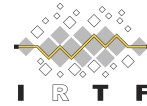# IETF 118

IRTF Decentralized Internet Infrastructure Research Group

2023-11-06

This session is being recorded

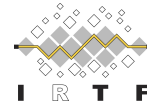I E T F®

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

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

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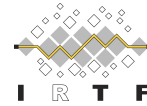
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- See RFC 7154 (Code of Conduct) and RFC 7776 (Anti-Harassment Procedures), which also apply to IRTF

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

DINRG Administrativia

- 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:**

I E T F

Agenda

1	DINRG Chairs' Presentation: Status, Updates	Chairs	10 min
2	The Case of AS59645: Making it ping and doing stupid things	Tobias Fiebig	25 min
3	The Cloud Strikes Back: Investigating the Decentralization of IPFS	Michal Krol, Onur Ascigil	25 min
4	Local-First Software	Martin Kleppmann	30 min
5	A Taxonomy of Internet Consolidation	Mark McFadden	15 min
6	Wrap-up & Buffer	Chairs	15 min

DINRG publications

- Research outcome should be published via research channels
    - Already published RFCs, if any, are grandfathered
- Everyone is welcome to add contributions and relevant materials to DINRG wiki

https://wiki.ietf.org/en/group/dinrg

🏠 / group / dinrg

DIN RG - IRTF Decentralized Internet Infrastructure

IRTF Decentralized Internet Infrastructure (DIN RG)

✏️ Edit   Edit on GitHub

Decentralization of the Internet Research Group (DINRG) Wiki

The Decentralization of the Internet Research Group (DINRG) aims to provide for the research and engineering community, both an open forum to discuss the Internet centralization phenomena and associated potential threats, and a platform to facilitate the coordination of efforts in identifying the causes of observed consolidations and the mitigation solutions.

DINRG Administrative Information

▸ Official DINRG web page 🔗

▸ Mailing list 🔗

▸ Charter 🔗

▸ Previous Meetings 🔗

▸ Current chairs dinrg-chairs@ietf.org

  ▸ Dirk Kutscher

  ▸ Lixia Zhang

IETF

Please Contribute

Research Resources

Obvservations and Measurements

▸ Christian Huitema, Geoff Huston, Dirk Kutscher, and Lixia Zhang. 2023. Report of 2021 DINRG Workshop on Centralization in the Internet. SIGCOMM Comput. Commun. Rev. 53, 2 (April 2023), 31–39. https://doi.org/10.1145/3610381.3610386 ☑

▸ Leonhard Balduf, Maciej Korczyński, Onur Ascigil, Navin V. Keizer, George Pavlou, Björn Scheuermann, and Michał Król. 2023. The Cloud Strikes Back: Investigating the Decentralization of IPFS. In Proceedings of the 2023 ACM on Internet Measurement Conference (IMC '23). Association for Computing Machinery, New York, NY, USA, 391–405. https://doi.org/10.1145/3618257.3624797 ☑

New Designs and Technology

▸ Martin Kleppmann, Adam Wiggins, Peter van Hardenberg, and Mark McGranaghan. 2019. Local-first software: you own your data, in spite of the cloud. In Proceedings of the 2019 ACM SIGPLAN International Symposium on New Ideas, New Paradigms, and Reflections on Programming and Software (Onward! 2019). Association for Computing Machinery, New York, NY, USA, 154–178. https://doi.org/10.1145/3359591.3359737 ☑

Regulation

Economics

DINRG effort planning

This meeting focuses on
- measurement of centralization
- Different approaches toward decentralization

Next meeting
- Economics and centralization
- Examination of policies around the globe

Your input welcome