IETF79
- impressions and summary

Lars Strand
What is this all about?

- **Standards**
  - An implemented network standard = **network protocol**
  - Protocols = the languages that make the Internet work
  - More precise: *Open standards* make the Internet work!
- So, who creates these standards then?
- Anyone who are interested and have the time...
- Very industry focused
Internet Society (ISOC)
* founded 1992
* administrative
* legal
* financial
= give “corporate structure”

Internet Architecture Board
* current form since 1992
* advisory body of ISOC
* oversees IETF and IRTF
* responsibility:
  - architectural oversight
  - oversight of process to create Internet Standards

Internet Engineering Steering Group
* Technical adm for IETF
* day-to-day mgmt of IETF
* final technical review of Internet Std.

Internet Engineering Task Force
* creates and promotes standards
* “rough consensus and running code”

Internet Research Task Force
* “promote research of future Internet”
* study long term issues
IETF79 – Beijing

- ~1337 participant
- People from major network players presents: Cisco, Ericsson, Huawei, ZTE, Juniper
- Some concern/discussion before the meeting regarding censorship (Great Firewall of China)
- Result: 2x1Gbps dedicated network - unfiltered
Areas

- Application
  - HTTP, FTP, SMTP, ..

- Internet
  - IPv6, DNS, ..

- Ops & Mgmt
  - Benchmark, config, monitoring, ...

- Real-time Application and Infrastructure
  - SIP, RTP, ..

- Routing
  - MANET, MPLS, OSPF, ..

- Security
  - Kerberos, Kitten, ..

- Transport
  - TCP, SCTP, NFSv4, ..
Working Group (WG)

- Created to address a specific problem
- Primary mechanism within in IETF to develop standards
- Expected to be short-lived → soon as reached its goals → conclude and move on
- Most work is done on mailinglists
- Real-life meeting (like IETF79) = summary and wrap-up
  - In-depth discussion of some key topics
- VERY informal meeting structure
  - rough consensus
  - can get rough
  - can reach decisions by humming
• SIP
  • Location Conveyance with SIP – request location of a UAC.
  • Request history – how did the call reach me?
  • SIP-based Media Recording – copy recording of call
• kitten
  • GSS-API with EAP
RFCs

- Anyone can write and publish a DRAFT
  - Online for 6 months – open for review, comments
  - The RFC Editor take a decision based on RFC4846
- Different maturity levels (RFC2026)
  - Internet Standards track: Proposed, Draft, Standard
  - Non-standards track: Experimental, Informational, Historic
  - “Community standards”: Best Current Practice
- SIP is a Proposed Standard.
- RTP is a Internet Standard
- Once published, an RFC never changes
  - But you can submit an errata
Numbers RFC per continent

Number of RFCs per Continent

- North America: 900
- Europe: 700
- Asia: 200
- (unknown)

South America: 0
Africa: 0
Australia: 0
Who is most active?

Comparison of Countries over the Years

- France
- Germany
- Switzerland
- USA
- Norway
- United Kingdom
- The Netherlands
- Finland
- Japan
- Australia
- Belgium
- Canada
- Sweden
Numbers of authors per company