

# Constrained Application Protocol (CoAP) over Bundle Protocol (BP) draft-ietf-core-coap-bp-02

Intended Status: Standards Track

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# Status

- Draft adopted after IETF 123 (Madrid)
  - draft-gomez-core-coap-bp-04
- draft-ietf-core-coap-bp-02
  - Address comments from IETF 124
  - Solved the last pending TO-DOs

# Table of contents

- Added content and then internal structure in Section 11
- Otherwise, main structure remains the same

4.1. Messaging model . . . . .	5
4.2. Single message format . . . . .	6
4.3. Payload-length option . . . . .	7
4.3.1. Payload-length option and OSCORE . . . . .	8
5. Encapsulating bundle . . . . .	8
6. CoAP parameter settings and related times . . . . .	9
7. Observe . . . . .	12
8. Block-wise transfers . . . . .	12
8.1. Main CoAP block-wise transfer parameters . . . . .	13
9. Proxying . . . . .	14
9.1. Proxying scenarios . . . . .	15
9.2. Proxying over BP . . . . .	16
9.3. Proxy operation and message aggregation . . . . .	16
10. URI Scheme . . . . .	17
11. Securing CoAP over BP . . . . .	18
11.1. DTLS versus OSCORE . . . . .	18
11.2. OSCORE and BPSec . . . . .	19
11.3. Security requirements of CoAP requests and responses over BP . . . . .	20
12. IANA Considerations . . . . .	20
12.1. Creation of two new reserved domains in the .arpa name space . . . . .	20
12.1.1. Domain Name Reservation Considerations . . . . .	21
12.2. ipn URI Scheme Well-known Service Number for CoAP . . . . .	21
12.3. CoAP Option Numbers Registry . . . . .	22
13. Implementation Status . . . . .	22
13.1. Space CoAP . . . . .	23
13.2. Other CoAP over BP implementations . . . . .	25
14. Security Considerations . . . . .	25
15. Acknowledgments . . . . .	25
16. References . . . . .	26
16.1. Normative References . . . . .	26
16.2. Informative References . . . . .	28
Appendix A. Reference CoAP parameter values for interplanetary communication . . . . .	29
Appendix B. Message ID size, EXCHANGE_LIFETIME, and maximum CoAP message rate . . . . .	33
Authors' Addresses . . . . .	35

# 8.1. CoAP block-wise transfer parameters

- `MAX_PAYLOADS`: number of consecutive blocks an endpoint can transmit without eliciting a message from the other endpoint
  - Default value in RFC 9177: 10

NEW

- Motivation in RFC 9177 is based on RFC 6928's motivation for an Initial Window of 10 segments:
  - "Ten segments are likely to fit into queue space available at any broadband access link, even when there are a reasonable number of concurrent connections" [RFC6928]
- However, the previous statement assumes typical Internet characteristics and TCP segment sizes
- For CoAP over BP environments, the characteristics of BP paths and CoAP message sizes involved need to be considered when setting `MAX_PAYLOADS`

# 11. Securing CoAP over BP

- Internal structure:
  - 11.1. DTLS versus OSCORE
  - 11.2. OSCORE and BPSec
  - 11.3. Security requirements of CoAP requests and responses over BP
- 11.3.
  - When CoAP is carried over BP, a CoAP response SHOULD be protected with at least the same level of security as its corresponding CoAP request

# 12.2. ipn URI Scheme Well-known Service Number for CoAP

- IANA request:
  - Well-known Service Number for CoAP in the 'ipn' Scheme URI Well-known Service Numbers for BPv7 registry [RFC9758]

Number	Name	Reference
TBD2	CoAP	[[this document]]

# 14. Security considerations

- Risk (Payload-length is “Class U” for OSCORE):
  - An attacker might infer some features of the communication based on the payload size of the messages

- Added:

NEW:

- Padding option [draft-ietf-core-cacheable-oscure]
- In that case, a Single message is first padded, then it can be protected with OSCORE
  - Padding option is “Class E” for OSCORE

# Next steps

- Address Marco's comments on -02
- Approaching WGLC ?
- Reviews would be very much welcome

# **Thanks!**

## **Questions? Comments?**

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