

CoRE

September 29th (Wednesday), 14:00–15:30 UTC

— SenML data-ct

<https://datatracker.ietf.org/doc/draft-ietf-core-senml-data-ct/>

Status: IESG Evaluation::Revised I-D Needed

Has 2 DISCUSSEs. Has enough positions to pass once DISCUSS positions are resolved.

(In DISCUSS/COMMENT processing.)

Need for both number and spec

(COMMENT by Rob Wilton)

Yes, we need both:

- Content-Format number is compact
(even if string makes them less compact than could be)
- Content-Format spec is general
(cross-products with parameter values/content-codings)

→ No change needed

Nested content-codings

(DISCUSS #1 by Ben Kaduk)

RFC7231 says:

Content-Encoding = 1#content-coding

If one or more encodings have been applied to a representation, the sender that applied the encodings MUST generate a Content-Encoding header field that lists the content codings in the order in which they were applied.

How to handle this in data-ct?

`application/json@deflate`

gives one content-coding.

Example alternatives for adding multiple ones:

`application/json@deflate,aes128gcm`

`application/json@deflate@aes128gcm`

Or maybe don't handle nested content-codings at all?

Reusing ABNF rule names, but cleaning up rules

(DISCUSS #1 by Ben Kaduk)

Also HTTPBIS-semantic updates to RFC 7230/7231:

```
parameters = *( OWS ";" OWS [ parameter ] )
```

Proposed reply:

Httpbis-semantic uses modified ABNF anyway; so there is no way to have exactly the same ABNF. But it is worthwhile pointing out that legacy 8-bit text and HTAB have no place in the strings used in this protocol and therefore are not allowed.

Do we need full re-check for replacing 7230/7231 by httpbis-semantic ([C430](#))?

Error handling

(COMMENT by Ben Kaduk)

Do we want to comment anywhere about the situation where an implementation receives a message using an IANA-registered numeric content-format that is "too new" for that implementation to know about?

(COMMENT by Roman Danyliw)

Is there any generic guidance to provide on expected error handling behavior if:

- ct (or bct) contains a number outside of the 0-65535 range, or an unregistered value per the CoAP Content-Formats?
- ct (or bct) contains a text value that is not a registered Content-Format-String?
- ct (or bct) contains a valid Content-Format-String, but an unregistered Content-Format?

Or is this application specific?

(Also, GENART review by Christer Holmberg:)

So, that means that the sender of "ct", as without "ct", has no knowledge (unless obtained using some out of band mechanism) whether the receiver will be able to interpret the associated value correctly or not. Perhaps that would be good to point out.

Error handling in SenML

Generally, it is the responsibility of the SenML generator to provide valid, processable SenML.

Do we have any other error handling of this kind defined?

Rest of GENART review

Updated comments from Christer Holmberg:

<https://mailarchive.ietf.org/arch/msg/last-call/o2cXYzeAnGsU5pTo0JNDuRIEipo>

But, I don't think the reader should have to know CoAP in order to understand SenML.

(Agree, but don't know what to change.)

I don't think it is used to indicate the Content-Format. It might be used to indicate the "content format", though. No capital letters, and no dash :)

The same applies for Content-Coding. I think "content coding" would be more correct.

(Update wording to make it less consistent?)

Would it be useful to point out that CoAP Content-Format applies to the whole payload, while "ct" only applies to the "vb" element?

I think we are doing the latter; don't see the commonality here.

... > Yes. The field values for the fields in RFC 8428 have a rather simple structure (see Table 1 in Section 4.3); there was no need to provide ABNF.

... > A Content-Format-Spec can get complicated; there is no single standard that can be used to reference the ABNF for it from.

... > So we define it here.

Would it be useful to point that out?

I don't know.

Editorial changes

... ongoing ...

[https://github.com/core-wg/senml-data-ct/commits/
master](https://github.com/core-wg/senml-data-ct/commits/master)

<https://github.com/core-wg/senml-data-ct/pulls>