

CoAP over Bundle Protocol (BP)

draft-gomez-core-coap-bp-02

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Status

- draft-gomez-core-coap-bp
 - -00 presented in IETF 119
 - CoRE and DTN WGs
 - -01 presented in IETF 120
 - CoRE and DTN WGs
- Revision -02
 - Optional support of CoAP message aggregation
 - Payload-length option
 - Feedback from IETF 120
 - Updates after Marco Tiloca's review on -01

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2.3. New terms

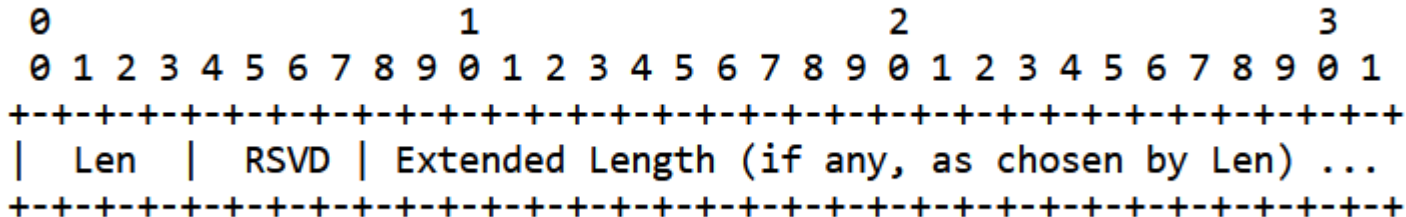
- Single message:
 - CoAP message carried as the payload of the underlying layer PDU
 - In CoAP over BP, a Single message is carried as the block-type-specific data field of the Bundle Payload Block of the encapsulating bundle
- Aggregate message:
 - A concatenation of Single messages that carry the Payload-length option
 - In CoAP over BP, an Aggregate message is carried as the block-type-specific data field of the Bundle Payload Block of the encapsulating bundle

4.3. Payload-length option

- Indicates the size of the payload of a CoAP message
- Definition:

No.	C	U	N	R	Name	Format	Length	Default
TBD	x				Payload-length	(*)	1-5	(none)

C = Critical, U = Unsafe, N = NoCacheKey, R = Repeatable
 (*) See below.



- Length (Len) follows the format of RFC 8323
- RSVD: 4 reserved bits

5. Encapsulating bundle

- Added in -02:
 - If an Aggregate message comprises at least one CON message and one NON message, the lifetime field of the encapsulating bundle is set to the maximum of EXCHANGE_LIFETIME and NON_LIFETIME
- Possible future action:
 - Capturing the additional aggregation delay might be needed
 - Time since Single CoAP message generation until bundle transmission carrying an Aggregate message

Other updates

- Section 4.1. Messaging Model:
 - No-Response option [RFC7967] now mentioned
- Section 7. Observe:
 - Determining whether a notification was sent by the server later than another notification **MUST** be performed based on the creation timestamps of the encapsulating bundles
- Section 9. URI Scheme:
 - For endpoint IDs based on the ipn scheme
 - Authority component: **service-nbr.node-nbr.ipn.arpa**
 - Example, URI of the discovery resource
 - endpoint ID ipn:81.2
 - coap://**2.81**.ipn.arpa/.well-known/core

Thanks!

Questions? Comments?

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