

The JSON Data Interchange Syntax

1 Scope

JSON is a lightweight, text-based, language-independent syntax for defining data interchange formats. It was derived from the ECMAScript programming language, but is programming language independent. JSON defines a small set of structuring rules for the portable representation of structured data.

The goal of this specification is only to define the syntax of valid JSON texts. Its intent is not to provide any semantics or interpretation of text conforming to that syntax. It also intentionally does not define how a valid JSON text might be internalized into the data structures of a programming language. There are many possible semantics that could be applied to the JSON syntax and many ways that a JSON text can be processed or mapped by a programming language. Meaningful interchange of information using JSON requires agreement among the involved parties on the specific semantics to be applied. Defining specific semantic interpretations of JSON is potentially a topic for other specifications. Similarly, language mappings of JSON can also be independently specified. For example, ECMA-262 defines mappings between valid JSON texts and ECMAScript's runtime data structures.

2 Conformance

A conforming JSON text is a sequence of Unicode code points that strictly conforms to the JSON grammar defined by this specification.

A conforming processor of JSON texts should not accept any inputs that are not conforming JSON texts. A conforming processor may impose semantic restrictions that limit the set of conforming JSON texts that it will process.

3 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 10646, *Information Technology – Universal Coded Character Set (UCS)*

The Unicode Consortium. The Unicode Standard <http://www.unicode.org/versions/latest>.

Bray, T., Ed. "The JavaScript Object Notation (JSON) Data Interchange Format", RFC 8259.

This specification and [RFC 8259] both provide specifications of the JSON grammar but do so using different formalisms. The intent is that both specifications define the same syntactic language. If a difference is found between them, Ecma International and the IETF will work together to update both documents. If an error is found with either document, the other should be examined to see if it has a similar error, and fixed if possible. If either document is changed in the future, Ecma International and the IETF will work together to ensure that the two documents stay aligned through the change. RFC 8259, also defines various semantic restrictions on the use of the JSON syntax. Those restrictions are not normative for this specification.