27 July 2023

IETF 117 LPWAN / SCHC

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Note Well

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- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
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In-person participants
- Make sure to sign into the session using the Meetecho (usually the “Meetecho lite” client) from the Datatracker agenda
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- Make sure your audio and video are off unless you are chairing or presenting during a session
- Use of a headset is strongly recommended
Resources for IETF 117 San Francisco

- Agenda  
  [https://datatracker.ietf.org/meeting/agenda](https://datatracker.ietf.org/meeting/agenda)
- Meetecho and other information:  
  [https://www.ietf.org/how/meetings/preparation](https://www.ietf.org/how/meetings/preparation)
- If you need technical assistance, see the Reporting Issues page:  
9:30  Opening, agenda bashing (Chairs)
   • Note-Well, Scribes, Agenda Bashing
   • Completing transition to SCHC
   • Announcing RFC 9441 / 9442
   • WG / drafts Status / adoption of SCHCoPPP
   • IP protocol Number and Ethertype (INTAREA)

9:50  AOM reborn
   • Presenter name: Laurent Toutain
   • Associated draft: draft-barthel-schc-oam-schc
   • discuss adoption

10:00 Updating RFC 8824 (new work)
   • Presenter name: Marco Tiloca
   • Associated draft: draft-tiloca-schc-8824-update
   • presentation of updates in version -01
   • confirm the switching to a bis document
10:15  SCHC Access Control
• Presenter name: Ivan Martinez
• Associated draft: draft-toutain-schc-access-control
• presentation of updates

10:25  SCHC Packet Information
• Presenter name: Pascal Thubert
• Associated draft: draft-ietf-schc-architecture
• Discuss the abstract data model of session identification in packets

13:35  Session Initiation and Rule exchange
• Presenter name: Pascal Thubert / Sergio Aguilar Romero
• Associated draft: draft-ietf-schc-architecture
• Discuss abstract exchange for session setup and Rule instantiation

10:45  diet ESP (new work)
• Presenter name: Daniel Migault
• Associated draft: draft-mglt-ipsecme-diet-esp
• introduce the work to the group
LPWAN Document's advancement

- RFC 9441 / RFC 9442
  - Moved to SCHC

Active Internet-Drafts (3 bits):
- draft-ietf-lpwan-schc-compound-ack-16
- SCHC Compound ACK
- draft-ietf-lpwan-schc-over-nsid-15
  - Static Context Header Compression over Narrowband Internet of Things
- draft-ietf-lpwan-schc-over-sigfox-23
  - SCHC over Sigfox LPWAN

Expired Internet Draft (1 bit):
- draft-ietf-lpwan-architecture-00
- LPWAN Static Context Header Compression (SCHC) Architecture

RFCs (5 bits):
- RFC 9224
  - Low-Power Wide Area Network (LPWAN) Overview
- RFC 8724
  - SCHC: Generic Framework for Static Context Header Compression and Fragmentation
- RFC 8724
  - SCHC: Generic Framework for Static Context Header Compression and Fragmentation
- RFC 9224
  - SCHC: Generic Framework for Static Context Header Compression and Fragmentation
- RFC 9224
  - SCHC: Generic Framework for Static Context Header Compression and Fragmentation

A YANG Data Model for Static Context Header Compression (SCHC)

Related Internet-Drafts (7 bits):
- draft-async-lpwan-schc-convergence-00
  - SCHC Convergence Profile
- draft-async-lpwan-schc-streaming-00
  - SCHC Streaming Mode
- draft-bartfeld-lpwan-nam-schc-04
  - O&M for LPWAN using Static Context Header Compression (SCHC)
- draft-lpwan-lpwan-schc-considerations-00
  - SCHC Design and Implementation Considerations
- draft-async-lpwan-8824-update-00
  - Clarifications and Updates on using Static Context Header Compression (SCHC) for the Constrained Application Protocol (CoAP)
- draft-lpwan-lpwan-access-control-01
  - SCHC Rule Access Control
- draft-lpwan-lpwan-rild-00-02
  - SCHC Rule Access Control
- draft-lpwan-lpwan-rild-00-02
  - SCHC Rule Access Control
## SCHC Document's advancement

### New WG doc

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<th>Pages</th>
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### Related Internet-Drafts

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### Moved from LPWAN

- Convergence profile for LPWAN
- Unified SCHC header

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**Summary**: The new WG doc has been moved from the LPWAN section and is focused on separating the convergence profile for LPWAN and the unified SCHC header.
• LPWAN is done. Can rightfully claim victory. Did really good.

• Folding into the most SCHC
The SCHC WG will coordinate with INTAREA WG for the IP protocol type definition, 6MAN WG for possible ICMPv6 code(s), and with other WGs for possible Protocols-over-SCHC or SCHC-over-protocol activities (e.g., in TSV area). It will work with the relevant security area WGs to appropriately secure the SCHC session. If required, the SCHC WG will liaise and coordinate with other Standard Development Organisations when SCHC will be used over or under protocols not defined with IETF.
<table>
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<td>Feb 2023</td>
<td>WG adoption of a standard track specification for SCHC over PPP</td>
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<tr>
<td>May 2023</td>
<td>WG adoption of an information document about SCHC architecture</td>
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<td>Jul 2023</td>
<td>WG adoption of a standard track specification of Operations, Administration, and Maintenance (OAM)</td>
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<td>Nov 2023</td>
<td>WG adoption of a standard track specification for generic SCHC header</td>
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<td>WG adoption of a standard track specification SCHC over IP</td>
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<td>Dec 2023</td>
<td>WG adoption of a standard track specification of FEC for fragments</td>
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<td>WG adoption of a standard track specification for rules discovery and parameters negotiation</td>
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<td>Mar 2024</td>
<td>Request for publication of a standard track specification for SCHC over PPP</td>
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<tr>
<td>Mar 2024</td>
<td>Request for publication of an information document about SCHC architecture</td>
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SCHC around the world

- SCHC now part of IEC 62056-8-12 ED1
  - Electricity metering data exchange? The DLMS/COSEM suite - Part 8-12: Communication profile for Low Power Wide Area Networks (LPWAN)
- There is now SCHC certification for LoRaWAN
  - “LoRaWAN Certification Test Tool Now Provides SCHC over LoRaWAN testing for end device certification” – Nov’22
  - And an award from the Lora Alliance to the team – March’23