SenML Data Value Content-Format Indication

draft-ietf-core-senml-data-ct-02

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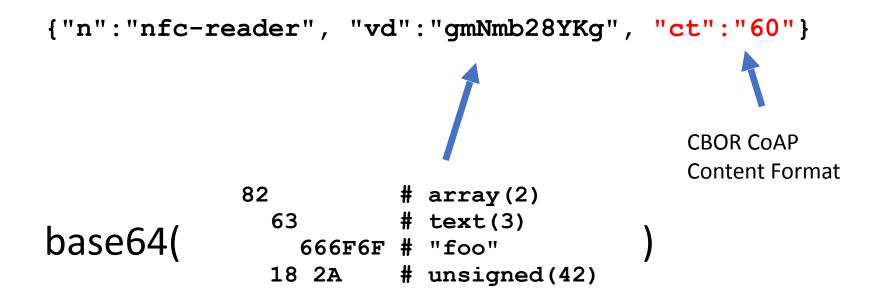IETF 109

Content-Format indication

- SenML Records can contain (binary) "data values" in a "vd" field

```
[
 {"bn":"urn:dev:ow:10e2073a01080063:", "n":"temp", "v":7.1},
  {"n":"open", "vb":false},
  {"n":"nfc-reader", "vd":"aGkgCg"}
]
```

- This draft: new Content-Format indication ("ct") field to indicate the Content-Format of the data in the SenML Record

Example SenML Record with data value and Content-Format indication

`{"n":"nfc-reader", "vd":"gmNmb28YKg", "ct":"60"}`

CBOR CoAP
Content Format

```
base64(   82              # array(2)
            63             # text(3)
              666F6F # "foo"          )
          18 2A      # unsigned(42)
```

Updates for draft-ietf-senml-data-ct-02

- 108: must-understand ct field ("ct_") proved puzzling
  - Don't know how to manage interaction with normal field ("ct") in resolution process
  - So we got rid of it again (thanks for the suggestion, Klaus)
  - Would have been nice to have, but don't know how to do it

- WGLC 2020-07-30..2020-08-17; no reviews by end of WGLC
- Since: reviews by Jim Schaad, Thomas Fossati, Alexey Melnikov

Need ABNF for contents of ct field (#2)

- Import from draft-bormann-core-media-content-type-format? (Revived 2020-08-18; would need to consider WG adoption)

- Or define here?

- content-coding   = token ; [since RFC2616; RFC 7231]

- **Content-Format-String**   = Content-Type ["@" content-coding]

- **Content-Format** = 1*DIGIT

token   = 1*tchar; [RFC 7230]
tchar   = "!" / "#" / "$" / "%" / "&" / "'" / "*"
             / "+" / "-" / "." / "^" / "_" / "`" / "|" / "~"
             / DIGIT / ALPHA

Meaning (allowedness) of "ct" without "vd" #1

- Can happen when "bct" is in effect
- Probably innocuous to allow ct without vd (no consequences)

Next steps

- Re-check reviews

- Resulting changes are probably not technical
- Perform changes, submit to IESG