# Drone Remote Identification Protocol (DRIP)

IETF 115 Hackathon
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London, UK

# What's DRIP?

- Unmanned Aircraft System (UAS) Remote IDentification & tracking (RID) is the wireless network based equivalent of an automobile license plate for security [& safety] purposes
- Baseline is in ASTM F3411 & other standards external to IETF
- DRIP makes RID info immediately actionable / trustworthy
  - Verify all rcvd messages claiming to be from the same sender really are
  - Authenticate messages & entities
  - Verify sender is properly registered & identify in which registry
  - Do lots of important things (not everything) while Internet-deprived

# Hackathon Plan

- Open-source Endorsement tool & updates to open source codebase from Andrei Gurtov et al at Linkoping University
  - draft-wiethuechter-drip-detim-00
    - Generation & loading from bytes for Endorsements
  - Quickly write a tool in Python
- Updates to LiU DRIP & OpenHIP codebases
  - draft-ietf-drip-auth-26

# What got done

- Endorsement Tool
  - Baseline implementation in Python
    - https://github.com/ietf-wg-drip/drip-scripts
  - Interoperable with closed-source version from AX Enterprize, LLC
- LiU Updates
  - Issues generated & further work plan formed (to be continued during the week remotely)

# What we learned

- Endorsements
  - New volunteer implementers needed minor assistance from draft authors – so clarifications are needed in draft
  - Needs CDDL instead of JSON examples
  - Found some interesting corner cases and future proofing cases that were not addressed in draft

# Wrap Up

Team Leader:
- Adam Wiethuechter (AX Enterprize, LLC)

First timers @ IETF/Hackathon:
- Filip Debczak
- Marius Kleidl (TUM)
- Mirna Ghazzawi (LiU)
- Younus Salman (LiU)
- Yinan Wwang (LiU)
- Abdullah Bin Zubair (LiU)
- Soleman Khan (LiU)

Strap-hangers:
- Bob Moskowitz (HTT Consulting)
- Stu Card (AX Enterprize etc.)

DRIP Working Group needs help!

Authors

**Reviewers!!!**

Implementers

Testers

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