

# I-JSON

IETF 89

# What draft-i-json-01 does

- No duplicate keys in an object.
- Order of object members explicitly not preserved.
- UTF-8 only, no Unicode non-characters.
- Top-level must be an object.
- Numbers restricted to IEEE 754 binary64.
- application/i-json media type.
- application/\*+i-json media-type pattern.
- Clients MUST NOT trust busted I-JSON.

# Not worth arguing over

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# Worth arguing over

- Top-level must be an object.
- You might want to allow lists...
- ...but object-only encourages a Must-Ignore policy such as “if it has a key that you don’t expect, carry on anyway”, which is A Good Thing in Internet protocols...
- ...and we really don’t want top-level primitives.

# Worth arguing over

- Numbers restricted to IEEE 754 binary64.
- Could avoid writing this into the syntax constraints...
- ... but printf & its descendents make it easy for generators to play nice ...
- ... maybe a MUST on producers but receivers not required to detect this class of error?

# Worth arguing over

- application/i-json media type.
- application/\*+i-json media-type pattern.
- Why not just use JSON media types?
- Hypothesis: Popular JSON generators/parsers will have an I-JSON mode; maybe just rely on app to turn I-JSON parsing on.

# Worth arguing over

- Clients MUST NOT trust busted I-JSON.
- In fact, all existing JSON parsers are sort of draconian, e.g. will not accept a missing closing brace:  

```
{ "foo" : "bar
```
- ...but lots of people hate XML's required draconianism.
- How about something like "I-JSON parsers MUST have a mode where they report violations of I-JSON requirements"?

# Worth arguing over

- Making I-JSON self-identifying.
- draft-00 had a reserved-value key in top-level object  
“urn:ietf:i-json” : {}
- Allows **sender** to request I-JSON parsing mode.
- All sorts of profile stuff could go in the {}.
- It might be smart to reserve the key even if we’re unconvinced about the virtues of self-identification.