

Q1

Get request:

25	387.836921410	aaaa::1	aaaa::212:4b00:1204	CoAP	65 CON, MID:54141, GET, End of Block #0, /test/hello
26	387.992761119	aaaa::212:4b00:1204	aaaa::1	CoAP	70 ACK, MID:54141, 2.05 Content, End of Block #0 (text/plain)
▶ Frame 25: 65 bytes on wire (520 bits), 65 bytes captured (520 bits) on interface 0					
Raw packet data					
▶ Internet Protocol Version 6, Src: aaaa::1, Dst: aaaa::212:4b00:1204:efff					
▶ User Datagram Protocol, Src Port: 51819, Dst Port: 5683					
▼ Constrained Application Protocol, Confirmable, GET, MID:54141					
01.. = Version: 1					
..00 = Type: Confirmable (0)					
.... 0000 = Token Length: 0					
Code: GET (1)					
Message ID: 54141					
▼ Opt Name: #1: Uri-Path: test					
Opt Desc: Type 11, Critical, Unsafe					
1011 = Opt Delta: 11					
.... 0100 = Opt Length: 4					
Uri-Path: test					
▼ Opt Name: #2: Uri-Path: hello					
Opt Desc: Type 11, Critical, Unsafe					
0000 = Opt Delta: 0					
.... 0101 = Opt Length: 5					
Uri-Path: hello					
▼ Opt Name: #3: Block2: NUM:0, M:0, SZX:64					
Opt Desc: Type 23, Critical, Unsafe					
1100 = Opt Delta: 12					
.... 0001 = Opt Length: 1					
Block Number: 0					
.... 0... = More Flag: 0					
Block Size: 64 (2 encoded)					
[Uri-Path: /test/hello]					

Get response:

25	387.836921410	aaaa::1	aaaa::212:4b00:1204	CoAP	65 CON, MID:54141, GET, End of Block #0, /test/hello
26	387.992761119	aaaa::212:4b00:1204	aaaa::1	CoAP	70 ACK, MID:54141, 2.05 Content, End of Block #0 (text/plain)
▶ Frame 26: 70 bytes on wire (560 bits), 70 bytes captured (560 bits) on interface 0					
Raw packet data					
▶ Internet Protocol Version 6, Src: aaaa::212:4b00:1204:efff, Dst: aaaa::1					
▶ User Datagram Protocol, Src Port: 5683, Dst Port: 51819					
▼ Constrained Application Protocol, Acknowledgement, 2.05 Content, MID:54141					
01.. = Version: 1					
..10 = Type: Acknowledgement (2)					
.... 0000 = Token Length: 0					
Code: 2.05 Content (69)					
Message ID: 54141					
▼ Opt Name: #1: Etag: 0c					
Opt Desc: Type 4, Elective, Safe					
0100 = Opt Delta: 4					
.... 0001 = Opt Length: 1					
Etag: 0c					
▼ Opt Name: #2: Content-Format: text/plain; charset=utf-8					
Opt Desc: Type 12, Elective, Safe					
1000 = Opt Delta: 8					
.... 0000 = Opt Length: 0					
Content-type: text/plain; charset=utf-8					
▼ Opt Name: #3: Block2: NUM:0, M:0, SZX:32					
Opt Desc: Type 23, Critical, Unsafe					
1011 = Opt Delta: 11					
.... 0001 = Opt Length: 1					
Block Number: 0					
.... 0... = More Flag: 0					
Block Size: 32 (1 encoded)					
End of options marker: 255					
▶ Payload: Payload Content-Format: text/plain; charset=utf-8, Length: 12					
▶ Line-based text data: text/plain (1 lines)					

Get Request from client

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9

1	0	0	GET = 1	MID = 54141
11		4	"test" (4 B)	
0		5	"hello" (5 B)	
12		1	64 (1 B)	

Get Response from Server

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9

1	2	0	2.05=69	MID = 54141
4	1	0c (1 B)		
8	0	""(0 B)		
11	1	32(1 B)		
"Hello World!" (12 B)				

Post request:

13	19.771253424	aaaa::1	aaaa::212:4b00:1204...	CoAP	69	CON, MID:18855, POST, /actuators/toggle
14	20.762296517	aaaa::212:4b00:1204...	aaaa::1	CoAP	52	ACK, MID:18855, 2.05 Content
15	238.352542200	aaaa::1	aaaa::212:4b00:1204...	CoAP	71	CON, MID:18856, GET, End of Block #0, /actuators/toggle
16	239.255150058	aaaa::212:4b00:1204...	aaaa::1	CoAP	52	ACK, MID:18856, 4.05 Method Not Allowed
17	254.723774753	aaaa::1	aaaa::212:4b00:1204...	CoAP	71	CON, MID:10496, GET, End of Block #0, /actuators/toggle

▶ Frame 13: 69 bytes on wire (552 bits), 69 bytes captured (552 bits) on interface 0
Raw packet data
▶ Internet Protocol Version 6, Src: aaaa::1, Dst: aaaa::212:4b00:1204:e1ff
▶ User Datagram Protocol, Src Port: 57012, Dst Port: 5683
▼ Constrained Application Protocol, Confirmable, POST, MID:18855
01... .. = Version: 1
..00... .. = Type: Confirmable (0)
.... 0000 = Token Length: 0
Code: POST (2)
Message ID: 18855
▶ Opt Name: #1: Uri-Path: actuators
▶ Opt Name: #2: Uri-Path: toggle
[Uri-Path: /actuators/toggle]

0000	60 00 00 00 00 1d 11 40	aa aa 00 00 00 00 00 000.....
0010	00 00 00 00 00 00 00 01	aa aa 00 00 00 00 00 00
0020	02 12 4b 00 12 04 e1 ff	de b4 16 33 00 1d 2f 54	..K.....-3../T
0030	40 02 49 a7 b9 61 63 74	75 61 74 6f 72 73 06 74	0 I-act uators t
0040	67 67 67 6c 65		oggie

Post response:

14	20.762296517	aaaa::212:4b00:1204...	aaaa::1	CoAP	52	ACK, MID:18855, 2.05 Content
15	238.352542200	aaaa::1	aaaa::212:4b00:1204...	CoAP	71	CON, MID:18856, GET, End of Block #0, /actuators/toggle
16	239.255150058	aaaa::212:4b00:1204...	aaaa::1	CoAP	52	ACK, MID:18856, 4.05 Method Not Allowed
17	254.723774753	aaaa::1	aaaa::212:4b00:1204...	CoAP	71	CON, MID:10496, GET, End of Block #0, /actuators/toggle

▶ Frame 14: 52 bytes on wire (416 bits), 52 bytes captured (416 bits) on interface 0
Raw packet data
▶ Internet Protocol Version 6, Src: aaaa::212:4b00:1204:e1ff, Dst: aaaa::1
▶ User Datagram Protocol, Src Port: 5683, Dst Port: 57012
▼ Constrained Application Protocol, Acknowledgement, 2.05 Content, MID:18855
01... .. = Version: 1
..10... .. = Type: Acknowledgement (2)
.... 0000 = Token Length: 0
Code: 2.05 Content (69)
Message ID: 18855

0000	60 00 00 00 00 0c 11 3f	aa aa 00 00 00 00 00 00?.....
0010	02 12 4b 00 12 04 e1 ff	aa aa 00 00 00 00 00 00	..K.....
0020	00 00 00 00 00 00 00 01	16 33 de b4 00 0c ca 95-3.....
0030	60 45 49 a7		EI

Post Request from client

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9

1	0	0	POST = 2	MID = 18855
11		9	"actuators" (9 B)	
0		6	"toggle" (6 B)	

Post Response from Server

0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9

1	2	0	2.05=69	MID = 18855
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