

ICNRG Meeting

Chicago

Information-Centric Networking Research Group
Thursday, March 30th, 2017

Chairs' Slides

Dirk Kutscher
Börje Ohlman
Dave Oran

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See RFC 3979 (BCP 79) for definitions of "IPR" and "contribution" and for the detailed rules (substituting "IRTF" for "IETF").

ICNRG Administrativa

- 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 taker: ???
 - Etherpad: <http://etherpad.tools.ietf.org:9000/p/notes-ietf-98-icnrg>
 - Meeting Materials: <https://datatracker.ietf.org/meeting/98/session/icnrg>

ICNRG Thursday Agenda

9:00 Meeting starts

- Welcome, Agenda Bashing, Minutes taker, Bluesheets, Status - Chairs (10 min)
- Chairs report:
 - ICNRG interim meetings - Sunday
 - ICN Harmonization update
 - Status of CCNx Drafts
- NSF/Intel proposal call ICN WEN on ICN and IoT - Eve Schooler (20 min)
- Brief Description of DARPA SHARE program - Dave Oran (5 mins)
- ICN in the IoT on RIOT: CCNlite & Pub-Sub - Thomas C. Schmidt (15 min)
- NDN on RIOT - Alex Afanasyev (10 min)
- Update on the ICN in disaster scenarios draft - Jan Seedorf (15 min)
 - <https://datatracker.ietf.org/doc/draft-irtf-icnrg-disaster/>
- New draft on “Deployment Configurations for ICN” - Akbar Rahman (15 min)
 - <https://datatracker.ietf.org/doc/draft-rahman-icnrg-deployment-guidelines/>
- Requirements and Challenges for IoT over ICN - Ravi Ravindran (15 min)
 - <https://datatracker.ietf.org/doc/draft-zhang-icnrg-icniot/>

ICNRG Thursday Agenda (cont)

- Contrace: Traceroute Facility for Content-Centric Network - Hitoshi Asaeda (10 min)
 - <https://datatracker.ietf.org/doc/draft-asaeda-icnrg-contrace/>
- Challenges in Networking to Support Augmented Reality and Virtual Reality - Cedric Westphal (15 min)
 - <https://users.soe.ucsc.edu/~cedric/papers/westphal2017challenges.pdf>
- Deploying Information Centric Networking in LTE Mobile Networks - Prakash Suthar (5 min)
 - <https://datatracker.ietf.org/doc/draft-suthar-icnrg-icn-lte-4g/>
- Wrap up - Chairs (10 min)
 - Upcoming ICN events
 - Next meetings

11:30 Meeting ends (the latest)

ICNRG Sunday Interim

9:00 Meeting starts

- Welcome, Agenda Bashing, Minutes taker, Bluesheets, Status - Chairs (15 min)
- Comparison of Security and Privacy features in major FIA architectures - Chris Wood (30 min)
- FD.IO open source CCN forwarder - Luca Muscariello (30 min)
- ICN testbeds - Luca Muscariello (20 min)
- NDN community meeting update/report - Lixia Zhang (20 min)
- Deploying Information Centric Networking in LTE Mobile Networks - Prakash Suthar (30 min)

12:30-14:00 Lunch

- GGIE::Leveraging IPv6 Glass to Glass - Glenn Deen (30 min)
- Merged NRS requirements draft - Jungha Hong (30 min)
 - <https://datatracker.ietf.org/doc/draft-jhong-icnrg-nrs-requirements/>
- Reliable ICN transport - Ideas and issues - Börje Ohlman (30 min)
- Terminology document - Bastiaan Wissingh (30 min)
 - <https://datatracker.ietf.org/doc/draft-wissingh-icnrg-terminology>
- Breakout sessions
 - Terminology draft
 - ICN & IoT
 - Wrap up, Next meetings - Chairs (10 min)

17:00 Meeting ends (the latest)

Cisco Acquired the PARC CCN Software & IPR

Cisco CCN acquisition: what changes?

- For IRTF and IETF if a WG is created
 - IPR clauses on CCN drafts has changed,
 - Under reasonable and non-discriminatory terms, with reciprocity, to implement and fully comply with the standard,
- Which means:
 - **RAND**: If standard is adopted Cisco will not assert any patents [...] against any party for making, using, selling, importing or offering for sale a product that implements the standard,
 - **Reciprocity**: Cisco retains the right to assert its patents against any party that asserts a patent it owns or controls [...] against Cisco in any IETF standard.

...and created a new Open Source effort based on it

Community Information-Centric Networking (CICN)

- Several software components
 - VPP ICN forwarder
 - Socket based forwarder
 - ICN socket API
 - HTTP server
 - DASH video player
 - vICN for container based network deployment and orchestration
- Software is distributed under Apache 2.0 license



ICN “Harmonization” Effort

- Now excellent time to resume harmonization effort
 - Understanding & documenting differences between CCNx/NDN
 - Paving the way for common unified set of specifications
- Discussions during the week seem to suggest support on all sides
- Plan
 - Goal: Finalize “differences” document well before IETF-99
 - Weekly phone calls (details will be announced)
 - Potentially longer virtual interim in May
- Long-term goal
 - ICN specifications owned and controlled by ICNRG
 - Maintain good connection with open source projects (fd.io cicc, NDN, others)
 - Fostering more experiments, applications and new research

<https://icnrg.github.io/draft-icnrg-harmonization/draft-icnrg-harmonization-00.html>

Upcoming ICN Research Events



- ACM ICN-2017 conference, Berlin, September 26-28
<http://conferences.sigcomm.org/acm-icn/2017/>
- IEEE Infocom 2017 Workshop on Named-Oriented Mobility, Atlanta, May 1-4
<http://infocom2017.ieee-infocom.org/workshop/nom>
- IEEE ICME MuSIC 2017, Hong Kong, July 10-14
<http://music2017.itec.aau.at/>
- IFIP Networking Workshop on Information-Centric Fog Computing (ICFC), Stockholm, June 12 - 16
 - <http://networking.ifip.org/2017/index.php/workshops/workshop-on-information-centric-fog-computing-icfc>