TZDIST System

IETF 105

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Motivation

tzdist has not been widely used to distribute tzdata

- tzdata seems to be embedded into software update

IANA hosts tzdata and is budgeting its next four year plan

==> Is there any way IANA could help in deploying tzdist

- started a discussion

Findings

Enthusiasm into having tzdist deployed at a more global scale

- IANA is watching us

We are currently not ready to move to that path and significant needs to be achieved

- Global ecosystem:
    - reaching out intending to deploy tzdist at scale
- Resource for the system:
- better quantify/qualify the system requirements
- Protocol:
    - revise, define the tzdist protocol to fit the needs

Global Ecosystem

What is the service we really expect:

- global service
- distribution master

Who will subscribe and how will they serve the tzdata ?

- seems tzdata is not always served as published.

Necessary resources

Amount of data

Need to better quantify volume try and expectation

tzdata (TZIf) size:

- tar 457 KB
- giz: 152 KB
- lzip: 68 KB

tzdata in minimal source code:

- 111 KB
- giz 27
- lzip 22 KB

iCalendar VTMEZONEs:

- gz: 777 KB

Frequencies

tzdata releases:

- 2019: a-b (2)
- 2018: a-i (9)
- 2017: a-c (3)
- 2016: a-j (10)
- 2015: a-f (6)
- 2014: a-j (10)
- 2013: a-i (9)
- worst case since 80: (18)

But we would like close-to-real time sync.

https://github.com/eggert/tz/graphs/commit-activity

Estimation of 5% growth per year.

Synchronization

cache for minutes

Protocol changes

requesting the full tzdist data

optimizing the synchronization process

checking leapsecond consistentcy with NTP client

a simple profile for tzdist

Specification for the data

Authentication of the data by IANA

- is it tzdist ?

Publishing intermediary results

- not only releases: 2019b vs 2019b-11-gd8c6bf2

Possibility to have minor changes performed by publishers

Specification of auxiliary metadata

- zone1970.tab, iso3166.tab

Probably next step:

- reaching out publishers

- chartering a dedicate WG

- TZDIST System requirements

- Protocol

- Data

- ...

Thanks