ICNRG @ IETF-100
Singapore

Information-Centric Networking Research Group
Wednesday, November 15th, 2017

Chairs' Slides

Dirk Kutscher
Börje Ohlman
Dave Oran

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ICNRG Administrativia

- IRTF RG on Information-Centric Networking
- Mailing list: icnrg@irtf.org
- Web: http://irtf.org/icnrg
- Wiki: http://trac.tools.ietf.org/group/irtf/trac/wiki/icnrg
- Github: https://github.com/icnrg
- Chairs
  - Dirk Kutscher (Huawei)
  - Börje Ohlman (Ericsson Research)
  - Dave Oran (Network Systems Research Design)
- This meeting
  - Note takers: ???
  - Etherpad: http://etherpad.tools.ietf.org/p/notes-ietf-100-icnrg
  - Meeting
    Materials: https://datatracker.ietf.org/meeting/100/session/icnrg

ICNRG Wednesday Agenda

- **Welcome, Agenda Bashing, Minutes taker, Bluesheets, Status** - Chairs (5 min)
- **Chairs report** (Sunday, RG Drafts) - Chairs (5 min)
- **IoT and ICN discussion** (60 min)
- **Enabling ICN in 3GPP's 5G NextGen Core Architecture** - Ravi Ravindran (15 min)
  - https://www.ietf.org/internet-drafts/draft-ravi-icnrg-5gc-icn-00.txt
- **Status update and discussion on revised ICN-LTE document** (15 min)
  - https://datatracker.ietf.org/doc/draft-suthar-icnrg-icn-lte-4g/ - Prakash Suthar
- **Status update and discussion on revised ICN deployment Guidelines Document** (15 min)
  - https://datatracker.ietf.org/doc/draft-rahman-icnrg-deployment-guidelines/ - Akbar Rahman
- **Network Coding for CCN & NDN** - Kazuhisa Matsuzono (15 min)
  - https://datatracker.ietf.org/doc/draft-matsuzono-nwcrg-nwc-ccn-reqs/
- **Multi-Service Tag** (duanshihui): https://datatracker.ietf.org/doc/draft-xia-icn-multiservtag/ (15 min)

RG Drafts

- **Update on CCNx protocol documents** - revision based on IRTF review in process:
  - https://datatracker.ietf.org/doc/draft-irtf-icnrg-ccnxmessages/
  - https://datatracker.ietf.org/doc/draft-irtf-icnrg-ccnxsemantics/
  - Recent updates reflect comments from IRSG review
  - Will move on with publication after IETF-100

- **Terminology Doc update & process for RG adoption**
  - https://datatracker.ietf.org/doc/draft-wissingh-icnrg-terminology/
  - Have received support for support for adoption on list and at Sunday meeting
  - Will re-confirm on the list after the meeting

Sunday Meeting 1

- Materials:
  https://datatracker.ietf.org/meeting/interim-2017-icnrg-04/session/icnrg
- **FLIC (File-like ICN Collection)**
  - Mostly stable
  - Want to publish this at some point
  - Needs more implementation / evaluation
- **802.15.4 ICN Adaptation Layer**
  - CCN on 802.15.4
  - Compression discussion
- **Contrace**
  - One proposal & implementation of a traceroute-like function
  - Discover path info, RTT, status of in-network caches
  - Requires new message types and node behavior
  - Authors discussing merging with ICN Traceroute proposal

Sunday Meeting: Name Resolution

- **NRS implementation based on CCNx/CICN**
  - ETRI proof-of-concept of a specific NRS system
  - Message formats for name resolution
- **Requirements for Name Resolution in ICN**
  - Rather "Architectural Design Considerations"
- **Discussion**
  - (see message on list)
  - How would name resolution assist forwarding
  - How does it relate to name-based routing
  - Changes to ICN protocol semantics?
  - Some locator discussion
  - Most important take-away: this is actually a security/trust discussion

Sunday Meeting: 3

- **Kafka Streams and ICN**
  - How can ICN assist/improve application-layer messaging/processing frameworks?
- **Augmented Reality / Virtual Reality**
  - Generalizing web acess and edge computing for AR/VR through ICN

IoT and ICN

- **IoT Naming - some reflections** - Börje Ohlman (15 min)
- **Status update and discussion on revised Support for Notifications in CCN** - Ravi Ravindran (15 min)
  - https://datatracker.ietf.org/doc/draft-ravi-icnrg-ccn-notification/
- **Status update and discussion on Design Considerations for Applying ICN to IoT draft** - Ravi Ravindran (15 min)
  - https://datatracker.ietf.org/doc/draft-zhang-icnrg-icniot/
- **Status update and discussion on ICN based Architecture for IoT** - Ravi Ravindran (15 min)
  - https://datatracker.ietf.org/doc/draft-zhang-icnrg-icniot-architecture/

Presentations

- **Enabling ICN in 3GPP's 5G NextGen Core Architecture** - Ravi Ravindran (15 min)
  - https://www.ietf.org/internet-drafts/draft-ravi-icnrg-5gc-icn-00.txt
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Wrap-up

- Future ICNRG meetings
  - Interim before IETF-101?
    - Focus topics, location, host?
  - ICNRG @ IETF101, London
    - Regular?
    - Sunday Interim?
- AOB?