

IRTF

**Decentralized Internet Infrastructure  
Proposed Research Group**

Interim Meeting at NDSS-2018

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# Decentralized Internet Infrastructure

- **Investigate open research issues in decentralizing infrastructure services**
  - Trust management, identity management
  - Name resolution, resource/asset ownership management, resource discovery
- **Focus: infrastructure services that can benefit from decentralization**
  - Or that are difficult to realize in local, potentially connectivity-constrained networks
- **Objectives**
  - Investigate use cases and requirements with respect to implementing them in a distributed manner
  - Discuss and assess solutions **with a focus on Internet level deployment issues such as scalability, performance, and security**
  - Develop and document technical solutions and best practices
  - Develop tools and metrics to identify scaling issues and to identify missing components
  - Identify future work items for the IETF.

# DINRG Administrativa

- Charter, Status: <https://datatracker.ietf.org/rg/dinrg/about/>
- Wiki: <https://trac.ietf.org/trac/dinrg/wiki/WikiStart>
- Mailing list: <https://www.irtf.org/mailman/listinfo/din>
- Chairs:
  - Melinda Shore, Fastly: [melinda.shore@nomountain.net](mailto:melinda.shore@nomountain.net)
  - Dirk Kutscher, Huawei: [ietf@dkutscher.net](mailto:ietf@dkutscher.net)
- This meeting
  - Presentation material (please send slides to chairs!)
    - <https://datatracker.ietf.org/meeting/100/session/dinrg>
  - Bluesheets
  - Meeting notes:  
<https://etherpad.tools.ietf.org/p/notes-dinrg-interim-ndss2018?useMonospaceFont=true>
  - Note takers today
    - 1:
    - 2:
    - 3:

# Agenda Today: Any Updates?

Time	Topic	Presenter	Duration
<b>09:30</b>	<b>Welcome, Intro, Agenda Bashing</b>	Melinda, Dirk	10 min
09:40	Secure Open Federation for the Internet of Everywhere	George Polyzos	30 min
10:10	Decentralized Computing Environments	Michal Krol	30 min
<b>10:40</b>	<b>Break</b> (no refreshments provided)		
11:10	KeyNet: A Secure, Distributed Public Key Management System	Sydney Li	30 min
11:40	Blockchain as an Audit-Able Communication Channel	Shigeya Suzuki	30 min
12:10	Distributed Name Rewriting	Christian Tschudin	20 min
<b>12:30</b>	<b>Lunch</b> (self-organized)		
14:00	NDSS DISS Workshop preview	Dirk	20 min
14:20	Decentralized Internet Infrastructure: Discussion on research scope, use cases, next steps	Melinda, Dirk	120 min
16:20	Summary, Wrap up, Next Steps	Melinda, Dirk	10 min
<b>16:30</b>	<b>End of Meeting</b>		



# Wrap-Up

- Meeting at IETF-101, London, March 17 -- 23
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