draft-ietf-schc-architecture-02

Authors:
Ana Minaburo <anaminaburo@gmail.com>
Pascal Thubert <pascal.thubert@gmail.com>
Alexander Pelov <alexander.pelov@imt-atlantique.fr>
Context

• New version -02
  – Define a generic architecture
    • Terminology
    • SCHC Header stratum has been introduced to generalize transport in different layers
      – Discriminator
    • SoR Instances
    • Management
SCHC stratum example

```
IP/UDP ( ) (CoAP) PAYLOAD2
  ^          ^          ^_____________
  |          |          |
  |          |          |+(SCHC Header)( SCHC-compressed data)
  +---------+---------+----------
  |         |         | IP/UDP---+
  |         |         |                   |
  |         |         | C/D ! M ___ | M ___ |
  |         |         | +-->[SoR] | [SoR] |
  | S       |         | ![ [___] | [___] |
  | C       |         | ! [___] | [___] |
  | H       |         |  F/R | F/R |
  | C       |         | ins_id1--ins_idi--ins_idn--|
  |         |         | C/D ! (IP/UDP)
  |         |         | +----------->[SoR] |
  |         |         | F/R | M [___] |
  |         |         | +---+---+---+---+
  |         | Discriminator: interface ID |
  +---------+----------+

N   ______________^  
E    /  
T    | ( ) (IP/UDP) PAYLOAD1  
W    | ^  ^_________
  |   |+(SCHC Header)(SCHC-compressed data)
  +---+---+---+---+
```
SCHC Architecture

Where: {} Optional; [] Encrypted; () Compressed.
SCHC Header Format

• Open format
  – Defined by stratum
  – Includes an ID & CRC
  – But not only

• SCHC Compressed header format

```
+- - - - -+- - - - - - - - - +
| Rule ID   | Compressed Residue |
+- - - - -+- - - - - - - - - +
```
Next Steps

• SoR Identification
• Rule Format
  – Add new Attributes as Action