

draft-ietf-lpwan-schc-over-sigfox-03 & PySCHC Implementation

Juan Carlos Zúñiga (Sigfox), Carles Gómez (UPC),
Laurent Toutain (IMT-Atlantique),

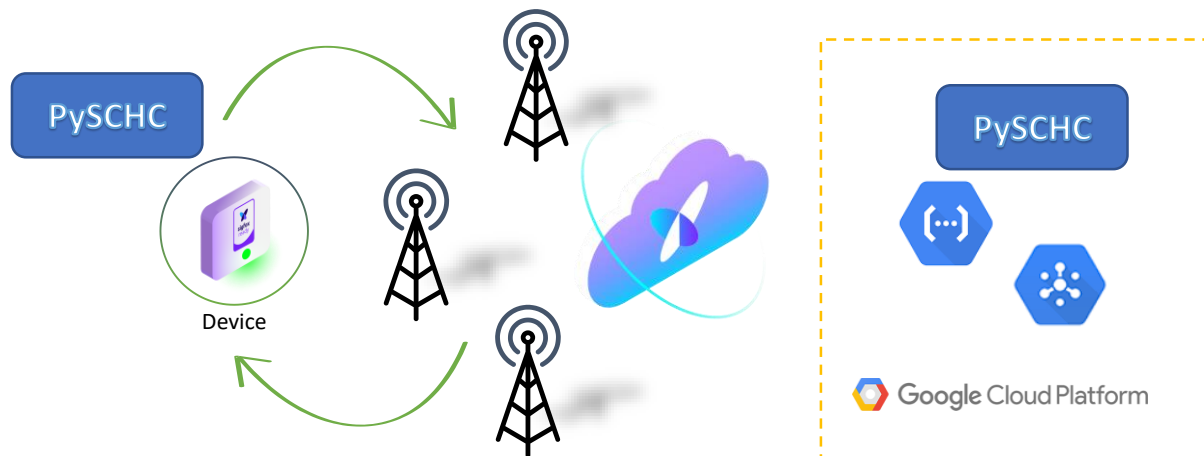
Diego Wistuba (U Chile), Sandra Céspedes (U Chile), Sergio Aguilar (UPC)

Updates

- Hackathon: Off-line coding between UChile and UPC
 - ACK-on-Error, No-ACK...
- Last draft updates (rev 02, 03)
 - Added more details about **ACK-on-Error data fragmentation and integrity mode** implementation
 - Update references and terminology to match RFC 8724
 - Usage of [Sigfox Sequence #] on SCHC Receiver to optimize SCHC ACK transmissions in ACK-on-Error (e.g. All-1 fragment)
 - Added recommendation for No-ACK usage (see next slides)

Testing Network Architecture

- PySCHC SW
- Pycom (LoPy4)
- Sigfox Network
- Google Cloud *



* <https://cloud.google.com/community/tutorials/sigfox-gw>

No-ACK

- Recommendation to use FCN to indicate size of packet:
 - In combination with [Sigfox Sequence #], this allows implicit indication about expected # of fragments and/or size of packet
 - Network can induce whether all fragments have been received or not

Next Steps

- Interoperability tests between PySCHC and other implementations should also help defining protocol parameters
 - Planned for upcoming IETF Hackathons:
 - IETF Bangkok? – TBD at the moment
- Continue fine-tuning of:
 - Timers
 - SCHC Header fields (Rules, DTag, etc.)