

Reported errata for RFC 8824

“Static Context Header Compression (SCHC) for the Constrained Application Protocol (CoAP)”

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IETF 116 meeting – Yokohama – March 30th, 2023

Overview

› 2 technical errata

- <https://www.rfc-editor.org/errata/eid7389>
- <https://www.rfc-editor.org/errata/eid7391> (*)

› 7 editorial errata

- <https://www.rfc-editor.org/errata/eid7390>
- <https://www.rfc-editor.org/errata/eid7392> (*)
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- <https://www.rfc-editor.org/errata/eid7397>

Technical errata eid7391

› CoAP options Size1, Size2, Proxy-URI, Proxy-Scheme

- <https://www.rfc-editor.org/errata/eid7391>
- In the rule, TV should be empty (instead of “not-sent”)
- Consistent with the intended CDA “value-sent”
- Addressed by [1], if “Hold for document update”

› Feedback from Ana (reject)

- *The original text was: “If the field value must be sent, TV is not set, MO is set to “ignore” and CDA is set to “value-sent”. A mapping can also be used.”*
- *‘not set’ has been transformed into ‘not-sent’ during the edition. And I prefer to use this terminology that corresponds to the RFC8724.*

› Follow-up: Is “not-sent” usable for TV at all?

- Different than anywhere else in RFC 8824, see: Sections 5.2, 6.1, 6.2 and 6.3; Tables 1 and 2
- In RFC 8724, “not-sent” is used only with CDA. When that’s the case, TV has no value.
- My understanding: CDA = “value-sent” → TV left empty

Section 5.4 says:

The SCHC Rule description MAY define sending some field values by setting the TV to “not-sent”, the MO to “ignore”, and the CDA to “value-sent”.

It should say:

The SCHC Rule description MAY define sending some field values by describing an empty TV, with the MO set to “ignore” and the CDA set to “value-sent”.

Editorial errata eid7392

› RST message with CoAP Observe

- <https://www.rfc-editor.org/errata/eid7392>
- RST used by a CoAP client, not by the Observe option
- OLD: Since the Observe Option MAY use a RST message
- NEW: Since the Observe extension MAY use a RST message

› Feedback from Ana (reject)

- *As soon as I understand CoAP RFC7252 uses Options, and in the RFC7641 Observe is also an Option, so I don't think that the change is needed. Because Observe is not an extension.*

› Follow-up: What's strange is that a CoAP option may use a message. The user is the CoAP client

- Per RFC 7641, Observe is a “protocol extension for CoAP”. Extensions are signaled/enforced with CoAP options
- Maybe there is a better, more effective rephrasing?
 - › *Since the client MAY use a RST message to inform a server that the Observe response is not required, ...*

Editorial errata eid7394

› Extra “1” in Table 3 showing a SCHC rule, column “MO”

– <https://www.rfc-editor.org/errata/eid7394>

CoAP Uri-Path	var	1	Dw	path	equal 1	not-sent	
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› Feedback from Ana (reject)

– *I reject this errata, and I correct an edition error.*

In table 3, the TV should be the 1st element of the path, so it is better to replace 'path' by 'element' and remove '1' after equal.

```
+-----+-----+-----+-----+-----+-----+-----+-----+
|CoAP Uri- |var | 1 |Dw | "elem" | equal | not-sent |           |
|Path      |   |   |   |         |       |         |         |         |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

› Follow-up: Ok, but shouldn’t *elem* be without quotes?

– Otherwise, a match occurs only if the first element of the path is the URI-Path segment with value "elem"

Editorial errata eid7395

› Discussed example of SCHC rule

- <https://www.rfc-editor.org/errata/eid7395>
- Based on the SCHC rule in Table 3 ...
- Type omitted if CON for downlink messages

Field	FL	FP	DI	TV	MO	CDA	Sent [bits]
CoAP version	2	1	Bi	01	equal	not-sent	
CoAP Type	2	1	Dw	CON	equal	not-sent	
CoAP Type	2	1	Up	[ACK, RST]	match-mapping	matching-sent	T

› Feedback from Ana (reject)

- *In this case we are making a difference between the index of the matching-list sent in Type and the mapped index used for Code that belongs to the RFC7252 section 12.1 IANA values.*

› Follow-up: Yes, for the uplink – The new text should better describe the whole rule in the table

- Old text: "sending only the Type" – This suggests a behavior consistent with CDA "value-sent" (instead of "matching-sent" as per Table 3) and for both directions (while, as per Table 3, a CDA "not-sent" applies to downlink messages for the considered Type CON).
- New text: sending only a mapped Type (and only for uplink messages)

Technical errata

› CoAP option URI-Path

- <https://www.rfc-editor.org/errata/eid7389>
- Not mandatory in requests
- Not used in responses

Section 3.1 says:

For example, the Uri-Path option is mandatory in the request, and it might not be present in the response.

It should say:

For example, the Uri-Path option can be used in the request, while it is not used in the response.

■ › CoAP options Size1, Size2, Proxy-URI, Proxy-Scheme

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Editorial errata (1/2)

› CoAP option name

- <https://www.rfc-editor.org/errata/eid7390>
- s/Content/Content-Format

■ › RST message with CoAP Observe

- <https://www.rfc-editor.org/errata/eid7392>
- RST used by a CoAP client, not by the Observe option

› Plural vs. singular

- <https://www.rfc-editor.org/errata/eid7393>
- s/content of the OSCORE options/content of the OSCORE option

■ › Extra “1” in Table 3 showing a SCHC rule, column “MO”

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Editorial errata (2/2)

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CoAP Type	2	1	Up	[ACK, RST]	match-mapping	matching-sent	T

> Subject-adjective pairing

- <https://www.rfc-editor.org/errata/eid7396>
- “compressed” should refer to a request, not to a CoAP client

> Clarify introduction of CoAP option OSCORE and outer options

- <https://www.rfc-editor.org/errata/eid7397>
- It should be “outer options”, in the plural
- Outer options include the OSCORE option
- It is specifically the OSCORE option that indicates OSCORE protection

Thank you!

Comments/questions?