

# **ICNRG Meeting @ IETF96 Berlin**

**IRTF  
Information-Centric Networking Research Group  
Thursday, July 21, 2016**

Chairs' Slides

Dirk Kutscher  
Börje Ohlman  
Dave Oran

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# ICNRG Administrativa

- IRTF RG on Information-Centric Networking
- Mailing list: [icnrg@irtf.org](mailto:icnrg@irtf.org)
- Web: <http://irtf.org/icnrg>
- Wiki: <http://trac.tools.ietf.org/group/irtf/trac/wiki/icnrg>
- Chairs
  - Dirk Kutscher (NEC Laboratories Europe)
  - Börje Ohlman (Ericsson Research)
  - Dave Oran (Cisco Systems)
- This meeting
  - **Note taker:** Chris Wood      **Thanks!!!**
  - <https://neclab.titanpad.com/ICNRG-Berlin-Thursday>

# ICNRG Thursday Agenda

- Welcome, Agenda Bashing, Minutes taker, Bluesheets, Status - Chairs (15 min)
  - a. Report from Berlin Interim meeting
  - b. RIOT summary/reflection
  - c. Dagstuhl summary
  - d. Terminology document
  - e. ICN conference accepted papers
- RG documents status (20 min)
  - a. ICN Research Challenges: <https://datatracker.ietf.org/doc/draft-irtf-icnrg-challenges/>
  - b. Adaptive Video Streaming over ICN: <https://datatracker.ietf.org/doc/draft-irtf-icnrg-videostreaming/>
  - c. Information-centric Networking: Evaluation and Security Considerations: <https://datatracker.ietf.org/doc/draft-irtf-icnrg-evaluation-methodology/>
  - d. CCNx Messages in TLV Format: <https://datatracker.ietf.org/doc/draft-irtf-icnrg-ccnxmessages/>
  - e. CCNx Semantics: <https://datatracker.ietf.org/doc/draft-irtf-icnrg-ccnxsemantics/>
- Individual drafts
  - a. CCNx Content Object Chunking - Marc Mosko (10 min)
    - i. <https://datatracker.ietf.org/doc/draft-mosko-icnrg-ccnxchunking/>
  - b. The CCNx URI Scheme - Marc Mosko (10 min)
    - i. <https://datatracker.ietf.org/doc/draft-mosko-icnrg-ccnxurischeme/>
  - c. File-Like ICN Collection (FLIC) - Chris Wood (10 min)
    - i. <https://datatracker.ietf.org/doc/draft-tschudin-icnrg-flic/>
  - d. Summarize of the changes to the merged ICN-IoT requirements draft based on the feedback on the mailing list - Ravi Ravindran (10 min)
    - i. <https://tools.ietf.org/html/draft-zhang-icnrg-icniot-requirements-01>
- ICN for IoT on challenged wireless links like LoRa - David Lake (20 min)
- NDN Protocol Stack for RIOT-OS - Alex Afanasyev (20 min)
- ICN BOF discussion (30 min)
  - a. Proposal for setting up a design team for Harmonizing CCN and NDN protocols
- Wrap up, Next meetings - Chairs (5 min)
  - a. Interim in Japan in conjunction with ACM ICN-2016 conference
  - b. Interim in Seoul?

# Report from ICNRG Berlin Interim

- Constructive discussion on ID/locator separation
  - Marc made an overview id/locator separation in different approaches both in the IP and ICN world
- Other topics discussed included: Downstream FIB, CDN pain points, ICN security, IP over ICN, NRS, ICN & IoT
- All meeting materials is available at our Wiki at:
  - <https://trac.tools.ietf.org/group/irtf/trac/wiki/icnrg/pastmeetings>

# RIOT Summit summary/reflection

- The community around the RIOT OS held an open Summit Friday-Saturday before the IETF
  - <http://summit.riot-os.org>
- ICN related activities:
  - Ralph Droms held the keynote talk about ICN and IoT
  - On Saturday ICN & IoT was one of the topics for the ad-hoc discussions

# Dagstuhl Seminar on Information-centric Networking and Security

About Dagstuhl and the seminar, see:

- <http://www.dagstuhl.de/en/program/calendar/semhp/?semnr=16251>

Major Discussion Threads

- Transport privacy
- Trust and identities
- Name privacy
- Locators and Identities
- Forward Secrecy
- ICN and IoT



# Dagstuhl Attendees





# Terminology Document

- First Draft Submitted
  - Draft-wissingh-icnrg-terminology-00.txt
- Much work by Baastian and others, so  
*Thank You*
- Some comments already posted on the mailing list
- Please participate - this is important work and needs a lot of eyes
  - And contributions!

# ICN 2016 Conference Preview

Kyoto Japan, September 26-28

Conference Web Site:

- <http://conferences2.sigcomm.org/acm-icn/2016/>

## ● TPC met June 28

- 80 papers submitted, 23 accepted (15 long, 8 short)
- A few papers previewed at Sunday ICNRG interim
  - OnboardICNg: a Secure Protocol for On-boarding IoT Devices in ICN
  - MIRCC: Multipath-aware ICN Rate-based Congestion Control
  - TCP/ICN: Carrying TCP over Content Centric and Named Data Networks
  - Network Names in Content-Centric Networking

# RG documents status

- ICN Research Challenges:
  - In RFC Editor's queue
  - <https://datatracker.ietf.org/doc/draft-irtf-icnrg-challenges/>
- Adaptive Video Streaming over ICN:
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- Information-centric Networking: Evaluation and Security Considerations:
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# Wrap up

## Future interim meetings

- Kyoto, Japan, September 29, immediately following the ACM ICN-2016 Conference
- Possible interim in Seoul?

## Next regular meeting:

- IETF97 Seoul, 13-18 November 2016