IETF Hackathon: SWiF Codec

IETF 106
16-17 November, 2019
Singapore

Hackathon goals

Our 4th Hackathon

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

- RLC-like first, RLNC-like in a second step
- facilitate FEC tests and adoption

2- challenge our **"generic API" I-D**

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Team @ ietf106

A unique 100% French-speaking team (once again):

- Cédric Adjih (part time)
- Oumaima Attia
- Vincent Roca (lead)

- Oumaima and Cédric did a lot since previous hackathon... unlike me.

Thanks !

Achievements

- encoder done

- decoder **starts decoding, result seems okay**

- C demo application **almost done**

- python wrapper for tests/demos **almost done**

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Achievements (2)

- **fixed 1 issues** in "generic API" I-D
  - stupid void* instead of void return type
- 4 open points remain from ietf105:

  encoder_reset_coding_window() usefulness / esi_t type / callback at session end? / swif_encoder_get_coding_window_information() format

Next steps

- **5th hackathon** at IETF107/Montreal
  - code cleanup/unitary tests/applications
  - better documentation in the I-D: how to use it?

- we'll then be ready for the RLNC-like codec
  - @IETF108? Before?

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