



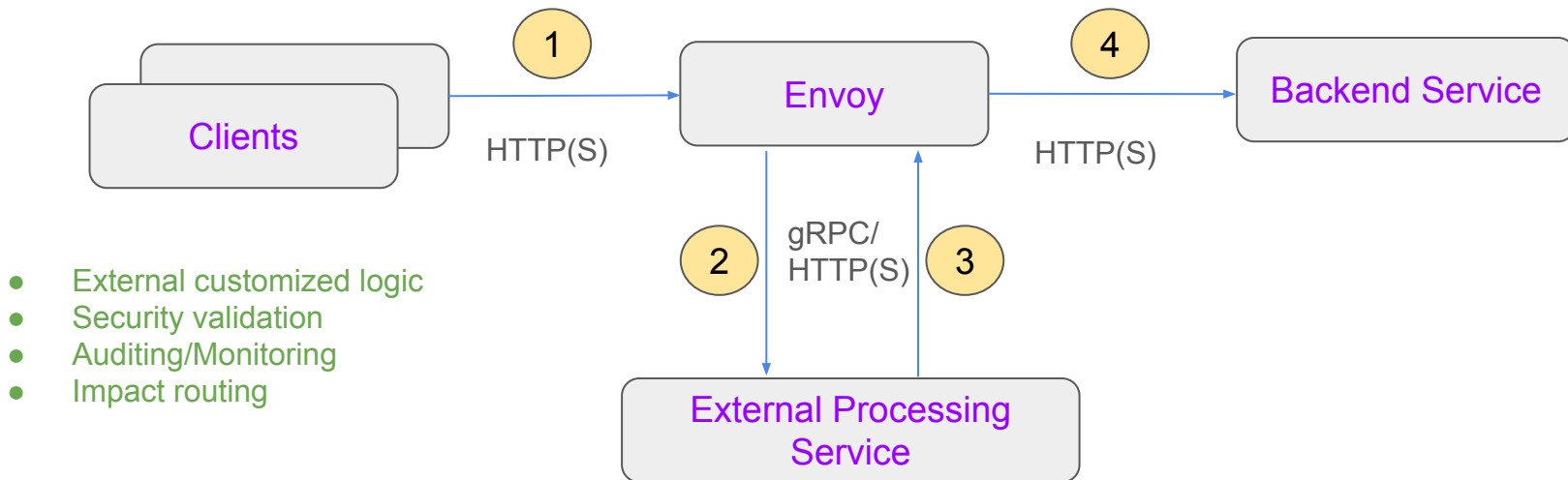
envoycon

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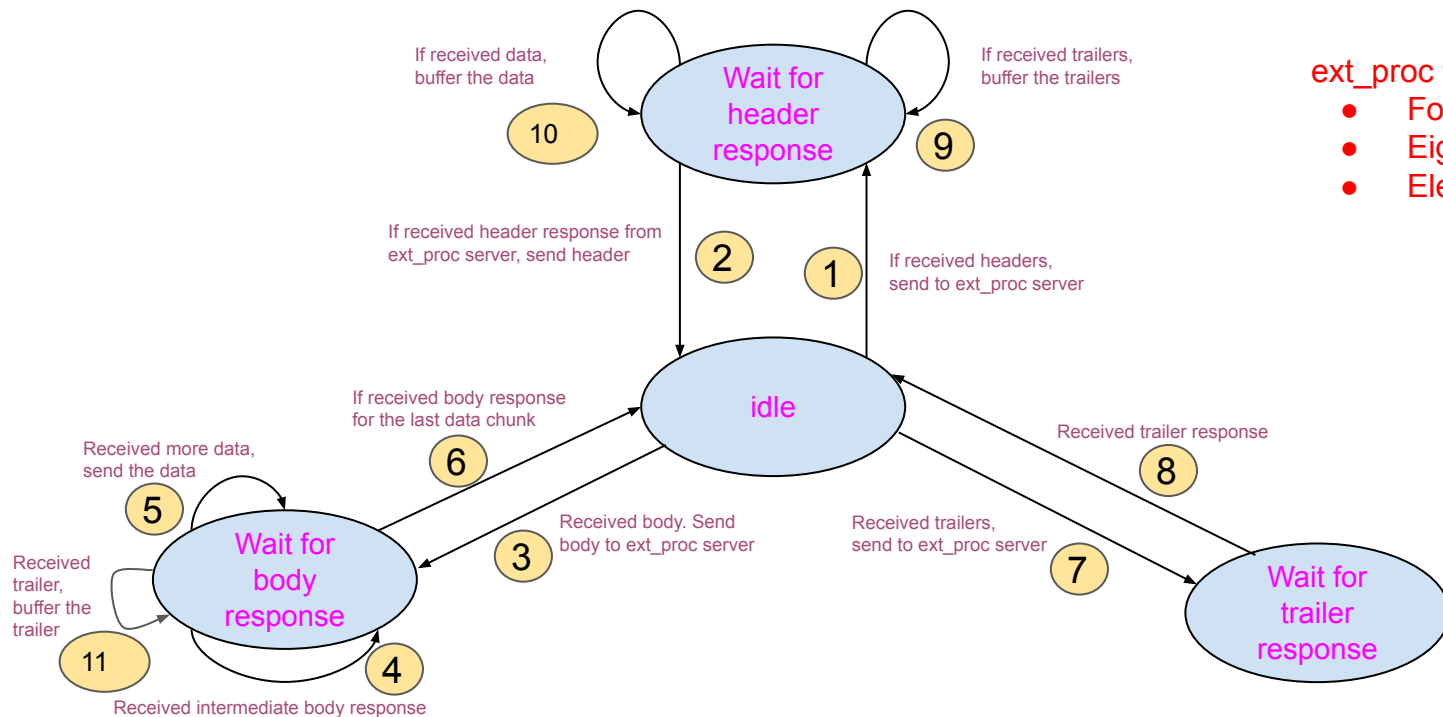
Lightning Talk: Envoy External Processing with MxN Streaming

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Envoy External Processing Background



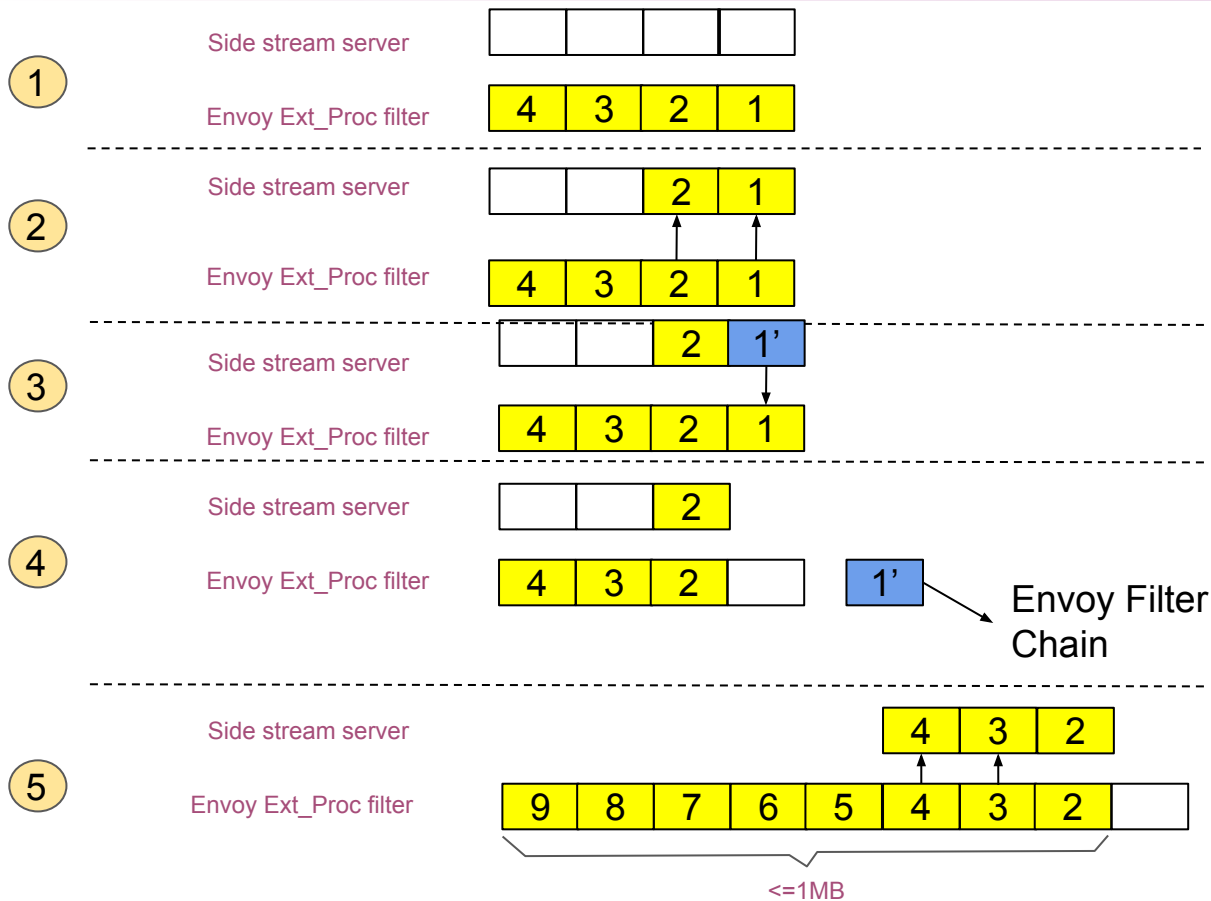
Ext_Proc Filter STREAMED Mode State Machine Diagram



ext_proc filter 1x1 Streamed Mode

- Four states
- Eight events
- Eleven actions

Ext_Proc Filter Streamed Mode Data Processing Pipeline

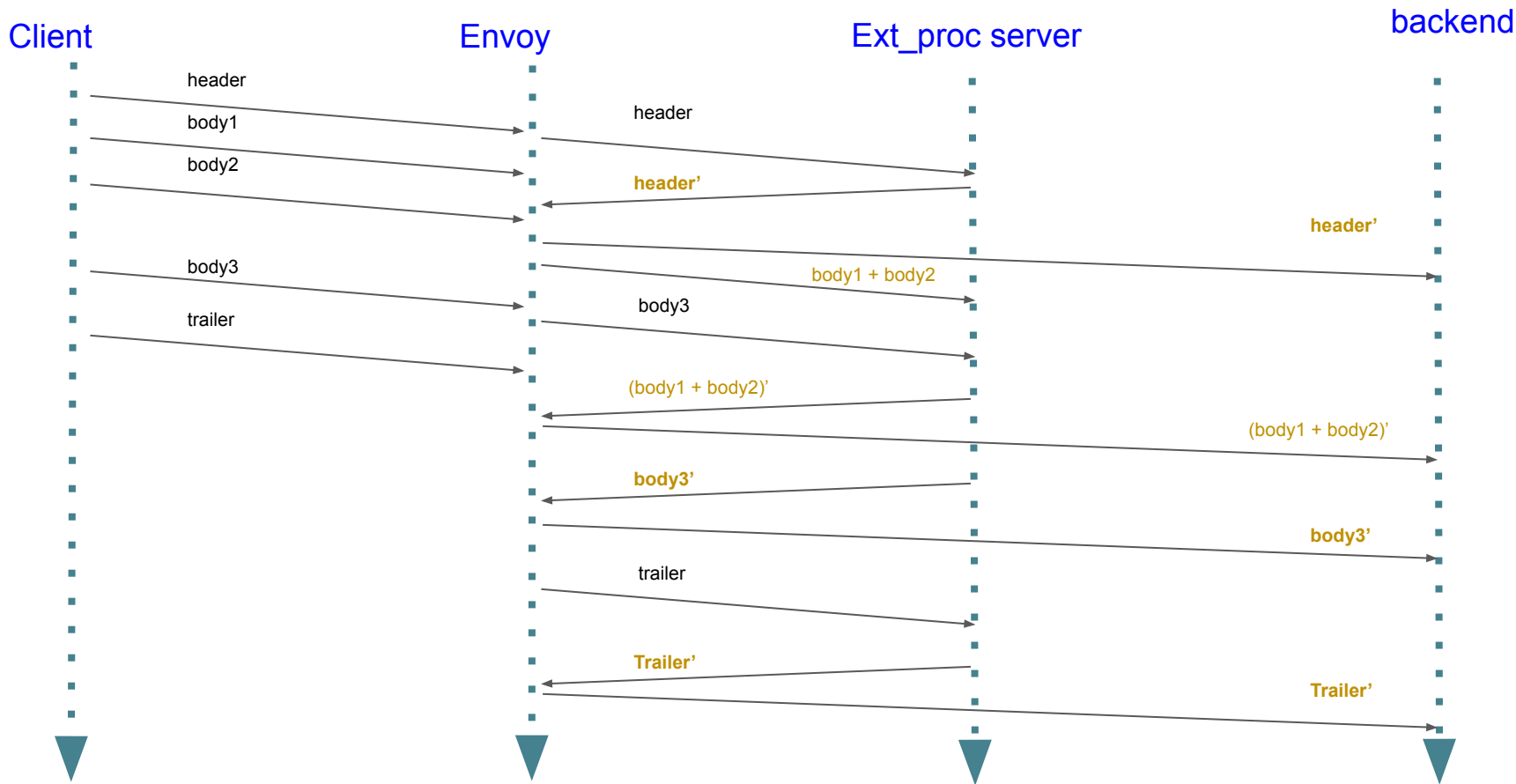


ext_proc STREAMED mode maintains a queue to

- Store the received data
- Track the data sent to the ext_proc server
- Flow control

1x1 mode: 1 body response is required for 1 body request

Ext_Proc Filter STREAMED Mode Traffic Flow



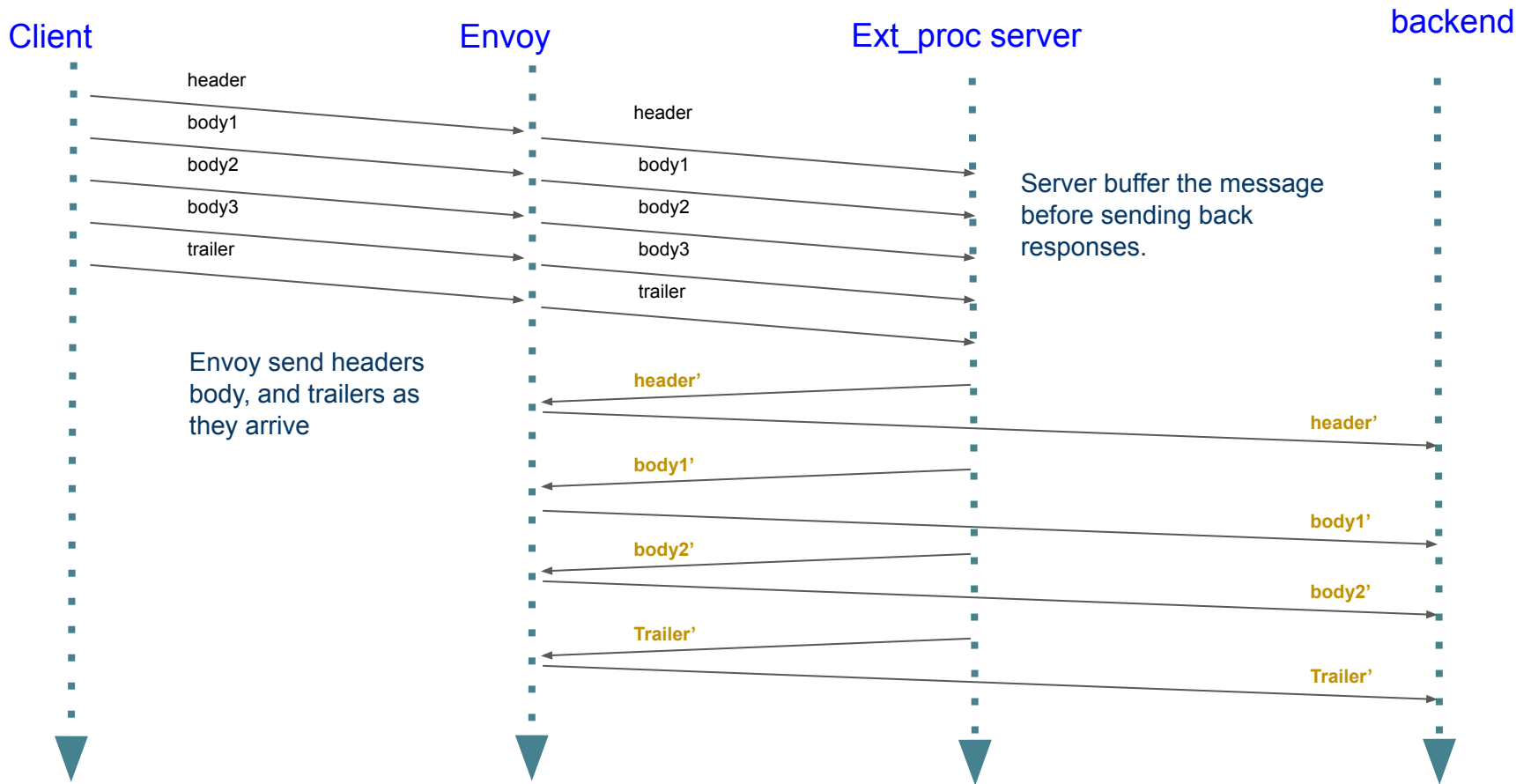
Envoy External New Feature Request



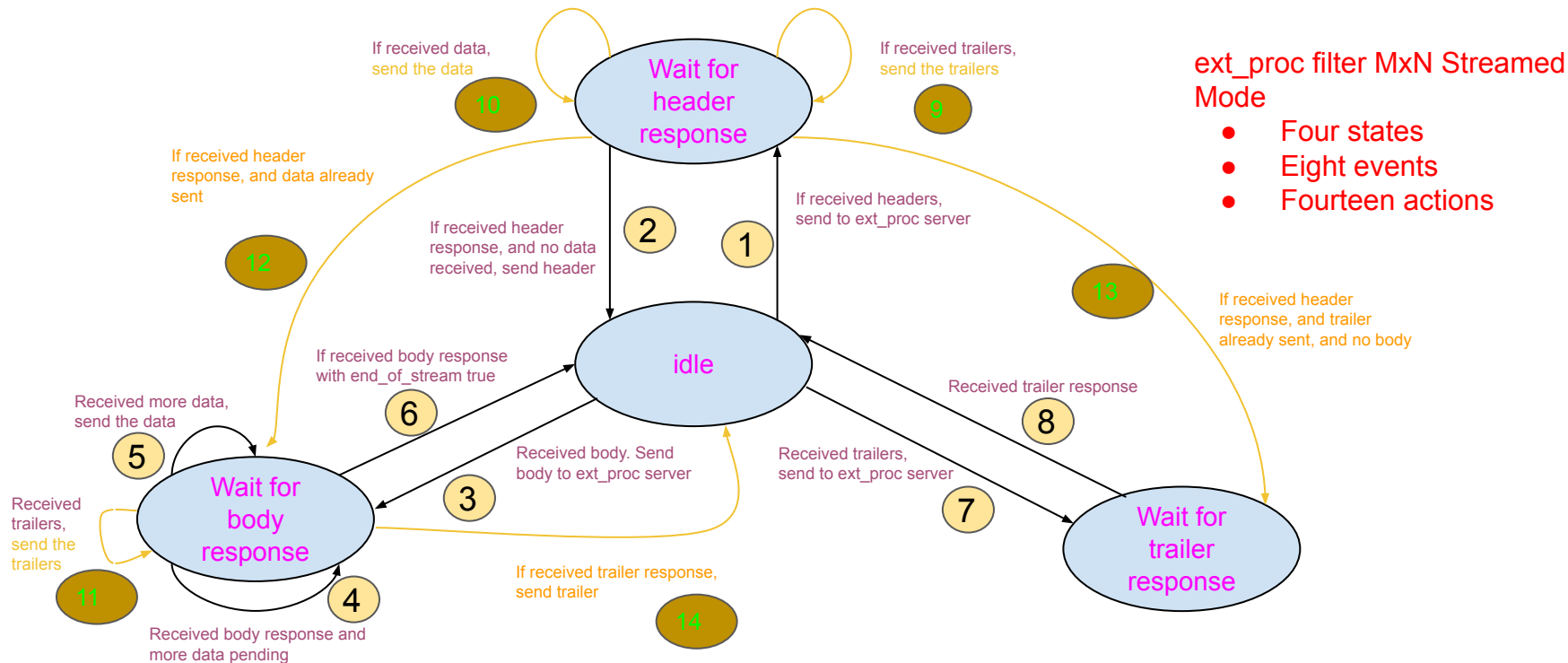
Server has to buffer certain amount of data chunks before sending back any response.

- Use cases: compression, decompression, security validation
- Can not send one body response after one body request
- Server has to buffer **M** chunks of data, or entire message, before sending back any response.
- Server can not send body response in one shot(too big). It has to split the body response in **N** chunks.

Ext_Proc Filter New MxN Streaming Mode Traffic Flow



Ext_Proc Filter New MxN Mode State Machine



❏ Any Questions?

Lightning Talk: Envoy External Processing with Bidirectional Streaming



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