SEDATE: IXDTF

March 30th, (Thursday), 0730-0830 UTC
draft-ietf-sedate-datetime-extended-07

— Submitted to IESG 2023-01-19
— Document now has AD review (2023-03-21) ➔ –08 needed
— Shepherding AD changed to Murray Kucherawy
— Solving problem with RFC 3339 needs charter change

AD Review (Francesca)

— Editorial (log/abstract, TAI expansion)
— MUST NOT on sending erroneous; explain treatment
— IANA expert guidelines needed
— stability of CLDR reference

Justin Grant has jumped in with a PR (thank you!).
This needs to be verified by the editors.

Github issues/PRs

— Justin Grant has provided PR #35
with many small improvements

— Several issues (#25, #28, #31, #33) from 2022/2023
call for minor improvements

Now have opportunity to roll them in.
Need reviews when editors have integrated the PR/Issue resolutions.

Plan

Address AD comments
Integrate github issues/PRs
Ship –09 ➔ 🐇

Backup slides

What RFC 3339 is

Text format for `[utctime, ? localoffset]`
Profiling ISO 8601:1988 for that (Y2K, unnecessary choices)
(The local offset is a hint once the decoding is done)

An RFC 3339 timestamp is always rooted in a UTC time
• (no "floating times").
optional "local offset" is "often useful information".
• opt out using `-00:00` as local offset

What SEDATE is

"IXDTF": Adding extensions to RFC 3339 timestamps

— semantics of RFC 3339 remain unchanged
— time zone hint adds named timezone `[Europe/Berlin]` to existing local offset (`+01:00`)
— keys for other options (`[key=value]`) can be registered
— options can be critical (`[!key=value]`), must understand

Are we done yet?

Yes.

Are we done yet?

Yes. But.

The problem

- RFC 3339 defines:
  - Z and +00:00: synonyms for local offset 0
  - -00:00: no local offset given (cf. RFC 2822 email date)
- Implementations tend to read:
  - Z: "no time zone offset given"
  - +00:00: local offset 0
- ISO 8601 versions since 2000 **do not allow** −00:00 — never written

Confusion 

We already need to cope with conflicts between
- RFC 3339 offset and
- timezone hint

Temporal interprets `Z` + `[Timezone]` as RFC3339 `-00:00`
#19 has a survey of various RFC3339-incompatible platform time data types

Options

1. ignore problem; feign ignorance

2. do the right thing

Radical Proposal

Should we start to interpret `Z` as `–00:00`,
leaving `+00:00` for RFC 3339's `Z`/`+00:00` semantics?

— Seems to mirror the consensus in the implementations

— Goes outside the charter of SEDATE

— Needs discussion beyond SEDATE WG

The Mail

2022-10-04:
Sent message to ART; CC: SEDATE, CBOR, NTP, TICTOC

<https://mailarchive.ietf.org/arch/msg/tictoc/K1tNGjOagyraLOZ1AiiPEJE8aBU>

(also about CBOR time tag, which is starting to provide a binary version of SEDATE extensions)

What people wanted to discuss

— IETF standards should not reference non-free standards normatively
— the need for floating times (or their impossibility)
— sub-minute Timezone Offsets
— calendaring issues
— unstable politicians and Timezone definitions

next steps

— Consider the discussion done

— Check with AD/IESG whether we can extend charter, to

— fix RFC 3339