

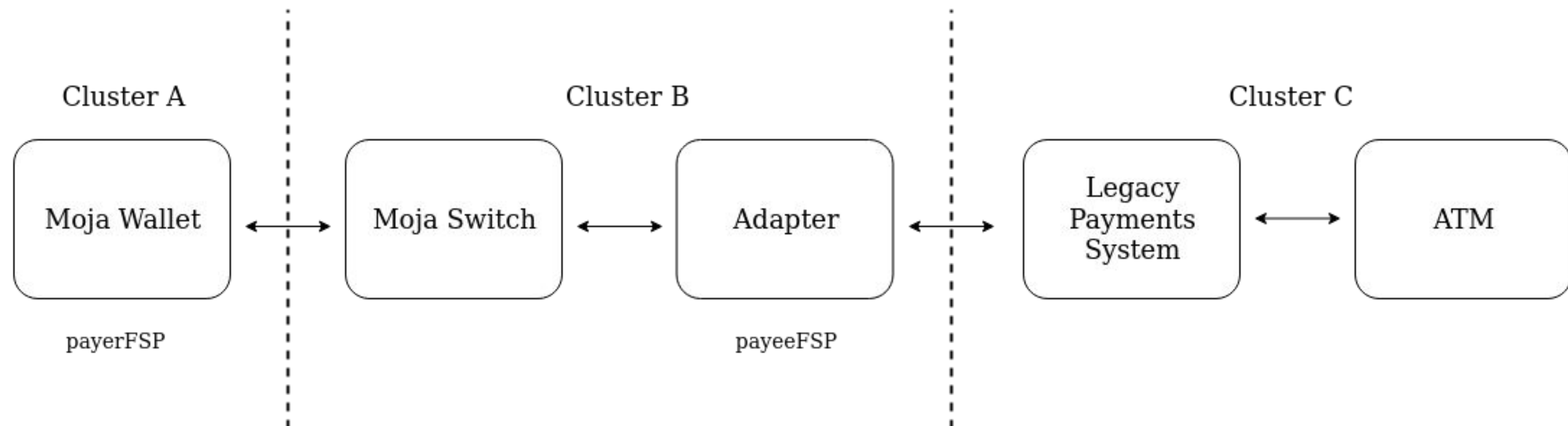
mojaloop

LPS Adapter

<https://github.com/mojaloop/LPS-Adapter>

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LPS Adapter

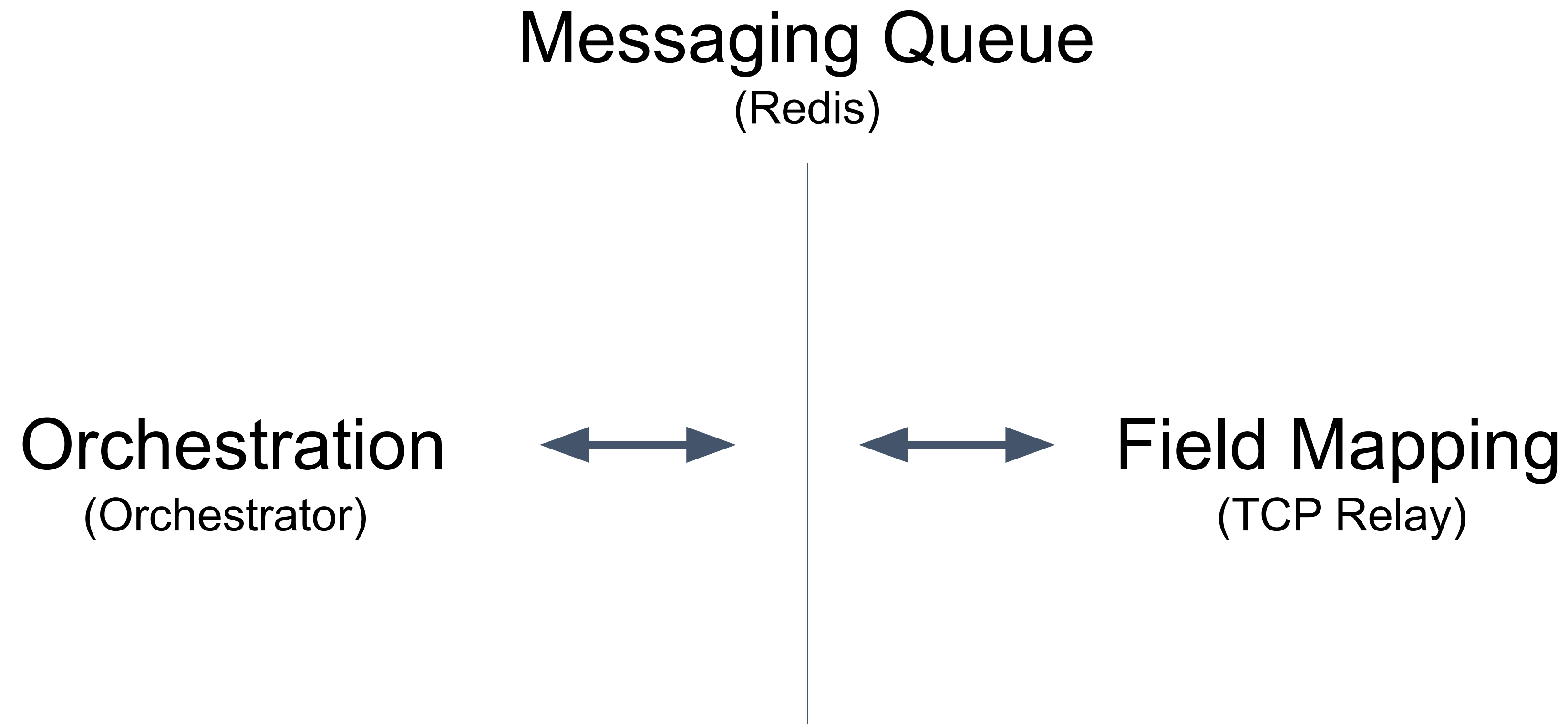


- 1 in-flight message from a particular device registered in the legacy payment system
- The LPS-Adapter hosts TCP servers in to which legacy systems can connect
- The OTP is transmitted in the clear. Work is being done to securely encrypt it whilst it is in transit.

v9.6.0 Change log

- Formalised message interface
- Redis backed message queue
- Extendable TCP Relay class
- Reversal flow
- Deployment scripts
- Documentation

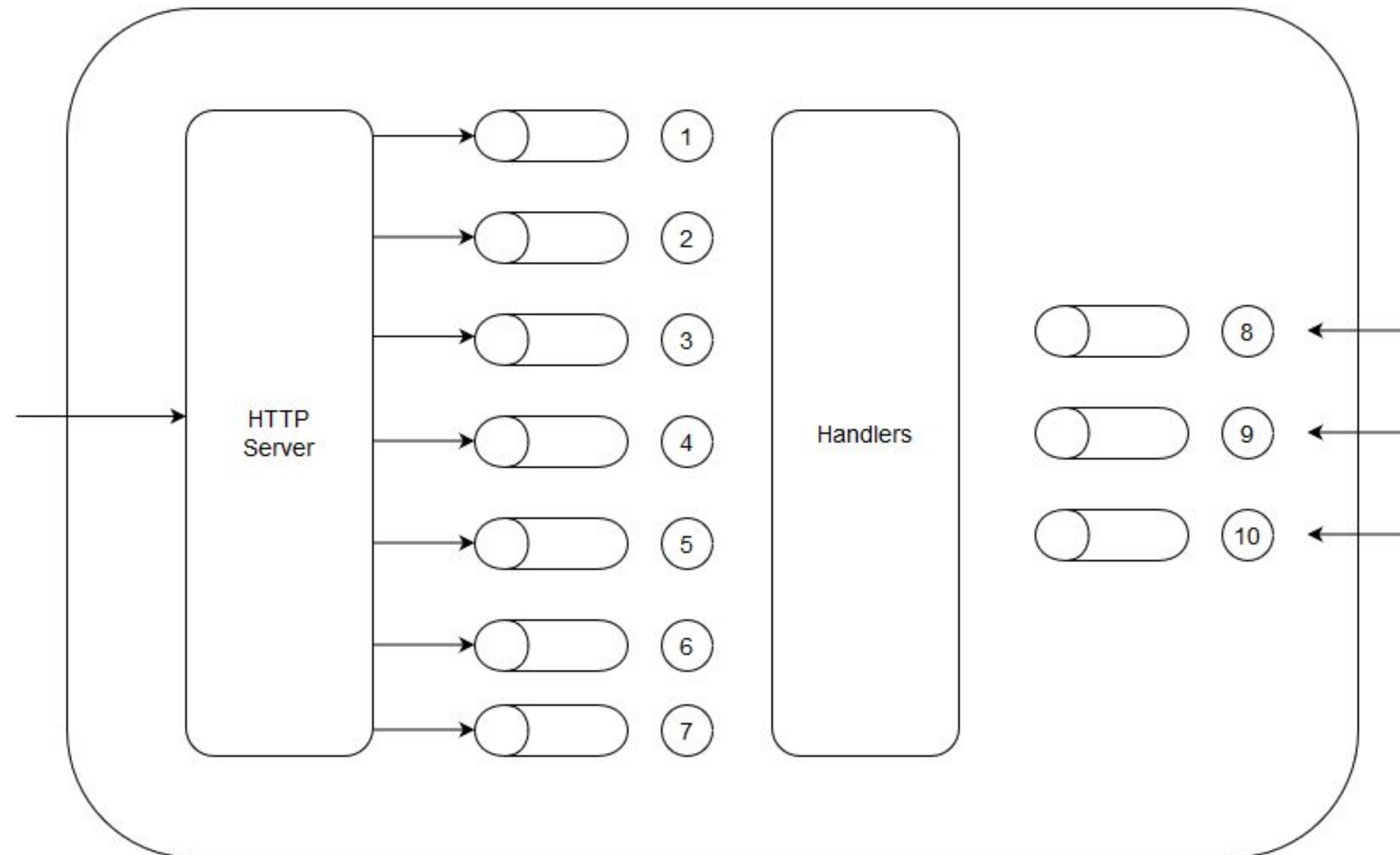
Architecture



Message Interface

Adapter Message	ISO8583-87	ISO8583-93
Legacy Authorization Request	0100	1100
Legacy Authorization Response	0110	1110
Legacy Financial Request	0200	1200
Legacy Financial Response	0210	1210
Legacy Reversal Request	0420 / 0421	1420 / 1421
Legacy Reversal Response	0430	1430

Queues - Orchestrator



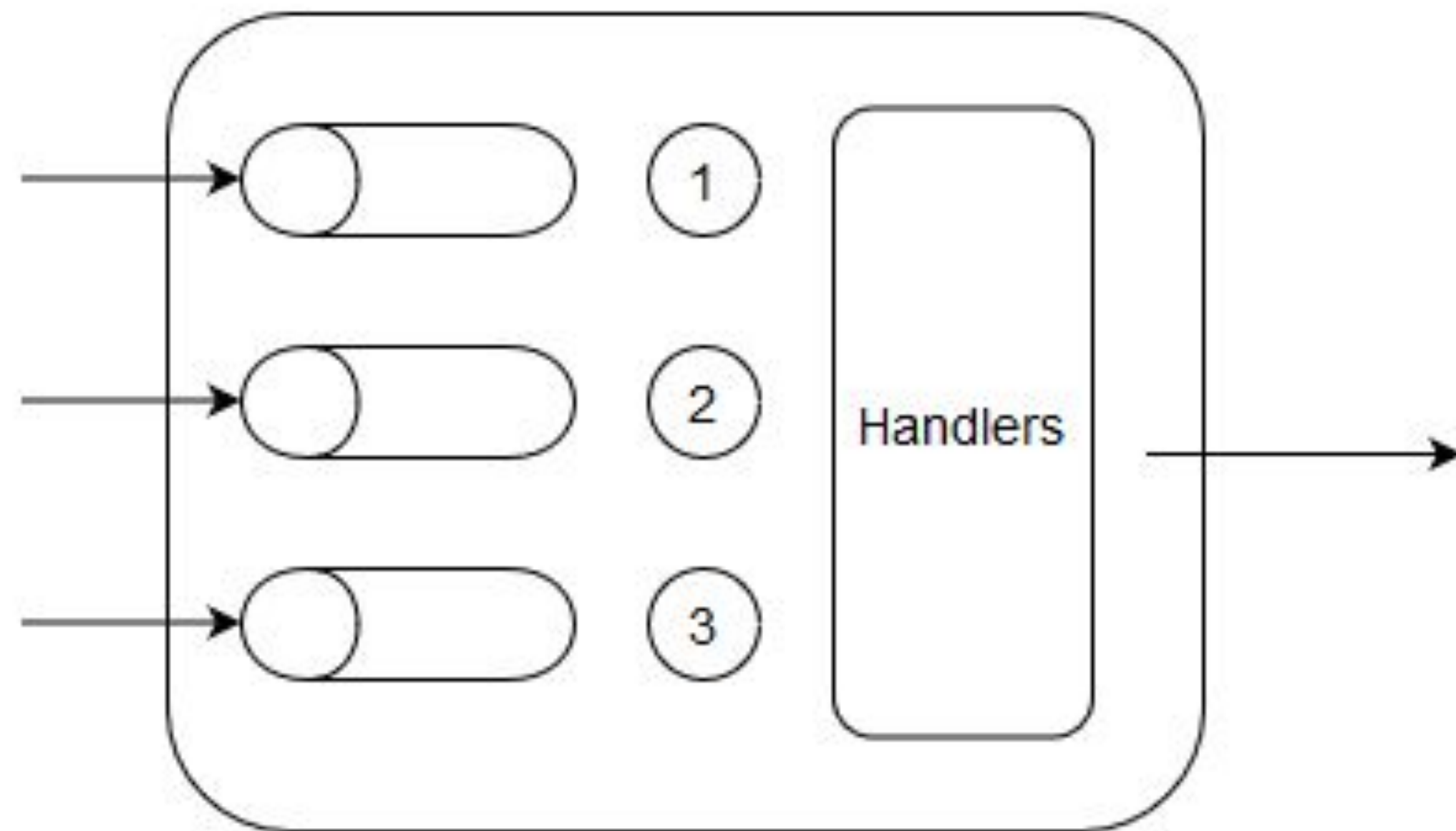
Mojaloop

1. Transaction Request Responses
2. Party Lookup Responses
3. Quote Requests
4. Quote Responses
5. Authorization Requests
6. Transfer Requests
7. Transfer Responses

Legacy System

8. Legacy Authorization Requests
9. Legacy Financial Requests
10. Legacy Reversal Requests

Queues - TCP Relay



1. <LPS ID>Authorization Responses
2. <LPS ID>Financial Responses
3. <LPS ID> Reversal Responses

TCP Relay

- Default 8583-87
- Extend by overriding base field mapping functions:
 - mapToAuthorizationResponse
 - mapFromAuthorizationRequest
 - mapToFinancialResponse
 - mapFromFinancialResponse
 - mapToReversalAdvice
 - mapFromReversalAdvice

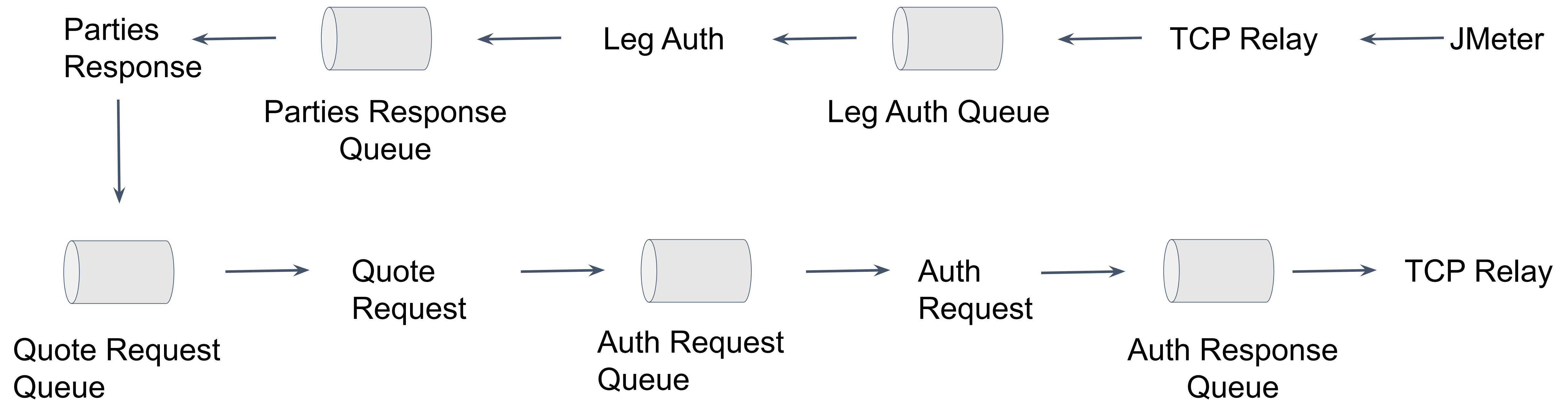
Functionally complete and ready for people to test

Performance

Here be dragons

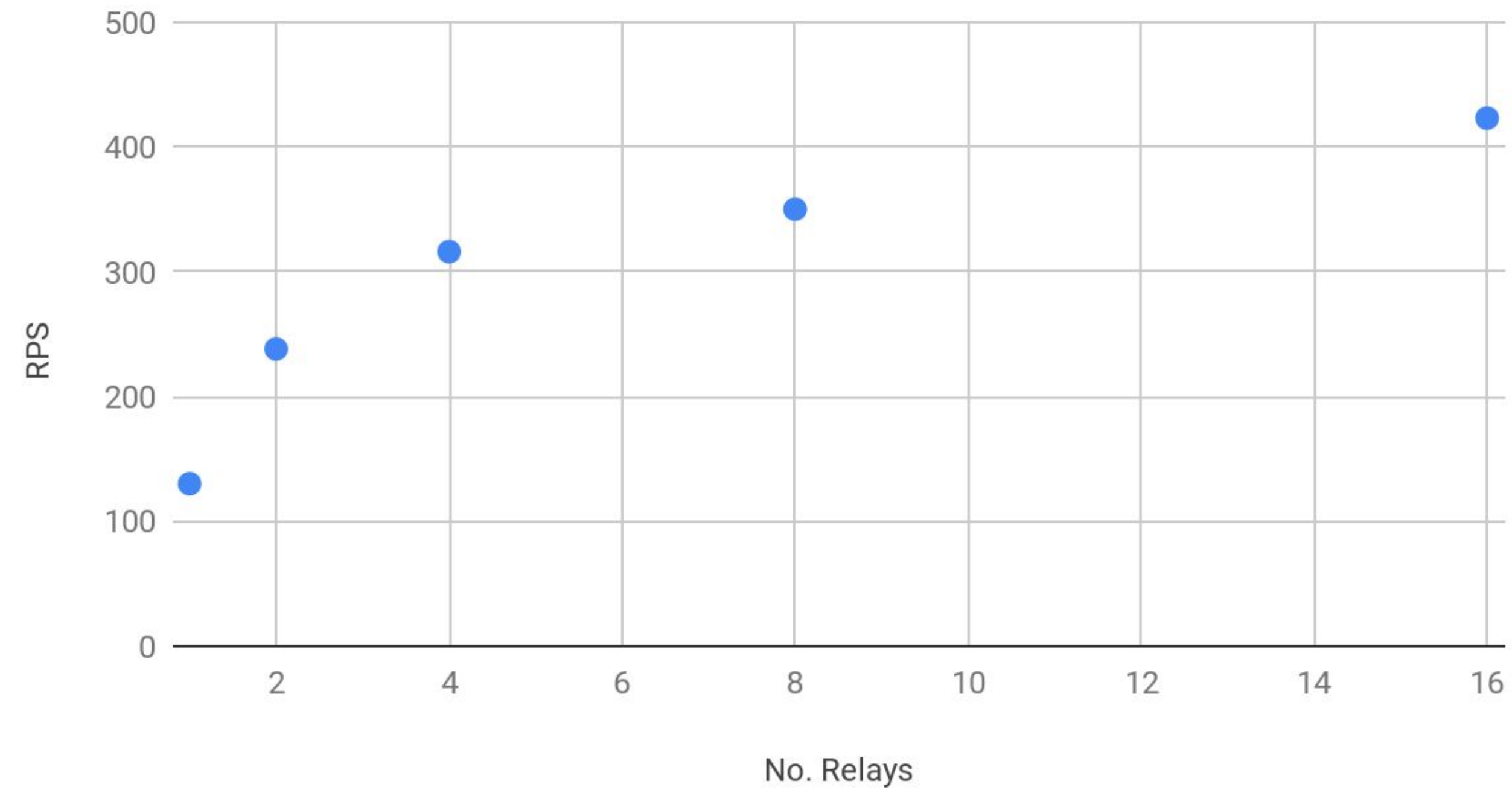
Performance - 0100 to 0110

Null Cipher



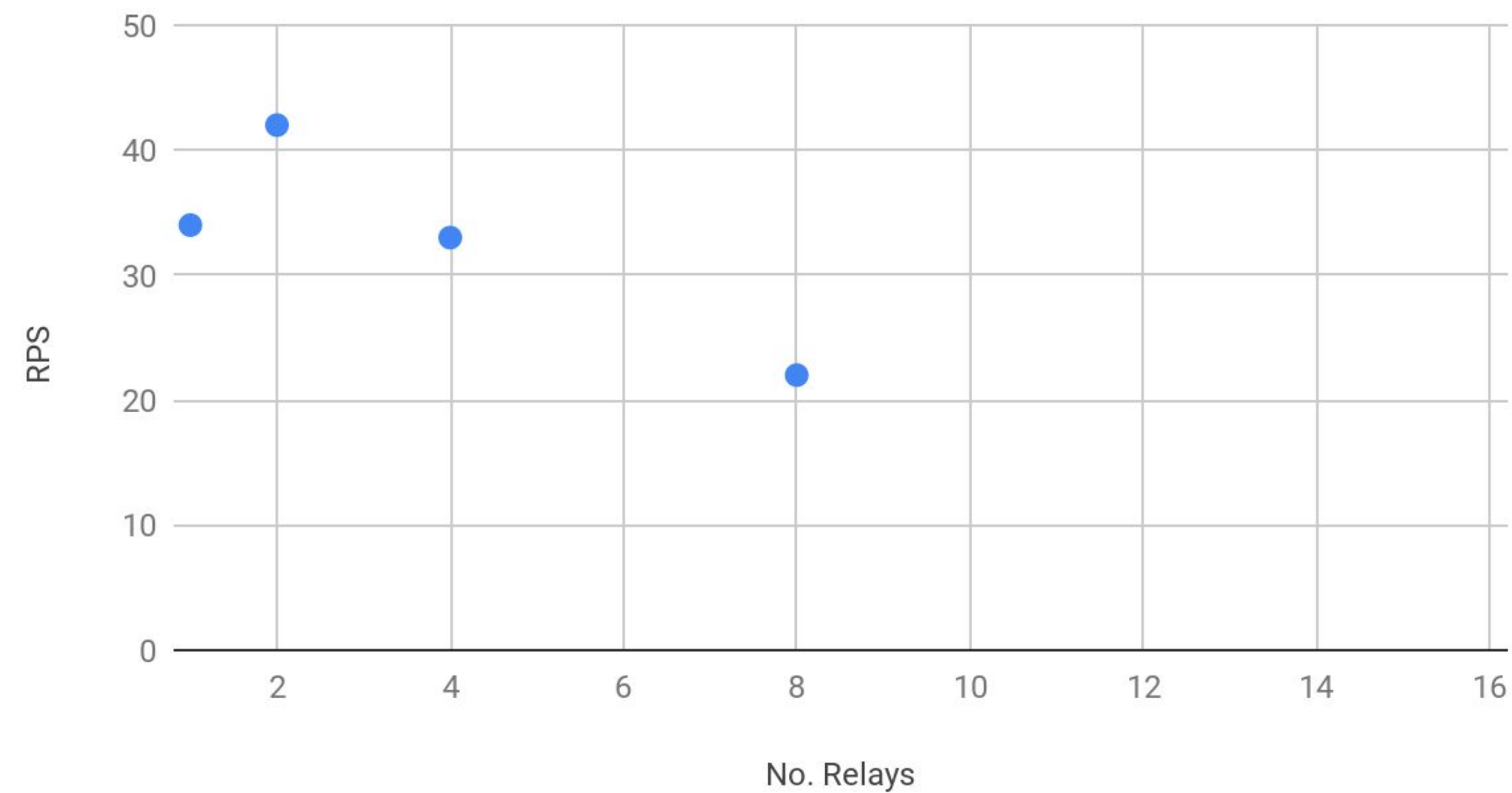
Performance - Null Cipher

RPS vs. No. Relays - Null Cipher



Performance - Actual Handlers

RPS vs No.Relays - Actual Handlers



Extended Use-Cases

- Operate on behalf of participants:
 - a. holds an account but injects messages as if coming from the payeeFSP
 - b. does not hold an account and injects messages as if coming from the payeeFSP (close to PISP)

Going forward

- Find performance bottleneck
- Integration with accounts service of adapter operator
- Integration with a FX provider
- Integration with HSM
- Dynamic configuration of relays

Thank You