NWCRG meeting

Vincent Roca, Victor Firoiu (remotely)
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Note Well

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Administrativa

- Charter
  - [https://datatracker.ietf.org/group/nwcrg/charter/](https://datatracker.ietf.org/group/nwcrg/charter/)
  - IRTF website: [https://irtf.org/nwcrg](https://irtf.org/nwcrg)

- Mailing list
  - nwcrg@irtf.org
  - Subscription: [https://www.irtf.org/mailman/listinfo/nwcrg](https://www.irtf.org/mailman/listinfo/nwcrg)

- Today’s slides
  - [https://datatracker.ietf.org/meeting/99/session/nwcrg/](https://datatracker.ietf.org/meeting/99/session/nwcrg/)

- Remote participation
  - Other means: [http://ietf.org/meeting/99/remote-participation.html](http://ietf.org/meeting/99/remote-participation.html)
Quick status about active Internet-Drafts

● WG-item I-D
  ○ draft-irtf-nwcrg-network-coding-taxonomy-05
    • passed RG last call
    • submitted for IRSG last call (2017/07/18)

● Individual I-D
  ○ draft-kuhn-nwcrg-network-coding-satellites-00
Agenda

00- Welcome, general matters, goals (chairs) (10’)

PART I: Use-cases where end-to-end coding or network coding can be beneficial

- NC for satellite communications
  01- "Network coding and satellites" (Nicolas Kuhn, remote) (10’)
    • Discussions: what's next and where do we want to go? (5’)

- NC for ICN/CCN
  02- "Network Coding Meets Information-Centric Networking: An Architectural Case for Information Dispersion Through Native Network Coding " (Cedric Westphal) (10’)
    • Also covers NetCodCCN (Infocom'16)
  03- "Low latency low loss streaming using in-network coding and caching" (Hitoshi Asaeda) (10’)
    • (Infocom'17)
    • Discussions: what's next and where do we want to go? (5’)

- Other NC potential use-cases
  04- "Some Network Coding Use Cases" (Vincent Roca, on behalf of Rolf Sperber (remote)) (10’)
  05- "Internet overlay networks: the need for a Generic Robust Low Latency Tunelling with common APIs (Marie-José Montpetit, remote) (10’)
    • Discussions: what's next and where do we want to go? Are these use-cases sufficient to extract a generic architecture and/or a generic protocol? (5’
PART II: On the coding side
- Low complexity coding
  - 06- "Pyrit: Polynomial Ring Transforms for Fast Erasure Coding" (Jonathan Detchart) (10’)
- On the benefit of sliding window codes (network coding?) to IETF protocols
  - 07- "Less Latency and Better Protection with AL-FEC Sliding Window Codes: a Robust Multimedia CBR Broadcast Case Study" (Vincent Roca, Inria) (10’)
  - 08- FEC codes and QUIC (Ian Swett) (10’)
    - Discussions: what's next and where do we want to go? What about the WebRTC and PAYLOAD WGs? (5’)

PART III: Other topics (if time left)
- 09- "About a simple protocol to negotiate network coded communication" (Frank Fitzek, TBC) (5’)
  - Discussions: what's next and where do we want to go? (5’)