- strong links with **NWCRG** and **RLC FEC scheme I-D** (TSVWG)

Hackathon goals

Our second Hackathon!

1- design a **reference, open-source, free codec**

- none available
- facilitate FEC tests and adoption

2- challenge our **“generic API” I-D**

Achievements

- **fixed several issues** in “generic API” I-D
 - 4 corrections + 2 open points
- encoder **done, tests on-going**
- C test/demo application **done, to be tested**
- python wrapper for tests/demos **in progress**
- decoder **in progress**

Wrap Up

**A unique 100% French-speaking,
40% women, Team:**

- Marie-José Montpetit
- Cédric Adjih
- Oumaima Attia
- François Michel
- Vincent Roca (lead)

<https://github.com/irtf-nwcrgr/swif-codec>

[NWCRG](#) IRTF research group