

ICNRG@IETF85

Information-centric Networking Research Group

Chairs' Slides

Note well

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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>
- Chairs
 - Dirk Kutscher (NEC Laboratories Europe)
 - Börje Ohlman (Ericsson Research)
 - Dave Oran (Cisco Systems)
- This meeting
 - Note taker: Jörg (thanks)
 - Jabber?
 - Webex (see mailing list)

Agenda

1. ICNRG Work Item Status -- 15 min
2. ICNRG Work Items -- 25 min/each
 - ICN Research Challenges
 - Fairness discussion (Damien Saucez)
 - Survey
 - Content Retrieval In Information-Centric Networks (Will Liu)
 - Baseline Scenarios
 - ICN Scenarios (Kostas Pentikousis)
3. Specific Proposals -- 20 min
 - Coordinated Forwarding and Caching in Information-Centric Networks (Xie)
4. Deployment Aspects -- 20 min
 - Discussing how to deal with ICN deployment issues
5. Other Business --20 min
 - Interim meeting in February 2013
 - Announcement: NetInf Protocol draft
 - Next Steps

RG Work Item Status

- Discussed topics for first deliverables
 - Research challenges, survey, baseline scenarios
- Have ideas on structure, content and first proposals
 - Research challenges
 - ICN motivation (current issues), ICN concepts, research challenges
 - ICN survey
 - Document existing approaches
 - Baseline scenarios
 - [Scenarios for evaluation of different ICN approaches and implementations](#)
- Material available for comment and feedback not presented at this meeting
 - Presentation of updates to *Information-Centric Network in an ISP*, <http://tools.ietf.org/html/draft-li-icnrg-icn-isp-01>
 - ICN vs. CDN <http://tools.ietf.org/id/draft-fmn-cdni-advanced-use-cases-00.txt>

Main objectives of this meeting

- Get feedback on the work done so far
- Find volunteers for continued work
- Plan next steps

ICNRG interim meeting

- We are planning for an interim meeting within the next 6 months. We are aiming for a two day meeting to kick off the work in the ICNRG. Current proposal for time and location:
 - Stockholm, Sweden. Thursday-Friday February 14-15th, 2013
- We will discuss this at the end of this meeting.

Research challenges draft (25 min)

- Presentation: Fairness discussion (Damien Saucez)
- Presentation: Draft status (Dirk/Dave)
- Discussion

ICN survey draft (25 min)

- Presentation: Content Retrieval In Information-Centric Networks (Will Liu)
- Draft status (Dirk)
- Discussion

Survey Document Status

- one presentation today
- IEEE commag issue July 2012
- Netinf protocol draft may have useful information
 - <http://tools.ietf.org/html/draft-kutscher-icnrg-netinf-proto-00#section-2>
- more?

Baseline scenarios draft (25 min)

- Presentation of draft document:
ICN Baseline Scenarios (Kostas Pentikousis)
 - <https://datatracker.ietf.org/doc/draft-pentikousis-icn-scenarios/>
- Discussion

Deployment Aspects (20 min)

- Available input

- ICN vs. CDN <http://tools.ietf.org/id/draft-fmn-cdni-advanced-use-cases-00.txt>
- *Information-Centric Network in an ISP*, <http://tools.ietf.org/html/draft-li-icnrg-icn-isp-01>
- http://www.psirp.org/files/Deliverables/FP7-INFISO-ICT-216173-PSIRP-D4.6_FinalReportOnDeplIncBusinessModels.pdf
- <http://hal.inria.fr/docs/00/68/44/58/PDF/paper.pdf>

Main CDNI and ICN points in draft

draft-fmn-cdni-advanced-use-cases-00.txt

- Both CDNI and ICN target wide and effective content delivery.
- Interconnection of CDNs resembles interconnection of ICN routers/domains.
- ICN routers/domains interconnected by design; CDNs interconnected with CDNI.
- Similar technical challenges in request routing, content metadata, and control.
- No logging in ICN (yet).
- No CDN Provider equivalent in ICN; ICN "belongs" to all involved NSPs.
- CDN footprint extension could be achieved with interface to ICN domain.

Slide by: Spiros Spirou

Migration incentives

- PSIRP deliverable
 - Model different players and their investment levels affect the time it takes to introduce ICN technology
- INRIA paper:
 - show that OTT service providers and consumers have strong incentives for migrating to ICN
 - propose a transition mechanism that leverages caching and enable loose collaboration by introducing ICN gateways

ICNRG interim meeting

- We are planning for an interim meeting within the next 6 months. We are aiming for a two day meeting to kick off the work in the ICNRG. Current proposal for time and location:
 - Stockholm, Sweden. Thursday-Friday February 14-15th, 2013
- Collocated with with a future networks workshop focusing on ICN, Wednesday February 13th
 - the workshop will include the final demo of the SAIL project
 - The workshop will have invited speakers, demos and industry discussions, including regulatory issues relating to ICN.
 - The workshop will be organized by SAIL and a Swedish ICN project called Efraim (partners include TV broadcasters (SVT, TV4), Spotify, CDN providers (QBrick, Peeralism), Telia, Ericsson and academic partners (SICS, Acreeo, Lund University)).

Announcement:

The NetInf Protocol draft

- draft-kutscher-icnrg-netinf-proto-00
 - description of some underlying concepts
 - specification of a message-based protocol
 - specification of HTTP and UDP convergence layers for the protocol.
- Available as Open Source NetInf software at: <http://sourceforge.net/projects/netinf/>

AOB?

THE END