IETF 125

IRTF
Decentralization of the Internet Research Group

2026-03-16

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Internet Engineering Task Force
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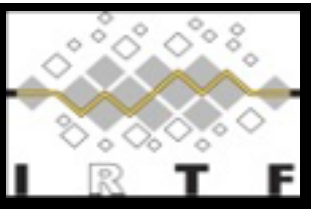

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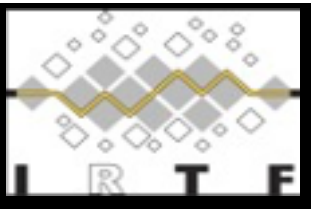

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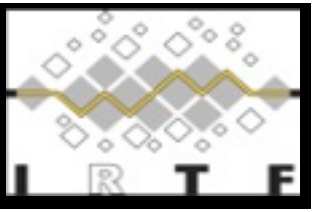
- Also see RFC 9775 (IRTF Code of Conduct)

Goals of the IRTF

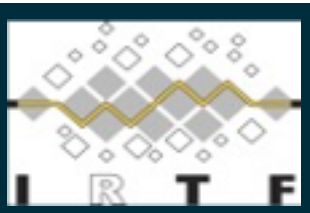


- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making

- **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 takers ??***

Agenda

1	DINRG chairs opening remark	chairs	5min
2	From Standards to Users: Leveling the Field for Interoperable E2EE	Mallory Knodel	20min
3	Open or Blocked Skies? Community Moderation Practices in Bluesky	Saidu Sokoto	20min
4	Designing Human-Centric, Decentralized Digital Infrastructure for the AGI Era	Arnaud Taddei	20min
5	Why Naming Matters: Identifier Design for Decentralized Digital Infrastructure in the Age of AGI	Lixia Zhang	20min
6	Open Floor Discussion	all	30min

DINRG Future Meetings

- Planning to meet at IETF-126 (Vienna, Austria)
  - Your input wanted

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

Please Contribute

Active Documents

- M. McFadden, Ed. "A Taxonomy of Internet Consolidation", October 2023. https://datatracker.ietf.org/doc/draft-mcfadden-consolidation-taxonomy/

Obvservations and Measurements

- Christian Huitema, Geoff Huston, Dirk Kutscher, and Lixia Zhang. "Report of 2021 DINRG Workshop on Centralization in the Internet" ACM Computer Communication Review 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 "The Cloud Strikes Back: Investigating the Decentralization of IPFS" In Proceedings of 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
- Gautam Akiwate, Kimberly Ruth, Rumaisa Habib, Zakir Durumeric; On the Centralization and Regionalization of the Web; 2024; https://arxiv.org/abs/2406.19569

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
- Navin V. Keizer, Onur Ascigil, Michał Król, Dirk Kutscher, and George Pavlou; A Survey on Content Retrieval on the Decentralised Web; ACM Computing Surveys; (March 2024; https://doi.org/10.1145/3649132
- Ash Wilson, Shumon Huque, Olle E. Johansson, Michael Richardson; An Architecture for DNS-Bound Client and Sender Identities; Internet Draft draft-ietf-dance-architecture (Work in Progress); May 2024; https://datatracker.ietf.org/doc/draft-ietf-dance-architecture/06/
- Tianyuan Yu, Xinyu Ma, Varun Patil, Yekta Kocaogullar, Yulong Zhang, Jeff Burke, Dirk Kutscher, Lixia Zhang; Secure Web Objects: Building Blocks for Metaverse Interoperability and Decentralization; IEEE MetaCom 2024; August 12-14 2024; Hong Kong, China; pre-print
- Tianyuan Yu, Xinyu Ma, Varun Patil, Yekta Kocaogullar, Lixia Zhang; Exploring the Design of Collaborative Applications via the Lens of NDN Workspace; IEEE MetaCom 2024; August 12-14 2024; Hong Kong, China; pre-print
- Tianyuan Yu, Adam Thieme, Lixia Zhang; Identifying Roadblocks in Building Decentralized Apps; Proceedings of the 2025 Applied Networking Research Workshop (ANRW 2025), [https://dl.acm.org/doi/10.1145/3744200.3744778] July 2025.
- Tianyuan Yu, Adam Thieme, Junxiao Shi, Lan Wang, Lixia Zhang; SRM at 30: Lessons from Early Data-Centric Networking and Their Impact on Named Data Networking. https://named-data.net/ndn-tr-0078-srm30/, December 2025.