

IETF 115 IRTF
Decentralized Internet
Infrastructure Research Group
7 November 2022

THIS SESSION IS BEING RECORDED

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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
- 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](#)

DINRG Administrativa

- IRTF RG on Decentralized Internet Infrastructure
- Mailing list: din@irtf.org
- Web: <https://irtf.org/dinrg>
- Chairs
 - Dirk Kutscher (HKUST(GZ))
 - Lixia Zhang (UCLA)
- This meeting
 - **Note taker:**

Recap: DINRG meeting at IETF 114

<https://datatracker.ietf.org/meeting/114/session/dinrg>

- Takeaways from DINRG June 2021 workshop
 - Economy of scale motivates corporations to grow big
 - few regulatory constraints on a market driven by economy of scale
→ increasing centralization of internet apps, infrastructure, and consequential the control power & influence of a small number of players
 - Lack of effective security solutions further drive centralization
 - Only massive systems have capabilities to absorb all forms of DDoS
 - Limitation of web security: user2user communicate thru cloud
 - Further discussions needed
- Making DINRG as a focal point to collect all inputs and to organize discussions

Moving forward from last IETF

- Since IETF114: multiple inputs, growing interests on the topic from the broader community
- Today:
 - Starting active discussions
 - Internet centralization (collect measurements, identify root cause)
 - exploration of mitigation approaches
 - DINRG charter update
 - Discussion at the end of today's meeting
 - A side meeting has been scheduled: 10:30-11:30 Wednesday Nov 9, in Richmond 6

Today's agenda:

- Chairs: Status, Updates (10 min)
- Internet Consolidation: Mark McFadden (20 min)
- Protocol and Engineering Effects of Consolidation: Dominique Lazanski (15 min)
- Web Centralization: Jens Finkhäuser (20 min)
- Power of Attorney (PoA) based authorization: Olov Schelén (20 min)
- Internet-Wide Realm Crossover: Rick van Rein (10 min)
- DINRG Charter Discussion: all (25 min)