ICNRG Online Meeting

Information-Centric Networking Research Group
Monday, April 20th 2020

Chairs' Slides

Dirk Kutscher
Dave Oran

Online Participation Instructions

- WebEx: https://ietf.webex.com/ietf/j.php?MTID=mb5468806b3ea4500943bcf0387f32eaf
- Etherpad: https://etherpad.tools.ietf.org/p/irtf-icnrg-interim-2020-04-20
- Jabber: xmpp:icnrg@jabber.ietf.org?join

Please remember that all sessions are being recorded. Please also:

- Ensure your video is off
- Keep yourself muted unless you are speaking.
- Use Webex chat only to join the mic queue
    - "+q" adds you the the queue
    - "-q" removes you from the queue
    - Add your name and affiliation to the virtual bluesheet (the session Etherpad) via IETF Datatracker Meeting agenda
    - Join the session Jabber room (see above)
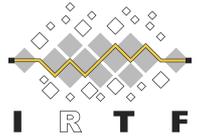
Note Well – Intellectual Property

- **The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules**

- By participating in the IRTF, you agree to follow IRTF processes and policies:

  - If you are aware that any IRTF contribution is covered by patents or patent applications that are owned or controlled by you or your sponsor, you must disclose that fact, or not participate in the discussion

  - The IRTF expects that you file such IPR disclosures in a timely manner – in a period measured in days or weeks, not months

  - The IRTF prefers that the most liberal licensing terms possible are made available for IRTF Stream documents – see RFC 5743

  - Definitive information is in RFC 5378 (Copyright) and RFC 8179 (Patents, Participation), substituting IRTF for IETF, and at https://irtf.org/policies/ipr

Note Well – Privacy & Code of Conduct

- As a participant in, or attendee to, any IRTF activity you acknowledge that written, audio, video, and photographic records of meetings may be made public

- Personal information that you provide to IRTF will be handled in accordance with the Privacy Policy at https://www.ietf.org/privacy-policy/

- As a participant or attendee, you agree to work respectfully with other participants; please contact the ombudsteam (https://www.ietf.org/contact/ombudsteam/) if you have questions or concerns about this

- See RFC 7154 (Code of Conduct) and RFC 7776 (Anti-Harassment Procedures), which also apply to IRTF
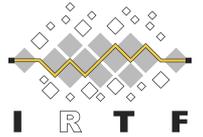
Goals of the IRTF

- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making

- **The IRTF conducts research; it is not a standards development organisation**

- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology

- See "An IRTF Primer for IETF Participants" – RFC 7418

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 (University of Emden)
  - Dave Oran (Network Systems Research Design)
- This meeting
  - **Marie-Jose Montpetit (Merci beaucoup!)**
  - Etherpad:
    https://etherpad.tools.ietf.org/p/irtf-icnrg-interim-2020-04-20
  - Meeting Materials:
    https://datatracker.ietf.org/meeting/interim-2020-icnrg-02/session/icnrg

Tack för din tjänst, Börje

- Börje Ohlman stepped down as ICNRG co-chair
- He was co-chairing ICNRG from its beginning in 2012

- **Thanks, Börje**
  and best wishes for the future!

New RFC!

RFC 7476 *(was draft-irtf-icnrg-scenarios)* **Information-Centric Networking: Baseline Scenarios**	2015-03 45 pages	Informational RFC
RFC 7927 *(was draft-irtf-icnrg-challenges)* **Information-Centric Networking (ICN) Research Challenges**	2016-07 38 pages	Informational RFC
RFC 7933 *(was draft-irtf-icnrg-videostreaming)* **Adaptive Video Streaming over Information-Centric Networking (ICN)**	2016-08 40 pages	Informational RFC
RFC 7945 *(was draft-irtf-icnrg-evaluation-methodology)* **Information-Centric Networking: Evaluation and Security Considerations**	2016-09 38 pages	Informational RFC
RFC 8569 *(was draft-irtf-icnrg-ccnxsemantics)* **Content-Centric Networking (CCNx) Semantics**	2019-07 40 pages	Experimental RFC
RFC 8609 *(was draft-irtf-icnrg-ccnxmessages)* **Content-Centric Networking (CCNx) Messages in TLV Format**	2019-07 46 pages	Experimental RFC
RFC 8763 *(was draft-irtf-icnrg-deployment-guidelines)* **Deployment Considerations for Information-Centric Networking (ICN)**	2020-04 30 pages New	Informational RFC

Active Research Group Drafts

draft-irtf-icnrg-5gc-icn-02 **Enabling ICN in 3GPP's 5G NextGen Core Architecture**	2020-02-04 32 pages	I-D Exists Active RG Document:Informational
draft-irtf-icnrg-ccninfo-04 **CCNinfo: Discovering Content and Network Information in Content-Centric Networks**	2020-03-22 34 pages	I-D Exists Active RG Document:Experimental
draft-irtf-icnrg-disaster-10 **Research Directions for Using ICN in Disaster Scenarios**	2020-01-30 20 pages	I-D Exists : AUTH Sent to the RFC Editor:Informational ⭐
draft-irtf-icnrg-flic-02 **File-Like ICN Collections (FLIC)**	2019-11-04 31 pages	I-D Exists Active RG Document:Experimental
draft-irtf-icnrg-icn-lte-4g-05 **Native Deployment of ICN in LTE, 4G Mobile Networks**	2019-11-04 37 pages	I-D Exists::Revised I-D Needed Waiting for Document Shepherd:Informational
draft-irtf-icnrg-icnlowpan-07 **ICN Adaptation to LoWPAN Networks (ICN LoWPAN)**	2020-03-09 49 pages	I-D Exists Waiting for IRTF Chair:Experimental ⭐
draft-irtf-icnrg-icnping-00 **ICN Ping Protocol Specification**	2020-03-19 18 pages	I-D Exists Active RG Document:Experimental
draft-irtf-icnrg-icntraceroute-00 **ICN Traceroute Protocol Specification**	2020-03-19 18 pages	I-D Exists Active RG Document:Experimental
draft-irtf-icnrg-ipoc-01 **Internet Protocol Tunneling over Content Centric Mobile Networks**	2020-01-31 15 pages	I-D Exists Active RG Document:Experimental
draft-irtf-icnrg-mapme-04 **MAP-Me : Managing Anchorless Mobility in Content Centric Networking**	2019-11-03 21 pages	I-D Exists IRTF stream
draft-irtf-icnrg-nrs-requirements-03 **Design Guidelines for Name Resolution Service in ICN**	2019-11-04 19 pages	I-D Exists Waiting for IRTF Chair:Informational ⭐
draft-irtf-icnrg-nrsarch-considerations-04 **Architectural Considerations of ICN using Name Resolution Service**	2020-03-09 11 pages	I-D Exists Waiting for IRTF Chair:Informational ⭐
draft-irtf-icnrg-terminology-08 **Information-Centric Networking (ICN): CCNx and NDN Terminology**	2020-01-17 20 pages	I-D Exists : RFC-EDITOR Sent to the RFC Editor:Informational ⭐
draft-oran-icnrg-qosarch-04 **Considerations in the development of a QoS Architecture for CCNx-like ICN protocols**	2020-02-28 26 pages	I-D Exists Waiting for IRTF Chair ⭐

Document Review and Sign-up Spreadsheet

Link in ICNRG Wiki

ICNRG Document Review Signup and Tracking ☆ 🗀
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fx | Instructions:

	A	B	C	D	E	F
1	**Instructions:**	Add a row below the document row if neeed				
2		Add the date and your Name/Email on that row				
3		When finished review, put in the date	Send review to ICNRG	Add url of message in the mail archive once posted		
4	**Document**	**Title**	**Review Stage**	**Reviewer Names/Emails**	**Signup Date**	**Finish Date**
5	draft-irtf-icnrg-ccninfo-04	**CCNinfo: Discovering Content and Network Information in Content-Centric Networks**	Possible Last Call			
6						
7	draft-irtf-icnrg-flic-02	**File-Like ICN Collections (FLIC)**	Possible Last Call	Ken Calvert <calvert@netlab.uky.edu>	18/04/2020	25/04/2020
8						
9	draft-irtf-icnrg-icnping-00	**ICN Ping Protocol Specification**	Recently Adopted			
10						
11	draft-irtf-icnrg-icntraceroute-0(	**ICN Traceroute Protocol Specification**	Recently Adopted			
12						
13	draft-irtf-icnrg-ipoc-01	**Internet Protocol Tunneling over Content Centric Mobile Network**	Last Call	Luca Muscariello <muscariello@ieee.org>		23/04/2020
14						
15	draft-irtf-icnrg-mapme-04	**MAP-Me : Managing Anchorless Mobility in Content Centric Networking**	Assess for Adoption	Prakash Suthar (psuthar@cisco.com), Milan Stolic (mistolic@cisco.com), Anil Jangam (anjangam@cisco.com)		04/27/2020
16						
17	draft-anilj-icnrg-dnc-qos-icn-0;	**QoS Treatments in ICN using Disaggregated Name Components**	More Review	Dave Oran <daveoran@orandom.net> Luca Muscariello <muscariello@ieee.org>		15/09/2019
18						
19	draft-choi-icnrg-aiot-02	**Requirements and Challenges for User-level Service Managements of IoT Network by utilizing Artificial Intelligence**	Initial Review	CG Wang <Chonggang.Wang@InterDigital.Com>	16/04/2020	

Agenda

1	**Chairs' Presentation**	Chairs	Almost done
2	**CCNInfo Update**	Hitoshi Asaeda	10 min
3	**ICN Lowpan Update**	Cenk Gündoğan	05 min
4	**ICN Time TLV Update**	Cenk Gündoğan	05 min
5	**Reflexive Interest Forwarding**	Dave Oran	20 min
6	**NDN-DPDK Forwarder**	Junxiao Shi	30 min
7	**QoS Update**	Anil Jangam	15 min

Wrap-up

- There is a great tool for asynchronous online collaboration: mailing list -- please use it!
- Please help with draft reviews (see spreadsheet)

- Future Meetings
  - Probably at least one more online meeting
  - Also happy to discuss new approaches, e.g., focused online meetings on interesting topics

- Stay safe, everyone!