

draft-ietf-lpwan-ipv6-static-context-hc-18

Authors:

Laurent Toutain < Laurent. Toutain@imt-atlantique.fr>
Carles Gomez < carlesgo@entel.upc.edu>
Ana Minaburo < ana@ackl.io>
Dominique Barthel < dominique.barthel@orange.com>
Juan Carlos Zuniga < JuanCarlos. Zuniga@sigfox.com>





- What is this draft about?
- What has happened since IETF103?
- Hackathon@IETF104 report
- What is coming up next?

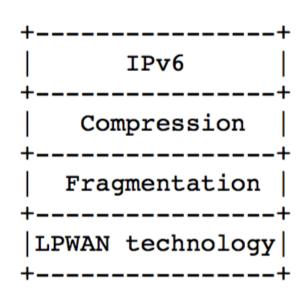


What is this draft about?



3 deliverables of this draft

- Specification of a Header Compression engine (Section 7)
 - Generic engine, uses Static Context (-> SCHC)
- Specification of UDP/IPv6 compression (Section 10)
 - Using this SCHC engine
- Specification of a fragmentation protocol (Section 8)
 - Has 3 different "modes" described in this draft
 - Different modes address different requirements



((LPWAN))

What has happened since IETF103?

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- Second WGLC initiated Nov 12th, closed Nov 27th
 - Devoted to fragmentation
- Presentation of fragmentation to LoRa Alliance Nov 20th
- MIC made optional again
 - Integrity Checking is mandatory, MIC is optional
 - Ticket #32 duly updated with discussion items and conclusions
- Text reworked based on Charlie's review
 - Lots of text improvements, thanks Charlie!
 - Target Value type and interoperable Rule description pushed off to another draft
- Published -18 Dec 14^{th,} 2018

What has happened since IETF103?

- Submitted to IESG Dec 15th, Standards track
- Early IoT Dir review comments by Carsten,
 March 4th
 - Thank you, Carsten!
- IETF104 Hackathon March 23rd 24th

SCHC Hackathon at IETF104

9 team members

- Cédric Adjih
- Sergio Aguilar*+
- José Ignacio Alamos*
- Sandoche Balakrichenan
- Dominique Barthel
- Antoine Bernard*
- Ivaylo Petrov
- Shoichi Sakane⁺
- Laurent Toutain
- * First timer @ IETF/Hackathon
- + Remote



https://github.com/openschc

Work done at Hackathon-104

- Made OpenSCHC easier to use
 - Cleaned up code repo, added README, new Wiki
 - Adjusted code to run with micropython, not just Python3
 - Added/changed unit tests to support Pytest
 - Added Sphinx documentation
- Improved functionalities
 - Augmented test coverage
 - Implemented more compression functionalities
 - Added connector to exchange messages over LoRaWAN with pycom device

Lessons learned at Hackathon-104

- Some parts of spec not understood by implementors
 - We will add examples in Appendix section
- Implementing a full system requires describing the compression rule, the fragmentation parameters, etc.
 New draft started about data model for these
 - draft-toutain-lpwan-schc-yang-data-model
 - Work at this hackathon provides food for new draft



What is coming up next?

What is coming up next?

- Act on Carsten's comments
- Expect to publish 19 around end of April
- Work in synch with reviews by IESG
- Carry on OpenSCHC development



Thank you for your attention