

IETF Hackathon

IETF 113

19-20 March 2022

Vienna, Austria



Hackathon Plan

- Make OpenSCHC usable for everyone
 - RFC 8724
 - Draft-ietf-lpwan-schc-yang
- Update code for fragmentation compound ack
 - draft-ietf-schc-over-sigfox

What got done

- Documentation of NoAck and compression in OpenSCHC
 - ICMPv6 Echo Query and Response
- Implement SCHC YANG model in CORECONF
 - <https://github.com/openschc/openschc>
- Updating schc over sigfox code
 - <https://github.com/schc-over-sigfox/schc-over-sigfox>

What we learned

- The SID value should be selected carefully to get a more compact cbor representation

SID		((LPWAN))	
1000090	data /ietf-schc:schc		
1000091	data /ietf-schc:schc/rule		
1000092	data /ietf-schc:schc/rule/ack-behavior		
1000093	data /ietf-schc:schc/rule/direction		
1000094	data /ietf-schc:schc/rule/dtag-size		
1000095	data /ietf-schc:schc/rule/entry		
1000096	data /ietf-schc:schc/rule/entry/comp-decomp-action		
1000097	data /ietf-schc:schc/rule/entry/comp-decomp-action-value		
1000098	data /ietf-schc:schc/rule/entry/comp-decomp-action-value/position		
1000099	data /ietf-schc:schc/rule/entry/comp-decomp-action-value/value		
1000100	data /ietf-schc:schc/rule/entry/direction-indicator		
1000101	data /ietf-schc:schc/rule/entry/field-id		
1000102	data /ietf-schc:schc/rule/entry/field-length		
1000103	data /ietf-schc:schc/rule/entry/field-position		
1000104	data /ietf-schc:schc/rule/entry/matching-operator		
1000105	data /ietf-schc:schc/rule/entry/matching-operator-value		
1000106	data /ietf-schc:schc/rule/entry/matching-operator-value/position		
1000107	data /ietf-schc:schc/rule/entry/matching-operator-value/value		
1000108	data /ietf-schc:schc/rule/entry/target-value		
1000109	data /ietf-schc:schc/rule/entry/target-value/position		
1000110	data /ietf-schc:schc/rule/entry/target-value/value	18 1F # unsigned(31)	
1000111	data /ietf-schc:schc/rule/entry/target-value/value	0C # unsigned(12)	
1000112	data /ietf-schc:schc/rule/entry/target-value/value	18 1E # unsigned(30)	
1000113	data /ietf-schc:schc/rule/fragmentation-mode	0B # unsigned(11)	
1000114	data /ietf-schc:schc/rule/l2-word-size	03 # unsigned(3)	
1000115	data /ietf-schc:schc/rule/max-ack-requests	1A 000186B5 # unsigned(100021)	
1000116	data /ietf-schc:schc/rule/max-interleaved-frames	18 1C # unsigned(28)	
1000117	data /ietf-schc:schc/rule/maximum-packet-size	1A 000186F6 # unsigned(100086)	
1000118	data /ietf-schc:schc/rule/rcs-algorithm	04 # unsigned(4)	
1000119	data /ietf-schc:schc/rule/retransmission-timer	02 # unsigned(2)	
1000120	data /ietf-schc:schc/rule/rule-id-length	15 # unsigned(21)	
1000121	data /ietf-schc:schc/rule/rule-id-value	03 # unsigned(3)	
1000122	data /ietf-schc:schc/rule/rule-id-value	16 # unsigned(22)	
1000123	data /ietf-schc:schc/rule/rule-id-value	1A 000186F0 # unsigned(100080)	
1000124	data /ietf-schc:schc/rule/rule-id-value		
1000125	data /ietf-schc:schc/rule/rule-id-value		

Wrap Up

Team members:

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First timers @ IETF/Hackathon:

Ivan Martinez

Diego Wistuba

- <https://github.com/openschc/openschc>
- <https://github.com/schc-over-sigfox/schc-over-sigfox>