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

```json
[
  {"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"}
```

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

CBOR CoAP Content Format
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