Timestamp Language-Independent Type for YAML™ Version 1.1

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Status

This specification is a draft reflecting consensus reached by members of the yaml-core mailing list [http://lists.sourceforge.net/lists/listinfo/yaml-core]. Any questions regarding this draft should be raised on this list.

URI:      tag:yaml.org,2002:timestamp
Shorthand: !!timestamp
Kind:      Scalar.
Canonical:

[0-9][0-9][0-9][0-9] # (year)
-[0-9][0-9][0-9] # (month)
-[0-9][0-9][0-9] # (day)
T[0-9][0-9][0-9] # (hour)
[:][0-9][0-9][0-9] # (minute)
[:][0-9][0-9][0-9] # (second)
(\.[0-9]+[1-9])? # (fraction)
Z # (time zone)

Regexp:

[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9] # (ymd)
[0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9][0-9] # (year)
-[0-9][0-9][0-9] # (month)
-[0-9][0-9][0-9] # (day)
([Tt]|\s+)[0-9][0-9][0-9] # (hour)
[:][0-9][0-9] # (minute)
[:][0-9][0-9] # (second)
(\.[0-9]+[1-9])? # (fraction)
((\s+)[zZ][-+][0-9][0-9][0-9]?:?([0-9][0-9])?)? # (time zone)

Definition: A point in time.

A timestamp value represents a single point in time. This can be serialized using a subset of the ISO8601 format and the formats proposed by the W3C note on datetime [http://www.w3.org/TR/NOTE-datetime]. In addition, a more relaxed format is also supported for enhanced readability, using white space separation.
If the time zone is omitted, the timestamp is assumed to be specified in UTC. The time part may be omitted altogether, resulting in a date format. In such a case, the time part is assumed to be \texttt{00:00:00Z} (start of day, UTC).

\textbf{Example 1. \texttt{!!timestamp} Examples}

- canonical: \texttt{2001-12-15T02:59:43.1Z}
- valid iso8601: \texttt{2001-12-14T21:59:43.10-05:00}
- space separated: \texttt{2001-12-14 21:59:43.10 -5}
- no time zone (Z): \texttt{2001-12-15 2:59:43.10}
- date (00:00:00Z): \texttt{2002-12-14}