

Constrained RESTful Environments (CoRE) WG

Virtual Interim Meeting
August 29, 2018

Chairs: Jaime Jiménez
 Carsten Bormann

Stand-in chair: Klaus Hartke

Note Well

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Definitive information is in the documents listed below and other IETF BCPs. For advice, please talk to WG chairs or ADs:

- BCP 9 (Internet Standards Process)
- BCP 25 (Working Group processes)
- BCP 25 (Anti-Harassment Procedures)
- BCP 54 (Code of Conduct)
- BCP 78 (Copyright)
- BCP 79 (Patents, Participation)
- <https://www.ietf.org/privacy-policy/> (Privacy Policy)

Agenda

- 15:00 Administrivia
 - Bluesheets
 - Note takers
 - Agenda bashing

- 15:10 DOTS: 3.00 (Alternate Server) response code
(draft-ietf-dots-signal-channel)

- 15:15 DOTS: Hop-Limit option
5.06 (Hop Limit Reached) response code
(draft-boucadair-core-hop-limit)

- 15:55 Wrap-up

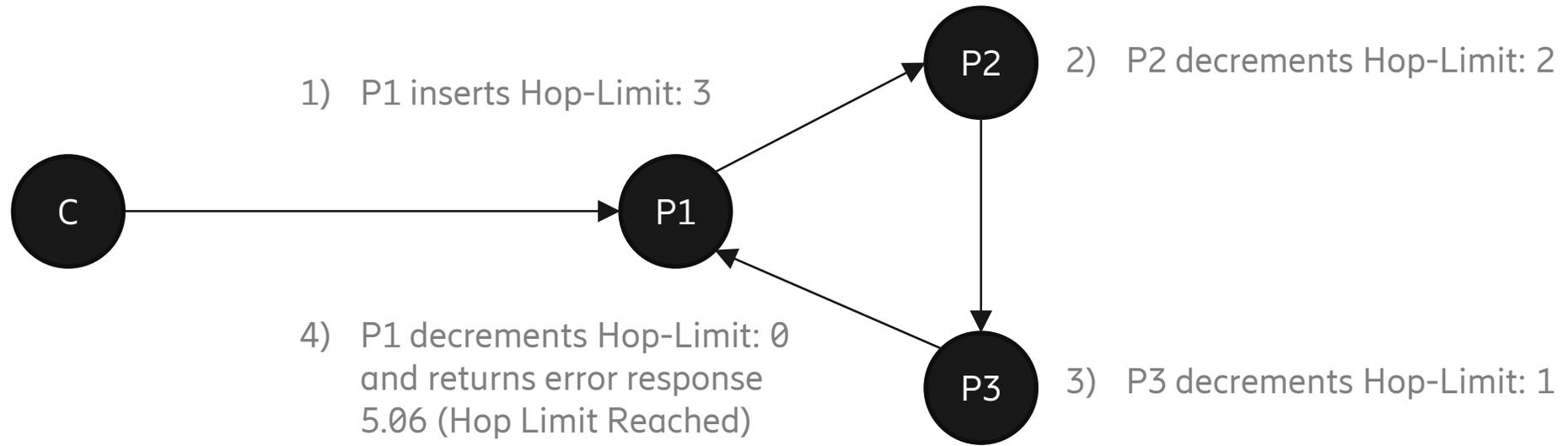
3.00 (Alternate Server) response code

- Redirects a DOTS client to an alternative DOTS server for a signal session
- CoAP does not have redirects
- draft-ietf-dots-signal-channel-22 → draft-ietf-dots-signal-channel-23:
3.00 (Alternate Server) → 5.03 (Service Unavailable)
- Payload provides alternate server details
(Content-Format: application/cbor)

draft-ietf-dots-signal-channel-23

— Looking for reviewers 😊

Hop-Limit option



Hop-Limit option

Option properties

Number:	2
Critical:	no
Safe to Forward when Unrecognized:	no X
Part of Cache Key when Unrecognized:	n/a

Servers: A request containing the option can be processed by servers if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present. If the option is recognized, the option must be processed as specified.

Clients: A response containing the option must be processed by clients as if the option wasn't present.

Intermediaries (Server Role): A request containing the option can be processed by intermediaries if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present; the option must not be forwarded. If the option is recognized, the option must be processed as specified.

Intermediaries (Client Role): A response containing the option must be processed by intermediaries as if the option wasn't present.

Hop-Limit option

Option properties

Number:	92
Critical:	no
Safe to Forward when Unrecognized:	yes ✓
Part of Cache Key when Unrecognized:	no

Servers: A request containing the option can be processed by servers if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present. If the option is recognized, the option must be processed as specified.

Clients: A response containing the option must be processed by clients as if the option wasn't present.

Intermediaries (Server Role): A request containing the option can be processed by intermediaries if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present; the option must be forwarded and is not part of the cache key. If the option is recognized, the option must be processed as specified.

Intermediaries (Client Role): A response containing the option must be processed by intermediaries as if the option wasn't present.

Hop-Limit option

Option properties

Number:	16
Critical:	no
Safe to Forward when Unrecognized:	yes ✓
Part of Cache Key when Unrecognized:	yes

Servers: A request containing the option can be processed by servers if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present. If the option is recognized, the option must be processed as specified.

Clients: A response containing the option must be processed by clients as if the option wasn't present.

Intermediaries (Server Role): A request containing the option can be processed by intermediaries if the option is not recognized. If the option is not recognized, the request must be processed as if the option wasn't present; the option must be forwarded and is part of the cache key. If the option is recognized, the option must be processed as specified.

Intermediaries (Client Role): A response containing the option must be processed by intermediaries as if the option wasn't present.

5.06 (Hop Limit Reached) response code

- Indicates request cannot be forwarded because of exhausted Hop-Limit
- Diagnostic payload
 - Proxy detecting a loop sends a 5.06 response and includes its information (e.g., server name, server alias, IP address) in the diagnostic payload
 - Proxy relaying a 5.06 response prepends its own information to the diagnostic payload
- Error responses are cacheable:
If a 5.06 response is returned and clients make subsequent requests to the same resource, then – even with a larger hop limit – they will receive the cached 5.06 response (until Max-Age expires)

draft-boucadair-core-hop-limit-00

Jim Schaad's review

- It would be clearer to me to say that the Hop-Limit value is between 0 and 255 inclusive rather than talk about the length of the option because I don't know if that includes all of the option encoding bytes or not.
- Probably does not matter, but the current algorithm wastes one bit. Check for 0 and then decrement would give one additional possible field. It would also compress down the size of the encoded option faster.
- I don't know that you only want to have a proxy information appearing once. If it appears multiple times then you can easily spot the loop. No real option one way or the other.
- I presume that a border proxy could remove rather than re-write the option as well. This would be esp. true if for example it was changing transports.
- Somewhere there needs to be a discussion on why the values of C, U and N (→ option properties)
- There is a potential privacy consideration that may need to be covered. The return value is going to provide an eavesdropper a large amount of information on the configuration of the network. Is there value to configuring so that the error but not the trace stack is provided?

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— WG adoption?

— Looking for reviewers 😊

Wrap-up

— Next virtual interim meeting: September 12, 2018