

# Internet in Space

## DTN - Delay Tolerant Networking

- IETF 101 Hackathon
- 17-18 March, 2018
- London

x-works  
μPCN



# Hackathon Plan

- Check whether [μPCN](#) referential implementation meets:
  - [draft-ietf-dtn-bpbis](#) - Bundle Protocol v7
  - [RFC-7242](#) - DTN TCP Convergence-Layer Protocol
- Problems to be solved:
  - Bundle encoding/decoding – does draft provide enough info? Yes.
  - Create easy to use API – can we have REST? Done, [Postman](#).
  - Reproducibility – can we easily test? Done, [Docker](#) containers.
- How?
  - By creating alternative [pyDTN](#) implementation talking to [μPCN](#)

# Key Results

- New ideas proposed by Telco operators
  - Bundle Protocol was originally designed for Space comm.
  - Telco operators proposed use cases also on Earth
  - E.g. providing delay tolerant peer-to-peer data network in developing countries
- New code – [pyDTN](#)
- New inter-op testing:
  - Found issue: [μPCN](#) uses special header not meeting draft
  - Solution: Replaced by [RFC-7242](#) DTN TCPCL protocol
- [Demo](#)

# Wrap Up

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