

Concise Binary Object Representation (CBOR) Tag for Date
draft-jones-cbor-date-tag-00

Abstract

The Concise Binary Object Representation (CBOR, [RFC 7049](#)) is a data format whose design goals include the possibility of extremely small code size, fairly small message size, and extensibility without the need for version negotiation.

In CBOR, one point of extensibility is the definition of CBOR tags. [RFC 7049](#) defines two tags for time: CBOR tag 0 ([RFC 3339](#) date/time string) and tag 1 (Posix "seconds since the epoch"). Since then, additional requirements have become known. This specification defines a CBOR tag for an [RFC 3339](#) date text string, for applications needing a date representation without a time. It is intended as the reference document for the IANA registration of the CBOR tag defined.

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[1.](#) Introduction

The Concise Binary Object Representation (CBOR) [[RFC7049](#)] provides for the interchange of structured data without a requirement for a pre-agreed schema. [RFC 7049](#) defines a basic set of data types, as well as a tagging mechanism that enables extending the set of data types supported via an IANA registry.

This specification defines a CBOR tag for a text string representing a date but not a time. The tagged text string is represented as specified by the [RFC 3339](#) [[RFC3339](#)] "full-date" production.

[1.1.](#) Requirements Notation and Conventions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "NOT RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [BCP 14](#) [[RFC2119](#)] [[RFC8174](#)] when, and only when, they appear in all capitals, as shown here.

[2.](#) IANA Considerations

2.1. Concise Binary Object Representation (CBOR) Tags Registrations

This section registers the following value in the IANA "Concise Binary Object Representation (CBOR) Tags" registry [[IANA.cbor-tags](#)].

- o Tag: 1004 (value requested)
- o Data Item: UTF-8 text string
- o Semantics: [RFC 3339](#) full-date string
- o Reference: [[this specification]]

3. Security Considerations

The security considerations of [RFC 7049](#) apply; the tag introduced here is not expected to raise security considerations beyond those.

A date, of course, has significant security considerations; these include the exploitation of ambiguities where the date is security relevant or where the date is used in access control decisions.

4. References

4.1. Normative References

- [RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), DOI 10.17487/RFC2119, March 1997, <<https://www.rfc-editor.org/info/rfc2119>>.
- [RFC3339] Klyne, G. and C. Newman, "Date and Time on the Internet: Timestamps", [RFC 3339](#), DOI 10.17487/RFC3339, July 2002, <<https://www.rfc-editor.org/info/rfc3339>>.
- [RFC7049] Bormann, C. and P. Hoffman, "Concise Binary Object Representation (CBOR)", [RFC 7049](#), DOI 10.17487/RFC7049, October 2013, <<https://www.rfc-editor.org/info/rfc7049>>.
- [RFC8174] Leiba, B., "Ambiguity of Uppercase vs Lowercase in [RFC 2119](#) Key Words", [BCP 14](#), [RFC 8174](#), DOI 10.17487/RFC8174, May 2017, <<https://www.rfc-editor.org/info/rfc8174>>.

4.2. Informative References

- [IANA.cbor-tags] IANA, "Concise Binary Object Representation (CBOR) Tags", <<http://www.iana.org/assignments/cbor-tags>>.

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Document History

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-00

- o Initial version.

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