CoAP: Non-traditional response forms

bormann-core-responses-02

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Non-traditional responses

Non-traditional response

A response that is not the single response generated for a request received on the same transport.

- Define new versatile non-traditional responses
- Define behavior of non-traditional responses in general

Behavior definition: OSCORE

New in -02

- Explicit request or not: Request needs sender and sequence number.
- Request nonce can only be used in one response.
- If order matters, responses are ordered by sequence number.
- If replaying matters, responses are subjected to the replay window.
- If follow-up requests were made, transiently tolerate erroneous responses.
- ... and that's it on the OSCORE side?

Next steps

- Interop based on concrete documents adopting this?
- Future in the WG?

Backup slide: Potential users

Adapted from IETF113 slide set

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RFC7252 simplest case Single request, single response
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RFC7252 multicast Single request, different responses with different source addresses

RFC7641 Observe notifications come in until further notice¹

core-coap-sms Response-To-Uri-Host/-Port – triangular requests

core-coap-endpoint-id Observations across server address changes

core-responses-00 Configured requests, Response-For

RFC9177 Responding with multiple blocks

core-groupcomm-proxy Multicast-Timeout

¹No intent to redefine, but implementers may use common mechanisms