

ICN & IoT

Dirk Kutscher

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- IoT one of the use cases for ICN
- Several claimed benefits
 - Location-independent access to named data/actuators
 - Data-oriented security model
 - Data availability due to caching, in-network forward strategies
 - Ad-Hoc communication features
 - Stack implementation simplification

Implementations

- RIOT (CCNLite)
- NDN-IoT
- Cisco
- Others?

Research Questions

- Naming in uncoordinated IoT networks
- IoT interaction semantics in ICN (push, updates)
- Security
 - Security bootstrapping (onboarding, key distribution)
 - Feasibility of ICN PK crypto
 - Other security approaches: ABE
- Semantic interoperability
 - Discovery: how to know what to ask for etc.
 - Semantics and properties of named data and dynamic computation results
- Internet picture
 - Connecting ICN IoT networks to the Internet
 - Role of gateways, translators etc.
 - Possibility of avoiding silo networks

Meeting Today

- Leverage background and new ideas in T2T and ICN communities
- Learn from current work in both groups
- Chairs' suggestion: device/data naming & semantic interoperability
 - See mailing list discussion
- Understand real-world problems and possible approaches
- Identify relevant topics for follow-up work