

draft-ietf-cbor-time-tag

draft-ietf-cbor-time-tag-00 adopted 2021-05

"no rush": tags registered, in use in implementations

Aiming for synchronized publication with SEDATE WG Internet Extended Date/Time Format (IXDTF) extending RFC 3339 with [hints](#):

1996-12-19T16:39:57-08:00[America/Los_Angeles][u-ca=hebrew]
Time Zone Hint Extension Suffix

SEDATE now converging.

[draft-ietf-cbor-time-tag-01](#)

added parsed SEDATE hints:

```
1001({ 1: 851042397,  
      -10: "America/Los_Angeles",  
      -11: { "u-ca": "hebrew" }  
})
```

Nearing WGLC

IXDTF (SEDATE-06) is now technically complete

time-tag-01 introduced map keys to carry IXDTF information

time-tag-02 addresses the TBDs that remained in -01

- IANA considerations
- Clarify durations
- Copy updates from IXDTF ABNF

IANA considerations

— Timescale registry

Pre-fill with TAI and UTC (or add UT1 as well? ... CBOR in Space ...)

Timescales that are just a constant offset to these (e.g., GPS, NTP) **should not** be registered

Policy: Expert Review **and** RFC Required

— Map Key registry

Pre-fill with map keys in the spec

Policy: Specification Required

(Also: Expert reviewer curates "good" code points)

Issue #4: Floating time

(A time that is bound to a time zone and/or time offset only by local context)

Assumptions:

- We want to do this in a way that is compatible with NTP
- NTP will take another year or so to converge on its approach

→ Add a (critical!) map key for this later.

Issue #8: critical map keys vs. base time

Negative map keys are ignorable (elective) options
Unsigned ones are critical

So far: Only one critical piece of information: base time
So only one key could be unsigned (non-negative)

Now: Keys 10 and 11 can carry critical IXDTF information

Almost editorial fix ("only one key" now for base-time keys)

Feature #7: planned vs. actual times

Time scales are not entirely predictable (e.g., leap seconds)

A "planned" time may be subject to irregularities in a timescale that are not yet known

An "actual" time should know timescale characteristics, so can reliably be translated between timescales.

Add this distinction via a flag? More information?

The Plan

Use Feedback from discussions initiated now with art@, sedate@, ntp@, tictoc@, cbor@

Have a –03 ready for WGLC before IETF 115
process WGLC at 115