IRTF Overview

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EDU at IETF99

Note Well

The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules. This is a summary of these rules as they relate to IRTF research group discussions, mailing lists and Internet Drafts:

- If you include your own or your employer's IPR in a contribution to an IRTF research group, then you must file an IPR disclosure with the IETF.

- If you recognize your own or your employer's IPR in someone else's contribution and you are participating in the discussions in the research group relating to that contribution, then you must file an IPR disclosure with the IETF. Even if you are not participating in the discussion, the IRTF still requests that you file an IPR disclosure with the IETF.

- Finally, the IRTF requests that you file an IPR disclosure with the IETF if you recognize IPR owned by others in any IRTF contribution.

The IRTF expects that you file IPR disclosures in a timely manner, i.e., in a period measured in days or weeks, not months. The IRTF prefers that the most liberal licensing terms possible are available for IRTF Stream documents, see RFC 5743. You may file an IPR disclosure here: http://www.ietf.org/ipr/file-disclosure
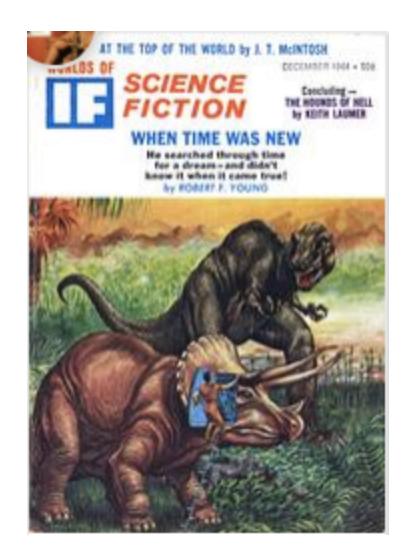
See RFC 3979 (BCP 79) for definitions of "IPR" and "contribution" and for the detailed rules (substituting "IRTF" for "IETF").

All of IRTF is Meeting This Week (IETF 99)!

- Crypto Forum (CFRG)
- Global Access to the Internet for All (GAIA)
- Human Rights Protocol Considerations (HRPC)
- Internet Congestion Control (ICCRG)
- Information-Centric Networking (ICNRG)
- Measurement and Analysis for Protocols (MAPRG)

- Proposed PANRG
- Network Coding Research Group (NWCRG)
- Network Function Virtualization (NFVRG)
- Thing to Thing (T2TRG)

- Plus, initial organizing meeting for Distributed (or Decentralized) InterNet (DIN)

Origins

History

- Well documented at https://iab.org
- The Task Force Era - 1984-1989
- Reorg reduced these to IETF, E2ETF, IAB, IRTF in 1989
- E2ETF became E2ERG approximately 2001

Defining RFCs (and Policies)
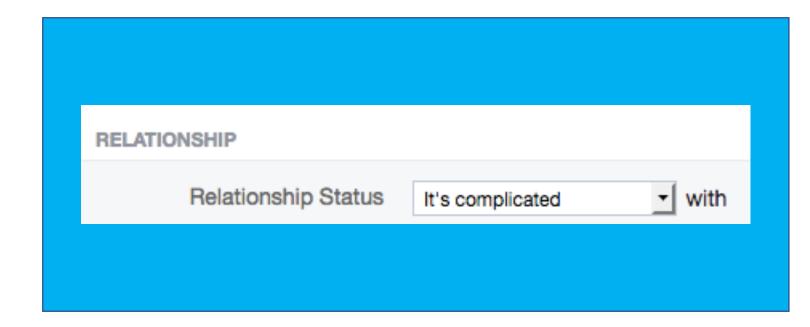
- The detailed IRTF Research Group guidelines and procedures are described in RFC 2014. In RFC 4440, the Internet Architecture Board (IAB) further details the role of the IRTF.

- The procedures for publishing documents on the IRTF RFC Stream are defined in RFC 5743, with additional details found in RFC 5742. The concept of RFC Streams is defined in RFC 4844.

- The IRTF follows the IETF Intellectual Property Rights (IPR) disclosure rules. Also see Section 3.2 of RFC 5743.

- The IETF Anti-Harassment Policy also applies to the IRTF.

Mission

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

- The IRTF is a composed of a number of focused and long-term Research Groups.

Relationships

- IAB
  - Parent (see detail slide)
- ISOC
  - Partner on Programs
  - Budget
- IETF
  - IRTF is under the Note Well
  - IRTF follows other policies
  - RGs may have roles in relation to existing WGs
  - RGs may aim toward future WGs

RELATIONSHIP

Relationship Status | It's complicated ▼ | with

IAB Relationship Detail

- Internet Architecture Board appoints the IRTF Chair

- IRTF Chair is an ex officio member of the IAB

- Internet Architecture Board manages the RFC Streams and the RFC Editor functions
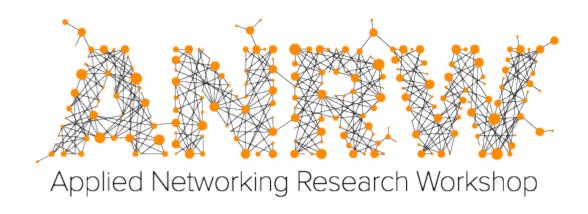
The Lars Eggert Years (2011-2017)

- Created programs: ANRP, ANRW
- Eased path to formation of RGs
- Big shoes to fill

Applied Networking Research Prize

- Peer review committee accepts submissions of published papers and proposed speaker
- ISOC program funds six speakers (two per IETF meeting)
- IRTFOPEN meeting features the speakers
- Join us on Thursday for two great speakers for IETF 99:
  - Stephen Checkoway, University of Illinois Chicago, US
    A Systematic Analysis of the Juniper Dual EC Incident

  - Philipp Richter, Technische Universität Berlin, DE
    A Multi-perspective Analysis of Carrier-Grade NAT Deployment
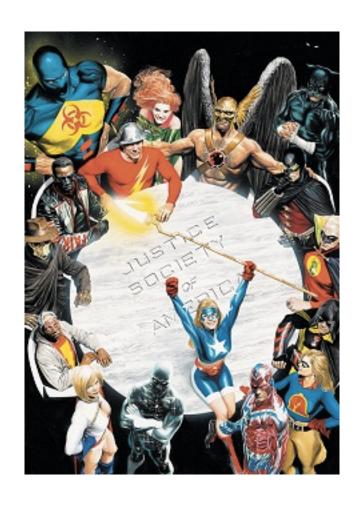
Applied Networking Research Workshop

https://irtf.org/anrw/2017/program.html

Internet Research Steering Group

- Chairs of RGs and At Large Members
- Business meeting at each IETF
- IRSG reviews required to advance RG documents
- IRSG Poll also required

Members of IRSG as of IETF 99

- Allison Mankin – IRTF Chair
- Lars Eggert – Past Chair, At Large
- Alia Atlas – At Large
- Spencer Dawkins – At Large
- Stephen Farrell – At Large
- Mat Ford – At Large, ISOC
- Erik Nordmark – At Large
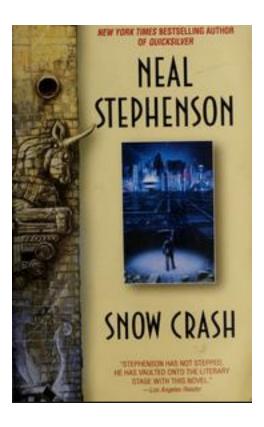- Chairs of the RGs – see slides

Research Groups

- Roles of Research Groups (one RG can have several/many of these)
  - Incubation of new ideas
  - Expert support for IETF (CFRG, ICCRG, maybe NWCRG)
  - Discovery of gaps and open areas
  - Exploration of industry or academic emerging areas with global Internet potential
  - Preparatory work for future WGs
    - Examples: RMRG -> RMT, DTNRG – DTN WG
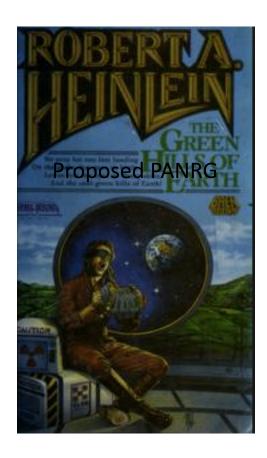- Open to explore any processes, any meeting strategy

Crypto Forum (CFRG)

Chairs:
Alexey Melnikov
Kenny Patterson

Global Access to the Internet for All (GAIA)

Chairs:
Jane Coffin
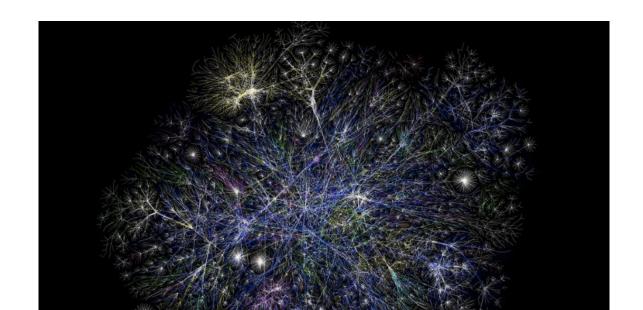Arjuna Sathiaseelan

Proposed PANRG

Human Rights Protocol Considerations (HRPC)

- Chairs: Avri Doria, Niels ten Oever
- Presented at Chicago Technical Plenary
- Research review document will soon go to publication
- New work items include right to assemble
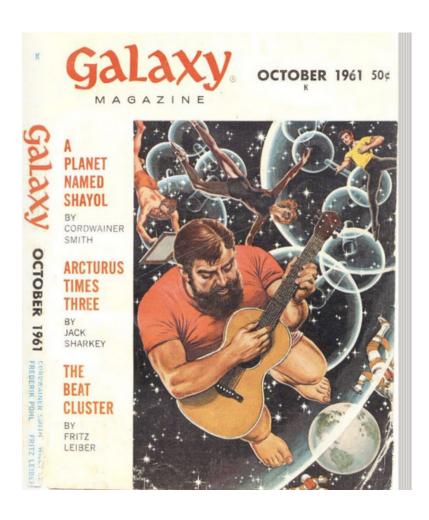- Anyone interested in equality rights research in HRPC?

Internet Congestion Control (ICCRG)

Chairs:

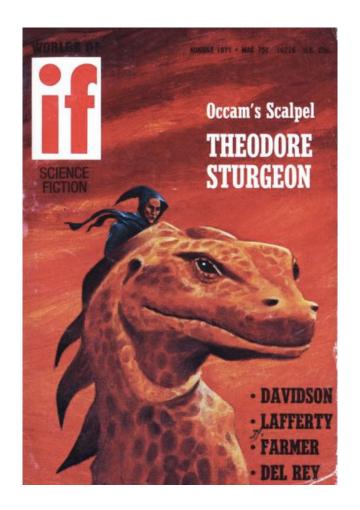Jana Iyengar

Michael Welzl

Information-Centric Networking (ICNRG)

Chairs:
Dirk Kutscher
Börje Ohlman
Dave Oran

Measurement and Analysis for Protocols (MAPRG)

Chairs:

Mirja Kuehlewind

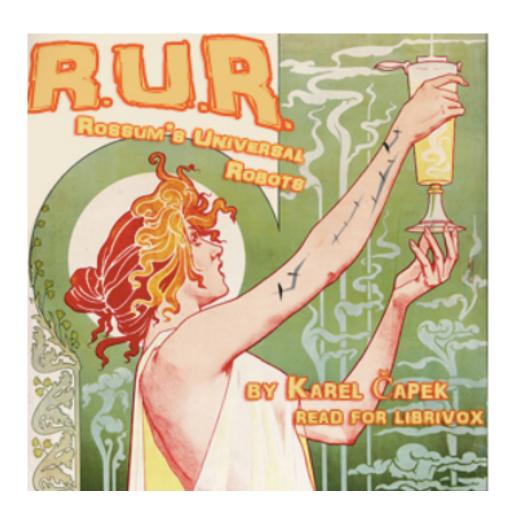Dave Plonka

The Three Ns

- Network Coding (NWCRG)
  - Chairs: Victor Firoiu, Vincent Roca

- Network Function Virtualization RG (NFVRG)
  - Chairs: Diego Lopez, Ramki Krishnan

- Network Management RG (NMRG) – longest-lived current RG
  - Chairs: Laurent Ciavaglia, Lisandro Granville

Thing to Thing (T2TRG)

Chairs:

Carsten Borman

Ari Keränen

Emerging Groups as of IETF 99

Proposed Path Aware Networking RG (PANRG)
    Chairs:
    Jen Linkova
    Brian Trammell

Distributed Internet Infrastrucutre (DIN) Side Meeting at IETF 99
    Chairs:
    Dirk Kutscher
    Melinda Shore

Informal discussions towards a Privacy technologies research group

Vision – What is Ahead?

- Continue to build bridges with academic researchers
- Support global Internet research as in HRPC, GAIA
- Provide incubation of future projects of the Internet
- Encourage experimentation with methods of working

Continue to Strengthen Ties to Academics

- Support IRTF publication that helps academic careers

- Open-access journal articles

- Collaborate with ACM as in ANRW

- Other potential collaborations: USENIX?

Potential Groups

- Active and capable advocates?
- Strong proposed leadership and plan?
- Topic is well connected with IETF mission and/or futures?
- Proposed RG gets a try-out for a year if these criteria are met
- Proposed RG now: PANRG
- Probably PRG at IETF 100: DIN (or new name)

Survey to fill out now

- https://www.surveymonkey.com/r/99irtf

- Thank you!

Questions Welcome

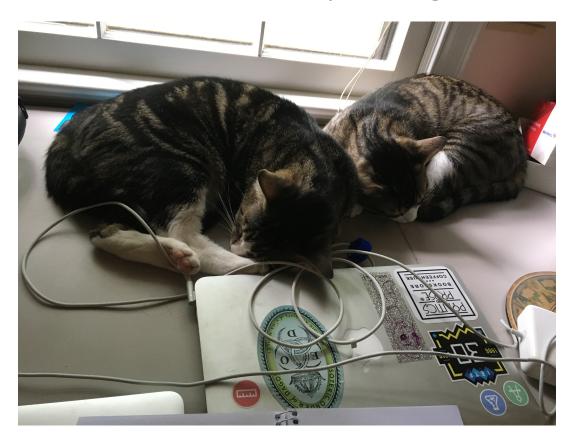- In case answers are not clear or funny enough, here are some kittens

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