cbor

2020-04-08 virtual interim

CBOR WG Meeting — Interim
Wednesday, 2020-04-08, 15:00–16:00 UTC
Chairs: Francesca Palombini, Jim Schaad

Carsten's slides:

— CBORbis status
— Time tag (1001..1003)
— CDDL freezer (if time)

CBORbis status

https://tools.ietf.org/html/draft-ietf-cbor-7049bis
WGLC completed at 2020-03-23
No reviews!

Implementer alerts slowly lead to some more comments

Proposal:
Wait for some more implementer comments, WG reviews

Issue 177

Should 1+8 tags maybe marked as less interoperable?
(We do so for 64-bit integers.)
(Editorial)

Related question:
Can the DE control 1+2 and 1+4 allocations?
(Answer is: No!)

Proposal for update:

New entries in the range 0 to 23 are assigned by Standards Action.
New entries in the range 24 to 255 are assigned by Specification
Required. New entries in the range 256 to 32767 are assigned by Expert Review.
32768 to 18446744073709551615 are assigned by First Come First Served.

Issue 176

Reserve a tag number for "no tag"?
Enables code to always store a tag number

Carsten: Why not; reserve a number in 1+2 space, e.g. 666?
Jim: Not useful in case of nested tags

(Can be done outside of/in parallel to 7049bis, but maybe better to do it now in the document.)

Issue 178

Security considerations about hashes -- mention that there are other implementation strategies

CBORbis next steps

Submit new version in 10 days, with the above discussions covered

By end of April, decide whether to ship

Date tags

RFC 3339 based (1004) 2020-04-08
Epoch-based (100) days since 1970-01-01 (offset version of MJD)

Single tag for both?
1+1 for epoch, 1+2 for text-based

Related: time of day (116), time zone (122)

Time tags 1001..1003

https://tools.ietf.org/html/draft-bormann-cbor-time-tag-03

— Draft has been around for a while

— Intention:

— More sophisticated tag

— Extensibility

— Other time/date related work is starting

— Is this one ready for WG adoption?

What does it do, what could be added

Now:
seconds, nanoseconds (or picoseconds, ...)

Could be added:
time scales (TAI vs. UTC)

Discuss: Publish this, or maybe merge it into an "interesting tags" document

Not discussed: CDDL freezer

https://tools.ietf.org/html/draft-bormann-cbor-cddl-freezer-03

Proposal: form a draft out of Section 4:

```
.abnf/.abnfb
.cat/.join
```

Maybe throw in `.plus` for good measure.

Who would be willing to review and discuss WG adoption?

```
; for draft-jones-cbor-date-tag-00
Tag1004 = #6.1004(text .abnf full-date)
; for RFC 7049
Tag0 = #6.0(text .abnf date-time)

full-date = "full-date" .cat rfc3339
date-time = "date-time" .cat rfc3339

; Note the trick of idiomatically starting with a newline, separating
;   off the element named by LHS of the .cat from the rule-list
rfc3339 = '
    date-fullyear   = 4DIGIT
    date-month      = 2DIGIT  ; 01-12
[...]
    full-date       = date-fullyear "-" date-month "-" date-mday
    full-time       = partial-time time-offset

    date-time       = full-date "T" full-time
' .cat rfc5234-core

rfc5234-core = '
    DIGIT           =  %x30-39 ; 0-9      ; abbreviated here
'
```