# IETF103 Hackathon: Sliding window FEC codec (sw-fec-codec)

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# Web sites

- **IETF**
  - official wiki with project description
    - ✓ **https://trac.ietf.org/trac/ietf/meeting/wiki/103hackathon**

- **Github**
  - new repo for Hackathon work
    - ✓ **https://github.com/irtf-nwcrg/sw-fec-codec**

** ideas for a better project name? **

  - for source code, guidelines, references to key documents, etc.

# Current project description (IETF hackathon wiki)

**Sliding Window FEC codec**

Champion(s)

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Project(s)

Main goal is to develop an **open-source C-language codec for a sliding window FEC code**. These codes can boost performance of content delivery protocols in harsh environments where packet losses can be frequent, while keeping the FEC-related added latency low. This development is done in the context of the "Coding for Efficient Network Communications" IRTF Research Group (NWCRG, https://datatracker.ietf.org/rg/nwcrg), with strong relationships with the Generic API I-D (https://datatracker.ietf.org/doc/draft-roca-nwcrg-generic-fec-api/) and RLC codes (https://datatracker.ietf.org/doc/draft-ietf-tsvwg-rlc-fec-scheme/) as examples of sliding window codes. Possible applications to QUIC (https://datatracker.ietf.org/doc/draft-swett-nwcrg-coding-for-quic/ and https://datatracker.ietf.org/doc/draft-roca-nwcrg-rlc-fec-scheme-for-quic/) are expected.

# Key questions to agree on

- **C language codec**
- **license: GPL, LGPL, something else?**
- **re-encoding in intermediate nodes possible?**
  - otherwise purely end-2-end (as in RLC)

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- **is anybody interested to help me run the project?**

- **more technical details will be provided/discussed/agreed before and during hackathon…**